

# The RAH Compendium

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Please note: Irrespective of the breadth of information, advice and problem-solving approaches contained within this book, it cannot replace the visit to a practitioner of alternative medicine or a physician with an interest in naturopathy. Furthermore, please note that traditional orthodox medicine has to date neither accepted nor acknowledged the connections illustrated in this book.

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1. Preface

## 1. Preface

The purpose of the VFS – Vereinigung zur Förderung der Schwingungsmedizin e.V. (Association for the Promotion of Vibrational Medicine) is clearly established in its name. For almost 20 years, the VFS has pursued the goal of introducing as many people as possible to the benefits of vibrational medicine, particularly bioresonance according to Paul Schmidt.

Although classical mainstream medicine has not accepted nor acknowledged the effects of bioenergetic oscillations, an increasing number of therapists have been using this method with great success each year, both nationally and internationally. In Germany alone, there are now over 5.500 therapists.

Through its history, the VFS has released several publications. In our opinion this RAH Compendium is very important, as it combines many advantages and the architecture of the procedure has been designed to get people enthusiastic about vibrational medicine on a broad basis.

This RAH Compendium aims to present the main concepts behind this procedure, explain its structure and ultimately provide user tips for operating both the Rayocomp PS 10 and the Rayocomp PS 1000 Polar.

For non-members of the VFS, please note that a registration form is provided on the final pages which you may use to become a member of the Association for the Promotion of Vibrational Medicine. As a member, you will receive our thrice-yearly society journal im+PULS free of charge to keep you informed of news and developments in the world of vibrational medicine. You are also invited to attend the annual congress of the Association for the Promotion of Vibrational Medicine free of charge. We would be delighted if you would accept our offer and support us with your membership. Many thanks in advance for your consideration.

The editorial team of the Association for the Promotion of Vibrational Medicine

### 2. Main ideas about the RAH

One of the particular advantages of bioresonance according to Paul Schmidt and of vibrational medicine is their sheer versatility. Here is a list of the possible uses:

- Discovery of causal influences
- Allergy testing and allergy harmonisation
- Acupuncture oscillation therapy
- Organ-specific analysis and harmonisation
- Consideration of psychological factors
- Determination of pathogen-related diseases
- Individual testing of body energy
- Integration of bodily excretions, such as blood, urine, saliva or stool
- Identification and assessment of water-related or environmental influences
- Development of energy-optimised products
- Product and medication tests
- Application in animals and plants

The width of applications arising from these possibilities is easy to imagine, as is the consequent plurality of therapist who, over time and by gaining experience, have become experts in a particular field. In addition, we often observe that the success of therapists in treating a very specific disease, will make them – frequently involuntarily – a specialist in a specific field of vibrational medicine.

As a result, we nowadays come across some bioresonance expert therapists, who have dedicated their entire practice to the treatment of pathogen-related diseases, or those who have specialised in the areas of detoxification, energy balance, or psychological conditions, etc. At some time in the past, such experts had to develop their own therapeutic programs for use in their specialist area. These programs have since been used for many years, sometimes accruing thousands of successful applications. One of the goals of the RAH is therefore to collate the best programs from the most experienced practitioners.

To cite one example: Dr Yayama, MD, a Japanese specialist in the application of vibrational medicine, created therapeutic programs for use in his own practice near Fukuoka. These programs target and stimulate the production of adenosine triphosphate - or ATP for short - in the cellular structures of different organs. Every process that takes place within a cell requires energy, regardless of whether this is a chemical, osmotic or mechanical process. ATP provides this energy. It is fair to say that ATP functions as the basic source of energy for all energy-consuming processes with a living being. Dr Yayama's idea was to find those frequency patterns with which he could specifically stimulate the production of ATP for each individual organ by means of bioresonance devices (RPS 1000 polar and RPS 10). In his experience, and guite understandably, it makes little sense to treat any living being if it does not have the energy to initiate a process of regulation.

This example illustrates the fundamental impetus for the RAH, which is to bring together numerous experts who are willing to donate their best programs for the common good. Despite the widely held conception that successful therapists are not prepared to share their expertise with the world, the RAH system demonstrates the opposite. The RAH demonstrates that it can be done differently.

What also becomes evident from the example is that future expert systems – such as the RAH – will always depend on the involvement of numerous therapists. Each therapeutic program often represents a life time's work. As such, a single person would be incapable of creating the sheer volume needed, simply due to time restraints. The RAH is an open system that also offers a platform for general use to newly joining experts and their programs, subject to the necessary quality controls. This open approach is explicitly supported by such institutions as the

Vereinigung zur Förderung der Schwingungsmedizin e.V. (the German Association for the Promotion of Vibrational Medicine, a registered charity), as we share the common goal of wanting to collate the experience of successful therapists from a broad range of areas.

#### However, hidden behind are other advantages:

- The provision of expert programs is of immeasurable value particularly to newcomers to the world of vibrational medicine. They are spared the process of having to research all the information from scratch, but can rely on programs that have been proved to work thousands of times. This enables therapist who are new to vibrational medicine to use this method successfully much earlier than was previously the case.
- It is in the nature of an open system to expand. The German Association for the Promotion of Vibrational Medicine (Vereinigung zur Förderung der Schwingungsmedizin) had noticed very positively that many experts had already put their programs at the disposal of the RAH in an astonishingly short time. Currently, over 1859 expert programs are already available for analysis and harmonisation. With the inclusion of so many experts, we are set to see an explosion in further developments.
- The breadth of applications is another invaluable advantage of an open system. Every user of an analysis and harmonisation system has different requirements. However, if a wide variety of therapists contribute their ideas and expertise to this system, this means that the user has an equally wide variety of therapeutic approaches to choose from. In turn, this will spread the enthusiasm for RAH use, and vibrational medicine as a whole, among more and more users.

#### Which programs are included in the RAH-system?

The first expert panel was formed in the year 2009. Since then the panel is dynamically composed.

Because the RAH-system is an open one, new experts are added. The most important objective is to consider as many interests and therapy options as possible.

Prerequisites for the new program to be included in the RAH are the following:

- The programs have proven themselves over a long period of time
- There are case-study reports and descriptions
- The RAH programs are subject to mandatory controls in future too and will be, if required, extended

#### Assembling frequencies using the RAH

It is now time to delve a little deeper into the RAH itself. In the RAH, so-called programs for analysis and harmonisation are employed. These are compilations of frequencies that are not applied individually and sequentially, but as a whole - i.e. as a frequency pattern. Take for example a precious stone. Upon examination with bioresonance according to Paul Schmidt you may find that this stone has 18 different characteristic frequencies. With bioresonance according to Paul Schmidt, you could now use one after the other for harmonisation too. Not so with the RAH. This system releases the 18 frequencies of the precious stone as a single frequency pattern. In doing so, it also brings us much closer to the entity of the stone as a whole. In the context of RAH, therefore, the term 'program' always refers to the compilation of different frequencies, which together provide the overall best reflection of a given structure's essence. For example, if you select the program 42.20 (Paranasal sinuses), this always refers to the frequency spectrum that describes this structure. Please be careful not to mistake this with a fundamental frequency value. Thus, 42.20 is not a fundamental frequency but the running number for a program that contains a spectrum of frequencies. If you employ a program, such as 42.20, for analysis, this inevitable means that you are testing a frequency spectrum. This method provides a clearer characterisation of the structure than was

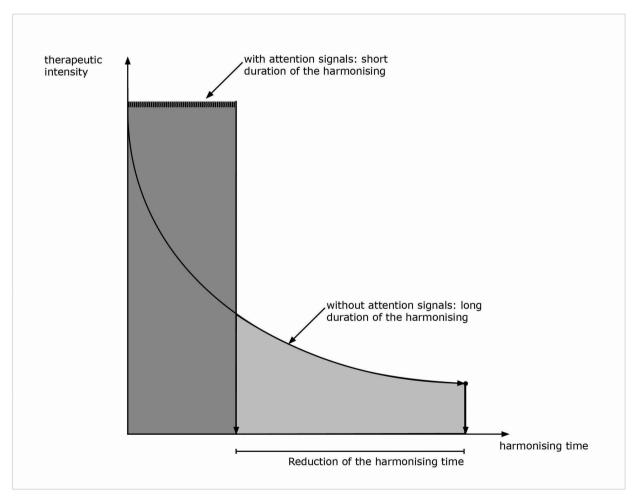
previously achievable. Duplicate selections of a single frequency are a thing of the past.

#### Shortening of the harmonisation time

Experience tells us that a body that is offered a wide frequency spectrum during harmonisation has to work very hard. To nonetheless achieve treatment times that are as short as possible in practice, a new system for transferring frequency spectra was developed for the RAH.

Within the RAH, frequency structures are transmitted via so-called transfer values that

correspond to the Schumann resonances (extremely low frequency ranges). In our experience, the duration of harmonisation can be cut by nearly one-third if these transfer values are modulated during harmonisation. Comparable to an acoustic signal that after a longer period of time can't be heard or can be perceived far worse. However, when the pitch is permanently changed, new attention signals are being generated for the organism over and over again. This concept is illustrated by the following graph:



Shortening harmonisation times with attention signals

Therapeutic intensity is indicated on the Y-axis. Harmonisation time on the X-axis on the bottom. If a frequency pattern is transferred onto the body with transfer values that remain unchanged, therapeutic intensity diminishes over time. As a consequence, longer harmonisation times are required. With the RAH, on the other hand, the transfer values are modulated constantly thus maintaining a therapeutic intensity of the frequency spectra. As a result, harmonisation times become significantly shorter. In some cases, a large frequency spectrum can even be harmonised within a few minutes.

Another wish of many therapist, although only indirectly linked to the RAH, can also be fulfilled with this new system. It is possible to display the results of an analysis in a visual format. This means that the disturbances identified in a patient can be shown on an image that can also be printed out.

Let us now turn to the organisation of the RAH.

## 3. Organisation of the RAH

The system is structured along clear medical lines, both in terms of analysis and in terms of harmonisation.

Its organisation and arrangement are based on the in-house Rayonex training program that is taught at the company's own School for Alternative Medicine, where the training material was developed de novo. At the Rayonex company, training to become a naturopath is combined with additional training in the discipline of bioresonance according to Paul Schmidt.



The RAH is based on educational material from the naturopath training course at the Sauerland Pyramids.

This is also reflected in the organisation of the RAH, which includes a cause-orientated approach and pays particular attention to energy.

On the next but one page you will find a graph that shows its principle organisation.

Looking at the organisation as a whole, you will notice that the program on analysis preparation is the very first program (more on this later in the RAH Compendium). It is followed by programs on energy, in particular referring to vitalisation, energy balance, pre-control, polarity and the chakras. You will also find programs on the of acupuncture channels (meridians) in this category.

The area on energy follows that of causes. Here you can find programs on electrosmog, geopathy, the acid-base balance, vital substances, harmful substances (pollutants), enzymes, bacteria, viruses, parasites, fungi and chromosome protection.

Thereafter come programs on physiology (frequency patterns of healthy structures) and pathology

(frequency patterns of diseased structures), arranged in an alternating sequence. An even program number, such as 30.00, indicates a physiological structure, whereas the following uneven program number (31.00) indicates a pathological structure.

The next tranche of programs are those in the 70s, which are cause-orientated system programs. More detailed information on these will be provided over the coming pages, but suffice to say here that all programs beginning with the number 70 are so-called system programs. In regard to a selected area,

they contain the matching physiological structures, the associated meridians, any pathogens that may apply, as well as any corresponding immunitystabilising frequency structures.

The organisational structure of the RAH is completed with the programs on pain, psychological aspects, and stress management; with programs on teeth/milk teeth, C-Module; and with special programs for the analysis of Bach Flower preparations, Schuessler salts, resistance genes and frequency structures relating to the periodic table of elements (PTE).

18 4. Structure of the RAH

# 4. Structure of the RAH

Vitalisation, energy, polarity, pre-control, chakras   01.00 ff.	Analysis preparation		00.00 ff.
Electrosmog		Vitalisation, energy, polarity, pre-control, chakras	01.00 ff.
Geopathy	Energetics		02.00 ff.
Acid-base balance Vital substances 07.00 ff. Harmful substances 08.00 ff. Enzymes 09.00 ff. Amino acids 10.00 ff. Bacteria I / II Viruses I / II Parasites I / II 22.05 ff. / 23.05 ff. Fungi I / II 24.05 ff. / 25.05 ff. Fungi I / II 26.05 ff. / 27.05 ff. Chromosomes protection 28.00 ff. Blood 32.00 ff. / 33.00 ff. Immune system 34.00 ff. / 35.00 ff. Lymphatic system 36.00 ff. / 37.00 ff. Circulation 38.00 ff. / 39.00 ff. Heart 40.00 ff. / 41.00 ff. Respiratory system 42.00 ff. / 43.00 ff. Kidney / Urinary organs 44.00 ff. / 45.00 ff. Digestive system 25.00 ff. / 49.00 ff. Metabolism 50.00 ff. / 51.00 ff. Metabolism 50.00 ff. / 55.00 ff. Nervous system 54.00 ff. / 55.00 ff. Visual organ Acoustic organ / Balance organ 58.00 ff. / 59.00 ff. Skin / Hair 62.00 ff. / 65.00 ff. Female sexual organs 66.00 ff. / 67.00 ff.		Electrosmog	04.00 ff.
Vital substances 07.00 ff. Harmful substances 08.00 ff. Enzymes 09.00 ff. Amino acids 10.00 ff. Bacteria I / II 20.05 ff. / 21.05 ff. Viruses I / II 22.05 ff. / 23.05 ff. Parasites I / II 24.05 ff. / 25.05 ff. Fungi I / II 26.05 ff. / 27.05 ff. Chromosomes protection 28.00 ff.  Cells and tissue 30.00 ff. / 31.00 ff. Blood 32.00 ff. / 33.00 ff. Immune system 34.00 ff. / 35.00 ff. Lymphatic system 36.00 ff. / 37.00 ff. Circulation 38.00 ff. / 37.00 ff. Circulation 38.00 ff. / 40.00 ff. / 40.00 ff. Respiratory system 42.00 ff. / 43.00 ff. Kidney / Urinary organs 44.00 ff. / 45.00 ff. Digestive system 40.00 ff. / 45.00 ff. Digestive system 50.00 ff. / 50.00 ff. Musculoskeletal system 50.00 ff. / 53.00 ff. Nervous system 54.00 ff. / 55.00 ff. Visual organ 56.00 ff. / 57.00 ff. Acoustic organ / Balance organ 58.00 ff. / 59.00 ff. Skin / Hair 62.00 ff. / 65.00 ff. Female sexual organs 66.00 ff. / 67.00 ff.		Geopathy	05.00 ff.
Causes    Harmful substances		Acid-base balance	06.00 ff.
Enzymes		Vital substances	07.00 ff.
Amino acids Bacteria I / II Viruses I / II Parasites I /		Harmful substances	08.00 ff.
Amino acids Bacteria I / II 20.05 ff. / 21.05 ff. Viruses I / II 22.05 ff. / 23.05 ff. Parasites I / II 24.05 ff. / 25.05 ff. Fungi I / II 26.05 ff. / 27.05 ff. Chromosomes protection 28.00 ff.  Cells and tissue 30.00 ff. / 31.00 ff. Blood 32.00 ff. / 33.00 ff. Immune system 34.00 ff. / 35.00 ff. Lymphatic system 36.00 ff. / 37.00 ff. Circulation 38.00 ff. / 39.00 ff. Heart 40.00 ff. / 41.00 ff. Respiratory system 42.00 ff. / 43.00 ff. Kidney / Urinary organs 44.00 ff. / 45.00 ff. Digestive system 46.00 ff. / 47.00 ff. Metabolism 50.00 ff. / 51.00 ff. Metabolism 50.00 ff. / 51.00 ff. Musculoskeletal system 52.00 ff. / 53.00 ff. Nervous system 54.00 ff. / 55.00 ff. Visual organ 56.00 ff. / 57.00 ff. Skin / Hair 62.00 ff. / 63.00 ff. Female sexual organs 66.00 ff. / 65.00 ff.	0	Enzymes	09.00 ff.
Viruses I / II 22.05 ff. / 23.05 ff. Parasites I / II 24.05 ff. / 25.05 ff. Fungi I / II 26.05 ff. / 27.05 ff. Chromosomes protection 28.00 ff.  Cells and tissue 30.00 ff. / 31.00 ff. Blood 32.00 ff. / 33.00 ff. Immune system 34.00 ff. / 35.00 ff. Lymphatic system 36.00 ff. / 37.00 ff. Circulation 38.00 ff. / 39.00 ff. Heart 40.00 ff. / 41.00 ff. Respiratory system 42.00 ff. / 43.00 ff. Kidney / Urinary organs 44.00 ff. / 45.00 ff. Digestive system 46.00 ff. / 47.00 ff. Kidney / Urinary organs 48.00 ff. / 49.00 ff. Metabolism 50.00 ff. / 51.00 ff. Musculoskeletal system 52.00 ff. / 53.00 ff. Nervous system 54.00 ff. / 55.00 ff. Visual organ 56.00 ff. / 57.00 ff. Acoustic organ / Balance organ 58.00 ff. / 59.00 ff. Skin / Hair 62.00 ff. / 63.00 ff. Hormonal system 64.00 ff. / 65.00 ff. Female sexual organs 66.00 ff. / 67.00 ff.	Causes	Amino acids	10.00 ff.
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Fungi I / II Chromosomes protection  28.00 ff.  Cells and tissue 30.00 ff. / 31.00 ff. Blood 32.00 ff. / 33.00 ff. Immune system 34.00 ff. / 35.00 ff. Lymphatic system 36.00 ff. / 37.00 ff. Circulation 38.00 ff. / 37.00 ff. Respiratory system 40.00 ff. / 41.00 ff. Respiratory system 42.00 ff. / 43.00 ff. Kidney / Urinary organs 44.00 ff. / 45.00 ff. Digestive system 46.00 ff. / 47.00 ff. Digestive system 46.00 ff. / 49.00 ff. Metabolism 50.00 ff. / 51.00 ff. Musculoskeletal system 54.00 ff. / 53.00 ff. Nervous system 54.00 ff. / 55.00 ff. Visual organ 56.00 ff. / 57.00 ff. Acoustic organ / Balance organ 58.00 ff. / 59.00 ff. Skin / Hair 62.00 ff. / 63.00 ff. Hormonal system 64.00 ff. / 65.00 ff. Female sexual organs		Viruses I / II	22.05 ff. / 23.05 ff.
Chromosomes protection 28.00 ff.  Cells and tissue 30.00 ff. / 31.00 ff. Blood 32.00 ff. / 33.00 ff. Immune system 34.00 ff. / 35.00 ff. Lymphatic system 36.00 ff. / 37.00 ff. Circulation 38.00 ff. / 39.00 ff. Heart 40.00 ff. / 41.00 ff. Respiratory system 42.00 ff. / 43.00 ff. Kidney / Urinary organs 44.00 ff. / 45.00 ff. Digestive system 46.00 ff. / 47.00 ff. Digestive system 46.00 ff. / 47.00 ff. Metabolism 50.00 ff. / 51.00 ff. Musculoskeletal system 52.00 ff. / 53.00 ff. Nervous system 54.00 ff. / 55.00 ff. Visual organ 56.00 ff. / 57.00 ff. Skin / Hair 62.00 ff. / 63.00 ff. Hormonal system 64.00 ff. / 65.00 ff. Female sexual organs 66.00 ff. / 67.00 ff.		Parasites I / II	24.05 ff. / 25.05 ff.
Cells and tissue 30.00 ff. / 31.00 ff.  Blood 32.00 ff. / 33.00 ff.  Immune system 34.00 ff. / 35.00 ff.  Lymphatic system 36.00 ff. / 37.00 ff.  Circulation 38.00 ff. / 39.00 ff.  Heart 40.00 ff. / 41.00 ff.  Respiratory system 42.00 ff. / 43.00 ff.  Kidney / Urinary organs 44.00 ff. / 45.00 ff.  Digestive system 46.00 ff. / 47.00 ff.  Liver-gall-pancreas 48.00 ff. / 49.00 ff.  Metabolism 50.00 ff. / 51.00 ff.  Musculoskeletal system 52.00 ff. / 53.00 ff.  Nervous system 54.00 ff. / 55.00 ff.  Visual organ 56.00 ff. / 57.00 ff.  Acoustic organ / Balance organ 58.00 ff. / 59.00 ff.  Skin / Hair 62.00 ff. / 63.00 ff.  Hormonal system 64.00 ff. / 65.00 ff.  Female sexual organs 66.00 ff. / 67.00 ff.		Fungi I / II	26.05 ff. / 27.05 ff.
Blood   32.00 ff.   33.00 ff.		Chromosomes protection	28.00 ff.
Immune system		Cells and tissue	30.00 ff. / 31.00 ff.
Lymphatic system       36.00 ff. / 37.00 ff.         Circulation       38.00 ff. / 39.00 ff.         Heart       40.00 ff. / 41.00 ff.         Respiratory system       42.00 ff. / 43.00 ff.         Kidney / Urinary organs       44.00 ff. / 45.00 ff.         Digestive system       46.00 ff. / 47.00 ff.         Liver-gall-pancreas       48.00 ff. / 49.00 ff.         Metabolism       50.00 ff. / 51.00 ff.         Musculoskeletal system       52.00 ff. / 53.00 ff.         Nervous system       54.00 ff. / 55.00 ff.         Visual organ       56.00 ff. / 57.00 ff.         Acoustic organ / Balance organ       58.00 ff. / 59.00 ff.         Skin / Hair       62.00 ff. / 63.00 ff.         Hormonal system       64.00 ff. / 65.00 ff.         Female sexual organs       66.00 ff. / 67.00 ff.		Blood	32.00 ff. / 33.00 ff.
Circulation 38.00 ff. / 39.00 ff.  Heart 40.00 ff. / 41.00 ff.  Respiratory system 42.00 ff. / 43.00 ff.  Kidney / Urinary organs 44.00 ff. / 45.00 ff.  Digestive system 46.00 ff. / 47.00 ff.  Liver-gall-pancreas 48.00 ff. / 49.00 ff.  Metabolism 50.00 ff. / 51.00 ff.  Musculoskeletal system 52.00 ff. / 53.00 ff.  Nervous system 54.00 ff. / 55.00 ff.  Visual organ 56.00 ff. / 57.00 ff.  Acoustic organ / Balance organ 58.00 ff. / 59.00 ff.  Skin / Hair 62.00 ff. / 63.00 ff.  Hormonal system 64.00 ff. / 65.00 ff.  Female sexual organs 66.00 ff. / 67.00 ff.		Immune system	34.00 ff. / 35.00 ff.
Heart 40.00 ff. / 41.00 ff. Respiratory system 42.00 ff. / 43.00 ff. Kidney / Urinary organs 44.00 ff. / 45.00 ff. Digestive system 46.00 ff. / 47.00 ff. Liver-gall-pancreas 48.00 ff. / 49.00 ff. Metabolism 50.00 ff. / 51.00 ff. Musculoskeletal system 52.00 ff. / 53.00 ff. Nervous system 54.00 ff. / 55.00 ff. Visual organ 56.00 ff. / 57.00 ff. Acoustic organ / Balance organ 58.00 ff. / 59.00 ff. Skin / Hair 62.00 ff. / 63.00 ff. Hormonal system 64.00 ff. / 65.00 ff. Female sexual organs 66.00 ff. / 67.00 ff.		Lymphatic system	36.00 ff. / 37.00 ff.
Respiratory system		Circulation	38.00 ff. / 39.00 ff.
Kidney / Urinary organs  Digestive system  46.00 ff. / 47.00 ff.  Liver-gall-pancreas  48.00 ff. / 49.00 ff.  Metabolism  50.00 ff. / 51.00 ff.  Musculoskeletal system  52.00 ff. / 53.00 ff.  Nervous system  54.00 ff. / 55.00 ff.  Visual organ  56.00 ff. / 57.00 ff.  Acoustic organ / Balance organ  58.00 ff. / 59.00 ff.  Skin / Hair  62.00 ff. / 63.00 ff.  Hormonal system  64.00 ff. / 65.00 ff.  Female sexual organs		Heart	40.00 ff. / 41.00 ff.
Digestive system 46.00 ff. / 47.00 ff.  Physiology and pathology Liver-gall-pancreas 48.00 ff. / 49.00 ff.  Metabolism 50.00 ff. / 51.00 ff.  Musculoskeletal system 52.00 ff. / 53.00 ff.  Nervous system 54.00 ff. / 55.00 ff.  Visual organ 56.00 ff. / 57.00 ff.  Acoustic organ / Balance organ 58.00 ff. / 59.00 ff.  Skin / Hair 62.00 ff. / 63.00 ff.  Hormonal system 64.00 ff. / 65.00 ff.  Female sexual organs 66.00 ff. / 67.00 ff.		Respiratory system	42.00 ff. / 43.00 ff.
Physiology and pathology   Liver-gall-pancreas   48.00 ff. / 49.00 ff.     Metabolism   50.00 ff. / 51.00 ff.     Musculoskeletal system   52.00 ff. / 53.00 ff.     Nervous system   54.00 ff. / 55.00 ff.     Visual organ   56.00 ff. / 57.00 ff.     Acoustic organ / Balance organ   58.00 ff. / 59.00 ff.     Skin / Hair   62.00 ff. / 63.00 ff.     Hormonal system   64.00 ff. / 65.00 ff.     Female sexual organs   66.00 ff. / 67.00 ff.		Kidney / Urinary organs	44.00 ff. / 45.00 ff.
Metabolism       50.00 ff. / 51.00 ff.         Musculoskeletal system       52.00 ff. / 53.00 ff.         Nervous system       54.00 ff. / 55.00 ff.         Visual organ       56.00 ff. / 57.00 ff.         Acoustic organ / Balance organ       58.00 ff. / 59.00 ff.         Skin / Hair       62.00 ff. / 63.00 ff.         Hormonal system       64.00 ff. / 65.00 ff.         Female sexual organs       66.00 ff. / 67.00 ff.		Digestive system	46.00 ff. / 47.00 ff.
Musculoskeletal system       52.00 ff. / 53.00 ff.         Nervous system       54.00 ff. / 55.00 ff.         Visual organ       56.00 ff. / 57.00 ff.         Acoustic organ / Balance organ       58.00 ff. / 59.00 ff.         Skin / Hair       62.00 ff. / 63.00 ff.         Hormonal system       64.00 ff. / 65.00 ff.         Female sexual organs       66.00 ff. / 67.00 ff.	Physiology and pathology	Liver-gall-pancreas	48.00 ff. / 49.00 ff.
Nervous system       54.00 ff. / 55.00 ff.         Visual organ       56.00 ff. / 57.00 ff.         Acoustic organ / Balance organ       58.00 ff. / 59.00 ff.         Skin / Hair       62.00 ff. / 63.00 ff.         Hormonal system       64.00 ff. / 65.00 ff.         Female sexual organs       66.00 ff. / 67.00 ff.		Metabolism	50.00 ff. / 51.00 ff.
Visual organ       56.00 ff. / 57.00 ff.         Acoustic organ / Balance organ       58.00 ff. / 59.00 ff.         Skin / Hair       62.00 ff. / 63.00 ff.         Hormonal system       64.00 ff. / 65.00 ff.         Female sexual organs       66.00 ff. / 67.00 ff.		Musculoskeletal system	52.00 ff. / 53.00 ff.
Acoustic organ / Balance organ       58.00 ff. / 59.00 ff.         Skin / Hair       62.00 ff. / 63.00 ff.         Hormonal system       64.00 ff. / 65.00 ff.         Female sexual organs       66.00 ff. / 67.00 ff.		Nervous system	54.00 ff. / 55.00 ff.
Skin / Hair       62.00 ff. / 63.00 ff.         Hormonal system       64.00 ff. / 65.00 ff.         Female sexual organs       66.00 ff. / 67.00 ff.		Visual organ	56.00 ff. / 57.00 ff.
Hormonal system 64.00 ff. / 65.00 ff. Female sexual organs 66.00 ff. / 67.00 ff.		Acoustic organ / Balance organ	58.00 ff. / 59.00 ff.
Female sexual organs 66.00 ff. / 67.00 ff.		Skin / Hair	62.00 ff. / 63.00 ff.
		Hormonal system	64.00 ff. / 65.00 ff.
Male sexual organs 68.00 ff. / 69.00 ff.		Female sexual organs	66.00 ff. / 67.00 ff.
		Male sexual organs	68.00 ff. / 69.00 ff.

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Cause-oriented system therapy	70.10 to 70.68
Pain	71.00 ff.
Psyche	72.00 ff.
Stress	75.00 ff.
Tooth / Milk tooth	76.00 ff. / 77.00 ff.
C-Module	79.00 ff.
Bach flowers	81.00 to 81.38
Schuessler salts	82.00 to 82.27
Resistance genes	83.00 ff.
Periodic table of elements	85.00 to 86.04
Own programs	95.00 ff.

Let us consider a single element from the RAH program structure, for example electrosmog, in more detail. The corresponding section of program structure is as follows:

04.00 Electro-magnetic pollution complete
04.10 Alternating electric and magnetic fields
04.20 Pulse-modulated irradiation / UMTS, complete
04.21 Mobile phones
04.22 UMTS
04.23 DECT (wireless telephone)
04.24 WLAN
04.25 Bluetooth
04.26 Satellite transmission
04.27 Wi Max
04.28 LTE
04.29 Tetra / BOS
04.30 Radiation, protection
04.31 Ultrasound
04.32 X-rays
04.33 Radioactivity

The program number of electrosmog is 04.00. The name is Electrosmog complete. The tag 'complete' means that all frequency structures under this program are also contained in this 04.00. So it also encompasses the frequency structures of 04.10, 04.20 as well as sub-programs 04.21 to 04.29 and of 04.30 as well as sub-programs 04.31 to 04.33. This organisation conveys particular advantages, because if testing of program number 04.00 reveals that this does not have to be harmonised it also means that no tests of the sub-programs are required. Or, for example, if there is a disturbance at 04.00, you can test via 04.10 whether the problem is caused by alternating electrical and magnetic fields, or via 04.20 whether the electrosmog problem is due to impulse modulated irradiation / UMTS . The program number 04.20 also carries the tag "complete", which again indicates that this program number contains all of the programs listed under this number. If a problem is detected at this point, you are able to ascertain very rapidly, by means of the individual sub-programs (04.21 to 04.29), whether the problem is caused, for example, by a DECT telephone (cordless telephone) under program number 04.23. Alternatively, this structure also allows you to test program number 04.23 directly, if you already have an indication for doing so.

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The organisation described above effectively takes testing from the coarse grade to the fine; the goal always being to reduce the number of tests that are necessary. The given structure allows therapists to decide for themselves at what level they want to undertake the tests.

This program structure is repeated across each of the areas. So that, for example, program number 56.00 covers the entire physiology of the eye, while the sub-programs cover the respective specific areas of the eye (chamber of the eye, membranes, musculature, nerves, and so on).

You will find a description of all currently available programs and sub-programs in chapter 9 of this RAH Compendium.

How was the organisation of the bioresonance devices Rayocomp PS 10 and Rayocomp PS 1000 polar implemented?

The goal has always been to integrate the RAH in the Rayocomp PS 10 as well as the Rayocomp PS 1000 polar.

To be able to run the RAH system on the Rayocomp devices, a hardware update is required. This requires that the devices have to go to the Rayonex factory for a couple of days. The new hardware has already been integrated in devices delivered since 01.07.2009, so that the RAH module merely has to be activated for use.

To find out whether the Rayocomp devices have been fitted with the new hardware simply look for the word 'Evolution' on the side of theses devices.

If the word 'Evolution' is printed on the side, the additional hardware needed to run the RAH has already been integrated.





With the Rayocomp PS 1000 polar the entire set of RAH programs are available for analysis and harmonisation. Only the RAH program of the C-Module was granted its own module.

The Rayocomp PS 10 supports six modules of the RAH.

Module 7	RAH program for building biologists
Module 8	Only higher-level RAH programs
Module 9	All RAH programs for harmonisation
Module 10	All RAH programs for harmonisation and testing
Module 11	RAH programs for veterinary medicine
Module 12	RAH programs of the C-Module

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## 5. Use of the RAH

With the following expositions, we would like to lay out a framework according to which the RAH may be used.

Please observe that we certainly do not intend to make a case for this approach being the only possible or even the only correct way of using the RAH. Of course, you can also combine individual programs using a detailed radiesthetic approach. But that is just one possibility and it may not be the right choice for every therapist. A physician, for example, is unlikely to be able to set enough time aside in his practice to conduct expansive testing sessions. Similarly, therapists are likely to apply the RAH very differently, depending on their therapeutic focus. And this is how it should be, given that one of the aims of the RAH is its widespread use.

The RAH divides into two functions: the analysis function, with which disturbances can be identified, and the harmonisation function, which aims to stimulate self-regulation in a targeted fashion.

With the RAH an analysis is preceded by the analysis preparation. This step ensures that the patient generates no resonances in response to the transfer values of the RAH. Should the Rayotensor display a linear motion during the testing of program 00.00 (Analysis Preparation), this program has to be harmonised until a rotation of the Rayotensor occurs. The actual testing procedure should only begin once this is the case. In other words, the analysis preparation is a pre-requisite for accurate testing. Otherwise, it may happen that all subsequent tests result in resonance, although this would not be due to the program itself but due to the transfer values that are required to apply it.

In the RAH, the actual analysis starts when the energy programs are being tested. Often patients are not capable of processing any treatment, because their body cannot implement the regulatory steps

prompted by harmonisation. It is, therefore, not without reason that the first of the RAH program numbers, 01.00, is Vitalisation Complete. This program can be used to ascertain the current energy status. If tests with this program indicate a severe blockage, it is sensible to conduct an intensive body energy-restoring session, before continuing with the primary treatment. Wilhelm Hömberg was the primary force behind researching and developing the vitalisation program.

# When can a burden be classified as a severe disturbance?

If you select a program, in this example, 01.00 Vitalisation complete, the associated frequency spectrum is transferred to the body. You should initially test, at the Polariser setting N, whether the Rayotensor displays a rotation (= harmonisation is not required) or a linear motion (harmonisation is required). In case of a linear motion, you can use the button on the Rayotensor to switch the Polariser to the bipolar mode. This mode intensifies the influence of the frequency spectrum on the body. If the linear motion persists, we can deduct that there is a severe disturbance and are thus primed to pay special attention to this program. This approach applies to all of the subsequent programs. By means of the Polariser we can therefore decide if a disturbance is more or less severe and if it deserves more or less attention.

Let us come back to the program 01.00 Vitalisation complete. In case of a strong disturbance, the expedient measure is to also test program number 02.00 Acupuncture Meridians complete. If you discover a strong disturbance here as well, you can now find out which channel is so severely affected. The recommended approach in such patients is to limit harmonisation in the first instance to three programs, program 01.00 Vitalisation complete,

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program 02.00 Acupuncture Meridians complete and program 31.10 ATP production complete, in order to restore the body to a state in which it can process subsequent therapy. Such cases occur more frequently than you would imagine. In the opinion of some therapists, this sole activation of the body's energy is sufficient treatment on its own, because the body then starts to regulate itself. Returning to the three programs: each should be harmonised for a duration of 10 minutes, resulting in an overall harmonisation time of 30 minutes.

Regardless of which therapeutic strategy you favour, the RAH offers suitable programs for a variety of treatment approaches.

The cause-oriented treatment approach is the most robust.

Once energy testing is complete, causal influences are the next area to cover. The RAH thus aligns itself with the philosophy of Paul Schmidt, who claimed as early as 1980 that a cause-orientated therapeutic approach is the most sustainable one.

The main program groupings in this section, ranging from 04 (electrosmog) to 28 (chromosome protection), certainly support Paul Schmidt's thinking. By applying these programs, it is possible to identify fundamental disturbances of the body. Consider this example: It is nonsensical to want to treat a headache, migraine or sleep disorder, without having first tested whether the patient is exposed to harmful levels of electrosmog. How often has the radio-alarm clock been the actual cause of such an illness, sitting on the bedside table and affecting the patient with an alternating magnetic field of over 600 nT throughout the night? This is reason enough to take the cause-orientated program section very seriously during testing. Here too, you can employ the bipolar setting of the Polariser to determine if you are dealing with a severe disturbance and attempt to eradicate this in a targeted way, regardless whether it is caused by electrosmog, geopathy, acid-base imbalances, a lack in vital substances, pollutants, a deficiency in enzymes or amino acids or pathogens. A multitude of programs are at the user's disposal to support a cause-orientated therapeutic approach. The primary function of the cause-orientated programs is, of course, that of analysis. There is no logic in harmonising, for example geopathic stress, if the cause has not been addressed. Such treatment would not deliver sustainable results. However, once the factor disturbing the body has been eliminated, it is indeed logical to harmonise precisely those frequency spectra the body was exposed to for such an long time.

Let us now turn to the pathogen programs. The RAH contains a large number of programs relating to bacteria, viruses, parasites and fungi. To test for each pathogen in every patient would be a monumental and highly impractical undertaking. As there are hardly any patients who are not affected by some pathogenic bacterium, virus or parasite, the naturopath, Ms Schußmann, and the physician, Dr Schußmann, MD, undertook fundamental scientific research at the therapy centre in Melbeck, Germany, in which they determined, in a total of 26.000 patients, which pathogens occur in which organs or organ areas. The results of this research have been integrated into the RAH. If you were to ask therapists today which pathogens are preferentially found in which organs, most would have to admit a lack of adequate knowledge of this area. Yet this subject is of pre-eminent importance. Therefore, it has to be seen as positive that the RAH offers special support in the area.

The subsequent pages of this RAH Compendium show exactly which pathogens are present in which organs. In this way, the entire testing procedure can often be narrowed down from many hundreds of pathogens to a mere handful. Comprehensive testing of all pathogen programs, however, is sensible when the symptoms indicate this or if further information has to be gathered for the purpose of further research and development.

**Please note:** Bioresonance frequently identifies the presence of pathogens in the body that can

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no longer be detected with traditional methods of orthodox medicine. In these instances we are often dealing with remnant disturbances of the energy pattern that were caused by a past pathogenic infection or infestation.

Here we consider programs relating to physiology and pathology. As mentioned earlier, programs on physiology characterise the frequency patterns of healthy structures, while programs on pathology characterise those of diseased structures. The numerical sequence of these program is organised on an alternation basis. An even program number, such as 30.00, indicates a physiological structure, whereas the following uneven program number (31.00) indicates a pathological structure.

In this context, Cells and Tissues present an extraordinary program number. Apart from also includes physiological aspects, it detoxification programs that have come out of the fundamental research of the naturopath, Mr Gerhard G. Rögele. This section also includes the previously mentioned ATP programs developed by Dr Yayama, MD. As well as, of course, the highly reliable programs of Dr Ulrich, MD. In addition, there are programs that have been contributed by the naturopath, Ms Rögele, specifically relating to the musculoskeletal system as we all as women's health issues

#### Why did we opt for this design?

Because it provides the structure required for use. The great advantage of this structure is that testing with the main programs allows the user to rule out certain organ areas, thereby facilitating a quick but efficient basic test.

It is not uncommon, however, for patients suffering from a specific problem to request a treatment solution specifically and exclusively for this problem, for example, otitis media (an infection of the middle ear). Based on this example, we would like to offer a suggestion of how the RAH can be used for testing and harmonisation.

For ear pain you can proceed directly to program group 58, to test which physiological structure of the ear is affected. To start with, you test the program 58.00 Hearing organ / organ of equilibrium physiology complete. If you observe a linear motion of the Rayotensor, you know that an energy pattern of the ear is affected.

By the way, at this point you can also ascertain whether this disturbance is mild or severe by testing in the bipolar mode (as previously described in detail). When continuing with the tests, the subprograms under program 58 will indicate the exact location of the primary problem. In this case, the program for the middle ear, program 58.30, will result in a linear motion at the bipolar setting.

You should now test which pathogen is adversely affecting the middle ear. As already mentioned, you will find the categorisation of pathogens by organ area in chapter 10 of this RAH Compendium.

For the auditory organ / organ of equilibrium, for example, the following pathogens are listed:

20.11 Alpha streptococcus

20.12 Beta haemolytic streptococci

20.21 Streptococcus lactis

20.22 Streptococcus mitis

20.23 Streptococcus pneumoniae

20.24 Streptococcus pyogenes

21.70 Borrelia afzelii

21.71 Borrelia burgdorferi

21.72 Borrelia duttoni

21.73 Borrelia garinii

21.74 Borrelia hermsii

21.88 Rickettsiae

22.12 Cytomegalovirus (CMV)

22.13 Epstein-Barr virus (EBV)

22.15 Herpes simplex

22.17 Herpes zoster

22.64 Chikungunya

22.67 Coxsackie virus B1

22.68 Coxsackie virus B4

22.89 Coxsackie virus A7

23.55 Retroviruses

24 5. Use of the RAH

23.56 Rotaviruses23.81 Viruses N.N.25.62 Dermatophagoides (dust mite)25.85 Blood parasites25.86 Pneumocystis carinii26.12 Aspergillus niger26.41 Aflatoxin

Each individual pathogen should now be tested with the bioresonance devices. As before, the same rule applies – a linear rotation of the Rayotensor indicates a disturbance in the body. If you also want to accurately determine the location of the affected tissue, hold a detector, for example a spherical detector, that is connected to the bioresonance device against the ear and test whether this elicits a linear motion of the Rayotensor.

Tip: If you are working with a Rayocomp PS 10, you can copy the template provided in chapter 10 and use this to make a note of your test results. If you are working with a Rayocomp PS 1000 polar, you can print out the test results.

Our recommendation: the duration of a subsequent harmonisation procedure would be three minutes in case of a disturbance that has been detected at the N setting, and at least five minutes if a linear motion – i.e. a severe disturbance – has been observed at the bipolar setting. Ideally, the harmonisation time should be determined by the radiesthetic method.

By following this approach you will be able to draw a clear conclusion and arrive at the cause of the disorder, which of course may lie at an even deeper level. After all, there is a reason as to why the pathogen was able to take a foothold in the middle ear in the first place, among other things, for example, an imbalance in the acid-base equilibrium, an unsuitable diet, or psychological factors.

Based on these test results, what would the plan for a harmonisation session look like?

#### We have proposed a possible suggestion below:

00.00 Analysis preparation	5 minutes
01.00 Vitalisation complete	5 minutes
02.16 Meridian of the small intestines	2 minutes
02.18 Kidney meridian	2 minutes
31.10 ATP production complete	3 minutes
58.30 Middle ear complete	5 minutes

#### Then the identified pathogens:

in case of resonance at N:	3 minutes
in case of resonance at +/-:	5 minutes
31.50 Basic detoxification program	5 minutes
01.00 Vitalisation complete	2 minutes

The composition of such a plan always starts with the vitalisation and the relevant channel, which can be looked up in chapter 9 of this RAH Compendium. This is followed by a program relating to ATP production. Because there is no specific ATP program for the ear, the higher-level program ATP Production Complete is selected. The next step is to add the relevant physiological program components; in this case, the middle ear. this, the programs for harmonising the relevant pathogens are included. This is always followed by a detoxification program, to manage the endotoxins that are generated in the body as a consequence of pathogen harmonisation. In this example, a high-level program was chosen again, the basic detoxification program with the number 31.50. The final program to round off harmonisation is once again the vitalisation program.

By this method you can compile individual programs of other organs or organ areas.

In addition to the physiology programs, the RAH offers a large number of frequency patterns that characterise pathological processes in the body. For example, in case of a suspected broken bone, it is possible to ascertain whether the bone is really broken by applying program 53.11 in conjunction with a spherical detector that has been connected

5. Use of the RAH 25

to a bioresonance device. Testing procedures, in particular, benefit greatly from the availability of pathological frequency patterns. Among these programs, you will find such classics as the Open wounds program (number 31.80) or the Learning program by Dr Ulrich, MD (number 75.19), devised to improve the concentration abilities of children, in particular.

Please note that the main-number pathological programs are empty. Do these ring a bell? You will recall that the main physiology programs (such as 32.00 Blood physiology complete) always represent a summary of the frequency patterns from all of the sub-programs. In terms of the pathology programs, however, this structure makes no sense. Therefore, programs such as 33.00 Blood pathology are empty and not suitable for use. Such an umbrella program would have to contain all pathological sub-programs, which is invalid from a therapeutic perspective.

The pathology programs can be employed both for analysis and harmonisation purposes, although there are of course some limits. The program Alzheimer's disease can prove helpful with respect to analysis and differentiation. It is also excellent for supporting the body and can often stabilise disease. Nonetheless, you cannot expect to resolve such degenerative disorders through the application of a single program. In such instances, more intensive and specialised analysis and harmonisation is required.

If we consider the further options for application of the RAH, this brings us to the 70s programs, which enjoy a special status. We owe the development of these programs to the naturopath, Ms Schußmann and to Dr Schußmann, MD. They explain that: "Every cause-orientated system program contains the entirety of known pathogens that have been investigated over the past 8 years. These are comprehensive programs that contain all of the pathogens that we have ever detected in each given organ system. It also contains the frequency patterns for the energy supply, the transfer frequencies, the physiological frequency patterns of the affected organ systems and of the immune system. Successful treatment is therefore possible without having to differentiate whether the pathogens are bacteria, viruses, parasites or fungi. In this sense, it is impossible to make mistakes in case of inaccurate testing. Even physicians who are not familiar with this method of investigation are able to conduct cause-orientated treatments and have satisfied patients in good long-term health."

This makes clear that the 70s programs of the RAH are not meant to be used for testing but exclusively for harmonising. When these programs are applied, the duration of harmonisation should last for at least 30 minutes. Four further areas follow the 70s programs, each having been assigned special programs. These contain programs on pain, psychological factors, stress reduction and on teeth/ milk teeth.

Finally, the RAH includes additional special programs to support further therapeutic approaches. Such special programs can be used, for example, to select the right Bach Flower preparation for a patient, find out which Schuessler salts are suitable or use resistance genes.

# 6. Use with the Rayocomp PS 10 and Rayocomp PS 1000 polar

So far the RAH has been integrated in two bioresonance devices. On the one hand the portable Rayocomp PS 10 and on the other hand the professional device, the Rayocomp PS 1000 polar.

As more and more practitioners are using the portable Rayocomp PS 10 for the home treatment of their patients, all of the programs provided by the RAH can also be accessed via a Rayocomp PS 10. For a home treatment, patients rent a Rayocomp PS 10 as well as the RAH and are issued with therapeutic programs that have been devised by their practitioner for the duration of their treatment. **One of the advantages** is less travel for patients, who no longer have to get to the practice. Another advantage is that treatments can be outsourced, thus freeing capacity at the practice itself. Conducting home treatment has become much easier, especially through the Rayonex 'Green-Card'.

The idea of the new RAH Green Card is as simple as it is brilliant. Previously, harmonising programs that had been determined with the Rayocomp PS 1000 polar or Rayocomp PS 10 via the RAH had to be written down or printed out to be available for future use. With the new RAH Green Card system you can now save your compiled program on a special memory card, i.e. the Green Card.

This systems allows you, for example, to download programs that have been tested on a Rayocomp PS 1000 polar to an RAH Green Card, which is then given to the patient for his home therapy with the Rayocomp PS 10. By means of the RAH Green Card, both devices effectively work together hand in hand.

In addition, the RAH Green Card offers a seamless connection between bioresonance according to Paul Schmidt and the RAH. As the use of RAH programmes is often accompanied by single frequencies of bioresonance according to Paul Schmidt (e.g. from an individual range value test), the Rayonex engineers found a way, to store single frequencies (up to 500 different values), as well as RAH programs on the Green Card. In addition, a special function was created under the main menu item of the Rayocomp PS 1000 polar and the Rayocomp PS 10. If you insert an RAH Green Card, an automatic harmonisation sequence begins. The single frequencies saved on the RAH Green Card are harmonised first, each for 30 seconds. After that, the RAH programs that are saved on the same card are harmonised. Thus, an RAH Green Card compiled by the therapist, can easily be used by the patient at home with a single button.



6.1 Rayocomp PS 10 27

## 6.1 Rayocomp PS 10

The three most important RAH-modules for human medicine are modules 8, 9 and 10.

Module 8 only contains higher-level frequency structures, in the current program version 239 different structures, whereas module 9 makes all frequency spectra available, currently 1859!

Module 10 (M 10) is the most advanced module in the Rayocomp PS 10, as it not only provides all programs in addition to module 9, but also a host of test functions. What is absolutely unique is that all RAH programs necessary for a certain organ area or disease are offered up for testing at the push of a button.

These testing protocols (detailed information in chapter 16) create a blueprint for analysing as well as harmonising with the RAH. In addition, they serve the purpose of capturing any energy deficits in the most comprehensive way possible. To this end, the RAH program numbers do not have to be typed in separately, but are available for testing at the push of a button. The test results are then ready to be harmonised and/or saved on the RAH Green Card.

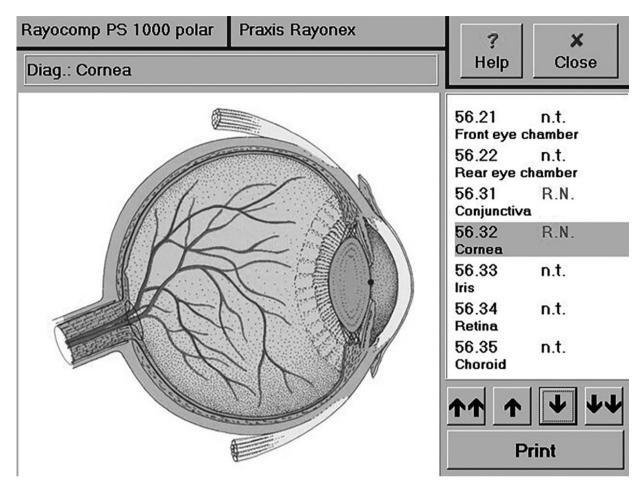
Furthermore, module 10 supports the level test, known from the Rayocomp PS 1000 polar. When a higher-level RAH program is chosen, the sub RAH programs can be selected and tested by using the switch on the Rayotensor.

Working with the RAH on the Rayocomp PS 10 is incredibly simple. With the menu button you can call up the programs listed in chapter 9 by entering the corresponding program number. In a single session, you can enter up to 200 different programs with diverse timings. After the start button has been activated, the frequency spectra are generated and released for imprinting on the body via the relevant detectors. With the Rayocomp PS 10 the programs can be used both for analysis and for harmonisation.

## 6.2 Rayocomp PS 1000 polar

The Rayocomp PS 1000 polar is the high-med bioresonance device of Rayonex Biomedical GmbH. The new RAH was Accordingly extensively and comfortablely implemented in the device. It includes both an analysis and a harmonisation function. The user-friendly display of information facilitates the intuitive testing approach described earlier in the book. Of course, any results can also be printed out. With this device, the integrated system for visualising the analysis results can prove particularly

helpful to patients. For example, if you detect a disturbance of the organ of sight that affects the conjunctiva, it is possible to display this on the screen of the Rayocomp PS 1000 polar (see image). In this way, you can explain the issue to the patient in a visually very accessible way. Apart from this, running the RAH on a Rayocomp PS 1000 polar offers a particular approach to analysis. By means of a switch on the Rayotensor you can access submenus very rapidly and thus switch from the overall



With the Rayocomp PS 1000 polar any disturbances that are detected can be displayed on the screen of the device – here the organ of sight.

structure of an organ to its sub-structure details. The same applies to a special function provided by the RAH, whereby you can conduct pathogen-specific testing and switch from this just as quickly to a harmonisation procedure.

With the Rayocomp PS 1000 polar any disturbances that are detected can be displayed on the screen of the device – here the organ of sight.

Use of the testing protocols (see chapter 16) for the different diseases that were mentioned at the start of this chapter and the application of the RAH Green Card are of course also available on the Rayocomp PS 1000 polar.

## 7. Integrating new programs

To date, the RAH contains over 1900 different programs (frequency structures) that can be used for analysis and harmonisation. A multitude of therapists have made their programs available for integration into the RAH.

Each program often represents a life time's work. As such, a single person would be incapable of creating the sheer volume needed, simply due to time restraints. The RAH is an open system that also offers a platform for general use to newly joining therapists and their programs, subject to the necessary quality controls.

Having as many therapists and their programs at hand as possible represents an immeasurable advantage for all users, as each one of them will have individual requirements as to what an analysis and harmonisation system has to deliver for them. Only if a wide variety of therapists contribute their ideas and expertise to this system, will the user have an equally wide variety of therapeutic approaches to choose from. In turn, this will spread the enthusiasm for RAH use, and vibrational medicine as a whole, among more and more users.

With the Rayocomp PS 1000 polar, you are able to store your own programs, so you can systematically test and use them. As such, it also provides the essential platform for the development and use of a user's own new programs and once again it emphasises that new programs of new therapists are explicitly welcome.

# But who decides which programs are included in the RAH?

Therapy specialists, the German Association for the Promotion of Vibrational Medicine (Vereinigung zur Förderung der Schwingungsmedizin), interested parties from around the world, engineers from research and development, and representatives from the Therapy Centre at the School for Alternative Medicine at the Sauerland Pyramids came together to form an expert panel. The panel's aim is to

consider as many interests as possible while also forming a decision-making body to evaluate and integrate new suggestions.

Here are the conditions for submitting a new program:

The program has proven successful in practice over a long period of time and relevant case-study reports are available. The new program should cover a new area of use. The expert panel will evaluate the new programs.

In order for the new programs to be integrated in the RAH a Word-document with the following information is required:

- Address of the therapist
- Designated name of the program
- A short description of the program's main area of application
- How long has this program been used for
- How many patients have already been treated with it
- Fundamental frequency values of the program (These are needed for programming and will not be published)
- At least three case-study reports

A sample is attached.

Please send the new program to the Paul Schmidt academy. Keyword: expert panel. You will find the address on the reference sheet. From there it will be forwarded to the other therapists sitting on the expert panel. If the results claimed for the new program can be verified, it will be put at the disposal of all users at the next round of RAH program updates.

Telefax: 02721 6006-66

Address of th	e tnerapist			
Designated na	ame of the program			
A short descr	iption of the progra	m's main area of ap	plication	
How long has	this program been	used for?		
How many pa	tients have already	been treated with it	:?	
Fundamental	frequency value of	the program		
1:	2:	3:	4:	5:
6:	7:	8:	9:	10:
11:	12:	13:	14:	15:
16:	17:	18:	19:	20:
21:	22:	23:	24:	25:
26:	27:	28:	29:	30:
31:	32:	33:	34:	35:
36:	37:	38:	39:	40:
41:	42:	43:	44:	45:
46:	47:	48:	49:	50:
51:	52:	53:	54:	55:
56:	57:	58:	59:	60:
61:	62:	63:	64:	65:
66:	67:	68:	69:	70:
71:	72:	73:	74:	75:
In case of fur	ther fundamental fr	equency values, plea	ase use a separate she	eet!
Number of at	tached case-study r	eports		
Send to: Paul-Schmidt- - Bioresonanc Sauerland-Pyr 57368 Lennes	e experts -			

# 8. Informative guidelines for the application of bioresonance according to Paul Schmidt at a glance

On the one hand, bioresonance according to Paul Schmidt impresses because of its multiple possibilities for use. It gives us the perspective to gain findings as well as carry out multifaceted energetic harmonisations. But on the other hand, it is a challenge for many users to keep the overview and find the right direction. In such a situation the most diverse opinions arise, which may cause confusion.

With these informative guidelines we give you some support, that allows everyone to find the all-important red thread, to follow the safe path.

## 8.1 Basic test procedure

In step one the point is to carry out the test with a sensible strategy.

- The guiding thread here is that every individual is unique and that true knowledge about his health is always the result of a complete individual test, from which finally a just as individual treatment program will be composed.
- The test protocols inform us to what we should pay particular attention to in all different diseases. It is important that we to use this just for orientation purposes and not to consider it to be accomplished facts. Experienced users know that sometimes the most "exotic" constellations describe a disease. And only the individual basic test can shed light into this.
- With many symptoms the treatment recommendations in the compact programs may help us, also in the hectic daily practice, to immediately conduct the therapeutic measures.
- With all these assistance we must not forget to focus on the individuality of the patient, what encourages us to use the RAH programs with our medical knowledge and the logic of experience.

• Ensure optimal use of the detectors, not only in the practical application of the test, but also in the treatment. It is very important to reach all body's circulatory systems and by doing so to apply the relevant frequencies via the hands, feet, or via the back and spine. Therefore we have hand and foot detectors or fabric detectors for hands and feet, as well as the large-surfaced fabric detectors, with which the frequency spectra can reach the spine. And finally the treatment chair that covers the complete body's circulatory systems. The choice is purely made based on the individual's practical needs. It turns out that the fabric detectors for hands and feet, the so-called 4x30 fabric detectors, are most frequently used in practice. We recommend, especially with regards to the correct connections, to have a look at the Wiki of the Paul Schmidt academy and the book "Bioresonance according to Paul Schmidt" by Prof (RAMSR) Dietmar Heimes, page 33 et seq.

# 8.2 Strategic approach when organising an RAH-treatment program

In the second step we build a treatment program, quided by the following thoughts:

- As set forth above, the key strategy is to compose a treatment program based on an individual basic test of the patient, supported by the test protocols and treatment recommendations. With regards to the practical application the following approach is recommended:
- Every treatment program starts with the analysis preparation. This is particularly important because the analysis preparation avoids false results based on possible resonances regarding the transfer values.
- In the next step it is the energetic status that matters most. Herewith we get an overview of the patient's energy status. Without this preparation it might, in case of energetic disturbances, not be possible to energetically harmonise those affected. This could cause a resistance to therapy.
- It should be remembered that, also within the energetic programs, individual details may be discussed, like e.g. specific channels and specific ATP-programs.
- When we then get involved in the harmonisation of extended physiology (frequency patterns of

- healthy structures) and pathology (frequency patterns of diseased structures) programs, we should always bear in mind that smaller steps need less reactive energy in the organism. This is very meaningful for the optimal therapeutic effect.
- The same applies to the energetic harmonisation with pathogens (viruses, bacteria, parasites, fungi). Here in particular the individual test results should be considered, instead of applying the complex programs.
- With the 70s programs we choose a program for therapy that corresponds most closely to the individual test results. Here, we also take into account that these programs are very complex and we should therefore keep their use to a minimum.
- Please remember, the treatment recommendations (compact programs) can also help us to compile a treatment program.
- Finally every treatment program should include the energetic boost of the detoxification (31.50). Here it is also advisable to consider the details of the test result.

## 8.3 Further recommendations

- The advised harmonisation time is a reference. In other words, the individual harmonisation times must be adapted to the patient's needs and the test result. Never forget that less can be more. Especially in case of chronically ill and weakened patients. In these cases the significance of the energy programs becomes particularly clear.
- Please remember that an application in water, e.g. bathtub and foot bath, can be very helpful. The best option would be a bath with Rayosole plus, in which we place a hand detector to transfer the frequencies to the bathing patient.

8.3 Further recommendations 33

Finally, we also consider the possibility of a treatment in the relaxed phase during sleep, while the patient rests on a large-surfaced fabric detector.

- The programs on acid-base balance (06.00) should primarily be used for testing and be complemented by the appropriate food supplements. We also consider the test set with ampoules.
- Programs with regards to nutrients (previously vital substances) (07.00) should also preferably be used for testing and in the treatment supplemented with the appropriate food supplements.

• And finally, with the programs on electrosmog burdens (04.00) and geopathic disorders (05.00) we consider the additional help of biofield-emitting devices. Without these devices the environmental burden of the patient will remain, possibly affecting the optimal treatment effect in a negative way.

As we said earlier, these are the outlines, the red thread. A valuable basis, upon which everyone can build experiences. 9. The RAH programs

# 9. The RAH programs

The following table lists the RAH (Rayonex Analysis and Harmonisation programs) which were available at the time the book was printed.

	N	+/-
00.00 Analysis preparation		

	N	+/-
01.00 Vitalisation complete		
01.10 Energy charging		
01.20 Equalisation of polarity		
01.30 Pre-control		
01.40 Chakras complete		
01.41 Vertex Chakra		
01.42 Forehead Chakra		
01.43 Throat Chakra		
01.44 Heart Chakra		
01.45 Spleen Chakra		
01.46 Navel Chakra		
01.47 Root Chakra		
01.50 Sirtuin genes (Jap. longevity)		

	N	+/-
02.00 Acupuncture Meridians complete		
02.11 Lung meridian		
02.12 Colon meridian		
02.13 Stomach meridian		
02.14 Spleen meridian		
02.15 Heart meridian		
02.16 Meridian of the small intestines		
02.17 Bladder meridian		
02.18 Kidney meridian		
02.19 Liver meridian		
02.20 Meridian of the heart and circulation		
02.21 Sanjiao meridian		

9. The RAH programs 35

	N	+/-
02.22 Gallbladder meridian		
02.23 Meridian of the Governing Vessel		
02.24 Meridian of the Conception Vessel		

	N	+/-
04.00 Electro-magnetic pollution complete		
04.10 Alternating electric and magnetic fields		
04.20 Pulse-modulated irradiation / UMTS complete		
04.21 Mobile phones		
04.22 UMTS		
04.23 DECT (wireless telephone)		
04.24 WLAN		
04.25 Bluetooth		
04.26 Satellite transmission		
04.27 Wi Max		
04.28 LTE		
04.29 Tetra / BOS		
04.30 Radiation, protection		
04.31 Ultrasound		
04.32 X-rays		
04.33 Radioactivity		

	N	+/-
05.00 Geopathic disorders complete		
05.10 Underground water		
05.20 Shiftings		
05.30 Global grids complete		
05.31 Hartmann grid line		
05.32 Hartmann grid intersection		
05.33 Curry grid line		
05.34 Curry grid intersection		
05.35 Benker grid line		
05.36 Benker grid intersection		

9. The RAH programs

	N	+/-
06.00 Acid-base balance complete		
06.10 Connective tissue		
06.20 Pancreas		
06.30 Liver		
06.40 Small intestines		

	N	+/-
07.00 Vital substances complete		
07.10 Minerals complete		
07.11 Calcium		
07.12 Potassium		
07.13 Magnesium		
07.14 Sodium		
07.20 Trace elements complete		
07.21 Iron		
07.22 Zinc		
07.23 Copper		
07.24 Manganese		
07.25 Molybdenum		
07.26 lodine		
07.27 Cobalt		
07.28 Chromium		
07.29 Selenium		
07.30 Vitamins, fat-soluble complete		
07.31 Vitamin A		
07.32 Vitamin D		
07.33 Vitamin E		
07.34 Vitamin K		
07.35 Vitamin K1		
07.36 Vitamin K2		
07.40 Vitamins, water soluble complete		
07.41 Vitamin C		
07.42 Vitamin B1, thiamine		
07.43 Vitamin B2, riboflavin		

	N	+/-
07.44 Vitamin B3, niacin		
07.45 Vitamin B5, pantothenic acid		
07.46 Vitamin B6, pyridoxine		
07.47 Vitamin B7, biotin		
07.48 Vitamin B9, folic acid		
07.49 Vitamin B12, cobalamin		
07.50 Vitamin B17, laetril		
07.60 Probiotic bacteria complete		
07.61 Lactobacillus rhamnosus		
07.62 Enterrococcus faecium		
07.63 Bifidobacterium lactis		
07.64 Bifidobacterium longum		
07.65 Lactococcus lactis		
07.66 Lactobacillus sporogenes		
07.67 Lactobacillus casei		
07.68 Lactobacillus plantarum		
07.69 Lactobacillus acidophilus		
07.70 Bifidobacterium infantis		
07.71 Lactobacillus salivarius		
07.72 Bifidobacterium bifidum		
07.80 Fatty acids complete		
07.81 Monocarboxylic acids		
07.82 Saturated fatty acids		
07.83 Monounsaturates		
07.84 Polyunsaturates		
07.85 Essential fatty acids		
07.90 Rayobase		
07.91 Rayovita		
07.92 Rayoflora		
07.93 Rayosole plus		
07.94 Aethsyna Phyto ECM		

	N	+/-
08.00 Harmful substances complete		
08.10 Heavy metals complete		
08.11 Palladium		
08.12 Silver		
08.13 Cadmium		
08.14 Platinum		
08.15 Gold		
08.16 Mercury		
08.17 Lead		
08.30 Spider and snake venoms complete		
08.31 Acanthoscurria geniculata / Brazilian whiteknee tarantula		
08.32 Araneae avicularia / Avicularia avicularia / pinktoe tarantula		
08.33 Araneae curcubitina / cucumber green spider		
08.34 Araneae diadema / European garden spider		
08.35 Aranea ixobola / cross spider		
08.36 Araneae scinencia / grey spider		
08.37 Aranium / Aranea ixobola		
08.38 Brachypelma smithi / Mexican redknee spider		
08.39 Cheiracanthium punctorium / Yellow sac spider		
08.40 Lactrdectus hasselt / redback spider		
08.41 Latrodectus mactans / black widow		
08.42 Tarantula cubensis / Cuban tarantula		
08.43 Tegenaria atrica / giant house spider		
08.44 Tarentula hispanica / Spanish spider		
08.45 Bothrops lanceolatus / yellow viper		
08.46 Crotalus horridus / timber rattlesnake		
08.47 Lachesis / bushmaster		
08.48 Naja tripudians / cobra		
08.49 Vipera berus / common European viper		
08.50 Pesticides complete		
08.51 Fungicides (fungus)		
08.52 Herbicides (weeds)		
08.53 Insecticides (insects)		
08.54 Molluscicides (snails)		

	N	+/-
08.55 Vermicides (parasitic worms)		
08.56 Rodenticides (rodents)		
08.57 Miticides (mites)		
08.80 Genotoxines		
08.81 Psorine		
08.82 Medorrhine		
08.83 Luesine		
08.84 Tuberculin		
08.85 Environmental toxins complete		
08.86 Benzene		
08.87 Benzpyrene		
08.88 DDT		
08.89 Formaldehyde		
08.90 Lindane		
08.91 Pentachlorophenol (PCP)		
08.92 Phtalates		
08.93 Biphenyl (PCB)		
08.94 Tobacco toxins / tobacco smoke		
08.95 Glyphosate		

	N	+/-
09.00 Enzymes complete		
09.01 Enzymes, basis complete		
09.02 Enzyme, Q 10		
09.03 Enzyme, superoxide dismutase		
09.04 Enzyme, bromelain		
09.05 Enzyme, papain		
09.07 Enzyme, cytochrome detoxification complete		
09.08 Enzyme, cytochrome 1A2		
09.09 Enzyme, cytochrome 2C9		
09.10 Enzyme, cytochrome 2D6		
09.11 Enzyme, cytochrome 3A4		
09.12 Enzyme, cytochrome c reductase		
09.13 Enzyme, cytochrome P450		

	N	+/-
09.14 Enzyme, cytochrome oxidase		
09.15 Enzyme, cytochrome		
09.17 Enzymes, heart complete		
09.18 Enzyme, CK creatine kinase		
09.19 Enzyme, CK creatine kinase MB		
09.20 Enzyme, phosphodiesterase PDE 3a		
09.21 Enzyme, angiotensin converting enzyme		
09.23 Enzymes, respiratory tract complete		
09.24 Enzyme, phosphodiesterase 4		
09.25 Enzyme, neprilysin 1		
09.26 Enzyme, neprilysin 2		
09.28 Enzyme, kidney / urinary organs complete		
09.29 Enzyme, renin		
09.30 Enzyme, Kallikrein		
09.31 Enzyme, neprilysin 1		
09.32 Enzyme, neprilysin 2		
09.34 Enzymes, digestive system complete		
09.35 Enzyme, ptyalin (oral cavity)		
09.36 Enzyme, amylase (stomach)		
09.37 Enzyme, pepsin (stomach)		
09.38 Enzyme, gastric lipase (stomach)		
09.39 Enzyme, peptidases (small intestine)		
09.40 Enzyme, peptidase extracellular (small intestine)		
09.40 Enzyme, peptidase intracellular (small intestine)		
09.42 Enzyme, disaccharidases glycosidase (small intestine)		
09.43 Enzyme, lactase-beta 1-galactosidase (small intestine)		
09.44 Enzyme, maltase (small intestine)		
09.45 Enzyme, PEPC 1 (small intestine)		
09.47 Enzymes, liver / gall bladder / pancreas complete		
09.48 Enzyme, gamma-glutamyl transferase (liver)		
09.49 Enzyme, glutamate oxaloacetate transaminase GOT (liver)		
09.50 Enzyme, glutamic-pyruvic transaminase liver GPT 1		
09.51 Enzyme, glutamic-pyruvic transaminase liver GPT 2		
09.52 Enzyme, alkaline phosphatase (gall bladder)		

	N	+/-
09.53 Enzyme, pancreas: trypsin (pancreas)		
09.54 Enzyme, chymotrypsin (pancreas)		
09.55 Enzyme, chymotrypsinogen (pancreas)		
09.56 Enzyme, carboxypeptidase (pancreas)		
09.57 Enzyme, carboxypeptidase A (pancreas)		
09.58 Enzyme, carboxypeptidase B (pancreas)		
09.59 Enzyme, elastase (pancreas)		
09.60 Enzyme, DNA ligase (pancreas)		
09.61 Enzyme, ribonuclease (pancreas)		
09.62 Enzyme, amylopsin (pancreas)		
09.64 Enzymes, metabolism complete		
09.65 Enzyme, uridyltransferase (KH)		
09.66 Enzyme, hormone-sensitive lipase (F)		
09.67 Enzyme, peptidyl arginin deiminase (E)		
09.68 Enzyme, Homocysteine		
09.69 Enzymes, locomotor system complete		
09.70 Enzyme, aldenylate kinase		
09.71 Enzyme, CK creatin kinase general		
09.72 Enzyme, CK creatin kinase MM		
09.73 Enzyme, peptidyl arginine deiminase		
09.74 Enzyme, hyaluronidase		
09.75 Enzymes, nervous system complete		
09.76 Enzyme, tryptophan hydroxylase 1		
09.77 Enzyme, tryptophan hydroxylase 2		
09.78 Enzyme, purin nucleoside phosphorylase		
09.79 Enzyme, CK creatin kinase general		
09.80 Enzyme, neprilysin 1		
09.81 Enzyme, neprilysin 2		
09.83 Enzymes, skin / hair complete		
09.84 Enzyme, tyrosinase (ultraviolet radiation protection)		
09.86 Enzymes, thyroidal metabolism		
09.87 Enzyme, 4-hydroxyphenylpyruvate dioxygenase		
09.88 Enzyme, aldehyde dehydrogenase ALDH		
09.89 Enzyme, diamino oxidase		

	N	+/-
09.90 Enzyme, dopachrome, L-dopachrome isomerase		
09.91 Enzyme, dopa decarboxylase		
09.92 Enzyme, fumarylacetoacetase		
09.93 Enzyme, homogentisate 1,2 dioxygenase		
09.94 Enzyme, maleylacetoacetate isomerase		
09.95 Enzyme, monoamine oxidase		
09.96 Enzyme, tyrosinase (ultraviolet radiation protection)		
09.97 Enzyme, alkaline phosphatase		

	N	+/-
10.00 Amino acids complete		
10.10 Essential amino acids complete		
10.11 L-Isoleucine		
10.12 L-Leucine		
10.13 L-Lysine		
10.14 L-Methionine		
10.15 L-Phenylalanine		
10.16 L-Threonine		
10.17 L-Tryptophan		
10.18 L-Valine		
10.30 Non-essential amino acids complete		
10.31 L-Alanine		
10.32 L-Arginine (semi-essential)		
10.33 L-Asparagine		
10.34 L-Aspartic acid		
10.35 L-Cysteine		
10.36 L-Glutamine		
10.37 L-Glutamic acid		
10.38 L-Glycine		
10.39 L-Histidine (semi-essential)		
10.40 L-Proline		
10.41 L-Serine		
10.42 L-Tyrosine		

	N	+/-
20.00 Bacteria complete		
20.05 Bacteria I complete		
20.10 Coccobacilli complete		
20.11 Alpha streptococcus		
20.12 Beta haemolytic streptococci		
20.13 Eikanella corrodens		
20.14 Gaffkya tetragena		
20.15 Meningococcus		
20.16 MRSA multidrug-resistant V		
20.17 Neisseria gonorrhoeae		
20.18 Staphylococci		
20.19 Staphylococcus aureus		
20.20 Streptococcus		
20.21 Streptococcus lactis		
20.22 Streptococcus mitis		
20.23 Streptococcus pneumoniae		
20.24 Streptococcus pyogenes		
20.25 Streptococcus sp.		
20.26 Veillonella dispar		
20.27 Moraxella		
20.28 Scarlatina (scarlet fever)		
20.29 Streptococcus salivarius		
20.40 Rod-shaped bacteria complete		
20.41 Actinobacillus (suis) V		
20.42 Actinomyces israelii		
20.43 Arcanobacterium pyogenes		
20.44 Bacilli		
20.45 Bacillus anthracis V		
20.46 Bacillus cereus		
20.47 Bacteroides fragilis		
20.48 Bordetella bronchiseptica		
20.49 Bordetella pertussis		
20.50 Brucella abortus V		
20.51 Brucella melitensis V		

	N	+/-
20.52 Brucella suis V		
20.53 Coxiella burnetii V		
20.54 Clostridia		
20.55 Clostridium botulinum V		
20.56 Clostridium feseri V		
20.57 Clostridium perfringens		
20.58 Clostridium septicum		
20.59 Clostridium tetani V		
20.60 Corynebacterium diphteriae		
20.61 Corynebacterium xerosis		
20.62 Cytophaga rubra		
20.63 Erysipelotrix rhusiopathiae V		
20.64 Eubacterium suis		
20.65 Francisella tularensis V		
20.66 Gardnerella vaginalis		
20.67 Haemophilus influenzae		
20.68 Haemophilus parasuis V		
20.69 Helicobacter pylori		
20.70 Lactobacillus acidophilus		
20.71 Lawsonia intracellularis		
20.72 Legionella		
20.73 Listeria monocytogenes V		
20.74 Malleomyces mallei V		
20.75 Mycobacteria phlei		
20.76 Mycobacteria tuberculosis		
20.77 Nocardia V		
20.78 Nocardia asteroides		
20.79 Pasteurella V		
20.80 Pasteurella multocida V		
20.81 Propionobacterium acnes		
20.82 Pseudomonas aeruginosa		
20.83 Bartonella henselae		
20.84 Fusobacterium necrophorum V		
20.85 Spirillum serpens		

	N	+/-
20.86 Sphaerotilus natans		
20.87 Acinetobacter baumanii		
20.88 Acinetobacter haemolyticus		
20.89 Acinetobacter johnsonii		
20.90 Acinetobacter junii		
20.91 Acinetobacter iwoffii		
20.92 Actinomyces viscosus		
20.93 Treponema denticola		
20.94 Campylobacter rectus / showae		
20.95 Porphyromonas gingivalis		
20.96 Prevotella intermedia		
20.97 Tannerella forsythensis		
20.98 Aggregatibacter actinomyces		
20.99 Fusubacterium nucleatum		

	N	+/-
21.05 Bacteria II complete		
21.10 Enterobacteriaceae complete		
21.11 Enterobacter aerogenes		
21.12 Erwinia amylovora		
21.13 Erwinia carotavora		
21.14 Escherichia coli		
21.15 Klebsiella pneumoniae		
21.16 Proteus mirabilis		
21.17 Proteus vulgaris		
21.18 Salmonellae		
21.19 Salmonella enteritidis		
21.20 Salmonella paratyphi		
21.21 Salmonella typhi		
21.22 Serratia marcescens		
21.23 Shigella dysenteriae		
21.24 Shigella flexneri		
21.25 Shigella sonnei		
21.26 Yersinia		

	N	+/-
21.27 Yersinia enterocolitica		
21.28 EHEC		
21.50 Mycoplasma complete		
21.51 Mycoplasma		
21.52 Mycoplasma agalactiae V		
21.53 Mycoplasma capricolum		
21.54 Mycoplasma mycoides V		
21.60 Spirochaetae complete		
21.61 Borrelia		
21.62 Brachyspira V		
21.63 Leptospira canicola V		
21.64 Leptospira grippotyphosa V		
21.65 Leptospira icterohaemorrhagiae		
21.66 Leptospira interrogans		
21.67 Leptospira pomona V		
21.68 Leptospira (suis) V		
21.69 Treponema pallidum		
21.70 Borrelia afzelii		
21.71 Borrelia burgdorferi		
21.72 Borrelia duttoni		
21.73 Borrelia garinii		
21.74 Borrelia hermsii		
21.80 Intracellular bacteria (cell parasites) complete		
21.81 Anaplasma marginale		
21.82 Chlamydiaceae		
21.83 Chlamydiaceae (feline) V		
21.84 Chlamydia ovis V		
21.85 Chlamydia psittaci V		
21.86 Chlamydia trachomatis		
21.87 Cowdria ruminantium V		
21.88 Rickettsiae		
21.89 Babesia divergens		
21.90 Other bacteria complete		
21.91 Laryngeal 1 bacteria		

	N	+/-
21.92 Borrelia toxin		
21.93 Caries bacteria		
21.94 PIA Porcine intestinal adenomatosis V		
21.95 Pain-producing bacteria		
21.96 Tuberculinum burnetti		
21.97 Anaplasma phagocytophilum		

	N	+/-
22.00 Viruses complete		
22.05 Viruses I complete		
22.10 Double-strain DNA viruses complete		
22.11 Adenovirus		
22.12 Cytomegalovirus (CMV)		
22.13 Epstein-Barr virus (EBV)		
22.14 Hepatitis B virus		
22.15 Herpes simplex		
22.16 Herpes simplex (feline) V		
22.17 Herpes zoster		
22.18 Human papilloma virus (HPV)		
22.19 Papilloma virus		
22.20 Varicella (chickenpox)		
22.21 JC viruses		
22.22 Humanes herpesvirus 8		
22.40 Single-strain DNA viruses complete		
22.41 Panleucopenia virus V		
22.42 Parvoviruses (suis) V		
22.43 Porcine circovirus V		
22.60 Single-strain RNA viruses, positive-strain RNA genome complete		
22.61 AE virus V		
22.62 BVD virus V		
22.63 Calciviruses (feline) V		
22.64 Chikungunya		
22.65 Coronaviruses (feline) V		
22.66 Coronaviruses (suis) V		

	N	+/-
22.67 Coxsackie virus B1		
22.68 Coxsackie virus B4		
22.69 EAV virus		
22.70 Duck hepatitis virus V		
22.71 Enteroviruses		
22.72 FHV viruses (feline herpes virus) V		
22.73 FSME		
22.74 Hepatitis A virus		
22.75 Hepatitis C virus		
22.76 CSF virus V		
22.77 FMD virus V		
22.78 Norovirus		
22.79 PRRS viruses (suis) V		
22.80 Rhinovirus		
22.81 SVD virus V		
22.82 Tobacco mosaic virus		
22.83 Teschen virus V		
22.84 VES virus V		
22.85 Hepatitis D virus V		
22.86 Hepatitis E virus V		
22.87 Dengue virus		
22.88 Rubella (German measles)		
22.89 Coxsackie virus A7		
22.90 Zika virus		
22.91 Humanes T-lymphotropes virus 1		
22.92 Humanes T-lymphotropes virus 2		

	N	+/-
23.05 Viruses II complete		
23.10 Negative-strain RNA genome, unsegmented complete		
23.11 Borna virus		
23.12 Equine influenza-virus V		
23.13 Highly pathogenic avian influenza virus V		
23.14 Measles virus		

	N	+/-
23.15 Mumps virus		
23.16 Parainfluenza		
23.17 Porcine influenza virus V		
23.18 VSI virus (VSV)		
23.19 HRSV		
23.30 Negative-strain RNA genome, segmented complete		
23.31 H1N1		
23.32 H5N1		
23.33 Influenza virus A and B		
23.34 A/H5N1		
23.50 Double-strain RNA viruses complete		
23.51 Bluetongue viruses V		
23.52 FCo viruses V		
23.53 FeL viruses V		
23.54 Fl viruses V		
23.55 Retroviruses		
23.56 Rotaviruses		
23.57 Rotaviruses (suis) V		
23.70 Wart frequencies complete		
23.71 Seborrhoeic warts		
23.72 Molluscum contagiosum		
23.73 Condyloma		
23.74 Flat warts - verruca plana		
23.75 Verrucae plantares		
23.76 Juvenile warts		
23.77 Verrucae filiformes		
23.78 Common warts- verruca vulgaris		
23.79 Warts N.N. warts recurrent		
23.80 Other viruses complete		
23.81 Viruses N.N.		

	N	+/-
24.00 Parasites complete		
24.05 Parasites I complete		

	N	+/-
24.10 Hookworms complete		
24.11 Ancylostoma braziliense		
24.12 Ancylostoma caninum		
24.13 Gyrodactylus		
24.20 Eelworms/intestinal roundworms / pinworms compl.		
24.21 Ascaris megalocephala		
24.22 Dirofilaria immitis (heartworm)		
24.23 Enterobius vermicularis		
24.24 Haemonchus contortus		
24.25 Loa loa		
24.26 Macracanthorhynchus		
24.27 Onchocerca volvulus (tumor)		
24.28 Enterobius worms		
24.29 Passalurus ambiguus (rabbit worm)		
24.30 Stephanurus dentatus		
24.31 Strongyloides (filariform)		
24.32 Trichinella spiralis (muscle)		
24.33 Trichuris sp.		
24.34 Macracanthorhynchus hirudinaceus		
24.35 Anisakis simplex		
24.36 Dirofilaria repens		
24.37 Microfilaria		
24.38 Ascaris lumbricoides		
24.40 Capillariae complete		
24.41 Capillaria hepatica (liver)		
24.50 Trematodes / leeches complete		
24.51 Clonorchis sinensis		
24.52 Cryptocotyle lingua		
24.53 Echinostoma revolutum		
24.54 Eurytrema pancreaticum		
24.55 Fasciola hepatica		
24.56 Fasciolopsis buski		
24.57 Fischoedrius elongatus		
24.58 Gastrothylax elongatus		

	N	+/-
24.59 Hasstile sig. tricolor		
24.60 Metagonimus Yokogawai		
24.61 Paragonimus Westermani		
24.62 Prosthogonimus macrorchis		
24.63 Schistosoma haematobium		
24.64 Schistosoma mansoni		
24.65 Urocleidus		
24.80 Tapeworms complete		
24.81 Echinococcus granulosus		
24.82 Echinococcus multicularis		
24.83 Taenia pisiformis		
24.84 Taenia saginata		
24.85 Taenia solium		
24.86 Moniezia expansa		
24.87 Taenia serialis		
24.88 Diphyllobothrium latum		
24.89 Hymenolepis diminuta		

	N	+/-
25.05 Parasites II complete		
25.10 Protozoa complete		
25.11 Balantidium		
25.12 Balantidium coli		
25.13 Besnoitia (lung)		
25.14 Blepharisma		
25.15 Chilomastix cysts (rat)		
25.16 Chilomonas		
25.17 Coccidia (suis) V		
25.18 Coccidia (canis) V		
25.19 Dientamoeba fragilis		
25.20 Encephalitozoon cuniculi V		
25.21 Endolimax nana		
25.22 Endolimax tropica		
25.23 Entamoeba coli trophozoite		

	N	+/-
25.24 Entamoeba gingivalis		
25.25 Entamoeba histolytica tro.		
25.26 Giardia lamblia (troph.)		
25.27 lodamoeba bütschlii		
25.28 lodamoeba bütschlii tropica		
25.29 Leishmania braziliensis		
25.30 Leishmania donovani		
25.31 Leishmania mexicana		
25.32 Leishmania tropica		
25.33 Leucocytozoon		
25.34 Myxobolus cerebralis		
25.35 Naegleria fowleri		
25.36 Plasmodium cynomolgi		
25.37 Plasmodium falciparum		
25.38 Plasmodium vivax		
25.39 Sarcocystis		
25.40 Toxoplasma gondii		
25.41 Trichomonas vaginalis		
25.42 Trypanosoma brucei		
25.43 Trypanosoma cruzi (brain)		
25.44 Trypanosoma equiperdum		
25.45 Trypanosoma gambiense		
25.46 Trypanosoma lewisi		
25.47 Trypanosoma rhodesiense		
25.48 Coccidia (feline) V		
25.49 Coccidia (bovine) V		
25.50 Cryptosporidium V		
25.51 Isospora belli		
25.60 Miltes / ticks / lice complete		
25.61 Acarus siro (flour mite)		
25.62 Dermatophagoides (dust mite)		
25.63 Demodex canis V		
25.64 Demodex folliculorum (hair follicle mite)		
25.65 Neotrombicula autumnalis (harvest mite) V		

	N	+/-
25.66 Notoedres cati V		
25.67 Ornithonyssus (bird mite)		
25.68 Sarcoptes scabiei (scabies)		
25.69 Pediculidae		
25.70 Pthirus pubis		
25.80 Other parasites complete		
25.81 Echinoparyphium recurvatum		
25.82 Hypodereum conoideum		
25.83 Stigeoclonium		
25.84 Troglodytella abrassarti		
25.85 Blood parasites		
25.86 Pneumocystis carinii		

	N	+/-
26.00 Fungi complete		
26.05 Fungi I complete		
26.10 Mould fungi complete		
26.11 Aspergillus fumigatus		
26.12 Aspergillus niger		
26.13 Aspergillus ochraceus		
26.14 Cladosporium herbarum		
26.15 Geotrichum candidum		
26.16 Monilia albicans		
26.17 Mucor mucedo		
26.18 Mucor racemosus		
26.19 Penicillinum camemberti		
26.20 Penicillinum frequentans		
26.21 Penicillinum notatum		
26.22 Penicillinum roqueforti		
26.23 Pullularia pullulans		
26.24 Scopulariopsis brevicaulis		
26.25 Torulpsis glabrata		
26.26 Acremonium		
26.27 Aspergillus versicolor		

	N	+/-
26.28 Aspergillus flavus		
26.29 Aureobasidium pullulans		
26.30 Curvularia		
26.31 Eurotium		
26.32 Fusarium oxysporum		
26.33 Paecilomyces variotii		
26.34 Scopulariopsis		
26.35 Stemphylium		
26.36 Penicillium chrysogenum		
26.37 Rhizopus		
26.38 Stachybotrys		
26.40 Mould fungi toxins complete		
26.41 Aflatoxin		
26.42 Griseofulvin		
26.43 Helminthosporium dematioideum		
26.44 Sterigmatocystin		
26.45 Zearalenon		
26.46 Trichothecenes		

	N	+/-
27.05 Fungi II complete		
27.10 Yeast fungi complete		
27.11 Candida albicans		
27.12 Candida Krusei		
27.13 Candida dattila		
27.14 Candida famata		
27.15 Candida glabrata		
27.16 Candida guilliermondii		
27.17 Candida kefyr		
27.18 Candida Iusitaniae		
27.19 Candida parapsilosis		
27.20 Candida stellatoidea		
27.21 Candida tropicalis		
27.22 Candida viswanathii		

	N	+/-
27.23 Cryptococcus neoformans		
27.24 Malassezia V		
27.25 Malassezia furfur		
27.26 Rhodotorula rubra		
27.27 Saccaromyces cerevisiae		
27.28 Sporothrix schenckii		
27.29 Torulpsis glabrata		
27.30 Trichosporon capitatum		
27.31 Trichosporon cutaneum		
27.40 Black fungi complete		
27.41 Chaetomium		
27.42 Dematiaceae		
27.43 Phoma		
27.44 Ulocladium		
27.45 Alternaria		
27.50 Filamentous fungi / dermatophytes, dimorphic fungi complete		
27.51 Coccidioides immitis V		
27.52 Microsporum canis		
27.53 Microsporum gypseum		
27.54 Trichophyton cutaneum		
27.55 Trichophyton mentagro		
27.56 Trichophyton rubrum		
27.57 Trichophyton terrestre		
27.58 Trichophyton verrucosum (trichophytia)		
27.59 Zymonema farinosus		
27.60 Histoplasma		
27.70 Mycetozoa complete		
27.71 Arcyria		
27.72 Lycogala		
27.73 Stemonitis		
27.80 Ascomycota complete		
27.81 Claviceps purpurea (Secale cornutum)		
27.82 Ergot		
27.83 Botrytis		

	N	+/-
27.84 Neurospora		
27.85 Trichoderma		
27.90 Other fungi complete		
27.91 Tryptophanum		
27.92 Wallemia		

	N	+/-
28.00 Chromosome protection complete		
28.01 Chromosome pair 1		
28.02 Chromosome pair 2		
28.03 Chromosome pair 3		
28.04 Chromosome pair 4		
28.05 Chromosome pair 5		
28.06 Chromosome pair 6		
28.07 Chromosome pair 7		
28.08 Chromosome pair 8		
28.09 Chromosome pair 9		
28.10 Chromosome pair 10		
28.11 Chromosome pair 11		
28.12 Chromosome pair 12		
28.13 Chromosome pair 13		
28.14 Chromosome pair 14		
28.15 Chromosome pair 15		
28.16 Chromosome pair 16		
28.17 Chromosome pair 17		
28.18 Chromosome pair 18		
28.19 Chromosome pair 19		
28.20 Chromosome pair 20		
28.21 Chromosome pair 21		
28.22 Chromosome pair 22		
28.23 X-chromosome		
28.24 Y-chromosome		

	N	+/-
30.00 Cells and tissue, physiology complete		
30.10 Cell nucleus		
30.20 Cell membrane		
30.25 Elastin		
30.26 Laminins		
30.27 Glycosaminoglycan		
30.28 Collagen		
30.30 Cytoplasm		
30.40 Organelles complete		
30.41 Endoplasmatic reticulum		
30.42 Mitochondria		
30.43 Golgi apparatus		
30.44 Ribosomes		
30.45 Lysosomes		
30.65 Epithelial tissues complete		
30.66 Surface epithelium		
30.67 Ciliated epithelium		
30.68 Glandular epithelium		
30.69 Sensory epithelium		
30.70 Connective tissues complete		
30.71 Collagenous tissues		
30.72 Elastic tissues		
30.73 Fat tissues		
30.74 Cartilage tissues		
30.75 Bone tissues		
30.76 Chondrocytes		
30.77 Chondrogenesis		
30.78 Fibroblasts		
30.79 Fibrocytes		
30.80 Nerve tissues complete		
30.81 Nerve cells		
30.82 Astrocytes		

	N	+/-
30.83 Oligodendrocytes		
30.84 Neural stem cells		
30.85 Axons		
30.86 Myelin sheath		
30.90 Mucous membranes complete		
30.91 Mucous membranes, head		
30.92 Mucous membranes, trunk		
30.93 Mucous membranes, genital organs		

	N	+/-
1.00 Cell and tissue, pathology (empty)		
31.10 ATP production complete		
31.11 ATP production lung		
31.12 ATP production colon		
31.13 ATP production stomach		
31.14 ATP production pancreas		
31.15 ATP production heart		
31.16 ATP production small intestines		
31.17 ATP production urinary bladder		
31.18 ATP production prostate gland		
31.19 ATP production testicles		
31.20 ATP production uterus		
31.21 ATP production uterine cervix		
31.22 ATP production ovaries		
31.23 ATP production kidney		
31.24 ATP production thymus		
31.25 ATP production lymph		
31.26 ATP production adrenal gland		
31.27 ATP production gall bladder		
31.28 ATP production biliary tract		
31.29 ATP production liver		
31.30 ATP production spleen		
31.31 ATP production eyes		
31.32 ATP production parathyroid gland		

	N	+/-
31.33 ATP production thyroid gland		
31.34 ATP production cerebellum		
31.35 ATP production cerebrum		
31.36 ATP production mammary gland		
31.37 ATP production bone marrow		
31.38 ATP production skin		
31.39 ATP production blood vessels		
31.40 ATP production muscles		
31.41 ATP production bones		
31.50 Basic detoxification program		
31.51 Detoxification blood system		
31.52 Detoxification lymphatic system		
31.53 Detoxification acidosis		
31.54 Detoxification extra-cellular		
31.55 Detoxification intra-cellular		
31.56 Detoxification mucous membrane		
31.57 Detoxification lung		
31.58 Detoxification stomach		
31.59 Detoxification pancreas		
31.60 Detoxification liver		
31.61 Detoxification intestines		
31.62 Detoxification kidney		
31.63 Detoxification bladder		
31.64 Detoxification woman / female-specific		
31.65 Detoxification skin		
31.66 Detox of endotoxins		
31.67 Detox of exotoxins		
31.68 Detoxification by chlorophyll a and b		
31.69 Detoxification phosphates		
31.70 Degeneration cell tissue		
31.80 Open wounds / wound healing		
31.81 Scar tissue repair		
31.82 Post-surgical care		
31.83 Dupuytren's contracture		

	N	+/-
31.84 Myomata		
31.85 Cysts		
31.86 Fistulae		
31.87 Oedema		
31.88 Abscess		
31.89 Acute local inflammation		

	N	+/-
32.00 Blood physiology complete		
32.01 Stem cells complete		
32.02 Embryonic stem cells		
32.03 Adult stem cells		
32.05 Stem cells of the bone marrow		
32.06 Formation of blood (haematopoiesis)		
32.07 Blood plasma		
32.10 Erythrocytes RBC complete		
32.11 Iron storage (ferritin)		
32.12 Haemoglobin		
32.20 Leukocytes complete		
32.21 Lymphocytes		
32.22 Monocytes		
32.23 Macrophages		
32.24 Neutrophil granulocytes		
32.25 Eosinophil granulocyte		
32.26 Basophil granulocyte		
32.27 Phagocytes		
32.28 T helper cells		
32.29 Regulatory T cells		
32.30 Thrombocytes PLT complete		
32.31 Fibrinolysis		
32.40 Blood coagulation system complete		
32.41 Coagulation factor I		
32.42 Coagulation factor II		
32.43 Coagulation factor III		

	N	+/-
32.44 Coagulation factor IV		
32.45 Coagulation factor V		
32.46 Coagulation factor VI		
32.47 Coagulation factor VII		
32.48 Coagulation factor VIII		
32.49 Coagulation factor IX		
32.50 Coagulation factor X		
32.51 Coagulation factor XI		
32.52 Coagulation factor XII		
32.53 Coagulation factor XIII		

	N	+/-
33.00 Blood, pathology (empty)		
33.10 Haemorrhagic anaemia		
33.20 Anaemia caused by a disorder of the erythropoesis complete		
33.21 Renal anaemia		
33.22 Aplastic anaemia		
33.23 Anaemia caused by the myelodysplastic syndrome (MDS)		
33.24 Iron-deficiency anaemia		
33.25 Vitamin B12 deficiency anaemia		
33.26 Vitamin B6 deficiency anaemia		
33.27 Folic acid deficiency anaemia		
33.28 Vitamin C deficiency anaemia		
33.29 Protein deficiency anaemia		
33.50 Degeneration bone marrow		
33.55 Inflammation bone marrow		
33.60 Oxygen supply / utilisation improvement		
33.70 Polycythaemia		

	N	+/-
34.00 Immune system physiology complete		
34.10 Interleukins		
34.15 CD4 receptors		
34.20 Cytokines		

	N	+/-
34.30 Lymphokines		
	N	+/-
35.00 Immune system, pathology (empty)		
35.10 Raising the defence capacity, basic program		
35.11 Raising the unspecific defence		
35.12 Raising the specific defence		
35.13 Phagocytosis		
35.20 Allergy complete		
35.21 Allergy type l		
35.22 Allergy type II		
35.23 Allergy type III		
35.24 Allergy type IV		
35.30 Fructose intolerance		

	N	+/-
36.00 Lymphatic system physiology complete		
36.10 Lymphatic tracts		
36.20 Lymph nodes		
36.40 Tonsils		
36.50 Thymus gland		
36.60 Spleen		
36.70 Peyer's patches		
36.80 Appendix		

	N	+/-
37.00 Lymphatic system, pathology (empty)		
37.10 Lymph vessel inflammation		
37.11 Lymph vessel degeneration		
37.12 Lymphadenitis, swelling of a lymph node		
37.13 Lymph flow disorder		
37.14 Tonsillitis, acute		
37.15 Lymphatic oedema		
37.30 Spleen, strengthening the organ function		

	N	+/-
37.40 Thymus gland strengthening the organ function		
37.50 Appendicitis		
37.60 Symptomatic Detoxification complete		
37.61 Detoxification rheumatic toxines		
37.62 Detoxification vaccination lesions		
37.70 Detoxification metals complete		
37.71 Detoxification palladium		
37.72 Detoxification cadmium		
37.73 Detoxification mercury		
37.74 Detoxification platinum		
37.75 Detoxification copper		
37.76 Detoxification nickel		
37.77 Detoxification lead		

	N	+/-
38.00 Circulatory system physiology complete		
38.10 Arteries		
38.40 Blood pressure receptors of the carotid artery		
38.41 Arteria carotis		
38.42 Carotid gland		
38.43 Vascular endothelium		
38.44 Vascular permeability		
38.50 Veins		
38.51 Venous valves		
38.80 Capillaries		

	N	+/-
39.00 Circulatory system, pathology (empty)		
39.10 Impairment of the arterial blood supply		
39.15 Atherosclerosis		
39.20 Venous impairment of the blood supply (varicosis)		
39.30 Inflammation of the blood vessels		
39.40 Degeneration of the blood vessels		
39.50 Disorders of blood pressure regulation		

	N	+/-
39.60 High blood pressure (hypertension)		
39.65 Renal hypertension		
39.70 Low blood pressure (hypotension)		

	N	+/-
40.00 Heart physiology complete		
40.10 Heart layers complete		
40.11 Pericardium		
40.12 Epicardium		
40.13 Myocardium		
40.14 Endocardium		
40.20 Heart interior complete		
40.21 Right atrium		
40.22 Right ventricle		
40.23 Left atrium		
40.24 Left ventricle		
40.30 Cardiac valves complete		
40.31 Tricuspid valve		
40.32 Pulmonary valve		
40.33 Mitral valve		
40.34 Aortic valve		
40.40 Conduction system complete		
40.41 Sinuatrical node SAN		
40.42 Atrioventricular node AVN		
40.43 Conduction system		
40.44 Atrioventricular bundle of His		
40.50 Interventricular septum		
40.60 Apex of heart		
40.70 Coronary vessels		
40.71 Coronary arteries		
40.72 Coronary veins		

	N	+/-
41.00 Heart, pathology (empty)		
41.10 Strengthening the myocardium		
41.11 Increasing cardiac capacity		
41.20 Cardiac insufficiency, left		
41.30 Cardiac insufficiency, right		
41.40 Angina pectoris		
41.50 Psychogenic heart disorder		

	N	+/-
2.00 Respiratory system physiology complete		
42.10 Nose / olfactory organ complete		
42.11 Dorsal turbinate		
42.12 Upper nasal meatus		
42.13 Central nasal meatus		
42.14 Lower nasal meatus		
42.15 Nasal mucous membrane		
42.16 Olfactory nerve		
42.17 Posterior nares		
42.20 Sinuses complete		
42.21 Frontal sinuses		
42.22 Sphenoidal sinuses		
42.23 Bony ethmoidal cells		
42.24 Maxillary sinus		
42.30 Throat		
42.40 Larynx complete		
42.41 Epiglottis		
42.42 Thyroid cartilage		
42.43 Cricoid cartilage		
42.44 Vocal ligaments		
42.50 Windpipe		
42.60 Bronchus complete		

	N	+/-
42.61 Main bronchus		
42.62 Lobar bronchus		
42.63 Segmental bronchus		
42.70 Lung complete		
42.71 Alveoles (air sacks)		
42.80 Pleura complete		
42.81 Pulmonary pleura (pleura visceralis)		
42.82 Costal pleura (pleura parietalis)		

	N	+/-
43.00 Respiratory system, pathology (empty)		
43.10 Cough		
43.11 Rhinitis, acute (common cold)		
43.12 Nasal polyps		
43.13 Bronchitis, acute		
43.14 Bronchitis, chronic		
43.15 Sinusitis, acute		
43.16 Sinusitis, chronic		
43.17 Pharyngitis		
43.18 Laryngitis		
43.20 Bronchial asthma		
43.30 Mucoid degeneration		
43.40 Pleuritis sicca / exsudativa		
43.50 Pneumonia, bacterial		
43.51 Pneumonia, atypical		

	N	+/-
44.00 Kidney / urinary organs, physiology complete		
44.10 Kidney complete		
44.11 Renal pelvis		
44.12 Renal calyces		
44.13 Renal papilla		
44.14 Renal medulla		
44.15 Renal cortex		

	N	+/-
44.16 Renal hilus		
44.17 Renal glomeruli		
44.20 Urinary organs complete		
44.21 Ureter		
44.22 Urinary bladder		
44.23 Urethra		
44.24 Sphincter		

	N	+/-
45.00 Kidney / urinary organs, pathology (empty)		
45.05 Kidney failure		
45.10 Glomerulonephritis		
45.11 Membranous glomerulonephritis		
45.12 Tubulo-interstitial glomerulonephritis		
45.15 Nephrosis (protein-losing kidney)		
45.16 Glomerulopathy		
45.20 Renal artery stenosis		
45.25 Nephrolithiasis (kidney stones)		
45.30 Pyelonephritis (pyelitis and kidney infection)		
45.35 Cystitis (inflammation of the bladder)		
45.40 Urethritis (inflammation of the urethra)		
45.45 Diabetic nephropathy (diabetic glomerulosclerosis)		
45.50 Renal diabetes		
45.80 Water removal		

	N	+/-
46.00 Digestive system, physiology complete		
46.10 Oral cavity / tongue complete		
46.11 Oral cavity		
46.12 Tongue		
46.13 Salivary glands		
46.14 Parotid gland		
46.15 Submandibular gland		
46.16 Sublingual gland		

	N	+/-
46.20 Oesophagus		
46.30 Stomach complete		
46.31 Stomach glands		
46.32 Cardia		
46.33 Body		
46.34 Fundus		
46.35 Sphincter pylori		
46.38 Peritoneum		
46.40 Small intestines complete		
46.41 Duodenum		
46.42 Jejunum		
46.43 lleum		
46.44 Intestinal villi		
46.50 Colon complete		
46.51 Appendix		
46.52 Vermicular appendix		
46.53 Ascending colon		
46.54 Transverse colon		
46.55 Descending colon		
46.56 S-shaped colon		
46.59 Intestinal flora		
46.60 Straight bowel		
46.70 Anus		

	N	+/-
47.00 Digestive system pathology (empty)		
47.10 Oesophagitis		
47.20 Gastritis, acute		
47.30 Gastritis, chronic		
47.31 Gastritis, A type		
47.32 Gastritis, B type		
47.33 Gastritis, C type		
47.40 Gastric ulcer		
47.45 Duodenal ulcer		

	N	+/-
47.50 Crohn's disease		
47.60 Ulcerative colitis		
47.65 Diverticulitis		
47.70 Irritable bowel syndrome (IBS)		
47.80 Intestinal polyps		
47.85 Flatulence		
47.86 Constipation		

	N	+/-
48.00 Liver – gall – pancreas, physiology complete		
48.10 Liver complete		
48.11 Right liver lobe		
48.12 Left liver lobe		
48.13 Small liver lobe		
48.14 Hepatocytes (liver cells)		
48.15 Liver sinusoids		
48.16 Kupffer star cells		
48.20 Gallbladder complete		
48.21 Gall bladder		
48.22 Bile ducts		
48.30 Pancreas complete		
48.31 Head of the pancreas		
48.32 Body of the pancreas		
48.33 Tail of the pancreas		
48.34 Pancreatic tract		
48.35 Islet cells		

	N	+/-
49.00 Liver – gall – pancreas, pathology (empty)		
49.10 Hepatitis		
49.15 Degeneration of the liver		
49.30 Bile formation disorder		
49.34 Bile flow disorder		
49.37 Inflammation of the gall bladder / tract		

	N	+/-
49.38 Gallstones		
49.50 Pancreas, exocrine functional disorder		

	N	+/-
50.00 Metabolism, physiology complete		
50.10 Protein metabolism		
50.20 Carbohydrate metabolism		
50.30 Fat metabolism		

	N	+/-
51.00 Metabolism, pathology (empty)		
51.10 Protein metabolism disorder		
51.11 Prions		
51.20 Carbohydrate metabolism disorder		
51.30 Fat metabolism disorder		
51.40 Diabetes mellitus		
51.50 Gout		

	N	+/-
52.00 Musculoskeletal system, physiology complete		
52.05 Bone cells complete		
52.06 Myelocytes		
52.07 Osteoblasts		
52.08 Osteocytes		
52.09 Osteoclasts		
52.10 Skeleton complete		
52.11 Skeleton skull		
52.12 Skeleton shoulder		
52.13 Skeleton – upper extremities		
52.14 Skeleton hands		
52.15 Skeleton chest		
52.16 Skeleton hips / lower extremities		
52.17 Skeleton feet		
52.20 Musculature complete		

	N	+/-
52.21 Muscles / ligaments / head / face / neck		
52.22 Muscles / ligaments / shoulder / upper extremities / trunk		
52.23 Diaphragm		
52.24 Musculature / ligaments hands		
52.25 Musculature / ligaments lower extremities		
52.26 Tendons		
52.27 Tendon sheaths		
52.28 Muscles of the pelvic floor / perineum		
52.30 Spine complete		
52.31 Cervical spine (C1-C7)		
52.32 Thoracic spine (Th1 – Th12)		
52.33 Lumbar spine (L1 – L5)		
52.34 Sacral bone / coccyx bone		
52.40 Spinal discs complete		
52.41 Spinal discs of the cervical spine (C1 - C7/Th1)		
52.42 Spinal discs of the thoracic spine (Th1/Th2 – Th12/L1)		
52.43 Spinal discs of the lumbar spine (L1/L2 – L5)		
52.50 Bursa (knee)		
52.60 Joint complete		
52.61 Capsular ligament		
52.62 Synovial fluid		
52.63 Periosteum		
52.64 Perichondrium		
52.65 Menisci		
52.66 Chondrogenesis		
52.67 Hyaluronic acid		
52.68 Proteoglycans		

	N	+/-
53.00 Musculoskeletal system, pathology (empty)		
53.11 Bone injury / fracture		
53.12 Inflammation of the bone		
53.13 Calcaneal spur		

	N	+/-
53.21 Sprain		
53.22 Bruise/bleeding		
53.23 Muscle tightness		
53.24 Injury of the muscle / fibre rupture		
53.25 Inflammation of the muscle		
53.26 Ligament injury		
53.27 Stretched ligament		
53.28 Ligament inflammation/tendonitis		
53.29 Inguinal hernia		
53.31 Carpal tunnel syndrome		
53.41 Backbone pain / tension		
53.42 Backbone, degeneration of spinal discs		
53.51 Joint injury		
53.52 Joint inflammation (arthritis)		
53.53 Joint degeneration (arthrosis)		
53.54 Shortage of hyaluronic acid		
53.55 Polymyalgia rheumatica		
53.61 Bursa injury		
53.62 Bursitis		
53.70 Backaches complete		
53.71 Backache cervical spine		
53.72 Backache thoracic spine		
53.73 Backache lumbar spine		
53.80 Osteoporosis		
53.81 Osteomalacia / rachitis		
53.82 Sciatica		
53.83 Lumbago		
53.84 Fibromyalgia		

	N	+/-
54.00 Nervous system physiology complete		
54.10 Central nervous system complete		
54.11 Brain, cortex, nuclei		
54.12 Interbrain, midbrain		

	N	+/-
54.13 Lobe of cerebrum, corpus callosum, cerebelum, pons		
54.14 Pyramidal and extrapyramidal system		
54.15 Medulla oblongata, respiratory centre, cardiovascular centre, vomiting centre		
54.16 Spinal marrow		
54.17 Blood cerebrospinal fluid barrier (CSF barrier)		
54.18 Blood brain barrier BBB		
54.19 Cerebrospinal fluid CSF		
54.20 Peripheral nervous system complete		
54.21 Cranial nerve I (olfactory nerve)		
54.22 Cranial nerve II (optic nerve)		
54.23 Cranial nerve III (oculomotor nerve)		
54.24 Cranial nerve IV (trochlear nerve)		
54.25 Cranial nerve V (trigeminal nerve)		
54.26 Cranial nerve VI (abducens nerve)		
54.27 Cranial nerve VII (facial nerve)		
54.28 Cranial nerve VIII (vestibulocochlear nerve)		
54.29 Cranial nerve IX (glossopharyngeal nerve)		
54.30 Cranial nerve X (vagus nerve)		
54.31 Cranial nerve XI (accessory nerve)		
54.32 Cranial nerve XII (hypoglossal nerve)		
54.35 Nerve ganglia		
54.36 Sciatic nerve		
54.50 Autonomic nervous system		
54.60 Psychosomatic control		

	N	+/-
55.00 Nervous system, pathology (empty)		
55.10 Sleep-onset insomnia (9-11 pm) – often hormonal disorders		
55.20 Sleep-maintenance insomnia time 1 (11pm-01am early waking)		
55.21 Difficulty in staying asleep time 2 (01 – 03h premature wakening)		
55.22 Difficulty in staying asleep time 3 (03 - 05h premature wakening)		
55.30 Alzheimer's disease		
55.31 Parkinson's disease		

	N	+/-
55.32 Organophosphate poisoning (OPs)		
55.40 Neuritis		
55.41 Neuralgia		
55.42 Nerve degeneration		
55.43 Multiple Sclerosis		
55.44 Restless Legs Syndrome		
55.45 ADD / ADHD		
55.46 Amyotrophic lateral sclerosis / muscle atrophy ALS		
55.50 Cerebral concussion		
55.51 Amnesia		
55.55 Headache		
55.60 Migraine		

	N	+/-
56.00 General visual organ physiology		
56.10 Lachrymal gland, nasal duct complete		
56.11 Lacrimal Gland		
56.12 Nasal duct		
56.13 Lacrimal point		
56.14 Lacrimal sac		
56.20 Chambers of the eye complete		
56.21 Front eye chamber		
56.22 Rear eye chamber		
56.30 Layers complete		
56.31 Conjunctiva		
56.32 Cornea		
56.33 Iris		
56.34 Retina		
56.35 Choroid		
56.36 Dermis		
56.40 Lens, pupil, vitreous body complete		
56.41 Lens		
56.42 Pupil		
56.43 Vitreous body		

	N	+/-
56.50 Musculature, nerve, socket of the eye		
56.60 Visual nerves complete		
56.61 Visual nerve		
56.62 Yellow spot		
56.63 Blind spot		

	N	+/-
57.00 Eye, pathology (empty)		
57.10 Retinal detachment		
57.20 Cataract		
57.30 Glaucoma		
57.40 Wet macular degeneration – WET AMD		
57.41 Dry macular degeneration – Dry AMD		
57.50 Hordeolum		
57.51 Chalazion		
57.52 Conjunctivitis		

	N	+/-
58.00 Acoustic organ, physiology complete		
58.10 Auricle complete		
58.11 Auricle		
58.12 Ear cartilage		
58.20 External ear complete		
58.21 Cartilaginous part		
58.22 Bony part		
58.23 Earwax glands		
58.30 Middle ear complete		
58.31 Ear drum, tympanic membrane		
58.32 Hammer, malleus		
58.33 Anvil, incus		
58.34 Stirrup / oval window		
58.35 Tympanum / Eustachian tube		
58.40 Inner ear complete		
58.41 Semicircular canals		

	N	+/-
58.42 Cochlea		
58.43 Acoustic nerve and nerve of equilibrium (nerve VIII)		

	N	+/-
59.00 Acoustic organ / organ of equilibrium, pathology (empty)		
59.10 Tinnitus		
59.20 External otitis		
59.21 Otitis media, acute (acute ear)		
59.30 Ménière's disease		
59.40 Acute hearing loss		

	N	+/-
62.00 Skin / hair, physiology complete		
62.10 Skin complete		
62.11 Epidermis		
62.12 Dermis		
62.13 Subcutis		
62.14 Fatty tissue		
62.15 Melanocytes (melanin forming cells)		
62.16 Keratinocytes		
62.20 Skin glands complete		
62.21 Sebaceous gland		
62.22 Sweat gland		
62.50 Hair		
62.60 Nails complete		
62.61 Onchyogenesis, basic structure		

	N	+/-
63.00 Skin / hair, pathology (empty)		
63.10 Psoriasis		
63.20 Neurodermatitis		
63.25 Sunburn		
63.30 Contact dermatitis (allergic)		
63.40 Urticaria		

	N	+/-
63.50 Epidermatomycoses		
63.60 Lichen (ruber planes)		
63.61 Mycosis fungoides		
63.70 Skin depigmentation		
63.80 Black hairy tongue (lingua nigra)		

	N	+/-
64.00 Hormonal system, physiology complete		
64.05 Pineal gland (epiphysis) complete		
64.06 Melatonin hormone		
64.10 Hypothalamus complete		
64.11 Sleeping-waking-centre		
64.12 Thermoregulation centre		
64.13 Oxytocin hormone		
64.14 Antidiuretic hormone ADH		
64.15 Gonadotropin releasing hormone		
64.20 Pituitary gland complete		
64.21 ACTH (from anterior lobe of the hypophysis)		
64.22 STH (from anterior lobe of the hypophysis)		
64.23 Melanotropin (MSH)		
64.24 Follicle stimulating hormone (FSH)		
64.25 Luteinising hormone LH		
64.26 Acetylcholine		
64.27 Histamine		
64.28 Dopamine		
64.29 Serotonin		
64.30 Thyroid gland		
64.31 TSH		
64.32 fT3		
64.33 fT4		
64.34 Calcitonin		
64.35 Parathyroid gland		
64.36 Parathormone		
64.40 Spleen		

	N	+/-
64.45 Glutamate		
64.46 Gamma-amino butyric acids		
64.50 Adrenal medulla		
64.51 Adrenaline		
64.52 Noradrenaline		
64.55 Adrenal cortex		
64.56 Cortisol		
64.60 Kidney		
64.61 Renin		
64.62 Angiotensin I		
64.63 Angiotensin II		
64.64 Aldosterone		
64.65 Erythropoietin		
64.70 Pancreas		
64.71 Insulin		
64.75 Adiponectin		
64.80 Ovary complete		
64.81 Oestrogens		
64.82 Progesterone / gestagens		
64.85 Testicles complete		
64.86 Testosterone		
64.90 Leptin		

	N	+/-
65.00 Hormonal system, pathology (empty)		
65.10 Female hormonal balance basic regulation		
65.20 Male hormonal balance basic regulation		
65.30 Hypothalamus		
65.31 Anterior lobe of pituitary		
65.32 Posterior lobe of pituitary		
65.33 Thyroid gland hyperfunction (Hyperthyreosis)		
65.34 Thyroid gland hypofunction		
65.35 Parathyroid gland, hyperfunction		

	N	+/-
65.36 Parathyroid gland, hypofunction		
65.37 Hyperfunction of the adrenal cortex		
65.38 Hypofunction of the adrenal cortex		
65.39 Hyperfunction of the adrenal medulla		
65.40 Hypofunction of the adrenal medulla		
65.45 Premenstrual syndrome PMS		
65.50 Menstruation programs complete		
65.51 Amenorrhea		
65.52 Oligomenorrhea		
65.53 Polymenorrhea		
65.54 Hypermenorrhea		
65.55 Hypomenorrhea		
65.56 Metrorrhagia		
65.60 Menopause complaints		
65.61 Female gonad, endocrine functional disorder		
65.62 Female gonad, exocrine functional disorder		
65.65 Male gonad, endocrine functional disorder		
65.66 Male gonad, exocrine functional disorder		
65.80 TPA		
65.81 TRAb		

	N	+/-
66.00 Female sexual organs, physiology complete		
66.10 External female genitalia complete		
66.11 Labia majora		
66.12 Clitoris		
66.13 Labia minora		
66.14 Bartholin's glands		
66.15 Mammary glands with mamillae		
66.16 Lactiferous glands		
66.17 Lactiferous tubules		
66.18 Prolactin (hormone)		
66.19 Colostrum		

	N	+/-
66.30 Internal female genitalia complete		
66.31 Ovaries		
66.32 Oviducts Fallopian tubes		
66.33 Uterus		
66.34 Placental barrier		
66.35 Amniotic fluid		
66.36 Vagina		

	N	+/-
67.00 Female sexual organs, pathology (empty)		
67.10 Salpingitis		
67.20 Ovaritis		
67.30 Endometriosis		
67.40 Mastitis		
67.50 Vaginitis		
67.55 Vaginal atrophy / vaginal dryness		

	N	+/-
68.00 Male sexual organs, physiology complete		
68.10 External male genitalia complete		
68.11 Scrotum		
68.12 Penis		
68.20 Internal male genitalia complete		
68.21 Testicles		
68.22 Epididymis		
68.23 Spermatic duct		
68.24 Seminal vesicle		
68.25 Cowper's glands		
68.26 Prostate gland		
68.27 Spermatic cord		

	N	+/-
69.00 Male sexual organs, pathology (empty)		
69.10 Prostate gland, functional disorder		
69.20 Potency-enhancing		
69.30 Prostatitis		

	N	+/-
70.00 Cause-oriented system therapy		
70.10 Nervous system		
70.11 Hair and scalp		
70.12 Eye system		
70.13 Tongue, oral cavity, salivary glands		
70.14 Teeth, jawbone, mouth		
70.15 Acoustic organ, organ of equilibrium		
70.16 Upper respiratory system		
70.17 Lung system		
70.18 Heart		
70.19 Digestive organs		
70.20 Liver, gall, pancreas		
70.21 Kidneys, ureter		
70.22 Female organs		
70.23 Male organs		
70.24 Skin system		
70.25 Artery and vein system		
70.26 Musculature I		
70.27 Musculature II		
70.28 Skeleton I		
70.29 Skeleton II		
70.40 Borreliosis, Rickettsioses (Lyme Disease)		
70.41 Helicobacter pylori infection		
70.42 Infectious mononucleosis acute (kissing disease)		

	N	+/-
70.43 Infectious mononucleosis chronic (kissing disease)		
70.44 Cytomegaly, chronic		
70.45 Migraines, headaches, insomnia, psychic imbalance, pathogen-oriented		
70.46 Influenza		
70.47 Vasodepression		
70.48 Disease of the blood system		
70.49 Allergy, upper respiratory tract		
70.50 Skin allergy		
70.51 Fracture, closed		
70.52 Fracture, open		
70.53 Disease breast tissue / mammary glands		
70.54 Thyroid gland / parathyroid gland		
70.55 Dengue fever		
70.56 Immunomodulation		
70.57 Changes of cell structures		
70.58 Detoxification program, intensive		
70.59 Diseases at the cellular level (intracellular)		
70.60 Ebola virus / Marburg virus infection		
70.61 Periodontosis-program		
70.62 Mental imbalance / stress		
70.63 Wound healing, care after operation		
70.64 Development support in children		
70.65 Hormonal dysfunction, female		
70.66 Hormonal dysfunction, male		
70.67 Cartilage growth		
70.68 Parkinson, Restless Legs Syndrome, Polyneuropathy		

	N	+/-
71.00 Pain (empty)		
71.11 Pain receptors		
71.50 Pain relief		
71.60 Pain syndrome cervical spine		
71.61 Pain syndrome elbow		

	N	+/-
71.62 Pain syndrome hip		
71.63 Pain syndrome lumbar spine		
71.64 Pain syndrome knee		
71.65 Cervical detoxification / pain syndrome		
71.66 Lumbar detoxification / pain syndrome		
71.67 Pain syndrome osteoporosis		
71.68 Pain syndrome tissue vitality		

	N	+/-
72.00 Psyche		
72.05 Psyche, strengthening		
72.06 Psychological trauma		
72.10 Depression		
72.11 Episode of depression		
72.12 Recurring depressive disorders		
72.13 Continuous affective disorders		
72.14 Cyclothymia		
72.15 Dysthymia		
72.16 Adaptation disorders		
72.17 Phobic neuroses		
72.18 Panic attacks		
72.19 Autism		

	N	+/-
75.00 Stress		
75.10 Stress reduction		
75.15 Weight reduction		
75.16 Giving up smoking		
75.17 Giving up an addiction		
75.18 Meteorosensitivity		
75.19 Learning program / concentration enhancement		
75.20 Mental stress		

	N	+/-
76.00 Teeth, physiology complete		
76.05 Periodontium		
76.10 Teeth, superior maxilla (adult) complete		
76.11 Tooth 11		
76.12 Tooth 12		
76.13 Tooth 13		
76.14 Tooth 14		
76.15 Tooth 15		
76.16 Tooth 16		
76.17 Tooth 17		
76.18 Tooth 18		
76.21 Tooth 21		
76.22 Tooth 22		
76.23 Tooth 23		
76.24 Tooth 24		
76.25 Tooth 25		
76.26 Tooth 26		
76.27 Tooth 27		
76.28 Tooth 28		
76.30 Teeth, inferior maxilla (adult) complete		
76.31 Tooth 31		
76.32 Tooth 32		
76.33 Tooth 33		
76.34 Tooth 34		
76.35 Tooth 35		
76.36 Tooth 36		
76.37 Tooth 37		
76.38 Tooth 38		
76.41 Tooth 41		
76.42 Tooth 42		
76.43 Tooth 43		
76.44 Tooth 44		
76.45 Tooth 45		
76.46 Tooth 46		

	N	+/-
76.47 Tooth 47		
76.48 Tooth 48		
76.50 Milk teeth, upper jaw (child) complete		
76.51 Milk tooth 51		
76.52 Milk tooth 52		
76.53 Milk tooth 53		
76.54 Milk tooth 54		
76.55 Milk tooth 55		
76.61 Milk tooth 61		
76.62 Milk tooth 62		
76.63 Milk tooth 63		
76.64 Milk tooth 64		
76.65 Milk tooth 65		
76.70 Milk teeth, lower jaw (child) complete		
76.71 Milk tooth 71		
76.72 Milk tooth 72		
76.73 Milk tooth 73		
76.74 Milk tooth 74		
76.75 Milk tooth 75		
76.81 Milk tooth 81		
76.82 Milk tooth 82		
76.83 Milk tooth 83		
76.84 Milk tooth 84		
76.85 Milk tooth 85		

	N	+/-
77.00 Teeth, pathology (empty)		
77.05 Cyst of the jaw		
77.10 Toothache		
77.11 Toothache, acute		
77.15 Periodontitis		
77.20 Parodontosis		
77.25 Gingivitis		
77.30 Apical granuloma		

	N	+/-
77.35 Dental caries (prophylaxis)		
77.40 Teething problems (milk teeth)		
77.50 Buccal swabs complete		
77.51 Buccal swab I		
77.52 Buccal swabs II		
77.53 Buccal swab III		
77.54 Buccal swab IV		
77.55 Buccal swab V		
77.56 Buccal swab VI		
77.57 Buccal swabs VII		
77.58 Buccal swab VIII		
77.59 Buccal swab IX		
77.60 Buccal swab X		

Note: The RAH programs included in the C-Module (cell module) can only be used in Rayocomp devices via an additional RAH module.

	N	+/-
79.00 C-Module, blood / lymphatic system complete		
79.01 C-01		
79.02 C-02		
79.03 C-03		
79.04 C-04		
79.05 C-05		
79.06 C-06		
79.07 C-07		
79.08 C-08		
79.09 C-09		
79.10 C-10		
79.11 C-11		
79.12 C-12		
79.13 C-Module, respiratory tract complete		
79.14 C-14		
79.15 C-15		
79.16 C-16		
79.17 C-17		
79.18 C-18		
79.19 C-19		
79.20 C-Module, kidney / urinary organs complete		
79.21 C-21		
79.22 C-22		
79.23 C-23		
79.24 C-24		
79.25 C-25		
79.26 C-26		
79.27 C-Module, digestive system complete		
79.28 C-28		
79.29 C-29		

	N	+/-
79.30 C-30		
79.31 C-31		
79.32 C-32		
79.33 C-33		
79.34 C-34		
79.35 C-35		
79.36 C-36		
79.37 C-37		
79.38 C-38		
79.39 C-Module, liver / gall bladder / pancreas complete		
79.40 C-40		
79.41 C-41		
79.42 C-42		
79.43 C-43		
79.44 C-44		
79.45 C-45		
79.46 C-46		
79.47 C-Module, locomotor system complete		
79.48 C-48		
79.49 C-49		
79.50 C-50		
79.51 C-51		
79.52 C-Module, nervous system complete		
79.53 C-53		
79.54 C-54		
79.55 C-55		
79.56 C-56		
79.57 C-57		
79.58 C-58		
79.59 C-59		
79.60 C-60		
79.61 C-61		
79.62 C-62		
79.63 C-63		

	N	+/-
79.64 C-Module, organ of sight complete		
79.65 C-65		
79.66 C-66		
79.67 C-67		
79.68 C-Module, skin complete		
79.69 C-69		
79.70 C-70		
79.71 C-71		
79.72 C-72		
79.73 C-Module, hormone system complete		
79.74 C-74		
79.75 C-75		
79.76 C-76		
79.77 C-77		
79.78 C-Module, female genital organs complete		
79.79 C-79		
79.80 C-80		
79.81 C-81		
79.82 C-82		
79.83 C-83		
79.84 C-84		
79.85 C-85		
79.86 C-86		
79.87 C-87		
79.88 C-88		
79.89 C-89		
79.90 C-Module, male genital organs complete		
79.91 C-91		
79.92 C-92		
79.93 C-93		
79.94 C-94		
79.95 C-Module, sundry		
79.96 C-96		
79.97 C-97		

	N	+/-
79.98 C-98		
79.99 C-99		

	N	+/-
81.00 Bach flowers complete		
81.01 Agrimony		
81.02 Aspen		
81.03 Beech		
81.04 Centaury		
81.05 Cerato		
81.06 Cherry Plum		
81.07 Chestnut Bud		
81.08 Chicory		
81.09 Clematis		
81.10 Crab Apple		
81.11 Elm		
81.12 Gentian		
81.13 Gorse		
81.14 Heather		
81.15 Holly		
81.16 Honeysuckle		
81.17 Hornbeam		
81.18 Impatiens		
81.19 Larch		
81.20 Mimulus		
81.21 Mustard		
81.22 Oak		
81.23 Olive		
81.24 Pine		
81.25 Red Chestnut		
81.26 Rock Rose		
81.27 Rock Water		
81.28 Scleranthus		
81.29 Star of Bethlehem		

	N	+/-
81.30 Sweet Chestnut		
81.31 Vervain		
81.32 Vine		
81.33 Walnut		
81.34 Water Violet		
81.35 White Chestnut		
81.36 Wild Oat		
81.37 Wild Rose		
81.38 Willow		

	N	+/-
82.00 Schuessler salts complete		
82.01 Calcium fluoratum		
82.02 Calcium phosphoricum		
82.03 Ferrum phosphoricum		
82.04 Potassium chloratum		
82.05 Potassium phosphoricum		
82.06 Potassium sulfuricum		
82.07 Magnesium phosphoricum		
82.08 Sodium chloratum		
82.09 Sodium phosphoricum		
82.10 Sodium sulfuricum		
82.11 Silicea		
82.12 Calcium sulfuricum		
82.13 Potassium arsenicum		
82.14 Potassium bromatum		
82.15 Potassium jodatum		
82.16 Lithium chloratum		
82.17 Manganum sulfuricum		
82.18 Calcium sulfuratum		
82.19 Cuprum arsenicosum		
82.20 Potassium aluminium sulfuricum		
82.21 Zincum chloratum		
82.22 Calcium carbonicum		

	N	+/-
82.23 Sodium bicarbonicum		
82.24 Arsenum jodatum		
82.25 Aurum chloratum natronatum		
82.26 Selenium		
82.27 Potassium bichromicum		

	N	+/-
83.00 Resistance genes from Dr. Hamada complete		
83.10 Resistance genes, groups complete		
83.11 Resistance genes group l		
83.12 Resistance genes group II		
83.13 Resistance genes group III		
83.14 Resistance genes group IV		
83.15 Resistance genes group V		
83.16 Resistance genes group VI		
83.17 Resistance genes group VII		
83.18 Resistance genes group VIII		
83.19 Resistance genes group IX		
83.20 Resistance genes group X		
83.25 Sexual functions complete		
83.26 Libido		
83.27 Sexual energy		
83.28 Sexual stimulation, cerebral cortex		
83.30 Male reproduction and interference fields complete		
83.31 Morning erection		
83.32 Erection		
83.33 Permanent erection with no loss of intensity		
83.34 Erection centers (brain, sacrum)		
83.35 Erection trigger		
83.36 Stimulation of the glans penis		
83.37 Prostatitis		
83.38 Sperm production		
83.39 Ischiocavernosus muscle		
83.40 Erection nerves		

	N	+/-
83.41 Erectile dysfunction A-1		
83.42 Erectile dysfunction A-2		
83.43 Erectile dysfunction A-3		
83.44 Erectile dysfunction A-4		
83.45 Erectile dysfunction A-5		
83.46 Erectile dysfunction A-6		
83.47 Erectile dysfunction A-7		
83.48 Erectile dysfunction B-1		
83.49 Erectile dysfunction B-2		
83.50 Erectile dysfunction B-3		
83.51 Erectile dysfunction B-4		
83.52 Erectile dysfunction B-5		
83.53 Erectile dysfunction B-6		
83.54 Erectile dysfunction B-7		
83.55 Erectile dysfunction B-8		
83.56 Erectile dysfunction B-9		
83.57 Erectile dysfunction B-10		
83.58 Erectile dysfunction C-1		
83.60 Female reproduction and interference fields complete		
83.61 Mastitis and mammillitis		
83.62 Vaginitis		
83.63 Cervicitis		
83.64 Endometritis		
83.65 Metritis		
83.66 Ovarian dysfunction		
83.67 Functional regulation of the uterine artery		
83.68 Dysmenorrhoea		
83.70 Hormones complete		
83.71 Testosterone		
83.72 Dehydroepiandrosterone		
83.76 Progesterone		
83.77 Estradiol		
83.80 Neurotransmitters complete		
83.81 Serotonin-dopamine antagonist		

	N	+/-
83.82 Serotonin		
83.83 Dopamine		
83.85 Endocrinal interference fields complete		
83.86 Octylphenol		
83.87 Bisphenol A		
83.88 Nonylphenol		
83.95 Detoxification of the endocrinal interference fields complete		
83.96 Activation of the endocrinal interference fields		
83.97 Genital dysfunctions		
83.98 Detoxification of endocrinal interference fields		

	N	+/-
85.00 Periodic Table of the Elements (PT) complete		
85.01 Hydrogen (H)		
85.02 Helium (He)		
85.03 Lithium (Li)		
85.04 Beryllium (Be)		
85.05 Boron (B)		
85.06 Carbon (C)		
85.07 Nitrogen (N)		
85.08 Oxygen (0)		
85.09 Fluor (F)		
85.10 Neon (Ne)		
85.11 Sodium (Na)		
85.12 Magnesium (Mg)		
85.13 Aluminium (Al)		
85.14 Silicon (Si)		
85.15 Phosphor (P)		
85.16 Sulphur (S)		
85.17 Chlorine (CI)		
85.18 Argon (Ar)		
85.19 Potassium (K)		
85.20 Calcium (Ca)		
85.21 Scandium (Sc)		

	N	+/-
85.22 Titan (Ti)		
85.23 Vanadium (V)		
85.24 Chromium (Cr)		
85.25 Manganese (Mn)		
85.26 Iron (Fe)		
85.27 Cobalt (Co)		
85.28 Nickel (Ni)		
85.29 Copper (Cu)		
85.30 Zinc (Zn)		
85.31 Gallium (Ga)		
85.32 Germanium (Ge)		
85.33 Arsenic (As)		
85.34 Selenium (Se)		
85.35 Bromine (Br)		
85.36 Krypton (Kr)		
85.37 Rubidium (Rb)		
85.38 Strontium (Sr)		
85.39 Yttrium (Y)		
85.40 Zirconium (Zr)		
85.41 Niobium (Nb)		
85.42 Molybdenum (Mo)		
85.43 Technetium (Tc)		
85.44 Ruthenium (Ru)		
85.45 Rhodium (Rh)		
85.46 Palladium (Pd)		
85.47 Silver (Ag)		
85.48 Cadmium (Cd)		
85.49 Indium (In)		
85.50 Tin (Sn)		
85.51 Antimony (Sb)		
85.52 Tellurium (Te)		
85.53 lodine (J)		
85.54 Xenon (Xe)		
85.55 Caesium (Cs)		

	N	+/-
85.56 Barium (Ba)		
85.57 Lanthanum (La)		
85.58 Cerium (Ce)		
85.59 Praseodymium (Pr)		
85.60 Neodymium (Nd)		
85.61 Promethium (Pm)		
85.62 Samarium (Sm)		
85.63 Europium (Eu)		
85.64 Gadolinium (Gd)		
85.65 Terbium (Tb)		
85.66 Dysprosium (Dy)		
85.67 Holmium (Ho)		
85.68 Erbium (Er)		
85.69 Thulium (Tm)		
85.70 Ytterbium (Yb)		
85.71 Lutetium (Lu)		
85.72 Hafnium (Hf)		
85.73 Tantalum (Ta)		
85.74 Tungsten (W)		
85.75 Rhenium (Re)		
85.76 Osmium (Os)		
85.77 Iridium (Ir)		
85.78 Platinum (Pt)		
85.79 Gold (Au)		
85.80 Mercury (Hg)		
85.81 Thallium (TI)		
85.82 Lead (Pb)		
85.83 Bismuth (Bi)		
85.84 Polonium (Po)		
85.85 Astatine (At)		
85.86 Radon (Rn)		
85.87 Francium (Fr)		
85.88 Radium (Ra)		
85.89 Actinium (Ac)		

	N	+/-
85.90 Thorium (Th)		
85.91 Protactinium (Pa)		
85.92 Uranium (U)		
85.93 Neptunium (Np)		
85.94 Plutonium (Pu)		
85.95 Americium (Am)		
85.96 Curium (Cm)		
85.97 Berkelium (Bk)		
85.98 Californium (Cf)		
85.99 Einsteinium (Es)		
86.00 Fermium (Fm)		
86.01 Mendelevium (Md)		
86.02 Nobelium (No)		
86.03 Lawrencium (Lr)		
86.04 Rutherfordium (Rf)		

## 10. Organ-specific tables of meridians and pathogens

38.00 Circulatory system physiology complete					
corresponding meridians	N	+/-	corresponding pathogens	N	+/-
02.15 Heart meridian			21.70 Borrelia afzelii		
02.19 Liver meridian			21.71 Borrelia burgdorferi		
			21.72 Borrelia duttoni		
			21.73 Borrelia garinii		
			21.74 Borrelia hermsii		
			21.88 Rickettsiae		
			21.89 Babesia divergens		
			22.87 Dengue virus		
			23.19 HRSV		
			24.22 Dirofilaria immitis (heartworm)		
			24.36 Dirofilaria repens		
			24.51 Clonorchis sinensis		
			25.15 Chilomastix cysts (rat)		
			25.16 Chilomonas		
			25.36 Plasmodium cynomolgi		
			25.85 Blood parasites		
			25.86 Pneumocystis carinii		
			27.10 Yeast fungi complete		

40.00 Heart physiology complete					
corresponding meridians	N	+/-	corresponding pathogens	N	+/-
02.20 Meridian of the heart and circulation			20.11 Alpha streptococcus		
			20.12 Beta haemolytic streptococci		
			20.21 Streptococcus lactis		
			20.22 Streptococcus mitis		
			20.23 Streptococcus pneumoniae		
			20.24 Streptococcus pyogenes		
			20.75 Mycobacteria phlei		
			20.76 Mycobacteria tuberculosis		
			21.51 Mycoplasma		

corresponding meridians	N	+/-	corresponding pathogens	N	+/-
			21.53 Mycoplasma capricolum		
			21.70 Borrelia afzelii		
			21.71 Borrelia burgdorferi		
			21.72 Borrelia duttoni		
			21.73 Borrelia garinii		
			21.74 Borrelia hermsii		
			21.88 Rickettsiae		
			21.89 Babesia divergens		
			23.55 Retroviruses		
			24.22 Dirofilaria immitis (heartworm)		
			24.36 Dirofilaria repens		
			24.51 Clonorchis sinensis		
			25.15 Chilomastix cysts (rat)		
			25.16 Chilomonas		
			25.36 Plasmodium cynomolgi		
			25.85 Blood parasites		
			25.86 Pneumocystis carinii		

42.00 Respiratory system physiology complete								
corresponding meridians	N	+/-	corresponding pathogens	N	+/-			
02.11 Lung meridian			20.11 Alpha streptococcus					
02.12 Colon meridian			20.12 Beta haemolytic streptococci					
02.14 Spleen meridian			20.18 Staphylococci					
02.17 Bladder meridian			20.19 Staphylococcus aureus					
02.21 Sanjiao meridian			20.21 Streptococcus lactis					
02.22 Gallbladder meridian			20.22 Streptococcus mitis					
			20.23 Streptococcus pneumoniae					
			20.24 Streptococcus pyogenes					
			20.44 Bacilli					
			20.49 Bordetella pertussis					
			20.67 Haemophilus influenzae					
			20.72 Legionella					
			20.75 Mycobacteria phlei					
			20.76 Mycobacteria tuberculosis					

corresponding meridians	N	+/-	corresponding pathogens	N	+/-
			21.15 Klebsiella pneumoniae		
			21.86 Chlamydia trachomatis		
			21.91 Laryngeal 1 bacteria		
			22.11 Adenovirus		
			22.12 Cytomegalovirus (CMV)		
			22.13 Epstein-Barr virus (EBV)		
			22.15 Herpes simplex		
			22.17 Herpes zoster		
			22.67 Coxsackie virus B1		
			22.68 Coxsackie virus B4		
			22.80 Rhinovirus		
			22.89 Coxsackie virus A7		
			23.16 Parainfluenza		
			23.19 HRSV		
			23.31 H1N1		
			23.32 H5N1		
			23.33 Influenza virus A and B		
			23.55 Retroviruses		
			23.56 Rotaviruses		
			23.81 Viruses N.N.		
			24.21 Ascaris megalocephala		
			24.36 Dirofilaria repens		
			24.38 Ascaris lumbricoides		
			25.36 Plasmodium cynomolgi		
			25.85 Blood parasites		
			25.86 Pneumocystis carinii		
			26.10 Mould fungi complete		
			26.40 Mould fungi toxins complete		

44.00 Kidney/urinary organs, physiology complete									
corresponding meridians	N	+/-	corresponding pathogens	N	+/-				
02.14 Spleen meridian			20.66 Gardnerella vaginalis						
02.17 Bladder meridian			21.14 Escherichia coli						
02.18 Kidney meridian			21.16 Proteus mirabilis						

corresponding meridians	N	+/-	corresponding pathogens	N	+/-
02.22 Gallbladder meridian			21.17 Proteus vulgaris		
			21.28 EHEC		
			24.36 Dirofilaria repens		
			24.63 Schistosoma haematobium		
			24.64 Schistosoma mansoni		
			24.65 Urocleidus		
			25.36 Plasmodium cynomolgi		
			25.41 Trichomonas vaginalis		
			25.42 Trypanosoma brucei		
			25.85 Blood parasites		
			25.86 Pneumocystis carinii		
			27.11 Candida albicans		

46.00 Digestive system, physiology complete								
corresponding meridians	N	+/-	corresponding pathogens	N	+/-			
02.13 Stomach meridian			20.69 Helicobacter pylori					
02.14 Spleen meridian			21.11 Enterobacter aerogenes					
02.19 Liver meridian			21.19 Salmonella enteritidis					
02.21 Sanjiao meridian			21.20 Salmonella paratyphi					
02.22 Gallbladder meridian			21.21 Salmonella typhi					
02.24 Meridian of the Conception Vessel			21.23 Shigella dysenteriae					
			21.28 EHEC					
			22.67 Coxsackie virus B1					
			22.68 Coxsackie virus B4					
			22.78 Norovirus					
			22.89 Coxsackie virus A7					
			23.55 Retroviruses					
			23.56 Rotaviruses					
			24.13 Gyrodactylus					
			24.21 Ascaris megalocephala					
			24.23 Enterobius vermicularis					
			24.28 Enterobius worms					
			24.31 Strongyloides (filariform)					
			24.38 Ascaris lumbricoides					

corresponding meridians	N	+/-	corresponding pathogens	N	+/-
			24.54 Eurytrema pancreaticum		
			24.56 Fasciolopsis buski		
			24.58 Gastrothylax elongatus		
			24.63 Schistosoma haematobium		
			24.64 Schistosoma mansoni		
			24.84 Taenia saginata		
			24.85 Taenia solium		
			25.29 Leishmania braziliensis		
			25.30 Leishmania donovani		
			25.31 Leishmania mexicana		
			25.32 Leishmania tropica		
			25.35 Naegleria fowleri		
			26.10 Mould fungi complete		
			26.40 Mould fungi toxins complete		
			27.11 Candida albicans		

48.00 Liver –	48.00 Liver – gall – pancreas, physiology complete									
corresponding meridians	N	+/-	corresponding pathogens	N	+/-					
02.19 Liver meridian			20.69 Helicobacter pylori							
02.22 Gallbladder meridian			22.13 Epstein-Barr virus (EBV)							
02.23 Meridian of the Governing Vessel			22.14 Hepatitis B virus							
			22.74 Hepatitis A virus							
			22.75 Hepatitis C virus							
			22.86 Hepatitis E virus V							
			22.87 Dengue virus							
			24.13 Gyrodactylus							
			24.21 Ascaris megalocephala							
			24.36 Dirofilaria repens							
			24.38 Ascaris lumbricoides							
			24.41 Capillaria hepatica (liver)							
			24.54 Eurytrema pancreaticum							
			24.55 Fasciola hepatica							
			24.58 Gastrothylax elongatus							
			24.63 Schistosoma haematobium							

corresponding meridians	N	+/-	corresponding pathogens	N	+/-
			24.64 Schistosoma mansoni		
			24.81 Echinococcus granulosus		
			24.82 Echinococcus multicularis		
			25.36 Plasmodium cynomolgi		
			25.85 Blood parasites		
			26.10 Mould fungi complete		
			26.40 Mould fungi toxins complete		

corresponding meridians	N	+/-	stem, physiology complete corresponding pathogens	N	+/-
02.12 Colon meridian		•	20.11 Alpha streptococcus		
02.16 Meridian of the small intestines			20.12 Beta haemolytic streptococci		
02.17 Bladder meridian			20.19 Staphylococcus aureus		
02.19 Liver meridian			20.21 Streptococcus lactis		
02.22 Gallbladder meridian			20.22 Streptococcus mitis		
			20.23 Streptococcus pneumoniae		
			20.24 Streptococcus pyogenes		
			20.76 Mycobacteria tuberculosis		
			21.27 Yersinia enterocolitica		
			21.61 Borrelia		
			21.70 Borrelia afzelii		
			21.71 Borrelia burgdorferi		
			21.72 Borrelia duttoni		
			21.73 Borrelia garinii		
			21.74 Borrelia hermsii		
			21.86 Chlamydia trachomatis		
			21.88 Rickettsiae		
			21.89 Babesia divergens		
			21.95 Pain-producing bacteria		
			21.96 Tuberculinum burnetti		
			22.12 Cytomegalovirus (CMV)		
			22.13 Epstein-Barr virus (EBV)		
			22.15 Herpes simplex		
			22.17 Herpes zoster		

corresponding meridians	N	+/-	corresponding pathogens	N	+/-
			22.64 Chikungunya		
			22.67 Coxsackie virus B1		
			22.68 Coxsackie virus B4		
			22.87 Dengue virus		
			22.89 Coxsackie virus A7		
			23.55 Retroviruses		
			23.56 Rotaviruses		
			23.81 Viruses N.N.		
			24.22 Dirofilaria immitis (heartworm)		
			24.32 Trichinella spiralis (muscle)		
			24.33 Trichuris sp.		
			24.36 Dirofilaria repens		
			24.56 Fasciolopsis buski		
			24.61 Paragonimus Westermani		
			24.62 Prosthogonimus macrorchis		
			25.36 Plasmodium cynomolgi		
			25.85 Blood parasites		
			25.86 Pneumocystis carinii		
			26.12 Aspergillus niger		
			26.41 Aflatoxin		
			51.11 Prions		

54.00 Nervous system physiology complete									
corresponding meridians	N	+/-	corresponding pathogens	N	+/-				
02.15 Heart meridian			20.11 Alpha streptococcus						
02.17 Bladder meridian			20.12 Beta haemolytic streptococci						
02.18 Kidney meridian			20.15 Meningococcus						
02.19 Liver meridian			20.19 Staphylococcus aureus						
02.20 Meridian of the heart and circulation			20.21 Streptococcus lactis						
			20.22 Streptococcus mitis						
			20.23 Streptococcus pneumoniae						
			20.24 Streptococcus pyogenes						
			21.61 Borrelia						
			21.70 Borrelia afzelii						

corresponding meridians	N	+/-	corresponding pathogens	N	+/-
			21.71 Borrelia burgdorferi		
			21.72 Borrelia duttoni		
			21.73 Borrelia garinii		
			21.74 Borrelia hermsii		
			21.88 Rickettsiae		
			21.89 Babesia divergens		
			21.92 Borellia toxin		
			21.95 Pain-producing bacteria		
			21.96 Tuberculinum burnetti		
			22.12 Cytomegalovirus (CMV)		
			22.13 Epstein-Barr virus (EBV)		
			22.15 Herpes simplex		
			22.17 Herpes zoster		
			22.21 JC viruses		
			22.64 Chikungunya		
			22.67 Coxsackie virus B1		
			22.68 Coxsackie virus B4		
			22.73 FSME		
			22.87 Dengue virus		
			22.89 Coxsackie virus A7		
			23.11 Borna virus		
			23.16 Parainfluenza		
			23.19 HRSV		
			23.31 H1N1		
			23.32 H5N1		
			23.33 Influenza virus A and B		
			23.55 Retroviruses		
			23.56 Rotaviruses		
			23.81 Viruses N.N.		
			24.36 Dirofilaria repens		
			25.36 Plasmodium cynomolgi		
			25.62 Dermatophagoides (dust mite)		
			25.64 Demodex folliculorum (hair follicle mite)		
			25.85 Blood parasites		

corresponding meridians	N	+/-	corresponding pathogens	N	+/-
			25.86 Pneumocystis carinii		
			26.10 Mould fungi complete		
			26.40 Mould fungi toxins complete		

50	6.00 Genera	al visu	al organ physiology		
corresponding meridians	N	+/-	corresponding pathogens	N	+/-
02.19 Liver meridian			20.11 Alpha streptococcus		
02.22 Gallbladder meridian			20.12 Beta haemolytic streptococci		
			20.19 Staphylococcus aureus		
			20.21 Streptococcus lactis		
			20.22 Streptococcus mitis		
			20.23 Streptococcus pneumoniae		
			20.24 Streptococcus pyogenes		
			21.70 Borrelia afzelii		
			21.71 Borrelia burgdorferi		
			21.72 Borrelia duttoni		
			21.73 Borrelia garinii		
			21.74 Borrelia hermsii		
			21.88 Rickettsiae		
			22.12 Cytomegalovirus (CMV)		
			22.13 Epstein-Barr virus (EBV)		
			22.15 Herpes simplex		
			22.17 Herpes zoster		
			22.64 Chikungunya		
			22.67 Coxsackie virus B1		
			22.68 Coxsackie virus B4		
			22.89 Coxsackie virus A7		
			23.55 Retroviruses		
			23.56 Rotaviruses		
			23.81 Viruses N.N.		
			25.14 Blepharisma		
			25.36 Plasmodium cynomolgi		
			25.62 Dermatophagoides (dust mite)		
			25.85 Blood parasites		

corresponding meridians	N	+/-	corresponding pathogens	N	+/-
			25.86 Pneumocystis carinii		
			26.12 Aspergillus niger		
			26.41 Aflatoxin		
			27.11 Candida albicans		

58.00 Acc	oustic	orgar	, physiology complete		
corresponding meridians	N	+/-	corresponding pathogens	N	+/-
02.16 Meridian of the small intestines			20.11 Alpha streptococcus		
02.18 Kidney meridian			20.12 Beta haemolytic streptococci		
			20.21 Streptococcus lactis		
			20.22 Streptococcus mitis		
			20.23 Streptococcus pneumoniae		
			20.24 Streptococcus pyogenes		
			21.70 Borrelia afzelii		
			21.71 Borrelia burgdorferi		
			21.72 Borrelia duttoni		
			21.73 Borrelia garinii		
			21.74 Borrelia hermsii		
			21.88 Rickettsiae		
			22.12 Cytomegalovirus (CMV)		
			22.13 Epstein-Barr virus (EBV)		
			22.15 Herpes simplex		
			22.17 Herpes zoster		
			22.64 Chikungunya		
			22.67 Coxsackie virus B1		
			22.68 Coxsackie virus B4		
			22.89 Coxsackie virus A7		
			23.55 Retroviruses		
			23.56 Rotaviruses		
			23.81 Viruses N.N.		
			25.62 Dermatophagoides (dust mite)		
			25.85 Blood parasites		
			25.86 Pneumocystis carinii		
			26.12 Aspergillus niger		

corresponding meridians	N	+/-	corresponding pathogens	N	+/-
			26.41 Aflatoxin		

			physiology complete	R.I	
corresponding meridians	N	+/-		N	+/-
02.11 Lung meridian			20.11 Alpha streptococcus		
02.12 Colon meridian			20.12 Beta haemolytic streptococci		
02.14 Spleen meridian			20.13 Eikanella corrodens		
02.18 Kidney meridian			20.19 Staphylococcus aureus		
02.19 Liver meridian			20.21 Streptococcus lactis		
			20.22 Streptococcus mitis		
			20.23 Streptococcus pneumoniae		
			20.24 Streptococcus pyogenes		
			20.25 Streptococcus sp.		
			20.42 Actinomyces israelii		
			20.46 Bacillus cereus		
			20.47 Bacteroides fragilis		
			20.66 Gardnerella vaginalis		
			20.70 Lactobacillus acidophilus		
			20.81 Propionibacterium acnes		
			21.12 Erwinia amylovora		
			21.13 Erwinia carotavora		
			21.16 Proteus mirabilis		
			21.17 Proteus vulgaris		
			21.22 Serratia marcescens		
			21.23 Shigella dysenteriae		
			21.24 Shigella flexneri		
			21.25 Shigella sonnei		
			22.12 Cytomegalovirus (CMV)		
			22.15 Herpes simplex		
			22.17 Herpes zoster		
			22.82 Tobacco mosaic virus		
			22.87 Dengue virus		
			23.70 Wart frequencies complete		
			23.81 Viruses N.N.		

corresponding meridians	N	+/-	corresponding pathogens	N	+/-
			24.36 Dirofilaria repens		
			24.37 Microfilaria		
			25.62 Dermatophagoides (dust mite)		
			25.64 Demodex folliculorum (hair follicle mite)		
			25.67 Ornithonyssus (bird mite)		
			25.68 Sarcoptes scabiei (scabies)		
			25.84 Troglodytella abrassarti		
			25.85 Blood parasites		
			26.05 Fungi I complete		
			26.40 Mould fungi toxins complete		
			27.05 Fungi II complete		

66.00 Fem	ale sexu	al org	ans, physiology complete		
corresponding meridians	N	+/-	corresponding pathogens	N	+/-
02.13 Stomach meridian			20.11 Alpha streptococcus		
02.14 Spleen meridian			20.12 Beta haemolytic streptococci		
02.18 Kidney meridian			20.19 Staphylococcus aureus		
02.24 Meridian of the Conception Vessel			20.21 Streptococcus lactis		
			20.22 Streptococcus mitis		
			20.23 Streptococcus pneumoniae		
			20.24 Streptococcus pyogenes		
			20.25 Streptococcus sp.		
			21.86 Chlamydia trachomatis		
			22.15 Herpes simplex		
			22.17 Herpes zoster		
			22.18 Human papilloma virus (HPV)		
			24.56 Fasciolopsis buski		
			25.41 Trichomonas vaginalis		
			25.85 Blood parasites		
			27.11 Candida albicans		

68.00 Mal	68.00 Male sexual organs, physiology complete				
corresponding meridians	N	+/-	corresponding pathogens	N	+/-
02.18 Kidney meridian			20.11 Alpha streptococcus		
02.19 Liver meridian			20.12 Beta haemolytic streptococci		
02.24 Meridian of the Conception Vessel			20.19 Staphylococcus aureus		
			20.21 Streptococcus lactis		
			20.22 Streptococcus mitis		
			20.23 Streptococcus pneumoniae		
			20.24 Streptococcus pyogenes		
			20.25 Streptococcus sp.		
			22.15 Herpes simplex		
			22.17 Herpes zoster		
			22.18 Human papilloma virus (HPV)		
			24.56 Fasciolopsis buski		
			24.63 Schistosoma haematobium		
			24.64 Schistosoma mansoni		
			24.65 Urocleidus		
			24.85 Taenia solium		
			25.36 Plasmodium cynomolgi		
			25.41 Trichomonas vaginalis		
			25.42 Trypanosoma brucei		
			25.85 Blood parasites		
			27.11 Candida albicans		

76.00 Teeth, physiology complete					
corresponding meridians	N	+/-	corresponding pathogens	N	+/-
02.11 Lung meridian			20.11 Alpha streptococcus		
02.12 Colon meridian			20.12 Beta haemolytic streptococci		
02.13 Stomach meridian			20.13 Eikanella corrodens		
02.14 Spleen meridian			20.22 Streptococcus mitis		
02.15 Heart meridian			20.92 Actinomyces viscosus		
02.16 Meridian of the small intestines			20.93 Treponema denticola		
02.17 Bladder meridian			20.94 Campylobacter rectus / showae		
02.18 Kidney meridian			20.95 Porphyromonas gingivalis		
02.19 Liver meridian			20.97 Tannerella forsythensis		

corresponding meridians	N	+/-	corresponding pathogens	N	+/-
02.22 Gallbladder meridian			20.98 Aggregatibacter actinomyces		
			20.99 Fusubacterium nucleatum		
			21.93 Caries bacteria		
			52.11 Skeleton skull		

## 11. Information about bacteria, viruses, parasites and fungi

Note: The pathogens indicated with "V", e.g. coccidia (feline) V can mainly be found in animals.

Bacteria		
Program no.	Description	
20.00 Bacteria complete	Bacteria are very small, single-cell organisms which can multiply by transversal division. Bacteria can have very different appearances (morphology), to be categorised in three basic shapes: coccobacilli, rod-shaped and spiral-shaped bacteria. Bacteria can be transferred through air, water, soil and body substances like blood, stool, urine and bodily excretions. Many bacteria are very useful for us humans, like in the intestinal flora. Others can lead to acute diseases. Bacterial infections often start locally, at a certain place. They can spread over the entire body. This program contains all bacteria from the program groups 20 and 21.	
20.05 Bacteria I complete	This includes all bacteria from program group 20.	
20.10 Coccobacilli complete		
20.11 Alpha streptococcus	Infections with streptococcus are very common. Depending on the nature of the streptococcus infection diseases like scarlet fever, angina tonsillaris, meningitis, otitis media, wound infections or even infections of the urinary tract may occur.	
20.12 Beta haemolytic streptococci	see above	
20.13 Eikanella corrodens	These bacteria belong to the normal flora of the oral cavity and the upper respiratory tract. Infections are caused by a human or animal bite. Consequences of such an infection can be diseases like endocarditis or meningitis.	
20.14 Gaffkya tetragena	Infections with these bacteria lead to diseases of the respiratory tract.	
20.15 Meningococcus	Are spread from person to person by droplet infection, for example when being coughed or sneezed on, or by being kissed. In case of a weakened immune system, for instance through other infections, the bacteria multiply, penetrate the mucous membrane and cause meningitis and blood poisoning.	

Bacteria		
Program no.	Description	
20.16 MRSA (multi-resistant staphy-lococcus aureus)	Initially methicillin-resistant staphylococcus aureus, named after an antibiotic we nowadays don't use anymore, whose resistance was first observed in the sixties of the last century. Its biological characteristics cannot be distinguished from the antibiotic sensitive staphylococcus-aureus strains.  MRSA-strains produce a modified penicillin binding protein. Therewith they become more resistant against all beta-lactamantibiotics (penicillin, cephalosporins and carbapenems). Infection sources: intravascular catheter (dialyse-shunt), wound drainages, burns, chronic skin lesions.	
20.17 Neisseria gonorrhoeae	Pathogens of gonorrhoea, a sexual disease. The pathogens are transmitted through sexual intercourse or smear infection.	
20.18 Staphylococci	These bacteria populate the skin and mucous membranes of humans and animals as pathogens and can also be found in the environment, e.g. in food.	
20.19 Staphylococcus aureus	These pathogens can very often be found in wound infections, abscesses and boils.	
20.20 Streptococcus	Infections caused by streptococcus-bacteria range from minor infections like impetigo (skin infections), tonsillitis and throat inflammation to toxic shock syndrome and necrotizing fasciitis (severe tissue destroying infection).	
20.21 Streptococcus lactis	see above	
20.22 Streptococcus mitis	see above	
20.23 Streptococcus pneumoniae	see above	
20.24 Streptococcus pyogenes	see above	
20.25 Streptococcus sp.	see above	
20.26 Veillonella dispar	These bacteria form part of the normal flora in the upper respiratory tract, the gastrointestinal tract and the vagina of the organism. In case of unfavourable environmental changes in the organism they occur in combination with other bacteria, but also in endocarditis, joint inflammations and abscesses.	
20.27 Moraxella	These pathogens form part of the healthy human and animal oral flora. Any imbalance in the organism with regards to the pathogens can lead to infections like ear infections, otitis media, sinusitis, laryngitis, acute bronchitis, pneumonia and bronchopneumonia. Further possible diseases are endocarditis and arthritis.	

Bacteria		
Program no.	Description	
20.28 Scarlatina (scarlet fever)	Scarlet fever (scarlatina) is a bacterial infectious disease. The disease is caused by specific types of streptococcus pyogenes, that have bacteriophages. These bacteriophages produce the scarlet fever toxin. Symptoms: Fever, chills and a sore throat. On the tongue the taste buds are shiny red (strawberry or raspberry tongue). Transmission takes place through droplet and contact infection. The risk is higher for young children, a person can suffer from scarlet fever several times in the course of his life.	
20.29 Streptococcus salivarius	Streptococcus salivarius can be found in the human mouth and the upper respiratory tract. These bacteria belong to the most important pathogens of caries.	
20.40 Rod-shaped bacteria complete		
20.41 Actinobacillus (suis) V	This pathogen can mainly be found in pigs. Infections by the pathogen have the following symptoms: Pain, increased heart frequencies, fever, shock, weakened immune system.	
20.42 Actinomyces israelii	This pathogen causes actinomycosis (ray fungi disease). Actinomycosis is a bacterial mixed infection. The germ penetrates, in case of injured mucous membrane, the deeper tissue layers, occurrence in the central nervous system, the lungs (by inhaling) and the skin is rather seldom.	
20.43 Arcanobacterium pyogenes	These bacteria often cause severe clinical mastitis diseases. The pathogen can be transmitted by flies. Entry portals to the organism are wound infections, teat wounds, udder inflammation and abscesses.	
20.44 Bacilli	The genus bacillus can be found in its natural habitat, in the soil. Infections can occur through infected animals or animal products with spores. The pathogen can also be inhaled.	
20.45 Bacillus anthracis V	These pathogens cause the so-called anthrax (skin anthrax, inhalation anthrax). As a spore the bacteria can also survive in the soil for many decades. Absorption usually takes place through skin injuries or by inhaling the pathogens.	
20.46 Bacillus cereus	This bacterium occurs naturally in the soil and is therefore one of the most frequently cultivated soil bacteria. It is a food poisoning bacteria that occurs in particular in rice plants. The spores in raw rice survive cooking and propagate. The toxins can cause vomiting as well as diarrhoea.	

Bacteria		
Program no.	Description	
20.47 Bacteroides fragilis	These pathogens belong to the physiological flora of people and animals. They can often be found in mixed infections, e.g. peritonitis, gynaecological infections (e.g. oviduct or ovarium), aspiration pneumonia, sinusitis and brain abscesses. Infections are mainly endogenous, in other words, starting from the body's own physiological flora.	
20.48 Bordetella bronchiseptica	This pathogen causes diseases of the upper respiratory tract like e.g. bronchitis and pneumonia in mammals and rodents. It plays a role in the cat cold complex and kennel cough.	
20.49 Bordetella pertussis	Bacteria of the genus Bordetella, that is of great medical importance as being the pathogen of whooping cough. Source of infection are whooping cough sufferers who cough up the pathogen. Healthy germ carriers don't exist. In addition to this, transfer through contaminated objects cannot be excluded, since the pertussis bacteria can survive outside of the organism for days.	
20.50 Brucella abortus V	Pathogens of the Bang's disease or contagious abortion.	
20.51 Brucella melitensis V	Pathogens of the Mediterranean fever, Malta fever, undulant fever. Symptoms: fever, nauseousness, enlarged liver, spleen and lymph nodes. Brucella can persist in unpasteurised milk and cheese made thereof for several weeks; from this ability to propagate the main route of infections results. For farmers and veterinarians, infected animals (faeces, urine) can be the source of infection.	
20.52 Brucella suis V	A pathogen specifically involving pigs.	
20.53 Coxiella burnetii V	Pathogen of the Q fever. The pathogen is distributed worldwide and can be transmitted to humans in particular by sheep, but also by pets like dogs and cats as well as by cattle and goats. Actual carriers in the transmission between animals are ticks; however, transmission may also occur through the consumption of infected faeces or milk. The infection of humans occurs aerobically, e.g. through the inhalation of infected dust.	
20.54 Clostridia	These bacteria are everywhere (ubiquitous), especially in soil and in the digestive tract of higher life forms. Because of their toxins they can cause different types of infection us diseases, like anaerobic cellulitis, gas gangrene or lockjaw (tetanus).	
20.55 Clostridium botulinum V	This bacteria is a soil dweller. While propagating it forms a toxin, the botulinum toxin, that causes the disease known as botulism.	

Bacteria		
Program no.	Description	
20.55 Clostridium botulinum V	The bacteria can propagate under exclusion of oxygen, e.g. in sealed containers (preserves) or raw ham, when it's not being cooled. It propagates and forms toxins that can trigger food poisoning. Because the pathogens are soil dwellers, most contaminations occur in vegetable preserves.	
20.56 Clostridium feseri V	This pathogen causes blackleg, a non-contagious, acute animal disease with high fever, which is sometimes endemic. The natural infection sources for infecting animals are food or water, infected by the spores of the blackleg pathogen, or wound infections.	
20.57 Clostridium perfringens	Another clostridia of the blackleg bacilli group, this is the main pathogen of blackleg. Furthermore, the bacteria is a major cause of necrotising pneumonia, gangrenous cholecystitis, sepsis or other unspecified infections. Clostridium perfringens can cause infections of the central nervous system. In animals diseases caused by clostridium perfringens toxins are called enterotoxemia.	
20.58 Clostridium septicum	These bacteria are the pathogens of parablackleg. This disease is a febrile, often lethal infectious disease, whose clinical picture cannot be distinguished from that of blackleg. Also triggered by clostridium septicum is the abomasum parablackleg of sheep (braxy). The infective agent is pathogenic for all mammals of domestic species, humans and doves.	
20.59 Clostridium tetani V	The reservoirs of the pathogen are soils and wood, as well as the excretions of cattle and other species. Open wounds can rapidly be infected with the bacteria and lead to tetanus disease. Clinical disease characteristics start with headaches and an enhanced triggering of reflexes. This is followed by increased spasticity, painful and more and more violent.	
20.60 Corynebacterium diphtheriae	This bacteria is the causing agent of diphtheria. Transmission takes place through direct contact from human to human with infected people, mainly by droplets, more seldom through contaminated objects. Complaints relating to neck and throat, swallowing problems and difficulty in breathing can be the first symptoms of an infection. The toxin of the bacteria effects the entire body and damages especially the heart, kidneys, suprarenal glands, motor neurons and liver. Independent of the effect of the toxin skin, infections and endocarditis were also observed.	

Bacteria		
Program no.	Description	
20.61 Corynebacterium xerosis	This pathogen belongs to the corynebacterium family and can cause skin infections, pneumonia and pharyngitis.	
20.62 Cytophaga rubra	Bacteria that can be found in soil. An infection usually takes place through direct contact or contaminated objects.	
20.63 Erysipelothrix rhusiopathiae V	Causes a disease that is called erysipelas (swine erysipelas) with animals and erysipeloid with humans. Turkeys and pigs are most commonly affected. The pathogen can be found in soils, surface waters and waste water, in decomposing animal matter. In dehydrated form as well as in cured, salted and smoked meat products the pathogen is able to survive. The infection usually occurs through skin injuries, however, orally is also a possibility. Endocarditis, arthritis as well as skin necrosis can occur.	
20.64 Eubacterium suis	In pigs these pathogens cause e.g. cystitis.	
20.65 Francisella tularensis V	This pathogen triggers the often lethal disease tularaemia in wild rodents. Can be transmitted to humans. An infection can be caused through infectious rodents or indirectly through blood sucking ectoparasites like mosquitoes, flees or lice. It is also possible to become infected through contaminated water or inhaling the bacteria. Symptoms: Fever, weakness, enlarged lymph nodes, conjunctivitis, but also lung abscesses, mediastinitis, meningitis, pericarditis and osteomyelitis.	
20.66 Gardnerella vaginalis	A low bacterial concentration is normal in vaginal flora. In increased bacterial concentration it is the main identified pathogen of bacterial vaginosis (vaginitis). The germ can penetrate the upper genital tract and lead to severe infections. A chronic inflammation can cause infertility.	
20.67 Haemophilus influenzae	This bacteria exclusively lives in the mucous membranes, in particular in those of the upper respiratory system (nose, throat, windpipe), causing inflammatory diseases (epiglottitis, bronchitis, pneumonia). It is transmitted through droplet infection; outside of the mucous membranes it is only viable for a very short period of time.	
20.68 Haemophilus parasuis V	Pathogen of the Glässer pig's disease. The clinical picture is dominated by febrile polyserositis and polyarthritis. However, the pathogen is also identified on mucous membranes of healthy animals. It is spread through droplet infection.	

Bacteria		
Program no.	Description	
20.69 Helicobacter pylori	Infections with this bacteria are made responsible for a number of stomach diseases that are accompanied by an increased secretion of gastric acid. Gastric and duodenal ulcers can also be a consequence of the infection with this bacteria. Long-term population can have carcinogenic effects. Until now the transmission channel has not been unequivocally cleared. The bacteria seems to propagate via the faecal-oral route. In other words, via the excretion of the bacteria in the stool and reuptake through water or decontaminated food. Transmission through blowflies is currently under discussion.	
20.70 Lactobacillus acidophilus	This bacteria is found again in the mouth flora, digestive tract and vagina resp. the extended area just before the male urethral opening. Lactobacillus acidophilus is a probiotic bacterium.	
20.71 Lawsonia intracellularis	These bacteria are pathogenic for pigs and cause the diarrhoeal disease porcine proliferative enteritis. Furthermore, there is evidence of the bacteria in horses, sheep and rodents.	
20.72 Legionella	To be found in soil and water samples. To be found as an infection source for humans in hot water pipes with not sufficiently heated water (< 70 °C), air conditioning units and cooling towers. Infections with the pathogen leads to legionnaire's disease, a type of pneumonia with fever, diarrhoea, headaches and disorientation. The Pontiac fever, another disease caused by this pathogen, is an acute disease with coughs and colds.	
20.73 Listeria monocytogenes V	This pathogen is not limited to certain host organisms or habitats and is present everywhere in the environment, e.g. in soils, waters and on plants. It can be found in mammals as well as in birds and fishes. Probably about one to ten percent of humans are also infected and excrete the pathogens in the stool. In case of infection monocytes proliferate in the blood. The disease is called listeriosis, in humans as well as in animals. The major infection route is intake through contaminated food.	
20.74 Malleomyces mallei V	This is a pathogenic type of Burkholderia, which can trigger glanders disease in humans and animals.	
20.75 Mycobacteria phlei	These pathogens can lead to inflammation of the lungs and eyes. They are widespread in plants, soils and dusts.	

	Bacteria	
Program no.	Description	
20.76 Mycobacteria tuberculosis	This is a bacteria from the mycobacteriaceae family, the most important pathogen of tuberculosis in humans and animals. Transmission takes place by droplet infection. Main entrance is the lung. Animals always become infected by people suffering from open tuberculosis. Sick animals usually only develop a fast healing, local process. In such cases it is advisable to have the caretakers checked for tuberculosis. Small mammals, like dogs and cats, and possibly parrots, which are infected with open tuberculosis, can become a dangerous, permanent source of infection.	
20.77 Nocardia V	Ubiquitous occurrence in soils and wetlands. An infection takes place via the respiratory tract or via skin injuries.	
20.78 Nocardia asteroides	These pathogens can be found in soils and wetlands. The following diseases are possible: Nocardiosis (bronchopneumonia, long abscess), sepsis, brain abscesses, abscesses in kidneys and musculature, cutaneous or subcutaneous abscesses, cutaneous lymphoma syndrome.	
20.79 Pasteurella V	Infections with this pathogen are called pasteurellosis. Such infections are often acute, like septicaemia, but also as an infection of the respiratory tract or the gastrointestinal tract.	
20.80 Pasteurella multocida V	This pathogen can be transmitted by cat bites or scratches. Infections in the respiratory tract and the gastrointestinal tract are possible. The disease is called pasteurellosis and can be found in mammals as well as birds.	
20.81 Propionibacterium acnes	Also called propionic acid bacteria; known for the holes formed in many cheeses. They belong to the usual population of the skin. If the natural balance of the skin bacteria shifts and e.g. staphylococcus aereus is added, these pathogens can affect an infection very unfavourably and worsen it. In case of endocarditis, corneal ulcers and septic arthritis there is evidence of increased pathogens.	
20.82 Pseudomonas aeruginosa	This pathogen is a so-called hospital germ. It is a widespread soil and water germ that can be found in humid environments. It can also be found in tap water, washbasins, showers, toilets, dishwashers, dialysis machines, drugs and disinfection agents. It can poison food. Because it is very resistant, it survives distilled water. Even the use of some disinfection agents does not guarantee a safe protection against the pathogen.	

	Bacteria
Program no.	Description
20.82 Pseudomonas aeruginosa	It can cause pneumonia in cystic fibrosis, infections of the urinary tract, enterocolitis, meningitis, otitis externa or infections on burn wounds. This pathogen also plays an important role in infectious diseases in the veterinary field.
20.83 Bartonella henselae	Bartonella henselae is considered the main pathogen of the cat-scratch disease (CSD). The pathogen is spread globally. It can be found in humans as well as animals. Main reservoir is the domestic cat. Transmission takes place via scratch injuries, faeces of the cat flee, but also ticks are considered to be carriers. Observed as symptoms of an infection are among others enlarged lymph nodes in the neck or under the armpit. The incubation time is between 3 and 10 days. Cats that spread the pathogen often don't show any symptoms of the disease.
20.84 Fusobacterium necrophorum V	This pathogen can be found in the normal human and animal flora. When the oral mucous membrane is injured or in case of periodontitis the pathogens can penetrate blood vessels and together with other pathogens cause mixed infection diseases like acute necrotising ulcerative gingivitis. In calves the pathogen plays a central role in hoof infection. In sheep the pathogen is responsible for foot rot.
20.85 Spirillum serpens	Spirillum serpens are bacteria of the spirillum genus. These bacteria can be found in waters with low oxygen content (liquid manure of pigs). There the pathogen propagates in large volumes.
20.86 Sphaerotilus natans	Sphaerotilus natans is a rod-shaped bacteria. It can be found in slow-flowing waters, trenches and ponds. With the intake of water the infection takes place.
20.87 Acinetobacter baumanii	Acinetobacter bacteria are usually resistant against penicillin and chloramphenicol. For patients with immune deficiency it represents a frequent infectious agent that may cause wound infections, pneumonia and meningitis (Central European Encephalitis (CEE)).
20.88 Acinetobacter haemolyticus	see above
20.89 Acinetobacter johnsonii	see above
20.90 Acinetobacter junii	see above
20.91 Acinetobacter iwoffii	see above
20.92 Actinomyces viscosus	The bacteria is considered a dominant organism for aggressive gingival inflammation up to parodontitis.
20.93 Treponema denticola	Treponema denticola is a bacterial pathogen, which on the oral mucous membrane leads to gingival inflammation and parodontitis. Untreated an infection with the pathogen may lead to bone resorption and loss of teeth.

Bacteria	
Program no.	Description
20.94 Campylobacter rectus / showae	The pathogen is rated among the risk factors with regards to the development of aggressive parodontitis diseases.
20.95 Porphyromonas gingivalis	Dominant organism for aggressive parodontitis and chronic parodontitis.
20.96 Prevotella intermedia	Risk factor for aggressive parodontitis. Gingivitis and ANUG (acute necrotising ulcerating gingivitis) recurrence germ.
20.97 Tannerella forsythensis	The pathogen can cause parodontitis, chronic parodontitis and inflammation of the implant bed of tooth implants (peri-implantitis).
20.98 Aggregatibacter actinomyces	The bacteria is considered a dominant organism for aggressive gingival inflammation up to parodontitis.
20.99 Fusubacterium nucleatum	The bacteria is a pathogen that can lead to ANUG (acute necrotising ulcerating gingivitis) and chronic parodontitis on the mucous membrane of the mouth.
21.05 Bacteria II complete	This includes all bacteria from program group 21.
21.10 Enterobacteriaceae complete	The enterobacteria or enterobacteriaceae (for the moment the only family in the order of enterobacteriales) are a large group of bacteria. According to the phylogenetic system they belong to the phylum (strain) proteobacteria and form their own family there. The name enterobacteria is derived from the Greek word 'enteron' (intestine), because many of them are typical intestinal inhabitants. But also many free-living, non-intestinal inhabitants belong to this family.
21.11 Enterobacter aerogenes	These bacteria can be found in almost all habitats, including the human intestines. There they belong to the normal intestinal flora. Some types of this genus may be causative organisms of diseases. Infections of the urinary tract, meningitis and infections of the respiratory tract are possible.
21.12 Erwinia amylovora	Pathogen of the so-called fireblight. The pathogen propagates in contaminated plant material, packaging material, cutting tools; but also migratory birds may propagate it. In the immediate vicinity the bacterial ooze is propagated by wind, rain, insects, small mammals, birds and humans. The penetration of the bacteria into the plant tissue happens during the active growth of the plant, via natural entrances. Furthermore, there are the following infection possibilities: Blossom blight (most frequent variant), shoot blight, canker blight.  The dangerous infection time is spring and summer, especially the flowering stage, when the weather is warm-humid. The bacteria particularly infect blossom.

Bacteria	
Program no.	Description
21.13 Erwinia carotavora	Many Erwinia types break down plant remains, but also take part in the development of plant diseases or are considered storage pests. Erwinia carotovora (new name: Pectobacterium carotovorum) for example causes take-all disease in potatoes. Some types can be found by humans or animals, however, their pathogenic function is not yet established.
21.14 Escherichia coli (abbreviated E. coli)	Bacteria that occurs in the human and animal intestines. E. coli is part of the intestinal flora. However, outside of the intestines E. coli can still cause infections, as it's in the wrong part of the organism. Infections of the urinary tract, peritonitis or meningitis in new-born infants (infection during birth) can be secondary diseases caused by an infection.
21.15 Klebsiella pneumoniae	Bacteria of the genus Klebsiella, which among others can cause pneumonia. Klebsiella pneumoniae is virtually present everywhere, among others also in the human intestinal flora. The bacteria can in particular cause diseases in people who suffer from a weakened immune system. Diseases that are often caused by Klebsiella pneumoniae are: Infections of the upper respiratory tract, pneumonia, hospital pneumonia (propagation through the air-conditioning), infections of the urinary tract, blood poisoning, meningitis.
21.16 Proteus mirabilis	These bacteria are pathogens that frequently occur in the large intestine of healthy people too, and which do not necessarily cause diseases. However, when the immune system weakens, this bacteria can cause the following diseases: infections of the urinary tract, wound infection, pneumonia and sepsis. With chronic infections of the urinary tract caused by proteus mirabilis the pH-value of the urine may increase, which could lead to urinary calculus.
21.17 Proteus vulgaris	see above
21.18 Salmonellae	These bacteria occur worldwide in cold- and warm-blooded animals, in humans and in habitats outside of living creatures. The bacteria cause diseases in humans and animals. Salmonellosis may be transmitted from animal to human, but also the other way around. Infections via food occur often. Difference can be made between the enteritis and typhus/paratyphus salmonella. The diseases that are actually caused by salmonella are: vomiting and diarrhoea by salmonella enteritidis, salmonella typhimurium a.o, as salmonellosis in the narrower sense or salmonella enteritis, typhus by salmonella typhi, paratyphus by salmonella paratyphi.

Bacteria	
Program no.	Description
21.18 Salmonellae	Typhus and paratyphus are considered a systematic (concerning several organs) disease whereby the symptoms involve the intestines.
21.19 Salmonella enteritidis	see above
21.20 Salmonella paratyphi	see above
21.21 Salmonella typhi	see above
21.22 Serratia marcescens	Bacteria of this type occur in soils, on plants and in water, only occasionally they can be found in the gastrointestinal tract or the upper respiratory tract of healthy humans. Serratia marcescens is above all pathogen of hospital infections. In patients with immune deficiency it may lead to wound infections, infections of the kidneys and urinary tract, infections of the respiratory tract as well as sepsis, endocarditis, meningitis and prosthesis infections. As infection sources in particular all contaminated catheters and infusion solutions come into question.
21.23 Shigella dysenteriae	This bacteria is named after its discoverer, the Japanese microbiologist Kiyoshi Shiga, and the main symptom of the infection, diarrhoea (dysentery). The pathogens cause abdominal pains and diarrhoea diseases. Infection sources: contaminated food, drinking water contaminated by faeces. The form Shigella dysenteriae additionally forms a neurotoxin.
21.24 Shigella flexneri	Causes diarrhoea diseases. This special pathogen is also named in the context of some cases of sudden infant death.
21.25 Shigella sonnei	These bacteria, also known as Kruse-Sonne bacteria, are the main shigella in Central Europe and cause, especially in children, the harmless summer diarrhoea.
21.26 Yersinia	Yersenia enterocolitica and Yersenia pseudotuberculosis can trigger infections in humans and animals. The pathogens are taken in orally per os and then lead to enteritis.
21.27 Yersinia enterocolitica	Oral infection with this pathogen leads to acute enteritis or enterocolitis. Possibilities are diarrhoea (in particular in small kids), pseudoappendicitis, abdominal colics, fever, nauseousness, blood in the stool as well as inflammations in the neck area. Main infection source for the infection of human Yersiniosis is raw or not completely heated pork (minced-meat and raw sausages).

Bacteria	
Program no.	Description
21.28 EHEC	The EHEC-pathogen causes the Escherichia-coli enteritis. Main symptom of the disease is bleeding diarrhoea. These are human pathogenic strains of the intestinal bacteria. Escherichia coli. EHEC pathogens are widespread under livestock such as sheep, goats and cows. Infection often occurs through the consumption of insufficiently treated (medium roasted, raw) and unhygienically prepared animal food products.
21.50 Mycoplasma complete	Mycoplasma are bacteria that are characteristic by their permanent lack of a cell wall. They are the smallest bacteria capable of replication outside cells.
21.51 Mycoplasma	Mycoplasma being parasitic bacteria are the cause of numerous diseases in humans, animals and plants. The pathogens cause among others chronic infections, tracheobronchitis, pharyngitis, meningitis and middle ear infections.
21.52 Mycoplasma agalactiae V	Pathogens of the contagious agalactia in small ruminants (sheep, goats). Most likely an unnoticed utter inflammation with a drop in milk yield is the result, seldom also inflammations of the joints and the conjunctiva of the eyes (conjunctivitis).
21.53 Mycoplasma capricolum V	Pathogen of caprine pleuropneumonia (CCPP).
21.54 Mycoplasma mycoides V	Pathogen of the notifiable bovine pleuropneumonia
21.60 Spirochaetae complete	
21.61 Borrelia	The most common Borrelia type in Germany/Europe is Borrelia burgdorferi. This pathogen causes the so-called Lyme borreliosis. Borrelia are mainly transmitted through ticks, an infection by mosquitoes cannot be excluded.
21.62 Brachyspira V	Some types are pathogenic. All types occur in the intestines of various animals (e.g. of pigs) and humans.
21.63 Leptospira canicola V	In leptospirae distinction can be made between host, hence animal species, to which the respective bacterial species have adapted and who represent the actual pathogen reservoir, and secondary hosts, who are just occasionally infected by the pathogen type. Dogs are main hosts of Leptospira canicola. Leptospirae are excreted by infected animals through their urine. The infection occurs through contact via the skin or mucous membranes. Main transmission route is the intake of water (puddles) contaminated by rat urine.

Bacteria	
Program no.	Description
21.63 Leptospira canicola V	In the acute phase the pathogen propagates in blood and settles in different organs, like liver, spleen, kidneys and lymph nodes. Symptoms: Lack of appetite (anorexia), vomiting, fever, difficulty breathing, sometimes also jaundice (icterus), bleeding (haemorrhage) and tissue defects of the oral mucosa, muscle tremor or blood in the stool as a result of a severe gastrointestinal inflammation (gastroenteritis).
21.64 Leptospira grippotyphosa V	Leptospirae cause general infections. The erythrocytes are damaged which leads to anaemia, icterus and haemoglobinuria. Endotoxins damage the central nervous system and other organs. Leptospira grippotyphosa may cause leptospirosis in cattle, sheep, goats, pigs and dogs.
21.65 Leptospira icterohaemorrhagiae	Pathogen of the Weil disease, also called Morbus Weil or Weil's disease. Occurs in Europa in particular in people that come into contact with infectious material, e.g. urine of rats. However, pigs and dogs are also considered pathogen reservoirs. The infection route takes place via the intake of contaminated sewage or soil, through the softened or broken skin or the mucous membrane. Intake through the respiratory tract is also possible. Symptoms: sudden high fever, head and limb pains. In the further process meningitis, kidney or cardiac inflammations may occur.
21.66 Leptospira interrogans	For these pathogens dogs are secondary host, rats are main host.
21.67 Leptospira pomona V	Main hosts are cattle and pigs.
21.68 Leptospira (suis) V	Main host of this pathogen is the pig.
21.69 Treponema pallidum	Pathogen of syphilis (also called lues, lues venerea or French disease). It is an infectious disease, belonging to the group of sexually transmitted diseases. Symptoms: painless mucous membrane ulcers and enlarged lymph nodes. In part of the infected people it results in a chronic form, characterised by various skin and organ infections. In the final stage degeneration of the central nervous system may occur.
21.70 Borrelia afzelii	Human pathogen Borrelia types that are transmitted by ticks.
21.71 Borrelia burgdorferi	see above
21.72 Borrelia duttoni	see above
21.73 Borrelia garinii	see above

	Bacteria	
Program no.	Description	
21.74 Borrelia hermsii	see above	
21.80 Intracellular bacteria (cell parasites) complete	Bacteria colonise a wide variety of habitats, some types live in cells of other living creatures.	
21.81 Anaplasma marginale	Penetrates into the red blood cells of a host and propagate in there. The presence of parasites in the red blood cells stimulates the organism of the animal to destroy the red blood cells. This large scale destruction of red blood cells leads to anaemia, fever, weight loss, shortness of breath. The pathogens are transferred by ticks, but also by contaminated injection needles, surgical instruments, mosquitoes and biting houseflies can lead to infection.	
21.82 Chlamydiaceae	These pathogens are cell parasites. Chlamydia triggers in particular diseases (chlamydiosis) of the mucous membranes in the area of the eyes, respiratory tract and genitals, with partly serious consequences like blindness or infertility. An infection with the pathogen takes place through direct contact, contaminated objects or e.g. flies.	
21.83 Chlamydiaceae (feline) V	A pathogen form that is mainly found in cats.	
21.84 Chlamydia ovis V	Pathogen of the enzootic abortion of sheep.	
21.85 Chlamydia psittaci V	Pathogen of the parrot disease, psittacosis, ornithosis.	
21.86 Chlamydia trachomatis	This pathogen triggers a sexually transmitted disease in the urogenital tract, which remains unnoticed among two thirds of the affected women, while there are no symptoms. Occasionally causes inflammation of the urethra among men, with transparent discharge and no further symptoms. However, untreated infections may lead to infertility. Different strains of the pathogen may cause eye infections or acute conjunctivitis (so-called swimming pool conjunctivitis, as it is preferably transmitted through bathing water), urethritis (inflammation of mucous membranes of the urethra) and cervicitis (inflammation of the uterus). Additionally, there are types that can cause lymphogranuloma venereum.	
21.87 Cowdria ruminantium V	This pathogen causes the "heartwater" disease. Affected are domestic and wild ruminants. The pathogen is propagated by ticks of the Amblyomma genus. Affected mammals are cattle, sheep, goats, antelopes and buffaloes. The name of the disease is derived from the symptoms of the developing disease. Fluid collects in the heart resp. in the lungs.	

Bacteria	
Program no.	Description
21.88 Rickettsiae	Bacteria, parasitic organisms, that find ticks, flees, mites and lice as carriers. Infections are called Rickettsial diseases. These include spotted fever, Rickettsialpox, Brill–Zinser disease, Boutonneuse fever (Mediterranean spotted fever) and the Rocky Mountain spotted fever.
21.89 Babesia divergens	Babesia are small, intracellular parasites, which can be transmitted by tick bites. Babesiosis is the infectious disease caused by babesia. The disease occurs as well in humans as in dogs (canine babesiosis), cattle, sheep, goats and wild animals.
21.90 Other bacteria complete	
21.91 Laryngeal 1 bacteria	Pathogenic bacteria in the area of the larynx.
21.92 Borellia toxin	Neurotoxins (toxins) generated by Borrelia.
21.93 Caries bacteria	Bacteria that could always be found in patients in combination with caries infections.
21.94 PIA Porcine intestinal adenomatosis V	Swellings and wrinkle formations in the intestinal mucous membrane of pigs.
21.95 Pain-producing bacteria	They are bacteria that cannot be classified.
21.96 Tuberculinum burnetti	Nosodes from tuberculous lung tissue or tuberculous caverns.
21.97 Anaplasma phagocytophilum	Anaplasma phagocytophilum is the pathogen of the "canine anaplasmosis" (granulocytic ehrlichiosis), an infectious disease in dogs transmitted by ticks. Also other mammals and humans (human granulocytic anaplasmosis) can be infected.

Viruses	
Program no.	Description
22.00 Viruses complete	This program contains all viruses from the program groups 22 and 23.
22.05 Viruses I complete	This includes all viruses from program group 22.
22.10 Double-strain DNA viruses complete	
22.11 Adenovirus	These pathogens can cause various diseases. In particularly affected are the respiratory tract (flu-like infections), infections of the eye (conjunctivitis) and the gastrointestinal tract (diarrhoea). Infection takes place through droplet or smear infection.
22.12 Cytomegalovirus (CMV)	Propagates after oral infection through saliva or other body fluids in the salivary glands. From there and via the blood stream the cell-bound viruses get to the organs like liver, spleen, lungs, bone mark and kidneys. Permanent infections of the affected organs may occur as primary infection, but may also occur in a latent form many years after the infection.
22.13 Epstein-Barr virus (EBV)	An infection, mainly through droplets, saliva, genital secretions, blood cells or transplants leads to a lifelong, persistent infection. Symptoms: fever, enlarged lymph nodes, tonsils with exudate. Pathogen of mononucleosis.
22.14 Hepatitis B virus	Possible diseases are liver inflammation (hepatitis), liver cirrhosis, hepatocellular carcinoma. The infection with the pathogen takes place parenteral and sexual, in other words, by blood or other body fluids of an infected patient. The entrances are often very small injuries of the skin or mucous membrane.
22.15 Herpes simplex	The main feature of this pathogen is that they persist (remain) in the host for life. After the primary infection the virus genome stays in the body for life. The immune status of the host plays an important role in the reactivation of the virus. Herpes simplex-viruses are globally widespread, humans are their reservoir and their only natural host. Because the Herpes simplex-virus has already been acquired at baby age through saliva contact and smear infection in the normal familiar environment, it appears very frequently in the general population. A further infection source is the mucous membrane contact. Diseases that result from Herpes-simplex viruses are: Gingivostomatitis (inflammation of the oral mucous membrane), Herpes labiales, Herpes encephalitis, keratoconjunctivitis and many other diseases.
22.16 Herpes simplex (feline) V	This pathogen leads to infections in cats.

Viruses	
Program no.	Description
22.17 Herpes zoster	Caused by two different clinical pictures: during the primary infection the varicella (chickenpox), during the reactivation Herpes zoster (shingles). The virus is spread airborne or through the content of the blisters. Contact with a person that is diseased is considered the main infection source.
22.18 Human papilloma virus (HPV)	Belongs to the oncogene viruses. This type of viruses is linked to certain cancers (cervix carcinoma, anogenital carcinoma). The viruses are transmitted mainly sexually and through skin injuries.
22.19 Papilloma virus	Causes the formation of warts in the organism. Transmission of the viruses occurs through direct contact.
22.20 Varicella (chickenpox)	Varicella-zoster viruses are transmitted through droplet infection and lead to chickenpox. The symptoms of the disease include fever and an itchy rash with clear blisters. Because the disease is often initially found in infants, it is ranked among the childhood diseases. Infections in adults often have serious complications. Meningitis, pneumonia and liver inflammations can be resulting diseases. Varicella-zoster viruses that remain after the disease can lead to a new disease in the organism, the so-called shingles (Herpes-zoster).
22.21 JC viruses	The JC-virus (Humanes Polyomavirus 2, JC-Polyomavirus) belongs to the Polyomavirus genus. An infection can cause brain disease. The disease almost only occurs in people with a very weakened immune system. It is a disease in which numerous functional changes of the nervous system can appear, e.g. motor and cognitive disorders.
22.22 Humanes herpesvirus 8	Human herpes viruses are viruses from the herpesviridae family, which affect the nervous system and are human pathogens.
22.40 Single-strain DNA viruses complete	
22.41 Panleucopenia virus V	Panleukopenia is a very often lethal virus related feline disease. It is also called cat plague, feline distemper, infectious enteritis of cats, agranulomatosis and aleukocytosis in cats. The pathogen penetrates the body via the nose and oral mucosa through contact with infectious material (faeces, nasal secretions, urine).
22.42 Parvoviruses (suis) V	The parvovirus is triggered by the porcine parvovirus (PPV). It occurs globally in pigs. If the infection occurs in the first three weeks before farrowing, all embryos or most of them die and are being reabsorbed.

Viruses	
Program no.	Description
22.43 Porcine circovirus V	The porcine Circovirus (PCV) type 2 is a virus, which occurs in pigs.
22.60 Single-strain RNA viruses, positive-strain RNA genome complete	
22.61 AE virus V	Avian Enzephalomyelitis, infectious chicks encephalomyelitis. A very infectious disease with nerval symptoms in chicks. Infected laying hens are the reservoir for the transmission of the virus via the egg or shortly after the chick hatched. Viruses are also transmitted via the faeces. Chicken, turkeys, pheasants, experimentally also ducks, doves and guinea fowls can disease.
22.62 BVD virus V	The bovine virus diarrhoea/mucosal disease, in short BVD/MD, is caused by the bovine virus diarrhoea virus (BVDV). It is a rather frequently occurring viral bovine disease complex.
22.63 Calciviruses (feline) V	The feline Calicivirus (FCV) is a pathogen of diseases of the upper respiratory tract of cats that has been known for many years. The transmission mainly occurs airborne by virus containing secretions of the nose-throat-cavity.
22.64 Chikungunya viruses	These pathogens are transmitted by mosquitoes. Symptoms: Fever and joint complaints.
22.65 Coronaviruses (feline) V	The infectious mastitis and inflammation of the peritoneum of cats (FIP) is a feline disease that is caused by coronaviruses. These viruses trigger a usually harmless intestinal infection in cats. However, a small percentage of the infected cats can get FIP. When a cat lives with other cats or meets other cats on the streets, it picks up the virus while pawing the cat toilet or by sniffing and licking (other cats, but also objects and clothes) via the mouth and nose.
22.66 Coronaviruses (suis) V	These pathogens can be found in pigs and cause infections there.
22.67 Coxsackie virus B1	The infection with this pathogen occurs through polluted water and contaminated food; droplet infection or smear infection is possible. Clinical picture: cold, viral meningitis, myocarditis, hand-foot-and-mouth disease.
22.68 Coxsackie virus B4	see above
22.69 EAV virus	Equine arthritis virus infection, EAV; formerly also called acute septicaemia, equine influenza, equine distemper, pink eye or lumpy skin disease. The infection occurs through aerosols from the respiratory tract, through urine acute infected animals or venereous through mating.

Viruses	
Program no.	Description
22.70 Duck hepatitis virus V	This pathogen is from the hepatitis virus family and can be found in liver diseases from ducks.
22.71 Enteroviruses	Transmission of all virus types belonging to the enterovirus genus usually takes place faecal-oral, however, for some pathogens droplet infection as an infection route is also considered. Transmission of the virus via the placenta is also a possibility. Polio, infection of the upper respiratory tract, colds, gastrointestinal diseases, febrile generalised exanthema, haemorrhoidal conjunctivitis, myocarditis, pericarditis, hepatitis, meningitis and encephalitis can be caused by the pathogens too.
22.72 FHV viruses (feline herpes virus) V	FHV belongs to the pathogens of the cat flu complex. In particular in young kittens the virus triggers symptoms in the form of a rhinotracheitis. Infected animals remain virus carriers and infection sources for susceptible cats for the rest of their lives, Furthermore there is a link to the feline cytomegalovirus.
22.73 FSME	The pathogens are transmitted by ticks. Symptoms of an infection: flu-like infection, meningitis, encephalitis, radiculitis, paralysis.
22.74 Hepatitis A virus	The infection with these viruses occurs faecal-oral (consumption of contaminated food products). The course is usually acute, there is no chronicity like other hepatitis infections have.
22.75 Hepatitis C virus	Transmitted via the blood. After an infection there are hardly any direct consequences, the liver is damaged chronically. Often the route to infection after the disease is noticed can no longer be traced. Liver cirrhosis and liver carcinoma are possible.
22.76 CSF virus V	The swine fever pathogen (classical swine fever) – although it is related to other pathogens – cannot be transmitted to other animal types or humans. The infection of pigs occurs in direct contact with diseased animals or via contaminated vehicles and tools, clothing or food waste.
22.77 FMD virus V	Foot-and-mouth disease (FMD) is a highly infectious virus disease in cattle and pigs. Also deer, goats and sheep, elephants, rats and hedgehogs may become infected. Horses are non-susceptible to FMD. Occasionally humans become infected. The disease may be transmitted by contact as well as by smear infection in case of direct contact with infected animals, with contaminated stables or livestock transport vehicles.

Viruses	
Program no.	Description
22.77 FMD virus V	Infection may also occur through the air. People who were in contact with infected animals must have their clothing disinfected. Feed supplements containing infected animal products and animal products like cheese or meat may contain the virus. Cows may become infected with FMD through sperm of infected bulls.
22.78 Norovirus	This pathogen causes acute gastroenteritis. Sudden vomiting and diarrhoea are typical symptoms for an infection. The viruses are extremely infectious and may still be found in the stool after weeks. Infection through contaminated objects, smear infection.
22.79 PRRS-Virus (suis) V	This pathogen leads to infections of the respiratory tract in pigs.
22.80 Rhinovirus	This pathogen leads to infections that are colloquially called rhinitis or a cold. Transmission takes place through droplet infection (coughing or sneezing), but also contaminated hands or objects can lead to infection. The viruses get to the organism through the mucous membranes and cause generalised infections.
22.81 SVD virus V	This pathogen causes a pig's disease that is similar to foot-and-mouth disease.
22.82 Tobacco mosaic virus	The tobacco mosaic virus causes the economically important mosaic disease of tobacco. Many agricultural crops and ornamental plants may become infected. The virus is easily transmitted, e.g. through direct contact between plants, through plant sap, in case of some plants through seeds. In contrast to many other plant viruses it is extremely heat-stable. Based on these characteristics it is probably one of the most widespread viruses in the world.
22.83 Teschen virus V	Pathogen of the Teschen disease (infectious porcine paralysis, polioencephalomyelitis enzootica suum, poliomyelitis suum). The infectious porcine paralysis is a poliomyelitis for pigs of any age and is characterised by a short, acute phase followed by typical paralysis. The disease is similar to poliomyelitis in humans.
22.84 VES virus V	This pathogen is the pathogen of the swine vesicular exanthema. The disease is clinically indistinguishable from foot-and-mouth disease.
22.85 Hepatitis D virus V	These viruses only occur in combination with hepatitis B viruses. Transmission possibilities are: sexual intercourse, infected needles of syringes, contaminated blood conserves, tattoo or acupuncture needles. It leads to a chronic infection of the liver.

Viruses	
Program no.	Description
22.86 Hepatitis E virus V	Hepatitis E-viruses are transmitted through contact infection resp. smear infection faecal-oral, or through water. Incubation time is between 30 and 40 days and clinically indistinguishable from hepatitis A. However, the course is more serious. Diarrhoea, lethargy, loss of appetite, abdominal pain and a yellow discolouration of the skin are the first signals. Most frequent infection sources are food products and drinking water.
22.87 Dengue virus	This is a virus that can trigger the so-called dengue fever in humans and animals. The virus is transmitted by mosquitoes. The pathogen is transferred by saliva of the infected mosquito.
22.88 Rubella (German measles)	German measles is the name of an infectious disease, caused by the Rubella virus. Transmission of the viruses occurs through droplet infection, the one-time contact assures a lifelong immunity. Symptoms: Red skin spots (exanthema), fever, enlarged lymph nodes. Rubella infection is dangerous in pregnancy, because the viruses may lead to distinct deformities of the child. To minimise the risk women are recommended to be vaccinated.
22.89 Coxsackie virus A7	The infection with this pathogen occurs through polluted water and contaminated food; droplet infection or smear infection is possible. Clinical picture: cold, viral meningitis, myocarditis, hand-foot-and-mouth disease.
22.90 Zika virus	The Zika virus (ZIKV) belongs to the flavivirus genus and is transmitted by mosquitoes. Infections often occur in Africa, south-east Asia and Latin-America. Symptoms: skin rash and fever ("Zika fever"), conjunctivitis, joint and muscle pains and headaches, vomiting. Symptoms usually last a week. In pregnant women an infection with the virus may lead to impairments of the foetus.
22.91 Humanes T-lymphotropes virus 1	Both pathogens weaken the immune system and might be involved in specific forms of leukaemia or other secondary diseases of the weakened immune defence.
22.92 Humanes T-lymphotropes virus 2	see above
23.05 Viruses II complete	This includes all viruses from program group 23.
23.10 Negative-strain RNA genome, unsegmented complete	
23.11 Borna virus	The Borna disease or infectious encephalitis and myelitis of solipeds is transmitted by this virus. The brain and spinal marrow of especially horses and sheep are infected. Symptoms:

Viruses	
Program no.	Description
23.11 Borna virus	Changes in behaviour, movement disorders and impairment of the sensitivity and sensory system such as separation from the herd, depression, lowered head position, partly increased urge to move, partly aggressiveness towards others, partly great jumpiness, reduced interest in its environment, spasms and salivating. In the final stage recumbent with rowing motions, bouts of fever. The natural infection presumably takes place via the mucous membranes of the upper respiratory tract, the throat or the olfactory mucosa. Meanwhile it is presumed that also people can also be infected. Symptoms: Depression, behavioural problems.
23.12 Equine influenza-virus V	The equine influenza, also called horse flu or Hoppegarten cough, is an acute, highly contagious disease of the upper and lower respiratory tract of the horse, caused by the equine influenza-virus type A. Besides an indirect transmission the pathogen is mainly transmitted airborne by the animals' coughing. Characteristic symptoms like intermittent bouts of fever (temperature up to 41 °C), watery-serous nasal discharge, dry cough, loss of appetite and lethargy may occur. In the further process laryngitis, bronchitis, bronchiolitis or even a viral pneumonia may develop. Some horses, mainly top performance horses, often develop a myocarditis and myocardium insufficiency in addition to muscle weakness and a stiff walk.
23.13 Highly pathogenic avian influenza virus V	The classical avian influenza (KP) is a serious general disease, in particular in chicken, turkeys and quails as well as numerous wild bird species. In principle, the same infection routes as in other influenza-viruses are observed. The viruses propagate through droplet infection via the inhaled air or through faecal particles on clothes or tools. The acute form of avian influenza is expressed mainly in general weakness, dull, ruffled feathers, high fever, breathing with opened bill, oedema of the head, neck, comb, wattle, legs and feet, blue discolouration of the mucous membranes, watery-slimy and greenish diarrhoea and neurological disorders (abnormal position of the head, mobility disorders). In chronic cases the laying performance reduces, the eggs have thin scales or no scale at all.
23.14 Measles virus	The pathogen is transmitted through droplet infection directly from human-to-human. The infection is followed by typical measles exanthema (red skin spots), fever and general weakness. Unfavourable progress leads to pneumonia and meningitis.

Viruses	
Program no.	Description
23.15 Mumps virus	This is the pathogen of an infectious disease, which mainly infects the salivary glands. Complication can be the occurrence of brain fever (meningitis) or testicular inflammation (orchitis). The pathogen is transmitted through a direct contact or droplet infection.
23.16 Parainfluenza	Globally propagated virus that preferably infects the respiratory tract, causes rhinitis in adults, in infants and small children also sever diseases including pneumonia (croup). The pathogens are transmitted through droplet infections, smear infections and contaminated objects.
23.17 Porcine influenza virus V	The porcine influenza was first observed in 1918, at the same time as the great human flu pandemic. Meanwhile porcine influenza is globally propagated. Symptoms: The animals can suffer from difficulties in breathing, painful coughing and a short-term rise in temperature up to 42 °C. Sows who disease during pregnancy may spontaneously abort due to the high fever or deliver small, weak piglets. Infections are transmitted by permanent carriers.
23.18 VSI virus (VSV)	Often called VSV. The virus belongs to the Rhabdoviridae virus, the well-known rabies viruses belong to the same family. Especially at risk are cattle, horses and pigs. Transmission to humans is possible and leads to a flu-like disease.
23.19 HRSV	An infection with the HRSV-viruses leads to infections of the upper respiratory tract. Symptoms like a cold, coughing, acute bronchitis and middle ear infection are possible. Smear or droplet infections are considered as transmission route. One-time infection does not lead to permanent immunity. In infants and small children the diseases often occur so vigorously, that they have to be taken to hospital.
23.30 Negative-strain RNA-genome, segmented complete	
23.31 H1N1	Also called human influenza or Spanish flu.
23.32 H5N1	Also called bird flu.
23.33 Influenza-Viren	These viruses and the diseases they cause exist worldwide. Influenza-viruses propagate in the human respiratory tract of an infected person. According to studies human influenza-viruses prefer epithelial cells without kinocilia.

Viruses	
Program no.	Description
23.33 Influenza viruses	In contrast, the bird flue mainly propagates in the intestinal epithelial cells. Among the species also the pathogens of the influenza or "real" flu can be found. This pathogen is responsible for infectious diseases that are generally called "flu". Different virus variants of this type were very common in recent years. Infection routes are droplet infection and direct contact with infected objects.
23.34 A/H5N1	Highly pathogenic avian influenza, a notifiable animal disease caused by viruses, which mainly affects chicken, turkeys, wild water birds and other birds. Some variants of the avian influenzaviruses, in particular the A/H5N1 variant, have in specific cases been transmitted to humans, leopards as well as to domestic cats.
23.50 Double-strain RNA viruses complete	
23.51 Bluetongue viruses V	The bluetongue virus, in short BTV, causes the bluetongue disease in ruminants.
23.52 FCo viruses V	Cause of the development of an FIP-disease in cats is a mutation of an actually quite harmless intestinal virus. It is called the feline corona-virus, in short FCoV. This intestinal virus is very widespread. It leads to – when it does cause a disease – mild diarrhoea and short-term loss of appetite. The lethal FIP develops through a mutation of the virus. The pathogen is destroyed by the organism, however, it tries to produce an antibody. The antibodies connect to other protein bodies and form "immune complexes". Inflammations of the blood vessels occur, and vessel fluid enters the abdominal and chest cavities or the pericardium. Local infections are also possible.
23.53 FeL viruses V	The feline leukaemia-virus (leukosis) belongs to the feline infectious diseases.
23.54 Fl viruses V	Feline immune deficiency-virus, also called feline aids. This virus is mainly excreted in the saliva and transferred through bite wounds while fighting. Because the virus weakens the immune system, infected cats are also more susceptible to "normal" diseases. Particularly frequent signals of a feline cat aids infection are gingival inflammation, bad healing wounds and chronic diseases of the bladder.
23.55 Retroviruses	These viruses are omnipresent among vertebrates. They infect mammals, birds, amphibians, reptiles and fish, but are thereby often very specifically limited to their host. Triggers of human diseases are known as HIV and HTLV-1.

Viruses	
Program no.	Description
23.56 Rotaviruses	An infection with this viruses causes gastroenteritis, also known as travel diarrhoea. Rotaviruses are transmitted particularly through smear infections (faecal-oral), but also through contaminated (with Rotaviruses polluted) water and food products. Although the viruses don't propagate in the respiratory tract, they may be excreted in secretions of the respiratory tract in the acute phase, enabling airborne transmission. The virus can be transmitted very easily, ten virus particles are sufficient to infect a child. The infection occurs practically only from human-to-human.
23.57 Rotaviruses (suis) V	Worldwide rotaviruses cause over 70% of the severe diarrhoea diseases in humans and animals and are therefore the main cause of intestinal infections. This pathogen can in particular be found in pigs.
23.70 Wart frequencies complete	Warts are caused mostly by so-called papilloma viruses, of which over a 100 different species exist. Seborrhoeic warts are an exception, their cause has not been found yet. After an incubation time of a few days to a couple of months they develop into slightly elevated tumours on the skin surface. Warts can occur practically everywhere on the body, however, most are found on the hands and feet. Depending on the body zone warts occur on and what they look like, they can be distinguished as follows:
23.71 Seborrhoeic warts	Until now it is not clear how they develop. To be found on the entire body.
23.72 Molluscum contagiosum	Also called "swimming pool warts". These actually don't belong to the warts family, although they look like warts. They are pinhead-to pea-sized nodules with a smooth and often shiny surface. They often have a dent in the middle and occur on the entire body, in particular on arms, hands, fingers and upper body. In contrast to other warts they are caused by the molluscum contagiosum-virus (MCV) from the poxviridae family, an enveloped double-stranded DNA-virus (dsDNA) through smear or contact infection.
23.73 Condyloma	These occur in the genital parts and the anal area and are transmitted via sexual intercourse.
23.74 Flat warts - verruca plana	Also called "flat warts". Flat, round or polygonal growths, often soft, skin coloured to grey-yellow or also brown with a diameter of one to five millimetre.

Viruses	
Program no.	Description
23.74 Flat warts - verruca plana	Their surface is usually blunt and subtly speckled. They can occur on the entire body, however, most often in the face or on the hand joints, back of the hands and fingers or on the outside facing parts of the forearms. The infection occurs through smear infection.
23.75 Verrucae plantares	An unpleasant form of the wart is the plantar wart. Because of its thorn shape it can be very painful while walking.
23.76 Juvenile warts	Another form of warts is the juvenile wart, its more flatly shaped. Children most often suffer from these type of warts.
23.77 Verrucae filiformes	Filamentary growths, especially in the face. They are transmitted through smear infection.
23.78 Common warts- verruca vulga- ris	Also known as common wart or thorn. Can be found in particular on the hands, fingers, nail edges and soles of the feet.
23.79 Warzen N.N.	Recurrent warts. They are warts whose pathogen cannot be clearly classified.
23.80 Other viruses complete	
23.81 Viruses N.N.	These pathogens cannot be clearly classified.

Parasites	
Program no.	Description
24.00 Parasites complete	This program contains all parasites from the program groups 26 and 25.
24.05 Parasites I complete	This includes all parasites from program group 24.
24.10 Hookworms complete	
24.11 Ancylostoma braziliense	Hookworm, occurs mainly in dogs and cats. It populates the intestines as a parasite. Infection of humans is also possible through larvae, who penetrate the skin; per oral intake is also possible. In animals the infection can occur through the mother's milk (lactogen). Symptoms: anaemia, weight loss, diarrhoea, pneumonia, skin changes.
24.12 Ancylostoma caninum	
24.13 Gyrodactylus	A flatworm genus of the monogenea class.
24.20 Roundworms / nematodes / pinworms, complete	
24.21 Ascaris megalocephala	Ascaris worms belong to the roundworms. Infections in humans and animals occur through the consumption of eggs in the area. Symptoms: coughing, fever, asthma-like attacks, intestinal and gallbladder diseases possible.
24.22 Dirofilaria immitis (heartworm)	A threadworm that is the pathogen of the dog heartworm disease. The infectious third-stage larval heartworm is transferred by mosquitoes. The larva develops into a heartworm. Symptoms: conditional problems, heart problems.
24.23 Enterobius vermicularis	This parasitic threadworm is the most common intestinal worm, spread worldwide. Humans as well as animals may become infected.
24.24 Haemonchus contortus	A threadworm that mainly infects small ruminants. Animals take it in orally and a parasitic gastritis follows. Symptoms: gastrointestinal problems, diarrhoea, anaemia.
24.25 Loa loa	A threadworm, also know as loa loa or eye worm. The parasite is the pathogen of the loiasis (Calabar swelling). Wandering through the organism it also occurs in the eye. It is transmitted percutaneouly by horseflies of the chrysops genus.
24.26 Macracanthorhynchus	Itch worm. The parasite lives in the intestines. Infections can occur through the consumption of infected beetle larvae or ground larvae. Symptoms: diarrhoea, intestinal bleeding.
24.27 Onchocerca volvulus (tumor)	Threadworm and pathogen of the river blindness.

Parasites	
Program no.	Description
24.28 Enterobius worms	Also pinworm or seatworm. The parasitic threadworm is the most common intestinal worm, spread worldwide. Humans as well as animals are affected. The infected eggs of the pathogen are taken in orally or via inhalation. Symptoms: serious itchiness in the anal area.
24.29 Passalurus ambiguus (rabbit worm)	Rabbit pinworm. It is a roundworm species that mainly settles in the intestines of rabbits. Symptoms: anaemia, gastrointestinal problems, weight loss.
24.30 Stephanurus dentatus	Also called kidney worm. Belongs to the threadworm family.
24.31 Strongyloides (filariform)	This pathogen belongs to the strongyloides stercoralis. Pathogen of the strongyloidiasis. The infection occurs percutaneously through larvae, directly into the host. Symptoms: Itching of the skin, skin inflammations, difficulties breathing, vomiting and bleeding diarrhoea.
24.32 Trichinella spiralis (muscle)	Parasitic threadworms. Infection occurs orally, e.g. through the consumption of minced pork or uncooked pork. The disease is called trichinellosis. Symptoms: abdominal pains, nauseousness, vomiting and diarrhoea.
24.33 Trichuris sp.	Whipworm. The pathogen belongs to the threadworms, the disease is called trichuriasis. It is a gastrointestinal disease. Infection through the consumption of larvae containing eggs. Symptoms: vomiting, diarrhoea, anaemia.
24.34 Macracanthorhynchus hirudinaceus	A worm species that can be found in pigs. Like the ascarids they populate the intestines. Humans can also be infected. The pathogen is transmitted through the consumption of infected insects, dung beetles or cockroaches.
24.35 Anisakis simplex	Anisakis simplex is a threadworm species. Anisakiasis the name of the disease caused by the pathogen. The threadworm can occur in raw meat, e.g. sushi or herring. The disease frequency in herring is about 70%. Symptoms of an infection: severe abdominal pains, dizziness, nauseousness, diarrhoea and vomiting. Also loss of appetite and weight loss may indicate an infection.
24.36 Dirofilaria repens	The pathogen is a threadworm that can mainly be found in the canine subcutaneous tissue. Intermediate host and carrier of the parasite is primarily the mosquito. Humans can be infected.
24.37 Microfilaria	Infections with parasitic threadworms are called filariasis. They belong to the worm diseases. The larvae of the filarioidea are called micro-filarioidea and are transmitted through various bloodsucking insects. Affected in the organism are in particular the lymphatic system and the connective tissue.

Parasites	
Program no.	Description
24.38 Ascaris lumbricoides	Ascaris lumbricoides (roundworm). The roundworm is a parasite that can be found in humans and animals. The parasites enter the body through contaminated food products. They move around in the intestines.
24.40 Capillariae complete	
24.41 Capillaria hepatica (liver)	Hairworm that lives in the liver of mammals. Infection source are for example the excreted rodent eggs. Symptoms: upper abdominal pains, enlargement of the liver.
24.50 Trematodes / leeches complete	
24.51 Clonorchis sinensis	Chinese liver fluke. Belongs to the flukes family. Final hosts are fish eating mammals (cats) and humans. Symptoms: upper abdominal pains, liver problems.
24.52 Cryptocotyle lingua	Fluke. Infection occurs through the consumption of raw fish. Symptoms: diarrhoea, vomiting, gastrointestinal problems.
24.53 Echinostoma revolutum	A flatworm or leech that lives in birds as intestinal parasite.
24.54 Eurytrema pancreaticum	Fluke or leech. Can be found mainly in the area of the pancreas.
24.55 Fasciola hepatica	Common liver fluke. The larvae get into the organism of humans and animals through the consumption of watercress, stems of plants or blades of grass. After consumption they move into the liver, where thus the problems develop. Symptoms: Upper abdominal pain, gastrointestinal problems, liver insufficiency, anaemia, increase of body temperature.
24.56 Fasciolopsis buski	Giant intestinal fluke. The infection occurs through the consumption of water plants like e.g. water chestnut or water spinach. Manchurian wild rice, when eaten raw, is very often infected by the pathogen. Symptoms: upper abdominal pains, digestive disorders, fever.
24.57 Fischoedrius elongatus	Also known as Opisthorchis felineus.
24.58 Gastrothylax elongatus	A worm, which can be found in the stomach of sheep and cattle.
24.59 Hasstile sig. tricolor	Rabbit fluke.
24.60 Metagonimus Yokogawai	Oral intake of bladder worms, the leech wanders in the intestines. Symptoms: problems in the digestive tract, diarrhoea, anaemia.
24.61 Paragonimus Westermani	Lungworm. A fluke that infects humans and mammals as a parasite. It is the pathogen of paragonimiasis. An oral infection as a result of raw crustaceans. The leech preferably forms cysts in the lung. Symptoms: fever, cough, upper abdominal pain. When it enters the brain it might trigger an epileptic fit.

Parasites	
Program no.	Description
-	This pathogen belongs to the flukes family. The oral intake occurs via the freshwater snail. Especially chicken are affected by an infection. Symptoms: Inflammation of the cloaca and the oviduct.
	Schistosoma (blood-flukes) Pathogen of schistosomiasis. An infection occurs through contaminated water or the consumption of snails. Depending on the nature mainly intestines or bladder of the organism are infected. Symptoms: fever, cough, headaches, enlargement of the liver or spleen.
24.64 Schistosoma mansoni	see above
24.65 Urocleidus	A fluke that attaches itself to the gills of the white perch.
24.80 Tapeworms complete	
-	Dog tapeworm. Infection of humans take place by peroral intake of the eggs. In the liver and lungs big fluid-filled blisters are formed from the eggs. Carcinoma-like metastases can often be found in the liver.
24.82 Echinococcus multicularis	Dangerous fox tapeworm, see below
24.83 Taenia pisiformis	A tapeworm that particularly infects dogs, foxes and cats.
_	Beef tapeworm. Also occurs in the human organism, cattle is intermediate host.
	Pork tapeworm, also occurs in the human organism. Intermediate host is the pig. $ \\$
'	The worm infects the small intestine of ruminants. Humans can be infected, however, this happens rarely.
	This parasite is a worldwide occurring tapeworm species, mainly infecting dogs and foxes. In seldom cases humans and cats can be infected as intermediate host with bladder worms.
	This parasite belongs to the tapeworms family. It is rarely found in domestic dogs, very seldom in domestic cats and humans. A disease with this parasite is called diphyllobothriasis.
	Also known as rat tapeworm. Humans can be infected by the pathogen through contaminated faeces of rats. In countries like Malaysia, Thailand, Jamaica and Indonesia the infection risk is particularly high.

Parasites	
Program no.	Description
25.10 Protozoa complete	Protozoa are single-celled organisms with a nucleus and cell organelles. Many protozoa have flagella and can move around. They have an excellent adaptability to different living conditions. Amoebas e.g. are able to change their form continuously.
25.11 Balantidium	Parasites that live in the intestinal mucous membrane and destroy this.
25.12 Balantidium coli	A single-cell organism that occurs in the digestive tract of animals. It is seldom that humans become infected. Symptoms: intestinal bleeding, diarrhoea.
25.13 Besnoitia (lung)	Single-cell organism. Pathogen of besnoitiosis. This is a disease of the skin, subcutis, mucous membrane and other tissues. Symptoms: Swelling of the lymph nodes, subcutaneous swellings, aborts, infertility, diarrhoea.
25.14 Blepharisma	Blepharisma is a single-cell organism and belongs to the group of ciliates. They can be found in stagnant waters.
25.15 Chilomastix cysts (rat)	A parasite that can be found in humans as well as animals. It lives in the appendix and the large intestine. Symptoms: diarrhoea.
25.16 Chilomonas	A genus of cryptophytes. These are single-cell, microscopically small algae, living in fresh and marine waters. They move through the water by means of two flagella and can be reddish, bluish or brownish.
25.17 Coccidia (suis) V	Coccidia are microscopically small, spore forming, single-cell parasites, which infect the intestinal tract of animals. Coccidia are obligate intracellular parasites, which means that they live within one cell and reproduce. Coccidiosis is the name of the disease that is caused by a coccidia infection. The source of an infection can be contaminated faeces or ingestion of infected tissue. A classic symptom for the disease is bleeding diarrhoea.
25.18 Coccidia (canis) V	See above, particularly young, weak animals are infected by these parasites.
25.19 Dientamoeba fragilis	A widespread large intestine parasite. Symptoms: When the host organism is weak diarrhoea and upper abdominal problems may occur.
25.20 Encephalitozoon cuniculi V	Encephalitozoon cuniculi (formerly also called Nosema cuniculi) is an obligate intracellular parasitic single-cell that lives in kidneys, brain and other organs. It is attributed to the microsporidia, however, the exact systematic position of these parasites is not yet known.

Parasites	
Program no.	Description
25.20 Encephalitozoon cuniculi V	It is the pathogen of the Encephalitozoonosis, a disease that occurs in particular in rabbits, murinae and canines and can also be transferred to people with a weakened immune system.
25.21 Endolimax nana	Amoebae in the large intestine.
25.22 Endolimax tropica	Amoebae in the large intestine.
25.23 Entamoeba coli trophozoite	Amoebae that can be found in the gastrointestinal tract.
25.24 Entamoeba gingivalis	Can be found in the gingival pockets in the teething area Causes gum diseases. Transmitted by kissing or using the same dinnerware.
25.25 Entamoeba histolytica tro.	Pathogen of amoebic dysentery (diarrhoea).
25.26 Giardia lamblia (troph.)	This parasite is the pathogen of giardiasis in humans, however it also infects other mammals and birds. The infection occurs through contaminated surface water or through contact with flies. Symptoms: bloating, pressure pains around the navel diarrhoea, weight loss.
25.27 lodamoeba bütschlii	Amoebae that live in the large intestine.
25.28 lodamoeba bütschlii tropica	Amoebae that live in the large intestine.
25.29 Leishmania braziliensis	Pathogens of the visceral leishmaniasis, cutaneous leishmaniasis mucocutaneous leishmaniasis. The pathogens propagate in blood in macrophages. They are also called cell parasites. The pathogens are transmitted by butterfly mosquitoes (phlebotomidae).
25.30 Leishmania donovani	see above
25.31 Leishmania mexicana	see above
25.32 Leishmania tropica	see above
25.33 Leucocytozoon	These pathogens are transmitted percutaneously by black fly bites. Birds are the main victims. In the leukocytes the parasites move through the entire organism.
25.34 Myxobolus cerebralis	Pathogens of the whirling disease in trouts. Intermediate host is the sludge worm tubifex that lives in pond floor sludge.
25.35 Naegleria fowleri	Pathogen of the purulent meningitis PAM (primary amebic meningoencephalitis). Infection occurs through bathing in contaminated waters. The pathogen enters the organism through the nasal mucous membranes. Symptoms: fever, nauseousness vomiting, stiff neck.
25.36 Plasmodium cynomolgi	Belongs to the sporozoa species. Pathogens of this species cause among others malaria. The pathogen is transmitted by mosquitoes Symptoms: bouts of fever, anaemia, convulsive seizures.

Parasites	
Program no.	Description
25.37 Plasmodium falciparum	see above
25.38 Plasmodium vivax	see above
25.39 Sarcocystis	Sarcosporidia are muscle and intestinal parasites. The pathogens can be found in the musculature of cattle and pigs. The animals become infected by contaminated food. By consuming infected meat pathogens also enter the human organism. They settle in the small intestine. Symptoms: vomiting, diarrhoea, fever.
25.40 Toxoplasma gondii	Pathogen of toxoplasmosis. Infection through feline faeces, infected sheep or pork meat. Cats may suffer from central nervous symptoms, ambulatory difficulties, diarrhoea and vomiting. Symptoms in humans rather go unnoticed, similar to a flu-disease. Complications only occur in case of infections during pregnancy, the unborn child may be impaired.
25.41 Trichomonas vaginalis	Pathogen of trichomoniasis. The single-cell lives on the human mucous membranes (in particular in the genital area), infection source is the direct contact from human-to-human.
25.42 Trypanosoma brucei	Pathogen of the Chagas-disease and the sleeping disease. The infection occurs through biting insects, percutaneously. Symptoms: fever, enlarged lymph nodes, limb pains.
25.43 Trypanosoma cruzi (brain)	see above
25.44 Trypanosoma equiperdum	see above
25.45 Trypanosoma gambiense	see above
25.46 Trypanosoma lewisi	see above
25.47 Trypanosoma rhodesiense	see above
25.48 Coccidia (feline) V	Coccidia are microscopically small, spore forming, single-cell parasites, which infect the intestinal tract of animals. Coccidia are obligate intracellular parasites, which means that they live within one cell and reproduce. Coccidiosis is the name of the disease that is caused by a coccidia infection. Infection source for an infection can be contaminated faeces or ingestion of infected tissue. A classical symptom for the disease is bleeding diarrhoea.
25.49 Coccidia (bovine) V	Bovine coccidiosis is often the reason for decreased growth and an increased susceptibility in calfs. Coccidiosis in calfs occurs throughout the entire year. The disease mainly occurs from the 6th week until the 12th month of life. Symptoms: loss of appetite, physical weakness, fever, diarrhoea, dehydration, hard bowel motions pains. Route of infection: contaminated food or water.

Parasites	
Program no.	Description
25.50 Cryptosporidium V	Are single-cell parasites that infect mainly calfs but occasionally also humans. The infection (cryptosporidiosis) usually heals naturally after a couple of weeks. Observed symptoms are light fever, dizziness, abdominal cramps and weight loss. Also chronic diarrhoea may occur. Cryptosporidium infection in reptiles is usually lethal as there is no effective drug so far.
25.51 Isospora belli	These pathogens are sporozoa that can often be found in warm climate regions (Chile, Brazil, Columbia). An infection occurs through contaminated food or water. The main symptom of an infection is usually diarrhoea.
25.60 Miltes / ticks / lice complete	Mites belong to the arachnids. There are approx. 50,000 known species. Some of them cause parasitic problems to humans as well as animals. For example dust mites that can cause allergies with their excretions, or sarcoptes that cause skin diseases like scabies. A subordination of mite is the so-called tick, which is dreaded as pathogen of TBE or borreliosis.
25.61 Acarus siro (flour mite)	The flour mite is considered a storage pest. A mite attack negatively changes the ingredients of food products.
25.62 Dermatophagoides (dust mite)	The excretion of these mites may trigger allergic symptoms and for example asthma.
25.63 Demodex canis V	In case of stronger occurance or in case of a weakened immune system this mite causes canine demodicosis, a parasitic skin disease in dogs. This can occur locally or on the entire body. Demodicosis occurs in elderly animals only in combination with immune system disorders, in young animals the occurrence of the disease has not been fully established. Demodicosis usually starts with hair loss and without itching. In the further process stronger skin changes up to a purulent skin inflammation (pyodermia) may develop through a bacterial secondary infection.
25.64 Demodex folliculorum (hair follicle mite)	In dogs with a weakened immune system it develops into a typical skin disease (see above), in humans it is usually harmless.
25.65 Neotrombicula autumnalis (harvest mite) V	This parasite belongs to the arachnids class. Their larvae live parasitic, they affect mainly mice, but also dogs, domestic cats, humans and other mammals. The harvest mite is also called red mite, aoutat or lepte automnale.

Parasites	
Program no.	Description
25.65 Neotrombicula autumnalis (harvest mite) V	The larvae of the mite cause scabies (trombidiosis) in humans There is itchiness, redness of the skin and itching wheals (similar to mosquito bites, but in larger numbers).
25.66 Notoedres cati V	A mite species that feeds on the skin of a cat's head and trigger the so-called head-lice. Occasionally pathogens can also jump to people (pseudo-scabies) or cause ear-mites in e.g. hedgehogs.
25.67 Ornithonyssus (bird mite)	This ectoparasite can mainly be found on birds, though humans and mammals can also be affected. Bacteria, viruses and blood parasites are transmitted by mites. Symptoms: Severe itching.
25.68 Sarcoptes scabiei (scabies)	This pathogen belongs to the mite species. It feeds on the skir of mammals, where it creates burrows. The so-called sarcoptes mange in mammals is called "scabies" when humans are infected Symptoms: itching, crust formation on the skin.
25.69 Pediculidae	Human lice are like animal lice bloodsucking parasites. Lice have a long proboscis, after drawing blood they leave a small itching lump. Within 25 days a sexual mature lice that can live for 30 days creeps out of the egg.
25.70 Pthirus pubis	It is a lice that is adapted to humans. This sort of lice is transmitted by sexual contact or contaminated clothing, bedlinen and towels Without contact to humans the crab louse can live for approx 24 hours.
25.80 Other parasites complete	
25.81 Echinoparyphium recurvatum	A leech that is assumed to parasite in the pancreas.
25.82 Hypodereum conoideum	Parasitic living worms.
25.83 Stigeoclonium	A green alga.
25.84 Troglodytella abrassarti	
25.85 Blood parasites	
25.86 Pneumocystis carinii	According to the general definition a sac fungus, see (27.81 - 27.85). Due to the frequency spectrum it is classified as a parasite for energetic reasons.

	Fungi	
Program no.	Description	
26.00 Fungi complete	This program contains all fungi from the program groups 26 and 27.	
26.05 Fungi I complete	This includes all fungi from program group 26.	
26.10 Mould fungi complete		
26.11-26.38 Fungi	Mould fungi can be found almost everywhere in the environment. Normally the spores are present in the air. When mould fungi spores occur in big quantities, in certain cases they can trigger allergies. For people or animals with weakened immune system mould fungi and their spores can lead to severe illness.	
26.40 Mould fungi toxins complete		
26.41-26.46 Fungal toxins (mycoto-xins)	Under certain circumstances e.g. optimal temperature, corresponding humidity, sufficient food supply and in appropriate development stages, mycotoxins are produced by fungi. Emitted into the air they can, among others, lead to unspecific health problems. Headaches and limp pains, mucosal irritations or inflammations, increased susceptibility to infections, are possible. In case of consumption these mycotoxins could lead to food poisoning.	
27.05 Fungi II complete	This includes all fungi from program group 27.	
27.10 Yeast fungi complete		
27.11-27.31 Yeast fungi	Yeast fungi are part of a healthy body flora, like many other microorganisms. However, if these yeast fungi suddenly proliferate uncontrollably, they become a danger to the healthy organism and lead to infections. Such a disturbance of the balance can be caused e.g. by taking antibiotics or by a chronic illness like diabetics mellitus. With yeast infection (candidiasis) the fungi attack the mucous membranes of the organism in large numbers, preferably in warm and humid areas. Yeast fungi are transmitted through direct contact (sexual intercourse) or through contact with contaminated objects (towels).	
27.40 Black fungi complete		
27.41-27.45 Blackness-fungi	This includes all fungi that are pigmented dark brown to blackish because of melanin storages. Many black-fungi occur as mould fungi in houses. In agriculture they populate entire grain stocks and lessen the quality of the crop.	
27.50 Filamentous fungi / dermato- phytes, dimorphic fungi complete		

Fungi	
Program no.	Description
27.50-27.59 Filamentous fungi / dermatophytes, dimorphic fungi complete	Filamentous fungi are called derrmatophytes, they cause a specific fungal infection of the skin (dermatophytosis). The fungi nest in the upper skin layer and feed off keratin of dead epidermal cells. Some fungi are also able to solve keratin from the skin by themselves. The organism reacts with an inflammation of the skin. Skin changes, (alopecia areata, circular patches of hair loss), hair breakage or hair loss are typical signs of an infection. Dermathophytes can be transmitted through contact from human-to-human or animal-to-human. The contact with contaminated objects (shoes in case of athlete's foot) can also lead to an infection.
27.60 Histoplasma	Belongs to the group of dimorphic fungi. It is often found in the faeces of birds and bats. The pathogen can cause lymphangitis in horses.
27.70 Mycetozoa complete	
27.71–27.73 Slime mould	Slime mould can be found in different places: in heaps of leaves, brushwood or compost, grass, plant debris and moss. Various species occur only during the snow melt in the mountains in spring. They are neither animal nor plant, and not a true fungus either.
27.80 Ascomycota complete	
27.81–27.85 Sac fungi	Sac fungi are responsible for numerous infections in humans and animals. However, they are also used in medicine and food production.  Health problems occur upon direct intake, symptoms vary from reactions in the gastrointestinal tract to hallucinations.
27.90 Other fungi complete	reactions in the gastronitestinal tract to nanucinations.
27.91 Tryptophanum	
27.92 Wallemia	

# 12. Cause-orientated system therapy in the RAH

Each of the 70's RAH programs is a treatment program. These RAH programs are based on 8 years of experience and over 26,000 patient analyses. The accumulated experiences show that in almost every case pathogens were the cause of the disease under examination, apart from mechanical injuries and irritations. It showed that the immune system was not able to compensate burdens from bacteria. viruses, parasites and fungi, because the burden was too strong. Of course it must be examined why the immune system could not sufficiently comply with its tasks. Vaccination damage, nutrient deficiency, heavy metal pollution and geopathic burdens are detected. Of course, these must be taken into account and reduced too. As a first step it is necessary to relieve the immune system by rebalancing the pathogen-related stress. Furthermore, the organs concerned must be stimulated with their physiological frequency patterns, to resume the communication between the organs, have the body find its way back to its routines and repair the body's regulatory system. All these tasks are carried out by the cause-orientated 70's RAH-treatment programs.

The RAH 70's programs are complete programs, in other words, they contain the energy supply, pre-control frequencies, frequency patterns of the respective meridians, all frequency patterns of the pathogens in question, the physiological

frequency patterns of the organ systems to be treated, frequency patterns for detoxification, deacidification, spasmolysis (if needed) and pain relief, as well as the frequencies of the immune and lymphatic system.

The names of the individual programs tell you which organs are treated. Program 70.10 contains the entire central nervous system and the peripheral nervous system. Program 70.26, Musculature I, contains the musculature of the skull, neck and upper extremities. The corresponding nerves are also treated.

Program 70.27, Musculature II, contains the core muscles and the musculature of the lower extremities and the nerve pathways in this area.

Program 70.28 treats the skeleton spinal column, ribcage, skull, shoulder, upper extremities and hands.

Program 70.29 treats the skeleton spinal column, hip, lower extremities and feet.

The specified indications can be used for orientation.

Karin Schußmann, naturopath

## 12.1 70.10 Nervous system

## As a supportive application in the following diseases:

Migraine
Headache
Motility disorders
Multiple sclerosis / Myelin destruction
ADHD / Attention deficit /
Hyperactivity disorder
Aphasia / Word finding disorders /
Speech disorders

Lack of concentration
Paresthesia / Sensitivity disorders
Agrypnia / Insomnia and hyposomnia /
Sleep disorders
Mycosis / Fungal infections
Parasitic diseases in the area of the
nervous system

20.11 Alpha streptococcus	22.64 Chikungunya
20.12 Beta haemolytic streptococci	22.67 Coxsackie virus B-1
20.15 Meningococcus	22.68 Coxsackie virus B4
20.19 Staphylococcus aureus	22.73 FSME
20.21 Streptococcus lactis	22.87 Dengue virus
20.22 Streptococcus mitis	22.89 Coxsackie virus A7
20.23 Streptococcus pneumoniae	23.11 Borna virus
20.24 Streptococcus pyogenes	23.16 Parainfluenza
21.61 Borrelia	23.19 HRSV
21.70 Borrelia afzelii	23.31 H1N1
21.71 Borrelia burgdorferi	23.32 H5N1
21.72 Borrelia duttoni	23.33 Influenza virus A and B
21.73 Borrelia garinii	23.55 Retroviruses
21.74 Borrelia hermsii	23.56 Rotaviruses
21.88 Rickettsiae	23.81 Viruses N.N.
21.89 Babesia divergens	24.36 Dirofilaria repens
21.92 Borrelia toxin	25.36 Plasmodium cynomolgi
21.95 Pain-producing bacteria	25.62 Dermatophagoides (dust mite)
21.96 Tuberculinum burnetti	25.64 Demodex folliculorum (hair follicle mite)
22.12 Cytomegalovirus (CMV)	25.85 Blood parasites
22.13 Epstein-Barr virus (EBV)	25.86 Pneumocystis carinii
22.15 Herpes simplex	26.10 Mould fungi complete
22.17 Herpes zoster	26.40 Mould fungi toxins complete
22.21 JC viruses	

# 12.2 70.11 Hair and scalp

## As a supportive application in the following diseases:

Alopecia / Hair loss
Trichodynia / Itchiness of the scalp
Seborrheic dermatitis, scab / crust building / milk crust
Eczema of the scalp
Mycosis / Fungal infections
Parasitic diseases in the area of the follicle and scalp

20.11 Alpha streptococcus	22.15 Herpes simplex
20.12 Beta haemolytic streptococci	22.17 Herpes zoster
20.19 Staphylococcus aureus	25.64 Demodex folliculorum (hair follicle mite)
20.21 Streptococcus lactis	26.10 Mould fungi complete
20.22 Streptococcus mitis	26.40 Mould fungi toxins complete
20.23 Streptococcus pneumoniae	27.10 Yeast fungi complete
20.24 Streptococcus pyogenes	

12.3 70.12 Eye system 153

## 12.3 70.12 Eye system

## As a supportive application in the following diseases:

Conjunctivitis / Inflammation of the conjunctiva
Allergies
Photo hypersensitivity / Excessive light sensitivity
Visual impairment / Degradation of vision
Excessive tear secretion
Eyelid oedema / Swelling of the eyelids
Cataract / Clouded lens
Glaucoma / Increase of internal pressure of the eye
Retinal detachment
Macular degeneration / Change of the macula
Retinopathy / Changes in the retina
Chorioiditis / Inflammation of the choroid
Mycosis / Fungal infections
Parasitic diseases of the eye system

20.11 Alpha streptococcus	22.17 Herpes zoster
20.12 Beta haemolytic streptococci	22.64 Chikungunya
20.19 Staphylococcus aureus	22.67 Coxsackie virus B-1
20.21 Streptococcus lactis	22.68 Coxsackie virus B4
20.22 Streptococcus mitis	22.89 Coxsackie virus A7
20.23 Streptococcus pneumoniae	23.55 Retroviruses
20.24 Streptococcus pyogenes	23.56 Rotaviruses
21.70 Borrelia afzelii	23.81 Viruses N.N.
21.71 Borrelia burgdorferi	25.14 Blepharisma
21.72 Borrelia duttoni	25.36 Plasmodium cynomolgi
21.73 Borrelia garinii	25.62 Dermatophagoides (dust mite)
21.74 Borrelia hermsii	25.85 Blood parasites
21.88 Rickettsiae	25.86 Pneumocystis carinii
22.12 Cytomegalovirus (CMV)	26.12 Aspergillus niger
22.13 Epstein-Barr virus (EBV)	26.41 Aflatoxin
22.15 Herpes simplex	27.11 Candida albicans

# 12.4 70.13 Tongue, oral cavity, salivary glands

## As a supportive application in the following diseases:

Aphthosis oris / Inflammation of the mucous membranes Lichen Ruber planus / Skin lesions Sialadenitis / Salivary gland inflammation Mycosis / Fungal infections

20.11 Alpha streptococcus	22.17 Herpes zoster
20.12 Beta haemolytic streptococci	24.52 Cryptocotyle lingua
20.21 Streptococcus lactis	25.85 Blood parasites
20.22 Streptococcus mitis	25.86 Pneumocystis carinii
20.23 Streptococcus pneumoniae	26.10 Mould fungi complete
20.24 Streptococcus pyogenes	26.40 Mould fungi toxins complete
21.93 Caries bacteria	27.10 Yeast fungi complete
22.13 Epstein-Barr virus (EBV)	63.60 Lichen (ruber planes)
22.15 Herpes simplex	

## 12.5 70.14 Teeth, jawbone, mouth

## As a supportive application in the following diseases:

Gingivitis / Inflammation of the gums Stomatitis / Infections of the oral cavity Odontogenic infection / Mouth, jaw Parodontitis / bacterial infection of tissue surrounded by teeth Parasatic diseases in the area of the teeth, jaw and mouth

20.11 Alpha streptococcus	20.95 Porphyromonas gingivalis
20.12 Beta haemolytic streptococci	20.96 Prevotella intermedia
20.13 Eikanella corrodens	20.97 Tannerella forsythensis
20.22 Streptococcus mitis	20.98 Aggregatibacter actinomyces
20.92 Actinomyces viscosus	20.99 Fusubacterium nucleatum
20.93 Treponema denticola	21.93 Caries bacteria
20.94 Campylobacter rectus / showae	52.11 Skeleton skull

## 12.6 70.15 Organs of hearing and equilibrium

## As a supportive application in the following diseases:

Otitis externa / Inflammation of the outer ear
Otitis media / Middle ear infection
Chronic middle ear infection
Labyrinthitis / Inner ear infection
Otomycosis / Fungus infection in the ear
Otitis externa circumscripta / Infection of the hair follicle in the ear
Vertigo / Dizziness
Tinnitus / Ear noises
Hypacusis / Deafness
Mycosis / Fungal infections
Parasitic diseases of the organ of hearing and balance

20.11 Alpha streptococcus	22.15 Herpes simplex
20.12 Beta haemolytic streptococci	22.17 Herpes zoster
20.21 Streptococcus lactis	22.64 Chikungunya
20.22 Streptococcus mitis	22.67 Coxsackie virus B1
20.23 Streptococcus pneumoniae	22.68 Coxsackie virus B4
20.24 Streptococcus pyogenes	22.89 Coxsackie virus A7
21.70 Borrelia afzelii	23.55 Retroviruses
21.71 Borrelia burgdorferi	23.56 Rotaviruses
21.72 Borrelia duttoni	23.81 Viruses N.N.
21.73 Borrelia garinii	25.62 Dermatophagoides (dust mite)
21.74 Borrelia hermsii	25.85 Blood parasites
21.88 Rickettsiae	25.86 Pneumocystis carinii
22.12 Cytomegalovirus (CMV)	26.12 Aspergillus niger
22.13 Epstein-Barr virus (EBV)	26.41 Aflatoxin

## 12.7 70.16 Upper respiratory system

## As a supportive application in the following diseases:

Bacterial and viral infections of the upper respiratory tract
Bronchitis / Inflammation of the bronchial tubes
Sinusitis / Inflammation of the sinuses
Conjunctivitis / Inflammation of the conjunctiva
Pharyngitis / Inflammation of the gullet mucosa
Laryngitis / Inflammation of the larynx and Vocal ligaments
Tonsillitis / Inflammation of the tonsils
Mycosis / Fungal infections
Parasitic diseases of the upper respiratory tract

20.11 Alpha streptococcus	22.68 Coxsackie virus B4
20.12 Beta haemolytic streptococci	22.80 Rhinovirus
20.19 Staphylococcus aureus	22.89 Coxsackie virus A7
20.21 Streptococcus lactis	23.16 Parainfluenza
20.22 Streptococcus mitis	23.19 HRSV
20.23 Streptococcus pneumoniae	23.31 H1N1
20.24 Streptococcus pyogenes	23.32 H5N1
20.44 Bacilli	23.33 Influenza virus A and B
20.67 Haemophilus influenzae	23.55 Retroviruses
21.91 Laryngeal 1 bacteria	23.56 Rotaviruses
22.11 Adenovirus	23.81 Viruses N.N.
22.12 Cytomegalovirus (CMV)	25.36 Plasmodium cynomolgi
22.13 Epstein-Barr virus (EBV)	25.85 Blood parasites
22.15 Herpes simplex	25.86 Pneumocystis carinii
22.17 Herpes zoster	26.10 Mould fungi complete
22.67 Coxsackie virus B-1	26.40 Mould fungi toxins complete

# 12.8 70.17 Lung system

## As a supportive application in the following diseases:

Acute and chronic bronchitis, bacterial, viral and allergic aetiology Pneumonia / Lung infection Irritated cough Pertussis / Whooping cough Tuberculosis Mycosis / Fungal infections Parasitic diseases of the lung system

20.11 Alpha streptococcus	22.67 Coxsackie virus B1
20.12 Beta haemolytic streptococci	22.68 Coxsackie virus B4
20.18 Staphylococci	22.89 Coxsackie virus A-7
20.21 Streptococcus lactis	23.19 HRSV
20.22 Streptococcus mitis	23.31 H1N1
20.23 Streptococcus pneumoniae	23.32 H5N1
20.24 Streptococcus pyogenes	23.33 Influenza virus A and B
20.49 Bordetella pertussis	23.55 Retroviruses
20.67 Haemophilus influenzae	23.56 Rotaviruses
20.72 Legionella	23.81 Viruses N.N.
20.75 Mycobacteria phlei	24.21 Ascaris megalocephala
20.76 Mycobacteria tuberculosis	24.36 Dirofilaria repens
21.15 Klebsiella pneumoniae	24.38 Ascaris lumbricoides
21.86 Chlamydia trachomatis	25.36 Plasmodium cynomolgi
22.11 Adenovirus	25.85 Blood parasites
22.12 Cytomegalovirus (CMV)	25.86 Pneumocystis carinii
22.13 Epstein-Barr virus (EBV)	26.10 Mould fungi complete
22.15 Herpes simplex	26.40 Mould fungi toxins complete
22.17 Herpes zoster	

12.9 70.18 Heart 159

## 12.9 70.18 Heart

## As a supportive application in the following diseases:

Tachycardia / Fast or irregular heart rate
Hypertension / High blood pressure
Arrhythmia / Cardiac rhythm disturbance
Arthritis of the coronaries / Inflammation of the coronary vessels
Myocarditis / Heart muscle inflammation
Pericarditis / Pericardium inflammation
Heart pains of unknown aetiology
Parasitic diseases of the heart

20.11 Alpha streptococcus	21.73 Borrelia garinii
20.12 Beta haemolytic streptococci	21.74 Borrelia hermsii
20.21 Streptococcus lactis	21.88 Rickettsiae
20.22 Streptococcus mitis	21.89 Babesia divergens
20.23 Streptococcus pneumoniae	23.55 Retroviruses
20.24 Streptococcus pyogenes	24.22 Dirofilaria immitis (heartworm)
20.75 Mycobacteria phlei	24.36 Dirofilaria repens
20.76 Mycobacteria tuberculosis	24.51 Clonorchis sinensis
21.51 Mycoplasma	25.15 Chilomastix cysts (rat)
21.53 Mycoplasma capricolum	25.16 Chilomonas
21.70 Borrelia afzelii	25.36 Plasmodium cynomolgi
21.71 Borrelia burgdorferi	25.85 Blood parasites
21.72 Borrelia duttoni	25.86 Pneumocystis carinii

# 12.10 70.19 Digestive organs

## As a supportive application in the following diseases:

Dyspepsia / Digestive disorder
Gastritis / Inflammation of the lining of the stomach
Stomach ulcer, duodenal ulcer / Gastric and duodenal ulcer
Colitis / Enteritis
Pancreatitis / Inflammation of the pancreas
Irritable bowel syndrome / Bloating
Nausea / Sickness
Emesis / Vomiting
Reflux esophagitis / Heartburn
Diarrhoea
Constipation
Oesophagitis / Gullet inflammation
Meteorism / Flatulence
Mycosis / Fungal infections
Parasitical diseases of the stomach and intestines

20.69 Helicobacter pylori	24.31 Strongyloides (filariform)
21.11 Enterobacter aerogenes	24.38 Ascaris lumbricoides
21.19 Salmonella enteritidis	24.54 Eurytrema pancreaticum
21.20 Salmonella paratyphi	24.56 Fasciolopsis buski
21.21 Salmonella typhi	24.58 Gastrothylax elongatus
21.23 Shigella dysenteriae	24.63 Schistosoma haematobium
21.28 EHEC	24.64 Schistosoma mansoni
22.67 Coxsackie virus B1	24.84 Taenia saginata
22.68 Coxsackie virus B4	24.85 Taenia solium
22.78 Norovirus	25.29 Leishmania braziliensis
22.89 Coxsackie virus A7	25.30 Leishmania donovani
23.55 Retroviruses	25.31 Leishmania mexicana
23.56 Rotaviruses	25.32 Leishmania tropica
24.13 Gyrodactylus	25.35 Naegleria fowleri
24.21 Ascaris megalocephala	26.10 Mould fungi complete
24.23 Enterobius vermicularis	26.40 Mould fungi toxins complete
24.28 Enterobius worms	27.11 Candida albicans

## 12.11 70.20 Liver, gall, pancreas

## As a supportive application in the following diseases:

Hypercholesterolemia / increased cholesterol level Diabetes mellitus type I and II / Diabetes Hepatopathy / Liver disease Hepatitis / Inflammation of the liver Cholelithiasis / Gallstone formation Mycosis / Fungal infections Parasitic diseases of the liver, gall and pancreas

20.69 Helicobacter pylori	24.54 Eurytrema pancreaticum
22.13 Epstein-Barr virus (EBV)	24.55 Fasciola hepatica
22.14 Hepatitis B virus	24.58 Gastrothylax elongatus
22.74 Hepatitis A virus	24.63 Schistosoma haematobium
22.75 Hepatitis C virus	24.64 Schistosoma mansoni
22.86 Hepatitis E virus V	24.81 Echinococcus granulosus
22.87 Dengue virus	24.82 Echinococcus multicularis
24.13 Gyrodactylus	25.36 Plasmodium cynomolgi
24.21 Ascaris megalocephala	25.85 Blood parasites
24.36 Dirofilaria repens	26.10 Mould fungi complete
24.38 Ascaris lumbricoides	26.40 Mould fungi toxins complete
24.41 Capillaria hepatica (liver)	

## 12.12 70.21 Kidneys, ureter

## As a supportive application in the following diseases:

Kidney failure / hypofunction of the kidneys
Glomerulonephritis / Inflammation of the kidneys
Pyelonephritis / Inflammation of kidney pelvis
Urethritis / Inflammation of the urinary tract
Cystitis / Bladder infection
Irritable bladder / Overactive bladder
Mycosis / Fungal infections
Parasitic diseases of the kidneys and the urinary tract

20.66 Gardnerella vaginalis	24.65 Urocleidus
21.14 Escherichia coli	25.36 Plasmodium cynomolgi
21.16 Proteus mirabilis	25.41 Trichomonas vaginalis
21.17 Proteus vulgaris	25.42 Trypanosoma brucei
21.28 EHEC	25.85 Blood parasites
24.36 Dirofilaria repens	25.86 Pneumocystis carinii
24.63 Schistosoma haematobium	27.11 Candida albicans
24.64 Schistosoma mansoni	

## 12.13 70.22 Female organs

## As a supportive application in the following diseases:

Vulvitis, colpitis / Inflammation of the outer genitals Vaginitis / Vaginal discharge Cervicitis, endometritis / Inflammation of the uterus Adnexitis / Oviduct and overian inflammation HPV-infections / Humanes Papilloma-virus Mycosis / Fungal infections Parasitic diseases of the female genital tract

20.11 Alpha streptococcus	21.86 Chlamydia trachomatis
20.12 Beta haemolytic streptococci	22.15 Herpes simplex
20.19 Staphylococcus aureus	22.17 Herpes zoster
20.21 Streptococcus lactis	22.18 Human papilloma virus (HPV)
20.22 Streptococcus mitis	24.56 Fasciolopsis buski
20.23 Streptococcus pneumoniae	25.41 Trichomonas vaginalis
20.24 Streptococcus pyogenes	25.85 Blood parasites
20.25 Streptococcus sp.	27.11 Candida albicans

# 12.14 70.23 Male organs

## As a supportive application in the following diseases:

Prostatitis / Inflammation of the prostate gland Orchitis / Testicular inflammation Mycosis / Fungal infections Parasitic diseases of the male genital tract

20.11 Alpha streptococcus	24.56 Fasciolopsis buski
20.12 Beta haemolytic streptococci	24.63 Schistosoma haematobium
20.19 Staphylococcus aureus	24.64 Schistosoma mansoni
20.21 Streptococcus lactis	24.65 Urocleidus
20.22 Streptococcus mitis	24.85 Taenia solium
20.23 Streptococcus pneumoniae	25.36 Plasmodium cynomolgi
20.24 Streptococcus pyogenes	25.41 Trichomonas vaginalis
20.25 Streptococcus sp.	25.42 Trypanosoma brucei
22.15 Herpes simplex	25.85 Blood parasites
22.17 Herpes zoster	27.11 Candida albicans
22.18 Human papilloma virus (HPV)	

12.15 70.24 Skin system 165

## 12.15 70.24 Skin system

## As a supportive application in the following diseases:

Dermatitis / Skin inflammations
Diaper dermatitis / Skin inflammation in the diaper area
Psoriasis / Rosacea / Chron. skin inflammation / Neurodermatitis / Chron. skin disease
Acne / Infection of the sebaceous glands and the hair follicles
Hyperhidrosis / Increased local sweat production
Hives, urtication / Wealing
Eczema / Allergies of the skin
Herpes Zoster / Shingles / Formation of warts
Mycosis / Fungal infections / Parasitic diseases of the skin system

20.11 Alpha streptococcus	21.23 Shigella dysenteriae
20.12 Beta haemolytic streptococci	21.24 Shigella flexneri
20.13 Eikanella corrodens	21.25 Shigella sonnei
20.19 Staphylococcus aureus	22.12 Cytomegalovirus (CMV)
20.21 Streptococcus lactis	22.15 Herpes simplex
20.22 Streptococcus mitis	22.17 Herpes zoster
20.23 Streptococcus pneumoniae	22.82 Tobacco mosaic virus
20.24 Streptococcus pyogenes	22.87 Dengue virus
20.25 Streptococcus sp.	23.70 Wart frequencies complete
20.42 Actinomyces israelii	23.81 Viruses N.N.
20.46 Bacillus cereus	24.36 Dirofilaria repens
20.47 Bacteroides fragilis	24.37 Microfilaria
20.66 Gardnerella vaginalis	25.62 Dermatophagoides (dust mite)
20.70 Lactobacillus acidophilus	25.67 Ornithonyssus (bird mite)
20.81 Propionibacterium acnes	25.68 Sarcoptes scabiei (scabies)
21.12 Erwinia amylovora	25.84 Troglodytella abrassarti
21.13 Erwinia carotavora	25.85 Blood parasites
21.16 Proteus mirabilis	26.05 Fungi I complete
21.17 Proteus vulgaris	26.40 Mould fungi toxins complete
21.22 Serratia marcescens	27.05 Fungi II complete

## 12.16 70.25 Artery and vein system

## As a supportive application in the following diseases:

Phlebitis / Vein inflammation
Arthritis / Inflammation of the arteries
Varicosities / Varices
Raynaud's disease / Arterial blood vessel cramps of the fingers with lack of oxygen
Lupus erythematosus / Autoimmune disease of the connective tissue
Mycosis / Fungal infections
Parasitic diseases of the artery and vein system

08.30 Spider and snake venoms complete	24.22 Dirofilaria immitis (heartworm)
21.70 Borrelia afzelii	24.36 Dirofilaria repens
21.71 Borrelia burgdorferi	24.51 Clonorchis sinensis
21.72 Borrelia duttoni	25.15 Chilomastix cysts (rat)
21.73 Borrelia garinii	25.16 Chilomonas
21.74 Borrelia hermsii	25.36 Plasmodium cynomolgi
21.88 Rickettsiae	25.85 Blood parasites
21.89 Babesia divergens	25.86 Pneumocystis carinii
22.87 Dengue virus	27.10 Yeast fungi complete
23.19 HRSV	

## 12.17 70.26, 70.27 Musculature I and II

## As a supportive application in the following diseases:

Myositis / Muscle inflammation / Myalgia / Muscle pains
Aching muscles / Muscle pain after physical stress
Cervical spine syndrome / Pains of the cervical spine and musculature
Thoracic spine syndrome / Pains of the thoracic spine and musculature
Lumbar spine syndrome / Pains of the lumbar spine and musculature
Muscle rheumatism / Fibromyalgia / Pain syndrome with chron. soft tissue pain
Mycosis / Fungal infections / Parasitic diseases of the musculature

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20.11 Alpha streptococcus	22.15 Herpes simplex
20.12 Beta haemolytic streptococci	22.17 Herpes zoster
20.19 Staphylococcus aureus	22.64 Chikungunya
20.21 Streptococcus lactis	22.67 Coxsackie virus B-1
20.22 Streptococcus mitis	22.68 Coxsackie virus B4
20.23 Streptococcus pneumoniae	22.87 Dengue virus
20.24 Streptococcus pyogenes	22.89 Coxsackie virus A7
20.76 Mycobacteria tuberculosis	23.55 Retroviruses
21.27 Yersinia enterocolitica	23.56 Rotaviruses
21.61 Borrelia	23.81 Viruses N.N.
21.70 Borrelia afzelii	24.22 Dirofilaria immitis (heartworm)
21.71 Borrelia burgdorferi	24.32 Trichinella spiralis (muscle)
21.72 Borrelia duttoni	24.33 Trichuris sp.
21.73 Borrelia garinii	24.36 Dirofilaria repens
21.74 Borrelia hermsii	24.61 Paragonimus Westermani
21.86 Chlamydia trachomatis	24.62 Prosthogonimus macrorchis
21.88 Rickettsiae	25.36 Plasmodium cynomolgi
21.89 Babesia divergens	25.85 Blood parasites
21.95 Pain-producing bacteria	25.86 Pneumocystis carinii
21.96 Tuberculinum burnetti	26.12 Aspergillus niger
22.12 Cytomegalovirus (CMV)	26.41 Aflatoxin
22.13 Epstein-Barr virus (EBV)	51.11 Prions

# 12.18 70.28, 70.29 Skeleton I and II

## As a supportive application in the following diseases:

Osteitis, osteomyelitis / Inflammation of the bones, cortical bone, bone marrow Osteoporosis / Bone loss
To support bone formation
To support jaw bone formation (after dental implantation)
Scoliosis / Lateral curvature of the spinal column
Arthrosis / Joint degeneration
Arthritis / Inflammatory joint disease
Mycosis / Fungal infections
Parasitic diseases of the skeleton

20.11 Alpha streptococcus	21.89 Babesia divergens
20.12 Beta haemolytic streptococci	21.95 Pain-producing bacteria
20.19 Staphylococcus aureus	22.12 Cytomegalovirus (CMV)
20.21 Streptococcus lactis	22.13 Epstein-Barr virus (EBV)
20.22 Streptococcus mitis	22.15 Herpes simplex
20.23 Streptococcus pneumoniae	22.17 Herpes zoster
20.24 Streptococcus pyogenes	22.64 Chikungunya
20.76 Mycobacteria tuberculosis	23.55 Retroviruses
21.27 Yersinia enterocolitica	23.56 Rotaviruses
21.61 Borrelia	23.81 Viruses N.N.
21.70 Borrelia afzelii	24.56 Fasciolopsis buski
21.71 Borrelia burgdorferi	25.36 Plasmodium cynomolgi
21.72 Borrelia duttoni	25.85 Blood parasites
21.73 Borrelia garinii	25.86 Pneumocystis carinii
21.74 Borrelia hermsii	26.12 Aspergillus niger
21.86 Chlamydia trachomatis	26.41 Aflatoxin
21.88 Rickettsiae	51.11 Prions

## 12.19 70.40 Borreliosis, Rickettsiosis

## As a supportive application in the following diseases:

Borreliosis / Disease after borrelia-infection Rickettsiosis / Disease after rickettsia-infection Yersiniosis / Disease after yersinia-infection Fibromyalgia / Pain syndrome with chron. soft tissue pains Rheumatism and rheumatoid complaints

## To be applied in case of following symptoms of unknown aetiology:

Acute and chronical muscle and joint pains Swelling of the joints

21.27 Yersinia enterocolitica	21.96 Tuberculinum burnetti
21.61 Borrelia	22.12 Cytomegalovirus (CMV)
21.70 Borrelia afzelii	22.64 Chikungunya
21.71 Borrelia burgdorferi	22.90 Zika virus
21.72 Borrelia duttoni	23.55 Retroviruses
21.73 Borrelia garinii	23.56 Rotaviruses
21.74 Borrelia hermsii	25.36 Plasmodium cynomolgi
21.86 Chlamydia trachomatis	25.37 Plasmodium falciparum
21.88 Rickettsiae	25.38 Plasmodium vivax
21.89 Babesia divergens	25.86 Pneumocystis carinii
21.95 Pain-producing bacteria	51.11 Prions

## 12.20 70.41 Helicobacter pylori infection

## As a supportive application in the following diseases:

Infections with Helicobacter pylori Acute and chronic gastritis / Inflammation of the lining of the stomach Stomach and intestinal ulcers / Gastric and duodenal ulcers Mycosis / Fungal infections

#### To be applied in case of following symptoms of unknown aetiology:

Heartburn Bloating Flatulence Alternation of diarrhoea and constipation

#### Pathogens:

Stomach ache

20.69 Helicobacter pylori	27.11 Candida albicans
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# 12.21 70.42 Infectious mononucleosis acute (kissing disease)

As a supportive application in the following diseases:

Acute Epstein Barr virus infection

#### Pathogens:

20.22 Streptococcus mitis	22.15 Herpes simplex
22.12 Cytomegalovirus (CMV)	22.17 Herpes zoster
22.13 Epstein-Barr virus (EBV)	

## 12.22 70.43 Infectious mononucleosis chronic (kissing disease)

As a supportive application in the following diseases:

Chronic Epstein Barr virus infection

20.11 Alpha streptococcus	22.12 Cytomegalovirus (CMV)
20.12 Beta haemolytic streptococci	22.13 Epstein-Barr virus (EBV)
20.21 Streptococcus lactis	22.15 Herpes simplex
20.22 Streptococcus mitis	22.17 Herpes zoster
20.23 Streptococcus pneumoniae	23.55 Retroviruses
20.24 Streptococcus pyogenes	23.81 Viruses N.N.

## 12.23 70.44 Cytomegaly, chronic

## As a supportive application in the following diseases:

Chronic cytomegaly virus infection

## To be applied in case of following symptoms of unknown aetiology:

Headache

Migraine

Exhaustion

Word finding disorders

Concentration disorders

Speech disorders

Visual disturbances to loss of sight

Sleep disorders

Coordination problems

Motoric sensitivity disorders

Tinnitus

Hard of hearing

Pain of the entire musculature

Joint pain

Snoring

22.12 Cytomegalovirus (CMV)	22.17 Herpes zoster
22.13 Epstein-Barr virus (EBV)	23.81 Viruses N.N.
22.15 Herpes simplex	

# 12.24 70.45 Migraines, headaches, insomnia, psychic imbalance, pathogen-oriented

To be applied in case of following symptoms of unknown aetiology:

Migraine
Headache
Sleep disorders
Anxiety attacks
Inner restlessness
Fear of being followed
Perception disorders
Forgetfulness

20.11 Alpha streptococcus	21.74 Borrelia hermsii
20.12 Beta haemolytic streptococci	21.88 Rickettsiae
20.15 Meningococcus	21.89 Babesia divergens
20.19 Staphylococcus aureus	21.95 Pain-producing bacteria
20.21 Streptococcus lactis	21.96 Tuberculinum burnetti
20.22 Streptococcus mitis	22.12 Cytomegalovirus (CMV)
20.23 Streptococcus pneumoniae	22.13 Epstein-Barr virus (EBV)
20.24 Streptococcus pyogenes	22.64 Chikungunya
21.61 Borrelia	22.73 FSME
21.70 Borrelia afzelii	25.62 Dermatophagoides (dust mite)
21.71 Borrelia burgdorferi	25.64 Demodex folliculorum (hair follicle mite)
21.72 Borrelia duttoni	26.12 Aspergillus niger
21.73 Borrelia garinii	26.41 Aflatoxin

## 12.25 70.46 Influenza

## As a supportive application in the following diseases:

Influenza
Bronchitis / Inflammation of the bronchial tubes
Sinusitis / Inflammation of the sinuses
Catarrh and inflammations in the nose and throat area

## To be applied in case of following symptoms of unknown aetiology:

Dry cough
Rhinitis
Headaches
Limb and joint pains
Sore throat and swallowing difficulties
Lethargy

20.11 Alpha streptococcus	22.11 Adenovirus
20.12 Beta haemolytic streptococci	22.13 Epstein-Barr virus (EBV)
20.19 Staphylococcus aureus	22.15 Herpes simplex
20.21 Streptococcus lactis	22.17 Herpes zoster
20.22 Streptococcus mitis	22.67 Coxsackie virus B1
20.23 Streptococcus pneumoniae	22.68 Coxsackie virus B4
20.24 Streptococcus pyogenes	22.80 Rhinovirus
20.25 Streptococcus sp.	22.89 Coxsackie virus A7
20.44 Bacilli	23.16 Parainfluenza
20.49 Bordetella pertussis	23.19 HRSV
20.60 Corynebacterium diphteriae	23.31 H1N1
20.67 Haemophilus influenzae	23.32 H5N1
20.72 Legionella	23.33 Influenza virus A and B
20.76 Mycobacteria tuberculosis	23.55 Retroviruses
21.15 Klebsiella pneumoniae	23.56 Rotaviruses
21.51 Mycoplasma	25.86 Pneumocystis jiiroveci (carinii)
21.86 Chlamydia trachomatis	

# 12.26 70.47 Vasodepression

## As a supportive application in the following diseases:

Hypertension / High blood pressure caused by infections with bacteria, viruses, fungi or parasites

20.11 Alpha streptococcus	21.88 Rickettsiae
20.12 Beta haemolytic streptococci	24.22 Dirofilaria immitis (heartworm)
20.21 Streptococcus lactis	24.36 Dirofilaria repens
20.22 Streptococcus mitis	24.51 Clonorchis sinensis
20.23 Streptococcus pneumoniae	24.63 Schistosoma haematobium
20.24 Streptococcus pyogenes	24.64 Schistosoma mansoni
21.14 Escherichia coli	24.65 Urocleidus
21.16 Proteus mirabilis	25.15 Chilomastix cysts (rat)
21.17 Proteus vulgaris	25.16 Chilomonas
21.70 Borrelia afzelii	25.36 Plasmodium cynomolgi
21.71 Borrelia burgdorferi	25.41 Trichomonas vaginalis
21.72 Borrelia duttoni	25.85 Blood parasites
21.73 Borrelia garinii	25.86 Pneumocystis carinii
21.74 Borrelia hermsii	27.11 Candida albicans

## 12.27 70.48 Disease of the blood system

#### As a supportive application in the following diseases:

Diseases in the blood system caused by parasitic infections Mycosis / Fungal infections

#### Pathogens:

21.70 Borrelia afzelii	21.89 Babesia divergens
21.71 Borrelia burgdorferi	25.36 Plasmodium cynomolgi
21.72 Borrelia duttoni	25.85 Blood parasites
21.73 Borrelia garinii	25.86 Pneumocystis carinii
21.74 Borrelia hermsii	27.11 Candida albicans

# 12.28 70.49 Allergy, upper respiratory tract

#### As a supportive application in the following diseases:

Allergic asthma / Chronic respiratory tract disease with paroxysmal dyspnea Allergic bronchial asthma / Chronic respiratory tract disease with paroxysmal dyspnea Chronic bronchitis / Chronic inflammation of the bronchial tubes Rhinitis alergica / Allergic rhinitis Mycosis / Fungal infections

20.76 Mycobacteria tuberculosis	22.17 Herpes zoster
21.51 Mycoplasma	23.81 Viruses N.N.
22.12 Cytomegalovirus (CMV)	25.85 Blood parasites
22.13 Epstein-Barr virus (EBV)	26.00 Fungi complete
22.15 Herpes simplex	26.40 Mould fungi toxins complete

12.29 70.50 Skin allergy 177

## 12.29 70.50 Skin allergy

## As a supportive application in the following diseases:

Allergic contact dermatitis / Inflammatory skin change, caused by an allergic reaction Contact dermatitis / Eczema disorder

As part of other allergies, skin reactions may also occur in combination with other complaints:

Sun allergy
Drug allergy
Food allergy
Insecticide allergy
Nickel allergy
Mycosis / Fungal infections

To be applied in case of the following symptoms on the skin with unknown aetiology:

Rashes Swelling Pruritus Wheals Skin eruption

22.12 Cytomegalovirus (CMV)	24.36 Dirofilaria repens
22.13 Epstein-Barr virus (EBV)	25.85 Blood parasites
22.15 Herpes simplex	26.00 Fungi complete
22.17 Herpes zoster	26.40 Mould fungi toxins complete
23.81 Viruses N.N.	

## 12.30 70.51 Fracture, closed

The program does not include pathogens. It is only used to speed up the healing process and to reduce pain.

As a supportive application in the following diseases:

Impaired fracture healing / Extended bone fracture healing Aseptic pseudoarthrosis / False joint formation without pathogens

## 12.31 70.52 Fracture, open

The program contains bacteria that could lead to wound infection. It is further used to speed up the healing process and to reduce pain.

## As a supportive application in the following diseases:

Fracture / Bone fracture
Septic pseudoarthrosis / False joint formation with use of pathogens
Post-operative after osteosynthesis / Post-surgical care after bone-OP
Dental implants / Surgical intervention for dental restoration in the jawbones

20.00 Bacteria complete	

## 12.32 70.53 Disease breast tissue / mammary glands

## As a supportive application in the following diseases:

Disease of the breast tissue / Mammary glands

Mastitis puerperalis / Inflammation of the breast following childbirth often caused by breastfeeding

Non puerperal mastitis / Local inflammation of the breast tissue

Mastodynia / Breast pain

Breast cyst / Fluid-filled sac within the breast, benign

20.11 Alpha streptococcus	22.13 Epstein-Barr virus (EBV)
20.12 Beta haemolytic streptococci	22.15 Herpes simplex
20.19 Staphylococcus aureus	22.17 Herpes zoster
20.21 Streptococcus lactis	23.81 Viruses N.N.
20.22 Streptococcus mitis	25.36 Plasmodium cynomolgi
20.23 Streptococcus pneumoniae	25.85 Blood parasites
20.24 Streptococcus pyogenes	25.86 Pneumocystis carinii
21.88 Rickettsiae	26.10 Mould fungi complete
22.12 Cytomegalovirus (CMV)	26.40 Mould fungi toxins complete

# 12.33 70.54 Thyroid gland / parathyroid gland

#### As a supportive application in the following diseases:

Diseases of the thyroid gland / Parathyroid gland

Hyperthyroidism / Overactive thyroid

Hypothyroidism / Underactive thyroid

Hashimoto / Autoimmune disease that leads to a chronic inflammation of the thyroid gland

Cyst formation

Hyperparathyreoidism / Pathogenic hyperfunction of the parathyroid glands

Hypoparathyreoidism / Pathogenic hypofunction of the parathyroid glands

#### Pathogens:

20.11 Alpha streptococcus	21.88 Rickettsiae
20.12 Beta haemolytic streptococci	22.12 Cytomegalovirus (CMV)
20.19 Staphylococcus aureus	22.13 Epstein-Barr virus (EBV)
20.21 Streptococcus lactis	22.15 Herpes simplex
20.22 Streptococcus mitis	22.17 Herpes zoster
20.23 Streptococcus pneumoniae	23.81 Viruses N.N.
20.24 Streptococcus pyogenes	25.36 Plasmodium cynomolgi
21.86 Chlamydia trachomatis	25.86 Pneumocystis carinii

## 12.34 70.55 Dengue fever

#### As a supportive application in the following diseases:

Dengue-fever virus infection

22.87 Dengue virus	22.90 Zika virus
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#### 12.35 70.56 Immunomodulation

The program does not include pathogens.

As a supportive application in the following diseases:

Immune weakened patients
As a supportive application in case of chronic virus infections like EBV or cytomegalo virus.
Patients with cell degenerations

#### 12.36 70.57 Changes of cell structures

The program does not include pathogens.

As a supportive application in the following diseases:

Malignant diseases

#### 12.37 70.58 Detoxification program, intensive

As a supportive application in the following diseases:

Detoxification processes for intensive purification of connective tissue from toxins like heavy metal pollution, environmental toxins and zootoxins (animal toxins), borrelia toxins.

08.10 Heavy metals complete	08.85 Environmental toxins complete
08.30 Spider and snake venoms complete	

#### 12.38 70.59 Diseases at the cellular level (intracellular)

#### As a supportive application in the following diseases:

Infections with intracellular, pathogenic organisms like bacteria, viruses and parasites.

#### Pathogens:

20.11 Alpha streptococcus	22.13 Epstein-Barr virus (EBV)
20.12 Beta haemolytic streptococci	22.15 Herpes simplex
20.21 Streptococcus lactis	22.17 Herpes zoster
20.22 Streptococcus mitis	22.18 Human papilloma virus (HPV)
20.23 Streptococcus pneumoniae	22.22 Humanes herpesvirus 8
20.24 Streptococcus pyogenes	22.91 Humanes T-lymphotropes virus 1
21.70 Borrelia afzelii	22.92 Humanes T-lymphotropes virus 2
21.71 Borrelia burgdorferi	23.81 Viruses N.N.
21.72 Borrelia duttoni	25.36 Plasmodium cynomolgi
21.73 Borrelia garinii	25.37 Plasmodium falciparum
21.74 Borrelia hermsii	25.38 Plasmodium vivax
21.88 Rickettsiae	25.86 Pneumocystis carinii
21.89 Babesia divergens	26.38 Stachybotrys
22.12 Cytomegalovirus (CMV)	

#### 12.39 70.60 Ebola virus / Marburg virus infection

The program does not include pathogens.

As a supportive application in the following diseases:

Ebola virus / Marburg virus infection

#### 12.40 70.61 Periodontosis program

#### As a supportive application in the following diseases:

Periodontosis, periodontal disease / Inflammation of the periodontium and gums Gingivitis / Gum inflammation

#### To be applied in case of following symptoms of unknown aetiology:

Bleeding gums
Receding gums
Bad breath
Sensitive teeth / neck of the tooth
Loose teeth

20.29 Streptococcus salivarius	20.96 Prevotella intermedia
20.92 Actinomyces viscosus	20.97 Tannerella forsythensis
20.93 Treponema denticola	20.98 Aggregatibacter actinomyces
20.94 Campylobacter rectus / showae	20.99 Fusubacterium nucleatum
20.95 Porphyromonas gingivalis	22.13 Epstein-Barr virus (EBV)

#### 12.41 70.62 Mental imbalance / stress

#### As a supportive application in the following diseases:

Behavioural problems with physical disorders Psychosomatic control problems

10.17 L-Tryptophan	64.45 Glutamate
64.13 Oxytocin hormone	64.51 Adrenaline
64.26 Acetylcholine	64.52 Noradrenaline
64.28 Dopamine	64.56 Cortisol
64.29 Serotonin	

#### 12.42 70.63 Wound healing, care after operation

#### As a supportive application in the following diseases:

Post-operative for the support of wound healing
Wound infection / Contamination by bacteria, viruses and parasites
Formation of seromas or hematomas / Cavities with blood resp. tissue fluid
Keloid / Rough tissue proliferations around a scar
Scar hypertrophy / Overgrowth of scar tissue
Wound rupture / Wound reopening because of insufficient wound closure or an infection

20.58 Clostridium septicum
20.59 Clostridium tetani V
20.66 Gardnerella vaginalis
20.81 Propionobacterium acnes
21.12 Erwinia amylovora
21.16 Proteus mirabilis
21.17 Proteus vulgaris
21.22 Serratia marcescens
22.15 Herpes simplex
22.17 Herpes zoster
25.84 Troglodytella abrassarti

#### 12.43 70.64 Development support in children

As a supportive application in the following diseases:

Development disorders in children with limited mental, cognitive, motoric, sensory, emotional and social abilities

Language development disorders

#### Pathogens:

20.11 Alpha streptococcus	20.24 Streptococcus pyogenes
20.12 Beta haemolytic streptococci	22.12 Cytomegalovirus (CMV)
20.19 Staphylococcus aureus	22.13 Epstein-Barr virus (EBV)
20.21 Streptococcus lactis	22.15 Herpes simplex
20.22 Streptococcus mitis	22.17 Herpes zoster
20.23 Streptococcus pneumoniae	23.81 Viruses N.N.

#### 12.44 70.65 Hormonal dysfunction, female

As a supportive application in the following diseases:

Dysregulations related to the female sex hormones

20.11 Alpha streptococcus	20.24 Streptococcus pyogenes
20.12 Beta haemolytic streptococci	22.18 Human papilloma virus (HPV)
20.19 Staphylococcus aureus	24.56 Fasciolopsis buski
20.21 Streptococcus lactis	25.41 Trichomonas vaginalis
20.22 Streptococcus mitis	25.42 Trypanosoma brucei
20.23 Streptococcus pneumoniae	27.11 Candida albicans

#### 12.45 70.66 Hormonal dysfunction, male

#### As a supportive application in the following diseases:

Dysregulations related to the male sex hormones

#### Pathogens:

20.11 Alpha streptococcus	22.18 Human papilloma virus (HPV)
20.12 Beta haemolytic streptococci	24.56 Fasciolopsis buski
20.19 Staphylococcus aureus	24.63 Schistosoma haematobium
20.21 Streptococcus lactis	24.64 Schistosoma mansoni
20.22 Streptococcus mitis	24.65 Urocleidus
20.23 Streptococcus pneumoniae	25.36 Plasmodium cynomolgi
20.24 Streptococcus pyogenes	25.41 Trichomonas vaginalis
22.15 Herpes simplex	25.42 Trypanosoma brucei
22.17 Herpes zoster	27.11 Candida albicans

#### 12.46 70.67 Cartilage growth

#### As a supportive application in the following diseases:

Arthrosis / Pathological and premature degradation of the joint cartilage Cartilage injuries in the joints
Chondromalacia / Cartilage softening
Injuries and fissures in the cartilage substance (meniscus)

09.74 Enzyme, hyaloronidase	30.78 Fibroblasts
30.25 Elastin	30.79 Fibrocytes
30.26 Laminins	52.67 Hyaluronic acid
30.27 Glycosaminoglycan	52.68 Proteoglycans
30.28 Collagen	

#### 12.47 70.68 Parkinson, Restless Legs Syndrome, Polyneuropathy

#### As a supportive application in the following diseases:

Parkinson disease / Diseases of the extrapyramidal-motoric systems
Restless Legs Syndrome / Neurological disease with sensory disorders and urge to move the legs
Polyneuropathy / Diseases of the peripheral nervous system

09.68 Homocysteine	64.45 Glutamate
10.17 L-Tryptophan	64.46 Gamma-amino butyric acids
64.26 Acetylcholine	64.51 Adrenaline
64.28 Dopamine	64.52 Noradrenaline
64.29 Serotonin	

# 13. Information on the RAH programs according to Dr Hamada, MD

The RAH is an open and evolving system that allows experienced therapists to incorporate their best programs – for the ultimate benefit of everyone. Over several years of research with a Rayocomp PS 1000 polar, Dr Yoshimichi Hamada, MD, an urologist from Osaka, Japan, developed programs specifically for the improvement of male and female fertility. To allow therapists worldwide to work with his method, he donated this as well as the associated RAH programs to the RAH for general access.

We hope the following description will provide the interested user with some initial guidance on how to implement the RAH programs of Dr Hamada in an efficient and successful way.

Over the course of all of his investigations and treatments, Dr Hamada was able to ascertain that the following stresses and disturbances critically influenced the fertility of men and women:

1. Pathogen-related stress caused, for example, by bacteria, viruses, fungi or parasites

- 2. Sexual dysfunction
- 3.Interference fields in reproductive organ areas, such as inflammatory diseases or dysfunction of the gonads (ovaries) or testicles (sperm production)
- 4. An imbalance of male or female sex hormones
- 5. A lack of neurotransmitters or their counterparts (antagonists)
- 6. Pressure on the hormonal balance from environmental hormones such as octylphenol, bisphenol A and nonylphenol (endocrine fields of interference)
- 7. Insufficient excretion, detoxification and dissolution of interference fields

# 13.1 Pathogen-related stress caused, for example, by bacteria, viruses, fungi or parasites

Dr Hamada followed a complete new path in order to achieve the optimal harmonisation of a pathogen-related disturbance in the body.

In reference to research conducted by Professor Shizuo Akira at the Research Institute for Microbial Diseases, Osaka, Japan, Dr Hamada managed to determine the respective resistance genes for each pathogen group and tailored these specifically for use with the bioresonance method of therapy. These

resistance genes are comparable in their function and purpose, to the function and purpose of the so-called Toll-like receptors (TLRs) of the immune system.

In his experiments, which greatly contributed to the understanding of TLRs, Professor Shizuo Akira was able to show that TLRs are microbial-sensing proteins that are able to recognise and bind to the specific pattern of a given pathogen group, for example, bacteria. Hence, the TLR family is known as a general sensing system that detects pathogens as part of the innate immune response.

A noteworthy feature is that these receptors do not recognise highly specific structures, in the way antibodies do, but instead recognise common patterns of molecules. This explains how the 10 pathogen groups (RAH 83.11 to RAH 83.20) come to be.

Each of the 10 groups represents a collection of substances or pathogens that share the same molecular pattern and thus can be immunised for with the same resistance gene. As each resistance gene group contains the frequency spectra from the substances, the pathogens and the respective resistance genes, each single RAH program can already be used to great effect on its own.

The grouping of the individual substances and pathogens is given at the end of this description.

#### Example:

#### Resistance gene group II

This group is divided into five subgroups containing viruses (such as the Novo virus), prions, Listeria (bacteria), Malassezia (fungi), and Sarcocystis (parasites). Harmonising the binding element, i.e. the resistance gene, enables the immune system to activate an innate immune response against the entire group of pathogens.

Dr Hamada also advocates the preventative use of resistance gene groups.

Take the example of a patient planning to travel abroad. The efficiency of his or her immune system

can be optimally supported if all resistance genes are harmonised with bioresonance therapy before embarking on the trip.

The recommendation for people who are frequently exposed to pathogens of all kinds, such as naturopaths or physicians, is to undergo regular control tests and, if need be, harmonisation of the resistance genes.

An RAH therapy plan for a patient with otitis media that includes the disturbed resistance gene groups may look as follows:

00.00 Analysis preparation01.00 Vitalisation complete02.00 Acupuncture Meridians complete31.10 ATP Production complete83.10 Resistance genes, groups complete58.30 Middle ear complete

then, if desired, detected pathogens

31.50 Detoxification, basic program 01.00 Vitalisation complete

According to Dr Hamada, the number of required repeat treatments depends on the reaction of the patient. In case of a favourable reaction, once-weekly harmonisation over the course of 4 weeks is sufficient. In resistant cases, Dr Hamada recommends twice-weekly harmonisation.

Generally, an umbrella program is used, namely RAH 83.10 Resistance Genes, Groups Complete. However, you can of course also employ individual programs on specific detailed areas of the umbrella program for testing and harmonisation.

13.2. Sexual dysfunction 191

#### 13.2. Sexual dysfunction

With regard to harmonising sexual dysfunctions, Dr Hamada directly targets the critical control point, the cerebral cortex.

All sensory inputs come together at this point. The sensory organs, for example the eyes, the ears and the skin relay their impressions to the cerebrum. Old modes of behaviour are then checked and compared in relation to the new impressions. Followed by a readjustment according to one's own norms and rules.

Finally, reason is also brought into play to elicit a suitable reaction via the control point.

Therefore, whether a signal is sexually stimulating one time and the complete opposite the next time, crucially depends on the optimal harmonisation of the cerebral area. This, in turn, also gives rise to the libido (sex drive) and sexual energy.

In the RAH, the program Sexual functions complete is found under the program number RAH 83.25.

The detailed parts of this spectrum can be found under the points RAH 83.26 Libido, RAH 83.27 Sexual energy and RAH 83.28 Sexual stimulation, Cerebral cortex.

# 13.3 Interference fields in reproductive organ areas, such as inflammatory diseases or dysfunction of the gonads (ovaries) or testicles (sperm production)

In affected patients, interference fields in reproductive organ areas, such as inflammatory diseases or dysfunction of the gonads (ovaries) or testicles (sperm production), can exist for a long time before they are noticed. As a rule, these disturbances are not due to acute diseases, but rather to past infections that have not been completely cured or to the burden of a chronic condition.

The test options available with bioresonance can identify these interference fields from the past very effectively and harmonise the disturbed frequency spectra in the body.

The relevant interference fields that correspond with the diseases and dysfunctions of men are listed in the RAH under program numbers RAH 83.30 (Male reproduction and Interference fields complete) up to and including program number RAH 83.58.

The relevant interference fields that correspond with the diseases and dysfunctions of women are listed in the RAH under program numbers RAH 83.60 (Female reproduction and Interference fields Complete) up to and including program number RAH 83.68.

#### 13.4. An imbalance of male or female sex hormones

Sex hormones are produced by the gonads, the adrenal cortex and the placenta. They serve the growth and development of the sexual characteristics and facilitate the human body's reproduction.

Concerning the female sex hormones, Dr Hamada places the emphasis for testing and harmonisation on the oestrogen, estradiol, and the progestogen, progesterone. Concerning the male sex hormones, he restricts his focus to the androgen, testosterone, and to dehydroepiandrosterone (DHEA), a precursor hormone for female and male sex hormones.

In the RAH, the program Hormones complete is found under the program number RAH 83.70.

At a detailed level, the differentiation between the following hormones is possible:

RAH 83.71 Testosterone RAH 83.72 Dehydroepiandrosterone RAH 83.76 Progesterone RAH 83.77 Estradiol

#### 13.5. A lack of neurotransmitters or their counterparts (antagonists)

The neurotransmitters of serotonin and dopamine are biochemical compounds that transfer, amplify or modulate stimuli from one neuron (nerve cell) to another neuron or to a cell.

The body requires dopamine to generate feelings of happiness.

This is why this neurotransmitter has also been dubbed the "happy hormone". If the levels of dopamine released by the body are insufficient, individuals suffer from unhappiness, lethargy, listlessness and a lack of interest. Patients with depressive tendencies often have dopamine deficits.

The neurotransmitter serotonin creates feelings of tranquillity, inner calm and contentedness in the body. In the world of our emotions, it dampens aggressive tendencies and controls feelings of anxiety.

Dr Hamada considers the optimal balance between the physical and the mental, i.e. the emotional level of the body, to be of prime importance for a healthy sex life.

As is so often the case in nature, all depends on a perfect balance between the two neurotransmitters. In the long term, too much or too little is unhealthy and affects our body in a negative way.

In the RAH, the program Neurotransmitters complete is found under the program number RAH 83.80.

At a detailed level, the differentiation between the following hormones is possible:

RAH 83.81 Serotonin-dopamine antagonist RAH 83.82 Serotonin RAH 83.83 Dopamine

## 13.6. Pressure on the hormonal balance from environmental hormones such as octylphenol, bisphenol A and nonylphenol (endocrine fields of interference)

Dr Hamada describes the hormonal pollutants octylphenol, bisphenol A and nonylphenol as endocrine fields of interference that influence the ability of humans and animals to reproduce. Generally known under the term of "endocrine disruptors", these pollutants can cause significant disturbances of the hormonal balance of the body, even if they are only taken up in small amounts.

Laboratory studies have shown that these pollutants have the property of attaching themselves to the endogenous hormones of the body. Thus octylphenol, for example, binds to the receptors for the hormone oestrogen. Already the smallest concentrations of octylphenol in the body of laboratory fish (zebra fish) result in a lower number of fertilised eggs and a reduced life expectancy of the offspring. Other consequences apparently include a reduction in the sperm count and behavioural abnormalities.

These pollutants can be found in compounds such as tyre rubber, print colours, paper coating materials, baby pacifiers and plastic bottles for baby foods, plastic plates and cutlery, and tin cans.

There are countless further examples. During his investigations, Dr Hamada discovered that pollutants are released and can enter our food chain when hot liquids are filled into plastic containers or when such containers are put into the dishwasher.

Pollutant substances cannot be degraded in the environment and are deposited, for example, in river sediments. They can also be detected in human urine. Through their excretion via urine these pollutants reach our sewage plants, where special filter systems for these harmful substances are not available in sufficient numbers.

The investigations of Dr Hamada showed that all his patients with fertility problems were affected by such endocrine interference fields in their bodies. These disturbances probably have their origin in babyhood, when the use of silicon pacifiers or plastic bottles filled with warm tea or milk caused the pollutant burden to accumulate in the body. If further disturbances are then added throughout the course life, the symptom in adulthood is sterility.

For testing, Dr Hamada has made the program Endocrine interference fields complete available in the RAH under the program number RAH 83.85.

At a detailed level, the individual tests are available under the program numbers RAH 83.86 Octylphenol, RAH 83.87 Bisphenol A, and RAH 83.88 Nonylphenol.

### 13.7. Insufficient excretion, detoxification and dissolution of interference fields

Based on a multitude of tests and treatment cases, Dr Hamada was able to recognise over the course of his practical experience that excreting toxins and harmful substances or channelling them out of the body is highly important in the treatment of patients with disturbances and interference fields.

Harmonising the body's frequency spectra will reactivate defence mechanisms, promote metabolic processes, and support the mechanisms of self-regulation. While all of this is happening, the movement and excretion of pollutants out of the body has to be secured at the same time.

Regarding detoxification and excretion, Dr Hamada developed a dedicated detoxification program, Detoxification of endocrine interference fields complete, available under the program number RAH 83.95. This completes his holistic treatment scheme for fertility problems and erectile dysfunction.

At a detailed level, the following sub-programs are available: program number RAH 83.96 Activation of endocrine interference fields, RAH 83.97 Genital dysfunctions, and RAH 83.98 Detoxification of endocrine interference fields.

#### 13.8 Hamada-Green Card

Dr Hamada has developed and made available program cards (the RAH Green Cards) for the specific purpose of optimising fertility problems in men and women and also erectile dysfunction in men.

He has included additional frequency spectra in the treatment programs on the program cards, which have been tested specifically for their capacity to optimise harmonisation.

There is no testing, and the recommendation is to apply a therapy program from the relevant card twice a week.

For harmonisation with a Rayocomp PS 10, the Hamada Green Card is simply slotted into the card drive after the device has been switched on.

The treatment program is uploaded instantly, after which the card can be removed and harmonisation initiated.

With the Rayocomp PS 1000 polar you can initiate harmonisation in the same way via the main menu.

#### 13.9 Further applications of the Hamada-Green Card

The issue of sterility, if we wish to define it in this way, is a symptom, in other words a sign, that points to a disease or injury of the body. Owing to the interference fields and disturbances described above, the body is incapable of creating new life. Additionally, however, these interference fields will

also affect many other areas of the human body's function.

Pathogens often cause many infectious diseases. An optimised interplay of the body's hormones and neurotransmitters is a general prerequisite for good health, a good quality of life and achieving one's full potential.

Dr Hamada also uses his Green Cards for the following indications:

#### Hamada Green Card, Sterility female

Menopause
Depression and depressive tendencies
Addiction
Excess weight
ADHD in female patients (especially children)
Neurological symptoms

#### Hamada Green Card, Sterility male

Depression and depressive tendencies

Addictions Excess weight

ADHD in male patients (especially children)

Neurological symptoms

#### 13.10 Contents of the resistance gene groups (RAH 83.11 - RAH 83.20)

#### 83.11 Resistance genes group I

Leptospira interrogans

Dioxin Claviceps purpurae (Ergot)

Gold (Au)
Lead (Pb)
Octylphenol
Trichloroethylene
Veillonella dispar
Echinostoma revolutum.
Ornithonyssus bacoti.

Adenovirus

Clostridium acetobutylicum Clostridium perfringens

Sarcocystis
Parainfluenza
Malassezia
Serratia
Histomonas
Fusarium solani.
Macracanthorhynchus

83.13 Resistance genes group III

#### 83.12 Resistance genes group II

Norovirus

Abnormal prion pro. Corynebacterium

Corynebacterium diphtheriae Clostridium botulinum Clostridium septicum Rubella

Helicobacter pylori

Shiftings

Geomagnetic grids Gardnerella vaginalis

Water veins Electrosmog Mycoplasma Troglodytella abrassarti.

Chilomonas Staphylococci

Staphylococcus aureus

Bisphenol A

Ancylostoma caninum

Campylobacter pylori

Campylobacter

Ancylostoma caninum

Trypanosoma gambiense

Leishmania donovani

Ancylostoma brasiliense

Leishmania mexicana Leishmania brasiliensis

Leishmania tropica

Trypanosoma lewisi

Trypanosoma rhodesiens

Trypanosoma brucei

Trypanosoma cruzi (brain)

Fusobacterium varium

Demodex folliculorum (hair follicle mite)

Acarus siro (flour mite)

#### 83.14 Resistance genes group IV

Histoplasma

Neisseria gonorrhoea

Blepharisma

Cryptosporidium

Pediculidae

Phthiridae

Eikenella corrodens

Sphaerotilus natans

Branhamella

Diphyllo. Nihonkaieuse

Treponema pallidum

Cryptocotyle lingua

Cysticercus fasciolaris/Taenia taeniaformis

Dipylidium cani.

Echinococcus granulosus

Taenia solium

Moniezia (scolex)

Moniezia expansa

Multiceps serialis

Echinococcus granulosus

Echinococcus multiloc.

Dipylidium caninum

Diphyllobothrium laturn

Hymerolepis diminuta

Taenia solium

Diphyllobothrium erinacei

Taenia pisiformis

Taenia saginata

Hymerolepis cystiverc.

Dermatophagoides (dust mite)

Gaffkya tetragena

Naegleria fowleri

Eurytrema pancreaticum

#### 83.15 Resistance genes group V

Hepatitis C virus

Candida albicans

Isospora belli

Chlamydia trachomatis

Formalin

Bacteroides fragilis

Chlamydia trachomatis

Paragonimus Westermani

Formaldehyde

Haemophilus influenzae

Penicillium

Balantidium coli

#### 83.16 Resistance genes group VI

Parkinsonvirus

Streptococcus mutans

Streptococcus mitis

Streptococcus pneumoniae

Streptococcus pyogenes

Beta haemolytic streptococci

Streptococcus lactis

HIV

Coxsackie virus B4

Coxsackie virus B1

Chilomastix cysts (rat)

Palladium (Pd)

Sarcoptes scabei (scabies)

Rotaviruses

Haemonchus contortus

Myxosoma Echinoporyphium

Toluol

Entamoeba histolytica tro. Anaplasma marginale Entamoeba coli trophozoi Iodamoeba bütschlii

lodamoeba bütschlii tropica

Fasciola epatica Cytophaga rubra Entamoeba gingivalis

#### 83.17 Resistance genes group VII

Yersinia enterocolitica

Borellia

Toxoplasma gondii

RS virus Trichuris sp.

Vesiculostomatitis virus Klebsiella pneumoniae Salmonella enteritidis Bordetella pertussis

Loa loa

Salmonella paratyphi Salmonella typhi

Onchocerca volvulus (tumor) Gastrothylax elongatus Strongyloides (filariform) Nocardia asteroides

Metagonimus Yokogawai

Shigella sonni

Schistosoma mansoni Shigella dysenteriae Shigella flexneri Ascaris (worms) Urocleidus

Schistosoma haem. Ascaris megalocephala

#### 83.18 Resistance genes group VIII

Influenza virus A and B

Avian influenza Mumps virus

H1N1 Anisakis

Fischoedrius elongatus Cytomegalovirus (CMV) Herpes simplex 2.

Epstein-Barr virus (EBV)

Leucocytozoon Herpes zoster

Stephanurus dentalus Pain-producing bacteria

Asbest

Dientamoeba fragilis Proteus mirabilis Proteus vulgaris

Pseudomonas aeruginosa Bacillus anthracis V Bacillus cereus Bacillus subtilis Mycobacteria phlei

Hypodereum Clonorchis sinensis

Mycobacteria tuberculosis Molluscum contagiosum virus

Fasciolopsis buski

#### 83.19 Resistance genes group IX

Influenza virus A and B Human papilloma virus (HPV)

Wart (nives)

Plasmodium falciparum Aspergillus fumigatus Aspergillus niger Aspergillus ochraceus

Warts

Trichinella spiralis (Muskel) Human papilloma virus (HPV)

Plasmodium cynomolgi Giardia lamblia (troph.) Plasmodium vivax

**PCB** 

Sterigmatocystin

Endotoxin

Propionbacterium acnes

Hepatitis B virus

Enterobacter aerogenes Trichomonas vaginalis Hasstile sig. tricolor Enterobacter aerogenes Erwinia carotovora Prosthogonimus mac.

Measles virus

Trichophyton verrucosum (trichophytia)

Besnoitia (lung) Stigeoclonium

#### 83.20 Resistance genes group X

Diabetes mellitus virus Japanese enceph. virus

Dengue virus

Pneumocystis jiroveci (carinii)

Spirillum serpens

Spirillum Nonylphenol Endolimax nana

Enterobius vermicularis

Escherichia coli

Dirofilaria immitis (heart worm)
Passalurus ambiguous (rabbit worm)

Gyrodactylus Hepatitis A virus

Capillaria hepatica (liver)

#### 14. Use of bioresonance for detoxification

Living nature only works through intelligent regulation and never through control of its systems. In the sense of a rightly understood naturopathy, in which I include the bioresonance according to Paul Schmidt from my own experience and observations, a controlling therapy is not necessary and therefore does not need to be practised. Of course this does not apply to the emergency medicine field. A treatment should ensure that the organism always maintains its freedom of reaction, or improves its ability to react.

To deal with the disorder of the inner control, is what I wanted to realise with the development of the RAH programs on detoxification. This type of treatment and this approach to disease makes the RAH programs on detoxification so unique. Naturopathically the relationships between the organ functions and the organ itself are as follows. Nature does not know any organs, just functions. This function uses the organ as its tool.

This is the idea behind all RAH detoxification programs. In all RAH detoxification programs it was decided that first the respective organ is stimulated and/or its ability to react is improved. The derivation, excretion and detoxification through the respective organ or organ system or also the complete regulatory circuit, like for example in program RAH 31.53, is the second pillar of this basic concept. The third pillar is the protection of the organ against the accumulating toxins that need excreting.

In earlier days therapists found the cause of many diseases in the accumulation of unwanted substances in the body. These toxins could be exogenous, in other words coming from outside, as well as endogenous, generated by the organism itself. These toxins first poison the blood and then the so-called matrix or basic substance of the body. These toxins prevent the harmonic functioning of the organism. This causes various kind of defence reactions, because the body is trying to free itself

from the poisoning substances. The variety of reactions - for example a cold, bronchitis, eczema, ulcers, diarrhoea and sweating - originate from one and the same attempt the body is making: detoxifying itself.

Hippocrates of Kos \* around 460 B.C. on the Greek Aegean island Kos; † around 370 B.C. in Larissa, Thessally is regarded as the most famous doctor of antiquity. He wrote the following words:

Diseases do not just appear out of the blue, but develop from daily little sins against nature. When they have accumulated, they apparently suddenly break out.

Philippus Theophrastus Aureolus Bombast von Hohenheim, baptised as Theophrastus Bombast von Hohenheim, named Paracelsus, \* presumably 10th of November, 1493 in Egg near Einsiedeln; † 24th of September, 1541 in Salzburg was a doctor, alchemist, astrologist, mystic, lay theologian and philosopher. He continues this line of thinking. He also points to the fact that the strength of recovery is within man himself:

Nature is the first doctor, humans the second.

Thomas Sydenham, \* 10th of September, 1624 in Wynford Eagle near Dorchester, Dorset; † 29th of December, 1689 in London was an English doctor. He is also called the "English Hippocrates". Sydenham presents among others a series of classical descriptions of infectious diseases. First he describes in 1686 chorea minor, named after him. In his work from 1683, for the first time he made a difference between rheumatism and gout. Sydenham says:

Disease is nothing else than nature attempting with all its might to free the patient from harmful substances.

Yoshimasu Todo \* 1702 in Yamaquchi, province of Aki (nowadays roughly: Hashimoto-chō, Naka-ku, Hiroshima); † 1773 in Heian-kyō, Kyōto) was the first-born son of surgeon and obstetrician Hatakeyama Shigemune. His first name was Tamenori, he was called Shūsuke. He later changed his family name and called himself after his place of birth Hiroshima in Yoshimasu and his first name after the residence of his most important motivator and friend Yamawaki Toyo in Todo. Due to his almost legendary treatment achievements Yoshimasu became one of the most famous doctors and medical researchers of Japan and he is considered the absolute Kampo-medical expert of his time. He became known for, among others, his Yoshimasuformula for weight reduction.

Consistent with the at the time generally accepted medical doctrine, that diseases are caused by a disturbed circulation of energy, he considered externally supplied "doku" (toxin), the trigger of a "systemic imbalance", which could be balanced again with an antidote.

Hahnemann comes across homeopathy. The first introduction to a bioinformation medicine. In strongly diluted homeopathic remedies a substantial active agent can no longer be detected.

Hans-Heinrich Reckeweg \* 9th of May, 1905 in Herford / Prussian province of Westphalia; † 13th of June, 1985 in Baden-Baden, founder of homotoxicology, a modification and further development of homeopathy. Together with the Austrian doctor Pischinger he is also one of the first that pointed out the importance of pluripotent tissue, also called matrix or extracellular space or Pischinger's space. Reckeweg takes it one step further to illness and health. He postulates:

Illness is the expression of biologically practical defence processes against exogenous and endogenous toxins. He calls them homotoxins. Consequently, health is the absence of homotoxins or homotoxin lesions.

With his insights, **Paul Schmidt** in 1976 took the step towards treatment of humans exclusively with oscillations or information or bioinformation.

The treatment methods that arise from this way of looking at the pathological process, including the RAH detoxification programs, are consequently rooted in the idea of helping the body to rid itself of harmful substances. Within a holistic approach, therefore, the supply of toxins, also from the diet, has to be regulated in order to exhaust the source of the disturbance.

This clear and simple logic, which has relieved and cured many ill people over centuries, places the therapeutic emphasis during prevention on the processes of excretion, detoxification and immunomodulation; during the treatment of a straightforward acute illnesses on improving symptoms and strengthening the immune system; and during the treatment of a chronic disease on immunomodulation, strengthening of organs, and activation of metabolic processes.

This pattern of therapeutic emphasis remains valid and is taken into account in the RAH detoxification programs by virtue of their specific design. Thus, the value of any treatment is further increased by the use of bioresonance therapy.

#### 14.1 Mesenchyme - cellular milieu - body's biochemical environment

For the matrix, the inner milieu, there is an ideal composition that guarantees a good functioning of the body. Any large quantitative or qualitative deviation in the composition of the body's biochemical environment will result in illness.

If, on occasion, an excessive supply of food or the intake of alcohol or medications cause a limited burden due to toxic substances, this will not have any dramatic consequences, as the body is capable of detoxifying itself and thus re-establishing its ideal biochemical milieu. However, if these deviations become the norm or are even taken to another level day in and day out, the body quickly reaches the limits of its capacity to re-establish an equilibrium. In this case, waste products accumulate in the blood and are eventually deposited in the vessel walls, leading to a reduction in the vessel diameter. The diameter of the vessels decreases. As a consequence the blood becomes more concentrated – it thickens. Circulation grows worse over time and any exchange between the blood and the matrix, and consequently the cells, becomes slower and worse. Waste products, excreted by cells on a regular basis (as part of the elimination process), collect in the tissues (surplus substance) instead of leaving the body quickly. Organs become incapable of working properly (conducting the processes of assimilation and dissimilation). The liver and the kidneys are overstretched with the task of cleansing the body fluids. All processes are disturbed. Both on organ or cellular levels, and matrix level. These disturbances are reflected in enzymatic imbalances and other diverse biochemical reactions, but also in the immune system, for example concerning the white blood cells.

How accurately the above descriptions apply can be seen from diagnosis and therapy. Three phases can be observed in all diseases: excretion, deposition and degeneration. During the phase of excretion, the body is still able to help itself by utilising methods of excretion such as a runny nose or diarrhoea.

During the phase of deposition, toxins are deposited

in the matrix because they can no longer be excreted for the reasons explained above. Either because the organs of excretion are overburdened and weakened in their function or the flood of toxins is overwhelming.

During the third phase, the process of degeneration, with its feared consequences, takes place. The vicariation effect characterises the pathological process.

**Progressive vicariation:** Diseases progress from the outside to the inside, from the less vital to the vital organs. The prognosis is unfavourable.

**Regressive vicariation:** Diseases progress from the inside to the outside, from the vital to the less vital organs. The prognosis is favourable.

The harmful substances or impacts on humans can be classified in:

- Physical influences
- Chemical influences
- Biological / physiological influences
- Mental influences

Among other things, the climate, air-conditioning systems, artificial illumination, noise, electrosmog, vibration, daily ergonomic issues, the colours in your environment and last but not least geopathic stress all fall under the category of physically damaging influences.

Chemically damaging influences include the general exposure to pollution, solvents, biocidal agents, formaldehyde, cleaning products, dust or fine particles, ozone, carbon dioxide, VOC (volatile organic compound) emissions and also odours.

Biological influences are defined as those to which humans are exposed at a physiological level, such as fungi, bacteria, viruses and parasite.

# The HOMOTOXINS (SIX-PHASE-TABLE)

	HUN	HUMORAL PHASES	MATR	MATRIX PHASES	CELLULAR	CELLULARPHASES RAH31.53
	Everation phases	Inflammation phases	Denocition phases	moreographical phases	Dogoporation phases	Do-differentiation phases
Organ system	RAH31.50	RAH31.52	RAH31.54	RAH31.55	RAH31.53	RAH31.53
Skin	Episodes of sweating RAH31.65	Acne RAH31.63	Naevus RAH31.51	Allergy RAH31.66	Scleroderma RAH31.62,31.65	Melanoma RAH31.60
Nervous system	Difficulties concentrating RAH31.67,31.60	Meningitis RAH31.56	Cerebral sclerosis RAH31.58	Migraine RAH31.66,31.67,31.58	Alzheimer's disease RAH31.57	Gliosarcoma RAH31.60
Sensory system	Tears, otorrhoea RAH31.56	Conjunctivitis, ottismedia RAH31.56,31.67	Chalazion, cholesteatoma RAH31.65	Iridocyclitis, tinnitusauriumRAH31. <b>B</b> 65	Macular degeneration, anosmia RAH31.55	Amaurosis, malignancies RAH31.60
Musculoskeletal system	Joint pains RAH31.53	Epicondylitis RAH31.53	Exostosis CAN RAH31.56,31.65 L	Chronic polyarthritis L RAH31.54	Spondylitis RAH31.58	Sarcoma, Chondroma RAH31.60
Respiratory tract	Cough, expectorate RAH31.56	Bronchitis,acute RAH31.66	Silicosis, smoker's lung GRAH31.66,31.67,31.65	Chronic(obstructive) bronchitis RAH31.60	Bronchiectasis, emphysema RAH31.65	Bronchial carcinoma RAH31.60
Cardiovasculars ystem	Functional cardiac complaints RAH31.51,31.58	Endocarditis,pericarditis,myocarditis RAH31.52,31.56,31.65	Coronary heart disease ARAH31.53,31.58	Heart failure	Myocardial infarction RAH31.59	Endothelioma RAH31.60
Gastrointestinalsystem	Heart burn RAH31.56	Gastroenteritis, gastritis RAH31,52	Hyperplasticgastrifis CType A) RAH31.55,31.56	D Chronic gastritis, I malabsorption V RAH31.57	Atrophic gastritis, liver cirrhosis RAH31.56	Carcinoma of the stomach or intestines RAH31.60
Urogenitalsystem	Polyuria RAH31.56	Urinary tract infection RAH31.56	Bladder stones, kidney stones S RAH31.54,31.66	S Chronic unnary tract infection RAH31.61	Cirrhotic kidney RAH31.63	Carcinoma RAH31.60
Blood	Reticulocytosis RAH31.67	Leucocytosis, purulence RAH31.51,31.52	Polycythaemia, thrombocytosis N RAH31.66,31.67	Aggregation disturbance RAH31.65	Anaemia,thrombocytopenia RAH31.57	Leukaemia RAH31.60
Lymphatic system	Lymphatic oedema RAH31.52,31.51	Lymphangitis, tonsillitis, lymphadenitis RAH31.52,31.56	Swelling of the lymph nodes RAH31.52,31.56	Lymphatic insufficiency RAH31.57	Fibrosis RAH31.57	Lymphoma, Hodgkin's/ non- Hodgkin's lymphoma RAH31.60
Metabolism	Electrolyte shift RAH31.51	Lipid disorder RAH31.60,31.59	Gout, obesity RAH31.52,31.51,31.53	Metabolic syndrome RAH31.52	Diabetes mellitus RAH31.62	Non-reactive RAH31.55
Hormonal system	Globus sensation RAH31.52	Thyroiditis RAH31.66,31.67	Goitre,adenoma RAH31.55	Hyperthyroidism, glucoseintolerance RAH 31.58, 31.63	Menopausal symptoms RAH31.56,31.64	Thyroid cancer RAH31.60
Immune system	Susceptibility to infection RAH31.52	Immune system weakness, acute infections RAH31.66,31.67	Poor reactions RAH31.53	Autoimmune diseases, insufficient immune responses, chronicinfections RAH31.64, 31.57	AIDS RAH31.66	Non-reactive RAH31.55
	Alteration*	Reaction*	Fixation*	Chronic forms*	Deficits*	Decoupling*
Psyche	Functional psychological disturbance, "Nervousness" RAH31.66	Reactived epressive syndromes, hyperkineticsyndrome RAH31.51	Psychosomatic manifestations, neuroses,phobias, neurotic depression RAH31.55	Endogenousdepression,psychosis, anxiety neurosis, organicpsychosyndromeRAH31.60	Defect states of schizophrenia, insanity RAH31.60	Mania catatonia RAH31.60
	*Decoriotion of the proposition of the					

\*Description of the psychological phases

Theixi-phase table, which constitutes a matrix of areas, reflects medical experience by means of integrating careful observations and empirical knowledge. It consists of sequentially organised phases of diseases that are not directly related to one another. Deducing a causal pathogenic link between these diseases is not possible. Owing to its design, the table is useful for developing forecasts that allow a better risk evaluation in terms of the occurrence of avicariation effect.

According to the naturopath Gerhard G. Rögele

Psychological influences are generally underestimated. Research results in psychoneuroimmunology point to a connection between the psyche, the nervous system and the immune system. In the main, these detrimental influences take on the shape of excessive or also insufficient demands or a

lack of influence in the sense of individual intentions or wishes not being paid any attention. Insufficient communication – also within a relationship –, bullying at the workplace, private problems, especially slights of any kind, can literally poison a person.

#### 14.2 Basic systems of detoxification

#### Lymphatic system

Anatomic structures are lymph nodes, lymphatic tracts and lymphatic fluid. The very functional aspect in conventional medicine view is that of a discharge system but also that of a supply system. The lymphatic system is the compensation system of the venous system. Hence, in the regulatory circuit of life every venous insufficiency was a lymphatic intoxication in a previous phase. In the RAH programs Detoxification the main focus was therefore on the lymphatic system.

#### Autonomic nervous system

All basic functions are regulated autonomically. This also includes all elimination, detoxifying processes. In the RAH programs Detoxification the main focus is on the fact that the organism is provided with a balanced visceral mode. The autonomic nervous system offers a number of very different systems. These systems make sure that we are alive and stay alive. Therefore these systems instinctively act on impulses. People are healthy in the truest sense of the word when the organism responds adequately to these impulses. An allergy for example is an inadequate impulse response due to intoxication. The naturopathic view does not limit the autonomic nervous system to the sympathetic nervous system, parasympathetic nervous system and intramural nervous system in their entirety as a neuroautonomic system. Functionally, the hormonal system, subordinated to the pituitary gland, is also a part of it. It is the endocrine autonomic nervous

system. This endocrine autonomic nervous system regulates the already mentioned basic functions, such as: Breathing, heartbeat, digestion, metabolism, secretion, water balance, tension in body tissues and stimulus situation. For the development of the RAH programs on detoxification I was guided by the old naturopathic wisdom, "there is no disease in a standard stimulus situation"

#### Colloid system or basic regulation system

The basic regulation takes place in the basic substance. Depending on the way you look at this, the basic substance is the end or the starting point of all biorhythms, all processes of creation or degradation, the endocrine system, the central nervous system, the blood system and the lymphatic system. Basic regulation constitutes a synthesis of the basic substance, collagen and fibroblasts. Fibroblasts are the cells that are found in the connective tissue. They synthesise the intercellular substance as well as collagen and proteoglycan. These proteoglycans act as filters in the matrix.

#### Elimination systems

For the sake of completeness the individual elimination systems should be mentioned. In the RAH programs on detoxification these systems have been merged in a functionally appropriate way. The systems are in detail, the ENT mucous membranes, the mucous membranes, the salivary glands, the lungs, the stomach, the pancreas, the liver, the intestines, the kidneys, the bladder, in females

the ovaries, the urogenital tract and the skin. Systemically a practical summary of the individual organs, organ systems and regulatory circuits (excretion systems) took place in the RAH programs on detoxification, analogous to the embryonic cotyledons and the development of the cotyledons.

We have now gained knowledge about the principles of a cause-oriented bioresonance therapy. With the detoxification programs of the RAH we can positively stimulate all detoxification and excretion regulatory circuits. We act in the sense of an old Asiatic saying, which says:

If you want to chase the tiger (disease) out of your house (body), then first close all doors and windows (excretion systems and detoxification organs), before you tweak its tail (treatment). Often it leaves at its own accord (recovery).

#### 14.3 The RAH detoxification programs in detail

#### **RAH 31.50**

The basic program contains all the central detoxification frequencies. It is a summary of all the body's detoxification functions. Due to the complexity the effectiveness is unspecific. Initially it acts significantly more gentle than the other specific RAH detoxification programs. Very appropriate for elderly people, very ill people and at the beginning of a treatment.

#### **RAH 31.51**

Detoxification blood system. The blood system has a key importance for all detoxification processes. The blood is the central, substantial transport medium in the organism. Contents of the programs are among others the improvement of the flow properties, the improved blood formation and the regeneration. This program can be used well in case of deficiencies, acute illness and convalescence.

#### RAH 31.52

Detoxification lymphatic system. The lymphatic fluid can be seen as blood's sister. In a way Cinderella. Via the lymphatic system all waste, from bacterial corpses to metabolic waste products, is removed. The program contains the protection of the system and the improved lymphatic drainage. It is the basic program for extracellular detoxification.

Improvement of the detoxification capacity on a non-organic level.

#### RAH 31.53

Detoxification acidosis. Acidosis is caused by the accumulation of slags in the matrix. Acidosis of the cells themselves are difficult to diagnose, especially when the matrix itself is not hyperacidic. In the healthy matrix all substances are dissolved. In case of overacidification the substances are in a sort of gel state. They are not available to the organism or only under more difficult conditions. These more difficult conditions require considerable energy. A sign of overacidification is therefore chronic fatigue. The program Acidosis covers both types of overacidification. The program must only be used in the treatment, when the detoxification organs work properly. The use of RAYOBASE may be considered as well. Depending on the type of overacidification it may be combined with the RAH programs 31.54 and 31.55.

#### **RAH 31.54**

Extracellular detoxification is a basic program on detoxification and works on the entire matrix. It is always a good combination with all other detoxification programs.

#### **RAH 31.55**

Intracellular detoxification is the basic program of all chronic diseases, from rheumatism to cancer. Here the intoxication already captured the cells. Hardly ever the program is considered at the beginning of a bioresonance treatment. A good combination is the combination with the RAH 31.52 Detoxification lymphatic system.

#### RAH 31.56

Detoxification mucous membrane. The mucous membranes are delineation organs. The program strengthens the function as well as the mucous membrane itself. A large area of application is in case of allergies that show on the skin and mucous membranes.

#### **RAH 31.57**

Detoxification lung. The lung is responsible for the elimination of gases. Especially the acid carbon dioxide and the ammoniac from the purine metabolism. The program is the little brother of the program RAH 31.53 Detoxification acidosis. The program actively protects the lungs in case of increased acid reduction in the context of detoxification. It may also be used in the context of an asthma treatment.

#### **RAH 31.58**

Detoxification stomach. Apart from the skin the stomach is the universal genius in excreting. It excretes all kind of acids. Additionally it makes sure that sufficient buffer substances are available. The program supports both. It strengthens in particular the stomach as an organ. The program is well applicable for overacidification as well as underacidification of the stomach.

#### **RAH 31.59**

Detoxification pancreas. The pancreas is functionally located before our most important detoxification organ, the liver. The program is primarily focussed on the protection of the pancreas and a good organ function. The very strongly alkaline pancreas also excretes many toxins. The program is useful for all diseases, of the pancreas as well as of the liver. To

relieve the liver the program may also very well be used with program RAH 31.60 Detoxification liver.

#### **RAH 31.60**

Detoxification liver. Like in all organ related increased detoxification programs the protection of the organ is priority. The liver enables substances to be excreted. The program Detoxification liver is the central detoxification program. It is very appropriate at the beginning of any treatment.

#### **RAH 31.61**

Detoxification intestines. The intestine, in particular the large intestine, is the organ with an almost unlimited performance when it comes to detoxification. Acids, bases, water and minerals can be excreted. In the RAH program 31.61 Detoxification intestines emphasis is placed on stimulating the organ in the truest sense of the word. It may very well be used throughout the entire therapeutic process and can always be used again. It shows good results with diarrhoea, intestinal mycosis and colitis.

#### **RAH 31.62**

Detoxification kidney. Although the kidney detoxifies thoroughly, it is also very sensitive. The kidney excretes highly toxic substances, like uric acid. Every stimulation of the kidney function and kidney activity can damage the kidney through serious inflammations. Therefore this program first of all protects the kidney organ. It may be used in all chronic disorders.

#### RAH 31.63

Detoxification bladder. Everything that generates pus-filled spots on the skin or itchy skin was not detoxified properly via the bladder. Program 31.63 Detoxification bladder can be used among others in case of puritus, acne, psoriasis and cystitis.

#### **RAH 31.64**

Detoxification woman / female-specific. Women have a great potential for detoxification because of menstruation. When menopause starts this ability is

limited. This program is primarily intended to enable a transition into menopause without hormones/drugs.

#### **RAH 31.65**

Detoxification skin. This program is the other side of the coin of program 31.63 Detoxification bladder. The program improves the skin function as such. Here the main focus is on the organ skin, because often you will only see problems of other organs there, problems that can be derived from the skin. It may in particular be used in case of allergies.

#### **RAH 31.66**

Detoxification of endotoxins. This program has been particularly developed to optimise the detoxification cascades of the organism after acute diseases, infections or operations. Endotoxins are increased and excretion is improved. It can be used very well after each treatment of antibiosis and as a treatment of allergies.

#### RAH 31.67

Detoxification of exotoxins. The exotoxins in the organism are resolved and excreted through the detoxification cascade. Especially also after acute diseases and infections. It is recommended directly after the removal of amalgam from the teeth and is also an unspecific detoxification program. It can be used at the beginning of a treatment, because it shows the patient's responsiveness.

#### **RAH 31.68**

Detoxification Chlorophyll a and b. (the green colouring in leafy vegetables) enables the transition from sunlight into energy (photosynthesis). In the organism chlorophyll is able to stimulate in particular the excretion of heavy metals and pesticides. Metabolisc activities are optimally supported by chlorophyll.

#### 14.4 Treatment examples for selected diseases

Basically all RAH detoxification programs can be used in each phase of a disease (humoral phase, matrix phase and cellular phase). The program composition predestined some RAH detoxification programs for the corresponding phases. This may be a reference point for a successful treatment. It is no indication of the performance of an RAH detoxification program. The performance/effectiveness is evident in the patient during treatment. All RAH detoxification programs can be combine well with one another.

Diseases develop from the humoral phases via the matrix phases to the cellular phases.

In the **humoral phases** of a disease the following detoxification programs are proposed:

RAH 31.50 Basic detoxification program
RAH 31.51 Detoxification blood system
RAH 31.52 Detoxification lymphatic system
RAH 31.54 Detoxification extra-cellular

Data a see Decoxined to the extra certain

RAH 31.56 Detoxification mucous membrane

RAH 31.67 Detox of exotoxins

In the **matrix phases** of a disease the following detoxification programs are proposed:

RAH 31.53 Detoxification acidosis

RAH 31.55 Detoxification intra-cellular

RAH 31.57 Detoxification lung

RAH 31.64 Detoxification woman / female-specific

In the **cellular phases** of a disease the following detoxification programs are proposed:

RAH 31.53 Detoxification acidosis

Treatment examples and possible procedures, paying particular attention to the RAH detoxification programs:

#### Acute, not chronic, urinary tract infection

The disease is in the **humoral phase**. Thus, possible RAH detoxification programs are:

RAH 31.50 Basic detoxification program

RAH 31.51 Detoxification blood system

RAH 31.52 Detoxification lymphatic system

RAH 31.54 Detoxification extra-cellular

RAH 31.56 Detoxification mucous membrane

RAH 31.67 Detox of exotoxins

Because the disease in the humoral phase has reached the inflammation phase, in particular program RAH 31.52 Detoxification lymphatic system is to be considered.

The specific program for urinary tract infection is program RAH 31.56 Detoxification mucous membranes.

For each treatment session 2 – 3 RAH detoxification programs are often enough.

The possible treatment settings for the RAH detoxification programs for the treatment of an acute urinary tract infection can be:

1. RAH 31.50 Basic detoxification program

or

RAH 31.51 Detoxification blood system

or

RAH 31.54 Detoxification extra-cellular

Or

and

RAH 31.67 Detox of exotoxins

2. RAH 31.52 Detoxification lymphatic system and

3. RAH 31.56 Detoxification mucous membrane

The program composition for a cause-oriented treatment of an acute urinary tract infection might for example look like this:

#### Organ strengthening

RAH 01.30 Pre-control,

RAH 02.17 Bladder meridian,

RAH 07.22 Zinc,

RAH 21.14 Escherichia coli

(80% of the acute urinary tract infections are related to gram negative rod bacteria from the intestinal flora, but also gram positive coccobacilli, mycoplasma, ureaplasma, yeast, chlamydia and viruses)

#### Modulation of the immune system

RAH 35.10 Raising the defence capacity, basic program

#### Detoxification

RAH 31.50 Basic detoxification program
RAH 31.52 Detoxification lymphatic system
RAH 31.56 Detoxification mucous membrane

#### Therapy damage due to medicines

RAH 30.00 Cells and tissue, physiology complete

RAH 30.40 Organelles complete

RAH 34.00 Immune system physiology complete

RAH 35.10 Raising the defence capacity, basic program

RAH 65.10 Female hormonal balance basic regulation or

RAH 65.20 Male hormonal balance basic regulation

RAH 31.50 Basic detoxification program

Excretion of the corresponding substantial toxins via bioresonance

#### Recurrent virus infections

RAH 30.00 Cells and tissue, physiology complete

RAH 30.40 Organelles complete

RAH 31.10 ATP production complete

RAH 22.05 Viruses I complete

RAH 23.05 Viruses II complete

RAH 35.10 Raising the defence capacity, basic

program

RAH 36.00 Lymphatic system physiology complete

RAH 31.50 Basic detoxification program

#### Precancerous conditions

RAH 30.00 Cells and tissue, physiology complete

RAH 30.40 Organelles complete

RAH 30.41 Endoplasmatic reticulum

RAH 30.42 Mitochondria

RAH 30.43 Golgi apparatus

RAH 30.44 Ribosomes

RAH 30.45 Lysosomes

RAH 31.50 - 31.67 Detoxification programs (after

checking out the corresponding organ)

RAH Physiology of the tested organ e.g. 45.00

Kidney

RAH 31.25 ATP production lymph

RAH 32.20 Leukocytes complete WBC

RAH 35.10 Raising the defence capacity, basic

program

RAH 36.50 Thymus gland

RAH 36.60 Spleen

#### Toxic liver damages

RAH 31.60 Detoxification liver

RAH 31.59 Detoxification pancreas

RAH 30.00 Cells and tissue, physiology complete

RAH 30.40 Organelles complete

RAH 48.10 Liver complete

#### Migraine

RAH 30.00 Cells and tissue, physiology complete

RAH 30.41 Endoplasmatic reticulum

RAH 35.11 Raising the unspecific defence

RAH 35.12 Raising the specific defence

RAH 31.10 ATP production complete

RAH 54.10 Central nervous system complete

RAH 45.80 Water removal

RAH 33.60 Oxygen supply / utilisation improvement

RAH 34.00 Immune system physiology complete

RAH 31.50 Basic detoxification program

#### Chronic eczema

RAH 30.00 Cells and tissue, physiology complete

RAH 30.40 Organelles complete

RAH 30.41 Endoplasmatic reticulum

RAH 31.65 Detoxification skin

RAH 31.63 Detoxification bladder

RAH 31.62 Detoxification kidney

RAH 62.10 Skin complete

RAH 44.10 Kidney complete

RAH 35.20 Allergy complete

RAH 30.20 Cell membrane

#### Bronchial asthma

RAH 30.00 Cells and tissue, physiology complete

RAH 31.66 Detox of endotoxins

RAH 31.67 Detox of exotoxins

RAH 31.55 Detoxification intra-cellular

RAH 31.53 Detoxification acidosis

RAH 31.57 Detoxification lung

RAH 31.81 Scar tissue repair

#### **Bronchitis**

RAH 30.00 Cells and tissue, physiology complete RAH 34.00 Immune system physiology complete RAH 31.55 Detoxification intra-cellular

RAH 31.57 Detoxification lung

RAH 35.10 Raising the defence capacity, basic program

RAH 31.80 Open wounds / wound healing

RAH 07.22 Zinc

#### Duodenal ulcer and gastric ulcer

RAH 35.10 Raising the defence capacity, basic program

RAH 31.80 Open wounds / wound healing

RAH 07.22 Zinc

RAH 33.60 Oxygen supply / utilisation improvement

RAH 33.55 Inflammation bone marrow

RAH 30.00 Cells and tissue, physiology complete

RAH 30.42 Mitochondria

RAH 54.00 Nervous system physiology complete

RAH 64.00 Hormonal system, physiology complete

RAH 20.00-21.97 Bacteria (after testing)

#### Arthrosis

RAH 35.10 Raising the defence capacity, basic program

RAH 31.80 Open wounds / wound healing

RAH 07.22 Zinc

RAH 33.60 Oxygen supply / utilisation improvement

RAH 33.55 Inflammation bone marrow

RAH 53.53 Joint degeneration (arthrosis)

RAH 65.10 Female hormonal balance basic regulation

or

RAH 65.20 Male hormonal balance basic regulation

#### Lymphatic diathesis/lymphatism

RAH 35.10 Raising the defence capacity, basic program

RAH 31.80 Open wounds / wound healing

**RAH 07.22 Zinc** 

RAH 33.60 Oxygen supply / utilisation improvement

RAH 33.55 Inflammation bone marrow

RAH 30.00 Cells and tissue, physiology complete

RAH 30.40 Organelles complete

RAH 30.41 Endoplasmatic reticulum

RAH 30.42 Mitochondria

RAH 30.43 Golgi apparatus

RAH 30.44 Ribosomes

RAH 30.45 Lysosomes

RAH 31.52 Detoxification lymphatic system

RAH 37.13 Lymph flow disorder

#### Allergy

RAH 35.20 Allergy complete

RAH 36.00 Lymphatic system physiology complete

RAH 44.10 Kidney complete

RAH 31.10 ATP production complete

RAH 31.62 Detoxification kidney

#### Gout

RAH 51.50 Gout

The following procedures will be employed:

RAH 33.60 Oxygen supply / utilisation improvement

RAH 33.55 Inflammation bone marrow

RAH 31.10 ATP production complete

RAH 30.42 Mitochondria

RAH 31.62 Detoxification kidney

#### 14.5 Summary

Every treatment stands and falls with the anamnesis. Through RAH testing we get a sharpened view of the patient. This gives us an invaluable edge in the cause-oriented identification of diseases, diagnostically as well as therapeutically. Always important are the patient's living environment, his family situation, his medical history, his vaccinations, his routines and his modalities. The entire RAH treatment is founded on three equal key pillars. One is the strengthening of the diseased organ, another is the improvement and support of the defences of the organism and the third pillar is the detoxification.

Detoxification is the first step to healing, because a diseased cell or basic function can only be healed in a healthy environment. The RAH programs on detoxification are therefore vital to the treatment of the matrix.

Be creative with the treatment – for your patient's sake.

Gerhard G. Rögele, naturopath

# 15. Information on the RAH programs according to Dr. G. Breier, MD

Dr Gerd Breier, MD, has been active in his own practice for over 40 years as a doctor and naturopath. As a practitioner of conventional medicine, specialised in osteopathy, he complemented conventional medical knowledge with holistic healing techniques. He focusses on treating back pains, pains in the joints and muscles, headaches, tinnitus or jaw problems. He uses his cause-oriented treatment approach in particular very successfully when treating pain.

Based on his long-term practical experience he developed, in cooperation with the Rayonex therapy and consultation centre, treatment programs that were especially designed for use in the Rayonex analysis and harmonisation system (RAH). His programs can be used by indication. He advises to always combine the programs with a therapy-free day.

The programs from Dr Breier are programs that include physiological as well as pathological frequency structures of the cervical spine, the

elbow, the lumbar spine, the hips and the knee. Frequency spectra of the hyaluronic acids and vitamin B complex are complemented. Dr Breier also developed a supportive treatment program for osteoporosis, a systemic disease that can affect the entire skeleton.

In the osteoporosis program frequency spectra in the fields of physiology and pathology concerning the skeleton and the bone formation are integrated, frequency spectra that stimulate the production and intake of hormones, vitamins and trace elements and therewith support the metabolism. Frequency spectra of the hyaluronic acids and vitamin B complex are integrated.

Compatible with the treatment programs Dr Breier, MD, developed two special forms of detoxification: the cervical detoxification and the lumbar detoxification. The use of the detoxification programs accelerates the pain reduction process.

#### 15.1 Contents and indications of the programs

A pain syndrome is a chronic pain sensation, in which the pain lost its guiding and warning function and acquired its own independent disease status. The symptom pain is described as an autonomous disease, independent of its cause.

- RAH 71.60 Pain syndrome cervical spine
- Pain (pressure- and percussion pain) in the neckshoulder-area above the spine
- Pain in the musculature of neck and shoulder due to hardening and tensions
- Sensory disturbances (tingling, numbness in the shoulder, neck)
- Signs of paralysis
- Headache
- Dizziness
- Visual and hearing disorders
- Tinnitus
- Whiplash

#### RAH 71.61 Pain syndrome elbows

In pain conditions caused by:

- Arthrosis of the elbow
- Fracture of the elbow
- Bursitis (bursitis olecrani)
- Chondromatosis
- Dislocation of the elbow
- Malpositions of the elbow joint
- Cubitus valgus / Cubitus varus
- Tennis or golf elbow
- Epicondylitis

#### RAH 71.62 Pain syndrome hip

In pain conditions caused by:

- Hip arthrosis
- Hip arthritis
- Dysfunctions of muscles, tendons and ligaments
- Bursitis
- Hip dysplasia
- RAH 71.63 Pain syndrome lumbar spine

In pain conditions caused by:

- Lumbago
- Sciatica
- Arthrosis / degenerative changes of the lumbar spine
- Damage of the intervertebral disk in the lumbar spine
- Dysfunctions of muscles, tendons and ligaments
- Traumas
- Fractures

#### RAH 71.64 Pain syndrome knee

In pain conditions caused by:

- Knee arthrosis
- Knee arthritis
- Dysfunctions of muscles, tendons and ligaments
- Bursitis
- Damage to the meniscus
- Water on the knee (joint effusion)
- Inflammations of the knee joint

#### RAH 71.65 Cervical detoxification / pain syndrome

For supportive detoxification in case of functional disorders and pain conditions in the cervical spine area.

#### RAH 71.66 Lumbar detoxification / pain syndrome

For supportive detoxification in case of functional disorders and pain conditions in the lumbar spine area.

Clear symptoms and signs of an osteoporosis disease can be generalised bone pains or accumulated bone fractures. A bone density measurement can be performed to obtain an unequivocal diagnosis.

#### RAH 71.67 Pain syndrome osteoporosis

For support in pain conditions based on osteoporosis diseases.

Osteoporosis symptoms

#### RAH 71.68 Pain syndrome tissue vitality

Contains special frequency spectra for activation of damaged tissue substance and reduction of pain. The program can be individually used to complement other programs.

#### 16. Supporting analysis with test protocols

The idea for test protocols was conceived at the School for Alternative Medicine at the Paul Schmidt Academy. There, you can learn among other things, which organ structures and regulation ranges you have to consider regarding the respective disease. These specifications are also valid for energy testing by means of the RAH. For example, in the case of high blood pressure (hypertension), you should always consider the kidneys because they produce the blood pressure-elevating enzyme renin. The hormonal system is important too, as it has a big influence on the metabolism and the blood pressure. The new analysis support considers exactly these coherences. For example, if you select the frequency structure of the RAH program 39.60 Hypertension, you can also choose (by the push of a button) to have a list of all RAH programs that are linked to this set of symptoms offered for immediate testing. Sometimes this list may include over 50 different areas. The program version that has been available for the Rayocomp PS 1000 polar and the Rayocomp PS 10 already supports 61 disease symptom sets for comprehensive energy testing:

- 1. 33.10 Haemorrhagic anaemia
- 2. 33.21 Renal anaemia
- 3. 33.24 Iron-deficiency anaemia
- 4. 33.25 Vitamin B12 deficiency anaemia
- 5. 33.26 Vitamin B6 deficiency anaemia
- 6. 33.27 Folic acid deficiency anaemia
- 7. 33.70 Polycythaemia
- 8. 35.20 Allergy complete
- 9. 37.14 Tonsillitis, acute
- 10. 39.15 Atherosclerosis
- 11. 39.20 Venous impairment of the blood supply (varicosis)
- 12. 39.60 High blood pressure (hypertension)
- 13. 39.65 Renal hypertension
- 14. 41.20 Cardiac insufficiency, left
- 15. 41.30 Cardiac insufficiency, right
- 16. 41.40 Angina pectoris
- 17. 43.13 Bronchitis, acute

- 18. 43.14 Bronchitis, chronic
- 19. 43.15 Sinusitis, acute
- 20. 43.16 Sinusitis, chronic
- 21. 43.17 Pharyngitis
- 22. 43.18 Laryngitis
- 23. 43.20 Bronchial asthma
- 24. 43.50 Pneumonia, bacterial
- 25. 43.51 Pneumonia, atypical
- 26. 45.05 Kidney failure
- 27. 45.25 Nephrolithiasis (kidney stones)
- 28. 45.35 Cystitis (inflammation of the bladder)
- 29. 47.10 Oesophagitis
- 30. 47.20 Gastritis, acute
- 31. 47.30 Gastritis, chronic
- 32. 47.50 Crohn's disease
- 33. 47.60 Ulcerative colitis
- 34. 47.70 Irritable bowel syndrome (IBS)
- 35. 49.15 Degeneration of the liver
- 36. 49.38 Gallstones
- 37. 51.40 Diabetes mellitus
- 38. 51.50 Gout
- 39. 53.52 Joint inflammation (arthritis)
- 40. 53.80 Osteoporosis
- 41. 53.84 Fibromyalgia
- 42. 55.30 Alzheimer's disease
- 43. 55.31 Parkinson's disease
- 44. 55.43 Multiple Sclerosis
- 45. 55.45 ADD/ADHD
- 46. 55.60 Migraine
- 47. 57.40 Wet macular degeneration WET AMD
- 48. 57.41 Dry macular degeneration Dry AMD
- 49. 57.52 Conjunctivitis
- 50. 59.10 Tinnitus
- 51. 59.21 Otitis media, acute
- 52. 59.40 Acute hearing loss
- 53. 63.10 Psoriasis
- 54. 63.20 Neurodermatitis
- 55. 65.33 Thyroid gland hyperfunction (Hyperthyreosis)
- 56. 65.34 Thyroid gland hypofunction (hypothyroidism)
- 57. 65.60 Menopause complaints

58. 67.30 Endometriosis

59. 72.10 Depression

60. 72.19 Autism

61. 75.17 Giving up an addiction

For each of these 61 test protocols there are detailed notes explaining why a given program should be considered in regard to a given disease or disorder. The naturopath, Ms Bettina Schipper, who is Head of Studies at the Paul Schmidt Academy, a member of the RAH Expert Committee, and who gives presentations on this topic, undertook the task of grouping and describing the individual areas for testing.

The design of the following test protocols is based on the cause-oriented structure that also underpins bioresonance according to Paul Schmidt. The first step consists of energetic testing, e.g. vitalisation and the meridians involved in the disorder. This is followed by suggestions of possible causal influences, ranging

from electrosmog, over nutritional deficiencies, to pollutants. Subsequently, pathogens corresponding to the illness are put forward (based on the work of Ms Schußmann, naturopath, and Dr. Schussmann). This is followed by the appropriate ATP programs devised by Dr. Yayama (Japan), and then all the physiology and pathology programs. As a final step, suitable detoxification programs, developed by the naturopath Mr Rögele, are proposed for testing.

These test protocols create a blueprint for analysing as well as harmonising with the RAH. In addition, they serve the purpose of capturing any energy deficits in the most comprehensive way possible.

These test protocols can be accessed in the RAH module of the Rayocomp PS 1000 polar and in the M 10 module of the Rayocomp PS 10.

You can also record and save the test results by using an RAH Green Card.

33.	.10 Haemorrhagic anaemia	
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.12 Colon meridian		2 min.
02.15 Heart meridian		2 min
02.16 Meridian of the small intestines		2 min.
02.17 Bladder meridian		2 min.
02.19 Liver meridian		2 min
02.22 Gallbladder meridian		2 min
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min
31.41 ATP production bones	target disease.	5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete	treatment approach.	5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min
08.00 Harmful substances (pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.70 Degeneration cell tissue	Blood loss anaemia can be caused by misinformation of cell tissues and their degeneration.	5 min
31.80 Open wounds/ wound healing	Blood loss anaemia can be caused by delayed wound healing.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min
31.82 Post-surgical care	Excessive post-operative bleeding can lead to anaemia.	5 min
32.05 Stem cells of the bone marrow	Damaged stem cells in the bone marrow may be at the root of blood loss anaemia.	5 min

33.10 Haemorrhagic anaemia		
Program no. / Name	Explanatory notes	Time
32.06 Formation of blood (haematopoiesis)	Blood loss causes changes in blood formation.	5 min.
32.10 Erythrocytes RBC complete	Blood loss can lead to a deficiency of red blood cells.	5 min.
32.11 Iron storage (ferritin)	Blood loss anaemia depletes iron reserves.	5 min.
32.20 Leukocytes complete WBC	Blood loss can lead to decreased white blood cell counts.	5 min.
32.30 Thrombocytes PLT complete	Blood loss can lead to decreased white blood cell counts.	5 min.
33.10 Haemorrhagic anaemia	Blood loss anaemia can result from internal bleeding, external blood loss, surgery or certain cancers.	5 min.
33.55 Inflammation bone marrow	Blood loss anaemia can be due to bone marrow inflammation.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 lmmune system physiology complete	Immune system activation plays an important role in haematological disorders.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
36.00 Lymphatic system physiology complete	In haematological disorders, is important to support the lymphatic system.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
44.10 Kidney complete	In the event of anaemia, the kidneys and urinary tract (ureter, bladder and urethra) should be tested as a potential source of bleeding.	
46.30 Stomach complete	Gastrointestinal diseases can cause bleeding and blood loss which may foster anaemia.	5 min.
46.40 Small intestines complete	Diseases of the small intestine can cause bleeding and blood loss.	5 min.
46.50 Colon complete	Diseases of the large intestine can cause bleeding and blood loss.	5 min.
47.30 Gastritis, chronic	Chronic gastritis often causes peptic ulcers, which can in turn lead to bleeding.	5 min.
47.40 Gastric ulcer	Peptic ulcers are a common cause of blood loss anaemia.	5 min.
47.45 Duodenal ulcer	Tests should be performed to check for the presence of duodenal ulcers as a possible cause of blood loss anaemia.	5 min.

33.10 Haemorrhagic anaemia		
Program no. / Name	Explanatory notes	Time
47.50 Crohn's disease	Crohn's disease may cause bleeding.	5 min.
47.60 Ulcerative colitis	Acute ulcerative colitis is typically associated with significant bleeding episodes which can lead to chronic anaemia.	5 min.
48.10 Liver complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
55.55 Headache	Blood loss can cause headaches due to a lack of oxygen.	5 min.
66.30 Internal female genitalia complete	Disorders affecting the female reproductive organs can cause bleeding and anaemia.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
77.15 Periodontitis	Acute inflammation of the periodontal apparatus should be investigated as a possible cause of bleeding.	5 min.
77.25 Gingivitis	Gum infections are often associated with bleeding, which may cause anaemia.	5 min.
82.03 Ferrum phosphoricum	If anaemia is accompanied by iron deficiency, ferrum phosphoricum should be given as a supplement to improve iron uptake.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.76 Mycobacteria tuberculosis	disease deserves particularly attention.	5 min.
21.27 Yersinia enterocolitica		5 min.
21.61 Borrelia		5 min.
21.86 Chlamydia trachomatis		5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria		5 min.
21.96 Tuberculinum burnetti		5 min.
22.12 Cytomegalovirus (CMV)		5 min.

33.10 Haemorrhagic anaemia		
Program no. / Name	Explanatory notes	Time
22.13 Epstein-Barr virus (EBV)	disease deserves particularly attention.	5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1	į	5 min.
22.68 Coxsackie virus B4		5 min.
23.56 Rotaviruses		5 min.
23.81 Viruses N.N.		5 min.
24.32 Trichinella spiralis (muscle)		5 min.
24.33 Trichuris sp.	Ę	5 min.
24.51 Clonorchis sinesi		5 min.
24.61 Paragonimus Westermani		5 min.
24.62 Prosthogonimus macrorchis		5 min.
25.15 Chilomastix cysts (rat)		5 min.
25.16 Chilomonas		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
27.10 Yeast fungi complete		5 min.
51.11 Prions		5 min.
31.51 Detoxification blood system	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.52 Detoxification lymphatic system		5 min.
31.53 Detoxification acidosis		5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete		2 min.

33.21 Renal anaemia		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.12 Colon meridian	Meridians that are associated with the target disease.	2 min.
02.14 Spleen meridian		2 min.
02.15 Heart meridian		2 min.
02.16 Meridian of the small intestines		2 min.
02.17 Bladder meridian		2 min.
02.18 Kidney meridian		2 min.
02.19 Liver meridian		2 min.
02.22 Gallbladder meridian		2 min.
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min.
31.23 ATP production kidney	target disease.	5 min.
31.41 ATP production bones		5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min.
32.06 Formation of blood (haematopoiesis)	Anaemia commonly occurs in people with chronic kidney disease.	5 min.
32.10 Erythrocytes RBC complete	In renal anaemia, the production of red blood cells is diminished.	5 min.
33.21 Renal anaemia	Renal anaemia is caused by diseased or damaged kidneys.	5 min.

33.21 Renal anaemia		
Program no. / Name	Explanatory notes	Time
33.60 Oxygenation / Improvement of Utilisation	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 Immune system physiology complete	Immune system activation plays an important role in haematological disorders.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
36.00 Lymphatic system physiology complete	In haematological disorders, is important to support the lymphatic system.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
44.10 Kidney complete	Renal anaemia is caused by kidney disease.	5 min.
55.55 Headache	Anaemia can lead to headaches due to lack of oxygen.	5 min.
64.65 Erythropoetin (hormone secreted by the kidneys)	Erythropoietin is a hormone which is produced by the kidneys. When the kidneys are diseased or damaged, they do not make enough of the hormone, which promotes renal anaemia.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.66 Gardnerella vaginalis	disease deserves particularly attention.	5 min.
20.76 Mycobacteria tuberculosis		5 min.
21.14 Escherichia coli		5 min.
21.16 Proteus mirabilis		5 min.
21.17 Proteus vulgaris		5 min.
21.27 Yersinia enterocolitica		5 min.
21.61 Borrelia		5 min.
21.86 Chlamydia trachomatis		5 min.

33.21 Renal anaemia		
Program no. / Name	Explanatory notes	Time
21.88 Rickettsiae	In energy terms, the role of these pathogens in the target	5 min.
21.95 Pain-producing bacteria	disease deserves particularly attention.	5 min.
21.96 Tuberculinum burnetti		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
23.56 Rotaviruses		5 min.
23.81 Viruses N.N.		5 min.
24.32 Trichinella spiralis (muscle)		5 min.
24.33 Trichuris sp.		5 min.
24.51 Clonorchis sinesi		5 min.
24.61 Paragonimus Westermani		5 min.
24.62 Prosthogonimus macrorchis		5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.
24.65 Urocleidus		5 min.
25.15 Chilomastix cysts (rat)		5 min.
25.16 Chilomonas		5 min.
25.41 Trichomonas vaginalis		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
27.10 Yeast fungi complete		5 min.
27.11 Candida albicans		5 min.
51.11 Prions		5 min.

33.21 Renal anaemia		
Program no. / Name	Explanatory notes	Time
31.51 Detoxification blood system	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.52 Detoxification lymphatic system		5 min.
31.53 Detoxification acidosis		5 min.
31.60 Detoxification liver		5 min.
31.62 Detoxification kidney		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

33.24 Iron-deficiency anaemia		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.12 Colon meridian	Meridians that are associated with the target disease.	2 min.
02.15 Heart meridian		2 min.
02.16 Meridian of the small intestines		2 min.
02.17 Bladder meridian		2 min.
02.19 Liver meridian		2 min.
02.22 Gallbladder meridian		2 min.
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min.
31.41 ATP production bones	target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment annroach	5 min.
06.00 Acid-base balance complete		5 min.
07.10 Minerals complete		5 min.
07.21 Iron	Iron is an important trace element which is essential for red blood cell formation. It binds to haemoglobin, the red pigment in erythrocytes, as does oxygen.	5 min.
07.23 Copper	Copper also plays an important role in red blood cell formation.	5 min.
08.00 Harmful substances complete	The programs indicated here serve to support a cause-oriented treatment approach.	5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.70 Degeneration cell tissue	Faulty information in cell tissue can lead to degeneration which can also manifest as red blood cell disorders.	5 min.
31.80 Open wounds/wound healing	Open wounds and delayed wound healing also constitute potential causes of iron deficiency anaemia.	5 min.

33.24 Iron-deficiency anaemia		
Program no. / Name	Explanatory notes	Time
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min.
31.82 Post-surgical care	Blood loss during surgery can lead to post-operative iron deficiency anaemia.	5 min.
32.05 Stem cells of the bone marrow	Damaged stem cells in the bone marrow may be at the root of iron deficiency anaemia.	5 min.
32.06 Formation of blood (haematopoiesis)	Iron deficiency anaemia results in decreased formation of erythrocytes.	5 min.
32.10 Erythrocytes RBC complete	Iron deficiency reduces red blood cell counts, thus causing iron deficiency anaemia.	5 min.
32.11 Iron storage (ferritin)	In iron deficiency anaemia, iron stores are depleted.	5 min.
32.20 Leukocytes complete WBC	Depending on the underlying cause of iron deficiency anaemia, white blood cell counts may also be affected.	5 min.
32.30 Thrombocytes PLT complete	Depending on the underlying cause of iron deficiency anaemia, platelet counts may also be affected.	5 min.
33.10 Haemorrhagic anaemia	Iron deficiency anaemia can be caused by bleeding.	5 min.
33.24 Iron-deficiency anaemia	Iron deficiency anaemia	5 min.
33.50 Degeneration bone marrow	Bone marrow disorders can also lead to iron deficiency anaemia.	5 min.
33.55 Inflammation bone marrow	Bone marrow disorders can also lead to iron deficiency anaemia.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 lmmune system physiology complete	Immune system activation plays an important role in haematological disorders.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
36.00 Lymphatic system physiology complete	In haematological disorders, is important to support the lymphatic system.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
42.15 Nasal mucous membrane	Atrophy (breakdown) of the nasal mucosa is one of the many symptoms of iron deficiency anaemia.	5 min.
44.10 Kidney complete	Renal disease can sometimes lead to anaemia, as the kidneys can no longer produce sufficient amounts of erythropoietin, a hormone which stimulates erythropoiesis (red blood cell formation) in the bone marrow.	5 min.

	3.24 Iron-deficiency anaemia	
Program no. / Name	Explanatory notes	Time
46.11 Oral cavity	Iron deficiency anaemia is associated with drying of the oral mucosa and rhagades (fissure cracks) at the corners of the mouth.	5 min
46.12 Tongue	Iron deficiency anaemia causes inflammation of the tongue, breakdown of the papillae and burning tongue.	5 min
46.30 Stomach complete	Gastrointestinal diseases can cause deficient absorption of dietary iron, thus promoting iron deficiency.	5 min
46.31 Stomach glands	Diseases affecting the gastric mucosa and gastric glands can be associated with inadequate uptake of dietary iron and thus promote iron deficiency anaemia.	5 min
46.40 Small intestines complete	Digestive disorders in the small intestine are possible cause or iron deficiency.	5 min
46.43 lleum	Iron is normally absorbed in the ileum, so that disorders affecting the latter can lead to iron deficiency anaemia as a result of inadequate absorption.	5 min
46.50 Colon complete	Disorders which affect the small intestine and may extend to the large intestine may interfere with dietary iron absorption.	5 min
47.20 Gastritis, acute	Acute gastritis (inflammation of the stomach lining) can cause iron deficiency.	5 min
47.30 Gastritis, chronic	Chronic gastritis is a common cause of iron deficiency anaemia.	5 min
47.40 Gastric ulcer	Peptic ulcers are a common cause of iron deficiency anaemia.	5 min
47.45 Duodenal ulcer	Duodenal ulcers are a common cause of iron deficiency anaemia.	5 min
47.50 Crohn's disease	Inflammatory conditions such as Crohn's disease are a common cause of iron deficiency anaemia.	5 min
47.60 Ulcerative colitis	Inflammatory diseases such as ulcerative colitis constitute potential causes of iron deficiency anaemia.	5 min
48.10 Liver complete	Hepatic metabolic disorders may cause iron deficiency, as the liver stores iron in the form of ferritin.	5 min
52.05 Bone cells complete	Disorders affecting bone cells, especially in bone marrow, can lead to iron deficiency.	5 min
52.06 Myelocytes	Bone marrow cell disorders can cause iron deficiency anaemia.	5 min
55.55 Headache	Iron deficiency anaemia is often associated with headaches due the inadequate oxygen supply.	5 min

33.24 Iron-deficiency anaemia		
Program no. / Name	Explanatory notes	Time
62.10 Skin complete	Iron deficiency causes dry and brittle skin.	5 min.
62.20 Skin glands complete	Iron deficiency also causes glands in the skin to dry out.	5 min.
62.50 Hair	Iron deficiency makes the hair dry and brittle.	5 min.
62.60 Nails complete	Iron deficiency also causes the nails to become brittle.	5 min.
65.50 Menstruation programs complete	Iron deficiency anaemia may be caused by menstruation disorders.	5 min.
66.30 Internal female genitalia complete	Iron deficiency may be caused by certain disorders or diseases affecting the female reproductive organs.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.00 Stress	Stress-related factors can lead to a haematological disorder associated with iron deficiency.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
77.15 Periodontitis	Long-term periodontal inflammation is a potential cause of iron deficiency anaemia.	5 min.
77.20 Parodontosis	Degenerative and chronic periodontal disease is a possible cause of iron deficiency.	5 min.
77.25 Gingivitis	Gum infections are often associated with frequent bleeding, which may cause iron deficiency anaemia.	5 min.
82.03 Ferrum phosphoricum	Ferrum phosphoricum (Schüssler Salt no.3) is an excellent homoeopathic remedy which promotes iron uptake and storage in the body. An 8-12 week course of Ferrum phosphoricum and iron supplementation is recommended to replenish the body's iron stores.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.76 Mycobacteria tuberculosis	disease deserves particularly attention.	5 min.
21.27 Yersinia enterocolitica		5 min.

33.24 Iron-deficiency anaemia		
Program no. / Name	Explanatory notes	Time
21.61 Borrelia	disease deserves particularly attention	5 min.
21.86 Chlamydia trachomatis		5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria		5 min.
21.96 Tuberculinum burnetti		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)	Ţ.	5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4	5	5 min.
23.56 Rotaviruses		5 min.
23.81 Viruses N.N.		5 min.
24.32 Trichinella spiralis (muscle)		5 min.
24.33 Trichuris sp.		5 min.
24.51 Clonorchis sinesi		5 min.
24.61 Paragonimus Westermani		5 min.
24.62 Prosthogonimus macrorchis		5 min.
25.15 Chilomastix cysts (rat)		5 min.
25.16 Chilomonas		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
27.10 Yeast fungi complete	_	5 min.
51.11 Prions		5 min.
31.51 Detoxification blood system	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.52 Detoxification lymphatic system		5 min.

33.24 Iron-deficiency anaemia		
Program no. / Name	Explanatory notes	Time
31.53 Detoxification acidosis	consideration for this torget discoss	5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

33.25 Vitamin B12 deficiency anaemia		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.12 Colon meridian	Meridians that are associated with the target disease.	2 min.
02.15 Heart meridian		2 min
02.16 Meridian of the small intestines		2 min.
02.17 Bladder meridian		2 min
02.19 Liver meridian		2 min
02.22 Gallbladder meridian		2 min
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min
31.41 ATP production bones	target disease.	5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete	treatment approach.	5 min
06.00 Acid-base balance complete	Vitamin B12 deficiency is associated with various organ	5 min
07.00 Vital substances complete	disorders and diseases. It mainly affects the nervous system, and to a lesser extent, the digestive tract.	5 min
07.49 Vitamin B12, cobalamin		5 min
08.00 Harmful substances complete	The programs indicated here serve to support a cause-oriented treatment approach.	5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min
32.05 Stem cells of the bone marrow	Vitamin B12 deficiency is associated with impaired red blood cell formation. It can also affect the formation of other blood cells and somatic cells.	5 min
32.06 Formation of blood (haematopoiesis)	Vitamin B12 deficiency affects the formation of all blood cells and is associated with decreased red blood cell counts.	5 min
32.10 Erythrocytes RBC complete	Vitamin B 12 deficiency is associated with reduced red blood cell formation.	5 min

33.25 Vitamin B12 deficiency anaemia		
Program no. / Name	Explanatory notes	Time
32.20 Leukocytes complete WBC	Vitamin B 12 deficiency is associated with reduced white blood cell formation.	5 min.
32.30 Thrombocytes PLT complete	Vitamin B 12 deficiency is associated with reduced platelet formation. $ \\$	5 min.
33.25 Vitamin B12 deficiency anaemia	Pernicious anaemia, also known as Biermer's disease.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 Immune system physiology complete	Immune system activation plays an important role in haematological disorders.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
36.00 Lymphatic system physiology complete	In haematological disorders, is important to support the lymphatic system.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
40.00 Heart physiology complete	Vitamin B12 deficiency affects cardiac activity, especially the conduction system.	5 min.
46.00 Digestive system physiology complete	Vitamin B12 deficiency can cause disorders affecting the entire gastrointestinal tract.	5 min.
46.11 Oral cavity	Vitamin B12 deficiency can cause changes in the oral mucosa and cracks (rhagades) in the corners of the mouth.	5 min.
46.12 Tongue	Vitamin B12 deficiency is associated with changes in the tongue with significant redness and loss of papillary structure (Hunter glossitis).	5 min.
46.30 Stomach complete	In patients with gastric disease, intrinsic factor deficiency can impair vitamin B12 absorption in the small intestine (ileum).	5 min.
46.40 Small intestines complete	The small intestine (ileum) is responsible for the absorption of vitamin B12. Certain diseases can lead to a deficiency of vitamin B12.	5 min.
46.50 Colon complete	Vitamin B12 deficiency can cause changes in intestinal activity and the mucosa.	5 min.
47.20 Gastritis, acute	In acute gastritis, the gastric mucosa produces insufficient amounts of intrinsic factor which disrupts vitamin B12 absorption, resulting in deficiency.	5 min.
47.30 Gastritis, chronic	In chronic gastritis, the gastric mucosa produces insufficient amounts of intrinsic factor which disrupts vitamin B12 absorption, resulting in deficiency.	5 min.

33.25 Vitamin B12 deficiency anaemia		
Program no. / Name	Explanatory notes	Time
47.31 Gastritis, A type	Type A gastritis (also known as atrophic gastritis) an inflammatory disease, leads to loss (atrophy) of gastric glandular cells (which produce intrinsic factor), resulting in vitamin B12 deficiency.	5 min.
47.40 Gastric ulcer	By causing changes and atrophy of the gastric mucosa where intrinsic factor is produced, gastric ulcers, also known as peptic ulcers can lead to vitamin B12 deficiency.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Vitamin B12 deficiency can also significantly affect hepatobiliary and pancreatic function.	5 min.
54.10 Central nervous system complete	Vitamin B12 deficiency impairs the entire CNS, which can lead to neurological diseases.	5 min.
54.20 Peripheral nervous system, complete	Vitamin B12 deficiency also affects the peripheral nervous system, particularly cranial nerve function.	5 min.
54.50 Autonomic nervous system	Vitamin B12 deficiency impairs vagus nerve function (sympathetic and parasympathetic nervous system) and the function of a range of organs (in the cardiovascular and digestive systems, for example)	5 min.
55.40 Neuritis	Vitamin B12 deficiency is a common underlying cause of neuritis.	5 min.
55.41 Neuralgia	Nerve pain is often related to vitamin B12 deficiency.	5 min.
55.42 Nerve degeneration	Vitamin B12 deficiency is associated with degenerative loss of neurons.	5 min.
55.55 Headache	Oxygen deficiency associated with anaemia often causes headaches.	5 min.
62.10 Skin complete	Vitamin B12 deficiency causes changes in the structure of the skin leading to dryness and cracking.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
77.25 Gingivitis	Vitamin B12 deficiency causes changes in the buccal and gingival mucosa.	5 min.

33.25 Vitamin B12 deficiency anaemia		
Program no. / Name	Explanatory notes	Time
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.76 Mycobacteria tuberculosis	disease deserves particularly attention.	5 min.
21.27 Yersinia enterocolitica		5 min.
21.61 Borrelia		5 min.
21.86 Chlamydia trachomatis		5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria		5 min.
21.96 Tuberculinum burnetti		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
23.56 Rotaviruses		5 min.
23.81 Viruses N.N.		5 min.
24.32 Trichinella spiralis (muscle)		5 min.
24.33 Trichuris sp.		5 min.
24.51 Clonorchis sinesi		5 min.
24.61 Paragonimus Westermani		5 min.
24.62 Prosthogonimus macrorchis		5 min.
24.80 Tapeworms complete		5 min.
24.88 Diphyllobothrium latum		5 min.
25.15 Chilomastix cysts (rat)		5 min.

Program no. / Name	Explanatory notes	Time
25.16 Chilomonas	In energy terms, the role of these pathogens in the target	5 min.
25.85 Blood parasites	disease deserves particularly attention.	5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
27.10 Yeast fungi complete		5 min.
51.11 Prions		5 min.
31.51 Detoxification blood system	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.52 Detoxification lymphatic system		5 min.
31.53 Detoxification acidosis		5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

33.26 Vitamin B6 deficiency anaemia		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.12 Colon meridian	Meridians that are associated with the target disease.	2 min.
02.15 Heart meridian		2 min.
02.16 Meridian of the small intestines		2 min.
02.17 Bladder meridian		2 min.
02.19 Liver meridian		2 min.
02.22 Gallbladder meridian		2 min.
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min.
31.41 ATP production bones	target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete		5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
07.46 Vitamin B6, pyridoxine		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min.
32.05 Stem cells of the bone marrow	Vitamin B6 deficiency can damage haematopoietic stem cells in the one marrow.	5 min.
32.06 Formation of blood (haematopoiesis)	Vitamin B6 deficiency interferes with blood cell formation.	5 min.
32.10 Erythrocytes RBC complete	Vitamin B6 deficiency can interfere with red blood cell formation (erythropoiesis).	5 min.

33.26 Vitamin B6 deficiency anaemia		
Program no. / Name	Explanatory notes	Time
32.20 Leukocytes complete WBC	Vitamin B6 deficiency can interfere with white blood cell formation.	5 min.
32.30 Thrombocytes PLT complete	Vitamin B6 deficiency can interfere with platelet formation.	5 min.
33.26 Vitamin B6 deficiency anaemia		5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 lmmune system physiology complete	Immune system activation plays an important role in haematological disorders.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
36.00 Lymphatic system physiology complete	In haematological disorders, is important to support the lymphatic system.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
46.00 Digestive system physiology complete	Vitamin B6 deficiency can affect the digestive organs.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Vitamin B6 deficiency can also affect hepatobiliary and pancreatic function.	5 min.
52.05 Bone cells complete	Vitamin B6 deficiency can affect bone cells.	5 min.
52.06 Myelocytes	Vitamin B6 deficiency can affect bone marrow cells.	5 min.
54.00 Nervous system physiology complete	Vitamin B6 deficiency can impair CNS function and lead to neurological disorders.	5 min.
55.55 Headache	Oxygen deprivation in anaemia often causes headaches.	5 min
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.

33.26 Vitamin B6 deficiency anaemia		
Program no. / Name	Explanatory notes	Time
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.76 Mycobacteria tuberculosis	disease deserves particularly attention.	5 min.
21.27 Yersinia enterocolitica		5 min.
21.61 Borrelia		5 min.
21.86 Chlamydia trachomatis		5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria		5 min.
21.96 Tuberculinum burnetti		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
23.56 Rotaviruses		5 min.
23.81 Viruses N.N.		5 min.
24.32 Trichinella spiralis (muscle)		5 min.
24.33 Trichuris sp.		5 min.
24.51 Clonorchis sinesi		5 min.
24.61 Paragonimus Westermani		5 min.
24.62 Prosthogonimus macrorchis		5 min.
25.15 Chilomastix cysts (rat)		5 min.
25.16 Chilomonas		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
27.10 Yeast fungi complete		5 min.

33.26 Vitamin B6 deficiency anaemia		
Program no. / Name	Explanatory notes	Time
51.11 Prions	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
31.51 Detoxification blood system	consideration for this target disease.	5 min.
31.52 Detoxification lymphatic system		5 min.
31.53 Detoxification acidosis		5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

33.27 Folic acid deficiency anaemia		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.12 Colon meridian	Meridians that are associated with the target disease.	2 min
02.15 Heart meridian		2 min
02.16 Meridian of the small intestines		2 min
02.17 Bladder meridian		2 min
02.19 Liver meridian		2 min
02.22 Gallbladder meridian		2 min
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min
31.41 ATP production bones	target disease.	5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete	treatment approach.	5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min
07.48 Vitamin B9, folic acid		5 min
08.00 Harmful substances (pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min
32.05 Stem cells of the bone marrow	Folic acid deficiency can interfere with blood cell formation.	5 min
32.06 Formation of blood (haematopoiesis)	Folic acid deficiency impairs red blood cell formation (erythropoiesis), primarily resulting in reduced RBC counts.	5 min
32.10 Erythrocytes RBC complete	Folic acid deficiency leads to reduced RBC counts.	5 min

33.27 Folic acid deficiency anaemia		
Program no. / Name	Explanatory notes	Time
32.20 Leukocytes complete WBC	Folic acid deficiency can also reduce white blood cell (WBC) counts.	5 min.
32.30 Thrombocytes PLT complete	Folic acid deficiency can also reduce platelet counts.	5 min.
33.27 Folic acid deficiency anaemia	The clinical picture of folate-deficiency anaemia is similar to that of vitamin B12 deficiency, the difference being that it is not associated with nervous system disorders (neurological symptoms).	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 lmmune system physiology complete	Immune system activation plays an important role in haematological disorders.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
36.00 Lymphatic system physiology complete	In haematological disorders, is important to support the lymphatic system.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
46.00 Digestive system physiology complete	Folic acid deficiency may impair the entire digestive system.	5 min.
46.30 Stomach complete	Gastric disorders affect folic acid uptake and absorption and result in deficiency.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Folic acid deficiency can affect hepatobiliary and pancreatic function.	5 min.
48.30 Pancreas complete	Folic acid deficiency affects digestion and impairs pancreatic hormone secretion.	5 min.
55.55 Headache	Folic acid deficiency can cause headaches as a result of the oxygen deprivation associated with anaemia.	5 min.
64.30 Thyroid gland	Healthy thyroid function is an important prerequisite for maintaining folic acid levels in the body.	5 min.
65.33 Thyroid gland hyperfunction (Hyperthyreosis)	Hyperthyroidism increases the body's consumption of folic acid, causing increased requirements.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.

33.27 Folic acid deficiency anaemia		
Program no. / Name	Explanatory notes	Time
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.76 Mycobacteria tuberculosis	disease deserves particularly attention.	5 min.
21.27 Yersinia enterocolitica		5 min.
21.61 Borrelia		5 min.
21.86 Chlamydia trachomatis		5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria		5 min.
21.96 Tuberculinum burnetti		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
23.56 Rotaviruses		5 min.
23.81 Viruses N.N.		5 min.
24.32 Trichinella spiralis (muscle)		5 min.
24.33 Trichuris sp.		5 min.
24.51 Clonorchis sinesi		5 min.
24.61 Paragonimus Westermani		5 min.
24.62 Prosthogonimus macrorchis		5 min.
25.15 Chilomastix cysts (rat)		5 min.
25.16 Chilomonas		5 min.
25.85 Blood parasites		5 min.

33.27 Folic acid deficiency anaemia		
Program no. / Name	Explanatory notes	Time
25.86 Pneumocystis carinii	In energy terms, the role of these pathogens in the target	5 min.
26.12 Aspergillus niger	disease deserves particularly attention.	5 min.
27.10 Yeast fungi complete		5 min.
51.11 Prions		5 min.
31.51 Detoxification blood system	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.52 Detoxification lymphatic system		5 min.
31.53 Detoxification acidosis		5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

33.70 Polycythaemia		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.11 Lung meridian	Meridians that are associated with the target disease.	2 min.
02.12 Colon meridian		2 min.
02.14 Spleen meridian		2 min.
02.15 Heart meridian		2 min.
02.16 Meridian of the small intestines		2 min.
02.17 Bladder meridian		2 min.
02.19 Liver meridian		2 min.
02.20 Meridian of the heart and circulation		2 min.
02.21 Sanjiao meridian		2 min.
02.22 Gallbladder meridian		2 min.
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min.
31.11 ATP production lung	target disease.	5 min.
31.15 ATP production heart		5 min.
31.41 ATP production bones		5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.

	33.70 Polycythaemia	
Program no. / Name	Explanatory notes	Time
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
32.06 Formation of blood (haematopoiesis)	Haematopoiesis (erythropoiesis in particular) is increased, slowing down blood flow.	5 min.
32.10 Erythrocytes RBC complete	There is a significant increase in haematocrit (volume percentage of red blood cells in blood), which requires diagnosis.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
33.70 Polycythaemia	Polycythaemia is associated with a marked increase in the number of red blood cells.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
36.00 Lymphatic system physiology complete	In haematological disorders, it is important to support the lymphatic system.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
38.10 Arteries	Due to the elevated haematocrit, arterial blood flow is significantly reduced, especially in the smallest arteries, which can deprive the organs of oxygen.	5 min.
38.80 Capillaries	At the capillary level, gas exchange disturbances occur as a result of the significant increase in erythrocytes in polycythaemia. As a result, oxygen supply to the various organ systems is reduced.	5 min.
39.10 Impairment of the arterial blood supply	As a result of the increased number of red blood cells, blood flow is slowed, impairing the blood circulation.	5 min.
40.00 Heart physiology complete	As a result of reduced oxygen supply, cardiovascular disease is associated with increased erythropoiesis.	5 min.
41.20 Cardiac insufficiency, left	Left-sided heart failure can lead to increased erythropoiesis as a result of increasing oxygen deficiency.	5 min.
41.30 Cardiac insufficiency, right	Right-sided heart failure can lead to increased erythropoiesis as a result of increasing oxygen deficiency.	5 min.
42.00 Respiratory system physiology complete	Upper and lower respiratory tract diseases can lead to an increased erythropoiesis due to impaired oxygen supply.	5 min.
43.14 Bronchitis, chronic	Chronic pulmonary diseases are associated with a marked increase in erythropoiesis.	5 min.

33.70 Polycythaemia		
Program no. / Name	Explanatory notes	Time
43.20 Bronchial asthma	Chronic pulmonary diseases are associated with a marked increase in erythropoiesis.	5 min.
44.10 Kidney complete	Certain kidney diseases may cause a significant increase in the production of erythropoietin, leading to a marked increase in red blood cell formation.	5 min.
52.06 Myelocytes	Certain bone marrow disorders can promote the development of polycythaemia.	5 min.
55.55 Headache	Significant increases in red blood cells reduce blood flow and oxygen supply, promoting the onset of headaches.	5 min.
56.34 Retina	The retina shows rapid degeneration in response to oxygen deprivation and disorders may develop.	5 min.
57.10 Retinal detachment	Retinal detachment is a common consequence of chronic oxygen deprivation.	5 min.
57.40 Wet macular degeneration – WET AMD	Chronic oxygen deprivation can lead to macular degeneration.	5 min.
57.41 Dry macular degeneration – Dry AMD	Chronic oxygen deprivation can lead to macular degeneration.	5 min.
58.30 Middle ear complete	Oxygen deprivation in the context of polycythaemia can lead to circulatory problems in the middle ear.	5 min.
58.40 Inner ear complete	Oxygen deprivation in the context of polycythaemia can lead to circulatory problems in the inner ear.	5 min.
59.10 Tinnitus	Circulatory problems and oxygen deprivation, both of which are symptoms of polycythaemia, can give rise to tinnitus (ringing in the ears).	5 min.
59.40 Acute hearing loss	Circulatory problems and oxygen deprivation, which are associated with polycythaemia, can promote a sudden hearing loss.	5 min.
64.00 Hormonal system, physiology complete	Disturbances in haematocrit can be due to endocrine disorders.	5 min.
64.60 Kidney	Increased renal production of erythropoietin result in excessively high haematocrit; this increases the viscosity of the blood, impairing blood flow and reducing oxygen supply, especially at the capillary level.	5 min.
64.65 Erythropoetin (hormone secreted by the kidneys)	Erythropoietin stimulates the formation of erythrocytes (erythropoiesis) in the bone marrow. Polycythaemia can be triggered by increased production of erythropoietin.	5 min.

33.70 Polycythaemia		
Program no. / Name	Explanatory notes	Time
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.76 Mycobacteria tuberculosis	disease deserves particularly attention.	5 min.
21.27 Yersinia enterocolitica		5 min.
21.61 Borrelia		5 min.
21.86 Chlamydia trachomatis		5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria		5 min.
21.96 Tuberculinum burnetti		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
23.56 Rotaviruses		5 min.
23.81 Viruses N.N.		5 min.
24.32 Trichinella spiralis (muscle)		5 min.
24.33 Trichuris sp.		5 min.
24.51 Clonorchis sinesi		5 min.
24.61 Paragonimus Westermani		5 min.

33.70 Polycythaemia		
Program no. / Name	Explanatory notes	Time
24.62 Prosthogonimus macrorchis	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
25.15 Chilomastix cysts (rat)		5 min.
25.16 Chilomonas		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
27.10 Yeast fungi complete		5 min.
51.11 Prions		5 min.
31.51 Detoxification blood system	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.52 Detoxification lymphatic system		5 min.
31.53 Detoxification acidosis		5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

35.20 Allergy complete		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.11 Lung meridian	Meridians that are associated with the target disease.	2 min.
02.12 Colon meridian		2 min.
02.13 Stomach meridian		2 min.
02.14 Spleen meridian		2 min
02.15 Heart meridian		2 min
02.17 Bladder meridian		2 min
02.18 Kidney meridian		2 min
02.19 Liver meridian		2 min
02.21 Sanjiao meridian		2 min
02.22 Gallbladder meridian		2 min
02.24 Meridian of the Conception Vessel		2 min
31.11 ATP production lung	These ATP programs have to be considered in regard to the	5 min
31.31 ATP production eyes	target disease.	5 min
31.38 ATP production skin		5 min
31.39 ATP production blood vessels		5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete	treatment approach.	5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min
08.00 Harmful substances (pollutants) complete		5 min
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.

35.20 Allergy complete		
Program no. / Name	Explanatory notes	Time
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min.
32.20 Leukocytes complete WBC	White blood cells are responsible for the immune response whose reactivity is modified in allergies, in that the immune system recognises certain substances as allergens. Lymphocytes, a kind of white blood cell, produce antibodies which can trigger immediate or delayed hypersensitivity reactions (allergy type 1–4)	5 min.
34.00 Immune system physiology complete	Allergic reactions occur due to an alteration in the immune response which thus requires support.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
35.20 Allergy complete	There are different ways in which the immune system can respond in the event of an allergic reaction. There are three, predominantly antibody-mediated, early-onset reactions (allergy type 1 to 3) and a delayed, cell-mediated reaction (allergy type 4).	5 min
36.00 Lymphatic system physiology complete	The lymphatic system and its organs are very quick to respond in the event of allergic reactions and thus play an important role in the testing process.	5 min
37.12 Lymphadenitis, swelling of a lymph node	In an immune reaction, the lymph nodes are very quick to respond, initially at a localised level.	5 min
37.30 Spleen, strengthening the organ function	The spleen is an important lymphatic organ which breaks down blood cells.	5 min
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min
38.10 Arteries	Allergies can cause inflammatory changes in the arteries.	5 min.
38.50 Veins	Veins can cause inflammatory changes in the arteries.	5 min
39.30 Inflammation of the blood vessels	Allergies can cause the entire vasculature to become inflamed.	5 min
42.00 Respiratory system physiology complete	The upper and lower respiratory tract tend to be the worst affected by allergies, which can cause narrowing of the airways and shortness of breath.	5 min
43.10 Cough	Coughing is a bodily reaction which can also occur as a defence reaction in the context of allergies.	5 min
43.20 Bronchial asthma	Bronchial asthma can be caused by an allergic predisposition in the body.	5 min

	35.20 Allergy complete	
Program no. / Name	Explanatory notes	Time
43.30 Mucoid degeneration	Respiratory obstruction, constriction and coughing are common allergic reactions.	5 min.
46.00 Digestive system physiology complete	Gastrointestinal reactions in allergic disorders are due to the presence of small lymph nodes responsible for the immune response in the ileum, the final segment of the small intestine.	5 min
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min
56.00 General visual organ physiology	Allergies may be associated with inflammatory reactions in the eyes, especially the conjunctiva.	5 min
62.00 Skin / hair, physiology complete	Allergic conditions are associated with skin reactions, redness and swelling.	5 min
64.10 Hypothalamus complete	CRH (corticotropin-releasing hormone) is a front-line stimulatory hormone secreted in the hypothalamus which regulates the production and release of cortisol from the adrenal cortex. Cortisol regulates and modulates the immune response in inflammation and allergy.	5 min
64.20 Pituitary gland complete	ACTH (adrenocorticotropic hormone) is produced in the anterior pituitary gland and stimulates the adrenal cortex into synthesising cortisol and releasing it into the bloodstream. Cortisol dampens the immune response and immune reactivity.	5 min
64.27 Histamine	Histamine, a hormone found in several tissues, is released from mast cells and basophils (white blood cells) during allergic reactions.	5 min
64.55 Adrenal cortex	The adrenal cortex produces cortisol, which exerts antiallergic and immunosuppressive effects, among other things.	5 min
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.

	35.20 Allergy complete	
Program no. / Name	Explanatory notes	Time
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.13 Eikanella corrodens		5 min.
20.19 Staphylococcus aureus	5	5 min.
20.21 Streptococcus lactis		5 min.
20.22 Streptococcus mitis		5 min.
20.23 Streptococcus pneumoniae		5 min.
20.24 Streptococcus pyogenes		5 min.
20.25 Streptococcus sp.		5 min.
20.42 Actinomyces israelii		5 min.
20.44 Bacilli		5 min.
20.46 Bacillus cereus		5 min.
20.47 Bacteroides fragilis		5 min.
20.49 Bordetella pertussis		5 min.
20.66 Gardnerella vaginalis		5 min.
20.67 Haemophilus influenzae		5 min.
20.69 Helicobacter pylori		5 min.
20.70 Lactobacillus acidophilus		5 min.
20.72 Legionella		5 min.
20.76 Mycobacteria tuberculosis		5 min.
20.81 Propionibacterium acnes		5 min.
21.11 Enterobacter aerogenes		5 min.
21.12 Erwinia amylovora		5 min.
21.13 Erwinia carotavora		5 min.
21.15 Klebsiella pneumoniae		5 min.
21.16 Proteus mirabilis		5 min.
21.17 Proteus vulgaris		5 min.
21.19 Salmonella enteritidis		5 min.
21.20 Salmonella paratyphi		5 min.
21.21 Salmonella typhi		5 min.

	35.20 Allergy complete	
Program no. / Name	Explanatory notes	Time
21.22 Serratia marcescens	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
21.23 Shigella dysenteriae		5 min.
21.86 Chlamydia trachomatis		5 min.
21.88 Rickettsiae	Ę	5 min.
21.91 Laryngeal 1 bacteria		5 min.
21.93 Caries bacteria		5 min.
22.11 Adenovirus		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
22.78 Norovirus		5 min.
22.80 Rhinovirus		5 min.
22.82 Tobacco mosaic virus		5 min.
23.16 Parainfluenza		5 min.
23.33 Influenza virus A and B		5 min.
23.56 Rotaviruses		5 min.
23.70 Wart frequencies complete		5 min.
23.81 Viruses N.N.		5 min.
24.21 Ascaris megalocephala		5 min.
24.23 Enterobius vermicularis		5 min.
24.28 Enterobius worms		5 min.
24.31 Strongyloides (filariform)		5 min.
24.51 Clonorchis sinesi		5 min.
24.54 Eurytrema pancreaticum		5 min.
24.56 Fasciolopsis buski		5 min.
24.58 Gastrothylax elongates		5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.

	35.20 Allergy complete	
Program no. / Name	Explanatory notes	Time
24.84 Taenia saginata	In energy terms, the role of these pathogens in the target	5 min.
24.85 Taenia solium	disease deserves particularly attention.	5 min.
25.14 Blepharisma		5 min.
25.15 Chilomastix cysts (rat)		5 min.
25.16 Chilomonas		5 min.
25.35 Naegleria fowleri		5 min.
25.62 Dermatophagoides (dust mite)		5 min.
25.64 Demodex folliculorum (hair follicle mite)		5 min.
25.67 Ornithonyssus (bird mite)		5 min.
25.68 Sarcoptes scabiei (scabies)		5 min.
25.84 Troglodytella abrassarti		5 min.
25.86 Pneumocystis carinii		5 min.
26.05 Fungi I complete		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
27.05 Fungi II complete		5 min.
27.10 Yeast fungi complete		5 min.
27.11 Candida albicans		5 min.
31.52 Detoxification lymphatic system	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.56 Detoxification mucous membrane		5 min.
31.60 Detoxification liver		5 min.
31.62 Detoxification kidney		5 min.
31.65 Detoxification skin		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

37.14 Tonsillitis, acute		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.11 Lung meridian	Meridians that are associated with the target disease.	2 min.
02.12 Colon meridian		2 min.
02.14 Spleen meridian		2 min.
02.17 Bladder meridian		2 min
02.21 Sanjiao meridian		2 min
02.22 Gallbladder meridian		2 min
31.25 ATP production lymph	These ATP programs have to be considered in regard to the target disease.	5 min
04.00 Electrosmog complete	treatment approach.	5 min
05.00 Geopathic disorders complete		5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min
08.00 Harmful substances (pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min
32.20 Leukocytes complete WBC	Leukocytes are responsible for specific and non-specific immunity. In acute tonsillitis, usually of the viral kind, leukocytes often infiltrate the tonsils.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
34.00 lmmune system physiology complete	Inflammatory diseases weaken the immune system.	5 min

37.14 Tonsillitis, acute		
Program no. / Name	Explanatory notes	Time
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
36.00 Lymphatic system physiology complete	The lymphatic system requires support during infections, as this promotes lymphatic drainage and the elimination of toxins.	5 min.
37.12 Lymphadenitis, swelling of a lymph node	Tonsillitis is associated with swelling and inflammation of the regional lymph nodes.	5 min.
37.13 Lymph flow disorder	It is important to promote lymphatic drainage during tonsillitis to ensure proper lymphatic flow.	5 min.
37.14 Tonsillitis, acute	Acute tonsillitis	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
42.00 Respiratory system physiology complete	Tonsillitis is often associated with airway involvement.	5 min.
43.10 Cough	Tonsillitis is often associated with coughing and respiratory disorders.	5 min.
43.17 Pharyngitis	Throat infections are a common cause or consequence of tonsillitis.	5 min.
43.18 Laryngitis	Tonsillitis may be accompanied by laryngitis.	5 min.
59.21 Otitis media, acute (middle ear inflammation)	Tonsillitis may be associated with a middle ear infection.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.19 Staphylococcus aureus		5 min.
20.22 Streptococcus mitis		5 min.
20.23 Streptococcus pneumoniae		5 min.

37.14 Tonsillitis, acute		
Program no. / Name	Explanatory notes	Time
20.24 Streptococcus pyogenes	In energy terms, the role of these pathogens in the target	5 min.
20.44 Bacilli	disease deserves particularly attention.	5 min.
20.49 Bordetella pertussis		5 min.
20.67 Haemophilus influenzae		5 min.
20.72 Legionella		5 min.
20.76 Mycobacteria tuberculosis		5 min.
21.15 Klebsiella pneumoniae		5 min.
21.86 Chlamydia trachomatis		5 min.
21.91 Laryngeal 1 bacteria		5 min.
22.11 Adenovirus		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
22.80 Rhinovirus		5 min.
23.16 Parainfluenza		5 min.
23.33 Influenza virus A and B		5 min.
23.81 Viruses N.N.		5 min.
24.21 Ascaris megalocephala		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
31.52 Detoxification lymphatic system	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

39.15 Atherosclerosis		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.14 Spleen meridian	Meridians that are associated with the target disease.	2 min.
02.15 Heart meridian		2 min.
02.17 Bladder meridian		2 min.
02.18 Kidney meridian		2 min.
02.19 Liver meridian		2 min.
02.20 Meridian of the heart and circulation		2 min.
02.22 Gallbladder meridian		2 min.
31.15 ATP production heart	These ATP programs have to be considered in regard to the	5 min
31.39 ATP production blood vessels	target disease.	5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete	treatment approach.	5 min
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.

39.15 Atherosclerosis		
Program no. / Name	Explanatory notes	Time
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
38.10 Arteries	Atherosclerosis primarily affects small arteries and capillaries, but over time, other arteries also become hardened.	5 min.
38.40 Blood pressure receptors of the carotid artery	Deposits or hardening of the arteries near the heart affect the function of receptors which are present in the carotid arteries; as a result, they can no longer effectively regulate blood pressure.	5 min.
38.80 Capillaries	Due to their small inner diameter, capillaries and small arteries are particularly vulnerable to deposits and hardening caused by atherosclerosis, which can thus cause significant functional limitations even in its early stages.	5 min.
39.15 Atherosclerosis	Atherosclerosis is understood as the formation of deposits in arterial vessels which cause the transformation of vascular epithelium into connective tissue. This conversion is accompanied by a loss of elasticity which impairs the important windkessel effect in the arteries near the heart. This promotes the onset of high blood pressure (hypertension).	5 min.
39.40 Degeneration of the blood vessels	The formation of vascular deposits (plaques) in atherosclerosis causes the blood vessels to harden.	5 min.
39.50 Disorders of blood pressure regulation	Arterial deposits cause changes in blood pressure as a result of a gradual loss of elasticity of the vascular walls which increases intra-arterial pressure, thus promoting hypertension.	5 min.
39.60 High blood pressure (high pressure)	Hypertension promotes the onset of atherosclerosis as a result of tiny injuries to the lining of the blood vessels caused by excessive intravascular pressure. Blood cells and deposits adhere to these rough patches, leading to atherosclerosis.	5 min.
40.13 Myocardium	Atherosclerosis can cause left ventricular overload and subsequent left-sided heart failure. The function of the myocardium (heart muscle) is significantly impaired.	5 min.
40.30 Cardiac valves complete	Atherosclerosis and consequent hypertension place stress on the heart valves which may be damaged as a result.	5 min.
41.10 Strengthening the myocardium	The myocardium requires strengthening during atherosclerosis, as it is clearly overloaded, especially on the left side.	5 min.
41.11 Increasing cardiac capacity	Atherosclerosis is associated with overexertion of the heart, which can impair its performance over time.	5 min.

39.15 Atherosclerosis		
Program no. / Name	Explanatory notes	Time
41.20 Cardiac insufficiency, left	Atherosclerosis is a leading cause of left-sided heart failure.	5 min.
64.10 Hypothalamus complete	Endocrine glands have a significant effect on blood pressure. Their possible causality should be investigated at an early stage.	5 min.
64.20 Pituitary gland complete	Endocrine glands have a significant effect on blood pressure. Their possible causality should be investigated at an early stage.	5 min.
64.30 Thyroid gland	An overactive thyroid gland (hyperthyroidism) causes hypertension which, in turn, promotes the onset of atherosclerosis.	5 min.
64.50 Adrenal medulla	Increased secretion of epinephrine and norepinephrine, two hormones which are synthesised in the adrenal medulla, influences blood pressure and can lead to hypertension, which, in turn, can promote atherosclerosis.	5 min.
64.55 Adrenal cortex	When their secretion is increased, hormones of the adrenal cortex, cortisol in particular, cause the blood pressure to increase.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.66 Gardnerella vaginalis	disease deserves particularly attention.	5 min.
21.14 Escherichia coli		5 min.
21.16 Proteus mirabilis		5 min.
21.17 Proteus vulgaris		5 min.
21.88 Rickettsiae		5 min.
24.22 Dirofilaria immitis (heartworm)		5 min.

39.15 Atherosclerosis		
Program no. / Name	Explanatory notes	Time
24.51 Clonorchis sinensis	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.
24.65 Urocleidus		5 min.
25.15 Chilomastix cysts (rat)		5 min.
25.16 Chilomonas		5 min.
25.41 Trichomonas vaginalis		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
27.10 Yeast fungi complete		5 min.
27.11 Candida albicans		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.60 Detoxification liver		5 min.
31.66 Detox of endotoxins		5 min.
31.67 Detoxification of exotoxins		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.15 Heart meridian	Meridians that are associated with the target disease.	2 min.
02.19 Liver meridian		2 min.
02.20 Meridian of the heart and circulation		2 min.
31.15 ATP production heart	These ATP programs have to be considered in regard to the	5 min.
31.39 ATP production blood vessels	target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, ohysiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
30.70 Connective tissues complete	In varicosis (varicose veins), the connective tissue is altered as it tends to be weakened and unstable even before the onset of the disorder.	5 min
31.80 Open wounds/wound nealing	Venous injuries can promote the development of varicosis, as they alter the vascular wall and blood flow to the heart. Further, possible sedentarity increases the risk of thrombosis.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
37.62 Detoxification	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min

## 39.20 Venous impairment of the blood supply (varicosis) Program no. / Name **Explanatory notes** Time 38.50 Veins Early changes in the vein wall (vascular wall weakness) 5 min. coupled with possible other factors promote the development of a varicosis. 39.20 Venous impairment of Connective tissue weakness, obesity, medication, congestion 5 min. the blood supply (varicosis) (tight clothing/shoes) and frequent increases in pressure (long-distance flights) are key factors in the development of varices (varicose veins) and varicosis. Varicosis significantly affects the overall performance of the 5 min. 40.00 Heart physiology heart and its circulation (the systemic [greater] circulation, complete the pulmonary [lesser] circulation and the portal circulation). 41.30 Cardiac insufficiency, Over time, impaired venous return causes right ventricular 5 min. overload. The right heart can no longer pump enough blood right to the lungs, which deprives the body of oxygen. 48.00 Liver - gall - pancreas, Hepatobiliary disorders and disease can promote varicosis as a 5 min. physiology complete result of back pressure from the liver into the portal vein and venous circulation. Metabolic disorders, diseases such as diabetes mellitus 5 min. 50.00 Metabolism, physiology complete and gout, and increased levels of lipids in the blood (hypercholesterolaemia) all promote arterial and venous system disorders. 62.10 Skin complete Weakening and diseases of the skin and connective tissue 5 min. promote the development of varicosis. Female hormonal balance For anatomical and hormonal reasons, varicosis is more 5 min. basic regulation common in women than men, as women are more likely to exhibit weakening of the connective tissue and have a lower percentage of lean muscle mass. 72.00 Psyche Mental factors should be taken into account in any kind of 5 min. disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions. 75.10 Stress reduction Stress factors can either cause or reinforce disorders. 5 min. 75.20 Mental stress Mental stress, especially persistent stress and psychological 5 min. trauma can either cause or worsen disorders. 76.00 Teeth, physiology The relationship between the teeth and all organs in the 5 min. body should be taken into account in the context of a causecomplete

oriented treatment approach.

39.20 Venous impairment of the blood supply (varicosis)		
Program no. / Name	Explanatory notes	Time
20.22 Streptococcus mitis	disease deserves particularly attention.	5 min.
20.66 Gardnerella vaginalis		5 min.
21.14 Escherichia coli		5 min.
21.88 Rickettsiae		5 min.
24.22 Dirofilaria immitis (heartworm)		5 min.
24.51 Clonorchis sinensis		5 min.
25.15 Chilomastix cysts (rat)		5 min.
25.16 Chilomonas		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
27.10 Yeast fungi complete		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

39.60 H	Fundamentary materials	T:
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.14 Spleen meridian	Meridians that are associated with the target disease.	2 min.
02.15 Heart meridian		2 min.
02.17 Bladder meridian		2 min.
02.18 Kidney meridian		2 min.
02.19 Liver meridian		2 min.
02.20 Meridian of the heart and circulation		2 min.
02.22 Gallbladder meridian		2 min
31.15 ATP production heart	These ATP programs have to be considered in regard to the	5 min
31.23 ATP production kidney	target disease.	5 min
31.39 ATP production blood vessels		5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min

	gh blood pressure (hypertension)	
Program no. / Name	Explanatory notes	Time
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
38.10 Arteries	Hypertension becomes manifest in the arterial vascular system and is favoured by arterial depositions.	5 min.
38.40 Blood pressure receptors of the carotid artery	Blood pressure is regulated by specific receptors located in the aorta and arteries near the heart.	5 min.
38.80 Capillaries	Gas exchange takes place in tiny blood vessels called capillaries. In hypertension, blood flow and the oxygen supply to these peripheral body regions are reduced.	5 min.
39.10 Impairment of the arterial blood supply	Impairments of the arterial blood supply are the consequence of hypertension. They start in the small arteries and over time also appear in the larger arteries.	5 min.
39.15 Atherosclerosis	Atherosclerosis is a disease in which the inner lining of blood vessels becomes hardened. Plaque deposits form on this innermost layer, causing what is known as vascular remodeling. This interferes with continuous and uniform blood flow and eventually leads to hypertension.	5 min.
39.40 Degeneration of the blood vessels	Depositions and arteriosclerosis lead to changes on the internal surfaces of the arteries, which promote hypertension.	5 min.
39.50 Disorders of blood pressure regulation	Hypertension leads to disturbances in blood pressure regulation.	5 min.
39.60 High blood pressure (high pressure)	High blood pressure	5 min.
39.65 Renal hypertension	The kidneys, more specifically kidney disorders, can be the cause of hypertension. The kidneys produce the enzyme renin, which increases blood pressure.	5 min.
40.13 Myocardium	The layers of the heart, more specifically the myocardium or cardiac muscles, generate pressure in the heart and in the arteries exiting from the heart. Increases in pressure lead to a thickening and eventual damage of the myocardial wall.	5 min.
40.30 Cardiac valves complete	Cardiac valve disorders can cause hypertension, while existing hypertension can also damage the cardiac valves.	5 min.
41.10 Strengthening the myocardium	Hypertension places an added strain on the cardiac muscle and eventually causes it to thicken.	5 min.
41.11 Increasing cardiac capacity	Existing high blood pressure means that the heart has to work harder, which over time leads to a decline in cardiac capacity.	5 min.
41.20 Cardiac insufficiency, left	Hypertension affects the left side of the heart in particular, because it is the left part of the heart that pumps oxygenrich blood through the whole body. The left ventricular wall is overworked and weakens over time.	5 min.

39.60 High blood pressure (hypertension)		
Program no. / Name	Explanatory notes	Time
44.10 Kidney complete	The kidneys produce the enzyme renin, which increases blood pressure. Kidney disorders can lead to increased blood pressure, known as renal hypertension. In case of hypertension, please always check the kidneys as a possible cause.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
64.10 Hypothalamus complete	Several hormonal glands can affect blood pressure. The hypothalamus generates stimulatory and inhibitory hormones that influence the anterior and posterior pituitary lobes to produce further hormones. These, in turn, are transported via the blood to, for example, the thyroid gland, which has a significant effect on the body's metabolism and on blood pressure. The adrenal glands produce two hormones. Adrenaline, which is produced in the adrenal medulla, is a stress hormone and increases blood pressure. Cortisone, which is produced in the adrenal cortex, binds water in the body thus increasing its blood volume and consequently contributing to increases in blood pressure. The kidneys produce the enzyme renin, which increases blood pressure. The posterior pituitary lobe produces hormones that include ADH, the antidiuretic hormone. In conjunction with renin released from the kidneys, ADH contributes to an increase in blood pressure by retaining water in the body and thus increasing the blood volume.	5 min.
64.20 Pituitary gland complete		5 min.
64.30 Thyroid gland		5 min.
64.50 Adrenal medulla		5 min
64.55 Adrenal cortex		5 min.
64.60 Kidney		5 min
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.

39.60 High blood pressure (hypertension)		
Program no. / Name	Explanatory notes	Time
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.66 Gardnerella vaginalis	disease deserves particularly attention.	5 min.
21.14 Escherichia coli		5 min.
21.16 Proteus mirabilis		5 min.
21.17 Proteus vulgaris		5 min.
21.88 Rickettsiae		5 min.
24.22 Dirofilaria immitis (heartworm)		5 min.
24.51 Clonorchis sinensis		5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.
24.65 Urocleidus		5 min.
25.15 Chilomastix cysts (rat)		5 min.
25.16 Chilomonas		5 min.
25.41 Trichomonas vaginalis		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
27.10 Yeast fungi complete		5 min.
27.11 Candida albicans		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.60 Detoxification liver		5 min.
31.66 Detox of endotoxins		5 min.
31.67 Detoxification of exotoxins		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.14 Spleen meridian	Meridians that are associated with the target disease.	2 min.
02.17 Bladder meridian		2 min.
02.18 Kidney meridian		2 min.
02.22 Gallbladder meridian		2 min.
31.15 ATP production heart	These ATP programs have to be considered in regard to the	5 min
31.23 ATP production kidney	target disease.	5 min
31.39 ATP production blood vessels		5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete	treatment approach.	5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min
38.10 Arteries	Changes in the arteries, particularly in the renal region, promote the onset of renal hypertension.	5 min

39.65 Renal hypertension		
Program no. / Name	Explanatory notes	Time
38.80 Capillaries	Renal hypertension leads to reduced blood flow in the peripheral and small arteries and impairs gas exchange in the capillaries.	5 min.
39.10 Impairment of the arterial blood supply	Renal hypertension promotes peripheral artery disease.	5 min.
39.50 Disorders of blood pressure regulation	Hypertension leads to disturbances in blood pressure regulation.	5 min.
39.60 High blood pressure (high pressure)	Hypertension can cause high blood pressure in the arteries.	5 min.
39.65 Renal hypertension	Renal hypertension is a kind of high blood pressure caused by narrowing of the arteries that carry blood to the kidneys.	5 min.
40.00 Heart physiology complete	Renal hypertension impairs the overall performance of the heart which can become weakened.	5 min.
44.10 Kidney complete	In the event of renal hypertension, the first step is to rule out kidney disease.	5 min.
50.20 Carbohydrate metabolism	Altered carbohydrate metabolism associated with increased blood glucose levels promotes and enhances the effect of high blood pressure on the arteries.	5 min.
51.40 Diabetes mellitus	Diabetes mellitus is a predisposing factor for atherosclerosis and hypertension. Possible consequences include renal disease.	5 min.
64.60 Kidney	The kidneys influence blood pressure conditions of the body by synthesising renin.	5 min.
64.61 Renin	Renin is an enzyme with a hormone-like structure and effects which is synthesised in the kidneys. Its release activates the renin-angiotensin-aldosterone system (RAAS), resulting in vasoconstriction and increased blood pressure, and sodium and fluid retention in the body.	5 min.
64.62 Angiotensin I	Renin secretion by the kidney stimulates the release of angiotensin I, a peptide hormone produced from angiotensinogen (inactive precursor), itself formed by the liver (and adipose tissue). Angiotensin I is the (as yet inactive) precursor of angiotensin II. Angiotensin-converting enzyme (ACE) converts angiotensin I into angiotensin II, a vasoconstrictor (which constricts the blood vessels).	5 min.
64.63 Angiotensin II	Angiotensin II is a peptide hormone which causes vasoconstriction and a subsequent increase in blood pressure. It is formed from angiotensin I, an inactive precursor, by angiotensin-converting enzyme (ACE). In traditional medicine, renal hypertension is treated with drugs called ACE inhibitors. ACE inhibitors prevent the conversion of angiotensin I to its active form, angiotensin II, thus lowering blood pressure. The cause-oriented treatment approach tests and treats renal disease and can thus have long-term effects on blood pressure.	5 min.

39.65 Renal hypertension		
Program no. / Name	Explanatory notes	Time
64.64 Aldosterone	Angiotensin II stimulates the release of aldosterone, a hormone produced in the adrenal cortex into the bloodstream. This causes sodium and water reabsorption and/or retention while also causing potassium excretion through antagonistic effects. This mechanism, along with the vasoconstrictive effect of angiotensin II, increases arterial blood pressure. Basically and physiologically, once blood pressure has been successfully increased, a negative feedback loop inhibits renin secretion.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.66 Gardnerella vaginalis	In energy terms, the role of these pathogens in the target	5 min.
21.14 Escherichia coli	disease deserves particularly attention.	5 min.
21.16 Proteus mirabilis		5 min.
21.17 Proteus vulgaris		5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.
24.65 Urocleidus		5 min.
25.41 Trichomonas vaginalis		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min
27.11 Candida albicans		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min
31.62 Detoxification kidney		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

41.20 Cardiac insufficiency, left		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.15 Heart meridian	Meridians that are associated with the target disease.	2 min.
02.19 Liver meridian		2 min.
02.20 Meridian of the heart and circulation		2 min.
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min.
31.15 ATP production heart	target disease.	5 min.
31.39 ATP production blood vessels		5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min
38.00 Circulatory system physiology complete	In heart failure, back pressure impairs the vascular system, especially the venous circulation.	5 min

41.20 Cardiac insufficiency, left		
Program no. / Name	Explanatory notes	Time
39.15 Atherosclerosis	Atherosclerosis is a possible cause of left-sided heart failure.	5 min.
39.60 High blood pressure (high pressure)	Hypertension is a possible cause of left-sided heart failure.	5 min.
39.65 Renal hypertension	Renal hypertension is a possible cause of left-sided heart failure.	5 min.
40.10 Heart layers complete	Left-sided heart failure causes long-term thickening of the layers of the heart wall, particularly the myocardium (heart muscle), which may eventually lead to loss of function.	5 min.
40.20 Heart interior complete	In advanced heart failure, the inner chambers of the heart, i.e. the atrium and the two ventricles become enlarged and dilated as a result of increased cardiac output.	5 min.
40.33 Mitral valve	Disorders where the mitral valve (left atrioventricular valve) does not open properly (mitral stenosis) or leaks (mitral regurgitation) promote left-sided heart failure.	5 min.
40.34 Aortic valve	Disorders where the mitral valve (left atrioventricular valve) does not open properly (mitral stenosis) or leaks (mitral regurgitation) promote left-sided heart failure.	5 min.
41.10 Strengthening the myocardium	Left-sided heart failure places greater strain on the left side of the myocardium which becomes thickened as a result.	5 min.
41.11 Increasing cardiac capacity	Left-sided heart failure increases the strain placed on the heart, weakening its performance in the long term.	5 min.
41.20 Cardiac insufficiency, left	In left heart failure, the left heart, especially the muscle structure of the left ventricle (myocardium) becomes abnormally thickened and enlarged, causing it to sag.	5 min.
41.30 Cardiac insufficiency, right	Advanced right-sided heart failure also eventually leads to left-sided heart failure, meaning that the entire heart is affected (bilateral heart failure).	5 min.
42.70 Lung complete	Venous back pressure from the left heart causes increased pressure in the lungs which can lead to fluid retention (pulmonary oedema).	5 min
43.10 Cough	Coughing (cardiac asthma) is due to back pressure from the left heart in the lungs. Pulmonary oedema (fluid in the lungs) may develop in the later course.	5 min
43.14 Bronchitis, chronic	Chronic bronchitis can be fostered by existing left-sided heart failure.	5 min.
44.10 Kidney complete	Heart failure may impair kidney function as a result of changes in blood pressure and fluctuations in the glomerular filtration rate.	5 min.

41.20 Cardiac insufficiency, left		
Program no. / Name	Explanatory notes	Time
64.10 Hypothalamus complete	The hypothalamus is the supreme organ of the endocrine system; it influences blood pressure, which can lead to heart failure when increased.	5 min.
64.20 Pituitary gland complete	Like the hypothalamus, the pituitary gland influences blood pressure, and hypertension can promote left-sided heart failure.	5 min.
64.30 Thyroid gland	An overactive thyroid (hyperthyroidism) may eventually lead to heart failure, as patients also exhibit a high resting heart rate (tachycardia) and typically develop hypertension.	5 min.
64.50 Adrenal medulla	Increased release of adrenaline and noradrenaline, two catecholamine hormones secreted by the adrenal medulla, can lead to heart failure.	5 min.
64.55 Adrenal cortex	Increased release of cortisol, a hormone secreted in the adrenal cortex causes hypertension, resulting in left ventricular overload which may lead to left-sided heart failure.	5 min.
64.60 Kidney	Increased renin production due to renal disease promotes the development of hypertension, which in turn promotes heart failure.	5 min.
64.61 Renin	Increased release of renin (an enzyme) by the kidneys increases systemic blood pressure, thus promoting the development of heart failure.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
21.88 Rickettsiae	disease deserves particularly attention.	5 min.
24.22 Dirofilaria immitis (heartworm)		5 min.
24.51 Clonorchis sinensis		5 min.

Program no. / Name	Explanatory notes	Time
25.15 Chilomastix cysts (rat)	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min
25.16 Chilomonas		5 min
25.85 Blood parasites		5 min
25.86 Pneumocystis carinii		5 min
27.10 Yeast fungi complete		5 min
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min

41.30 Cardiac insufficiency, right		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min
02.15 Heart meridian	Meridians that are associated with the target disease.	2 min
02.19 Liver meridian		2 min
02.20 Meridian of the heart and circulation		2 min
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min
31.15 ATP production heart	target disease.	5 min
31.39 ATP production blood vessels		5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete	treatment approach.	5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min
08.00 Harmful substances (pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min
36.60 Spleen	Right-sided heart failure causes blood to back up from the heart into the inferior vena cava, causing engorgement and increased pressure in the spleen, and eventually its enlargement (splenomegaly).	5 min

Program no. / Name	Explanatory notes	Time
37.30 Spleen, strengthening the organ function	In the event of congestion of the spleen due to right-sided heart failure, prompt supportive measures are required to maintain spleen function.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
38.00 Circulatory system physiology complete	In heart failure, back pressure impairs the vascular system, especially the venous circulation.	5 min.
39.15 Atherosclerosis	Atherosclerosis is a possible cause of heart failure.	5 min.
39.60 High blood pressure (high pressure)	Hypertension influences the development of heart failure.	5 min.
39.65 Renal hypertension	Renal hypertension is a possible cause of heart failure.	5 min.
40.10 Heart layers complete	Right-sided heart failure causes long-term thickening of the layers of the heart wall, particularly the myocardium (heart muscle), which may eventually lead to loss of function.	5 min.
40.20 Heart interior complete	In advanced heart failure, the inner chambers of the heart, i.e. the atrium and the two ventricles become enlarged and dilated as a result of increased cardiac output.	5 min.
40.31 Tricuspid valve	Disorders where the tricuspid valve (right atrioventricular valve) does not open properly (stenosis) or leaks (regurgitation) promote right-sided heart failure.	5 min.
40.32 Pulmonary valve	Disorders where the pulmonary valve does not open properly (stenosis) or leaks (regurgitation) promote right-sided heart failure.	5 min.
41.10 Strengthening the myocardium	Right-sided heart failure places greater strain on the right side of the myocardium which becomes thickened as a result.	5 min.
41.11 Increasing cardiac capacity	Right-sided heart failure increases the strain placed on the heart, weakening its performance in the long term.	5 min.
41.30 Cardiac insufficiency, right	Advanced right-sided heart failure also eventually leads to an impairment of the heart (bilateral heart failure).	5 min.
42.70 Lung complete	Respiratory disorders are a possible cause of right-sided heart failure.	5 min.
43.14 Bronchitis, chronic	Chronic bronchitis is a possible cause of right-sided heart failure.	5 min.
43.20 Bronchial asthma	Bronchial asthma is a common cause of right-sided ventricular disease (cor pulmonale) and eventually, right-sided heart failure.	5 min.

41.30 Cardiac insufficiency, right		
Program no. / Name	Explanatory notes	Time
43.40 Pleuritis sicca / exsudativa	Pleurisy can lead to right heart failure.	5 min.
43.50 Pneumonia, bacterial	Bacterial chest infections can lead to a right-sided ventricular disease and eventually to right-sided heart failure.	5 min.
43.51 Pneumonia, atypical	Atypical (usually viral) chest infections can lead to a right-sided heart strain and eventually to right-sided heart failure.	5 min.
46.20 Oesophagus	Backflow of blood into the lower vena cava in the context of right-sided heart failure causes signs of congestion in the stomach and the oesophagus.	5 min.
46.30 Stomach complete	Backflow of blood into the lower vena cava in the context of right-sided heart failure causes signs of congestion in the stomach and the oesophagus associated with loss of appetite, among other things.	5 min.
46.40 Small intestines complete	Backflow of blood into the lower vena cava in the context of right-sided heart failure causes signs of congestion in the small intestine.	5 min.
46.50 Colon complete	Due to the backflow into the lower vena cava in the case of right-sided heart failure, congestive symptoms occur in the large intestine, which can lead to varicose vein-like changes in the abdominal veins.	5 min.
46.60 Straight bowel	Due to the backflow into the lower vena cava in the case of right-sided heart failure, congestive symptoms occur in the rectum area, which can promote the development of haemorrhoids.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Backflow of blood into the lower vena cava in the context of right-sided heart failure causes signs of congestion in the liver, gallbladder, and pancreas, which can lead to increased pressure in these organs and eventually, their enlargement.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.

41.30 Cardiac insufficiency, right		
Program no. / Name	Explanatory notes	Time
20.22 Streptococcus mitis	disease deserves particularly attention.	5 min.
21.88 Rickettsiae		5 min.
24.22 Dirofilaria immitis (heartworm)		5 min.
24.51 Clonorchis sinensis		5 min.
25.15 Chilomastix cysts (rat)		5 min.
25.16 Chilomonas		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
27.10 Yeast fungi complete		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

41.40 Angina pectoris		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.15 Heart meridian	Meridians that are associated with the target disease.	2 min.
02.19 Liver meridian		2 min.
02.20 Meridian of the heart and circulation		2 min.
31.10 ATP production complete	These ATP programs have to be considered in regard to the target disease.	5 min.
31.15 ATP production heart		5 min.
31.39 ATP production blood vessels		5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented treatment approach.	5 min
05.00 Geopathic disorders complete		5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
38.10 Arteries	The constriction of arteries promotes the development of angina.	5 min

41.40 Angina pectoris		
Program no. / Name	Explanatory notes	Time
38.40 Blood pressure receptors of the carotid artery	Blood pressure receptors regulate arterial blood flow by influencing the narrowing and dilation (vasoconstriction and vasodilation) of arteries near the heart and the carotid artery.	5 min.
38.80 Capillaries	The capillaries, where gas exchange takes place, supply the smallest fractions of organ tissues. The coronary arteries play an important role in ensuring adequate blood supply to cardiac muscle tissue.	5 min.
39.10 Impairment of the arterial blood supply	Impairment of blood flow through the coronary arteries causes symptoms of angina.	5 min.
39.15 Atherosclerosis	Atherosclerosis is a common cause of coronary artery stenosis and angina.	5 min.
39.20 Venous impairment of the blood supply (varicosis)	Possible links between arterial and venous circulatory disorders should be investigated.	5 min.
39.60 High blood pressure (high pressure)	Hypertension is a common cause of angina.	5 min.
39.65 Renal hypertension	Renal hypertension must be investigated as a possible cause in patients with angina.	5 min.
39.70 Low blood pressure (hypotension)	Hypotension (systolic blood pressure below 100 mmHg and diastolic blood pressure below 60 mmHg) can lead to inadequate supply of the coronary arteries, depriving the myocardium of oxygen.	5 min.
40.00 Heart physiology complete	Coronary artery stenosis can lead to heart damage and disease.	5 min.
40.13 Myocardium	In angina, blood supply to the heart muscle is impaired and requires support.	5 min.
40.30 Cardiac valves complete	Heart valve disease may decrease blood flow to the heart muscle.	5 min.
40.40 Conduction system complete	An intact conduction system with a functional sinus node which effectively relays impulses to the next structures is a prerequisite for adequate blood supply to the inner heart chambers, the vessels supplying the heart and the myocardium.	5 min.
41.10 Strengthening the myocardium	In angina, impaired blood flow causes the heart muscle to become overloaded.	5 min.
41.20 Cardiac insufficiency, left	Angina can promote development of left-sided heart failure, as the heart muscle, which is about twice as thick on the left side, is deprived of oxygen.	5 min.
41.30 Cardiac insufficiency, right	In long-term bronchial asthma, the right heart and heart muscle eventually become weakened.	5 min.

41.40 Angina pectoris		
Program no. / Name	Explanatory notes	Time
41.40 Angina pectoris	Angina is a tightness in the chest which manifests as pressure and pain and is caused by constriction of the coronary arteries.	5 min.
42.70 Lung complete	In patients with heart disease and/or coronary artery disease, the lungs should also be tested, as the two organ systems are intimately connected.	5 min.
46.00 Digestive system physiology complete	The digestive system can be affected by heart disease, as oxygen deficiency can cause blood to back up into the upper abdominal organs.	5 min.
54.30 Cranial nerve X (vagus nerve)	The 10th cranial nerve, aka the vagus nerve, plays an important role in various organ systems, particularly the thoracic organs and their function, and the digestive organs.	5 min.
54.50 Autonomic nervous system	The autonomic nervous system can significantly influence heart function, which it is able to enhance in response to stress and in the context of angina.	5 min.
54.60 Psychosomatic control	Psychosomatic factors should always be taken into account in angina, as the causes may be multiple.	5 min.
64.10 Hypothalamus complete	The hypothalamus is the supreme organ of the endocrine system. It also plays a role in blood pressure regulation and can worsen the symptoms of angina.	5 min.
64.20 Pituitary gland complete	Like the hypothalamus, the pituitary gland influences blood pressure, and hypertension can promote angina.	5 min.
64.30 Thyroid gland	An overactive thyroid (hyperthyroidism) may eventually lead to angina, as patients also exhibit a high resting heart rate (tachycardia) and typically develop hypertension.	5 min.
64.50 Adrenal medulla	Increased release of adrenaline and noradrenaline, two catecholamine hormones secreted by the adrenal medulla, can lead to symptoms of angina.	5 min.
64.60 Kidney	Increased renin production due to renal disease promotes the development of hypertension, which in turn promotes coronary heart disease such as angina.	5 min.
64.61 Renin	Increased release of renin (an enzyme) by the kidneys increases systemic blood pressure, thus promoting the development of coronary heart disease.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.

41.40 Angina pectoris		
Program no. / Name	Explanatory notes	Time
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
81.02 Aspen	Bach Flower remedy no.2, Aspen for the relief of anxiety can be used as an adjunctive treatment in an angina attack.	5 min.
81.20 Mimulus	Bach Flower remedy no.20, Mimulus for the relief of anxiety can be used as an adjunctive treatment in an angina attack.	5 min.
20.22 Streptococcus mitis	disease deserves particularly attention.	5 min.
21.88 Rickettsiae		5 min.
24.22 Dirofilaria immitis (heartworm)		5 min.
24.51 Clonorchis sinensis		5 min.
25.15 Chilomastix cysts (rat)		5 min.
25.16 Chilomonas		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
27.10 Yeast fungi complete		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

	43.13 Bronchitis, acute	
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min
02.11 Lung meridian	Meridians that are associated with the target disease.	2 min
02.12 Colon meridian		2 min
02.14 Spleen meridian		2 min
02.17 Bladder meridian		2 min
02.21 Sanjiao meridian		2 min
02.22 Gallbladder meridian		2 min
31.11 ATP production lung	These ATP programs have to be considered in regard to the target disease.	5 min
04.00 Electrosmog complete	treatment approach.	5 min
05.00 Geopathic disorders complete		5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min
07.22 Zinc	Zinc is very important for the immune system and for numerous enzymatic conversion processes in the body.	5 min
08.00 Harmful substances complete	The programs indicated here serve to support a cause-oriented treatment approach.	5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min
31.80 Open wounds / wound healing	Open wounds can increase inflammation and infection in the body.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min
32.20 Leukocytes complete WBC	Leukocytes are responsible for specific and non-specific immunity.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min

43.13 Bronchitis, acute		
Program no. / Name	Explanatory notes	Time
34.00 lmmune system physiology complete	Inflammatory diseases weaken the immune system.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
36.00 Lymphatic system physiology complete	The lymphatic system requires support during infections, as this promotes lymphatic drainage and the elimination of toxins.	5 min.
37.13 Lymph flow disorder	Lymphatic drainage must be promoted for detoxification and clearance of the the mucous membranes lining the bronchi.	5 min.
42.10 Nose / olfactory organ complete	The nose and nasal mucosa often become inflamed before the onset of bronchitis and therefore also require treatment.	5 min.
42.20 Sinuses complete	Sinus infections can turn into bronchitis.	5 min
42.30 Throat	The upper respiratory tract and the pharynx usually become inflamed before the onset of bronchitis.	5 min.
42.40 Larynx complete	Laryngitis can turn into bronchitis.	5 min
42.50 Windpipe	Bronchitis can also affect the trachea as it spreads to the left and right main bronchi.	5 min
42.60 Bronchus complete	Bronchitis causes inflammatory changes in the bronchi.	5 min
42.70 Lung complete	Bronchitis can also cause deterioration of the lungs and alveoli.	5 min
42.71 Alveoles (air sacks)	Bronchitis can also affect the alveoli.	5 min
42.80 Pleura complete	Bronchitis can also spread to the pleura.	5 min
43.10 Cough	Acute cough is a very common symptom of bronchitis.	5 min
43.11 Rhinitis, acute (common cold)	Bronchitis is often preceded and triggered by a cold.	5 min
43.13 Bronchitis, acute	Acute bronchitis	5 min
43.15 Sinusitis, acute	Acute sinus infections can turn into bronchitis.	5 min
43.16 Sinusitis, chronic	Chronic sinus infections can turn into bronchitis.	5 min
43.17 Pharyngitis	Pharyngitis is a possible cause of bronchitis.	5 min
43.18 Laryngitis	Laryngitis is a possible cause of bronchitis.	5 min

	43.13 Bronchitis, acute	
Program no. / Name	Explanatory notes	Time
43.20 Bronchial asthma	Bronchial asthma is a common complication of bronchitis which should be tested early.	5 min.
43.30 Mucoid degeneration	Bronchitis is associated with mucus obstruction and sputum production.	5 min.
43.50 Pneumonia, bacterial	Progressive bronchitis may lead to a bacterial chest infection.	5 min.
43.51 Pneumonia, atypical	A viral (i.e. non-bacterial) chest infection is a possible consequence of bronchitis.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.19 Staphylococcus aureus		5 min.
20.22 Streptococcus mitis		5 min.
20.23 Streptococcus pneumoniae		5 min.
20.24 Streptococcus pyogenes		5 min.
20.44 Bacilli		5 min.
20.49 Bordetella pertussis		5 min.
20.67 Haemophilus influenzae		5 min.
20.72 Legionella		5 min.
20.76 Mycobacteria tuberculosis		5 min.
21.15 Klebsiella pneumoniae		5 min.
21.86 Chlamydia trachomatis		5 min.
21.91 Laryngeal 1 bacteria		5 min.
22.11 Adenovirus		5 min.
22.12 Cytomegalovirus (CMV)		5 min.

43.13 Bronchitis, acute		
Program no. / Name	Explanatory notes	Time
22.13 Epstein-Barr virus (EBV)	disease deserves particularly attention.	5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
22.80 Rhinovirus		5 min.
23.16 Parainfluenza		5 min.
23.33 Influenza virus A and B		5 min.
23.81 Viruses N.N.		5 min.
24.21 Ascaris megalocephala		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
31.55 Detoxification intra- cellular	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.57 Detoxification lung	-	5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

43.14 Bronchitis, chronic		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.11 Lung meridian	Meridians that are associated with the target disease.	2 min.
02.12 Colon meridian		2 min.
02.14 Spleen meridian		2 min.
02.17 Bladder meridian		2 min.
02.21 Sanjiao meridian		2 min.
02.22 Gallbladder meridian		2 min.
31.11 ATP production lung	These ATP programs have to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	treatment approach.	5 min.
05.00 Geopathic disorders complete		5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
07.22 Zinc	Zinc is very important for the immune system and for numerous enzymatic conversion processes in the body.	5 min.
08.00 Harmful substances complete	The programs indicated here serve to support a cause-oriented treatment approach.	5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.80 Open wounds / wound healing	Open wounds can increase inflammation and infection in the body.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
32.20 Leukocytes complete WBC	Leukocytes are responsible for specific and non-specific immunity.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.

Time
5 min

Program no. / Name	Explanatory notes	Time
42.60 Bronchus complete	Bronchitis causes inflammatory changes in the bronchi.	5 min
42.70 Lung complete	Bronchitis can also cause deterioration of the lungs and alveoli.	5 min
42.71 Alveoles (air sacks)	Bronchitis can also affect the alveoli.	5 min
42.80 Pleura complete	Bronchitis can also spread to the pleura.	5 min
43.10 Cough	Acute cough is a very common symptom of bronchitis.	5 min
43.11 Rhinitis, acute (common cold)	Bronchitis is often preceded and triggered by a cold.	5 min
43.14 Bronchitis, chronic	Chronic bronchitis	5 min
43.15 Sinusitis, acute	Acute sinus infections can turn into bronchitis.	5 min
43.16 Sinusitis, chronic	Chronic sinus infections can turn into bronchitis.	5 min
43.17 Pharyngitis	Pharyngitis is a possible cause of bronchitis.	5 min
43.18 Laryngitis	Laryngitis is a possible cause of bronchitis.	5 min
43.20 Bronchial asthma	Bronchial asthma is a common complication of bronchitis which should be tested early.	5 min
43.30 Mucoid degeneration	Bronchitis is associated with mucus obstruction and sputum production.	5 min
43.50 Pneumonia, bacterial	Progressive bronchitis may lead to a bacterial chest infection.	5 min
43.51 Pneumonia, atypical	A viral (i.e. non-bacterial) chest infection is a possible consequence of bronchitis.	5 min
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min

43.14 Bronchitis, chronic		
Program no. / Name	Explanatory notes	Time
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.19 Staphylococcus aureus		5 min.
20.22 Streptococcus mitis		5 min.
20.23 Streptococcus pneumoniae		5 min.
20.24 Streptococcus pyogenes		5 min.
20.44 Bacilli		5 min.
20.49 Bordetella pertussis		5 min.
20.67 Haemophilus influenzae		5 min.
20.72 Legionella		5 min.
20.76 Mycobacteria tuberculosis		5 min.
21.15 Klebsiella pneumoniae	5	5 min.
21.86 Chlamydia trachomatis		5 min.
21.91 Laryngeal 1 bacteria		5 min.
22.11 Adenovirus		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
22.80 Rhinovirus		5 min.
23.16 Parainfluenza		5 min.
23.33 Influenza virus A and B		5 min.
23.81 Viruses N.N.		5 min.
24.21 Ascaris megalocephala		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.

43.14 Bronchitis, chronic		
Program no. / Name	Explanatory notes	Time
31.55 Detoxification intra- cellular	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.57 Detoxification lung		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	

43.15 Sinusitis, acute		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min
02.11 Lung meridian	Meridians that are associated with the target disease.	2 min
02.12 Colon meridian		2 min
02.14 Spleen meridian		2 min
02.17 Bladder meridian		2 min
02.21 Sanjiao meridian		2 min
02.22 Gallbladder meridian		2 min
31.25 ATP production lymph	These ATP programs have to be considered in regard to the target disease.	5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete	treatment approach.	5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min
08.00 Harmful substances (pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
34.00 lmmune system physiology complete	Inflammatory disorders call for immune system support.	5 min

43.15 Sinusitis, acute		
Program no. / Name	Explanatory notes	Time
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
36.00 Lymphatic system physiology complete	The lymphatic system requires support during infections, as this promotes lymphatic drainage and the elimination of toxins.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
42.10 Nose/olfactory organ complete	Sinusitis (inflammation of the sinuses) is often caused by an infection in the nasal cavity.	5 min.
42.20 Sinuses complete	Sinusitis can affect all nasal sinuses or individual sinuses.	5 min.
43.11 Rhinitis, acute (common cold)	Acute rhinitis, also known as the common cold is one of the most common causes of sinusitis.	5 min.
43.15 Sinusitis, acute	Acute sinusitis	5 min.
54.25 Cranial nerve V (N. trigeminus)	Sinusitis can also involve the trigeminal nerve, which is responsible for sensation in the face and has three branches. In trigeminal neuralgia, pain can be felt around the frontal sinuses and the maxillary cavities.	5 min.
55.55 Headache	Headache is a common symptom of sinusitis.	5 min.
56.00 General visual organ physiology	Sinus infections can affect the eyes.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
76.16 Tooth 16	In case of inflammation of the right maxillary sinus, infection in the two lateral molars in the right upper jaw should be ruled out as a possible cause. The root tips can extend into the right maxillary sinus and dental root infections can cause sinusitis.	5 min.

43.15 Sinusitis, acute		
Program no. / Name	Explanatory notes	Time
76.17 Tooth 17	In case of inflammation of the right maxillary sinus, infection in the two lateral molars in the right upper jaw should be ruled out as a possible cause. The root tips can extend into the right maxillary sinus and dental root infections can cause sinusitis.	5 min.
76.26 Tooth 26	In case of inflammation of the left maxillary sinus, infection in the two lateral molars in the left upper jaw should be ruled out as a possible cause. The root tips can extend into the left maxillary sinus and dental root infections can cause sinusitis.	5 min.
76.27 Tooth 27	In case of inflammation of the left maxillary sinus, infection in the two lateral molars in the left upper jaw should be ruled out as a possible cause. The root tips can extend into the left maxillary sinus and dental root infections can cause sinusitis.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.19 Staphylococcus aureus		5 min.
20.22 Streptococcus mitis		5 min.
20.23 Streptococcus pneumoniae		5 min.
20.24 Streptococcus pyogenes		5 min.
20.44 Bacilli		5 min.
20.49 Bordetella pertussis		5 min.
20.67 Haemophilus influenzae		5 min.
20.72 Legionella		5 min.
20.76 Mycobacteria tuberculosis		5 min.
21.15 Klebsiella pneumoniae		5 min.
21.86 Chlamydia trachomatis		5 min.
21.91 Laryngeal 1 bacteria		5 min.
22.11 Adenovirus		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.

43.15 Sinusitis, acute		
Program no. / Name	Explanatory notes	Time
22.67 Coxsackie virus B1	In energy terms, the role of these pathogens in the target	5 min.
22.68 Coxsackie virus B4	disease deserves particularly attention.	5 min.
22.80 Rhinovirus		5 min.
23.16 Parainfluenza		5 min.
23.33 Influenza virus A and B	Ę	5 min.
23.81 Viruses N.N.		5 min.
24.21 Ascaris megalocephala		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
31.56 Detoxification mucous membrane	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

43.16 Sinusitis, chronic		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min
02.11 Lung meridian	Meridians that are associated with the target disease.	2 min
02.12 Colon meridian		2 min
02.14 Spleen meridian		2 min
02.17 Bladder meridian		2 min
02.21 Sanjiao meridian		2 min
02.22 Gallbladder meridian		2 min
31.25 ATP production lymph	These ATP programs have to be considered in regard to the target disease.	5 min
04.00 Electrosmog complete	treatment approach	5 min
05.00 Geopathic disorders complete		5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min
08.00 Harmful substances (pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
34.00 lmmune system physiology complete	Inflammatory disorders call for immune system support.	5 min

43.16 Sinusitis, chronic		
Program no. / Name	Explanatory notes	Time
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
36.00 Lymphatic system physiology complete	The lymphatic system requires support during infections, as this promotes lymphatic drainage and the elimination of toxins.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
42.10 Nose/olfactory organ complete	Sinusitis (inflammation of the sinuses) is often caused by an infection in the nasal cavity.	5 min.
42.20 Sinuses complete	Sinusitis can affect all nasal sinuses or individual sinuses.	5 min.
43.11 Rhinitis, acute (common cold)	Acute rhinitis, also known as the common cold is one of the most common causes of sinusitis.	5 min.
43.16 Sinusitis, chronic	Chronic sinusitis	5 min.
54.25 Cranial nerve V (N. trigeminus)	Sinusitis can also involve the trigeminal nerve, which is responsible for sensation in the face and has three branches. In trigeminal neuralgia, pain can be felt around the frontal sinuses and the maxillary cavities.	5 min.
55.55 Headache	Headache is a common symptom of sinusitis.	5 min.
56.00 General visual organ physiology	Sinus infections can affect the eyes.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
76.16 Tooth 16	In case of inflammation of the right maxillary sinus, infection in the two lateral molars in the right upper jaw should be ruled out as a possible cause. The root tips can extend into the right maxillary sinus and dental root infections can cause sinusitis.	5 min.

43.16 Sinusitis, chronic		
Program no. / Name	Explanatory notes	Time
76.17 Tooth 17	In case of inflammation of the right maxillary sinus, infection in the two lateral molars in the right upper jaw should be ruled out as a possible cause. The root tips can extend into the right maxillary sinus and dental root infections can cause sinusitis.	5 min.
76.26 Tooth 26	In case of inflammation of the left maxillary sinus, infection in the two lateral molars in the left upper jaw should be ruled out as a possible cause. The root tips can extend into the left maxillary sinus and dental root infections can cause sinusitis.	5 min.
76.27 Tooth 27	In case of inflammation of the left maxillary sinus, infection in the two lateral molars in the left upper jaw should be ruled out as a possible cause. The root tips can extend into the left maxillary sinus and dental root infections can cause sinusitis.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.19 Staphylococcus aureus		5 min.
20.22 Streptococcus mitis		5 min.
20.23 Streptococcus pneumoniae		5 min.
20.24 Streptococcus pyogene	5	5 min.
20.44 Bacilli		5 min.
20.49 Bordetella pertussis		5 min.
20.67 Haemophilus influenzae		5 min.
20.72 Legionella		5 min.
20.76 Mycobacteria tuberculosis		5 min.
21.15 Klebsiella pneumoniae		5 min.
21.86 Chlamydia trachomatis		5 min.
21.91 Laryngeal 1 bacteria		5 min.
22.11 Adenovirus		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.

43.16 Sinusitis, chronic		
Program no. / Name	Explanatory notes	Time
22.67 Coxsackie virus B1	In energy terms, the role of these pathogens in the target	5 min.
22.68 Coxsackie virus B4		5 min.
22.80 Rhinovirus		5 min.
23.16 Parainfluenza		5 min.
23.33 Influenza virus A and B		5 min.
23.81 Viruses N.N.		5 min.
24.21 Ascaris megalocephala		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
31.56 Detoxification mucous membrane	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

43.17 Pharyngitis		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.11 Lung meridian	Meridians that are associated with the target disease.	2 min.
02.12 Colon meridian		2 min.
02.14 Spleen meridian		2 min.
02.17 Bladder meridian		2 min.
02.21 Sanjiao meridian		2 min
02.22 Gallbladder meridian		2 min
31.11 ATP production lung	These ATP programs have to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete		5 min
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
30.91 Mucous membranes, head	Weakened immune defences are often associated with significant dryness of the mucous membranes lining the throat and sinuses, which promotes the onset of infection. It is important to ensure that the physiological balance of the mucous membranes is maintained to avoid the disorder becoming chronic.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min

43.17 Pharyngitis		
Program no. / Name	Explanatory notes	Time
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
35.20 Allergy complete	Pharyngitis may occur in connection with an allergic reaction, the cause of which should be promptly identified.	5 min.
36.00 Lymphatic system physiology complete	The lymphatic system usually intervenes in pharyngeal inflammation, as the tonsils, in particular the adenoids (pharyngeal tonsils) act as defence organs.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
42.20 Sinuses complete	Sinusitis frequently leads to pharyngitis, as the pathogens descend into the throat.	5 min.
42.30 Throat	Pharyngitis initially causes redness, swelling and pain in the throat and is often accompanied by tonsillitis.	5 min.
42.40 Larynx complete	In chronic pharyngitis, the larynx is often affected since the pathogens also descend into the lower respiratory tract.	5 min.
43.10 Cough	Acute cough is a common symptom of pharyngitis.	5 min.
43.11 Rhinitis, acute (common cold)	Typical symptoms of pharyngitis include a runny nose.	5 min.
43.15 Sinusitis, acute	Sinusitis frequently leads to pharyngitis, as the pathogens descend into the throat.	5 min.
43.17 Pharyngitis	Pharyngitis is an inflammation of the back of the throat which is usually caused by pathogens present in the nasal cavity and sinuses.	5 min.
43.18 Laryngitis	Laryngitis is an inflammation of the larynx which is typically triggered by colds, frequent throat infections and changes in temperature.	5 min.
51.40 Diabetes mellitus	Patients with diabetes also experience respiratory infections due to their weakened immune response.	5 min.
54.29 Cranial nerve IX . (N. glossopharyngeus)	The laryngeal nerve is one of the 12 cranial nerves; it innervates the tongue, pharynx and larynx, parts of the ear, the tonsils and the parotid gland.	5 min.
54.30 Cranial nerve X (vagus nerve)	The 10th cranial nerve, aka the vagus nerve innervates an area which is larger than that of all the other cranial nerves. It largely contributes to the innervation of the internal organs of the chest and abdominal cavity, the cranial region, parts of the ear, the tongue, the pharynx and larynx.	5 min.

43.17 Pharyngitis		
Program no. / Name	Explanatory notes	Time
65.34 Thyroid gland hypofunction	Inadequate metabolic activity in patients with hypothyroidism causes mucosal changes in the pharyngeal region which can lead to chronic pharyngitis.	5 min.
65.60 Menopause complaints	Changes in hormone levels experienced by in women during menopause reduce moisture in the mucous membranes present in different parts of the body. Chronic pharyngitis may be one of many symptoms.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.19 Staphylococcus aureus		5 min.
20.22 Streptococcus mitis		5 min.
20.23 Streptococcus pneumoniae		5 min.
20.24 Streptococcus pyogenes		5 min.
20.44 Bacilli		5 min.
20.49 Bordetella pertussis		5 min.
20.67 Haemophilus influenzae		5 min.
20.72 Legionella		5 min.
20.76 Mycobacteria tuberculosis		5 min.
21.15 Klebsiella pneumoniae		5 min.
21.86 Chlamydia trachomatis		5 min.
21.91 Laryngeal 1 bacteria		5 min.
22.11 Adenovirus		5 min.

43.17 Pharyngitis		
Program no. / Name	Explanatory notes	Time
22.12 Cytomegalovirus (CMV)	In energy terms, the role of these pathogens in the target	5 min.
22.13 Epstein-Barr virus (EBV)	disease deserves particularly attention.	5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
22.80 Rhinovirus		5 min.
23.16 Parainfluenza		5 min.
23.33 Influenza virus A and B		5 min.
23.81 Viruses N.N.		5 min.
24.21 Ascaris megalocephala		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
31.56 Detoxification mucous membrane	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.57 Detoxification lung		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

43.18 Laryngitis		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.11 Lung meridian	Meridians that are associated with the target disease.	2 min.
02.12 Colon meridian		2 min.
02.14 Spleen meridian		2 min.
02.17 Bladder meridian		2 min.
02.21 Sanjiao meridian		2 min.
02.22 Gallbladder meridian		2 min.
31.11 ATP production lung	These ATP programs have to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete		5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
30.91 Mucous membranes, head	Weakened immune defences are often associated with significant dryness of the mucous membranes lining the pharynx and larynx, which promotes the onset of infection. It is important to ensure that the physiological balance of the mucous membranes is maintained to avoid the disorder becoming chronic.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.

43.18 Laryngitis		
Program no. / Name	Explanatory notes	Time
36.00 Lymphatic system physiology complete	The lymphatic system usually intervenes in pharyngeal inflammation, as the tonsils, in particular the adenoids (pharyngeal tonsils) act as defense organs.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
42.30 Throat	Laryngitis tends to involve the throat and laryngeal mucosa which are red, swollen and painful. It is often accompanied by tonsillitis.	5 min.
42.40 Larynx complete	Laryngitis primarily affects the larynx and its tissues, as the pathogens also descend into the lower respiratory tract.	5 min.
42.50 Windpipe	The trachea (windpipe) and larynx (throat) are contiguous portions of the upper respiratory tract and should be treated together.	5 min.
43.10 Cough	Acute cough is a common symptom of laryngitis.	5 min.
43.11 Rhinitis, acute (common cold)	Possible symptoms of pharyngitis include a runny nose.	5 min.
43.15 Sinusitis, acute	Sinusitis frequently leads to pharyngitis, as the pathogens descend into the throat. This throat infection promotes laryngitis.	5 min.
43.17 Pharyngitis	Pharyngitis may also promote laryngitis as pathogens descend from the nasal cavity and sinuses.	5 min.
43.18 Laryngitis	Laryngitis is an inflammation of the larynx which is typically triggered by colds, frequent throat infections and changes in temperature.	5 min.
54.29 Cranial nerve IX . (N. glossopharyngeus)	The laryngeal nerve is one of the 12 cranial nerves; it innervates the tongue, pharynx and larynx, parts of the ear, the tonsils and the parotid gland.	5 min.
54.30 Cranial nerve X (vagus nerve)	The 10th cranial nerve, aka the vagus nerve innervates an area which is larger than that of all the other cranial nerves. It largely contributes to the innervation of the internal organs of the chest and abdominal cavity, the cranial region, parts of the ear, the tongue, the pharynx and larynx.	5 min.
65.34 Thyroid gland hypofunction	Inadequate metabolic activity in patients with hypothyroidism causes mucosal changes in the throat and pharyngeal region which can lead to chronic pharyngitis and laryngitis.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.

43.18 Laryngitis		
Program no. / Name	Explanatory notes	Time
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.19 Staphylococcus aureus		5 min.
20.22 Streptococcus mitis		5 min.
20.23 Streptococcus pneumoniae		5 min.
20.24 Streptococcus pyogenes		5 min.
20.44 Bacilli		5 min.
20.49 Bordetella pertussis		5 min.
20.67 Haemophilus influenzae		5 min.
20.72 Legionella		5 min.
20.76 Mycobacteria tuberculosis		5 min.
21.15 Klebsiella pneumoniae		5 min.
21.86 Chlamydia trachomatis		5 min.
21.91 Laryngeal 1 bacteria		5 min.
22.11 Adenovirus		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
22.80 Rhinovirus		5 min.
23.16 Parainfluenza		5 min.
23.33 Influenza virus A and B		5 min.

43.18 Laryngitis		
Program no. / Name	Explanatory notes	Time
23.81 Viruses N.N.		5 min.
24.21 Ascaris megalocephala		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
31.56 Detoxification mucous membrane	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.57 Detoxification lung		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

43.20 Bronchial asthma		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.11 Lung meridian	Meridians that are associated with the target disease.	2 min.
02.12 Colon meridian		2 min.
02.14 Spleen meridian		2 min.
02.17 Bladder meridian		2 min.
02.21 Sanjiao meridian		2 min.
02.22 Gallbladder meridian		2 min
31.11 ATP production lung	These ATP programs have to be considered in regard to the target disease.	5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete	Zinc is very important for the immune system and for numerous enzymatic conversion processes in the body.	5 min.
07.00 Vital substances complete		5 min.
07.22 Zinc		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
34.00 lmmune system physiology complete	In bronchial asthma, the immune system is usually weakened, which should be taken into account during testing and harmonisation.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.

Program no. / Name	Explanatory notes	Time
35.20 Allergy complete	Bronchial asthma may be caused by allergies. If a linear reading is obtained on the Rayotensor, please perform further tests with a different kit.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
40.13 Myocardium	In chronic respiratory diseases, the right side of the myocardium (heart muscle) in particular becomes overloaded, since it has to pump harder to offset increased pulmonary blood pressure.	5 min.
40.22 Right ventricle	The increased pulmonary blood pressure generated in chronic lung disease overloads the right ventricle, which eventually becomes enlarged.	5 min.
41.10 Strengthening the myocardium	Bronchial asthma causes overexertion of the heart muscle which becomes thickened, particularly on the right side.	5 min.
41.30 Cardiac insufficiency, right	In long-term bronchial asthma, the right heart and heart muscle eventually become weakened.	5 min.
42.60 Bronchus complete	Asthma affects the bronchi.	5 min.
42.70 Lung complete	Bronchial asthma affects the lung tissue involved in gas exchange (alveoli).	5 min.
43.10 Cough	The main symptom of bronchial asthma is a cough.	5 min.
43.20 Bronchial asthma	Bronchial asthma	5 min.
43.30 Mucoid degeneration	Airway mucus obstruction is one of the three main symptoms of bronchial asthma, the other two being bronchial spasm (constriction) and bronchial oedema (fluid build-up in the lungs).	5 min.
64.27 Histamine	Histamine, a hormone found in several tissues, is released from mast cells and basophils (white blood cells) during allergic reactions.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.

43.20 Bronchial asthma		
Program no. / Name	Explanatory notes	Time
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.19 Staphylococcus aureus		5 min.
20.22 Streptococcus mitis		5 min.
20.23 Streptococcus pneumoniae		5 min.
20.24 Streptococcus pyogenes		5 min.
20.44 Bacilli		5 min.
20.49 Bordetella pertussis		5 min.
20.67 Haemophilus influenzae		5 min.
20.72 Legionella		5 min.
20.76 Mycobacteria tuberculosis		5 min.
21.15 Klebsiella pneumoniae		5 min.
21.86 Chlamydia trachomatis		5 min.
21.91 Laryngeal 1 bacteria		5 min.
22.11 Adenovirus		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min
22.80 Rhinovirus		5 min
23.16 Parainfluenza		5 min
23.33 Influenza virus A and B		5 min
23.81 Viruses N.N.		5 min
24.21 Ascaris megalocephala		5 min
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.

43.20 Bronchial asthma		
Program no. / Name	Explanatory notes	Time
26.41 Aflatoxin	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
31.53 Detoxification acidosis	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.55 Detoxification intra- cellular		5 min.
31.57 Detoxification lung		5 min.
31.66 Detox of endotoxins		5 min.
31.67 Detoxification of exotoxins		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

43.50 Pneumonia, bacterial		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.11 Lung meridian	Meridians that are associated with the target disease.	2 min.
02.12 Colon meridian		2 min.
02.14 Spleen meridian		2 min.
02.17 Bladder meridian		2 min.
02.21 Sanjiao meridian		2 min.
02.22 Gallbladder meridian		2 min.
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min.
31.11 ATP production lung	target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented treatment approach.	5 min.
05.00 Geopathic disorders complete		5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.

43.50 Pneumonia, bacterial		
Program no. / Name	Explanatory notes	Time
35.20 Allergy complete	Pneumonia may occur in connection with an allergic reaction, the cause of which should be promptly identified.	5 min.
36.00 Lymphatic system physiology complete	In chest infections, it is especially important to support the lymphatic system, as adequate lymphatic drainage is necessary for the clearance of pathogens and their metabolic products.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
41.20 Cardiac insufficiency, left	Sooner or later, chest infections affect cardiac output and the left side of the heart, thus depriving the systemic circulation and internal organs of oxygen.	5 min.
41.30 Cardiac insufficiency, right	Pneumonia promotes the onset of right-sided heart failure, since it causes backflow into the lesser pulmonary circulation and the right heart.	5 min.
42.60 Bronchus complete	Such chest infections usually involve the bronchi.	5 min.
42.70 Lung complete	Lung tissue is the worst affected region in pneumonia.	5 min.
42.80 Pleura complete	Pneumonia may also affect the pleurae (visceral and parietal), causing pain during inhalation and exhalation.	5 min.
43.10 Cough	Acute cough is a common symptom of a chest infection and typically appears before diagnosis.	5 min.
43.14 Bronchitis, chronic	Pneumonia is often preceded by chronic bronchitis, which should thus be promptly investigated and treated.	5 min.
43.16 Sinusitis, chronic	Pneumonia can develop secondary to chronic or frequent sinusitis due to the descent of pathogens into the lungs.	5 min.
43.30 Mucoid degeneration	Pneumonia is associated with mucus obstruction, cough, sputum, and other signs of infection and inflammation.	5 min.
43.40 Pleuritis sicca / exsudativa	Pneumonia can also lead to pleurisy. Dry pleurisy is associated with pain in the flanks and back, as the pleurae rub directly against each other during breathing on the affected side. Rubbing sounds can be heard on auscultation. The clinical picture of wet pleurisy (where exudate builds up in the pleural cavity) includes shortness of breath (dyspnoea), tightness of the chest and a dull sound when tapping the chest wall over the affected lung.	5 min.

43.50 Pneumonia, bacterial		
Program no. / Name	Explanatory notes	Time
43.50 Pneumonia, bacterial	Bacterial chest infections are associated with poor general condition, fever, productive cough and inflammation.	5 min.
44.10 Kidney complete	Toxin formation by bacterial pathogens may damage the kidneys, as secondary infections can occur.	5 min.
45.05 Kidney failure	For example, renal impairment is a complication which can occur a few weeks after a streptococcal infection. Streptococcal toxins can permanently destroy renal tissue and lead to a marked increase in levels of creatinine and urea (products of excretion) in the blood.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Detoxifying organs like the liver and the pancreas play an important role, as the patients will feel very unwell and exhibit general symptoms of inflammation.	5 min.
51.40 Diabetes mellitus	Due to their weakened immune system, diabetic patients are prone to recurrent infections which promote the onset of pneumonia.	5 min.
53.72 Backache thoracic spine	Patients with pneumonia usually experience pain during breathing, particularly in the back and flanks. Early diagnosis and subsequent cause-oriented therapy are important.	5 min.
54.00 Nervous system physiology complete	In serious disease such as pneumonia, it is best to include the nervous system in the treatment plan due to its very long-term influence on the respiratory system as a whole.	5 min.
55.41 Neuralgia	The clinical picture of pneumonia may include nerve pain in case of pleural involvement, as the costal pleura is highly innervated. Patients experience discomfort with every inhalation and exhalation.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.

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Program no. / Name	Explanatory notes	Time
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.19 Staphylococcus aureus		5 min.
20.22 Streptococcus mitis		5 min.
20.23 Streptococcus pneumoniae		5 min.
20.24 Streptococcus pyogenes		5 min.
20.44 Bacilli		5 min.
20.49 Bordetella pertussis		5 min.
20.67 Haemophilus influenzae		5 min.
20.72 Legionella		5 min.
20.76 Mycobacteria tuberculosis		5 min.
21.15 Klebsiella pneumoniae		5 min.
21.86 Chlamydia trachomatis		5 min.
21.91 Laryngeal 1 bacteria		5 min.
22.11 Adenovirus		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
22.80 Rhinovirus		5 min.
23.16 Parainfluenza		5 min.
23.33 Influenza virus A and B		5 min.
23.81 Viruses N.N.		5 min.
24.21 Ascaris megalocephala		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.

43.50 Pneumonia, bacterial		
Program no. / Name	Explanatory notes	Time
31.53 Detoxification acidosis	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.56 Detoxification mucous membrane		5 min.
31.57 Detoxification lung		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

43.51 Pneumonia, atypical		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.11 Lung meridian	Meridians that are associated with the target disease.	2 min.
02.12 Colon meridian		2 min.
02.14 Spleen meridian		2 min.
02.17 Bladder meridian		2 min.
02.21 Sanjiao meridian		2 min.
2.22 Gallbladder meridian		2 min.
1.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min.
1.11 ATP production lung	target disease.	5 min.
04.00 Electrosmog complete	treatment approach.	5 min.
05.00 Geopathic disorders		5 min.
06.00 Acid-base balance		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, ohysiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
35.20 Allergy complete	Pneumonia may occur in connection with an allergic reaction, the cause of which should be promptly identified.	5 min.

43.51 Pneumonia, atypical		
Program no. / Name	Explanatory notes	Time
36.00 Lymphatic system physiology complete	In chest infections, it is especially important to support the lymphatic system, as adequate lymphatic drainage is necessary for the clearance of pathogens and their metabolic products.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
41.20 Cardiac insufficiency, left	Sooner or later, chest infections affect cardiac output and the left side of the heart, thus depriving the systemic circulation and internal organs of oxygen.	5 min.
41.30 Cardiac insufficiency, right	Pneumonia promotes the onset of right-sided heart failure, since it causes backflow into the lesser pulmonary circulation and the right heart.	5 min
42.60 Bronchus complete	Such chest infections usually involve the bronchi.	5 min
42.70 Lung complete	Lung tissue is the worst affected region in pneumonia.	5 min
42.80 Pleura complete	Pneumonia may also affect the pleurae (visceral and parietal), causing pain during inhalation and exhalation.	5 min
43.10 Cough	Acute cough is a common symptom of a chest infection and typically appears before diagnosis.	5 min
43.14 Bronchitis, chronic	Pneumonia is often preceded by chronic bronchitis, which should thus be promptly investigated and treated.	5 min
43.16 Sinusitis, chronic	Pneumonia can develop secondary to chronic or frequent sinusitis due to the descent of pathogens into the lungs.	5 min
43.30 Mucoid degeneration	Pneumonia is associated with mucus obstruction, cough, sputum, and other signs of infection and inflammation.	5 min
43.40 Pleuritis sicca / exsudativa	Pneumonia can also lead to pleurisy. Dry pleurisy is associated with pain in the flanks and back, as the pleurae rub directly against each other during breathing on the affected side. Rubbing sounds can be heard on auscultation. The clinical picture of wet pleurisy (where exudate builds up in the pleural cavity) includes shortness of breath (dyspnoea), tightness of the chest and a dull sound when tapping the chest wall over the affected lung.	

43.51 Pneumonia, atypical		
Program no. / Name	Explanatory notes	Time
43.51 Pneumonia, atypical	Atypical (non-bacterial) pneumonia is caused by viruses, fungi or even parasites, and its clinical symptoms exhibit a delayed and insidious onset. Symptoms are moderate with low-level malaise. Early diagnosis is key in causal therapy.	5 min.
51.40 Diabetes mellitus	Due to their weakened immune system, diabetic patients are prone to recurrent infections which promote the onset of pneumonia.	5 min.
53.72 Backache thoracic spine	Patients with pneumonia usually experience pain during breathing, particularly in the back and flanks. Early diagnosis and subsequent cause-oriented therapy are important.	5 min.
54.00 Nervous system physiology complete	In serious disease such as pneumonia, it is best to include the nervous system in the treatment plan due to its very long-term influence on the respiratory system as a whole.	5 min.
55.41 Neuralgia	The clinical picture of pneumonia may include nerve pain in case of pleural involvement, as the costal pleura is highly innervated. Patients experience discomfort with every inhalation and exhalation.	5 min.
55.55 Headache	Headaches are a possible symptom of chest infections.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.19 Staphylococcus aureus		5 min.
20.22 Streptococcus mitis		5 min.
20.23 Streptococcus pneumoniae		5 min.
20.24 Streptococcus pyogenes		5 min.

4	3.51 Pneumonia, atypical	
Program no. / Name	Explanatory notes	Time
20.44 Bacilli	disease deserves particularly attention	5 min.
20.49 Bordetella pertussis		5 min.
20.67 Haemophilus influenzae		5 min.
20.72 Legionella		5 min.
20.76 Mycobacteria tuberculosis		5 min.
21.15 Klebsiella pneumoniae		5 min.
21.86 Chlamydia trachomatis	!	5 min.
21.91 Laryngeal 1 bacteria		5 min.
22.11 Adenovirus		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
22.80 Rhinovirus		5 min.
23.16 Parainfluenza		5 min.
23.33 Influenza virus A and B		5 min.
23.81 Viruses N.N.		5 min.
24.21 Ascaris megalocephala		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
31.53 Detoxification acidosis	The detoxification programs listed here should be taken into	5 min.
31.55 Detoxification intra- cellular	consideration for this target disease.	5 min.
31.57 Detoxification lung		5 min.
01.00 Vitalisation complete		2 min.

45.05 Kidney failure		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.14 Spleen meridian	Meridians that are associated with the target disease.	2 min.
02.17 Bladder meridian		2 min.
02.18 Kidney meridian		2 min.
02.22 Gallbladder meridian		2 min.
31.23 ATP production kidney	These ATP programs have to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete	Kidney disease (renal insufficiency) can lead to increased levels of calcium in the blood, which can promote the formation of kidney stones.	5 min.
07.00 Vital substances complete		5 min.
07.11 Calcium	The symbolic of vitagein DO (a harmone) is demandent as	5 min.
07.32 Vitamin D	The synthesis of vitamin D3 (a hormone) is dependent on the kidneys and liver, since both organs are involved in the	5 min.
08.00 Harmful substances (pollutants) complete	conversion of its precursor.	5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
32.10 Erythrocytes RBC complete	Erythropoiesis is dependent on healthy renal function, as the kidneys produce erythropoietin, a hormone which stimulates red blood cell formation in case of oxygen deficiency.	5 min.
33.21 Renal anaemia	Anaemia can be an early symptom of kidney disease.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.

45.05 Kidney failure		
Program no. / Name	Explanatory notes	Time
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
38.80 Capillaries	The fine capillaries should be well-perfused in order to support glomerular filtration and to ensure that the blood is cleared of any urinary waste products.	5 min.
39.15 Atherosclerosis	Atherosclerosis promotes the onset of renal failure as a result of significant restriction of arterial blood flow.	5 min.
39.60 High blood pressure (high pressure)	Prolonged hypertension promotes the onset of renal failure, as high blood pressure reduces the glomerular filtration rate.	5 min.
39.65 Renal hypertension	Renal hypertension is usually caused by kidney disease which can lead to renal failure.	5 min.
40.00 Heart physiology complete	Renal impairment leads to reduced cardiovascular output.	5 min.
41.20 Cardiac insufficiency, left	Patients with renal insufficiency also develop left-sided heart failure, as kidney disease causes cardiovascular disorders.	5 min.
45.05 Kidney failure	In renal insufficiency, the ability of the kidneys to eliminate urinary waste products is impaired.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Renal insufficiency causes gastrointestinal problems and is also reflected by changes in hepatobiliary and pancreatic function.	5 min.
51.40 Diabetes mellitus	In its late stages, diabetes mellitus is a leading cause of nephropathy. As a result of progressive arterial disease, diabetic patients are more likely to retain urinary waste products in their bloodstream, eventually causing the need for haemodialysis.	5 min.
52.05 Bone cells complete	Renal disease is associated with the development of renal osteopathy, as the kidneys are no longer able to convert the precursor metabolite of vitamin D3 to its active form.	5 min.
53.73 Backache lumbar spine	One of the symptoms of kidney disease is back pain in the upper lumbar spine which radiates forward and into the groin region.	5 min.
53.81 Osteomalacia / rachitis	Advanced renal disease leads to renal osteopathy due to a disturbance in the conversion to the bioactive form of the vitamin D3 hormone in the kidneys.	5 min.

45.05 Kidney failure		
Program no. / Name	Explanatory notes	Time
55.42 Nerve degeneration	High levels of urinary waste products in the blood damage the neurons, especially peripherally, which can lead to polyneuropathy.	5 min.
55.55 Headache	Due to the high amounts of urinary waste products present in the blood, renal disease is often associated with headaches and back pain that radiates into the inguinal region.	5 min.
64.60 Kidney	The kidneys produce erythropoietin, a hormone which stimulates the formation of red blood cells in the bone marrow. Kidney disease is associated with renal anaemia.	5 min.
64.61 Renin	Declines in kidney function lead to short-term rebalancing of blood pressure, increased renin secretion and increased blood pressure. Renal insufficiency progresses to renal failure relatively quickly, as the kidneys are no longer able to regulate blood pressure.	5 min.
64.65 Erythropoetin (hormone secreted by the kidneys)	The kidneys produce erythropoietin, a hormone which stimulates the formation of red blood cells in the bone marrow. Kidney disease is associated with renal anaemia.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.66 Gardnerella vaginalis	In energy terms, the role of these pathogens in the target	5 min.
21.14 Escherichia coli	disease deserves particularly attention.	5 min.
21.16 Proteus mirabilis		5 min.
21.17 Proteus vulgaris		5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.
24.65 Urocleidus		5 min.

45.05 Kidney failure		
Program no. / Name	Explanatory notes	Time
25.41 Trichomonas vaginalis	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
25.85 Blood parasites		5 min
25.86 Pneumocystis carinii		5 min
27.11 Candida albicans		5 min
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min
31.62 Detoxification kidney		5 min
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min

45.25 Nephrolithiasis (kidney stones)		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.14 Spleen meridian	Meridians that are associated with the target disease.	2 min.
02.17 Bladder meridian		2 min.
02.18 Kidney meridian		2 min.
02.22 Gallbladder meridian		2 min.
31.23 ATP production kidney	These ATP programs have to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete		5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete	Elevated calcium levels in the blood due to different aetiologies can promote the development of kidney stones.	5 min.
07.11 Calcium		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
44.10 Kidney complete	Kidney stones can be found in the renal tubules, the renal pelvis, the ureters and the urinary bladder.	5 min.

45.25 Nephrolithiasis (kidney stones)		
Program no. / Name	Explanatory notes	Time
44.20 Urinary organs complete	Kidney stones can be found in the renal tubules, the renal pelvis, the ureters and the urinary bladder.	5 min.
45.25 Nephrolithiasis (kidney stones)	Kidney stones are solid concretions which form in the renal tubules, in the renal pelvis, or in the efferent urinary tract (ureter and urinary bladder).	5 min.
45.80 Water removal	Diuresis (drainage) should be encouraged at an early stage to eliminate kidney stones.	5 min.
46.30 Stomach complete	Kidney stones can cause colic, which can radiate into the abdomen and promote nausea and vomiting.	5 min.
50.10 Protein metabolism	Increased levels of uric acid due to purine metabolism disorders or errors can lead to the development of kidney stones.	5 min.
51.10 Protein metabolism disorder	Increased levels of uric acid due to purine metabolism disorders or errors can lead to the development of kidney stones.	5 min.
51.50 Gout	The term gout refers to high levels of uric acid in the blood. Uric acid deposits form primarily on the surface of articular cartilage, which is devoid of blood vessels and supplied only by diffusion. Uric acid deposits can also form in the tissues of internal organs, e.g. in ear cartilage, in the kidneys and in the heart.	5 min.
52.05 Bone cells complete	Bone diseases can lead to increased levels of calcium in the blood, which can promote the formation of kidney stones.	5 min.
53.73 Backache lumbar spine	Renal colic caused by kidney stones leads to back pain in the lumbar region which radiates into the groin.	5 min.
64.35 Parathyroid gland	The parathyroid gland produces parathyroid hormone (PTH), which causes calcium to be released from bone tissue, thus increasing blood calcium levels. Parathyroid hormone secretion disorders can cause kidney stones.	5 min.
64.36 Parathormone	The parathyroid gland produces parathyroid hormone (PTH), which causes calcium to be released from bone tissue, thus increasing blood calcium levels. Parathyroid hormone secretion disorders can cause kidney stones.	5 min.
65.35 Parathyroid gland, hyperfunction	Overactivity of the parathyroid gland increases parathyroid hormone secretion, which in turn increases calcium levels in the blood and promotes the formation of kidney stones.	5 min.

45.25 Nephrolithiasis (kidney stones)		
Program no. / Name	Explanatory notes	Time
71.50 Pain relief	Renal colic causes severe and acute pain which radiates from the back into the groin and inner thighs. Until treatment is possible, pain management can give the patient significant relief.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.66 Gardnerella vaginalis	disease deserves particularly attention	5 min.
21.14 Escherichia coli		5 min.
21.16 Proteus mirabilis		5 min.
21.17 Proteus vulgaris		5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.
24.65 Urocleidus		5 min.
25.41 Trichomonas vaginalis		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
27.11 Candida albicans		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.62 Detoxification kidney		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.12 Colon meridian	Meridians that are associated with the target disease.	2 min.
02.14 Spleen meridian		2 min.
02.17 Bladder meridian		2 min.
02.18 Kidney meridian		2 min.
02.22 Gallbladder meridian		2 min.
31.17 ATP production urinary pladder	These ATP programs have to be considered in regard to the target disease.	5 min.
31.23 ATP production kidney		5 min.
04.00 Electrosmog complete	treatment approach.	5 min.
05.00 Geopathic disorders		5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
85.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
44.10 Kidney complete	Cystitis can sometimes be caused or triggered by a kidney infection.	5 min.

45.35 Cystitis (inflammation of the bladder)		
Program no. / Name	Explanatory notes	Time
44.20 Urinary organs complete	Cystitis may be caused by infections descending via the ureters or ascending via the urethra.	5 min.
45.35 Cystitis (inflammation of the bladder)	Inflammation of the bladder	5 min.
45.40 Urethritis (inflammation of the urethra)	Urethritis can progress to cystitis.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.66 Gardnerella vaginalis	In energy terms, the role of these pathogens in the target	5 min.
21.14 Escherichia coli	disease deserves particularly attention.	5 min.
21.16 Proteus mirabilis		5 min.
21.17 Proteus vulgaris		5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.
24.65 Urocleidus		5 min.
25.41 Trichomonas vaginalis		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
27.11 Candida albicans		5 min.
31.51 Detoxification blood system	There are two forms of cystitis: acute and chronic. Therefore, there are also various detoxification programme testing options.  The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.52 Detoxification lymphatic system		5 min.

45.35 Cystitis (inflammation of the bladder)		
Program no. / Name	Explanatory notes	Time
31.54 Detoxification extra- cellular	Therefore, there are also various detoxification programme testing options.  The detoxification programs listed here should be taken into consideration for this target disease.	5 min
31.56 Detoxification mucous membrane		5 min
31.62 Detoxification kidney		5 min
31.63 Detoxification bladder		5 min
31.67 Detoxification of exotoxins		5 min
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min

47.10 Oesophagitis		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.13 Stomach meridian	Meridians that are associated with the target disease.	2 min.
02.14 Spleen meridian		2 min.
2.19 Liver meridian		2 min
2.21 Sanjiao meridian		2 min
02.22 Gallbladder meridian		2 min
02.24 Meridian of the Conception Vessel		2 min
31.53 Detoxification acidosis	These ATP programs have to be considered in regard to the	5 min
31.60 Detoxification liver	target disease.	5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders	treatment annroach	5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min.
08.00 Harmful substances pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, ohysiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min
31.80 Open wounds/wound nealing	In oesophagitis, the oesophageal mucosa is inflamed and reddened by infections or acid irritation. Wound healing support helps alleviate pain and swallowing problems.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min

47.10 Oesophagitis		
Program no. / Name	Explanatory notes	Time
36.00 Lymphatic system physiology complete	The lymphatic system plays an important role in relief from inflammation.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
46.20 Oesophagus	Oesophagitis primarily affects the oesophagus and its lining. Early treatment is important, as the mucous membranes tend to degenerate as the condition becomes chronic.	5 min.
46.30 Stomach complete	Oesophagitis is often caused by gastric hyperacidity. The lower oesophageal sphincter becomes inadequate, allowing gastric acid regurgitation (reflux oesophagitis).	5 min.
47.10 Oesophagitis	Oesophagitis is an inflammation of the oesophagus which can be caused by pathogens, gastric acid, medicines or even alcohol.	5 min.
47.50 Crohn's disease	Crohn's disease is a chronic inflammatory bowel disease which can affect any part of the gastrointestinal tract from the mouth to the anus. Exacerbations may cause inflammatory changes in the oesophagus.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Disorders and diseases of the liver, gallbladder and pancreas may lead to gastroesophageal reflux disease (GERD).	5 min.
50.00 Metabolism, physiology complete	Oesophagitis may be fostered by metabolic disorders and hyperacidity.	5 min.
54.50 Autonomic nervous system	The vegetative (autonomic) nervous system regulates the functions of many internal organs, in particular the digestive system via the vagus nerve (10th cranial nerve). Under conditions of stress, it can effect over-acidification of the oesophagus.	5 min.
64.10 Hypothalamus complete	The endocrine system affects inflammation by releasing hormones which trigger the release of cortisol from the adrenal cortex. Cortisol exerts immunosuppressive and anti-inflammatory effects.	5 min.
64.20 Pituitary gland complete	The endocrine system affects inflammation by releasing hormones which trigger the release of cortisol from the adrenal cortex. Cortisol exerts immunosuppressive and anti-inflammatory effects.	5 min.
64.55 Adrenal cortex	The adrenal cortex produces cortisol, which exerts anti- inflammatory effects on the body and its organs.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.

47.10 Oesophagitis		
Program no. / Name	Explanatory notes	Time
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.69 Helicobacter pylori	disease deserves particularly attention.	5 min.
21.11 Enterobacter aerogenes		5 min.
21.19 Salmonella enteritidis	į	5 min.
21.20 Salmonella paratyphi		5 min.
21.21 Salmonella typhi		5 min.
21.23 Shigella dysenteriae	5	5 min.
21.93 Caries bacteria		5 min.
22.78 Norovirus		5 min.
23.56 Rotaviruses		5 min.
24.21 Ascaris megalocephala		5 min.
24.23 Enterobius vermicularis		5 min.
24.28 Enterobius worms		5 min.
24.31 Strongyloides (filariform)		5 min.
24.54 Eurytrema pancreaticum		5 min.
24.56 Fasciolopsis buski		5 min.
24.58 Gastrothylax elongatus		5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.
24.84 Taenia saginata		5 min.
24.85 Taenia solium		5 min.
25.35 Naegleria fowleri		5 min.
27.11 Candida albicans		5 min.
31.53 Detoxification acidosis	The detoxification programs listed here should be taken into	5 min.
31.56 Detoxification mucous membrane	consideration for this target disease.	5 min.

47.10 Oesophagitis		
Program no. / Name	Explanatory notes	Time
31.58 Detoxification stomach	consideration for this torget discose	5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

47.20 Gastritis, acute		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.13 Stomach meridian	Meridians that are associated with the target disease.	2 min.
02.14 Spleen meridian		2 min.
02.19 Liver meridian		2 min.
02.21 Sanjiao meridian		2 min.
02.22 Gallbladder meridian		2 min.
02.24 Meridian of the Conception Vessel		2 min.
31.13 ATP production stomach	These ATP programs have to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	treatment approach.  Gastrointestinal disorders such as gastritis may lead to vitamin	5 min.
05.00 Geopathic disorders complete		5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete	vitamin B12 absorption in the small intestine. Vitamin B12 is essential for the formation of new cells, especially red blood	5 min.
07.49 Vitamin B12, cobalamin	cells.	5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min

47.20 Gastritis, acute		
Program no. / Name	Explanatory notes	Time
46.30 Stomach complete	Gastritis may affect various layers and areas of the stomach.	5 min.
46.40 Small intestines complete	Gastritis may be caused by dysfunction of the small intestine, especially the duodenum.	5 min.
47.20 Gastritis, acute	Gastritis acute	5 min.
47.31 Gastritis, A type	Type A gastritis, also known as atrophic gastritis involves the formation of antibodies against gastric cells and intrinsic factor.	5 min.
47.32 Gastritis, B type	Type B gastritis is a bacterial form of the disorder caused by Helicobacter pylori. It is also the most common form of gastritis.	5 min.
47.33 Gastritis, C type	Type C gastritis is usually caused by reflux of bile acids from the duodenum into the stomach.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.69 Helicobacter pylori	disease deserves particularly attention.	5 min.
21.11 Enterobacter aerogenes		5 min.
21.19 Salmonella enteritidis		5 min.
21.20 Salmonella paratyphi		5 min
21.21 Salmonella typhi		5 min
21.23 Shigella dysenteriae		5 min
21.93 Caries bacteria		5 min
22.78 Norovirus		5 min.
23.56 Rotaviruses		5 min

47.20 Gastritis, acute		
Program no. / Name	Explanatory notes	Time
24.21 Ascaris megalocephala	disease deserves particularly attention	5 min.
24.23 Enterobius vermicularis		5 min.
24.28 Enterobius worms		5 min.
24.31 Strongyloides (filariform)		5 min.
24.54 Eurytrema pancreaticum		5 min.
24.56 Fasciolopsis buski		5 min.
24.58 Gastrothylax elongatus		5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.
24.84 Taenia saginata		5 min.
24.85 Taenia solium		5 min.
25.35 Naegleria fowleri		5 min.
27.11 Candida albicans		5 min.
31.58 Detoxification stomach	The detoxification programs listed here should be taken into	5 min.
31.60 Detoxification liver	consideration for this target disease.	5 min.
31.66 Detox of endotoxins		5 min.
31.67 Detoxification of exotoxins		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

47.30 Gastritis, chronic		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.13 Stomach meridian	Meridians that are associated with the target disease.	2 min.
02.14 Spleen meridian		2 min.
02.19 Liver meridian		2 min.
02.21 Sanjiao meridian		2 min.
02.22 Gallbladder meridian		2 min.
02.24 Meridian of the Conception Vessel		2 min.
31.13 ATP production stomach	These ATP programs have to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete	sufficient amounts of intrinsic factor, a protein necessary for	5 min.
07.00 Vital substances complete		5 min.
07.49 Vitamin B12, cobalamin	cells.	5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.

	47.30 Gastritis, chronic	
Program no. / Name	Explanatory notes	Time
46.30 Stomach complete	Gastritis may affect various layers and areas of the stomach.	5 min.
46.40 Small intestines complete	Gastritis may be caused by dysfunction of the small intestine, especially the duodenum.	5 min.
47.30 Gastritis, chronic	Gastritis chronic	5 min.
47.31 Gastritis, A type	Type A gastritis, also known as atrophic gastritis involves the formation of antibodies against gastric cells and intrinsic factor.	5 min.
47.32 Gastritis, B type	Type B gastritis is a bacterial form of the disorder caused by Helicobacter pylori. It is also the most common form of gastritis.	5 min.
47.33 Gastritis, C type	Type C gastritis is usually caused by reflux of bile acids from the duodenum into the stomach.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.69 Helicobacter pylori	disease deserves particularly attention.	5 min.
21.11 Enterobacter aerogenes		5 min.
21.19 Salmonella enteritidis		5 min.
21.20 Salmonella paratyphi		5 min.
21.21 Salmonella typhi		5 min.
21.23 Shigella dysenteriae		5 min.
21.93 Caries bacteria		5 min.
22.78 Norovirus		5 min.
23.56 Rotaviruses		5 min.

Program no. / Name	Explanatory notes	Time
24.21 Ascaris megalocephala	In energy terms, the role of these pathogens in the target	5 min.
24.23 Enterobius vermicularis	disease deserves particularly attention.	5 min.
24.28 Enterobius worms		5 min.
24.31 Strongyloides (filariform)		5 min.
24.54 Eurytrema pancreaticum		5 min.
24.56 Fasciolopsis buski		5 min.
24.58 Gastrothylax elongatus		5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.
24.84 Taenia saginata		5 min.
24.85 Taenia solium		5 min.
25.35 Naegleria fowleri		5 min.
27.11 Candida albicans		5 min.
31.58 Detoxification stomach	The detoxification programs listed here should be taken into	5 min.
31.60 Detoxification liver	consideration for this target disease.	5 min.
31.66 Detox of endotoxins		5 min
31.67 Detoxification of exotoxins		5 min
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

47.50 Crohn's disease		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.13 Stomach meridian	Meridians that are associated with the target disease.	2 min.
02.14 Spleen meridian		2 min.
02.19 Liver meridian		2 min.
02.21 Sanjiao meridian		2 min.
02.22 Gallbladder meridian		2 min.
02.24 Meridian of the Conception Vessel		2 min.
31.12 ATP production colon	target disease.	5 min.
31.16 ATP production small intestine		5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete	Chronic inflammatory diseases cause disturbances in the absorption of important substances such as vitamin B12 in the final segment of the small intestine.	5 min.
07.00 Vital substances complete	In most cases, digestion and resorption problems also	5 min.
07.49 Vitamin B12, cobalamin	lead to imbalances in the intestinal flora.	5 min.
07.60 Probiotic bacteria complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.70 Degeneration cell tissue	Due to its chronic and intermittent course, Crohn's disease also tends to cause cell tissue degeneration. This means that the risk of malignant bowel disease increases with the duration of illness.	5 min.

47.50 Crohn's disease		
Program no. / Name	Explanatory notes	Time
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min.
32.20 Leukocytes complete WBC	The leukocytes are responsible for the nonspecific and specific immune response, which is usually impaired by immunological dysregulation in inflammatory diseases.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 Immune system physiology complete	Inflammatory diseases impair the immune system, as they are often caused by autoimmune conditions.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
35.20 Allergy complete	In inflammatory bowel disease, autoimmune processes may be associated with allergic reactions.	5 min.
36.00 Lymphatic system physiology complete	The lymphatic system requires support during infections, as this promotes lymphatic drainage and the elimination of toxins.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
46.00 Digestive system physiology complete	Crohn's disease is associated with changes in the oral, gastric, small intestinal and colorectal mucosa. In most cases, it involves the final segment of the small intestine and parts of the large intestine.	5 min.
47.50 Crohn's disease	Crohn's disease	5 min.
48.00 Liver – gall – pancreas, physiology complete	Absorption and digestive disorders throughout the gastrointestinal tract may lead to inflammation and diseases of the gallbladder and pancreas.	5 min.
52.00 Musculoskeletal system, physiology complete	Inflammatory diseases may also cause inflammation of the joints (arthritis) due to autoimmune factors.	5 min.
56.30 Layers, complete	Autoimmune factors can also affect the sclera, cornea and conjunctiva.	5 min.
64.10 Hypothalamus complete	Strengthening the hypothalamus provides first-line endocrine support for cortisol production. Cortisol exerts immunosuppressive and anti-inflammatory effects.	5 min.
64.20 Pituitary gland complete	The anterior pituitary produces ACTH, which stimulates the adrenal cortex.	5 min.
64.55 Adrenal cortex	The adrenal cortex produces cortisol.	5 min.

47.50 Crohn's disease		
Program no. / Name	Explanatory notes	Time
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.69 Helicobacter pylori	disease deserves particularly attention.	5 min.
21.11 Enterobacter aerogenes		5 min.
21.19 Salmonella enteritidis		5 min.
21.20 Salmonella paratyphi		5 min.
21.21 Salmonella typhi		5 min.
21.23 Shigella dysenteriae		5 min.
21.93 Caries bacteria		5 min.
22.78 Norovirus		5 min.
23.56 Rotaviruses		5 min.
24.21 Ascaris megalocephala		5 min.
24.23 Enterobius vermicularis		5 min.
24.28 Enterobius worms		5 min.
24.31 Strongyloides (filariform)		5 min.
24.54 Eurytrema pancreaticum		5 min.
24.56 Fasciolopsis buski		5 min.
24.58 Gastrothylax elongatus		5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.
24.84 Taenia saginata		5 min.
24.85 Taenia solium		5 min.
25.35 Naegleria fowleri		5 min.
27.11 Candida albicans		5 min.

47.50 Crohn's disease		
Program no. / Name	Explanatory notes	Time
31.52 Detoxification lymphatic system	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.60 Detoxification liver		5 min.
31.61 Detoxification intestines		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

47.60 Ulcerative colitis		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.13 Stomach meridian	Meridians that are associated with the target disease.	2 min.
02.14 Spleen meridian		2 min.
02.19 Liver meridian		2 min
02.21 Sanjiao meridian		2 min
02.22 Gallbladder meridian		2 min
02.24 Meridian of the Conception Vessel		2 min
31.12 ATP production colon	These ATP programs have to be considered in regard to the target disease.	5 min
31.16 ATP production mall intestine		5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete	treatment approach.	5 min
06.00 Acid-base balance complete	Chronic inflammatory diseases cause disturbances in the absorption of important substances such as vitamin B12 in the final segment of the small intestine.	5 min
07.00 Vital substances complete	In most cases, digestion and resorption problems also	5 min
07.49 Vitamin B12, cobalamin	lead to imbalances in the intestinal flora.	5 min
07.60 Probiotic bacteria complete		5 min
08.00 Harmful substances pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min
31.70 Degeneration cell tissue	Due to its chronic and intermittent course, UC also tends to cause cell tissue degeneration. This means that the risk of malignant bowel disease increases with the duration of illness.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min

47.60 Ulcerative colitis		
Program no. / Name	Explanatory notes	Time
32.20 Leukocytes complete WBC	The leukocytes are responsible for the nonspecific and specific immune response, which is usually impaired by immunological dysregulation in inflammatory diseases.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 Immune system ohysiology complete	Inflammatory diseases impair the immune system, as they are often caused by autoimmune conditions.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
35.20 Allergy complete	In UC, allergic reactions can occur as a result of autoimmune processes.	5 min.
36.00 Lymphatic system ohysiology complete	The lymphatic system requires support during infections, as this promotes lymphatic drainage and the elimination of toxins.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
46.00 Digestive system ohysiology complete	While ulcerative colitis (UC) can affect the entire intestine, it is usually restricted to its final segments. UC is associated with very frequent bloody diarrhoea with mucus.	5 min.
47.60 Ulcerative colitis	Ulcerative colitis	5 min.
48.00 Liver – gall – pancreas, ohysiology complete	Absorption and digestive disorders throughout the gastrointestinal tract may lead to inflammation and diseases of the gallbladder and pancreas.	5 min.
52.00 Musculoskeletal system, ohysiology complete	Inflammatory diseases may also cause inflammation of the joints (arthritis) due to autoimmune factors.	5 min.
56.30 Layers, complete	Autoimmune factors can also affect the sclera, cornea and conjunctiva.	5 min.
64.10 Hypothalamus complete	Strengthening the hypothalamus provides first-line endocrine support for cortisol production. Cortisol exerts immunosuppressive and anti-inflammatory effects.	5 min.
64.20 Pituitary gland complete	The anterior pituitary produces ACTH, which stimulates the adrenal cortex.	5 min.
64.55 Adrenal cortex	The adrenal cortex produces cortisol.	5 min.

47.60 Ulcerative colitis		
Program no. / Name	Explanatory notes	Time
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.69 Helicobacter pylori	disease deserves particularly attention.	5 min.
21.11 Enterobacter aerogenes		5 min.
21.19 Salmonella enteritidis		5 min.
21.20 Salmonella paratyphi		5 min.
21.21 Salmonella typhi		5 min.
21.23 Shigella dysenteriae		5 min.
21.93 Caries bacteria		5 min.
22.78 Norovirus		5 min.
23.56 Rotaviruses		5 min.
24.21 Ascaris megalocephala		5 min.
24.23 Enterobius vermicularis		5 min.
24.28 Enterobius worms		5 min.
24.31 Strongyloides (filariform)		5 min.
24.54 Eurytrema pancreaticum		5 min.
24.56 Fasciolopsis buski		5 min.
24.58 Gastrothylax elongatus		5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.
24.84 Taenia saginata		5 min.
24.85 Taenia solium		5 min.
25.35 Naegleria fowleri		5 min.

47.60 Ulcerative colitis		
Program no. / Name	Explanatory notes	Time
27.11 Candida albicans	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
31.52 Detoxification lymphatic system	consideration for this target disease.	5 min.
31.60 Detoxification liver		5 min.
31.61 Detoxification intestines		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

47.70 Irritable bowel syndrome (IBS)		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.13 Stomach meridian	Meridians that are associated with the target disease.	2 min.
02.14 Spleen meridian		2 min.
02.19 Liver meridian		2 min.
02.21 Sanjiao meridian		2 min.
02.22 Gallbladder meridian		2 min.
02.24 Meridian of the Conception Vessel		2 min.
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min.
31.12 ATP production colon		5 min.
31.16 ATP production small ntestines		5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.

47.70 Irritable bowel syndrome (IBS)		
Program no. / Name	Explanatory notes	Time
35.20 Allergy complete	Any allergies and intolerances should be diagnosed early using a cause-oriented approach before initiating treatment for irritable bowel syndrome.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
40.40 Conduction system complete	Cardiac conduction disorders may also affect the functions of internal organs. The gut-brain axis is an extensive bidirectional communication network which is very sensitive to neural changes and disorders.	5 min.
41.50 Psychogenic heart disorder	Psychogenic cardiac stress can cause irritable bowel syndrome and should be diagnosed before therapy.	5 min.
46.40 Small intestines complete	Irritable bowel syndrome may impair the function of the entire small and large intestines.	5 min.
46.50 Colon complete	Irritable bowel syndrome may impair the function of the entire small and large intestines.	5 min.
46.60 Straight bowel	IBS can even affect the rectum.	5 min.
47.50 Crohn's disease	Chronic inflammatory bowel disease, e.g. Crohn's disease, requires early differential diagnosis for the purposes of cause-oriented diagnosis.	5 min.
47.60 Ulcerative colitis	Chronic inflammatory bowel disease such as UC requires early differential diagnosis for the purposes of cause-oriented diagnosis.	5 min.
47.70 Irritable bowel syndrome (IBS)	Irritable bowel syndrome is a functional bowel disorder involving intermittent abdominal pain, the location and intensity of which may vary. Patients experience alternating episodes of diarrhoea and constipation, with bloating and a sensation of incomplete evacuation.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic disorders and diseases can influence or worsen irritable bowel syndrome.	5 min.
50.00 Metabolism, physiology complete	Metabolic disorders may promote the onset of irritable bowel disease and should be diagnosed early on.	5 min.
54.00 Nervous system physiology complete	The nervous system controls and affects all internal organs. The intestine has a large network of nerve cells which control motility and peristalsis.	5 min.
54.30 Cranial nerve X (vagus nerve)	The 10th cranial nerve exerts a significant and extensive influence on the entire digestive system. The bowel is particularly sensitive to the influence of this nerve, reacting rapidly to its impulses.	5 min.

47.70 Irritable bowel syndrome (IBS)		
Program no. / Name	Explanatory notes	Time
54.50 Autonomic nervous system	The vegetative nervous system exerts most of its effects on the intestine via vagus nerve, thereby decisively influencing bowel function.	5 min.
55.55 Headache	Irritable bowel syndrome may be associated with headaches and migraines.	5 min.
64.30 Thyroid gland	Hyperthyroidism accelerates the metabolism; it can thus have tremendous effects on intestinal motility and cause frequent, daily episodes of diarrhoea.	5 min.
64.50 Adrenal medulla	Adrenal medulla hyperfunction causes a significant increase in the release of adrenaline, the fight or flight hormone, which affects the sympathetic nervous system. Vegetative organ functions, intestinal activity in particular are accelerated as a result.	5 min.
65.33 Thyroid gland hyperfunction (Hyperthyreosis)	Hyperthyroidism accelerates the metabolism; it can thus have tremendous effects on intestinal motility and cause frequent, daily episodes of diarrhoea.	5 min.
65.39 Hyperfunction of the adrenal medulla	Adrenal medulla hyperfunction causes a significant increase in the release of adrenaline, the fight or flight hormone, which affects the sympathetic nervous system. Vegetative organ functions, intestinal activity in particular are accelerated as a result.	5 min.
65.50 Menstruation programs complete	Irritable bowel syndrome may be associated with menstrual problems.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.69 Helicobacter pylori		5 min.
21.11 Enterobacter aerogenes		5 min.

47.70 Irritable bowel syndrome (IBS)		
Program no. / Name	Explanatory notes	Time
21.19 Salmonella enteritidis	In energy terms, the role of these pathogens in the target	5 min.
21.20 Salmonella paratyphi	disease deserves particularly attention.	5 min.
21.21 Salmonella typhi		5 min.
21.23 Shigella dysenteriae		5 min.
21.93 Caries bacteria		5 min.
22.78 Norovirus		5 min.
23.56 Rotaviruses		5 min.
24.21 Ascaris megalocephala	-	5 min.
24.23 Enterobius vermicularis		5 min.
24.28 Enterobius worms		5 min.
24.31 Strongyloides (filariform)		5 min.
24.54 Eurytrema pancreaticum		5 min.
24.56 Fasciolopsis buski		5 min.
24.58 Gastrothylax elongatus		5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.
24.84 Taenia saginata		5 min.
24.85 Taenia solium		5 min.
25.35 Naegleria fowleri		5 min.
27.11 Candida albicans		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.60 Detoxification liver		5 min.
31.61 Detoxification intestines		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

49.15 Degeneration of the liver		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.19 Liver meridian	Meridians that are associated with the target disease.	2 min.
02.22 Gallbladder meridian		2 min.
02.23 Meridian of the Governing Vessel		2 min.
31.10 ATP production complete		5 min.
31.29 ATP production liver	target disease.	5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete	treatment approach.	5 min
06.00 Acid-base balance complete		5 min
06.30 Liver		5 min.
07.00 Vital substances complete		5 min.
07.30 Vitamins, fat-soluble complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
09.47 Enzymes, liver / gall bladder / pancreas complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min
36.00 Lymphatic system physi- ology complete	The lymphatic system plays an important role in the drainage and detoxification of metabolic waste products and toxins.	5 min

49.15 Degeneration of the liver		
Program no. / Name	Explanatory notes	Time
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min
38.10 Arteries	Arterial blood flow to the internal organs is important for adequate oxygen supply and the numerous functions of the liver, including storage.	5 min.
38.80 Capillaries	The capillaries are responsible for gas exchange within the organs and ensure their functionality.	5 min.
39.10 Impairment of the arterial blood supply	Arterial circulation disorders can foster and promote disease and should be treated according to a cause-oriented approach.	5 min.
39.20 Venous impairment of the blood supply (varicosis)	Venous disorders may indicate back pressure in chronic liver disease.	5 min.
39.60 High blood pressure (high pressure)	Liver disease is often associated with hypertension, as it can cause changes in blood pressure and degeneration.	5 min
40.00 Heart physiology complete	Advanced right-sided heart disease can cause liver degeneration as a result of chronic backflow.	5 min.
41.30 Cardiac insufficiency, right	Advanced right heart failure is a known cause of degenerative disease of the liver.	5 min.
46.20 Oesophagus	By increasing intracellular pressure in hepatocytes, liver degeneration causes backflow into the portal vein and the unpaired abdominal organs. Abdominal congestion affects the oesophagus, leading to the formation of oesophageal varices.	5 min.
46.30 Stomach complete	By increasing intracellular pressure in hepatocytes, liver degeneration causes backflow into the portal vein and the unpaired abdominal organs. Abdominal congestion affects the oesophagus, leading to the formation of oesophageal varices.	5 min
46.40 Small intestines complete	By increasing intracellular pressure in hepatocytes, liver degeneration causes backflow into the portal vein and the unpaired abdominal organs. The small intestine is involved and eventually forms small bowel varices which can be diagnosed in the anterior abdominal wall.	5 min
46.50 Colon complete	By increasing intracellular pressure in hepatocytes, liver degeneration causes backflow into the portal vein and the unpaired abdominal organs. The large intestine is also involved and forms varices as a result.	5 min

Program no. / Name	Explanatory notes	Time
46.60 Straight bowel	By increasing intracellular pressure in hepatocytes, liver degeneration causes backflow into the portal vein and the unpaired abdominal organs. The rectum is involved and consequently forms varices called haemorrhoids.	5 min.
47.10 Oesophagitis	By increasing intracellular pressure in hepatocytes, liver degeneration causes backflow into the portal vein and the unpaired abdominal organs. Abdominal congestion affects the oesophagus, leading to the formation of oesophageal varices. There may also be inflammatory changes.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Metabolic disorders of the liver should be investigated at an early stage to prevent secondary diseases.	5 min
49.10 Hepatitis	Hepatitis can eventually lead to degenerative liver disease.	5 min
49.15 Degeneration of the liver	Degenerative liver disease is understood as a chronic inflammatory disease, where fat accumulates in hepatocytes, and the slow destruction of functional tissue which is transformed into connective tissue.	5 min
50.00 Metabolism, physiology complete	Metabolic disorders may play a role in the development of liver disease.	5 min
51.10 Protein metabolism disorder	Disorders of protein metabolism may be associated with hepatic dysfunction, as the liver can produce, convert and store proteins.	5 min
51.20 Carbohydrate metabolism disorder	Glucose is stored as glycogen in the liver to make ATP which is used to produce energy as and when needed. Liver disease causes changes in energy metabolism.	5 min
51.30 Fat metabolism disorder	Liver disease is associated with changes in lipid metabolism, as the liver metabolises and produces lipids, and also produces bile acids for fat digestion from fats and bilirubin.	5 min
62.10 Skin complete	Liver disease is associated with tell-tale changes in the skin, with redness on the palms of the hands and soles of the feet.	5 min
62.60 Nails complete	The finger- and toenails of patients with hepatic degeneration show whitish discolourations known as "white nail".	5 min

49.15 Degeneration of the liver		
Program no. / Name	Explanatory notes	Time
64.70 Pancreas	Liver disease tends to involve the pancreas due to the interplay between the upper abdominal organs. The pancreas is another possible cause of liver disease, as it can generate backflow into the hepatic ducts.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.69 Helicobacter pylori	In energy terms, the role of these pathogens in the target	5 min.
22.14 Hepatitis B virus	disease deserves particularly attention.	5 min.
22.74 Hepatitis A virus		5 min.
22.75 Hepatitis C virus		5 min.
24.41 Capillaria hepatica (liver)		5 min.
24.54 Eurytrema pancreaticum		5 min.
24.55 Fasciola hepatica		5 min.
24.58 Gastrothylax elongatus		5 min.
24.81 Echinococcus granulosus		5 min.
24.82 Echinococcus multicularis		5 min.
26.41 Aflatoxin		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.53 Detoxification acidosis		5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

49.38 Gallstones		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.19 Liver meridian	Meridians that are associated with the target disease.	2 min.
02.22 Gallbladder meridian		2 min.
02.23 Meridian of the Governing Vessel		2 min.
31.27 ATP production gall bladder	These ATP programs have to be considered in regard to the target disease.	5 min.
31.28 ATP production biliary tract		5 min.
31.29 ATP production liver		5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete	Gallstones tend to be associated with increased levels	5 min.
08.00 Harmful substances (pollutants) complete	of hepatic, biliary and pancreatic enzymes resulting from inflammation of the gallbladder or bile ducts.	5 min.
09.00 Enzymes complete		5 min.
09.47 Enzymes, liver / gall bladder / pancreas complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
32.10 Erythrocytes RBC complete	Increased breakdown of red blood cells (haemolysis) can lead to the formation of gallstones called bilirubin stones.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.

49.38 Gallstones		
Program no. / Name	Explanatory notes	Time
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
46.00 Digestive system physiology complete	The development of biliary stones is influenced by the digestive system and dietary habits.	5 min.
48.10 Liver complete	The liver produces bile which is then stored in the gallbladder, where it thickens.	5 min.
48.20 Gallbladder complete	The bile produced in the liver is stored in the gallbladder and released into the duodenum in liquid form as and when needed.	5 min.
48.30 Pancreas complete	The activity of the pancreas is interlinked with hepatobiliary function, as both organs release digestive enzymes to break down fats. The pancreas also secretes enzymes which break down carbohydrates and proteins.	5 min.
49.30 Bile formation disorder	Bile acid synthesis disorders can lead to delays and congestion, thus promoting gallstone formation.	5 min.
49.34 Bile flow disorder	Bile duct disorders may signal alterations in the composition of bile acid which could promote recurrent gallstone disease.	5 min.
49.38 Gallstones	Gallstones are crystalline concretions which form in the gallbladder and bile ducts. Gallstones may differ in their composition, e.g. bilirubin stones are made up of products of haemolysis (breakdown red blood cells), cholesterol, or calcium carbonate in the case of certain bone disorders associated with increased release of calcium from bone.	5 min.
50.00 Metabolism, physiology complete	The metabolism affects gallstone formation.	5 min.
51.10 Protein metabolism disorder	Disorders in protein metabolism promote the onset of gout and gallstone disorders.	5 min.
51.20 Carbohydrate metabolism disorder	Disorders of carbohydrate metabolism lead to changes in the digestive system and can promote the formation of gallstones.	5 min.
51.30 Fat metabolism disorder	Disorders in fat metabolism promote the formation of cholesterol gallstones.	5 min.
64.70 Pancreas	The activity of the pancreas is interlinked with hepatobiliary function, as both organs release digestive enzymes to break down fats. The pancreas also secretes enzymes which break down carbohydrates and proteins.	5 min.
65.10 Female hormonal balance basic regulation	Gallstones are more common in women than in men. The presence of female hormones promotes their formation.	5 min.

49.38 Gallstones		
Program no. / Name	Explanatory notes	Time
65.60 Menopause complaints	Gallstones are more common in women, as their formation can also be promoted by changes in hormone levels during the menopause.	5 min.
71.50 Pain relief	The term biliary colic designates painful gallbladder attacks which can radiate throughout the upper abdomen. The abdominal wall is stretched taut and there may be significant circulatory problems, so that timely pain management is indicated.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
72.10 Depression	Gallstones are often associated with depression as they disrupt bile flow, leading to gallbladder and bile duct inflammation.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.69 Helicobacter pylori	In energy terms, the role of these pathogens in the target	5 min.
22.14 Hepatitis B virus	disease deserves particularly attention.	5 min.
22.74 Hepatitis A virus		5 min.
22.75 Hepatitis C virus		5 min.
24.41 Capillaria hepatica (liver)		5 min.
24.54 Eurytrema pancreaticum		5 min.
24.55 Fasciola hepatica		5 min.
24.58 Gastrothylax elongatus		5 min.
24.81 Echinococcus granulosus		5 min.
24.82 Echinococcus multicularis		5 min.
26.41 Aflatoxin		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.53 Detoxification acidosis		5 min.

49.38 Gallstones		
Program no. / Name	Explanatory notes	Time
31.60 Detoxification liver	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

51.40 Diabetes mellitus		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.19 Liver meridian	Meridians that are associated with the target disease.	2 min.
02.22 Gallbladder meridian		2 min.
02.23 Meridian of the Governing Vessel		2 min.
31.14 ATP production pancreas	These ATP programs have to be considered in regard to the	5 min.
31.15 ATP production heart	target disease.	5 min.
31.23 ATP production kidney		5 min.
31.31 ATP production eyes		5 min.
31.38 ATP production skin		5 min.
31.39 ATP production blood vessels		5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 lmmune system physiology complete	In diabetics, the immune system is permanently weakened by chronic metabolic disease and requires regular stimulation.	5 min.

51.40 Diabetes mellitus		
Program no. / Name	Explanatory notes	Time
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
38.10 Arteries	Diabetes mellitus is a chronic disorder of carbohydrate metabolism which is associated with increased deposits in the arteries. These initially form in small arteries and subsequently affect larger blood vessels, as evidenced by circulatory problems and corresponding complications.	5 min.
38.80 Capillaries	Gas exchange takes place in tiny blood vessels called capillaries. In hypertension, blood flow and the oxygen supply to these peripheral body regions are reduced.	5 min.
39.10 Impairment of the arterial blood supply	Diabetes mellitus promotes arterial circulatory disorders and complications, including atherosclerosis, hypertension and infarctions.	5 min.
39.15 Atherosclerosis	Atherosclerosis is a disease in which the inner lining of blood vessels becomes hardened. Plaque deposits form on this innermost layer, causing what is known as vascular remodeling. This interferes with continuous and uniform blood flow and eventually leads to hypertension.	5 min.
39.60 High blood pressure (high pressure)	As a result of increased arterial deposits, diabetic patients are prone to early-onset atherosclerosis, followed by hypertension.	5 min.
40.13 Myocardium	The myocardium or cardiac muscles, generates pressure in the heart and in the arteries exiting from the heart. Increases in pressure lead to a thickening and eventual damage of the myocardial wall.	5 min.
41.10 Strengthening the myocardium	Hypertension puts extra strain on the heart muscle, causing thickening and premature weakening.	5 min.
44.10 Kidney complete	Circulatory problems are associated with kidney function disorders due to the delicate and intricate nature of the renal vasculature. Kidney disease is among the most common complications of diabetes and should be given special consideration during testing and harmonisation.	5 min.
44.17 Renal glomeruli	The glomerulus is the part of the kidney responsible for blood filtration. Deposits and hypertension in these tiny arteries lead to loss of function, and eventually to inflammation and kidney disease. Late-onset complications include degeneration of renal tissue and loss of organ function.	5 min.

	51.40 Diabetes mellitus	
Program no. / Name	Explanatory notes	Time
45.45 Diabetic nephropathy (diabetic glomerulosclerosis)	Diabetes mellitus and progressive circulatory disorders, particularly in the capillaries lead to functional kidney damage. Patients eventually develop diabetic glomerulosclerosis.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
48.35 Islet cells	Insulin is produced by beta cells in pancreatic islets. Diabetics produce insufficient quantities of insulin, a hormone responsible for lowering blood glucose levels.  In DM1, loss of function of beta cells is due to their destruction, typically as a result of autoimmune processes and inflammation. In DM2, beta cells become depleted as insulin resistance develops.	5 min.
50.20 Carbohydrate metabolism	Diabetes mellitus is a chronic disorder which affects and deregulates carbohydrate metabolism.	5 min.
51.20 Carbohydrate metabolism disorder	Diabetes mellitus is a disorder of carbohydrate metabolism which affects insulin-producing beta-cells in the pancreas.	5 min.
51.40 Diabetes mellitus	Glucose metabolism disorder	5 min.
54.20 Peripheral nervous system, complete	As diabetes progresses, disturbances in arterial blood supply eventually affect the nerves, particularly the peripheral nerves.	5 min.
55.42 Nerve degeneration	Progressive arterial disease leads to increasing loss of nerve cells and degeneration, especially in distal regions such as the hands and feet, but also in the sense organs, with their delicate capillary network.	5 min.
56.30 Layers, complete	The ocular membranes, the retina and choroid in particular are severely affected by circulatory disorders associated with diabetes mellitus.	5 min.
56.40 Lens, pupil, vitreous body complete	Diabetes mellitus also affects the eye lens and the vitreous body.	5 min.
57.10 Retinal detachment	Retinal detachment is one of the most common complication of diabetes.	5 min.
57.20 Cataract	Diabetes mellitus worsens cataracts and degeneration of the eye lens.	5 min.
57.30 Glaucoma	Increased intraocular pressure is a possible complication of diabetes.	5 min.

51.40 Diabetes mellitus		
Program no. / Name	Explanatory notes	Time
62.10 Skin complete	Due to their impaired immune response, diabetics are prone to fungal and other skin infections.	5 min.
64.70 Pancreas	As an endocrine gland, the pancreas should be tested and harmonised to optimise hormone function in diabetic patients.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.69 Helicobacter pylori	In energy terms, the role of these pathogens in the target	5 min.
22.14 Hepatitis B virus		5 min.
22.74 Hepatitis A virus		5 min.
22.75 Hepatitis C virus		5 min.
24.41 Capillaria hepatica (liver)		5 min.
24.54 Eurytrema pancreaticum		5 min.
24.55 Fasciola hepatica		5 min.
24.58 Gastrothylax elongatus		5 min.
24.81 Echinococcus granulosus		5 min.
24.82 Echinococcus multicularis		5 min.
26.41 Aflatoxin		5 min.
31.59 Detoxification pancreas	The detoxification programs listed here should be taken into	5 min.
31.60 Detoxification liver	consideration for this target disease.	5 min.
31.62 Detoxification kidney	1	5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

51.50 Gout		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.12 Colon meridian	Meridians that are associated with the target disease.	2 min.
02.16 Meridian of the small intestines		2 min.
02.17 Bladder meridian		2 min.
02.19 Liver meridian		2 min.
02.22 Gallbladder meridian		2 min.
31.23 ATP production kidney	These ATP programs have to be considered in regard to the	5 min.
31.40 ATP production muscles	target disease.	5 min.
31.41 ATP production bones		5 min.
04.00 Electrosmog complete	treatment approach.	5 min.
05.00 Geopathic disorders complete		5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
32.00 Blood physiology complete	Gout can also be caused by haematopoietic disorders involving increased cell death. This leads to increased production of uric acid (hyperuricaemia), especially as a result of increased degradation of erythrocytes (red blood cells) associated with anaemia and haemolysis.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.

51.50 Gout		
Program no. / Name	Explanatory notes	Time
34.00 lmmune system physiology complete	Patients with metabolic disorders require immune system support, as inflammatory changes occur throughout the joint.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
35.20 Allergy complete	Metabolic disorders can also foster autoimmune processes and may trigger allergic reactions.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
38.80 Capillaries	Gas exchange takes place in tiny blood vessels called capillaries. In hypertension, blood flow and the oxygen supply to these peripheral body regions are reduced.	5 min.
39.10 Impairment of the arterial blood supply	Uric acid deposits cause circulatory disorders in the body, especially in joint cartilage.	5 min.
39.15 Atherosclerosis	Atherosclerosis is a disease in which the inner lining of blood vessels becomes hardened. Plaque deposits form on this innermost layer, causing what is known as vascular remodeling. This interferes with continuous and uniform blood flow and eventually leads to hypertension.	5 min.
39.60 High blood pressure (high pressure)	In gout, a disorder of protein metabolism, uric acid also deposits in the arterial walls, causing atherosclerosis and hypertension.	5 min.
40.13 Myocardium	In chronic gout, uric acid crystals can accumulate in the body, e.g. in the heart muscle, aka the myocardium (heart gout).	5 min.
44.10 Kidney complete	Kidney disease can lead to renal dysfunction, which in turn contributes to increased uric acid deposition in the body. As gout becomes chronic, uric acid crystals may for instance deposit in the kidneys (renal gout). Kidney stones (uric acid stones) are a common comorbidity of gout.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Gout is associated with frequent complications such as disorders of fat metabolism, diabetes mellitus and liver damage.	5 min.
50.10 Protein metabolism	Gout is a disorder of protein metabolism.	5 min.
50.20 Carbohydrate metabolism	Gout is often associated with deregulation of carbohydrate metabolism, which can lead to diabetes.	5 min.
50.30 Fat metabolism	Gout is often associated with a disorder of fat metabolism, which is usually due to a poor diet (obesity).	5 min.
51.50 Gout	Protein metabolism disorder (gout)	5 min.

51.50 Gout		
Program no. / Name	Explanatory notes	Time
52.00 Musculoskeletal system, physiology complete	In gout, uric acid deposits primarily affect the large and small joints, especially the first metatarsophalangeal joint, the ankle, knee, shoulder, wrist and finger joints, and the synovial bursae.	5 min.
56.00 General visual organ physiology	In chronic gout, uric acid may also appear as gouty tophi on the eyelids.	5 min.
58.00 Acoustic organ, physiology complete	In chronic gout, uric acid may form gout tophi on the outer ear and ear cartilage.	5 min.
62.10 Skin complete	In chronic gout, uric acid deposits may also form in the skin.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.15 Weight reduction	Gout is also typically associated with overweight or even obesity.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.76 Mycobacteria tuberculosis	disease deserves particularly attention.	5 min.
21.27 Yersinia enterocolitica		5 min.
21.61 Borrelia		5 min.
21.86 Chlamydia trachomatis		5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria		5 min.
21.96 Tuberculinum burnetti		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.

51.50 Gout		
Program no. / Name	Explanatory notes	Time
22.64 Chikungunya	In energy terms, the role of these pathogens in the target	5 min.
22.67 Coxsackie virus B1	disease deserves particularly attention.	5 min.
22.68 Coxsackie virus B4		5 min.
23.56 Rotaviruses		5 min.
23.81 Viruses N.N.		5 min.
24.32 Trichinella spiralis (muscle)		5 min.
24.33 Trichuris sp.		5 min.
24.61 Paragonimus Westermani		5 min.
24.62 Prosthogonimus macrorchis		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
51.11 Prions		5 min.
31.53 Detoxification acidosis	The detoxification programs listed here should be taken into	5 min.
31.60 Detoxification liver	consideration for this target disease.	5 min.
31.62 Detoxification kidney		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

53.52 Joint inflammation (arthritis)		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.12 Colon meridian	Meridians that are associated with the target disease.	2 min.
02.16 Meridian of the small intestines		2 min.
02.17 Bladder meridian		2 min.
02.19 Liver meridian		2 min.
02.22 Gallbladder meridian		2 min.
31.40 ATP production muscles	These ATP programs have to be considered in regard to the	5 min.
31.41 ATP production bones	target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.  Zinc is very important for the immune system and for numerous	5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
07.22 Zinc		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 lmmune system physiology complete	Inflammatory disorders call for immune system support.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
35.20 Allergy complete	Arthritis can be triggered by an allergic reaction and promote autoimmune processes in the body.	5 min.

53.52 Joint inflammation (arthritis)		
Program no. / Name	Explanatory notes	Time
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
46.40 Small intestines complete	Inflammation of the joints may be associated with an inflammatory disease of the small intestine (e.g. Crohn's disease).	5 min.
46.50 Colon complete	Inflammation of the joints may be associated with an inflammatory disease of the large intestine (e.g. ulcerative colitis).	5 min.
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
50.10 Protein metabolism	Arthritis is associated with gout (disorder or protein metabolism).	5 min.
50.20 Carbohydrate metabolism	Arthritis may occur in conjunction with diabetes mellitus (disorder of carbohydrate metabolism).	5 min.
51.40 Diabetes mellitus	Diabetes also promotes blood circulation problems in the joints, where it fosters inflammatory changes.	5 min.
51.50 Gout	Gout causes arthritis as a result of uric acid deposits in the joints.	5 min.
52.00 Musculoskeletal system, physiology complete	Arthritis affects the entire musculoskeletal system, especially the bones, muscles and ligaments.	5 min.
53.51 Joint injury	Arthritis can also be caused by trauma.	5 min.
53.52 Joint inflammation (arthritis)	Joint inflammation (arthritis)	5 min.
53.53 Joint degeneration (arthrosis)	Arthritis can lead to joint degeneration as a result of changes in bone and cartilaginous tissue. This can lead to severe joint damage and movement restriction.	5 min.
53.54 Shortage of hyaluronic acid	Hyaluronic acid is a component of synovial fluid (a natural joint lubricant) and bone. Hyaluronic acid deficiency is associated with early-onset arthritis.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.

53.52 Joint inflammation (arthritis)		
Program no. / Name	Explanatory notes	Time
20.16 MRSA multidrug- resistant V	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.19 Staphylococcus aureus		5 min.
20.22 Streptococcus mitis		5 min.
20.76 Mycobacteria tuberculosis		5 min.
21.27 Yersinia enterocolitica		5 min.
21.61 Borrelia		5 min.
21.86 Chlamydia trachomatis		5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria		5 min.
21.96 Tuberculinum burnetti		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
23.56 Rotaviruses		5 min.
23.81 Viruses N.N.		5 min.
24.32 Trichinella spiralis (muscle)		5 min.
24.33 Trichuris sp.		5 min.
24.61 Paragonimus Westermani		5 min.
24.62 Prosthogonimus macrorchis		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
51.11 Prions		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.

53.52 Joint inflammation (arthritis)		
Program no. / Name	Explanatory notes	Time
31.60 Detoxification liver	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.66 Detox of endotoxins		5 min.
31.67 Detoxification of exotoxins		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

53.80 Osteoporosis		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.12 Colon meridian	Meridians that are associated with the target disease.	2 min.
02.16 Meridian of the small intestines		2 min.
02.17 Bladder meridian		2 min.
02.19 Liver meridian		2 min.
02.22 Gallbladder meridian	2	2 min.
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min.
31.40 ATP production muscles		5 min.
31.41 ATP production bones		5 min.
04.00 Electrosmog complete	treatment annroach	5 min.
05.00 Geopathic disorders complete		5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete	Vitamin D (vitamin D3 hormone) regulates bone metabolism as well as calcium and phosphate levels in the blood, and is	5 min.
07.11 Calcium	converted to its active form by skin exposure to UV light. The	5 min.
07.32 Vitamin D	liver and kidneys convert the inactive precursor into vitamin D3.	5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.

53.80 Osteoporosis		
Program no. / Name	Explanatory notes	Time
36.00 Lymphatic system physiology complete	In degenerative skeletal disorders, it is important to support the lymphatic system.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
38.80 Capillaries Capillaries	Capillary perfusion should be adequate to prevent loss of bone mass.	5 min.
44.10 Kidney complete	The kidneys convert the inactive precursor into vitamin D3.	5 min.
46.00 Digestive system physiology complete	The absorption of vital nutrients from the entire digestive tract is a prerequisite for healthy bone metabolism.	5 min.
48.10 Liver complete	The liver converts the inactive precursor into vitamin D3.	5 min.
50.00 Metabolism, physiology complete	A balanced metabolism is a prerequisite for healthy bone cells.	5 min.
51.40 Diabetes mellitus	In the long term, diabetes causes arterial circulatory disorders in all tissues of the body and may promote degenerative processes such as osteoporosis.	5 min.
51.50 Gout	Gout is a metabolic disorder in which uric acid accumulates primarily in connective tissue, e.g. in cartilage, adipose tissue and bone.	5 min.
52.00 Musculoskeletal system, physiology complete	While osteoporosis may involve the entire musculoskeletal system, the vertebrae and long bones are the most likely to be affected.	5 min.
53.11 Bone injury / fracture	Bone fracture and injuries are common complications of long- term osteoporosis. Bone loss can causes the bones to become more brittle and fracture more readily.	5 min.
53.53 Joint degeneration (arthrosis)	Osteoporosis also promotes joint disease and degradation as a result of bone loss, thus promoting osteoarthritis.	5 min.
53.70 Backaches complete	Back pain is a possible symptom of osteoporosis which may result from changes in, and degeneration of the vertebral bodies and their small joints. Curvature of the spine also causes pain.	5 min.
53.80 Osteoporosis	Osteoporosis is associated with loss of bone density and microarchitecture, which leads to increased susceptibility to fractures.	5 min.
53.81 Osteomalacia / rachitis	Osteomalacia must be distinguished from osteoporosis at an early stage, since, like childhood rickets, it is characterised by softening of the bone and increased proneness to bowing deformities. This is due to a mineral deficiency.	5 min.

53.80 Osteoporosis		
Program no. / Name	Explanatory notes	Time
55.41 Neuralgia	Symptoms of advanced osteoporosis may include nerve pain as a result of static changes of the spine and many joints.	5 min.
64.10 Hypothalamus complete	The hypothalamus and pituitary gland synthesise various hormones whose increased release can influence bone metabolism.	5 min.
64.20 Pituitary gland complete	The hypothalamus and pituitary gland synthesise various hormones whose increased release can influence bone metabolism.	5 min.
64.30 Thyroid gland	In hyperthyroidism, the thyroid gland, produces increased levels of two thyroid hormones, FT 3 and FT 4, which can promote osteoporosis.	5 min.
64.35 Parathyroid gland	In hyperparathyroidism, the parathyroid gland synthesises increased levels of parathormone, which dissolves calcium from the bone and can thus lead to bone disease.	5 min.
64.36 Parathormone	Increased production of parathormone by the parathyroid gland causes calcium to be released from the bones, which can lead to bone disease.	5 min.
64.55 Adrenal cortex	The adrenal cortex produces cortisol, increased blood levels of which over long periods can cause Cushing's syndrome, which can in turn foster the onset of osteoporosis.	5 min.
64.60 Kidney	The kidneys play a role in the conversion of the inactive precursor of vitamin D into vitamin D3 hormone.	5 min.
64.80 Ovary complete	Decreased production of oestrogen in the ovaries is associated with postmenopausal osteoporosis.	5 min.
64.81 Oestrogens	Decreased production of oestrogen in the ovaries is associated with postmenopausal osteoporosis.	5 min.
65.33 Thyroid gland hyperfunction (Hyperthyreosis)	Hyperthyroidism can lead to osteoporosis due to increased synthesis of FT3 and FT4 hormones.	5 min.
65.35 Parathyroid gland, hyperfunction	Increased production of parathormone causes calcium to be released from the bones, fostering the onset of osteoporosis.	5 min.
65.37 Hyperfunction of the adrenal cortex	Adrenocortical hyperfunction, due to a tumour for example, can lead to Cushing's syndrome as a result of significantly increased cortisol secretion, which in turn promotes the onset of osteoporosis.	5 min.
65.60 Menopause complaints	Decreased production of oestrogen in the ovaries is associated with postmenopausal osteoporosis.	5 min.

53.80 Osteoporosis		
Program no. / Name	Explanatory notes	Time
66.31 Ovaries	Decreased production of oestrogen in the ovaries is associated with postmenopausal osteoporosis.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.76 Mycobacteria tuberculosis	disease deserves particularly attention.	5 min.
21.27 Yersinia enterocolitica		5 min.
21.61 Borrelia		5 min.
21.86 Chlamydia trachomatis		5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria		5 min.
21.96 Tuberculinum burnetti		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
23.56 Rotaviruses	Ę	5 min.
23.81 Viruses N.N.		5 min.
24.32 Trichinella spiralis (muscle)		5 min.
24.33 Trichuris sp.		5 min.

53.80 Osteoporosis		
Program no. / Name	Explanatory notes	Time
24.61 Paragonimus Westermani	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
24.62 Prosthogonimus macrorchis		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
51.11 Prions		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

53.84 Fibromyalgia		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.12 Colon meridian	Meridians that are associated with the target disease.	2 min.
02.16 Meridian of the small intestines		2 min.
02.17 Bladder meridian		2 min.
02.19 Liver meridian		2 min.
02.22 Gallbladder meridian		2 min.
31.38 ATP production skin	These ATP programs have to be considered in regard to the	5 min.
31.40 ATP production muscles	target disease.	5 min.
04.00 Electrosmog complete	treatment approach.	5 min.
05.00 Geopathic disorders complete		5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min.
32.20 Leukocytes complete NBC	In autoimmune diseases such as fibromyalgia, both the nonspecific immune response and specific cell-mediated immunity should be strengthened.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 lmmune system physiology complete	Autoimmune diseases alter the immune system, which thus requires support.	5 min.

53.84 Fibromyalgia		
Program no. / Name	Explanatory notes	Time
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
35.20 Allergy complete	Autoimmune diseases trigger an immune response to the body's own organ structures, which can manifest as different kinds of allergies.	5 min.
36.00 Lymphatic system physiology complete	Fibromyalgia may be associated with reactions in the lymphatic organs, which may for instance show signs of inflammation.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
46.00 Digestive system physiology complete	Fibromyalgia can lead to irritable bowel syndrome, which is associated with pain and frequent bowel movements.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
52.00 Musculoskeletal system, physiology complete	Fibromyalgia can affect the musculoskeletal system, connective tissue as a whole and the muscles, ligaments and tendons.	5 min.
53.23 Muscle tightness	Chronic soft tissue pain leads to muscle cramps.	5 min.
53.25 Inflammation of the muscle	Inflammatory changes may occur throughout the connective tissue, especially in the muscles.	5 min.
53.28 Inflammation of a ligament / tendon sheath inflammation	In fibromyalgia, autoimmune processes can also lead to inflammation of the ligaments and tendon sheaths.	5 min.
53.62 Bursitis	Inflammatory changes (bursitis) may be observed in the bursae of the most commonly used and movable joints, like the shoulder and knee joints.	5 min.
53.84 Fibromyalgia	Fibromyalgia (pain syndrome with chronic soft tissue disorders)	5 min.
55.55 Headache	Tension headaches can be associated with fibromyalgia due to hormonal influences.	5 min.
62.13 Subcutis	Fibromyalgia also affects the hypodermis.	5 min.
62.14 Fatty tissue	Fibromyalgia also affects subcutaneous adipose tissue.	5 min.
64.10 Hypothalamus complete	Release of CRH from the hypothalamus triggers the synthesis of cortisol in the adrenal cortex. CRH stimulates the anterior pituitary, which in turn promotes the secretion of cortisol in the adrenal cortex.	5 min.
64.20 Pituitary gland complete	The anterior pituitary gland produces ACTH, which stimulates the adrenal cortex into producing cortisol.	5 min.

53.84 Fibromyalgia		
Program no. / Name	Explanatory notes	Time
64.55 Adrenal cortex	The adrenal cortex produces cortisol, which dampens the immune response in inflammation and autoimmune diseases, thus exerting immunosuppressive effects.	5 min.
64.80 Ovary complete	Female hormones may promote the onset of fibromyalgia, which explains why the condition mostly affects women.	5 min.
Female hormonal balance basic regulation	This may be worsened by disturbances or imbalances in levels of female hormones.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.18 Meteorosensitivity	Changes in the weather may affect pain in fibromyalgia.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.76 Mycobacteria tuberculosis	disease deserves particularly attention.	5 min.
21.27 Yersinia enterocolitica		5 min.
21.61 Borrelia		5 min.
21.86 Chlamydia trachomatis		5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria		5 min.
21.96 Tuberculinum burnetti		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.

53.84 Fibromyalgia		
Program no. / Name	Explanatory notes	Time
22.68 Coxsackie virus B4	In energy terms, the role of these pathogens in the target	5 min.
23.56 Rotaviruses	disease deserves particularly attention.	5 min.
23.81 Viruses N.N.		5 min.
24.32 Trichinella spiralis (muscle)		5 min.
24.33 Trichuris sp.		5 min.
24.61 Paragonimus Westermani		5 min.
24.62 Prosthogonimus macrorchis		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
51.11 Prions		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.53 Detoxification acidosis		5 min.
31.60 Detoxification liver		5 min.
31.64 Detoxification female / female-specific		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

	Join of Alementer 5 disease	55.30 Alzheimer's disease		
Program no. / Name	Explanatory notes	Time		
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min		
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min		
02.15 Heart meridian	Meridians that are associated with the target disease.	2 min		
02.17 Bladder meridian		2 min		
02.18 Kidney meridian		2 min		
02.19 Liver meridian		2 min		
02.20 Meridian of the heart and circulation		2 min		
31.35 ATP production cerebrum	These ATP programs have to be considered in regard to the target disease.	5 min		
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min		
05.00 Geopathic disorders complete		5 min		
06.00 Acid-base balance complete		5 min		
07.00 Vital substances complete		5 min		
08.00 Harmful substances (pollutants) complete		5 min		
09.00 Enzymes complete		5 min		
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min		
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min		
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min		
34.00 lmmune system physiology complete	The immune system should be supported in degenerative brain disease.	5 min		
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min		
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min		

55.30 Alzheimer's disease		
Program no. / Name	Explanatory notes	Time
38.10 Arteries	The arterial vascular system supplies the entire body with oxygen and supports brain function.	5 min.
39.10 Impairment of the arterial blood supply	Arterial circulatory disorders increase the cerebral cortex damage associated with Alzheimer's disease.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
50.10 Protein metabolism	Alzheimer's disease is associated with disorders of protein metabolism and consequent neuronal degeneration.	5 min.
54.00 Nervous system physiology complete	Alzheimer's disease causes degeneration of the cerebral cortex, and may involve other brain regions in the later course.	5 min.
55.30 Alzheimer's disease	Alzheimer-type dementia. This program is intended as a complement to the diagnostic process and is important for preventative support in the early stages of disease.	5 min.
55.42 Nerve degeneration	The main effect of the disease is neuronal degeneration.	5 min.
64.10 Hypothalamus complete	Neurological diseases call for cause-oriented testing of the main endocrine organs.	5 min.
64.20 Pituitary gland complete	Neurological diseases call for cause-oriented testing of the main endocrine organs.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
21.61 Borrelia	disease deserves particularly attention.	5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.

55.30 Alzheimer's disease		
Program no. / Name	Explanatory notes	Time
22.64 Chikungunya	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
22.67 Coxsackie virus B1		5 min
22.68 Coxsackie virus B4		5 min
23.11 Borna virus		5 min
23.56 Rotaviruses		5 min
23.81 Viruses N.N.		5 min
25.62 Dermatophagoides (dust mite)		5 min
25.64 Demodex folliculorum (hair follicle mite)		5 min
25.86 Pneumocystis carinii		5 min
26.12 Aspergillus niger		5 min
26.41 Aflatoxin		5 min
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min
31.54 Detoxification extra- cellular		5 min
31.55 Detoxification intra- cellular		5 min
31.60 Detoxification liver		5 min
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

55.31 Parkinson's disease		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min
02.15 Heart meridian	Meridians that are associated with the target disease.	2 min
02.17 Bladder meridian		2 min
02.18 Kidney meridian		2 min
02.19 Liver meridian		2 min
02.20 Meridian of the heart and circulation		2 min
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min
31.34 ATP production cerebellum	target disease.	5 min
31.35 ATP production cerebrum		5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete	treatment annroach	5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min
08.00 Harmful substances (pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
31.70 Degeneration cell tissue	Cell tissue degeneration or brain tumours may contribute to the onset of Parkinson's disease.	5 min
34.00 lmmune system physiology complete	The immune system should be supported in degenerative brain disease.	5 min

55.31 Parkinson's disease		
Program no. / Name	Explanatory notes	Time
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
38.10 Arteries	The arterial vascular system supplies the entire body with oxygen and supports the cerebral circulation.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
54.00 Nervous system physiology complete	PD is associated with degenerative loss of dopaminergic neurons in the midbrain with subsequent involvement of other brain regions.	5 min.
55.31 Parkinson's disease	Parkinson's syndrome. This program is intended as a complement to the diagnostic process and is important for preventative support in the early stages of disease.	5 min.
62.10 Skin complete	Parkinson's disease is associated with changes in the skin, which can become very greasy and oily (seborrhoea).	5 min.
62.21 Sebaceous gland	Sebaceous glands in the skin go into overdrive.	5 min.
64.10 Hypothalamus complete	Neurological diseases call for cause-oriented testing of the main endocrine organs.	5 min.
64.20 Pituitary gland complete	Neurological diseases call for cause-oriented testing of the main endocrine organs.	5 min.
64.28 Dopamine	Dopamine is an important neurotransmitter (chemical messenger) and a precursor of adrenaline (stress hormone). Adrenaline is produced in the substantia nigra in the midbrain and is involved in the regulation and control of the body's motor responses. Parkinson's disease is associated with a deficiency of dopamine due to degeneration of dopaminergic neurons in the midbrain. Typical symptoms include akinesia (loss or impairment of voluntary movement), muscle rigidity (stiffness) and tremor (trembling). Form a diagnostic perspective, changes in dopamine levels should be identified in a timely manner in order to enable preventative therapy.	5 min.
64.29 Serotonin	Serotonin is an important neurotransmitter (chemical messenger) and a precursor of melatonin (a hormone produced in the pineal gland). Melatonin is secreted into the bloodstream in response to exposure to darkness and is involved in the control and regulation of the circadian rhythm sleep-wake cycle. Serotonin influences mood, and deficiencies of this neurotransmitter can lead to depression. In neurological diseases such as Parkinson's disease, serotonin levels should be tested early for diagnostic purposes, as changes in mood and depressive tendencies are part of the clinical picture.	5 min.

55.31 Parkinson's disease		
Program no. / Name	Explanatory notes	Time
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
85.13 Aluminium (AI)	Aluminium exposure or build-up can increase the incidence of the disease.	5 min.
85.25 Manganese (Mn)	Manganese exposure or build-up can increase the incidence of the disease.	5 min.
85.27 Cobalt (Co)	Cobalt exposure or build-up can increase the incidence of the disease.	5 min
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min
21.61 Borrelia	disease deserves particularly attention.	5 min
21.88 Rickettsiae		5 min
21.95 Pain-producing bacteria		5 min
22.12 Cytomegalovirus (CMV)		5 min
22.13 Epstein-Barr virus (EBV)		5 min
22.15 Herpes simplex		5 min
22.17 Herpes zoster		5 min
22.64 Chikungunya		5 min
22.67 Coxsackie virus B1		5 min
22.68 Coxsackie virus B4		5 min
23.11 Borna virus		5 min
23.56 Rotaviruses		5 min
23.81 Viruses N.N.		5 min
25.62 Dermatophagoides (dust mite)		5 min
25.64 Demodex folliculorum (hair follicle mite)		5 min

55.31 Parkinson's disease		
Program no. / Name	Explanatory notes	Time
25.86 Pneumocystis carinii	In energy terms, the role of these pathogens in the target	5 min.
26.12 Aspergillus niger	disease deserves particularly attention.	5 min.
26.41 Aflatoxin		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.52 Detoxification lymphatic system		5 min.
31.54 Detoxification extra- cellular		5 min.
31.55 Detoxification intra- cellular		5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

55.43 Multiple Sclerosis		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.15 Heart meridian	Meridians that are associated with the target disease.	2 min.
02.17 Bladder meridian		2 min.
02.18 Kidney meridian		2 min.
02.19 Liver meridian		2 min.
02.20 Meridian of the heart and circulation		2 min.
31.34 ATP production cerebelum	These ATP programs have to be considered in regard to the	5 min.
31.35 ATP production cerebrum	target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
37.62 Detoxification vaccina- tion lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
42.70 Lung complete	Long-term complications include respiratory diseases such as pneumonia, as the patient often becomes bedridden as a result of loss of motor function.	5 min.

55.43 Multiple Sclerosis		
Program no. / Name	Explanatory notes	Time
43.50 Pneumonia, bacterial	Long-term complications include respiratory diseases such as pneumonia, as the patient often becomes bedridden as a result of loss of motor function.	5 min.
43.51 Pneumonia, atypical	Long-term complications include respiratory diseases such as pneumonia, as the patient often becomes bedridden as a result of loss of motor function.	5 min.
44.10 Kidney complete	Short-term complications include urinary tract disorders due to neurological damage and spasticity. These primarily affect the bladder and may lead to incontinence.	5 min.
44.20 Urinary organs complete	Short-term complications include urinary tract disorders due to neurological damage and spasticity. These primarily affect the bladder and may lead to incontinence.	5 min.
45.35 Cystitis (inflammation of the bladder)	Short-term complications include urinary tract disorders due to neurological damage and spasticity. These primarily affect the bladder and may lead to incontinence.	5 min.
45.40 Urethritis (inflammation of the urethra)	Short-term complications include urinary tract disorders due to neurological damage and spasticity. These primarily affect the bladder and urethra and may lead to incontinence.	5 min.
46.50 Colon complete	The spinal symptoms of PD can lead to paraplegia and rectal disorders with incontinence.	5 min.
46.60 Straight bowel	The spinal symptoms of PD can lead to paraplegia and rectal disorders with incontinence.	5 min.
50.10 Protein metabolism	MS is associated with disturbances in protein metabolism resulting from autoimmune/inflammatory processes which thus require early treatment.	5 min.
50.30 Fat metabolism	MS is associated with disturbances in fat metabolism resulting from autoimmune/inflammatory processes which thus require early treatment.	5 min.
51.10 Protein metabolism disorder	MS is associated with disturbances in protein metabolism resulting from autoimmune/inflammatory processes which thus require early treatment.	5 min
51.30 Fat metabolism disorder	MS is associated with disturbances in fat metabolism resulting from autoimmune/inflammatory processes which thus require early treatment.	5 min.
52.00 Musculoskeletal system, physiology complete	Multiple sclerosis primarily affects the musculoskeletal system; damage to the nerves in the spinal cord and brain manifesting as sensory disturbances and eventually paralysis in different parts of the body.	5 min.

	55.43 Multiple Sclerosis	
Program no. / Name	Explanatory notes	Time
54.10 Central nervous system complete	Damage to the central and peripheral nervous system manifests as spastic paresis in different areas of the body.	5 min.
54.20 Peripheral nervous system, complete	Damage to the central and peripheral nervous system manifests as spastic paresis in different areas of the body.	5 min.
54.50 Autonomic nervous system	MS lesions can affect the entire autonomic nervous system, which regulates the functions of our internal organs.	5 min.
54.60 Psychosomatic control	Psychosomatics play an important role in neurological disorders and should be treated at an early stage.	5 min.
55.40 Neuritis	MS is an inflammatory disease which affects the neurons (nerve cells) and the cause of which should be tested and treated early. Beside its autoimmune aetiology, viruses and other pathogens, as well as environmental factors are thought to play a role in its onset. Only a cause-oriented diagnosis and treatment approach can address the complexity of this disease.	5 min.
55.42 Nerve degeneration	Inflammation of the nervous tissue eventually causes degeneration which manifests as sensory disturbances and paresis (paralysis).	5 min.
55.43 Multiple Sclerosis	Multiple sclerosis is one of the most common inflammatory diseases of the CNS. It causes focal lesions and axonal damage (axons are projections of the neurons). The usual age of onset of MS is between 20 and 40 years, and its prevalence is slightly higher in women. The most common symptoms include intention tremor (trembling of the hands during deliberate and visually guided movement), nystagmus (involuntary eye movement) and speech problems (including slurring and impaired articulation).	5 min.
56.00 General visual organ physiology	The eyes, optic nerves and eye muscles are affected early on. Early symptoms of MS include ocular oscillation (nystagmus) and double vision (diplopia) caused by ocular muscle palsy.	5 min.
56.50 Musculature, nerve, socket of the eye	The eyes, optic nerves and eye muscles are affected early on. Early symptoms of MS include ocular oscillation (nystagmus) and double vision (diplopia) caused by ocular muscle palsy.	5 min.
56.60 Visual nerves complete	The eyes, optic nerves and eye muscles are affected early on. Early symptoms of MS include ocular oscillation (nystagmus) and double vision (diplopia) caused by ocular muscle palsy.	5 min.

55.43 Multiple Sclerosis		
Program no. / Name	Explanatory notes	Time
64.00 Hormonal system, physiology complete	The endocrine system has a significant influence on nervous system disorders and can inhibit inflammation by releasing chemical messengers.	5 min.
64.10 Hypothalamus complete	The hypothalamus and anterior pituitary stimulate endogenous cortisol secretion by the adrenal cortex. Autoimmune or inflammatory processes directed at the myelin sheath surrounding the neuron axons (projections) can be dampened, potentially allowing improved nerve cell regeneration.	5 min.
64.20 Pituitary gland complete	The hypothalamus and anterior pituitary stimulate endogenous cortisol secretion by the adrenal cortex. Autoimmune or inflammatory processes directed at the myelin sheath surrounding the neuron axons (projections) can be dampened, potentially allowing improved nerve cell regeneration.	5 min.
64.55 Adrenal cortex	The hypothalamus and anterior pituitary stimulate endogenous cortisol secretion by the adrenal cortex. Autoimmune or inflammatory processes directed at the myelin sheath surrounding the neuron axons (projections) can be dampened, potentially allowing improved nerve cell regeneration.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
72.10 Depression	Depression is a common comorbidity in patients with multiple sclerosis.	5 min.
72.12 Recurring depressive disorders	Frequent bouts of depressions are common in the later course of MS and should be treated at an early stage.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.

	55.43 Multiple Sclerosis	
Program no. / Name	Explanatory notes	Time
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
21.61 Borrelia	disease deserves particularly attention.	5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria	5	5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)	5 5 5 5 5 5	5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
23.11 Borna virus		5 min.
23.56 Rotaviruses		5 min.
23.81 Viruses N.N.		5 min.
25.62 Dermatophagoides (dust mite)		5 min.
25.64 Demodex folliculorum (hair follicle mite)		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.60 Detoxification liver		5 min.
31.66 Detox of endotoxins		5 min.
31.67 Detoxification of exotoxins		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

55.45 ADD/ADHD		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min
02.15 Heart meridian	Meridians that are associated with the target disease.	2 min
02.17 Bladder meridian		2 min
02.18 Kidney meridian		2 min
02.19 Liver meridian		2 min
02.20 Meridian of the heart and circulation		2 min
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min
31.25 ATP production lymph	target disease.	5 min
31.35 ATP production cerebrum		5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete	treatment approach.	5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min
08.00 Harmful substances (pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min
36.00 Lymphatic system ohysiology complete	The lymphatic system promotes detoxification and elimination of metabolic waste products resulting from cell degradation.	5 min
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min

55.45 ADD/ADHD		
Program no. / Name	Explanatory notes	Time
38.10 Arteries	Good arterial circulation is a prerequisite for adequate oxygen supply to the body and especially for brain activity.	5 min.
38.80 Capillaries Capillaries	Oxygen supply to the smallest units of the lungs allows gas exchange to take place and ensures appropriate organ metabolism.	5 min.
46.00 Digestive system physiology complete	The capacity for absorption of the entire digestive system is a prerequisite for maintaining balanced levels of nutrients. ADHD patients also tend to exhibit nutrient deficiencies.	5 min.
48.10 Liver complete	Hepatic detoxification and other important functions of the liver should be tested and any deficiencies addressed early on by means of cause-oriented therapy, as the liver has essential interactions with all other organs.	5 min.
50.00 Metabolism, physiology complete	Basically, metabolic elimination and conversion processes should be well balanced to ensure that important systems in the body such as the CNS and cardiovascular system can function properly.	5 min.
51.10 Protein metabolism disorder	ADHD tend to be associated with disorders of protein metabolism, as the body often fails to get enough dietary nutrients (in patients with a carbohydrate- and fat-rich diet for example). Such diets are often deficient in proteins essential for cell regeneration.	5 min.
51.20 Carbohydrate metabolism disorder	In ADHD patients, carbohydrate metabolism is often impaired due to poor diet. They often consume excessive amounts of refined carbohydrates (white sugar/flour) which worsen symptoms.	5 min.
51.30 Fat metabolism disorder	Lipid metabolism is often out of balance in ADHD patients who predominantly consume animal fats and store insufficient amounts of the lipid building blocks and reserves needed by the cells in the body and for brain activity.	5 min.
54.10 Central nervous system complete	The central nervous system comprises all regions of the brain and is an important focus of treatment for neurological disorders.	5 min.
54.20 Peripheral nervous system, complete	The peripheral nervous system is directly connected to the CNS.	5 min.
54.50 Autonomic nervous system	The autonomic nervous system regulates all bodily functions via the sympathetic and parasympathetic nervous systems.	5 min.
54.60 Psychosomatic control	Psychosomatics and their control are particularly important in the treatment of neurological diseases.	5 min.

55.45 ADD/ADHD		
Program no. / Name	Explanatory notes	Time
55.45 ADD/ADHD	The term ADHD refers to Attention Deficit Hyperactivity Disorder. This disease is characterised by poor concentration, hyperactivity and impulsiveness. ADHD patients exhibit disorders in their social behaviour and development. The disorder typically develops before the sixth year of life and boys are more frequently affected than girls.	5 min.
64.10 Hypothalamus complete	As the supreme endocrine glands, the hypothalamus and pituitary glands are responsible for hormone regulation and should be subjected to cause-oriented tests.	5 min.
64.20 Pituitary gland complete	As the supreme endocrine glands, the hypothalamus and pituitary glands are responsible for hormone regulation and should be subjected to cause-oriented tests.	5 min.
64.28 Dopamine	Dopamine is a neurotransmitter and the direct precursor of adrenaline and noradrenaline. It is involved in motor control. ADHD is often associated with abnormal dopamine metabolism.	5 min.
64.30 Thyroid gland	In ADHD patients, hyperthyroidism should be ruled out early on using a cause-oriented approach.	5 min.
64.50 Adrenal medulla	Adrenaline and norepinephrine, two catecholamine hormones, are synthesised in the adrenal medulla. Patients should be tested for hyperadrenalism early on, as it can either cause or worsen ADHD.	5 min.
64.86 Testosterone	Testosterone, a male sex hormone may act as an aggravating factor in ADHD, as the disorder predominantly affects male patients.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.19 Learning programme concentration enhancement	The treatment of ADS/ADHD focuses on promoting and improving concentration, as inattention is the most debilitating aspect of the disorder.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.

55.45 ADD/ADHD		
Program no. / Name	Explanatory notes	Time
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target 5	5 min.
21.61 Borrelia	disease deserves particularly attention.	5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4	5	5 min.
23.11 Borna virus		5 min.
23.56 Rotaviruses		5 min.
23.81 Viruses N.N.		5 min.
25.62 Dermatophagoides (dust mite)		5 min.
25.64 Demodex folliculorum (hair follicle mite)		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.52 Detoxification lymphatic system		5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

55.60 Migraine		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.12 Colon meridian	Meridians that are associated with the target disease.	2 min.
02.13 Stomach meridian		2 min.
02.14 Spleen meridian		2 min.
02.15 Heart meridian		2 min.
02.16 Meridian of the small intestines		2 min.
02.17 Bladder meridian		2 min.
02.18 Kidney meridian		2 min.
02.19 Liver meridian		2 min
02.20 Meridian of the heart and circulation		2 min.
02.21 Sanjiao meridian		2 min.
02.22 Gallbladder meridian		2 min.
02.24 Meridian of the Conception Vessel		2 min.
31.10 ATP production complete	These ATP programs have to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.

55.60 Migraine		
Program no. / Name	Explanatory notes	Time
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
38.10 Arteries	The role of the arteries is to supply oxygen to all organs and tissues. Oxygen deficiency is associated with pain and with the breakdown of tissues in the body.	5 min.
38.80 Capillaries	Gas exchange takes place in tiny blood vessels called capillaries. In hypertension, blood flow and the oxygen supply to these peripheral body regions are reduced.	5 min.
39.10 Impairment of the arterial blood supply	Arterial circulation problems cause oxygen deficiency, which may cause frequent headaches and migraines.	5 min.
39.15 Atherosclerosis	Atherosclerosis is a disease in which the inner lining of blood vessels becomes hardened. Plaque deposits form on this innermost layer, causing what is known as vascular remodeling. This interferes with continuous and uniform blood flow and eventually leads to hypertension.	5 min.
39.40 Degeneration of the blood vessels	Deposits and atherosclerosis cause changes in the layers of the arterial wall, promoting blood circulation disorders and high blood pressure.	5 min.
39.60 High blood pressure (high pressure)	In the long term, hypertension leads to hypoxia, especially in the organs, since these are supplied by small arteries.	5 min.
44.10 Kidney complete	The kidneys produce the enzyme renin, which increases blood pressure. Kidney disease can lead to hypertension and renal hypertension, which in turn causes circulatory problems and oxygen deficiency.	5 min.
46.11 Oral cavity	Diagnostic tests should be conducted to identify disorders such as oral and dental inflammation which can cause headache and migraine.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
52.30 Spine complete	Headaches and migraines may be caused by spinal diseases, as these can impair blood circulation in the arteries supplying the spine, head and neck.	5 min.

55.60 Migraine		
Program no. / Name	Explanatory notes	Time
52.31 Cervical spine (C1-C7)	Disorders of the cervical spine in particular often lead to circulatory problems and consequently hypoxia in the head region.	5 min.
54.10 Central nervous system complete	Headaches and migraine may be caused by disorders and diseases affecting different parts of the brain.	5 min.
54.25 Cranial nerve V (trigeminal nerve)	Irritation or inflammation of the trigeminal nerve, the fifth cranial nerve whose three paired branches are responsible for sensation in the forehead, eyes, upper and lower jaw and teeth, can lead to severe headache and migraine, or cause trigeminal neuralgia.	5 min.
55.55 Headache	Headache	5 min.
55.60 Migraine	Migraine	5 min.
56.00 General visual organ physiology	Vision problems and ocular disorders may cause headaches and should be investigated.	5 min.
57.30 Glaucoma	Glaucoma is associated with increased intraocular pressure and can also cause headaches.	5 min.
58.00 Acoustic organ, physiology complete	Diseases of the ear may promote headaches and should be investigated.	5 min.
64.00 Hormonal system, physiology complete	Endocrine function disorders can also cause headaches.	5 min.
64.27 Histamine	Histamine, a hormone found in several tissues, is released from mast cells and basophils (white blood cells) during allergic reactions.	5 min.
65.10 Female hormonal balance basic regulation	Changes or disturbances in female hormone levels are often associated with headaches.	5 min.
65.50 Menstruation programs complete	Menstruation disorders are often accompanied by headaches.	5 min.
66.00 Female sexual organs, physiology complete	Diseases of the female sex organs may causes, headaches and should be investigated.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.00 Stress	Stress is a common headache trigger.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.

55.60 Migraine		
Program no. / Name	Explanatory notes	Time
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
21.61 Borrelia	disease deserves particularly attention.	5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster	_	5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
23.11 Borna virus		5 min.
23.56 Rotaviruses		5 min.
23.81 Viruses N.N.		5 min.
25.62 Dermatophagoides (dust mite)		5 min.
25.64 Demodex folliculorum (hair follicle mite)		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.60 Detoxification liver		5 min.
31.64 Detoxification female / female-specific		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

57.40 Wet macular degeneration		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.19 Liver meridian	Meridians that are associated with the target disease.	2 min.
02.22 Gallbladder meridian		2 min.
31.31 ATP production eyes	This ATP program has to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete		5 min
07.00 Vital substances		5 min
08.00 Harmful substances pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, ohysiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
34.00 lmmune system physiology complete	The immune system should be supported.	5 min
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min
88.10 Arteries	The role of the arteries is to supply oxygen-rich blood to all organs and tissues. Oxygen deficiency leads to tissue degradation and function disorders.	5 min
38.80 Capillaries	Gas exchange takes place in tiny blood vessels called capillaries. In hypertension, blood flow and the oxygen supply to these peripheral body regions are reduced.	5 min.

57.40 Wet macular degeneration		
Program no. / Name	Explanatory notes	Time
39.10 Impairment of the arterial blood supply	Arterial circulation problems, especially in the retina can lead to severe degenerative changes and progression of vision loss.	5 min.
39.15 Atherosclerosis	Atherosclerosis is a disease in which the inner lining of blood vessels becomes hardened. Plaque deposits form on this innermost layer, causing what is known as vascular remodeling. This interferes with continuous and uniform blood flow and eventually leads to hypertension.	5 min.
39.60 High blood pressure (high pressure)	In the long term, hypertension leads to hypoxia, especially in the organs, since these are supplied by small arteries.	5 min.
54.22 Cranial nerve II (optic nerve)	Retinal involvement may also lead to deterioration of the optic nerve.	5 min.
56.34 Retina	The retina and the yellow spot (i.e. the macula, the area which provides sharp visual acuity) are affected.	5 min.
56.61 Visual nerve	The optic nerve may be impaired.	5 min.
56.62 Yellow spot	The yellow spot (i.e. the macula), the area which provides sharp visual acuity on the retina, is affected.	5 min.
57.40 Wet macular degeneration – WET AMD	Wet macular degeneration is associated with a severe loss of visual acuity due to serous detachment of the retina and retinal pigment epithelium.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.19 Staphylococcus aureus		5 min.
20.22 Streptococcus mitis		5 min.
21.88 Rickettsiae		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.

57.40 Wet macular degeneration		
Program no. / Name	Explanatory notes	Time
22.15 Herpes simplex	In energy terms, the role of these pathogens in the target	5 min.
22.17 Herpes zoster	disease deserves particularly attention.	5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
25.14 Blepharisma		5 min.
25.62 Dermatophagoides (dust mite)		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
27.11 Candida albicans		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

57.41 Dry macular degeneration		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.19 Liver meridian	Meridians that are associated with the target disease.	2 min.
02.22 Gallbladder meridian		2 min.
31.31 ATP production eyes	This ATP program has to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 lmmune system physiology complete	The immune system should be supported.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
38.10 Arteries	The role of the arteries is to supply oxygen-rich blood to all organs and tissues. Oxygen deficiency leads to tissue degradation and function disorders.	5 min.
38.80 Capillaries	Gas exchange takes place in tiny blood vessels called capillaries. In hypertension, blood flow and the oxygen supply to these peripheral body regions are reduced.	5 min.

57.41 Dry macular degeneration		
Program no. / Name	Explanatory notes	Time
39.10 Impairment of the arterial blood supply	Arterial circulation problems, especially in the retina can lead to severe degenerative changes and progression of vision loss.	5 min.
39.15 Atherosclerosis	Atherosclerosis is a disease in which the inner lining of blood vessels becomes hardened. Plaque deposits form on this innermost layer, causing what is known as vascular remodeling. This interferes with continuous and uniform blood flow and eventually leads to hypertension.	5 min.
39.60 High blood pressure (high pressure)	This eye disorder may be caused by high blood pressure.	5 min.
54.22 Cranial nerve II (optic nerve)	Retinal involvement may also lead to deterioration of the optic nerve.	5 min.
56.34 Retina	The retina and the yellow spot (i.e. the macula, the area which provides sharp visual acuity) are affected.	5 min.
56.61 Visual nerve	The optic nerve may be impaired.	5 min.
56.62 Yellow spot	The yellow spot (i.e. the macula), the area which provides sharp visual acuity on the retina, is affected.	5 min.
57.41 Dry macular degeneration – Dry AMD	Dry macular degeneration is associated with moderate loss of visual acuity due to degradation of the retinal pigment epithelium.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.19 Staphylococcus aureus		5 min.
20.22 Streptococcus mitis		5 min.
21.88 Rickettsiae		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.

57.41 Dry macular degeneration		
Program no. / Name	Explanatory notes	Time
22.17 Herpes zoster	In energy terms, the role of these pathogens in the target	5 min.
22.64 Chikungunya	disease deserves particularly attention.	5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
25.14 Blepharisma		5 min.
25.62 Dermatophagoides (dust mite)		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
27.11 Candida albicans		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

57.52 Conjunctivitis		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.19 Liver meridian	Meridians that are associated with the target disease.	2 min.
02.22 Gallbladder meridian		2 min.
31.31 ATP production eyes	This ATP program has to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 lmmune system physiology complete	Inflammatory diseases weaken the immune system.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
35.20 Allergy complete	Allergies can also lead to conjunctivitis. If a linear motion is obtained on the Rayotensor, please perform further tests with a different kit.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
42.10 Nose/olfactory organ complete	Bacteria from the nasal passages may cause conjunctivitis.	5 min.
42.20 Sinuses complete	Bacteria from the nasal passages may cause conjunctivitis.	5 min.

57.52 Conjunctivitis		
Program no. / Name	Explanatory notes	Time
43.11 Rhinitis, acute (common cold)	Rhinitis can also lead to conjunctivitis.	5 min.
43.15 Sinusitis, acute	Sinus infections can cause conjunctivitis.	5 min.
56.00 General visual organ physiology	Conjunctivitis is an ocular disorder.	5 min.
57.52 Conjunctivitis	Inflammation of the conjunctiva	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.19 Staphylococcus aureus		5 min.
20.22 Streptococcus mitis		5 min.
21.88 Rickettsiae		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
25.14 Blepharisma		5 min.
25.62 Dermatophagoides (dust mite)		5 min.
25.86 Pneumocystis carinii		5 min.

57.52 Conjunctivitis		
Program no. / Name	Explanatory notes	Time
26.12 Aspergillus niger	disease deserves particularly attention	5 min.
27.11 Candida albicans		5 min.
31.56 Detoxification mucous membrane	consideration for this target disease.	5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

59.10 Tinnitus		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.15 Heart meridian	Meridians that are associated with the target disease.	2 min.
02.16 Meridian of the small intestines		2 min.
02.18 Kidney meridian		2 min.
02.19 Liver meridian		2 min.
31.10 ATP production complete	These ATP programs have to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete		5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
38.10 Arteries	The role of the arteries is to supply oxygen to all organs and tissues. Inadequate oxygen supply can lead to functional disorders and organ disease.	5 min.

59.10 Tinnitus		
Program no. / Name	Explanatory notes	Time
38.80 Capillaries	Gas exchange takes place in tiny blood vessels called capillaries. In hypertension, blood flow and the oxygen supply to these peripheral body regions are reduced.	5 min.
39.10 Impairment of the arterial blood supply	Arterial circulation problems lead to oxygen deficiency, which particularly affects organs and tissues, since these are supplied by small arteries.	5 min.
39.15 Atherosclerosis	Atherosclerosis is a disease in which the inner lining of blood vessels becomes hardened. Plaque deposits form on this innermost layer, causing what is known as vascular remodeling. This interferes with continuous and uniform blood flow and eventually leads to hypertension.	5 min.
39.60 High blood pressure (high pressure)	In the long term, hypertension leads to oxygen deficiencies, especially in organs supplied by small arteries.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
58.30 Middle ear complete	Middle ear damage or disease can lead to tinnitus.	5 min.
58.40 Inner ear complete	Circulation disorders or diseases of the inner ear can lead to tinnitus.	5 min.
59.10 Tinnitus	Ringing in the ears (Tinnitus)	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
72.10 Depression	Depression can both promote or be triggered by tinnitus.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.22 Streptococcus mitis		5 min.
21.88 Rickettsiae		5 min.
22.12 Cytomegalovirus (CMV)		5 min.

59.10 Tinnitus		
Program no. / Name	Explanatory notes	Time
22.13 Epstein-Barr virus (EBV)	In energy terms, the role of these pathogens in the target	5 min.
22.15 Herpes simplex	disease deserves particularly attention.	5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
23.81 Viruses N.N.		5 min.
25.62 Dermatophagoides (dust mite)		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.60 Detoxification liver		5 min.
31.66 Detox of endotoxins		5 min.
31.67 Detoxification of exotoxins		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.16 Meridian of the small intestines	Meridians that are associated with the target disease.	2 min.
02.18 Kidney meridian		2 min.
31.25 ATP production lymph	These ATP programs have to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 lmmune system physiology complete	Inflammatory diseases weaken the immune system, which should be given special consideration during testing and harmonisation.	5 min.
35.10 Raising the defence capacity, basic program	The body's defences should be strengthened and boosted in inflammatory diseases.	5 min.
36.00 Lymphatic system physiology complete	In inflammatory diseases, the lymphatic system should be strengthened as a second line of defence. This promotes lymphatic drainage and improves the elimination of toxins.	5 min.
37.62 Detoxification vaccination lesions		5 min.
38.10 Arteries	The arterial blood circulation in the ear should be improved in order to allow inflammation to subside faster.	5 min.

59.21 Otitis media, acute		
Program no. / Name	Explanatory notes	Time
39.10 Arterial impairment of the blood supply	Arterial circulation problems can promote inflammatory processes and lead to chronification.	5 min
42.00 Respiratory system physiology complete	Middle ear problems tend to affect the respiratory tract.	5 min.
43.11 Rhinitis, acute (common cold)	Rhinitis can also lead to acute otitis.	5 min
43.15 Sinusitis, acute	Sinusitis can be a cause or comorbidity of otitis media.	5 min.
43.17 Pharyngitis	Ascending bacterial respiratory tract infections are the most common cause of otitis media.	5 min
58.30 Middle ear complete	Otitis media affects the middle ear, eardrum, ossicles and tympanic cavity.	5 min
59.21 Otitis media, acute (middle ear inflammation)	Acute middle ear inflammation	5 min
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min
20.22 Streptococcus mitis		5 min
21.88 Rickettsiae		5 min
22.12 Cytomegalovirus (CMV)		5 min
22.13 Epstein-Barr virus (EBV)		5 min
22.15 Herpes simplex		5 min
22.17 Herpes zoster		5 min
22.64 Chikungunya		5 min
23.81 Viruses N.N.		5 min
25.62 Dermatophagoides (dust mite)		5 min

59.21 Otitis media, acute		
Program no. / Name	Explanatory notes	Time
25.86 Pneumocystis carinii	disease deserves particularly attention.	5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
31.52 Detoxification lymphatic system	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

59.40 Acute hearing loss		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.15 Heart meridian	Meridians that are associated with the target disease.	2 min.
02.16 Meridian of the small ntestines		2 min.
02.18 Kidney meridian		2 min.
02.19 Liver meridian		2 min.
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min
31.39 ATP production blood vessels	target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete		5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
35.20 Allergy complete	Allergic processes can cause sudden hearing loss and should thus be dealt with early on and treated with a cause-oriented approach.	5 min.

59.40 Acute hearing loss		
Program no. / Name	Explanatory notes	Time
36.00 Lymphatic system physiology complete	The lymphatic system, which functions as a drainage and detoxification system, contributes to the important clearance of deposits and acidity.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
38.10 Arteries	The arteries supply the organs and tissues with oxygen. Oxygen deficiency can lead to functional disorders.	5 min.
38.80 Capillaries	Oxygen deficiency is particularly noticeable at the capillary level, as these tiny blood vessels are where gas exchange takes place.	5 min.
39.10 Impairment of the arterial blood supply	Arterial circulation problems lead to oxygen deficiency, which particularly affects organs supplied by small arteries.	5 min.
39.15 Atherosclerosis	In the long term, hardening of the arterial vessels leads to changes in blood pressure and circulatory disorders, starting in the small arteries and later extending to larger ones.	5 min.
39.50 Disorders of blood pressure regulation	Changes or variations in blood pressure conditions may cause sudden hearing loss.	5 min.
39.60 High blood pressure (high pressure)	In the long term, hypertension leads to oxygen deficiencies, especially in organs supplied by small arteries.	5 min.
40.00 Heart physiology complete	Cardiac disease or disorders can rapidly affect the entire circulation and oxygen supply.	5 min.
50.00 Metabolism, physiology complete	Systemic metabolic disorders can lead to deposits in the limbs, acidosis and circulatory disorders.	5 min.
51.40 Diabetes mellitus	Diabetes is a major risk factor for arterial circulation problems, causing deposits to form in small arteries and then larger ones.	5 min.
52.10 Skeleton complete	Skeletal system diseases or disorders should be diagnosed early, before initiating treatment for hearing loss or tinnitus.	5 min.
52.20 Musculature complete	Muscle tension and hardening can cause disorders of the middle and inner ear.	5 min.
52.30 Spine complete	Spinal disease or disorders should be diagnosed before initiating treatment for sudden hearing loss.	5 min.
53.41 Backbone pain / tension	Pain and tension in the spine may lead to circulatory disorders and complications thereof.	5 min.
53.71 Backache cervical spine	Pain in the cervical spine should be investigated for possible malformations and disorders, as complications may include problems in certain joints and organs.	5 min.

Program no. / Name	Explanatory notes	Time
54.20 Peripheral nervous system, complete	The peripheral nervous system connects the CNS to the limbs and organs.	5 min.
56.00 General visual organ physiology	Eye diseases and disorders should be diagnosed before starting cause-oriented treatment for acute hearing loss/tinnitus.	5 min.
58.30 Middle ear complete	The middle ear and ossicular chain transmit sound waves to the oval window and inner ear via the footplate. Any dysfunctions should be diagnosed at an early stage.	5 min.
58.40 Inner ear complete	Sudden hearing loss is primarily due to microcirculation disorders in the inner ear which must be investigated. Autoimmune, viral and vascular causes should also be identified.	5 min.
59.10 Tinnitus	Tinnitus is a constant, intermittent, episodic or progressive perception of noise in the ear/s which can be associated with sudden hearing loss.	5 min.
59.40 Acute hearing loss	Sudden hearing loss is usually unilateral and may be associated with tinnitus and dizziness.	5 min.
64.10 Hypothalamus complete	The hormones produced by the hypothalamus and pituitary gland can affect the blood circulation and the onset of sudden hearing loss.	5 min.
64.20 Pituitary gland complete	The hormones produced by the hypothalamus and pituitary gland can affect the blood circulation and the onset of sudden hearing loss.	5 min.
64.55 Adrenal cortex	Increased secretion of cortisol in the adrenal cortex can alter blood pressure conditions and lead to circulatory disorders.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
72.10 Depression	Depression is classified as a symptom of sudden hearing loss and should thus be treated early on so as not to become chronic and to prevent frequent recurrences.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.

59.40 Acute hearing loss		
Program no. / Name	Explanatory notes	Time
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.22 Streptococcus mitis		5 min.
21.88 Rickettsiae		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
23.81 Viruses N.N.		5 min.
25.62 Dermatophagoides (dust mite)		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.51 Detoxification blood system		5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

63.10 Psoriasis		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.11 Lung meridian	Meridians that are associated with the target disease.	2 min.
02.12 Colon meridian		2 min.
02.14 Spleen meridian		2 min.
02.18 Kidney meridian		2 min.
02.19 Liver meridian		2 min.
31.38 ATP production skin	These ATP programs have to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete		5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
30.65 Epithelial tissues complete	The skin is classified as an epithelial tissue.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 lmmune system ohysiology complete	The immune system should be strengthened in the event of dermatological diseases.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
35.20 Allergy complete	Skin diseases can also be due to allergic reactions in the body.	5 min

63.10 Psoriasis		
Program no. / Name	Explanatory notes	Time
37.62 Detoxification vaccina- tion lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
46.40 Small intestines complete	In psoriasis, the balance of the small intestinal flora is usually disrupted and requires support.	5 min.
46.50 Colon complete	In psoriasis, the balance of the large intestinal flora is usually disrupted and requires support.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
62.10 Skin complete	Psoriasis is associated with very dry skin, excessively rapid cell division and scaling.	5 min.
62.20 Skin glands complete	Glands in the skin are also affected by dryness in psoriasis.	5 min.
62.50 Hair	The hair is dry and brittle.	5 min.
62.60 Nails complete	The finger and toenails become dry and crumbly, and in some patients, the nail plate is completely destroyed. The nails are pitted and show yellowish discolouration (oil stains).	5 min.
63.10 Psoriasis	Psoriasis	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.13 Eikanella corrodens		5 min.
20.19 Staphylococcus aureus		5 min.
20.21 Streptococcus lactis		5 min.
20.22 Streptococcus mitis		5 min.
20.23 Streptococcus pneumoniae		5 min.
20.24 Streptococcus pyogenes		5 min.
20.25 Streptococcus sp.		5 min.
20.42 Actinomyces israelii		5 min.
20.46 Bacillus cereus		5 min.

63.10 Psoriasis		
Program no. / Name	Explanatory notes	Time
20.47 Bacteroides fragilis	disease deserves particularly attention	5 min.
20.66 Gardnerella vaginalis		5 min.
20.70 Lactobacillus acidophilus		5 min.
20.81 Propionibacterium acnes		5 min.
21.12 Erwinia amylovora		5 min.
21.13 Erwinia carotavora		5 min.
21.16 Proteus mirabilis		5 min.
21.17 Proteus vulgaris		5 min.
21.22 Serratia marcescens		5 min.
21.23 Shigella dysenteriae		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.82 Tobacco mosaic virus		5 min.
23.70 Wart frequencies complete		5 min.
23.81 Viruses N.N.		5 min.
25.62 Dermatophagoides (dust mite)		5 min.
25.64 Demodex folliculorum (hair follicle mite)		5 min.
25.67 Ornithonyssus (bird mite)		5 min.
25.68 Sarcoptes scabiei (scabies)		5 min.
25.84 Troglodytella abrassarti		5 min.
26.05 Fungi I complete		5 min.
27.05 Fungi II complete		5 min.
31.60 Detoxification liver	The detoxification programs listed here should be taken into	5 min.
31.62 Detoxification kidney	consideration for this target disease.	5 min.
31.63 Detoxification bladder		5 min.
31.65 Detoxification skin		5 min.
01.00 Vitalisation complete		2 min.

63.20 Neurodermatitis		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.11 Lung meridian	Meridians that are associated with the target disease.	2 min.
02.12 Colon meridian		2 min.
02.14 Spleen meridian		2 min
02.18 Kidney meridian		2 min
02.19 Liver meridian		2 min
31.12 ATP production colon	These ATP programs have to be considered in regard to the target disease.	5 min
31.16 ATP production small intestine		5 min
31.38 ATP production skin		5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete	treatment approach.	5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min
08.00 Harmful substances (pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min
32.20 Leukocytes complete WBC	The leukocytes are responsible for the nonspecific and specific immune response, which is usually impaired by immunological dysregulation in atopic dermatitis. Allergic reactions are more common.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
34.00 lmmune system physiology complete	In atopic dermatitis, the immune system is usually weakened, which should be taken into account during testing and harmonisation.	5 min

63.20 Neurodermatitis		
Program no. / Name	Explanatory notes	Time
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
35.20 Allergy complete	Patients with eczema (atopic dermatitis) often have a predisposition to allergic reactions. If a linear motion is obtained on the Rayotensor, please perform further tests with a different allergy kit.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
46.40 Small intestines complete	In atopic dermatitis, the balance of the small intestinal flora is usually disrupted and requires support.	5 min.
46.50 Colon complete	In atopic dermatitis, the balance of the large intestinal flora is usually disrupted and requires support.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
62.10 Skin complete	In atopic dermatitis, the skin is very dry and various areas of the body develop eczema.	5 min.
62.20 Skin glands complete	In atopic dermatitis, the sebaceous and sweat glands in the skin are underactive.	5 min.
62.50 Hair	Eczema also affects the hair, which becomes very dry, especially on the head.	5 min.
63.20 Neurodermatitis	Eczema	5 min.
64.27 Histamine	Histamine, a tissue hormone, is formed by certain white blood cells during allergic reactions.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.13 Eikanella corrodens		5 min.
20.19 Staphylococcus aureus		5 min.
20.21 Streptococcus lactis		5 min.
20.22 Streptococcus mitis		5 min.
20.23 Streptococcus pneumoniae		5 min.

	63.20 Neurodermatitis	
Program no. / Name	Explanatory notes	Time
20.24 Streptococcus pyogenes	In energy terms, the role of these pathogens in the target	5 min.
20.25 Streptococcus sp.	disease deserves particularly attention.	5 min.
20.42 Actinomyces israelii		5 min.
20.46 Bacillus cereus		5 min.
20.47 Bacteroides fragilis		5 min.
20.66 Gardnerella vaginalis		5 min.
20.70 Lactobacillus acidophilus		5 min.
20.81 Propionibacterium acnes		5 min.
21.12 Erwinia amylovora		5 min.
21.13 Erwinia carotavora		5 min.
21.16 Proteus mirabilis		5 min.
21.17 Proteus vulgaris		5 min.
21.22 Serratia marcescens	5	5 min.
21.23 Shigella dysenteriae		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.82 Tobacco mosaic virus		5 min.
23.70 Wart frequencies complete		5 min.
23.81 Viruses N.N.		5 min.
25.62 Dermatophagoides (dust mite)		5 min.
25.64 Demodex folliculorum (hair follicle mite)		5 min.
25.67 Ornithonyssus (bird mite)		5 min.
25.68 Sarcoptes scabiei (scabies)		5 min.
25.84 Troglodytella abrassarti		5 min.
26.05 Fungi I complete		5 min.
27.05 Fungi II complete		5 min.
31.60 Detoxification liver	The detoxification programs listed here should be taken into	5 min.
31.61 Detoxification intestines	consideration for this target disease.	5 min.

63.20 Neurodermatitis		
Program no. / Name	Explanatory notes	Time
31.62 Detoxification kidney	consideration for this target disease.	5 min.
31.63 Detoxification bladder		5 min.
31.65 Detoxification skin		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.13 Stomach meridian	Meridians that are associated with the target disease.	2 min.
02.14 Spleen meridian		2 min.
02.15 Heart meridian		2 min.
02.19 Liver meridian		2 min.
02.20 Meridian of the heart and circulation		2 min.
02.21 Sanjiao meridian		2 min.
02.22 Gallbladder meridian		2 min.
02.23 Meridian of the Governing Vessel		2 min.
02.24 Meridian of the Conception Vessel		2 min.
31.33 ATP production thyroid gland	These ATP programs have to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete		5 min.
07.26 lodine	lodine is very important for the metabolism and hormones of the thyroid gland.	5 min.
08.00 Harmful substances complete	The programs indicated here serve to support a cause-oriented treatment approach.	5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.

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Program no. / Name	Explanatory notes	Time
34.00 Immune system physiology complete	Hyperthyroidism may be caused by an autoimmune disorder.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
35.20 Allergy complete	Autoimmune processes involving the thyroid can also cause allergic reactions.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
38.80 Capillaries	Gas exchange takes place in tiny blood vessels called capillaries. In hypertension, blood flow and the oxygen supply to these peripheral body regions are reduced.	5 min.
39.15 Atherosclerosis	Atherosclerosis is a disease in which the inner lining of blood vessels becomes hardened. Plaque deposits form on this innermost layer, causing what is known as vascular remodeling. This interferes with continuous and uniform blood flow and eventually leads to hypertension.	5 min.
39.60 High blood pressure (high pressure)	Hyperthyroidism leads to increased blood pressure and tachycardia, i.e. an increase in the resting heart rate.	5 min.
41.10 Strengthening the myocardium	Long-standing hyperthyroidism can weaken the heart muscle.	5 min.
41.20 Cardiac insufficiency, left	Long-standing hyperthyroidism and hypertension can lead to weakening of the left heart.	5 min.
46.40 Small intestines complete	Hyperthyroidism also causes a significant activation of the small intestine.	5 min.
46.50 Colon complete	Hyperthyroidism also causes a significant activation of the large intestine.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
50.00 Metabolism, physiology complete	Hyperthyroidism significantly speeds up the entire metabolism.	5 min.
52.05 Bone cells complete	The thyroid gland influences bone turnover by producing a hormone called calcitonin.	5 min.
52.20 Musculature complete	Hyperthyroidism affects the muscles.	5 min.
53.80 Osteoporosis	Long-standing hyperthyroidism may lead to osteoporosis due to a disruption in bone turnover and in calcitonin and calcium metabolism.	5 min.
56.50 Musculature, nerve, socket of the eye	Hyperthyroidism can lead to changes and deterioration in the oculomotor muscles and optic nerve.	5 min.

Program no. / Name	Explanatory notes	Time
62.50 Hair	Hyperthyroidism affects hair growth and metabolism.	5 min.
64.10 Hypothalamus complete	The hypothalamus produces a hormone called TRH which stimulates the anterior pituitary gland.	5 min.
64.20 Pituitary gland complete	Thyroid stimulating hormone (TSH) is formed in the anterior pituitary.	5 min.
64.30 Thyroid gland	TSH stimulates the thyroid into producing two hormones known as T3 and T4.	5 min.
64.31 TSH	Levels of TSH, which is produced in the anterior pituitary gland, should be tested in patients with an overactive thyroid, as this hormone affects thyroid function.	5 min.
64.32 fT3	Hyperthyroidism is associated with increased levels of free T3, a hormone formed in the thyroid gland.	5 min.
64.33 fT4	Hyperthyroidism is associated with increased levels of free T4, a hormone formed in the thyroid gland.	5 min.
65.33 Thyroid gland hyperfunction (Hyperthyreosis)	Hyperthyreosis	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.69 Helicobacter pylori	disease deserves particularly attention.	5 min.
21.11 Enterobacter aerogenes		5 min.
21.19 Salmonella enteritidis		5 min
21.20 Salmonella paratyphi		5 min
21.21 Salmonella typhi		5 min
21.23 Shigella dysenteriae		5 min
21.88 Rickettsiae		5 min.
21.93 Caries bacteria		5 min

65.33 Thyroid gland hyperfunction (Hyperthyreosis)		
Program no. / Name	Explanatory notes	Time
22.14 Hepatitis B virus	37 , 1 3	5 min.
22.74 Hepatitis A virus	disease deserves particularly attention.	5 min.
22.75 Hepatitis C virus		5 min.
22.78 Norovirus		5 min.
23.56 Rotaviruses		5 min.
24.21 Ascaris megalocephala		5 min.
24.22 Dirofilaria immitis (heartworm)	5 5 5 5 5	5 min.
24.23 Enterobius vermicularis		5 min.
24.28 Enterobius worms		5 min.
24.31 Strongyloides (filariform)		5 min.
24.41 Capillaria hepatica (liver)		5 min.
24.51 Clonorchis sinensis		5 min.
24.54 Eurytrema pancreaticum		5 min.
24.55 Fasciola hepatica		5 min.
24.56 Fasciolopsis buski		5 min.
24.58 Gastrothylax elongatus		5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.
24.81 Echinococcus granulosus		5 min.
24.82 Echinococcus multicularis		5 min.
24.84 Taenia saginata		5 min.
24.85 Taenia solium		5 min.
25.15 Chilomastix cysts (rat)		5 min.
25.16 Chilomonas		5 min.
25.35 Naegleria fowleri		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
26.41 Aflatoxin		5 min.
27.10 Yeast fungi complete		5 min.

65.33 Thyroid gland hyperfunction (Hyperthyreosis)		
Program no. / Name	Explanatory notes	Time
27.11 Candida albicans	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
31.60 Detoxification liver	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

65.34 Thyroi	d gland hypofunction (Hypothyreosis)	
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.13 Stomach meridian	Meridians that are associated with the target disease.	2 min.
02.14 Spleen meridian		2 min.
02.15 Heart meridian		2 min.
02.19 Liver meridian		2 min.
02.20 Meridian of the heart and circulation		2 min.
02.21 Sanjiao meridian		2 min.
02.22 Gallbladder meridian		2 min.
02.23 Meridian of the Governing Vessel		2 min.
02.24 Meridian of the Conception Vessel		2 min.
31.33 ATP production thyroid gland	These ATP programs have to be considered in regard to the target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach.	5 min.
06.00 Acid-base balance complete		5 min.
07.26 lodine	lodine is very important for the metabolism and hormones of the thyroid gland.	5 min.
08.00 Harmful substances complete	The programs indicated here serve to support a cause-oriented treatment approach.	5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
32.20 Leukocytes complete WBC	Bodily defences are strengthened via the white blood cells, as hypothyroidism slows the metabolism.	5 min.

Program no. / Name	Explanatory notes	Time
33.60 Oxygenation/ Improvement of Utilisation	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
34.00 lmmune system physiology complete	The immune system requires support and strengthening due to slowing of the metabolism.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
39.70 Low blood pressure (hypotension)	Low blood pressure due to a slow metabolism is a major symptom of hypothyroidism. Patients also exhibit an excessively low resting heart rate.	5 min.
40.13 Myocardium	Hypothyroidism is associated with dilated cardiomyopathy, and thus to impaired cardiac function in general.	5 min.
41.10 Strengthening the myocardium	The heart muscle requires strengthening due to heart enlargement (dilated cardiomyopathy).	5 min.
41.11 Increasing cardiac capacity	Cardiac output also needs strengthening, as patients are prone to hypotension and bradycardia.	5 min.
46.40 Small intestines complete	The small intestine needs strengthening, as the patients are prone to constipation early on.	5 min.
46.50 Colon complete	The large intestine needs strengthening, as patients are prone to constipation.	5 min.
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
50.00 Metabolism, physiology complete	Patients suffer from slow metabolism with weakness, fatigue and weight gain.	5 min.
52.20 Musculature complete	There may be muscle cramps, and reflexes may be slowed.	5 min.
53.23 Muscle tightness	There may be muscle cramps and numbness.	5 min.
62.10 Skin complete	In hypothyroidism, the skin is dry, rough and thickened.	5 min.
62.50 Hair	The hair looks shaggy and dull.	5 min.
64.10 Hypothalamus complete	The hypothalamus produces TRH, which stimulates the anterior pituitary gland.	5 min.
64.20 Pituitary gland complete	Thyroid stimulating hormone (TSH) is formed in the anterior pituitary.	5 min.
64.30 Thyroid gland	TSH stimulates the thyroid into producing two hormones known as T3 and T4.	5 min.
64.31 TSH	Thyroid stimulating hormone (TSH) is formed in the anterior pituitary. Hypothyroidism is associated with increased levels of TSH.	5 min.

Program no. / Name	Explanatory notes	Time
64.32 fT3	Hypothyroidism is associated with decreased levels of free T3, a hormone formed in the thyroid gland.	5 min.
64.33 fT4	Hypothyroidism is associated with decreased levels of free T4, a hormone formed in the thyroid gland.	5 min.
65.34 Thyroid gland hypofunction	Hypothyroidism	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
82.15 Potassium jodatum	Schuessler salts no.15 Potassium iodide may be helpful in the event of an iodine deficiency.	5 min.
82.24 Arsenicum jodatum	The Schuessler salt Arsenum jodatum may be helpful in the event of an iodine deficiency.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
20.69 Helicobacter pylori	disease deserves particularly attention.	5 min.
21.11 Enterobacter aerogenes		5 min.
21.19 Salmonella enteritidis		5 min.
21.20 Salmonella paratyphi		5 min.
21.21 Salmonella typhi		5 min.
21.23 Shigella dysenteriae		5 min.
21.88 Rickettsiae		5 min.
21.93 Caries bacteria		5 min.
22.14 Hepatitis B virus		5 min.
22.74 Hepatitis A virus		5 min.
22.75 Hepatitis C virus		5 min.
22.78 Norovirus		5 min.
23.56 Rotaviruses		5 min.
24.21 Ascaris megalocephala		5 min.

Program no. / Name	Explanatory notes	Time
24.22 Dirofilaria immitis (heartworm)	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
24.23 Enterobius vermicularis		5 min.
24.28 Enterobius worms		5 min.
24.31 Strongyloides (filariform)		5 min.
24.41 Capillaria hepatica (liver)		5 min.
24.51 Clonorchis sinensis		5 min.
24.54 Eurytrema pancreaticum		5 min.
24.55 Fasciola hepatica		5 min.
24.56 Fasciolopsis buski	-  -	5 min.
24.58 Gastrothylax elongatus		5 min.
24.63 Schistosoma haematica		5 min.
24.64 Schistosoma mansoni		5 min.
24.81 Echinococcus granulosus	_	5 min.
24.82 Echinococcus multicularis		5 min
24.84 Taenia saginata		5 min.
24.85 Taenia solium		5 min.
25.15 Chilomastix cysts (rat)		5 min.
25.16 Chilomonas		5 min.
25.35 Naegleria fowleri		5 min.
25.85 Blood parasites		5 min.
25.86 Pneumocystis carinii		5 min.
26.41 Aflatoxin		5 min.
27.10 Yeast fungi complete		5 min.
27.11 Candida albicans		5 min
31.56 Detoxification mucous membrane	The detoxification programs listed here should be taken into consideration for this target disease.	5 min
31.60 Detoxification liver		5 min
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

65.60 Menopause complaints		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.13 Stomach meridian	Meridians that are associated with the target disease.	2 min.
02.14 Spleen meridian		2 min.
02.18 Kidney meridian		2 min.
02.24 Meridian of the Conception Vessel		2 min.
31.12 ATP production colon	These ATP programs have to be considered in regard to the target disease.	5 min.
31.20 ATP production Uterus		5 min.
31.22 ATP production ovaries		5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete	treatment approach	5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min

65.60 Menopause complaints		
Program no. / Name	Explanatory notes	Time
48.00 Liver – gall – pancreas, physiology complete	Hepatobiliary and pancreatic metabolism should be active for digestive processes.	5 min.
52.10 Skeleton complete	Changes and transitions in hormone levels during the menopause can lead to osteoporosis.	5 min.
55.10 Sleep-onset insomnia (9-11 pm) – often hormonal disorders	Hormone-related sleep disorders are common.	5 min.
55.20 Sleep-maintenance insomnia time 1 (11pm-01am early waking)	The symptoms of menopause include various sleep disorders.	5 min.
55.21 Difficulty in staying asleep time 2 (01 – 03h premature wakening)	The symptoms of menopause include various sleep disorders.	5 min.
55.22 Difficulty in staying asleep time 3 (03 – 05h premature wakening)	The symptoms of menopause include various sleep disorders.	5 min.
64.10 Hypothalamus complete	The hypothalamus acts on the pituitary gland and is the leading endocrine organ in terms of the regulation of sex hormone synthesis.	5 min.
64.20 Pituitary gland complete	The anterior pituitary produces hormones which act on the ovaries.	5 min.
64.80 Ovary complete	The ovaries are responsible for oestrogen and progestogen (progesterone) synthesis.	5 min.
Female hormonal balance basic regulation	Female hormone levels require support due to the changes which take place during the menopause.	5 min.
65.30 Hypothalamus	The hypothalamus directly affects the pituitary gland and formation of the sex hormones.	5 min.
65.31 Anterior lobe of pituitary	In turn, the anterior pituitary influences hormone production in the ovaries.	5 min.
65.60 Menopause complaints	Menopause, climacteric syndrome	5 min.
66.00 Female sexual organs, physiology complete	The female sex organs require support due to changes in hormone levels during the menopause.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.15 Weight reduction	Overweight and obesity are common symptoms of the menopause.	5 min.

65.60 Menopause complaints		
Program no. / Name	Explanatory notes	Time
75.18 Meteorosensitivity	Hormonal imbalances may also increase the likelihood of meteoropathy.	5 min
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min
20.19 Staphylococcus aureus		5 min
20.21 Streptococcus lactis		5 min
20.22 Streptococcus mitis		5 min
20.23 Streptococcus pneumoniae		5 min
20.24 Streptococcus pyogenes		5 min
20.25 Streptococcus sp.		5 min
21.86 Chlamydia trachomatis		5 min
22.15 Herpes simplex		5 min
22.17 Herpes zoster		5 min
22.18 Human papilloma virus (HPV)		5 min
25.41 Trichomonas vaginalis		5 min
27.11 Candida albicans		5 min
31.51 Detoxification blood system	The detoxification programs listed here should be taken into consideration for this target disease.	5 min
31.60 Detoxification liver		5 min
31.64 Detoxification female / female-specific		5 min
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

67.30 Endometriosis		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min
02.13 Stomach meridian	Meridians that are associated with the target disease.	2 min
02.14 Spleen meridian		2 min
02.18 Kidney meridian		2 min
02.24 Meridian of the Conception Vessel		2 min
31.20 ATP production uterus	These ATP programs have to be considered in regard to the target disease.	5 min
31.22 ATP production ovaries		5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete		5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min
08.00 Harmful substances (pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min
34.00 lmmune system physiology complete	The immune system requires support and strengthening.	5 min
36.10 Lymphatic tracts	Tissues from the uterine lining can also reach other organs via the lymphatic vessels (lymph ducts).	5 min
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min

67.30 Endometriosis		
Program no. / Name	Explanatory notes	Time
52.34 Sacral bone / coccyx bone	There may be pain, especially in the sacral region.	5 min.
53.73 Backache lumbar spine	Back pain radiates into the lumbar spine.	5 min.
64.10 Hypothalamus complete	This affects the anterior pituitary gland and the ovaries in the HPG axis.	5 min.
64.20 Pituitary gland complete	It affects the ovaries and ovarian hormone synthesis.	5 min.
64.80 Ovary complete	In endometriosis, fragments of the lining of the uterus travel through the fallopian tubes into the abdominal cavity during menstruation.	5 min.
64.81 Oestrogens	These are formed in the ovaries.	5 min.
64.82 Progesterone / gestagens	These are formed in the ovaries.	5 min.
Female hormonal balance basic regulation	Levels of female hormones should be balanced.	5 min.
65.30 Hypothalamus	The hypothalamus controls the release of hormones which stimulate the ovaries.	5 min.
65.31 Anterior lobe of pituitary	The hormones formed by the anterior pituitary have a direct effect on the ovaries.	5 min.
65.50 Menstruation programs complete	There may be disturbances in menstruation.	5 min.
66.00 Female sexual organs, physiology complete	Since tissue from the uterine lining travels into the abdominal cavity or attaches to other organs, the female genital organs should be supported.	5 min.
67.30 Endometriosis	Endometriosis	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.12 Beta haemolytic streptococci	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.19 Staphylococcus aureus		5 min.
20.21 Streptococcus lactis		5 min.
20.22 Streptococcus mitis		5 min.

67.30 Endometriosis		
Program no. / Name	Explanatory notes	Time
20.23 Streptococcus pneumoniae	In energy terms, the role of these pathogens in the target disease deserves particularly attention.	5 min.
20.24 Streptococcus pyogenes		5 min.
20.25 Streptococcus sp.		5 min.
21.86 Chlamydia trachomatis		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.18 Human papilloma virus (HPV)		5 min.
25.41 Trichomonas vaginalis		5 min.
27.11 Candida albicans		5 min.
31.51 Detoxification blood system	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.52 Detoxification lymphatic system		5 min.
31.64 Detoxification female / female-specific		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

72.10 Depression		
Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.15 Heart meridian	Meridians that are associated with the target disease.	2 min.
02.17 Bladder meridian		2 min
02.18 Kidney meridian		2 min
02.19 Liver meridian		2 min
02.20 Meridian of the heart and circulation		2 min
31.10 ATP production complete	These ATP programs have to be considered in regard to the target disease.	5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented treatment approach.	5 min
05.00 Geopathic disorders complete		5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min
08.00 Harmful substances (pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min
46.00 Digestive system physiology complete	Certain digestive functions may influence the onset of depression.	5 min
48.10 Liver complete	Hepatobiliary disorders can promote depression as a result of inadequate detoxification processes.	5 min

72.10 Depression		
Program no. / Name	Explanatory notes	Time
48.20 Gallbladder complete	Hepatobiliary disorders can promote depression as a result of inadequate detoxification processes.	5 min.
50.00 Metabolism, physiology complete	The metabolism can influence the development of diseases, as it can cause acidity in tissues and organs.	5 min.
51.40 Diabetes mellitus	In its advanced stages, diabetes is also associated with neurological symptoms, including depression.	5 min.
54.00 Nervous system physiology complete	The nervous system of diabetics is permanently damaged as a result of arterial circulation problems which impair blood supply to nerve tissue, especially in the peripheral nervous system and eventually the CNS.	5 min.
55.10 Sleep-onset insomnia (9-11 pm) – often hormonal disorders	Depression is often associated with sleep disturbances (problems falling and staying asleep) and its symptoms are worsened by lack of sleep.	5 min.
55.20 Sleep-maintenance insomnia time 1 (11pm-01am early waking)	Depression is often associated with sleep disturbances (problems falling and staying asleep) and its symptoms are worsened by lack of sleep.	5 min.
55.21 Difficulty in staying asleep time 2 (01 – 03h premature wakening)	Depression is often associated with sleep disturbances (problems falling and staying asleep) and its symptoms are worsened by lack of sleep.	5 min.
55.22 Difficulty in staying asleep time 3 (03 - 05h premature wakening)	Depression is often associated with sleep disturbances (problems falling and staying asleep) and its symptoms are worsened by lack of sleep.	5 min.
55.55 Headache	Headache and depression are closely linked as patients are subject to significant vegetative stress.	5 min.
64.05 Pineal gland (epiphysis) complete	The pineal gland is responsible for producing melatonin, a hormone which is released when it is dark to maintain the body's circadian rhythms. This function is often altered in depressed patients whose sleep pattern is disturbed.	5 min.
64.10 Hypothalamus complete	The influence of the diencephalon is an essential consideration in depression, as the hypothalamus is home to life-preserving centres which regulate and maintain our rhythm of life.	5 min.
64.20 Pituitary gland complete	As a result of its close links and interplay with the hypothalamus, the pituitary gland plays an important role in hormone regulation during depression.	5 min.

72.10 Depression		
Program no. / Name	Explanatory notes	Time
64.30 Thyroid gland	The influence of irregular thyroid function and hypothyroidism on the onset of depression is clear, since the entire metabolism is impaired or slowed down. A cause-oriented treatment approach calls for early diagnosis.	5 min.
64.55 Adrenal cortex	Addison's disease, also known as primary adrenal insufficiency and hypocortisolism, is primarily associated with reduced cortisol and aldosterone synthesis. The clinical picture includes fatigue, weakness, apathy, confusion and depressive moods with a number of organic symptoms.	5 min.
65.34 Thyroid gland hypofunction	The influence of irregular thyroid function and hypothyroidism on the onset of depression is clear, since the entire metabolism is impaired or slowed down. A cause-oriented treatment approach calls for early diagnosis.	5 min.
65.38 Hypofunction of the adrenal cortex	Addison's disease, also known as primary adrenal insufficiency and hypocortisolism, is primarily associated with reduced cortisol and aldosterone synthesis. The clinical picture includes fatigue, weakness, apathy, confusion and depressive moods with a number of organic symptoms.	5 min.
65.45 Premenstrual syndrome (PMS)	Premenstrual syndrome and depression can be closely linked, as hormone changes involved in the menstrual cycle can cause changes in mood.	5 min.
65.60 Menopause complaints	Depression and the menopause are closely linked, as changes in hormone levels can lead to mental fluctuations.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
72.10 Depression	Depression is a mental disorder which is primarily characterised by low mood, loss of interest, lack of drive, and impaired performance. Women are more commonly affected than men, and while depression may develop at any age, its incidence peaks in the third decade of life.	5 min.
72.12 Recurring depressive disorders	Depending on its causes, depression may present as a recurrent disease.	5 min.

72.10 Depression		
Program no. / Name	Explanatory notes	Time
72.17 Phobic neuroses	Anxiety and phobias can be symptoms of depression and should be treated early.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.18 Meteorosensitivity	Depression can be intensified or triggered by weather sensitivity (high pressure areas and bracing climates).	5 min.
75.19 Learning programme concentration enhancement	Early increase in the levels of concentration and interest of the patient may have a positive effect on symptoms of the depression, since the negative aspects of the disease such as the helplessness, brooding and low mood may then fade into the background. Stimulation of emotional, cognitive and somatic abilities can have a beneficial effect on the course of depression.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
81.00 Bach flowers complete	A number of different Bach flower remedies by Dr. Edward Bach can have beneficial effects on depression. There are anxiety flower remedies (no.2 and 21) and several other flowers essences which can decisively influence self-awareness and mood.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
21.61 Borrelia	disease deserves particularly attention.	5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
23.11 Borna virus		5 min.

72.10 Depression		
Program no. / Name	Explanatory notes	Time
23.56 Rotaviruses	In energy terms, the role of these pathogens in the target	5 min.
23.81 Viruses N.N.	disease deserves particularly attention.	5 min.
25.62 Dermatophagoides (dust mite)		5 min.
25.64 Demodex folliculorum (hair follicle mite)		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.53 Detoxification acidosis		5 min.
31.60 Detoxification liver	Ţ <u></u>	5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.15 Heart meridian	Meridians that are associated with the target disease.	2 min.
02.17 Bladder meridian		2 min.
02.18 Kidney meridian		2 min.
02.19 Liver meridian		2 min.
02.20 Meridian of the heart and circulation		2 min.
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min.
31.35 ATP production cerebrum	target disease.	5 min.
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min.
05.00 Geopathic disorders complete		5 min.
06.00 Acid-base balance complete		5 min.
07.00 Vital substances complete		5 min.
08.00 Harmful substances (pollutants) complete		5 min.
09.00 Enzymes complete		5 min.
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min.
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause- oriented treatment approach.	5 min.
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min.
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min.
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min.
48.10 Liver complete	Disturbances in hepatobiliary metabolism may promote neurological and psychological disorders by causing build-ups and hyperacidity.	5 min.

72.19 Autism		
Program no. / Name	Explanatory notes	Time
50.00 Metabolism, physiology complete	Metabolic disorders can influence mental illness and should be investigated before treatment.	5 min.
54.10 Central nervous system complete	The central and peripheral nervous systems should be examined before initiating treatment for autism, as any damage could lead to a wrong diagnosis.	5 min.
54.20 Peripheral nervous system, complete	The central and peripheral nervous systems should be examined before initiating treatment for autism, as any damage could lead to a wrong diagnosis.	5 min.
54.50 Autonomic nervous system	The vegetative nervous system influences the functions of internal organs and the psyche via the sympathetic and parasympathetic nervous systems.	5 min.
54.60 Psychosomatic control	Psychosomatic regulation plays an important role in all physical and mental functions in the body.	5 min.
64.10 Hypothalamus complete	The hypothalamus and the pituitary have a fundamental impact on mental disorders, as these life-sustaining centres located in the diencephalon regulate a variety of hormone glands.	5 min.
64.20 Pituitary gland complete	The hypothalamus and the pituitary have a fundamental impact on mental disorders, as these life-sustaining centres located in the diencephalon regulate a variety of hormone glands.	5 min.
64.28 Dopamine	Dopamine is a catecholamine, a neurotransmitter and the direct precursor of adrenaline and noradrenaline. It contributes to the control of involuntary movements and the regulation of muscle tone (tension) by the extrapyramidal motor system.	5 min.
64.29 Serotonin	Serotonin is a neurotransmitter and precursor to melatonin, which is synthesised in the pineal gland. It affects mood and circadian rhythms.	5 min.
64.30 Thyroid gland	Thyroid disorders should be investigated early on using cause- oriented diagnostic methods.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.
72.19 Autism	Autism is a mental contact disorder characterised by social-interaction difficulties, communication challenges and language problems. Is is also associated with repetitive and stereotypical behaviour patterns. Early infantile autism occurs before the age of three years and is associated with profound developmental disorders.	5 min.
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.

72.19 Autism		
Program no. / Name	Explanatory notes	Time
75.19 Learning programme / concentration enhancement	Increasing levels of attention and concentration are important aspects in the treatment autism.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
81.00 Bach flowers complete	Used as adjunctive therapy, some of Dr. Edward Bach's flower remedies can have positive effects on the mental disorders associated with autism.	5 min.
20.22 Streptococcus mitis	In energy terms, the role of these pathogens in the target	5 min.
21.61 Borrelia	disease deserves particularly attention.	5 min.
21.88 Rickettsiae		5 min.
21.95 Pain-producing bacteria		5 min.
22.12 Cytomegalovirus (CMV)		5 min.
22.13 Epstein-Barr virus (EBV)		5 min.
22.15 Herpes simplex		5 min.
22.17 Herpes zoster		5 min.
22.64 Chikungunya		5 min.
22.67 Coxsackie virus B1		5 min.
22.68 Coxsackie virus B4		5 min.
23.11 Borna virus		5 min.
23.56 Rotaviruses		5 min.
23.81 Viruses N.N.		5 min.
25.62 Dermatophagoides (dust mite)		5 min.
25.64 Demodex folliculorum (hair follicle mite)		5 min.
25.86 Pneumocystis carinii		5 min.
26.12 Aspergillus niger		5 min.
26.41 Aflatoxin		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.60 Detoxification liver		5 min.

72.19 Autism  Program no. / Name Explanatory notes Time		
31.67 Detoxification of exotoxins	5 min.	
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

Program no. / Name	Explanatory notes	Time
00.00 Analysis preparation	This program is used exclusively for analyses. Rotation of the Rayotensor: testing can commence. Linear motion: harmonise the program first, until a rotation of the Rayotensor can be observed.	5 min.
01.00 Vitalisation complete	Test to ascertain whether the energy balance is disturbed / too weak.	5 min.
02.19 Liver meridian	Meridians that are associated with the target disease.	2 min.
02.22 Gallbladder meridian		2 min
02.23 Meridian of the Governing Vessel		2 min.
31.10 ATP production complete	These ATP programs have to be considered in regard to the	5 min
31.29 ATP production liver	target disease.	5 min
04.00 Electrosmog complete	The programs indicated here serve to support a cause-oriented	5 min
05.00 Geopathic disorders complete	!	5 min
06.00 Acid-base balance complete		5 min
07.00 Vital substances complete		5 min
08.00 Harmful substances (pollutants) complete		5 min
09.00 Enzymes complete		5 min
30.00 Cells and tissue, physiology complete	In the cause-oriented treatment approach, the cell is regarded as the smallest functional unit. A distinction is also made between the different kinds of tissues.	5 min
31.81 Scar tissue repair	Scar tissue can either cause or trigger disorders and should be cleared before initiating therapy in the context of a cause-oriented treatment approach.	5 min
33.60 Oxygen supply / utilisation improvement	Improving oxygen supply is the most important prerequisite for cell metabolism and mitochondrial ATP production in each cell.	5 min
35.10 Raising the defence capacity, basic program	In order to activate the body's self-healing powers, it is necessary to boost the immune system to increase bodily defences.	5 min
36.00 Lymphatic system physiology complete	The lymphatic system cleanses the body by eliminating major products of degradation and toxins.	5 min
37.62 Detoxification vaccination lesions	Cause-oriented treatment approaches should consider the possibility of vaccine injury.	5 min
38.10 Arteries	Adequate oxygen supply via the arteries is a basic requirement for the function of all the organs in the body.	5 min

75.17 Giving up an addiction		
Program no. / Name	Explanatory notes	Time
38.50 Veins	Adequate venous return of CO <sub>2</sub> -rich blood to the right heart is a basic prerequisite for a healthy cardiovascular system.	5 min.
38.80 Capillaries	The capillaries are responsible for gas exchange and adequate supply of oxygen to the various organs.	5 min.
39.10 Impairment of the arterial blood supply	Arterial circulatory disorders should be investigated at an early stage to ensure that sufficient oxygen supply is maintained.	5 min.
39.15 Atherosclerosis	By forming deposits in the arteries, atherosclerosis promotes changes in the blood vessels and high blood pressure.	5 min.
39.20 Venous impairment of the blood supply (varicosis)	Venous circulatory disorders can result in varices (varicose veins), causing blood to pool and form thrombi. This risk of thrombosis or embolism should be addressed early on in order to prevent subsequent disorders.	5 min.
39.60 High blood pressure (high pressure)	In the long term, high blood pressure can cause life- threatening complications such as heart attack or stroke. Early preventative measures can have a decisive impact on the quality of life.	5 min.
40.00 Heart physiology complete	The cardiovascular system ensures that the body is adequately supplied with oxygen and nutrients.	5 min.
44.10 Kidney complete	The kidneys play an essential role in body detoxification and diuresis and should be strengthened in their function.	5 min.
46.00 Digestive system physiology complete	During recovery from addiction, the entire digestive system plays an important role in the purification and regeneration phase.	5 min.
48.10 Liver complete	The liver and gallbladder are responsible for detoxifying other organs in the body and should effectively eliminate toxins and excess acidity.	5 min.
48.20 Gallbladder complete	The liver and gallbladder are responsible for detoxifying other organs in the body and should effectively eliminate toxins and excess acidity.	5 min.
48.30 Pancreas complete	The pancreas secretes digestive enzymes which help break down and digest essential nutrients.	5 min.
50.00 Metabolism, physiology complete	Metabolic disorders may occur during substance abuse therapy and should be specifically treated and addressed.	5 min.
54.10 Central nervous system complete	Both the central and peripheral nervous systems should be examined before initiating substance abuse therapy.	5 min.

75.17 Giving up an addiction		
Program no. / Name	Explanatory notes	Time
54.20 Peripheral nervous system, complete	Both the central and peripheral nervous systems should be examined before initiating substance abuse therapy.	5 min.
54.50 Autonomic nervous system	The vegetative nervous system influences the functions of internal organs and the psyche via the sympathetic and parasympathetic nervous systems.	5 min.
54.60 Psychosomatic control	Psychosomatic regulation plays an important role in all physical and mental functions in the body.	5 min.
55.21 Difficulty in staying asleep time 2 (01 – 03h premature wakening)	According to traditional Chinese medicine, sleep disorders occurring between 01:00 and 03:00 am are a symptom of liver disease. Liver function should be restored so as to ensure proper detoxification and enzyme synthesis.	5 min.
64.10 Hypothalamus complete	The hypothalamus and the pituitary have a fundamental impact on physical and mental disorders, as these lifesustaining centres located in the diencephalon regulate a variety of hormone glands.	5 min.
64.20 Pituitary gland complete	The hypothalamus and the pituitary have a fundamental impact on physical and mental disorders, as these lifesustaining centres located in the diencephalon regulate a variety of hormone glands.	5 min.
64.28 Dopamine	Dopamine is a catecholamine, a neurotransmitter and the direct precursor of adrenaline and noradrenaline. It contributes to the control of involuntary movements and the regulation of muscle tone (tension) by the extrapyramidal motor system.	5 min.
64.29 Serotonin	Serotonin is a neurotransmitter and precursor of melatonin, a hormone which is synthesised in the pineal gland and released according to our circadian rhythms. It has a decisive effect on mood and circadian rhythms.	5 min.
64.70 Pancreas	The pancreas is an endocrine gland which produces hormones that help regulate levels of glucose in the blood.	5 min.
71.11 Pain receptors	Pain management, which targets the pain receptors, is an important component of substance abuse therapy.	5 min.
71.50 Pain relief	Pain relief is important in the treatment of addiction, as pain can adversely affect willpower and perseverance.	5 min.
72.00 Psyche	Mental factors should be taken into account in any kind of disease. Strengthening the psyche and ensuring its balance is an important prerequisite for all bodily functions.	5 min.

75.17 Giving up an addiction		
Program no. / Name	Explanatory notes	Time
75.10 Stress reduction	Stress factors can either cause or reinforce disorders.	5 min.
75.17 Giving up an addiction	When undergoing treatment for addiction, it is essential to cleanse and purge the body to enable the elimination of harmful substances via the relevant organs.	5 min.
75.20 Mental stress	Mental stress, especially persistent stress and psychological trauma can either cause or worsen disorders.	5 min.
76.00 Teeth, physiology complete	The relationship between the teeth and all organs in the body should be taken into account in the context of a cause-oriented treatment approach.	5 min.
20.69 Helicobacter pylori	In energy terms, the role of these pathogens in the target	5 min.
22.14 Hepatitis B virus	disease deserves particularly attention.	5 min.
22.74 Hepatitis A virus		5 min.
22.75 Hepatitis C virus		5 min.
24.41 Capillaria hepatica (liver)	-	5 min.
24.54 Eurytrema pancreaticum		5 min.
24.55 Fasciola hepatica		5 min.
24.58 Gastrothylax elongatus		5 min.
24.81 Echinococcus granulosus		5 min.
24.82 Echinococcus multicularis		5 min.
26.41 Aflatoxin		5 min.
31.50 Basic detoxification program	The detoxification programs listed here should be taken into consideration for this target disease.	5 min.
31.53 Detoxification acidosis		5 min.
31.60 Detoxification liver		5 min.
01.00 Vitalisation complete	The body requires energy to be able to process the regulatory impulses that it has received. Therefore, a harmonising session is always finished by re-running the vitalisation program again.	2 min.

### 17. Pathology RAH compact programs

When the development of the RAH (Rayonex Analysis and Harmonising system) began in 2007, no one suspected what powerful, energetic expert system would emerge. Almost yearly new RAH-programs with regards to analysis and harmonisation are added to the RAH, be it in the human or veterinary field.

The actual RAH is characterised by great individuality as well as many prepared RAH program sets. This is important for new entrants, but also for experienced users of the system.

The aim can be described as follows: With as little time as possible therapists can achieve the maximum therapeutic success for the patients. Of course, it would be ideal to test all available RAH programs to come to an individual, cause-orientated analysis and harmonisation. However, daily praxis showed that prepared RAH sets too can be very effectively used for analysis and harmonisation. The advantage: The number of RAH programs to be tested is reduced significantly.

An example: in the past we asked therapists from several countries which RAH programs they would test and harmonise in case of hypertension. The results showed that therapists tended to follow their own focus and in doing so ignored many of the therapeutic possibilities of the RAH. Many therapists, also experienced therapists, were not clear about which channels, ATP programs, pathogens, physiology and pathology programs, detoxification programs, etc. were to be tested and harmonised for this disease. But also for new entrants it would be a great help to have clear guidelines of the RAH programs to be tested and to be able to harmonise based on the test results. Therefore, some years ago, the so-called RAH test protocols were developed. These are RAH program protocols set up by experts, accurately focused on a specific disease (e.g. hypertension), optimally

suitable for testing and subsequentl harmonisation. In the meantime these test protocols have become indispensable in daily operations of the RAH expert system. One reason is that more and more RAH test protocols were developed by Rayonex Biomedical GmbH.

So much for testing. However, what's the procedure when a clear diagnosis is made and a useful set of RAH programs is needed? Now the RAH contains many pathology programs from a range of various areas. Only using the respective RAH pathology program for harmonising would not do justice to the complexity of the disease and the therapist's demand and would neglect to observe many useful RAH programs. In addition, it makes sense to use certain RAH programs before or after a harmonisation. The RAH programs 00.00 (analysis preparation) and 01.00 (vitalisation, complete) must e.g. always be placed at the start of a harmonisation program. It was also clear that the repeated harmonisation of the RAH program 01.00 (vitalisation complete) is beneficial at the end of the harmonisation.

Therefore the new RAH compact programs were developed. Herewith the therapist can refer to a praxis-proven compilation of matching RAH programs for each RAH pathology program.

The example to RAH program 37.15 Lymphatic oedema will make this clear:

00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.25 ATP production lymph	5 min.
35.10 Raising the defence capacity,	
basic program	5 min.
36.00 Lymphatic system physiology complete	5 min.
37.13 Lymph flow disorder	5 min.
37.15 Lymphatic oedema	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.

The 10 listed RAH programs represent the praxisproven compact program for lymphatic oedema.

Users of a Rayocomp PS 10 can enter this set-up of RAH programs into the device and use it for harmonisation. Of course the programs can be stored permanently on a Green Card and be of very practical use e.g. in the context of home therapy.

It is more convenient for users of a Rayocomp PS 1000 polar. The device with a 2017 software update offers the option to read the compact programs at the push of a button and use them for harmonisation.

We wish you and your patients a lot of success with the new RAH compact programs.

# 17.1 Immune system

35.20 Allergy complete	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
34.00 Immune system physiology complete	
35.10 Raising the defence capacity, basic program	
35.20 Allergy complete	
36.00 Lymphatic system physiology complete	
64.27 Histamine	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
35.30 Fructose intolerance	Time
35.30 Fructose intolerance	
	5 min.
00.00 Analysis preparation	5 min. 5 min.
00.00 Analysis preparation	5 min. 5 min. 5 min.
00.00 Analysis preparation	5 min. 5 min. 5 min. 5 min. 5 min. 5 min.
00.00 Analysis preparation	5 min.
00.00 Analysis preparation	5 min.
00.00 Analysis preparation	5 min.
00.00 Analysis preparation	5 min.
00.00 Analysis preparation	5 min.
00.00 Analysis preparation	5 min.
00.00 Analysis preparation	5 min.

17.2 Lymph 459

## 17.2 Lymph

37.10 Lymph vessel inflammation	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.25 ATP production lymph	5 min.
35.10 Raising the defence capacity, basic program	5 min.
36.00 Lymphatic system physiology complete	5 min.
37.10 Lymph vessel inflammation	5 min.
37.12 Lymphadenitis, swelling of a lymph node	5 min.
37.30 Spleen, strengthening the organ function	5 min.
37.40 Thymus gland strengthening the organ function	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
37.11 Lymph vessel degeneration	Timo
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.25 ATP production lymph	
35.10 Raising the defence capacity, basic program	
36.00 Lymphatic system physiology complete	
37.11 Lymph vessel degeneration	
37.30 Spleen, strengthening the organ function	
37.40 Thymus gland strengthening the organ function	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
37.12 Lymphadenitis, swelling of a lymph node	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.25 ATP production lymph	
35.10 Raising the defence capacity, basic program	
36.00 Lymphatic system physiology complete	
36.20 Lymph nodes	5 min.
37.12 Lymphadenitis, swelling of a lymph node	
37.30 Spleen, strengthening the organ function	
37.40 Thymus gland strengthening the organ function	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.

37.13 Lymph flow disorder	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.25 ATP production lymph	5 min.
35.10 Raising the defence capacity, basic program	5 min.
36.00 Lymphatic system physiology complete	
37.13 Lymph flow disorder	
37.15 Lymphatic oedema	
37.30 Spleen, strengthening the organ function	
37.40 Thymus gland strengthening the organ function	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
'	
37.14 Tonsillitis, acute	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.25 ATP production lymph	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.16 Upper respiratory system	10 min.
36.00 Lymphatic system physiology complete	5 min.
37.12 Lymphadenitis, swelling of a lymph node	5 min.
37.13 Lymph flow disorder	5 min.
37.14 Tonsillitis, acute	
43.17 Pharyngitis	5 min.
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
37.15 Lymphatic oedema	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.25 ATP production lymph	
35.10 Raising the defence capacity, basic program	
36.00 Lymphatic system physiology complete	
37.13 Lymph flow disorder	
37.15 Lymphatic oedema	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
37.30 Spleen, strengthening the organ function	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
ı	

02.00 Acupuncture Meridians complete	5 min.
31.25 ATP production lymph	5 min
32.05 Stem cells of the bone marrow	
32.20 Leukocytes complete WBC	5 min
35.10 Raising the defence capacity, basic program	5 min
36.10 Lymph vessels	5 min
36.20 Lymph nodes	5 min
36.60 Spleen	5 min
37.30 Spleen, strengthening the organ function	5 min
31.50 Basic detoxification program	5 min
01.00 Vitalisation complete	5 min
37.40 Thymus gland strengthening the organ function	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.25 ATP production lymph	
32.05 Stem cells of the bone marrow	
32.20 Leukocytes complete WBC	
34.00 Immune system physiology complete	
36.20 Lymph nodes	5 min
36.50 Thymus gland	
37.40 Thymus gland strengthening the organ function	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min
37.50 Appendicitis	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
20.10 Coccobacilli complete	
20.40 Rod-shaped bacteria complete	
21.10 Enterobacteriaceae complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
36.00 Lymphatic system physiology complete	
36.80 Appendix	
37.50 Appendicitis	
46.51 Appendix	
46.52 Vermicular appendix	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.

### 17.3 Circulation

39.10 Arterial impairment of the blood supply	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	
31.39 ATP production blood vessels	5 min.
35.10 Raising the defence capacity, basic program	5 min.
38.00 Circulatory system physiology complete	5 min
38.10 Arteries	5 min
39.10 Arterial impairment of the blood supply	5 min
31.50 Basic detoxification program	5 min
01.00 Vitalisation complete	5 min.
39.15 Atherosclerosis	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.39 ATP production blood vessels	5 min.
35.10 Raising the defence capacity, basic program	5 min.
38.00 Circulatory system physiology complete	
38.10 Arteries	
39.10 Arterial impairment of the blood supply	5 min
39.15 Atherosclerosis	5 min
39.40 Degeneration of the blood vessels	
31.50 Basic detoxification program	5 min
01.00 Vitalisation complete	5 min.
39.20 Venous impairment of the blood supply (varicosis)	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	5 min
02.00 Acupuncture Meridians complete	5 min
31.39 ATP production blood vessels	
31.87 Oedemata	5 min
35.10 Raising the defence capacity, basic program	5 min
36.00 Lymphatic system physiology complete	5 min
38.00 Circulatory system physiology complete	5 min
38.50 Veins	5 min
39.20 Venous impairment of the blood supply (varicosis)	5 min
39.40 Degeneration of the blood vessels	5 min
31.50 Basic detoxification program	5 min
01 00 Vitalisation complete	5 min

39.30 Inflammation of the blood vessels	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	
31.39 ATP production blood vessels	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.25 Artery and vein system	
38.00 Circulatory system physiology complete	
39.30 Inflammation of the blood vessels	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
39.40 Degeneration of the blood vessels	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.39 ATP production blood vessels	
35.10 Raising the defence capacity, basic program	
38.00 Circulatory system physiology complete	
38.10 Arteries	
39.10 Arterial impairment of the blood supply	
39.40 Degeneration of the blood vessels	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
39.50 Blood pressure regulatory disorder	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.39 ATP production blood vessels	
35.10 Raising the defence capacity, basic program	
38.00 Circulatory system physiology complete	
39.50 Blood pressure regulatory disorder	
64.00 Hormonal system, physiology complete	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
39.60 High blood pressure (hypertension)	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.39 ATP production blood vessels	5 min.

35.10 Raising the defence capacity, basic program	5 min.
70.47 Vasodepression	10 min.
38.00 Circulatory system physiology complete	5 min.
39.10 Arterial impairment of the blood supply	5 min.
39.40 Degeneration of the blood vessels	5 min.
39.50 Blood pressure regulatory disorder	5 min.
39.60 High blood pressure (hypertension)	5 min.
64.00 Hormonal system, physiology complete	
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
	Ţ.
39.65 Renal hypertension	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.39 ATP production blood vessels	
35.10 Raising the defence capacity, basic program	
70.47 Vasodepression	
38.00 Circulatory system physiology complete	
39.50 Blood pressure regulatory disorder	
39.65 Renal hypertension	
64.60 Kidney	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
39.70 Low blood pressure (hypotension)	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.39 ATP production blood vessels	
35.10 Raising the defence capacity, basic program	
38.00 Circulatory system physiology complete	
39.50 Blood pressure regulatory disorder	
39.70 Low blood pressure (hypotension)	
64.00 Hormonal system, physiology complete	
31.50 Basic detoxification program	
01.00 Vitalisation complete	

### 17.4 Heart

41.10 Strengthening of the myocardium	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.15 ATP production heart	5 min.
31.39 ATP production blood vessels	5 min.
31.40 ATP production muscles	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.18 Heart	10 min.
38.00 Circulatory system physiology complete	5 min.
40.00 Heart physiology complete	5 min.
41.10 Strengthening of the myocardium	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
41.11 Strengthening of the heart capacity	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min
31.15 ATP production heart	5 min
31.39 ATP production blood vessels	5 min
35.10 Raising the defence capacity, basic program	5 min
70.18 Heart	
38.00 Circulatory system physiology complete	5 min
40.00 Heart physiology complete	5 min
41.11 Strengthening of the heart capacity	5 min
31.50 Basic detoxification program	5 min
01.00 Vitalisation complete	5 min.
41.20 Cardiac insufficiency, left	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.15 ATP production heart	
31.39 ATP production blood vessels	
31.87 Oedemata	
35.10 Raising the defence capacity, basic program	
70.18 Heart	
38.00 Circulatory system physiology complete	
39.60 High blood pressure (hypertension)	
40.00 Heart physiology complete	5 min

41.20 Cardiac insufficiency, left	5 min.
41.30 Cardiac insufficiency, right	5 min.
42.70 Lung complete	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
41.30 Cardiac insufficiency, right	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.15 ATP production heart	5 min.
31.39 ATP production blood vessels	5 min.
31.87 Oedemata	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.18 Heart	10 min.
38.00 Circulatory system physiology complete	5 min.
39.15 Atherosclerosis	5 min.
39.40 Degeneration of the blood vessels	5 min.
39.60 High blood pressure (hypertension)	5 min.
40.00 Heart physiology complete	5 min.
41.20 Cardiac insufficiency, left	5 min.
41.30 Cardiac insufficiency, right	5 min.
42.70 Lung complete	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
41.40 Angina pectoris	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.15 ATP production heart	5 min.
35.10 Raising the defence capacity, basic program	5 min.
38.00 Circulatory system physiology complete	5 min.
40.00 Heart physiology complete	5 min.
41.40 Angina pectoris	5 min.
41.50 Psychogenic heart disorder	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
41.50 Psychogenic heart disorder	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.

35.10 Raising the defence capacity, basic program	
40.00 Heart physiology complete	5 min.
41.50 Psychogenic heart disorder	
72.00 Psyche	
75.00 Stress	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
17.5 Respiratory tract	
This hespiratory tract	
43.10 Cough	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.11 ATP production lung	5 min.
35.10 Raising the defence capacity, basic program	
70.17 Lung system	10 min.
36.00 Lymphatic system physiology complete	
42.60 Bronchus complete	5 min.
43.10 Cough	5 min.
43.30 Mucoid degeneration	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
43.11 Rhinitis, acute (common cold)	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
70.16 Upper respiratory system	
36.00 Lymphatic system physiology complete	5 min.
42.10 Nose/olfactory organ complete	
43.11 Rhinitis, acute (common cold)	
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
43.12 Nasal polyps	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	

35.10 Raising the defence capacity, basic program       5         42.00 Respiratory system physiology complete       5         42.10 Nose/olfactory organ complete       5         43.12 Nasal polyps       5         42.20 Paranasal sinuses complete       5         31.50 Basic detoxification program       5         01.00 Vitalisation complete       5         43.13 Bronchitis, acute       T         00.00 Analysis preparation       5         01.00 Vitalisation complete       5         02.00 Acupuncture Meridians complete       5         35.10 Raising the defence capacity, basic program       5         70.17 Lung system       10         36.00 Lymphatic system physiology complete       5         42.60 Bronchus complete       5         43.13 Bronchitis, acute       5         43.13 Bronchitis, acute       5         43.14 Bronchitis, acute       5         43.15 Basic detoxification program       5         01.00 Vitalisation complete       5         43.14 Bronchitis, chronic       7         00.00 Analysis preparation       5         01.00 Vitalisation complete       5         43.14 Bronchitis, chronic       5         02.00 Acupuncture Meridians complete <td< th=""><th>min. min. min. min. min. min. min. min.</th></td<>	min. min. min. min. min. min. min. min.
42.00 Respiratory system physiology complete       5         42.10 Nose/olfactory organ complete       5         43.12 Nasal polyps       5         42.20 Paranasal sinuses complete       5         31.50 Basic detoxification program       5         01.00 Vitalisation complete       5         43.13 Bronchitis, acute       T         00.00 Analysis preparation       5         01.00 Vitalisation complete       5         02.00 Acupuncture Meridians complete       5         35.10 Raising the defence capacity, basic program       5         70.17 Lung system       10         36.00 Lymphatic system physiology complete       5         42.60 Bronchus complete       5         43.13 Bronchitis, acute       5         43.10 Mucoid degeneration       5         31.50 Basic detoxification program       5         01.00 Vitalisation complete       5         43.14 Bronchitis, chronic       7         00.00 Analysis preparation       5         01.00 Vitalisation complete       5         43.11 ATP production lung       5         35.10 Raising the defence capacity, basic program       5	min. min. min. min. min. min. min. min.
42.10 Nose/olfactory organ complete	min. min. min. min. min. min. min. min.
43.12 Nasal polyps       5         42.20 Paranasal sinuses complete       5         31.50 Basic detoxification program       5         01.00 Vitalisation complete       5         43.13 Bronchitis, acute       T         00.00 Analysis preparation       5         01.00 Vitalisation complete       5         02.00 Acupuncture Meridians complete       5         31.11 ATP production lung       5         35.10 Raising the defence capacity, basic program       5         70.17 Lung system       10         36.00 Lymphatic system physiology complete       5         42.60 Bronchus complete       5         43.13 Bronchitis, acute       5         43.00 Mucoid degeneration       5         31.50 Basic detoxification program       5         01.00 Vitalisation complete       5         43.14 Bronchitis, chronic       T         00.00 Analysis preparation       5         01.00 Vitalisation complete       5         02.00 Acupuncture Meridians complete       5         31.11 ATP production lung       5         35.10 Raising the defence capacity, basic program       5	min. min. min. min. ime min. min.
42.20 Paranasal sinuses complete       5         31.50 Basic detoxification program       5         01.00 Vitalisation complete       5         43.13 Bronchitis, acute       T         00.00 Analysis preparation       5         01.00 Vitalisation complete       5         02.00 Acupuncture Meridians complete       5         31.11 ATP production lung       5         35.10 Raising the defence capacity, basic program       5         70.17 Lung system       10         36.00 Lymphatic system physiology complete       5         42.60 Bronchus complete       5         43.13 Bronchitis, acute       5         43.30 Mucoid degeneration       5         31.50 Basic detoxification program       5         01.00 Vitalisation complete       5         43.14 Bronchitis, chronic       T         00.00 Analysis preparation       5         01.00 Vitalisation complete       5         02.00 Acupuncture Meridians complete       5         02.00 Acupuncture Meridians complete       5         31.11 ATP production lung       5         35.10 Raising the defence capacity, basic program       5	min. min. nin. ime nin. min.
31.50 Basic detoxification program	nin. nin. ime nin. nin.
01.00 Vitalisation complete	nin. ime nin. nin. nin.
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00.00 Analysis preparation5 to01.00 Vitalisation complete5 to02.00 Acupuncture Meridians complete5 to31.11 ATP production lung5 to35.10 Raising the defence capacity, basic program5 to70.17 Lung system10 to36.00 Lymphatic system physiology complete5 to42.60 Bronchus complete5 to43.13 Bronchitis, acute5 to43.30 Mucoid degeneration5 to31.50 Basic detoxification program5 to01.00 Vitalisation complete5 to43.14 Bronchitis, chronicTo00.00 Analysis preparation5 to01.00 Vitalisation complete5 to02.00 Acupuncture Meridians complete5 to31.11 ATP production lung5 to35.10 Raising the defence capacity, basic program5 to	nin. nin. nin.
01.00 Vitalisation complete502.00 Acupuncture Meridians complete531.11 ATP production lung535.10 Raising the defence capacity, basic program570.17 Lung system1036.00 Lymphatic system physiology complete542.60 Bronchus complete543.13 Bronchitis, acute543.30 Mucoid degeneration531.50 Basic detoxification program501.00 Vitalisation complete543.14 Bronchitis, chronicT00.00 Analysis preparation501.00 Vitalisation complete502.00 Acupuncture Meridians complete531.11 ATP production lung535.10 Raising the defence capacity, basic program5	nin. nin.
02.00 Acupuncture Meridians complete531.11 ATP production lung535.10 Raising the defence capacity, basic program570.17 Lung system1036.00 Lymphatic system physiology complete542.60 Bronchus complete543.13 Bronchitis, acute543.30 Mucoid degeneration531.50 Basic detoxification program501.00 Vitalisation complete543.14 Bronchitis, chronicT00.00 Analysis preparation501.00 Vitalisation complete502.00 Acupuncture Meridians complete531.11 ATP production lung535.10 Raising the defence capacity, basic program5	nin.
31.11 ATP production lung	
35.10 Raising the defence capacity, basic program	nin.
70.17 Lung system	
36.00 Lymphatic system physiology complete	nin.
42.60 Bronchus complete543.13 Bronchitis, acute543.30 Mucoid degeneration531.50 Basic detoxification program501.00 Vitalisation complete543.14 Bronchitis, chronicT00.00 Analysis preparation501.00 Vitalisation complete502.00 Acupuncture Meridians complete531.11 ATP production lung535.10 Raising the defence capacity, basic program5	nin.
43.13 Bronchitis, acute	nin.
43.30 Mucoid degeneration	nin.
31.50 Basic detoxification program	nin.
01.00 Vitalisation complete	nin.
43.14 Bronchitis, chronic	nin.
00.00 Analysis preparation5 I01.00 Vitalisation complete5 I02.00 Acupuncture Meridians complete5 I31.11 ATP production lung5 I35.10 Raising the defence capacity, basic program5 I	nin.
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02.00 Acupuncture Meridians complete	
31.11 ATP production lung	
35.10 Raising the defence capacity, basic program5	
70.17	
70.17 Lung system	
36.00 Lymphatic system physiology complete	
42.60 Bronchus complete	
43.14 Bronchitis, chronic	
43.30 Mucoid degeneration	
31.50 Basic detoxification program	
01.00 Vitalisation complete	nın.
43.15 Sinusitis, acuteT	
00.00 Analysis preparation	ime
01.00 Vitalisation complete5 i	
02.00 Acupuncture Meridians complete5 I	nin.
31.25 ATP production lymph5 i	nin. nin.
35.10 Raising the defence capacity, basic program5	min. min. min.

70.16 Upper respiratory system	10 min.
36.00 Lymphatic system physiology complete	5 min.
42.10 Nose/olfactory organ complete	5 min.
42.20 Paranasal sinuses complete	5 min.
43.11 Rhinitis, acute (common cold)	5 min.
43.15 Sinusitis, acute	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
'	
43.16 Sinusitis, chronic	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.25 ATP production lymph	5 min.
35.10 Raising the defence capacity, basic program	
70.16 Upper respiratory system	10 min.
36.00 Lymphatic system physiology complete	5 min.
42.10 Nose/olfactory organ complete	5 min.
42.20 Paranasal sinuses complete	5 min.
43.11 Rhinitis, acute (common cold)	
43.16 Sinusitis, chronic	
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
43.17 Pharyngitis	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
70.16 Upper respiratory system	
36.00 Lymphatic system physiology complete	
42.30 Throat	
43.17 Pharyngitis	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
43.18 Laryngitis	Tima
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
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70.16 Upper respiratory system	10 min.
36.00 Lymphatic system physiology complete	5 min.
42.40 Larynx complete	5 min.
43.18 Laryngitis	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
43.20 Bronchial asthma	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.11 ATP production lung	
34.00 Immune system physiology complete	
35.10 Raising the defence capacity, basic program	
35.20 Allergy complete	
70.16 Upper respiratory system	
36.00 Lymphatic system physiology complete	
42.60 Bronchus complete	
42.70 Lung complete	
43.10 Cough	
43.20 Bronchial asthma	
43.30 Mucoid degeneration	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
43.30 Mucoid degeneration	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.11 ATP production lung	
35.10 Raising the defence capacity, basic program	
70.17 Lung system	
36.00 Lymphatic system physiology complete	
42.60 Bronchus complete	
42.70 Lung complete	
43.30 Mucoid degeneration	
31.50 Basic detoxification program	
, -	
01.00 Vitalisation complete	ə min.
43.40 Pleuritis sicca / exsudativa	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	

31.11 ATP production lung	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.17 Lung system	
43.40 Pleuritis sicca / exsudativa	
42.81 Pulmonary pleura (pleura visceralis)	5 min.
42.82 Costal pleura (pleura parietalis)	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
43.50 Pneumonia, bacterial	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	5 min.
31.11 ATP production lung	
35.10 Raising the defence capacity, basic program	
70.17 Lung system	
42.70 Lung complete	
42.80 Pleura complete	
43.50 Pneumonia, bacterial	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
43.51 Pneumonia, atypical	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.11 ATP production lung	
35.10 Raising the defence capacity, basic program	
70.17 Lung system	
42.80 Pleura complete	
43.51 Pneumonia, atypical	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
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### 17.6 Kidney

45.05 Kidney failure	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.23 ATP production kidney	5 min.
31.87 Oedemata	5 min.
35.10 Raising the defence capacity, basic program	5 min.
44.10 Kidney complete	5 min.
44.17 Renal glomeruli	5 min.
70.21 Kidneys, ureter	10 min.
45.05 Kidney failure	5 min.
45.10 Glomerulonephritis	5 min.
45.80 Water removal	5 min.
31.51 Detoxification blood system	5 min.
31.52 Detoxification lymphatic system	5 min.
31.62 Detoxification kidney	5 min.
01.00 Vitalisation complete	5 min.
45.10 Glomerulonephritis	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.23 ATP production kidney	
31.87 Oedemata	
35.10 Raising the defence capacity, basic program	
44.10 Kidney complete	
44.17 Renal glomeruli	
45.05 Kidney failure	
45.10 Glomerulonephritis	
45.80 Water removal	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
45.11 Membranous glomerulonephritis	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.87 Oedemata	
31.23 ATP production kidney	
35.10 Raising the defence capacity, basic program	
44.10 Kidney complete	

44.17 Renal glomeruli	
45.11 Membranous glomerulonephritis	5 min.
45.80 Water removal	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
45.12 Tubulo-interstitial glomerulonephritis	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.23 ATP production kidney	5 min.
31.87 Oedemata	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.21 Kidneys, ureter	10 min.
44.10 Kidney complete	5 min.
44.17 Renal glomeruli	5 min.
45.12 Tubulo-interstitial glomerulonephritis	5 min.
45.80 Water removal	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
45.15 Nephrosis (protein-losing kidney)	
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.23 ATP production kidney	5 min.
31.87 Oedemata	5 min.
35.10 Raising the defence capacity, basic program	5 min.
44.10 Kidney complete	5 min.
44.17 Renal glomeruli	
45.15 Nephrosis (protein-losing kidney)	5 min.
45.80 Water removal	
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
45.16 Glomerulopathy	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.23 ATP production kidney	
35.10 Raising the defence capacity, basic program	
31.87 Oedemata	
70.21 Kidneys, ureter	
AAZ 1 NIMIN VA. MICHAL	

44.10 Kidney complete	5 min.
44.17 Renal glomeruli	5 min.
45.05 Kidney failure	5 min.
45.16 Glomerulopathy	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
45.20 Renal artery stenosis	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.23 ATP production kidney	5 min.
31.39 ATP production blood vessels	5 min.
35.10 Raising the defence capacity, basic program	5 min.
31.87 Oedemata	5 min.
39.40 Degeneration of the blood vessels	5 min.
44.10 Kidney complete	5 min.
45.20 Renal artery stenosis	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
45.25 Nephrolithiasis (kidney stones)	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.23 ATP production kidney	
35.10 Raising the defence capacity, basic program	
44.00 Kidney/urinary organs, physiology complete	
44.21 Ureter	
39.65 Renal hypertension	
45.25 Nephrolithiasis (kidney stones)	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
45.30 Pyelonephritis (pyelitis and kidney infection)	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.23 ATP production kidney	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.21 Kidneys, ureter	10 min.
44.10 Kidney complete	5 min.
44 11 Renal nelvis	5 min

44.20 Urinary organs complete	5 min.
45.30 Pyelonephritis (pyelitis and kidney infection)	5 min.
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
45.35 Cystitis (inflammation of the bladder)	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.17 ATP production bladder	5 min.
31.23 ATP production kidney	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.21 Kidneys, ureter	10 min.
44.10 Kidney complete	5 min.
44.20 Urinary organs complete	
45.35 Cystitis (inflammation of the bladder)	
45.40 Urethritis (inflammation of the urethra)	
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
45.40 Urethritis (inflammation of the urethra)	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.17 ATP production bladder	
31.23 ATP production kidney	
35.10 Raising the defence capacity, basic program	
70.21 Kidneys, ureter	
44.10 Kidney complete	
44.20 Urinary organs complete	
45.35 Cystitis (inflammation of the bladder)	
45.40 Urethritis (inflammation of the urethra)	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
	•
45.45 Diabetic nephropathy (diabetic glomerulosclerosis)	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.23 ATP production kidney	
31.87 Oedemata	
33.21 Renal anaemia	
34.00 Immune system physiology complete	5 min

44.10 Kidney complete	5 min.
45.45 Diabetic nephropathy (diabetic glomerulosclerosis)	5 min.
45.80 Water removal	5 min.
51.40 Diabetes mellitus	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
45 50 Paral Palata	<b>T</b> *
45.50 Renal diabetes	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.23 ATP production kidney	
35.10 Raising the defence capacity, basic program	
70.21 Kidneys, ureter	
44.10 Kidney complete	
45.50 Renal diabetes	
64.00 Hormonal system, physiology complete	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 !!!!!!
45.80 Water removal	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
09.00 Enzymes complete	5 min.
31.10 ATP production complete	
31.87 Oedemata	5 min.
35.10 Raising the defence capacity, basic program	5 min.
36.00 Lymphatic system physiology complete	
38.80 Capillaries	
39.50 Blood pressure regulatory disorder	
44.10 Kidney complete	5 min.
44.20 Urinary organs complete	
45.80 Water removal	
64.10 Hypothalamus complete	
64.20 Pituitary gland complete	
64.60 Kidney	
31.50 Basic detoxification program	
01.00 Vitalisation complete	

17.7 Digestive system 477

# 17.7 Digestive system

47.10 Oesophagitis	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
30.90 Mucous membranes complete	5 min.
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
70.19 Digestive organs	
46.20 Oesophagus	5 min.
47.10 Oesophagitis	5 min.
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
47.20 Gastritis, acute	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	5 min.
31.13 ATP production stomach	
35.10 Raising the defence capacity, basic program	
70.19 Digestive organs	
46.30 Stomach complete	
47.20 Gastritis, acute	
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	
47.30 Gastritis, chronic	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	5 min.
31.13 ATP production stomach	5 min.
35.10 Raising the defence capacity, basic program	
70.19 Digestive organs	
46.30 Stomach complete	
46.40 Small intestines complete	
47.30 Gastritis, chronic	
31.50 Basic detoxification program	
01.00 Vitalisation complete	

47.31 Gastritis, A type	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
07.49 Vitamin B12, cobalamin	5 min.
09.34 Enzymes, digestive system complete	5 min.
31.13 ATP production stomach	5 min.
33.25 Vitamin B12 deficiency anaemia	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.19 Digestive organs	10 min.
46.30 Stomach complete	5 min.
47.31 Gastritis, A type	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
47.32 Gastritis, B type	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.13 ATP production stomach	
35.10 Raising the defence capacity, basic program	
70.19 Digestive organs	
70.41 Helicobacter pylori infection	
46.30 Stomach complete	
47.32 Gastritis, B type	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
47.33 Gastritis, C type	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
30.92 Mucous membranes, trunk	
31.13 ATP production stomach	
35.10 Raising the defence capacity, basic program	
70.19 Digestive organs	
48.20 Gall complete	
46.30 Stomach complete	
47.33 Gastritis, C type	
31.50 Basic detoxification program	
01.00 Vitalisation complete	

47.40 Gastric ulcer	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.13 ATP production stomach	5 min.
31.70 Degeneration cellular tissue	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.19 Digestive organs	10 min.
70.41 Helicobacter pylori infection	10 min.
46.30 Stomach complete	5 min.
46.40 Small intestines complete	5 min.
47.40 Gastric ulcer	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
47.45 Duodenal ulcer	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
30.92 Mucous membranes, trunk	
31.16 ATP production small intestines	
35.10 Raising the defence capacity, basic program	
31.70 Degeneration cellular tissue	
70.19 Digestive organs	
70.41 Helicobacter pylori infection	
46.30 Stomach complete	
46.40 Small intestines complete	
47.45 Duodenal ulcer	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
47.50 Crohn's disease	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.12 ATP production colon	
31.16 ATP production small intestines	
31.70 Degeneration cellular tissue	
35.10 Raising the defence capacity, basic program	
70.19 Digestive organs	
46.00 Digestive system, physiology complete	
47.50 Crohn's disease	
64.55 Adrenal cortex	
72.00 Psyche	5 min.

31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
47.60 Ulcerative colitis	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
30.92 Mucous membranes, trunk	
31.12 ATP production colon	
31.16 ATP production small intestines	
31.70 Degeneration cellular tissue	
35.10 Raising the defence capacity, basic program	
70.19 Digestive organs	
46.00 Digestive system, physiology complete	
47.60 Ulcerative colitis	
64.55 Adrenal cortex	5 min.
75.10 Stress reduction	5 min.
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
47.70 Irritable bowel syndrome (IBS)	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.12 ATP production colon	
31.16 ATP production small intestines	5 min.
35.10 Raising the defence capacity, basic program	
70.19 Digestive organs	
46.00 Digestive system, physiology complete	5 min.
47.70 Irritable bowel syndrome (IBS)	5 min.
75.10 Stress reduction	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
47.80 Intestinal polyps	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.12 ATP production colon	
31.16 ATP production small intestines	
31.70 Degeneration cellular tissue	
35.10 Raising the defence capacity, basic program	
46.00 Digestive system, physiology complete	

47.80 Intestinal polyps	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
17.8 Liver, gall bladder / pancreas	
-	
49.10 Hepatitis	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.29 ATP production liver	
35.10 Raising the defence capacity, basic program	
70.20 Liver, gall, pancreas	
48.10 Liver complete	
49.10 Hepatitis	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
•	
49.15 Degeneration of the liver	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.29 ATP production liver	
35.10 Raising the defence capacity, basic program	
31.70 Degeneration cellular tissue	
70.20 Liver, gall, pancreas	
48.10 Liver complete	
49.15 Degeneration of the liver	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
oneo vitansation complete	
49.30 Bile formation disorder	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.27 ATP production gall bladder	
31.28 ATP production biliary tract	
31.29 ATP production liver	
35.10 Raising the defence capacity, basic program	
49.30 Bile formation disorder	
50.00 Metabolism, physiology complete	
, p, p, p	

51.30 Fat metabolism disorder	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
49.34 Bile flow disorder	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.27 ATP production gall bladder	
31.28 ATP production biliary tract	
31.29 ATP production liver	
35.10 Raising the defence capacity, basic program	
70.20 Liver, gall, pancreas	
48.20 Gall complete	
49.34 Bile flow disorder	
49.37 Inflammation of the gall bladder / tract	
49.38 Gallstones	
50.00 Metabolism, physiology complete	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
49.37 Inflammation of the gall bladder / tract	Timo
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.27 ATP production gall bladder	
31.28 ATP production biliary tract	
31.29 ATP production liver	
35.10 Raising the defence capacity, basic program	
70.20 Liver, gall, pancreas	
48.20 Gall complete	
49.34 Bile flow disorder	
49.37 Inflammation of the gall bladder / tract	
49.38 Gallstones	
50.00 Metabolism, physiology complete	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
01.00 Vitalisation complete	5 IIIII.
40.00.0 !! !	<del></del> -
49.38 Gallstones	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.27 ATP production gall bladder	5 min.

31.28 ATP production biliary tract	5 min.
31.29 ATP production liver	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.20 Liver, gall, pancreas	10 min.
48.20 Gall complete	5 min.
49.34 Bile flow disorder	5 min.
49.37 Inflammation of the gall bladder / tract	5 min.
49.38 Gallstones	5 min.
50.00 Metabolism, physiology complete	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
U1.00 VITAIISATION COMPIETE	
O1.00 Vitalisation complete	
	Time
49.50 Pancreas, exocrine functional disorder	
49.50 Pancreas, exocrine functional disorder	5 min.
49.50 Pancreas, exocrine functional disorder	5 min
49.50 Pancreas, exocrine functional disorder	5 min5 min5 min5 min5 min
49.50 Pancreas, exocrine functional disorder	5 min5 min
49.50 Pancreas, exocrine functional disorder	5 min
49.50 Pancreas, exocrine functional disorder	5 min
49.50 Pancreas, exocrine functional disorder  00.00 Analysis preparation  01.00 Vitalisation complete  02.00 Acupuncture Meridians complete  31.14 ATP production pancreas  35.10 Raising the defence capacity, basic program  09.34 Enzymes, digestive system complete	5 min
49.50 Pancreas, exocrine functional disorder	5 min
49.50 Pancreas, exocrine functional disorder	5 min

#### 17.9 Metabolism

51.10 Protein metabolism disorder	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	
09.00 Enzymes complete	5 min.
31.10 ATP production complete	5 min.
35.10 Raising the defence capacity, basic program	5 min.
35.10 Raising the defence capacity, basic program44.10 Kidney complete44.10 Kidney complete	5 min.
46.40 Small intestines complete	5 min.
48.10 Liver complete	5 min.
50.00 Metabolism, physiology complete	5 min.
50.10 Protein metabolism	5 min.
51.10 Protein metabolism disorder	5 min.
51.50 Gout	5 min.

64.00 Hormonal system, physiology complete	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
51.11 Prions	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	5 min.
31.10 ATP production complete	5 min.
34.00 Immune system physiology complete	5 min.
35.10 Raising the defence capacity, basic program	5 min.
35.11 Raising the unspecific defence	5 min.
35.12 Raising the specific defence	5 min.
35.13 Phagocytosis	5 min.
51.11 Prions	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
51.20 Carbohydrate metabolism disorder	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
09.00 Enzymes complete	5 min.
31.10 ATP production complete	5 min.
35.10 Raising the defence capacity, basic program	
44.10 Kidney complete	
46.40 Small intestines complete	
48.10 Liver complete	
48.30 Pancreas complete	
50.20 Carbohydrate metabolism	
51.20 Carbohydrate metabolism disorder	
51.40 Diabetes mellitus	
64.00 Hormonal system, physiology complete	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
51.30 Fat metabolism disorder	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
09.00 Enzymes complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
J	2

44.10 Kidney complete	5 min
46.40 Small intestines complete	5 min
48.10 Liver complete	5 min
48.20 Gall complete	5 min
50.30 Fat metabolism	5 min
51.30 Fat metabolism disorder	5 min
64.00 Hormonal system, physiology complete	5 min
	5 min
01.00 Vitalisation complete	5 min
51.40 Diabetes mellitus	Time
00.00 Analysis preparation	5 min
01.00 Vitalisation complete	5 min
02.00 Acupuncture meridians complete	5 min
31.14 ATP production pancreas	5 min
35.10 Raising the defence capacity, basic program	5 min
70.20 Liver, gall, pancreas	10 min
48.35 Islet cells	5 min
50.20 Carbohydrate metabolism	5 min
51.20 Carbohydrate metabolism disorder	5 min
51.40 Diabetes mellitus	5 min
64.70 Pancreas	5 min
31.50 Detoxification, basic program	5 min
01.00 Vitalisation complete	5 min
51.50 Gout	Time
00.00 Analysis preparation	5 min
01.00 Vitalisation complete	5 min
02.00 Acupuncture Meridians complete	5 min
30.70 Connective tissues complete	5 min
31.10 ATP production complete	5 min
35.10 Raising the defence capacity, basic program	5 min
50.00 Metabolism, physiology complete	5 min
51.10 Protein metabolism disorder	5 min
51.50 Gout	5 min
52.60 Joint complete	5 min
71.11 Pain receptors	5 min
71.50 Pain relief	5 min
31.50 Basic detoxification program	5 min
01.00 Vitalisation complete	5 min

#### 17.10 Musculoskeletal system

53.11 Bone injury/fracture	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	5 min.
31.39 ATP production blood vessels	5 min.
31.41 ATP production bones	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.51 Fracture, closed or 70.52 Fracture, open	10 min.
52.00 Musculoskeletal system, physiology complete	5 min.
53.11 Bone injury/fracture	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
53.12 Inflammation of the bone	
00.00 Analysis preparation	5 min.
00.00 Analysis preparation	5 min5 min.
00.00 Analysis preparation	5 min. 5 min. 5 min.
00.00 Analysis preparation	5 min5 min5 min5 min5 min5 min5 min.
00.00 Analysis preparation	5 min.
00.00 Analysis preparation	5 min.
00.00 Analysis preparation	
00.00 Analysis preparation	
00.00 Analysis preparation	5 min. 10 min. 5 min.
00.00 Analysis preparation	
00.00 Analysis preparation	5 min. 5 min. 5 min. 5 min. 5 min. 5 min. 10 min. 5 min. 5 min. 5 min. 5 min.

<sup>\* 70.28</sup> deals with the skeleton spinal column, ribcage, skull, shoulder, upper extremities and hands.

<sup>\* 70.29</sup> deals with the skeleton spinal column, hip, lower extremities and feet.

Time
5 min.

53.22 Haematoma / bruise	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.39 ATP production blood vessels	5 min.
31.40 ATP production muscles	5 min.
31.41 ATP production bones	5 min.
35.10 Raising the defence capacity, basic program	5 min.
52.00 Musculoskeletal system, physiology complete	5 min.
53.22 Haematoma / bruise	
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
F2 22 Mussle tension	T:
53.23 Muscle tension	
00.00 Analysis preparation	
02.00 Acupuncture Meridians complete	
31.40 ATP production muscles	
35.10 Raising the defence capacity, basic program	
52.20 Musculature complete	
53.23 Muscle tension	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
53.24 Injury of the muscle / fibre rupture	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	5 min.
31.39 ATP production blood vessels	5 min.
31.40 ATP production muscles	5 min.
31.87 Oedemata	5 min.
35.10 Raising the defence capacity, basic program	
52.20 Musculature complete	
53.24 Injury of the muscle / fibre rupture	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
E2.25 Inflammation of the musele	T:
53.25 Inflammation of the muscle	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
35.10 Raising the defence capacity basic program	
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70.26 Musculature I and/or 70.27 Musculature II - use depending on location*	10 min.
52.20 Musculature complete	
53.25 Inflammation of the muscle	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
* 70.26, Musculature I, contains the musculature of the skull, neck and upper extremities are treated at the same time.  * 70.27, Musculature II, contains the core muscles and the musculature of the lower extremetre tracts in this area.	
53.26 Ligament injury	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	
30.70 Connective tissues complete	
31.39 ATP production blood vessels	
31.40 ATP production muscles	5 min.
31.87 Oedemata	
35.10 Raising the defence capacity, basic program	
52.20 Musculature complete	
53.26 Ligament injury	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
53.27 Stretched ligament	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
30.70 Connective tissues complete	
31.39 ATP production blood vessels	
31.40 ATP production muscles	
35.10 Raising the defence capacity, basic program	
52.20 Musculature complete	
53.27 Stretched ligament	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
53.28 Inflammation of a ligament / tendon sheath inflammation	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	5 min.

24.20 ATD and dusting blood wassels	F!.
31.39 ATP production blood vessels	
31.40 ATP production muscles	
35.10 Raising the defence capacity, basic program	
70.26 Musculature I and/or 70.27 Musculature II - use depending on location*	
53.28 Inflammation of a ligament / tendon sheath inflammation	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
01.00 Vitarisation Complete	5 111111.
* 70.26, Musculature I, contains the musculature of the skull, neck and upper extremities. The are treated at the same time.	
* 70.27, Musculature II, contains the core muscles and the musculature of the lower extrem nerve tracts in this area.	ities and the
53.29 Inguinal hernia	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
30.70 Connective tissues complete	
31.39 ATP production blood vessels	
31.40 ATP production muscles	
35.10 Raising the defence capacity, basic program	
52.20 Musculature complete	
53.29 Inguinal hernia	5 min.
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
53.31 Carpal tunnel syndrome	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	5 min.
35.10 Raising the defence capacity, basic program	
52.24 Musculature / ligaments hands	
53.31 Carpal tunnel syndrome	
54.20 Peripheral nervous system, complete	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
53.51 Joint injury	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	

31.39 ATP production blood vessels	5 min.
31.41 ATP production bones	5 min.
35.10 Raising the defence capacity, basic program	5 min.
52.00 Musculoskeletal system, physiology complete	5 min.
52.60 Joint complete	5 min.
53.51 Joint injury	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
53.52 Joint inflammation (arthritis)	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	5 min
02.00 Acupuncture Meridians complete	5 min.
31.40 ATP production muscles	5 min.
31.41 ATP production bones	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.28 Skeleton I and/or 70.29 Skeleton II - use depending on localisation*	10 min
52.00 Musculoskeletal system, physiology complete	5 min.
53.52 Joint inflammation (arthritis)	5 min.
53.53 Joint degeneration (arthrosis)	5 min
53.54 Shortage of hyaluronic acid	5 min
31.50 Basic detoxification program	5 min
01.00 Vitalisation complete	5 min

<sup>\* 70.29</sup> deals with the skeleton spinal column, hip, lower extremities and feet.

53.53 Joint degeneration (arthrosis)	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.40 ATP production muscles	5 min.
31.41 ATP production bones	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.28 Skeleton I and/or 70.29 Skeleton II - use depending on localisation*	10 min.
52.00 Musculoskeletal system, physiology complete	5 min.
52.61 Capsular ligament	5 min.
52.62 Synovial fluid	5 min.
53.53 Joint degeneration (arthrosis)	5 min.
53.54 Shortage of hyaluronic acid	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	

<sup>\* 70.28</sup> deals with the skeleton spinal column, ribcage, skull, shoulder, upper extremities and hands.

<sup>\* 70.28</sup> deals with the skeleton spinal column, ribcage, skull, shoulder, upper extremities and hands.

<sup>\* 70.29</sup> deals with the skeleton spinal column, hip, lower extremities and feet.

00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
30.00 Cells and tissue, physiology complete	5 min.
31.10 ATP production complete	5 min.
35.10 Raising the defence capacity, basic program	
62.10 Skin complete	5 min.
52.40 Spinal discs complete	5 min.
52.60 Joint complete	5 min.
53.54 Shortage of hyaluronic acid	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
53.62 Bursitis	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.40 ATP production muscles	
31.41 ATP production bones	
35.10 Raising the defence capacity, basic program	
70.26 Musculature I and/or 70.27 Musculature II - use depending on location*	
52.00 Musculoskeletal system, physiology complete	5 min
53.62 Bursitis	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
C TOO TOO TOO TOO TOO TOO TOO TOO TOO TO	
* 70.26, Musculature I, contains the musculature of the skull, neck and upper extremities.	. The local nerves
are treated at the same time.	
* 70.27, Musculature II, contains the core muscles and the musculature of the lower ext	tremities and the
nerve tracts in this area.	
F3 70 Rackaches complete	Tima
53.70 Backaches complete	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.40 ATP production muscles	
35.10 Raising the defence capacity, basic program	
71.11 Pain receptors	
52.00 Musculoskeletal system, physiology complete	
52.20 Musculature complete	
53.23 Muscle tension	
53.25 Inflammation of the muscle	
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53.54 Shortage of hyaluronic acid ......Time

53.41 Backbone pain / tension	5 min.
53.70 Backaches complete	5 min.
72.05 Psyche, strengthening	5 min.
75.10 Stress reduction	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
53.71 Backache cervical spine	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.40 ATP production muscles	
35.10 Raising the defence capacity, basic program	5 min.
71.11 Pain receptors	
71.50 Pain relief	5 min.
52.00 Musculoskeletal system, physiology complete	5 min.
52.20 Musculature complete	5 min.
53.23 Muscle tension	5 min.
53.25 Inflammation of the muscle	5 min.
53.41 Backbone pain / tension	5 min.
53.71 Backache cervical spine	5 min.
72.05 Psyche, strengthening	5 min.
75.10 Stress reduction	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
53.72 Backache thoracic spine	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.40 ATP production muscles	
35.10 Raising the defence capacity, basic program	
71.11 Pain receptors	
71.50 Pain relief	
52.00 Musculoskeletal system, physiology complete	
52.20 Musculature complete	
53.23 Muscle tension	
53.25 Inflammation of the muscle	
53.41 Backbone pain / tension	
53.72 Backache thoracic spine	
72.05 Psyche, strengthening	
75.10 Stress reduction	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.

53.73 Backache lumbar spine	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.40 ATP production muscles	5 min.
35.10 Raising the defence capacity, basic program	5 min.
71.11 Pain receptors	5 min.
71.50 Pain relief	5 min.
52.00 Musculoskeletal system, physiology complete	5 min.
52.20 Musculature complete	5 min.
53.23 Muscle tension	5 min.
53.25 Inflammation of the muscle	5 min.
53.41 Backbone pain / tension	5 min.
53.73 Backache lumbar spine	5 min.
72.05 Psyche, strengthening	5 min.
75.10 Stress reduction	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	
53.80 Osteoporosis	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.41 ATP production bones	
35.10 Raising the defence capacity, basic program	
50.00 Metabolism, physiology complete	5 min.
52.00 Musculoskeletal system, physiology complete	
52.05 Bone cells complete	5 min.
53.80 Osteoporosis	5 min.
64.00 Hormonal system, physiology complete	5 min.
64.81 Oestrogens	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
EQ 04 Out a contact of contacts	<b>T</b> *
53.81 Osteomalacia / rachitis	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
07.32 Vitamin D	
31.41 ATP production bones	
35.10 Raising the defence capacity, basic program	
50.00 Metabolism, physiology complete	
52.00 Musculoskeletal system, physiology complete	
52.05 Bone cells complete	5 min

53.81 Osteomalacia / rachitis	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min
53.82 lschialgia	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
52.43 Spinal discs of the lumbar spine (L1/L2 – L5)	
53.82 lschialgia	
54.36 Sciatic nerve	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
	_
53.83 Lumbago	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.40 ATP production muscles	
35.10 Raising the defence capacity, basic program	
52.25 Musculature / ligaments lower extremities	
53.23 Muscle tension	
53.41 Backbone pain / tension	
53.73 Backache lumbar spine	
53.83 Lumbago	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
53.84 Fibromyalgia	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.38 ATP production skin	
31.40 ATP production muscles	
35.10 Raising the defence capacity, basic program	
70.26 Musculature I	
70.27 Musculature II	
36.00 Lymphatic system physiology complete	
52.00 Musculoskeletal system, physiology complete	
53.23 Muscle tension	
53.25 Inflammation of the muscle	5 min

53.28 Inflammation of a ligament / tendon sheath inflammation	5 min.
53.62 Bursitis	5 min.
53.84 Fibromyalgia	5 min.
62.10 Skin complete	5 min.
64.00 Hormonal system, physiology complete	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
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55.46 Amyotrophic lateral sclerosis / muscle atrophy ALS	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	5 min.
31.40 ATP production muscles	5 min.
35.10 Raising the defence capacity, basic program	5 min.
52.20 Musculature complete	5 min.
54.00 Nervous system physiology complete	
55.42 Nerve degeneration	5 min.
55.46 Amyotrophic lateral sclerosis / muscle atrophy ALS	5 min.
31.50 Basic detoxification program	
01.00 Vitalisation complete	

## 17.11 Nervous system

55.10 Sleep-onset insomnia (9-11 pm) - often hormonal disorders	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.21 Sanjiao meridian	5 min.
31.10 ATP production complete	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.10 Nervous system	10 min.
54.00 Nervous system physiology complete	5 min.
55.10 Sleep-onset insomnia (9-11 pm) – often hormonal disorders	5 min.
64.11 Sleeping-waking-centre	5 min.
65.30 Hypothalamus	5 min.
72.00 Psyche	5 min.
75.10 Stress reduction	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
FF 20 Slave maintanance incompie time 1 (11 pm, 01 pm, code maline)	Т:
55.20 Sleep-maintenance insomnia time 1 (11 pm - 01 am early waking)	
01.00 Vitalisation complete	
02.22 Gallbladder meridian	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
70.20 Liver, gall, pancreas	
48.20 Gall complete	
54.00 Nervous system physiology complete	
55.20 Sleep-maintenance insomnia time 1 (11pm-01am early waking)	
64.11 Sleeping-waking-centre	
65.30 Hypothalamus	
72.00 Psyche	
75.10 Stress reduction	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
55.21 Difficulty in staying asleep time 2 (01 – 03h premature wakening)	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.19 Liver meridian	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
70.20 Liver, gall, pancreas	
48.10 Liver complete	5 min.

54.00 Nervous system physiology complete	
55.21 Difficulty in staying asleep time 2 (01 - 03h premature wakening)	5 min.
64.11 Sleeping-waking-centre	5 min.
65.30 Hypothalamus	5 min.
72.00 Psyche	5 min.
75.10 Stress reduction	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
55.22 Difficulty in staying asleep time 3 (03 – 05h premature wakening)	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.11 Lung meridian	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
70.17 Lung system	10 min.
42.70 Lung complete	
54.00 Nervous system physiology complete	
55.22 Difficulty in staying asleep time 3 (03 - 05h premature wakening)	
64.11 Sleeping-waking-centre	5 min.
65.30 Hypothalamus	
72.00 Psyche	5 min.
75.10 Stress reduction	5 min.
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
55.30 Alzheimer's disease	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	
31.34 ATP production cerebellum	5 min.
31.35 ATP production cerebrum	
35.10 Raising the defence capacity, basic program	5 min.
70.10 Nervous system	10 min.
38.10 Arteries	
39.10 Arterial impairment of the blood supply	5 min.
50.10 Protein metabolism	
54.00 Nervous system physiology complete	
55.30 Alzheimer's disease	5 min.
55.42 Nerve degeneration	5 min.
72.00 Psyche	
75.10 Stress reduction	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.

55.31 Parkinson's disease	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.34 ATP production cerebellum	5 min.
31.35 ATP production cerebrum	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.10 Nervous system	10 min.
38.10 Arteries	5 min.
54.00 Nervous system physiology complete	5 min.
55.31 Parkinson's disease	5 min.
64.28 Dopamine	5 min.
72.00 Psyche	5 min.
75.10 Stress reduction	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	
FF 40 Navrikia	Time
55.40 Neuritis	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
70.10 Nervous system	
54.20 Peripheral nervous system, complete	
55.40 Neuritis	
55.41 Neuralgia	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
55.41 Neuralgia	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
70.10 Nervous system	
54.20 Peripheral nervous system, complete	
55.41 Neuralgia	
71.11 Pain receptors	
71.50 Pain relief	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.

55.42 Nerve degeneration	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	5 min.
31.10 ATP production complete	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.10 Nervous system	10 min.
54.00 Nervous system physiology complete	5 min.
55.42 Nerve degeneration	5 min.
72.00 Psyche	5 min.
75.10 Stress reduction	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
55.43 Multiple Sclerosis	
00.00 Analysis preparation	
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	
31.34 ATP production cerebellum	
31.35 ATP production cerebrum	
35.10 Raising the defence capacity, basic program	
70.10 Nervous system	
54.00 Nervous system physiology complete	
55.42 Nerve degeneration	5 min.
55.43 Multiple Sclerosis	5 min.
72.00 Psyche	5 min.
75.10 Stress reduction	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
55.44 Restless Legs Syndrome	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
70.10 Nervous system	
54.00 Nervous system physiology complete	5 min.
54.10 Central nervous system complete	
55.44 Restless Legs Syndrome	
83.80 Neurotransmitters complete	
72.00 Psyche	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.

55.45 ADD/ADHD	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.10 ATP production complete	5 min.
35.10 Raising the defence capacity, basic program	5 min.
35.20 Allergy complete	
70.10 Nervous system	10 min.
54.00 Nervous system physiology complete	5 min.
54.10 Central nervous system complete	5 min.
55.45 ADD/ADHD	5 min.
64.27 Histamine	5 min.
83.80 Neurotransmitters complete	5 min.
72.00 Psyche	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
55.46 Amyotrophic lateral sclerosis / muscle atrophy ALS	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	
31.40 ATP production muscles	
35.10 Raising the defence capacity, basic program	
52.20 Musculature complete	
54.00 Nervous system physiology complete	
55.42 Nerve degeneration	
55.46 Amyotrophic lateral sclerosis / muscle atrophy ALS	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
55.50 Cerebral concussion	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
72.05 Psyche, strengthening	
52.11 Skeleton skull	
53.23 Muscle tension	
53.71 Backache cervical spine	
55.50 Cerebral concussion	
55.55 Headache	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.

17.11 Nervous system 501

55.55 Headache	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.10 ATP production complete	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.45 Migraines, headaches, insomnia, psychic imbalance, pathogen-oriented	10 min.
54.10 Central nervous system complete	5 min.
55.55 Headache	5 min.
72.05 Psyche, strengthening	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
55.60 Migraine	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
70.45 Migraines, headaches, insomnia, psychic imbalance, pathogen-oriented	
38.10 Arteries	
39.10 Arterial impairment of the blood supply	
39.40 Degeneration of the blood vessels	
54.10 Central nervous system complete	
54.25 Cranial nerve V (trigeminal nerve)	
55.55 Headache	
55.60 Migraines	
64.00 Hormonal system, physiology complete	
72.05 Psyche, strengthening	
31.50 Basic detoxification program	

## 17.12 Visual organ

57.10 Retinal detachment	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.31 ATP production eyes	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.12 Eye system	10 min.
56.00 Organ of vision, physiology complete	5 min.
57.10 Retinal detachment	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min
57.20 Cataract	
00.00 Analysis preparation	
01.00 Vitalisation complete	5 min
02.00 Acupuncture Meridians complete	
31.31 ATP production eyes	
35.10 Raising the defence capacity, basic program	
70.12 Eye system	
56.00 Organ of vision, physiology complete	
56.40 Lens, pupil, vitreous body complete	
57.20 Cataract	5 min
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min
57.30 Glaucoma	Time
00.00 Analysis preparation	5 min
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	5 min
31.31 ATP production eyes	5 min
35.10 Raising the defence capacity, basic program	
70.12 Eye system	
56.00 Organ of vision, physiology complete	
56.60 Visual nerves complete	
57.10 Retinal detachment	5 min
57.30 Glaucoma	
31.50 Basic detoxification program	5 min
01.00 Vitalisation complete	5 min

57.40 Wet macular degeneration – WET AMD	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.31 ATP production eyes	5 min.
31.81 Scar interference suppression	5 min.
31.87 Oedemata	5 min.
	5 min.
70.12 Eye system	10 min.
38.10 Arteries	5 min.
39.10 Arterial impairment of the blood supply	5 min.
54.22 Cerebral nerve (optic nerve)	5 min.
56.34 Retina	5 min.
56.61 Visual nerve	5 min.
56.62 Yellow spot	5 min.
57.40 Wet macular degeneration - WET AMD	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
57.41 Dry macular degeneration – Dry AMD	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.31 ATP production eyes	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.12 Eye system	10 min.
38.10 Arteries	5 min.
39.10 Arterial impairment of the blood supply	5 min.
54.22 Cerebral nerve (optic nerve)	5 min.
56.34 Retina	5 min.
56.61 Visual nerve	5 min.
56.62 Yellow spot	5 min.
57.41 Dry macular degeneration – Dry AMD	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
57.50 Hordeolum	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.31 ATP production eyes	
35.10 Raising the defence capacity, basic program	
70.12 Eye system	
56.00 Organ of vision, physiology complete	5 min.

57.50 Hordeolum	5 min.
31.50 Basic detoxification program	
01.00 Vitalisation complete	
57.51 Chalazion	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.31 ATP production eyes	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.12 Eye system	10 min.
56.00 Organ of vision, physiology complete	
57.51 Chalazion	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
57.52 Conjunctivitis	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.31 ATP production eyes	
35.10 Raising the defence capacity, basic program	
70.12 Eye system	
56.00 Organ of vision, physiology complete	
57.52 Conjunctivitis	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
17.13 Hearing organ / organ of equilibrium	
59.10 Tinnitus	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
70.15 Acoustic organ, organ of equilibrium	
38.10 Arteries	
39.10 Arterial impairment of the blood supply	
58.30 Middle ear complete	
58.40 Inner ear complete	
59 10 Tinnitus	5 min

59.40 Acute hearing loss	5 min.
72.00 Psyche	5 min.
75.00 Stress	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
59.20 External otitis	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.25 ATP production lymph	
35.10 Raising the defence capacity, basic program	
70.15 Acoustic organ, organ of equilibrium	
36.00 Lymphatic system physiology complete	
58.10 Auricle complete	
58.20 External ear complete	
59.20 External otitis	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
59.21 Otitis media, acute (acute ear)	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.25 ATP production lymph	
35.10 Raising the defence capacity, basic program	
70.15 Acoustic organ, organ of equilibrium	
36.00 Lymphatic system physiology complete	
38.10 Arteries	
58.30 Middle ear complete	
59.21 Otitis media, acute (acute ear)	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
59.30 Ménière's disease	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
70.15 Acoustic organ, organ of equilibrium	
38.10 Arteries	
39.10 Arterial impairment of the blood supply	
h	

58.30 Middle ear complete	5 min.
58.40 Inner ear complete	5 min.
59.10 Tinnitus	5 min.
59.30 Ménière's disease	5 min.
72.00 Psyche	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
59.40 Acute hearing loss	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
70.15 Acoustic organ, organ of equilibrium	
38.10 Arteries	
39.10 Arterial impairment of the blood supply	
58.30 Middle ear complete	
58.40 Inner ear complete	
59.10 Tinnitus	
59.30 Ménière's disease	5 min
59.40 Acute hearing loss	
75.00 Stress	5 min
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.

# 17.14 Skin / Hair

63.10 Psoriasis	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.38 AIP production skin	5 min.
30.65 Epithelial tissues complete	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.24 Skin system62.10 Skin complete	10 min.
62.10 Skin complete	5 min.
62.20 Skin glands complete	5 min.
62.60 Nails complete	5 min.
63.10 Psoriasis	5 min.
72.00 Psyche	5 min.
75.00 Stress	5 min.

31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
63.20 Neurodermatitis	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
30.65 Epithelial tissues complete	
31.38 ATP production skin	
35.10 Raising the defence capacity, basic program	5 min.
70.24 Skin system	
54.20 Peripheral nervous system, complete	
54.50 Autonomic nervous system	
62.10 Skin complete	5 min.
62.20 Skin glands complete	5 min.
63.20 Neurodermatitis	5 min.
72.00 Psyche	5 min.
75.00 Stress	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
63.30 Contact dermatitis (allergic)	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
30.65 Epithelial tissues complete	5 min.
31.38 ATP production skin	
35.10 Raising the defence capacity, basic program	
70.50 Skin allergy	
35.20 Allergy complete	
62.10 Skin complete	
63.30 Contact dermatitis (allergic)	
64.27 Histamine	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
orioo viturisation complete	
63.40 Urticaria	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
30.65 Epithelial tissues complete	
31.38 ATP production skin	
31.87 Oedemata	
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35.10 Raising the defence capacity, basic program	5 min.
70.50 Skin allergy	10 min.
62.10 Skin complete	5 min.
63.40 Urticaria	5 min.
64.27 Histamine	5 min.
75.00 Stress	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
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63.50 Epidermatomycoses	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
30.65 Epithelial tissues complete	5 min.
31.38 ATP production skin	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.24 Skin system	
62.10 Skin complete	
63.50 Epidermatomycoses	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
,	
63.60 Lichen (ruber planes)	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
01.00 Vitalisation complete	
·	5 min.
02.00 Acupuncture Meridians complete	5 min. 5 min.
02.00 Acupuncture Meridians complete	5 min. 5 min. 5 min.
02.00 Acupuncture Meridians complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
02.00 Acupuncture Meridians complete	5 min. 10 min.
02.00 Acupuncture Meridians complete	5 min. 10 min. 5 min. 5 min.
02.00 Acupuncture Meridians complete	5 min. 5 min. 5 min. 5 min. 5 min. 5 min. 10 min. 5 min. 5 min.
02.00 Acupuncture Meridians complete 31.38 ATP production skin	5 min. 5 min. 5 min. 5 min. 5 min. 10 min. 5 min. 5 min. 5 min. 5 min. 5 min.
02.00 Acupuncture Meridians complete	5 min. 5 min. 5 min. 5 min. 5 min. 10 min. 5 min. 5 min. 5 min. 5 min. 5 min.
02.00 Acupuncture Meridians complete 31.38 ATP production skin	5 min. 5 min. 5 min. 5 min. 5 min. 10 min. 5 min. 5 min. 5 min. 5 min. 5 min.
02.00 Acupuncture Meridians complete 31.38 ATP production skin	5 min. 10 min. 5 min.
02.00 Acupuncture Meridians complete 31.38 ATP production skin	5 min. 10 min. 5 min.
02.00 Acupuncture Meridians complete 31.38 ATP production skin	5 min. 5 min. 5 min. 5 min. 5 min. 10 min. 5 min. 5 min. 5 min. 5 min. 5 min. 75 min.
02.00 Acupuncture Meridians complete 31.38 ATP production skin	5 min. 5 min. 5 min. 5 min. 5 min. 10 min. 5 min.
02.00 Acupuncture Meridians complete 31.38 ATP production skin	5 min. 5 min. 5 min. 5 min. 5 min. 75 min. 5 min.
02.00 Acupuncture Meridians complete 31.38 ATP production skin 30.65 Epithelial tissues complete 30.90 Mucous membranes complete 35.10 Raising the defence capacity, basic program 70.24 Skin system 62.10 Skin complete 63.60 Lichen (ruber planes) 31.50 Basic detoxification program 01.00 Vitalisation complete  63.61 Mycosis fungoides 00.00 Analysis preparation 01.00 Vitalisation complete 02.00 Acupuncture Meridians complete 31.38 ATP production skin	5 min. 5 min. 5 min. 5 min. 5 min. 10 min. 5 min.
02.00 Acupuncture Meridians complete 31.38 ATP production skin	5 min. 5 min. 5 min. 5 min. 5 min. 10 min. 5 min.

32.20 Leukocytes complete WBC	5 min.
62.10 Skin complete	5 min.
63.61 Mycosis fungoides	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
63.70 Skin depigmentation	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.38 ATP production skin	
35.10 Raising the defence capacity, basic program	5 min.
70.24 Skin system	10 min.
62.10 Skin complete	
62.15 Melanocytes (melanin forming cells)	
63.70 Skin depigmentation	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
63.80 Black hairy tongue (lingua nigra)	
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.38 ATP production skin	
35.10 Raising the defence capacity, basic program	
70.13 Tongue, oral cavity, salivary glands	
46.12 Tongue	
63.80 Black hairy tongue (lingua nigra)	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
17 15 Endouine gratem	
17.15 Endocrine system	
65.10 Female hormonal balance basic regulation	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
70.22 Female organs	
64.00 Hormonal system, physiology complete	5 min.

65.10 Female hormonal balance basic regulation	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
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65.20 Male hormonal balance basic regulation	
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.10 ATP production complete	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.23 Male organs	
64.00 Hormonal system, physiology complete	5 min.
65.20 Male hormonal balance basic regulation	5 min.
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
65.30 Hypothalamus	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
01.30 Pre-control	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.10 ATP production complete	5 min.
35.10 Raising the defence capacity, basic program	
54.10 Central nervous system complete	5 min.
64.00 Hormonal system, physiology complete	5 min.
65.30 Hypothalamus	
65.31 Anterior lobe of pituitary	5 min.
65.32 Posterior lobe of pituitary	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
65.31 Anterior lobe of pituitary	
00.00 Analysis preparation	
01.00 Vitalisation complete	
01.30 Pre-control	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
54.10 Central nervous system complete	
64.00 Hormonal system, physiology complete	
65.30 Hypothalamus	
65.31 Anterior lobe of pituitary	
65.32 Posterior lobe of pituitary	5 min.

31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
65.32 Posterior lobe of pituitary	
00.00 Analysis preparation	
01.00 Vitalisation complete	
01.30 Pre-control	5 min.
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
54.10 Central nervous system complete	
64.00 Hormonal system, physiology complete	
65.30 Hypothalamus	
65.31 Anterior lobe of pituitary	
65.32 Posterior lobe of pituitary	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
65.33 Thyroid gland hyperfunction (Hyperthyreosis)	Timo
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.33 ATP production thyroidal gland	
35.10 Raising the defence capacity, basic program	
70.54 Thyroid gland / parathyroid gland	
64.10 Hypothalamus complete	
64.20 Pituitary gland complete	
64.30 Thyroid gland	
65.33 Thyroid gland hyperfunction (Hyperthyreosis)	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
65.34 Thyroid gland hypofunction	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.33 ATP production thyroidal gland	
35.10 Raising the defence capacity, basic program	
70.54 Thyroid gland / parathyroid gland	
64.10 Hypothalamus complete	
64.20 Pituitary gland complete	
64.30 Thyroid gland	
65.34 Thyroid gland hypofunction	5 min.

31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	
65.35 Parathyroid gland, hyperfunction	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.33 ATP production thyroidal gland	
35.10 Raising the defence capacity, basic program	
70.54 Thyroid gland / parathyroid gland	
64.35 Parathyroid gland	
65.35 Parathyroid gland, hyperfunction	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
65.36 Parathyroid gland, hypofunction	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.33 ATP production thyroidal gland	
35.10 Raising the defence capacity, basic program	
70.54 Thyroid gland / parathyroid gland	
64.35 Parathyroid gland	
65.36 Parathyroid gland, hypofunction	
31.50 Basic detoxification program	
01.00 Vitalisation complete	
	_
65.37 Hyperfunction of the adrenal cortex	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.26 ATP production adrenal gland	
35.10 Raising the defence capacity, basic program	
64.00 Hormonal system, physiology complete	
64.55 Adrenal cortex	
64.64 Aldosterone	
65.37 Hyperfunction of the adrenal cortex	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
65.38 Hypofunction of the adrenal cortex	Time
00.00 Analysis preparation	5 min

01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.26 ATP production adrenal gland	5 min.
35.10 Raising the defence capacity, basic program	5 min.
64.00 Hormonal system, physiology complete	5 min.
64.21 ACTH (from anterior lobe of the hypophysis)	5 min.
64.55 Adrenal cortex	5 min.
65.38 Hypofunction of the adrenal cortex	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
65.39 Hyperfunction of the adrenal medulla	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.26 ATP production adrenal gland	5 min.
35.10 Raising the defence capacity, basic program	
54.50 Autonomic nervous system	5 min.
64.50 Adrenal medulla	5 min.
65.39 Hyperfunction of the adrenal medulla	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
65.40 Hypofunction of the adrenal medulla	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.26 ATP production adrenal gland	5 min.
35.10 Raising the defence capacity, basic program	5 min.
54.50 Autonomic nervous system	5 min.
64.50 Adrenal medulla	5 min.
65.40 Hypofunction of the adrenal medulla	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
65.45 Premenstrual syndrome PMS	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
64.10 Hypothalamus complete	
64.20 Pituitary gland complete	

64.80 Ovary complete	5 min.
65.10 Female hormonal balance basic regulation	5 min.
65.45 Premenstrual syndrome PMS	5 min.
65.50 Menstruation programs complete	5 min.
66.00 Female sexual organs, physiology complete	5 min.
72.00 Psyche	5 min.
75.00 Stress	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
65.50 Menstruation programs complete	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.10 ATP production complete	5 min.
35.10 Raising the defence capacity, basic program	5 min.
64.10 Hypothalamus complete	5 min.
64.20 Pituitary gland complete	5 min.
64.80 Ovary complete	5 min.
65.10 Female hormonal balance basic regulation	5 min.
65.50 Menstruation programs complete	5 min.
65.61 Female gonad, endocrine functional disorder	5 min.
65.62 Female gonad, exocrine functional disorder	5 min.
66.00 Female sexual organs, physiology complete	5 min.
72.00 Psyche	5 min.
75.00 Stress	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
65.51 Amenorrhea	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.10 ATP production complete	5 min.
35.10 Raising the defence capacity, basic program	5 min.
64.10 Hypothalamus complete	5 min.
64.20 Pituitary gland complete	5 min.
64.80 Ovary complete	
65.10 Female hormonal balance basic regulation	
65.51 Amenorrhea	5 min.
65.61 Female gonad, endocrine functional disorder	
65.62 Female gonad, exocrine functional disorder	5 min.
66.00 Female sexual organs, physiology complete	
72.00 Psyche	5 min.

75.00 Stress	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
	_
65.52 Oligomenorrhea	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
64.10 Hypothalamus complete	
64.20 Pituitary gland complete	
64.80 Ovary complete	
65.10 Female hormonal balance basic regulation	
65.52 Oligomenorrhea	
65.61 Female gonad, endocrine functional disorder	
65.62 Female gonad, exocrine functional disorder	
66.00 Female sexual organs, physiology complete	
72.00 Psyche	
75.00 Stress	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
65.53 Polymenorrhea	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
64.10 Hypothalamus complete	
64.20 Pituitary gland complete	
64.80 Ovary complete	
65.10 Female hormonal balance basic regulation	
65.53 Polymenorrhea	
65.61 Female gonad, endocrine functional disorder	
65.62 Female gonad, exocrine functional disorder	
66.00 Female sexual organs, physiology complete	
72.00 Psyche	
75.00 Stress	
31.50 Basic detoxification program	
01.00 Vitalisation complete	

65.54 Hypermenorrhea	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.10 ATP production complete	5 min.
35.10 Raising the defence capacity, basic program	5 min.
64.10 Hypothalamus complete	5 min.
64.20 Pituitary gland complete	5 min.
64.80 Ovary complete	5 min.
65.10 Female hormonal balance basic regulation	5 min.
65.54 Hypermenorrhea	5 min.
65.61 Female gonad, endocrine functional disorder	
65.62 Female gonad, exocrine functional disorder	
66.00 Female sexual organs, physiology complete	5 min.
72.00 Psyche	5 min.
75.00 Stress	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
65.56 Metrorrhagia	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.10 ATP production complete	5 min.
35.10 Raising the defence capacity, basic program	5 min.
64.10 Hypothalamus complete	
64.20 Pituitary gland complete	5 min.
64.80 Ovary complete	
65.10 Female hormonal balance basic regulation	
65.56 Metrorrhagia	
65.61 Female gonad, endocrine functional disorder	
65.62 Female gonad, exocrine functional disorder	
66.00 Female sexual organs, physiology complete	5 min.
72.00 Psyche	
75.00 Stress	5 min.
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
65.60 Menopause complaints	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	

35.10 Raising the defence capacity, basic program	
70.22 Female organs	
64.10 Hypothalamus complete	
64.20 Pituitary gland complete	
65.10 Female hormonal balance basic regulation	
65.60 Menopause complaints	
66.00 Female sexual organs, physiology complete	5 min.
72.00 Psyche	5 min.
75.00 Stress	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
65.61 Female gonad, endocrine functional disorder	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.10 ATP production complete	5 min.
35.10 Raising the defence capacity, basic program	5 min.
64.10 Hypothalamus complete	5 min.
64.20 Pituitary gland complete	5 min.
64.80 Ovary complete	5 min.
65.10 Female hormonal balance basic regulation	5 min.
65.61 Female gonad, endocrine functional disorder	5 min.
72.00 Psyche	5 min.
75.00 Stress	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
65.62 Female gonad, exocrine functional disorder	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	
31.22 ATP production ovaries	5 min.
35.10 Raising the defence capacity, basic program	5 min.
64.10 Hypothalamus complete	5 min.
64.20 Pituitary gland complete	5 min.
64.80 Ovary complete	5 min.
65.10 Female hormonal balance basic regulation	5 min.
65.62 Female gonad, exocrine functional disorder	
66.31 Ovaries	5 min.
72.00 Psyche	5 min.
75.00 Stress	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min

65.65 Male gonad, endocrine functional disorder	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.19 ATP production testicles	5 min.
35.10 Raising the defence capacity, basic program	5 min.
64.86 Testosterone	5 min.
65.20 Male hormonal balance basic regulation	5 min.
65.65 Male gonad, endocrine functional disorder	5 min.
68.11 Scrotum	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
65.66 Male gonad, exocrine functional disorder	
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.19 ATP production testicles	5 min.
35.10 Raising the defence capacity, basic program	5 min.
64.85 Testicles complete	
65.20 Male hormonal balance basic regulation	
65.66 Male gonad, exocrine functional disorder	
68.00 Male sexual organs, physiology complete	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min

## 17.16 Sexual organs

67.10 Salpingitis	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.22 ATP production ovaries	
35.10 Raising the defence capacity, basic program	5 min.
70.22 Female organs	10 min.
36.10 Lymph vessels	
66.32 Oviducts Fallopian tubes	5 min.
67.10 Salpingitis	5 min.
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.

67.20 Ovaritis	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.22 ATP production ovaries	5 min.
35.10 Raising the defence capacity, basic program	5 min.
70.22 Female organs	10 min.
36.10 Lymph vessels	5 min.
64.80 Ovary complete	5 min.
66.31 Ovaries	5 min.
67.20 Ovaritis	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
67.30 Endometriosis	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.20 ATP production uterus	
31.22 ATP production ovaries	
31.81 Scar interference suppression	
35.10 Raising the defence capacity, basic program	
70.22 Female organs	
36.10 Lymph vessels	
64.80 Ovaries complete	
65.10 Female hormonal balance basic regulation	
65.30 Hypothalamus	
65.31 Anterior lobe of pituitary	
65.50 Menstruation programs complete	
66.00 Female sexual organs, physiology complete	
67.30 Endometriosis	5 min.
72.00 Psyche	
75.00 Stress	5 min.
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
67.40 Mactitic	Tima
67.40 Mastitis	
00.00 Analysis preparation	
01.00 Vitalisation complete	
31.36 ATP production mammary gland	
35.10 Raising the defence capacity, basic program	
70.53 Disease oreast tissue / mammary gianus	10 min. 5 min

66.15 Mammary glands with mamillae	5 min.
66.16 Lactiferous glands	5 min.
66.17 Lactiferous tubules	5 min.
67.40 Mastitis	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
67.50 Vaginitis	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
70.22 Female organs	
30.93 Mucous membranes, genital organs	
36.10 Lymph vessels	
66.36 Vagina	
67.50 Vaginitis	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
69.10 Prostate gland, functional disorder	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.18 ATP production prostate gland	
35.10 Raising the defence capacity, basic program	
68.26 Prostate gland	
69.10 Prostate gland, functional disorder	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
69.30 Prostatitis	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.18 ATP production prostate gland	
35.10 Raising the defence capacity, basic program	
70.23 Male organs	
68.26 Prostate gland	
69.30 Prostatitis	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.

17.17 Blood 521

## 17.17 Blood

33.10 Haemorrhagic anaemia	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
07.21 Iron	5 min.
31.41 ATP production bones	5 min.
35.10 Raising the defence capacity, basic program	5 min.
32.06 Formation of blood (haematopoiesis)	5 min.
32.10 Erythrocytes RBC complete	5 min
33.10 Haemorrhagic anaemia	5 min
33.60 Oxygen supply / utilisation improvement	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
33.21 Renal anaemia	Time
00.00 Analysis preparation	5 min
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.23 ATP production kidney	5 min.
31.41 ATP production bones	5 min.
35.10 Raising the defence capacity, basic program	5 min.
32.06 Formation of blood (haematopoiesis)	5 min.
32.10 Erythrocytes RBC complete	5 min.
33.21 Renal anaemia	5 min
33.60 Oxygen supply / utilisation improvement	5 min.
44.10 Kidney complete	5 min.
64.65 Erythropoietin	5 min
31.50 Basic detoxification program	5 min
01.00 Vitalisation complete	5 min
33.22 Aplastic anaemia	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
31.37 ATP production bone marrow	5 min.
35.10 Raising the defence capacity, basic program	5 min.
32.00 Blood physiology complete	5 min.
33.22 Aplastic anaemia	5 min.
33.50 Degeneration bone marrow	
33.60 Oxygen supply / utilisation improvement	5 min
52.06 Myelocytes	5 min.

31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
33.23 Anaemia caused by the myelodysplastic syndrome (MDS)	
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	
31.37 ATP production bone marrow	
35.10 Raising the defence capacity, basic program	
32.00 Blood physiology complete	
33.23 Anaemia caused by the myelodysplastic syndrome (MDS)	
33.50 Degeneration bone marrow	5 min.
33.60 Oxygen supply / utilisation improvement	5 min.
52.06 Myelocytes	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
33.24 Iron-deficiency anaemia	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
07.21 Iron	5 min.
31.39 ATP production blood vessels	5 min.
35.10 Raising the defence capacity, basic program	5 min.
32.06 Formation of blood (haematopoiesis)	5 min.
32.10 Erythrocytes RBC complete	5 min.
33.24 Iron-deficiency anaemia	5 min.
33.60 Oxygen supply / utilisation improvement	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
33.25 Vitamin B12 deficiency anaemia	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
07.49 Vitamin B12, cobalamin	
09.37 Enzyme, pepsin (stomach)	
09.53 Enzyme, pancreas: trypsin (pancreas)	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
32.00 Blood physiology complete	
33.25 Vitamin B12 deficiency anaemia	
33.60 Oxygen supply / utilisation improvement	5 min.

46.00 Digestive system, physiology complete	
47.31 Gastritis, A type	
54.00 Nervous system physiology complete	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
33.26 Vitamin B6 deficiency anaemia	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
07.46 Vitamin B6, pyridoxine	5 min.
31.41 ATP production bones	5 min.
35.10 Raising the defence capacity, basic program	5 min.
32.00 Blood physiology complete	5 min.
33.26 Vitamin B6 deficiency anaemia	5 min.
52.05 Bone cells complete	5 min.
54.00 Nervous system physiology complete	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
33.27 Folic acid deficiency anaemia	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	5 min.
07.48 Vitamin B9, folic acid	5 min.
31.41 ATP production bones	
35.10 Raising the defence capacity, basic program	5 min.
32.00 Blood physiology complete	
32.10 Erythrocytes RBC complete	5 min.
33.27 Folic acid deficiency anaemia	5 min.
33.60 Oxygen supply / utilisation improvement	5 min.
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
33.28 Vitamin C deficiency anaemia	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
07.41 Vitamin C	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
32.00 Blood physiology complete	
33.28 Vitamin C deficiency anaemia	

33.60 Oxygen supply / utilisation improvement	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
33.29 Protein deficiency anaemia	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
32.00 Blood physiology complete	
33.29 Protein deficiency anaemia	
33.60 Oxygen supply / utilisation improvement	5 min.
31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
33.50 Degeneration bone marrow	
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.37 ATP production bone marrow	
31.41 ATP production bones	
35.10 Raising the defence capacity, basic program	
32.00 Blood physiology complete	
33.50 Degeneration bone marrow	
33.60 Oxygen supply / utilisation improvement	
52.06 Myelocytes	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
33.55 Inflammation bone marrow	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	5 min.
20.19 Staphylococcus aureus	5 min.
31.37 ATP production bone marrow	5 min.
31.41 ATP production bones	5 min.
35.10 Raising the defence capacity, basic program	5 min.
32.00 Blood physiology complete	
33.55 Inflammation bone marrow	5 min.
33.60 Oxygen supply / utilisation improvement	5 min.
52.05 Bone cells complete	5 min.
53.12 Inflammation of the bone	5 min.

31.50 Basic detoxification program	5 min.
01.00 Vitalisation complete	5 min.
33.60 Oxygen supply / utilisation improvement	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.10 ATP production complete	
35.10 Raising the defence capacity, basic program	
32.00 Blood physiology complete	
33.60 Oxygen supply / utilisation improvement	
31.50 Basic detoxification program	
01.00 Vitalisation complete	5 min.
33.70 Polycythaemia	Time
00.00 Analysis preparation	
01.00 Vitalisation complete	
02.00 Acupuncture Meridians complete	
31.11 ATP production lung	
31.15 ATP production heart	
31.41 ATP production bones	5 min.
35.10 Raising the defence capacity, basic program	5 min.
32.00 Blood physiology complete	
33.60 Oxygen supply / utilisation improvement	
33.70 Polycythaemia	5 min.
38.00 Circulatory system physiology complete	
39.10 Arterial impairment of the blood supply	5 min.
31.50 Basic detoxification program	5 min.
01 00 Vitalisation complete	5 min

## 18. The C-Module

### 18.1 Preface

The purpose of the VFS – Vereinigung zur Förderung der Schwingungsmedizin e.V. (Association for the Promotion of Vibrational Medicine) is clearly established in its name. For almost 20 years, the VFS has pursued the goal of introducing as many people as possible to the benefits of vibrational medicine, particularly bioresonance according to Paul Schmidt.

#### Its article of incorporation specifies the following:

"The association undertakes, based on the research and publications of Paul Schmidt and using his life work as its foundation, to promote and lend its financial support to science and research in the field of vibrational medicine and related diagnostic and therapeutic procedures, and to make the results of its research accessible to 'everyone'.

Although classical mainstream medicine has yet to accept and acknowledge the effects of bioenergetic oscillations, an increasing number of therapists have been using this method with great success each year, both nationally and internationally. In Germany alone, there are now over 5,500 therapists.

Through its history, the VFS has released several publications and issued information on a range of topics. This RAH Compendium is devoted to frequency patterns detected by the RAH, which describes abnormal cells. To avoid creating the misconception that these programmes are intended

for the same diagnostic or treatment purposes as conventional allopathic methods, this RAH Compendium is dedicated not only to describing the individual programmes, but also their envisaged use.

This RAH Compendium aims to present the main concepts behind the so-called C-Module, explain its structure and ultimately provide user tips for operating both the Rayocomp PS 10 and the Rayocomp PS 1000 Polar.

For non-members of the VFS, please note that a registration form is provided on the final pages which you may use to become a member of the Association for the Promotion of Vibrational Medicine. As a member, you will receive our twice – or thrice-yearly society journal im+PULS free of charge to keep you informed of news and developments in the world of vibrational medicine. You are also invited to attend the annual congress of the Association for the Promotion of Vibrational Medicine free of charge. We would be delighted if you would accept our offer and support us with your membership. Many thanks in advance for your consideration.

The editorial team of the Association for the Promotion of Vibrational Medicine

18.2 Principles 527

## 18.2 Principles

One of the reasons for the great success of vibrational medicine – which we strive to disseminate – is its cause– oriented treatment approach. Its aim, rather than symptom oriented diagnosis and treatment, is to identify harmful influences prior to therapy or harmonisation.

Indeed, it makes little sense to treat people without reducing causal stress loads. Here is an example: Electrosmog is commonly associated with insomnia, fatigue, migraines or hormonal fluctuations. But how can we even attempt to treat migraine headaches without first of all establishing whether the patient is affected by electrosmog? A clock radio on the bedside table in the bedroom can for instance generate a huge magnetic field. Only where the causative burden has been identified and eliminated can one also hope for a sustainable solution.

In line with this holistic approach, vibrational medicine focuses on causal factors such as electromagnetic pollution, geopathy, acidification, disruptions in the gut flora, vitamin, mineral and trace element deficiencies, pollutants, detoxification, nutrition, etc.

This is where the bioresonance devices devised by Paul Schmidt come in, providing frequency values and frequency spectra for physiological and pathological processes as a development platform and fulfilling two functions:

#### 1. Effect Testing:

When the frequency spectra imprinted on the organism of a human or animal exhibit a linear movement during the energy test procedure (e.g. Rayotensor), this is indicative of a dysregulation. If substances are then added to the measuring cup (resonant circuit) of the bioresonance device and these induce a direct rotation in the energetic test, the substance at hand may be considered useful for this particular organism and dysregulation.

Example: The frequency spectrum of minerals (RAH program number 07.10) is entered on the bioresonance device. The Rayotensor shows a linear motion during the test. If a mineral preparation is added to the measuring cup, the formerly linear motion is observed to switch to a rotation: this indicates that the mineral preparation is helpful to that organism from an energetic perspective (see book ,Bioresonance according to Paul Schmidt', chapter on ,Product and drug testing').

#### 2. Testing for side effects:

When the frequency spectra imprinted on the organism of a human or animal exhibit a rotational movement during the energy level testing procedure performed with the Rayotensor, this is indicative of healthy function. If we now add an unsuitable substance to the measuring cup, or expose the organism to be tested to a burden (e.g. the pulse-modulated field of a mobile phone), the information thus obtained reveals whether or not the organism experiences this as a strain. In the presence of a disturbance, the rotation pattern collapses and changes to a linear motion. Another example: The frequency spectrum of the kidneys (RAH program number 44.10) is selected on the bioresonance device. A rotation observed during the test performed with the Rayotensor is an indicator of healthy kidney function. If for example we now add paracetamol to the measuring cup, the formerly rotational motion changes into a linear motion; from an energetic perspective, this shows that paracetamol impairs kidney function (incidentally, a known side effect of this drug).

A few more words on the subject of development. The question of whether electrosmog can cause cell degeneration is universally contentious and hotly disputed. There are countless trials, observational studies and reports available on the subject. In this regard, vibrational medicine can help establish some interesting correlations. For one thing, the ground frequency values of the various cell structures and

organelles have been determined. That in itself allows to carry out the side reaction or side effect test described above. The program RAH 30.00 Cells and tissue, physiology complete can be configured for this purpose. A rotation pattern observed during the test performed with the Rayotensor constitutes an indication of healthy cell function in the organism. If said organism is now subjected to a specific field, such as the pulse-modulated field of a cordless phone, an energy test can be performed to check whether the former rotational movement

switches to a linear motion. In energy terms, this would mean that the pulse-modulated field is affecting the cellular system.

Although the frequencies of many types of stress and physiological and pathological processes of the body have already been identified, previously we were unable to test cell function, given that no frequency spectra were available for specific types of cell degeneration.

## 18.3 The term C-Module and associated objectives

The C-Module (which stands for Cell Module) is a development platform within the RAH which provides frequency spectra for different types of cell degeneration, based on energy, i.e., bioresonance technology. Since this topic is being widely discussed in the public domain and also happens to be subject to legal regulations, the name C-Module was chosen based on the fact that the term allows to easily carry out research, tests and harmonisation processes without creating the false impression that its purpose is the diagnosis or treatment of cancer from a conventional medicine perspective.

The C-Module comprises 87 programmes which only appear in bioresonance devices in code form, e.g. C-17. This is to prevent test results from being printed which could be wrongly interpreted by patients as a conventional medical diagnosis.

The purpose of the C-Module is the development of yet unknown connections (risks, causes) of malignant cells and the verification of known or presumed connections. It is mainly intended as a helpful tool to gain new insights in relation to cause-oriented treatment approaches (e-smog, geopathy, pathogens, diet, nutritional deficiencies, pollutants,...).

The RAH is an open expert system that pools the experience of many national and international experts. The same applies to the C-Module. Therefore, findings serving the further development of the C-Module are highly welcome because they should be made available to all bioresonance therapists through new software updates.

Hopefully, this will enable the many thousands of national and international vibrational medicine therapists to give their patients improved advice and treatment over the long term.

We will now provide the exact correlation between the designations included in the RAH C-Module and individual diseases.

## 18.4 Overview of the various C-Module programs

The following table shows the correlation between the terms in the RAH C-Module and individual di-

seases, and is thus the basis for working with the C-Module.

C-Module program numbers	Description of diseases
79.00 C-Module, blood / lymphatic system complete	79.00 C-Module, blood / lymphatic system complete
79.01 C-01	79.01 Acute lymphatic leukaemia
79.02 C-02	79.02 Acute myeloid leukaemia
79.03 C-03	79.03 Burkitt's lymphoma
79.04 C-04	79.04 Chronic lymphatic leukaemia
79.05 C-05	79.05 Chronic myeloid leukaemia
79.06 C-06	79.06 Hair cell leukaemia
79.07 C-07	79.07 Hodgkin's lymphoma
79.08 C-08	79.08 Lymphoma, malignant
79.09 C-09	79.09 Mycosis fungoides
79.10 C-10	79.10 Non-Hodgkin lymphoma
79.11 C-11	79.11 Plasmacytoma
79.12 C-12	79.12 Thymoma
79.13 C-Module, respiratory tract complete	79.13 C-Module, respiratory tract complete
79.14 C-14	79.14 Bronchial carcinoma
79.15 C-15	79.15 Laryngeal papilloma
79.16 C-16	79.16 Laryngeal carcinoma
79.17 C-17	79.17 Paranasal sinus tumour
79.18 C-18	79.18 Nasal tumour
79.19 C-19	79.19 Pharyngeal carcinoma
79.20 C-Module, kidney / urinary organs complete	79.20 C-Module, kidney / urinary organs complete
79.21 C-21	79.21 Bladder carcinoma
79.22 C-22	79.22 Bladder papilloma
79.23 C-23	79.23 Urethral cancer

70.24.0.24	70.24 Nambushlastania
79.24 C-24	79.24 Nephroblastoma
79.25 C-25	79.25 Renal cell carcinoma
79.26 C-26	79.26 Urothelial carcinoma
79.27 C-Module, digestive system complete	79.27 C-Module, digestive system complete
79.28 C-28	79.28 Anal carcinoma
79.29 C-29	79.29 Small intestinal tumour
79.30 C-30	79.30 Duodenal tumour
79.31 C-31	79.31 Colorectal carcinoma
79.32 C-32	79.32 Gastric carcinoma
79.33 C-33	79.33 Cancer of the oral cavity
79.34 C-34	79.34 Labial angioma
79.35 C-35	79.35 Oesophageal carcinoma
79.36 C-36	79.36 Rectal carcinoma
79.37 C-37	79.37 Salivary gland tumour
79.38 C-38	79.38 Labial carcinoma
79.39 C-Module, liver / gall bladder / pancreas	79.39 C-Module, liver / gall bladder / pancreas
complete	complete
complete	complete
complete 79.40 C-40	complete 79.40 Gall bladder tumour
complete 79.40 C-40 79.41 C-41	complete 79.40 Gall bladder tumour 79.41 Gall bladder carcinoma
complete 79.40 C-40 79.41 C-41 79.42 C-42	complete 79.40 Gall bladder tumour 79.41 Gall bladder carcinoma 79.42 Bile duct carcinoma
complete 79.40 C-40 79.41 C-41 79.42 C-42 79.43 C-43	complete 79.40 Gall bladder tumour 79.41 Gall bladder carcinoma 79.42 Bile duct carcinoma 79.43 Liver cell adenoma
complete 79.40 C-40 79.41 C-41 79.42 C-42 79.43 C-43 79.44 C-44	complete 79.40 Gall bladder tumour 79.41 Gall bladder carcinoma 79.42 Bile duct carcinoma 79.43 Liver cell adenoma 79.44 Lever cell carcinoma, primary
complete 79.40 C-40 79.41 C-41 79.42 C-42 79.43 C-43 79.44 C-44 79.45 C-45	complete 79.40 Gall bladder tumour 79.41 Gall bladder carcinoma 79.42 Bile duct carcinoma 79.43 Liver cell adenoma 79.44 Lever cell carcinoma, primary 79.45 Pancreas adenoma
complete 79.40 C-40 79.41 C-41 79.42 C-42 79.43 C-43 79.44 C-44 79.45 C-45	complete 79.40 Gall bladder tumour 79.41 Gall bladder carcinoma 79.42 Bile duct carcinoma 79.43 Liver cell adenoma 79.44 Lever cell carcinoma, primary 79.45 Pancreas adenoma
complete 79.40 C-40 79.41 C-41 79.42 C-42 79.43 C-43 79.44 C-44 79.45 C-45 79.46 C-46	complete 79.40 Gall bladder tumour 79.41 Gall bladder carcinoma 79.42 Bile duct carcinoma 79.43 Liver cell adenoma 79.44 Lever cell carcinoma, primary 79.45 Pancreas adenoma 79.46 Pancreas carcinoma
complete 79.40 C-40 79.41 C-41 79.42 C-42 79.43 C-43 79.44 C-44 79.45 C-45 79.46 C-46  79.47 C-Module, locomotor system complete	complete 79.40 Gall bladder tumour 79.41 Gall bladder carcinoma 79.42 Bile duct carcinoma 79.43 Liver cell adenoma 79.44 Lever cell carcinoma, primary 79.45 Pancreas adenoma 79.46 Pancreas carcinoma 79.47 C-Module, locomotor system complete
complete 79.40 C-40 79.41 C-41 79.42 C-42 79.43 C-43 79.44 C-44 79.45 C-45 79.46 C-46  79.47 C-Module, locomotor system complete 79.48 C-48	complete 79.40 Gall bladder tumour 79.41 Gall bladder carcinoma 79.42 Bile duct carcinoma 79.43 Liver cell adenoma 79.44 Lever cell carcinoma, primary 79.45 Pancreas adenoma 79.46 Pancreas carcinoma 79.47 C-Module, locomotor system complete 79.48 Chondrosarcoma
complete 79.40 C-40 79.41 C-41 79.42 C-42 79.43 C-43 79.44 C-44 79.45 C-45 79.46 C-46  79.47 C-Module, locomotor system complete 79.48 C-48 79.49 C-49	complete 79.40 Gall bladder tumour 79.41 Gall bladder carcinoma 79.42 Bile duct carcinoma 79.43 Liver cell adenoma 79.44 Lever cell carcinoma, primary 79.45 Pancreas adenoma 79.46 Pancreas carcinoma 79.47 C-Module, locomotor system complete 79.48 Chondrosarcoma 79.49 Ewing's sarcoma
complete 79.40 C-40 79.41 C-41 79.42 C-42 79.43 C-43 79.44 C-44 79.45 C-45 79.46 C-46  79.47 C-Module, locomotor system complete 79.48 C-48 79.49 C-49 79.50 C-50	complete 79.40 Gall bladder tumour 79.41 Gall bladder carcinoma 79.42 Bile duct carcinoma 79.43 Liver cell adenoma 79.44 Lever cell carcinoma, primary 79.45 Pancreas adenoma 79.46 Pancreas carcinoma 79.47 C-Module, locomotor system complete 79.48 Chondrosarcoma 79.49 Ewing's sarcoma 79.50 Osteochondroma
complete 79.40 C-40 79.41 C-41 79.42 C-42 79.43 C-43 79.44 C-44 79.45 C-45 79.46 C-46  79.47 C-Module, locomotor system complete 79.48 C-48 79.49 C-49 79.50 C-50	complete 79.40 Gall bladder tumour 79.41 Gall bladder carcinoma 79.42 Bile duct carcinoma 79.43 Liver cell adenoma 79.44 Lever cell carcinoma, primary 79.45 Pancreas adenoma 79.46 Pancreas carcinoma 79.47 C-Module, locomotor system complete 79.48 Chondrosarcoma 79.49 Ewing's sarcoma 79.50 Osteochondroma
complete 79.40 C-40 79.41 C-41 79.42 C-42 79.43 C-43 79.44 C-44 79.45 C-45 79.46 C-46  79.47 C-Module, locomotor system complete 79.48 C-48 79.49 C-49 79.50 C-50 79.51 C-51	complete 79.40 Gall bladder tumour 79.41 Gall bladder carcinoma 79.42 Bile duct carcinoma 79.43 Liver cell adenoma 79.44 Lever cell carcinoma, primary 79.45 Pancreas adenoma 79.46 Pancreas carcinoma 79.47 C-Module, locomotor system complete 79.48 Chondrosarcoma 79.49 Ewing's sarcoma 79.50 Osteochondroma 79.51 Osteosarcoma

79.54 C-54	79.54 Astrocytoma	
79.55 C-55	79.55 Ependymoma	
79.56 C-56	79.56 Glioblastoma	
79.57 C-57	79.57 Medulloblastoma	
79.58 C-58	79.58 Meningioma	
79.59 C-59	79.59 Neurinoma (schwannoma)	
79.60 C-60	79.60 Neuroblastoma	
79.61 C-61	79.61 Oligoastrocytoma	
79.62 C-62	79.62 Oligodendroglioma	
79.63 C-63	79.63 Choroid plexus carcinoma	
79.64 C-Module, organ of sight complete	79.64 C-Module, organ of sight complete	
79.65 C-65	79.65 Eyelid carcinoma	
79.66 C-66	79.66 Retinal tumour	
79.67 C-67	79.67 Retinoblastoma	
79.68 C-Module, skin complete	79.68 C-Module, skin complete	
79.69 C-69	79.69 Actinic keratosis	
79.70 C-70	79.70 Basalioma	
79.71 C-71	79.71 Melanoma, malign	
79.72 C-72	79.72 Spinocellular carcinoma	
79.73 C-Module, hormone system complete	79.73 C-Module, hormone system complete	
79.74 C-74	79.74 Pituitary adenoma	
79.75 C-75	79.75 Craniopharyngeal duct tumour	
79.76 C-76	79.76 Thyroid adenoma	
79.77 C-77	79.77 Thyroid carcinoma	
79.78 C-Module, female genital organs complete	79.78 C-Module, female genital organs complete	
79.79 C-79	79.79 Endometrial carcinoma	
79.80 C-80	79.80 Uterine cancer	
79.81 C-81	79.81 Mammary carcinoma	
79.82 C-82	79.82 Ovarian fibroma	
79.83 C-83	79.83 Ovarian carcinoma	

79.84 C-84	79.84 Uterine myoma
79.85 C-85	79.85 Uterine carcinoma
79.86 C-86	79.86 Uterine sarcoma
79.87 C-87	79.87 Vaginal carcinoma
79.88 C-88	79.88 Vulva carcinoma
79.89 C-89	79.89 Cervical carcinoma
79.90 C-Module, male genital organs complete	79.90 C-Module, male genital organs complete
79.91 C-91	79.91 Testicular adenoma
79.92 C-92	79.92 Testicular carcinoma
79.93 C-93	79.93 Penis carcinoma
79.94 C-94	79.94 Prostatic carcinoma
79.95 C-Module, sundry	79.95 C-Module, sundry
79.96 C-96	79.96 CUP syndrome
79.97 C-97	79.97 Carcinoid
79.98 C-98	79.98 Neuro-endocrine tumour
79.99 C-99	79.99 Soft-tissue sarcoma

# 18.5 Explanations on further documentation and the test protocols

First and foremost, energetic research in the field of cell degeneration also constitutes an analysis of the current state of scientific knowledge. It is of the greatest interest, for example, to find out which currently known causes are associated with each kind of cell degeneration.

The rest of this document provides the descriptions of each one of the programs in the RAH Compendium Each description is divided into the following subsections:

- Definition
- Prevalence (frequency)
- Age
- Diagnostic options
- Genetic predisposition
- Risk factors
- Ethnic origin
- References

## 18.5.1 C-Module test protocols

Testing protocols for analyses and harmonisation can be derived from the descriptions of the 87 programs of the C-Module according to the current state of scientific knowledge. The first software version of the C-Module already included the highly useful testing protocols for all C programs – known from the RAH of the Rayocomp PS 10 device and module 10 of the Rayocomp PS 10.

The testing protocols thus represent combinations of various RAH programs which are automatically suggested by the Rayocomps in order to avoid wasting time on entering each RAH programme individually.

# 18.5.2 The non-specific and specific part of the test protocols in the C-Module

The specific part of the test protocols is obtained mainly based on the risk factors and by considering each physiological structure and each type of cell degeneration. The full test protocol therefore consists of the non-specific part, which is the same for all C-programs and the specific part, which is tailored to each individual C-program. If one then selects the test protocol in the Rayocomp PS 1000 polar or Rayocomp PS 10 device, a complete test

protocol made up of a non-specific part and a specific part is then proposed for the test which can subsequently be transferred to the harmonisation process. This should provide the research operator with as comprehensive a tool as possible. The composition of the test protocols is obviously subject to upgrades and cannot claim to be exhaustive. This is precisely what the C-Module is supposed to develop to the greatest possible extent.

## 18.5.3 The non-specific part of the test protocols in the C-Module

The non-specific part of the test protocols consists of the intersection of those RAH programs which can broadly apply to any kind of cell degeneration.

The non-specific portion of the test protocols in the C-Module is established as follows:

Program no. / Description	Time
00.00 Analysis preparation	5 min.
01.00 Vitalisation complete	5 min.
02.00 Acupuncture Meridians complete	2 min.
We recommend to perform the cause orientated test programs 04.00 / 05.00 / 06.00 / 08.00 / $$	
20.05-27.05 before the start of the test for the individual C-protocol.	
30.10 Cell nucleus	5 min.

Program no. / Description	Time
30.20 Cell membrane	5 min.
30.30 Cytoplasm	5 min.
30.41 Endoplasmatic reticulum	5 min.
30.42 Mitochondria	5 min.
30.43 Golgi apparatus	5 min.
30.44 Ribosomes	5 min.
30.45 Lysosomes	5 min.
30.65 Epithelial tissues complete	5 min.
30.70 Connective tissues complete	5 min.
30.80 Nerve tissues complete	5 min.
30.90 Mucous membranes complete	5 min.
31.51 Detoxification blood system	5 min.
31.52 Detoxification lymphatic system	5 min.
31.53 Detoxification acidosis	5 min.
31.54 Detoxification extra-cellular	5 min.
31.55 Detoxification intra-cellular	5 min.
31.56 Detoxification mucous membrane	5 min.
31.57 Detoxification lung	5 min.
31.58 Detoxification stomach	5 min.
31.59 Detoxification pancreas	5 min.
31.60 Detoxification liver	5 min.
31.61 Detoxification intestines	5 min.
31.62 Detoxification kidney	5 min.
31.63 Detoxification bladder	5 min.
31.64 Detoxification woman / female-specific	5 min.
31.65 Detoxification skin	5 min.
31.66 Detox of endotoxins	5 min.
31.67 Entgiftung Exotoxine	5 Min.
31.70 Entartung Zellgewebe	5 Min.
36.10 Lymphbahnen	5 Min.
36.20 Lymphknoten	5 Min.
36.40 Tonsillen	5 Min.
36.50 Thymus	5 Min.
36.60 Milz	5 Min.

Program no. / Description	Time
36.70 Peyersche Plaques	5 Min.
36.80 Appendix vermiformis	5 Min.

The non-specific part of the C-Module test protocols focuses on readily known areas, which are energy, meridian balancing, physiological structures and detoxification. This assumes that the cause-oriented test programs, 04.00 / 05.00 / 06.00 and 08.00 in particular, and of course the RAH program areas were cleared for pathogens 20.05-27.05 before the start (e.g. with the help of the cause test set).

## 18.5.4 The specific part of the test protocols in the C-Module

The specific component, however, deals with the specific form of the disease, and in particular the risk factors.

For example, C-program 79.07 (Hodgkin's lymphoma). Risk factors indicated in the description include:

"A connection with certain viral infections is suspected because the Epstein Barr virus (the causative agent of mononucleosis) was detectable in about 40 to 60 per cent of those affected".

Accordingly, the specific part of the test protocol for the C-programs 79.07 contains the RAH Epstein-Barr virus (EBV) program 22.13.

**Note:** Should individual diseases featured in the C-Module clearly be traced to specific causes, these will be re-entered in the specific part of the test protocols just to be safe.

## 18.6 Legal framework

### 18.6.1 General information

It has already been pointed out in the previous chapter that the C-Module is not to be used for medical diagnosis or treatment in the conventional sense.

Orthodox medicine regularly requires placebocontrolled clinical trials as proof of efficacy, while the mechanisms herein described for the C-Module are intended solely to establish a scientific basis for discussion. Accordingly, a declaration of consent is required by the offering company in order to use the C-Module.

An example of this consent form can be found on the following pages. This is intended to avoid misunderstandings from the outset.

# 18.6.2 Statement of compliance to the use of the C-Module with the Rayocomp PS 1000 polar and Rayocomp PS 10

Your signature to this statement of agreement is to gain insight in the resonance behaviour a prerequisite for the activation and use of the of C-programs. I have taken note of and C-Module in the above bioresonance devices. understood this  $( \square )$ . The C-Module (Cell module) is a development The C-Module comprises 87 programmes platform within the RAH that researches which only appear in bioresonance devices different cell degenerations on the basis of in code form, e.g. C-17. This is to prevent energy, i. e., the basis of bioresonance. I have test results from being printed which could taken note of and understood this  $( \square )$ . be wrongly interpreted by patients as a conventional medical diagnosis. I have taken The purpose of the C-Module is the development note of and understood this  $(\boxtimes)$ . of yet unknown connections (risks, causes) of malignant cells and the verification of known The relation between a program number of or presumed connections. It is mainly intended the C-Module and its description be obtained from the bioresonance devices. as a helpful tool to gain new insights in relation The description can only be found in this to cause-oriented treatment approaches (e-smog, geopathic stress, pathogens, diet, RAH Compendium. I have taken note of and nutritional deficiencies, pollution,...) and thus understood this  $( \square )$ . make a contribution for the benefit of the people on the part of vibrational medicine. I The use of the C-Module is limited exclusively to agree to the purposes of the C-Module  $( \square )$ . professionals (doctors, naturopaths, therapists, research institutions, building biologists, oecotrophology specialists, researchers,...). I The purpose of the C-Module is not to offer diagnosis and therapy of the type conventional will respect this as user of the C-Module and medicine does. Therefore, it is forbidden to tell not make this C-Module available generally. I the patient – on the basis of the C-Module have taken note of and agree to it  $( \square )$ . - that he or she is suffering from cancer, offer a 'cancer' therapy or promise healing The RAH is an open expert system that in connection with this. Please observe the pools the experience of many national and administration of the Law in this context in international experts. The same applies to the UK especially with reference to the 1939 the C-Module. Therefore, findings serving the further development of the C-Module cancer act. Orthodox medicine regularly requires placebo-controlled clinical trials as are highly welcome because they should be proof of efficacy, while the mechanisms herein made available to all bioresonance therapists

through new software updates. I have taken

note of it  $( \square )$ .

described for the C-Module are intended solely

to establish a scientific basis for discussion.

The aim of tests and harmonization with the C-Module by a large number of therapists is

I sign this statement to d	locument my agreement to the above points.	
First name, surname:		
Street, number:		
ZIP code, city or town:		
Country:		
	Place, date, signature	

# 18.7 Descriptions and specific protocols regarding the different programs of the C-Module

## 18.7.1 79.01: C-01 Acute lymphatic leukaemia (ALL)

#### Definition

Acute lymphoblastic leukaemia (ALL) is a malignant disease which affects the blood-forming system. It originates in the bone marrow where the blood is formed and is associated with an excessive production of immature white blood cells (leukocytes). Rather than maturing into functional cells, the white blood cells multiply quickly and uncontrollably. Eventually, this leads to a suppression of normal blood formation whereby healthy white blood cells and red blood cells (erythrocytes) and thrombocytes can no longer be produced to the required extent. Anaemia, infections and increased bleeding propensity may be both the result and an initial symptom of acute leukaemia. Since ALL originates from the bone marrow and may affect the blood, the lymphatic tissue (lymphatic system), and all other organs, and even whole organ systems, it is sometimes referred to as malignant systemic disease. This applies to all types of leukaemia.

#### Prevalence (frequency)

With a proportion of approximately 80 percent, acute lymphoblastic leukaemia (ALL) represents the most frequent form of leukaemia in children and adolescents. It accounts for almost one third of all cancer diseases affecting this age group. According to the German Childhood Cancer Registry in Mainz, approximately 500 children between 0 and 14 years are taken ill with ALL each year. The total number of patients (until 18 years old) is estimated at 550 to 600 per year. Boys are affected slightly more frequently than girls.

#### Age

ALL can occur at any age, including in adults. However, children between the ages of 0 and 5

years are the most affected.

#### Diagnostic options

A blood test and an analysis of the bone marrow can determine accurately whether the patient suffers from leukaemia, and if so, from which type. Examination procedures like ultrasound, x-rays, resonance tomography (MRT), computer tomography (CT) and/ or scintigraphy of the skeleton can determine whether other organs beyond the bone marrow are affected by the disease. To determine if the central nervous system is also affected by the disease, a spinal fluid sample is taken and examined for presence of leukaemia cells (lumbar puncture).

#### Genetic predisposition

It is known that children with specific inherited or acquired immune deficiencies or with chromosomal mutations have a significantly higher risk of developing ALL.

#### Risk factors

The causes for lymphoblastic leukaemia (ALL) are largely unknown. In most cases it remains unclear why genetic changes occur. There are indications that not only genetic factors, but also environmental factors play a role in the development of the disease. It seems likely that various different factors work together to cause ALL. However, demonstrable risk factors include:

- Radioactive rays and x-rays
- Certain chemical substances (e. g. benzene, pesticides)
- Specific medications (e. g. cytostatic drugs, immunosuppressive drugs)
- Viruses

#### Smoking and alcohol

#### Ethnic origin

So far it is unknown whether there is any link between the disease and the ethnic origin.

#### Prevention

To minimise the risk of contracting leukaemia it is recommended to be careful with harmful chemical substances, specifically benzene or substances containing benzene. You should also refrain from smoking. Ionising radiation (e. g. x-rays) represents another risk factor. You can avoid excessive x-ray

examinations by creating an x-ray log in which all prior x-ray examinations are listed.

#### Sources

- Yiallouros M, Creutzig U. Acute lymphoblastic leukaemia (ALL). Information portal about cancerand blood diseases in children and young people. URL: http://www.kinderkrebsinfo.de/ALL [Release: 03.01.2013]
- Leukaemia (blood cancer). Health portal Onmeda. URL: http://www.onmeda.de/krankheiten/ leukaemie.html [Release: 20.09.2012]

#### Specific test protocol

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.50 Pesticides complete	5 min.
31.24 ATP production thymus	5 min.
31.25 ATP production lymph	5 min.
31.37 ATP production bone marrow	5 min.
32.00 Blood physiology complete	5 min.
34.00 Immune system physiology complete	5 min.
79.01 C-01	10 min.
01.00 Vitalisation complete	5 min.

## 18.7.2 79.02: C-02 Acute myeloid leukaemia (AML)

#### Definition

Acute myeloid leukaemia (AML) is a malignant disease which affects the blood-forming system. It originates in the bone marrow where the blood is formed and is associated with an excessive production of immature white blood cells (leukocytes). Rather than maturing into functional cells, the white blood cells multiply quickly and uncontrollably. Eventually, this leads to a suppression of normal blood formation whereby healthy white blood cells and red blood cells (erythrocytes) and thrombocytes can no longer be produced to the required extent. Anaemia, infections and increased bleeding propensity may be both the result and an initial symptom of acute leukaemia. Since AML originates from the bone marrow and may affect the blood, the lymphatic tissue (lymphatic system) and all other organs and even whole organ systems, it is sometimes referred to as malignant systemic disease. This applies to all types of leukaemia.

#### Prevalence (frequency)

The incidence of AML is 3.7 per 100,000 inhabitants and year and increases with growing age. At the over 70 years age-range the incidence rate reaches 100 per 100,000 inhabitants and year. After lymphoblastic leukaemia (ALL), AML represents, with almost 20 percent, the second most common leukaemia in children and young people: its share of the total of all malignant diseases lies at 4.8 per cent. Boys are slightly more frequently affected than girls.

#### Age

AML can occur at any age, however, it is most frequent in late adulthood. The average age of disease onset stands at 75 years. In childhood and adolescence children of up to 2 years are most frequently affected.

#### Diagnostic options

A blood test and an analysis of the bone marrow

can determine accurately whether the patient suffers from leukaemia, and if so, from which type. Examination procedures like ultrasound, x-rays, resonance tomography (MRT), computer tomography (CT) and/ or scintigraphy of the skeleton can determine whether other organs beyond the bone marrow are affected by the disease. To determine if the central nervous system is also affected by the disease, a spinal fluid sample is taken and examined for presence of leukaemia cells (lumbar puncture).

#### Genetic predisposition

It is known that children with specific inherited or acquired immune deficiencies or with chromosomal mutations (e. g. Down-syndrome, Fanconi anaemia) have a higher risk of developing AML.

#### Risk factors

The causes for myeloid leukaemia (AML) are largely unknown. However, there are indications that not only genetic factors, but also environmental factors play a role in the development of the disease. It seems likely that various different factors work together to cause AML. However, demonstrable risk factors include:

- Radioactive rays and x-rays
- Certain chemical substances (e. g. benzene, pesticides)
- Specific medications (e. g. cytostatic drugs, immunosuppressive drugs)
- Viruses
- Smoking and alcohol

#### Ethnic origin

So far it is unknown whether there is any link between the disease and the ethnic origin.

#### Prevention

To minimise the risk of contracting leukaemia it is recommended to be careful with harmful chemical substances, specifically benzene or substances containing benzene. You should also refrain from smoking. Ionising radiation (e. g. x-rays) represents another risk factor. You can avoid excessive x-ray examinations by creating an x-ray log in which all prior x-ray examinations are listed.

### Sources

 Yiallouros M, Creutzig U. Acute myeloid leukaemia (AML). Information portal about cancerand blood diseases in children and young people. URL: http://www.kinderkrebsinfo.de/AML

[Release: 02.10.2012]

 Schrappe M, Creutzig U. Acute myeloid leukaemia (AML). DGHO – Guideline of the German association of Haematology and Oncology about acute leukaemias.

[Release: May 2008]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.50 Pesticides complete	5 min.
31.24 ATP production thymus	5 min.
31.25 ATP production lymph	5 min.
31.37 ATP production bone marrow	5 min.
32.00 Blood physiology complete	5 min.
34.00 Immune system physiology complete	5 min.
79.02 C-02	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.3 79.03: C-03 Burkitt lymphoma

### Definition

The Burkitt-lymphoma was named after its discoverer, the English tropical doctor Dr. Denis Burkitt. It belongs to the so-called non-Hodgkin lymphomas (NHL), which are associated with the group of malignant lymphomas. Lymphomas are varying enlargements of the lymphatic glands. Malignant lymphomas are also popularly known as cancer of the lymphatic glands or lymph node cancer, which is not entirely correct.

# Prevalence (frequency)

The endemic Burkitt lymphoma occurs in children in Central and East Africa and represents the most frequent malignant tumor in children. Boys are about twice as often affected as girls. The sporadic Burkitt lymphoma occurs worldwide, however, it is significantly less frequent. About four percent of acute non-Hodgkin lymphomas in Germany are Burkitt lymphomas.

# Age

The endemic Burkitt-lymphoma affects children and young people between 2 and 20 years. It occurs most frequently in young children, specifically in children of 5 to 6 years of age. Patients suffering from sporadic Burkitt lymphoma are on average ten years older than patients suffering from endemic lymphoma.

### Diagnostic options

In the beginning the doctor records the patient's current complaints and obtains his medical history (anamnesis). The physical examination focuses on all palpable lymph nodes, the liver, the spleen and the nasopharyngeal cavity (e. g. tonsils). The doctor also performs a neurological examination including a check of the cranial nerves. The definite diagnosis is usually reached after the removal of sample tissue (biopsy) of the tumour tissue (usually lymph nodes). This will be cytologically and histologically examined. Imaging diagnostics include ultrasound, CT (computer tomography) and MRT (magnetic

resonance tomography). The blood analysis examines different parameters (full blood count, liver and kidney values, detection of Epstein-Barr-virus, HIV-test). Furthermore, it is important to examine the liquor (cerebrospinal fluid) of the patient.

# Genetic predisposition

Translocation is one of the possible causes. This means that the chromosomes are damaged whereby segments of the chromosomes are displaced in another position of a chromosome. This translocation will influence the normal functioning of the gene, which plays a control function in the cell division process and which also influences a great number of other genes.

### Risk factor: Epstein-Barr-Virus

The Epstein-Barr-Virus is shed with the saliva and throat secretions and can be transmitted through close contact and handling of objects that are contaminated with saliva. The virus is absorbed via the mucous membranes and reaches the B-lymphocytes via the lymphatic organs where it multiplies, partially on the basis of destroying the cells. The Epstein-Barr-Virus is known as the causative agent of infectious mononucleosis (Pfeiffer's disease).

### Risk factor: Immune system

A damaged immune system which is typically present in HIV-patients or those treated with drugs to suppress the immune system, so-called immuno-suppressants, appears to play a role in the development of the Burkitt lymphoma.

### Ethnic origin

It affects more people in Central- and Eastern Africa than in other parts of the world. The morbidity rate in specific geographic regions seems to be linked to specific conditions for infection.

### A healthy lifestyle

As a general rule it is possible to reduce the risk of developing an estimated 60 percent of all cancer types, if we consider a few aspects concerning our personal lifestyle. Eating a healthy and well-balanced diet that includes a lot of fruit, vegetables and whole grain products and taking regular physical exercise, constitute a first step towards preventing cancer!

#### Sources

 Burkitt lymphoma Online-Information of the German Cancer Society 'DKG' URL: http://www.krebsgesellschaft.de/pat\_ka\_burkitt\_lymphom\_definition,107809.html

[Release: 12.03.2012]

Burkitt lymphoma Health portal Onmeda.
 URL: http://www.onmeda.de/krankheiten/burkitt\_lymphom.html

[Release: 12.10.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
22.13 Epstein-Barr virus (EBV)	5 min.
31.24 ATP production thymus	5 min.
31.25 ATP production lymph	5 min.
31.37 ATP production bone marrow	5 min.
32.00 Blood physiology complete	5 min.
34.00 Immune system physiology complete	5 min.
79.03 C-03	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.4 79.04: C-04 Chronic lymphatic leukaemia (CLL)

### Definition

Chronic lymphocytic leukaemia (CLL) forms part of the so-called low-grade non-Hodgkin-lymphomas, and occurs primarily in the higher age groups. In CLL, certain mainly functionless leukocytes -the B-lymphocytes- accumulate in the blood, in the bone marrow, in the lymph nodes, in the liver and in the spleen. Intact B-cells play an important role in the immune system as they are responsible for the formation of anti-bodies. They are found in the blood and in the lymphatic organs.

# Prevalence (frequency)

Each year approximately three in 100.000 inhabitants are diagnosed with chronic lymphocytic leukaemia. Men are affected twice as often as women.

### Age

The average age of disease onset stands at 72 years. The probability of developing the disease increases with age.

# Diagnostic options

Normally, the physical examination is followed by a differential blood count. With the aid of ultrasound- and x-ray exams, and possibly a computer tomography, the doctor can detect affected lymph nodes. Where appropriate, the doctor performs a biopsy of the affected lymph nodes. An examination of the bone marrow which is usually extracted from the iliac crest and performed under local anaesthesia, is only useful in individual cases.

# Genetic predisposition

First-degree relatives (brothers, sisters, children) of CLL-sufferers show an increased risk for the disease.

### Risk factors

In the case of leukaemia the causes are not yet entirely clear. However, demonstrable risk factors include:

- Radioactive rays and x-rays
- Certain chemical substances (e. g. benzene, pesticides)
- Specific medications (e. g. cytostatic drugs, immunosuppressive drugs)

- Viruses (the "human T-cell lymphotropic virus")
- Smoking and alcohol

### Ethnic origin

Interestingly, Asian people contract CLL less frequently than the overall population. In fact, in Japan and China the disease is almost non-existent. Also, Japanese people who emigrated to the USA contract CLL very rarely.

### Prevention

To minimise the risk of contracting leukaemia it is recommended to be careful with harmful chemical substances, specifically benzene or substances containing benzene. You should also refrain from smoking. Ionising radiation (e. g. x-rays) represents another risk factor. You can avoid excessive x-ray examinations by creating an x-ray log in which all prior x-ray examinations are listed.

#### Sources

- Leukaemia (blood cancer). Health portal Onmeda. URL: http://www.onmeda.de/krankheiten/leukaemie-definition-1424-2.html
  - [Release: 20.09.2012]
- Chronic lymphatic leukaemia (CLL) NetDoktor.de. URL: http://www.netdoktor.de/Krankheiten/ Leukaemie/Wissen/Chronisch-lymphatische-Leukaemi-104.html

[Release: 31.08.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.50 Pesticides complete	5 min.
31.24 ATP production thymus	5 min.
31.25 ATP production lymph	5 min.
31.37 ATP production bone marrow	5 min.
32.00 Blood physiology complete	5 min.
34.00 Immune system physiology complete	5 min.
79.04 C-04	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.5 79.05: C-05 Chronic myeloid leukaemia (CML)

### Definition

In case of CML the granulocytes, that are still functioning, multiply very strongly. Granulocytes form a subgroup of white blood cells. If the CML reaches an acute stage, this leads to the so-called blast crisis. In this process many immature and non-functional granulocytes in a precursor stage (blast cells) are washed into the blood stream. In case of CML liver or spleen often become swollen because the degenerated cells take up residence in these organs. A typical characteristic of CML is the so-called Philadelphia-Chromosome – a genetic alteration, which is detectable in over 90 percent of CML-patients.

### Prevalence (frequency)

The Robert Koch-Institute estimates that approximately 9,100 people contract one of the different types of leukaemia in Germany each year. The incidences of leukaemia constitute approximately 2 percent of all newly diagnosed cancers. About 15 percent of all leukaemia patients suffer from chronic myelogenous leukaemia. Men contract this disease more frequently than women.

# Age

Chronic myelogenous leukaemia occurs mainly in middle-aged people. It affects people under 20 years less frequently. The biggest incidence of newly diagnosed chronic myelogenous leukaemia occurs in the age-group between 50 and 60 years.

### **Diagnostic options**

Normally, a physical examination is carried out at the beginning, followed by a blood analysis by means of a differential blood count. To assure the diagnosis the doctor finally performs a bone marrow biopsy. Possible cancerous lymph nodes can be detected by means of imaging techniques such as computer tomography (CT) or ultrasound.

# Genetic predisposition

There appears to be a genetic predisposition for

chronic myelogenous leukaemia as many chronic myelogenous (CML) sufferers have the so-called Philadelphia chromosome. The Philadelphia chromosome is chromosome 22 of the human genome, but in this case chromosome 22 is altered and in a faulty condition.

### Risk factors

In the case of chronic myelogenous leukaemia (CML) the causes are not yet entirely clear. However, demonstrable risk factors include:

- Radioactive rays and x-rays
- Certain chemical substances (e. g. benzene, pesticides)
- Specific medications (e. g. cytostatic drugs, immunosuppressive drugs)
- Viruses (the "human T-cell lymphotropic virus")
- Smoking and alcohol

### Ethnic origin

Regional or ethnic differences on a global scale are not known.

#### Prevention

To minimise the risk of contracting the disease it is recommended to handle certain chemical substances with care, specifically benzene or substances containing benzene. You should also refrain from smoking. Ionising radiation represents another risk factor. You can avoid excessive x-ray examinations by creating an x-ray log in which all prior x-ray examinations are listed.

### Sources

 Chronic myeloid leukaemia (CML) Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/leuka-emie-definition-chronisch-myeloische-leuka-emie-%28cml%29-1424-5.html

[Release: 20.09.2012]

- Chronic myeloid leukaemia (CML) NetDoktor.de.
   URL: http://www.netdoktor.de/Krankheiten/
   Leukaemie/Wissen/Chronische-myeloische Leukaemi-3901.html [Release: 31.08.2012]
- Chronic myeloid leukaemia. Information for people affected and their family members.

URL: http://www.chronische-myeloische-leuka-emie.com/

[Release: 16.01.2013]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.50 Pesticides complete	5 min.
31.24 ATP production thymus	5 min.
31.25 ATP production lymph	5 min.
31.37 ATP production bone marrow	5 min.
32.00 Blood physiology complete	5 min.
34.00 Immune system physiology complete	5 min.
79.05 C-05	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.6 79.06: C-06 Hair cell leukaemia (HCL)

### Definition

Hairy cell leukaemia (HCL) is a malignant disease of the B-lymphocytes, a subgroup of the white blood cells. Based on its formation and the progression of the disease it belongs to the indolent, low-grade non-Hodgkin lymphomas. Under the microscope the leukaemia cells show fine cytoplasm-extensions that look like hair. Hence the name of this type of leukaemia. The disease usually progresses slowly.

# Prevalence (frequency)

Hairy cell leukaemia is a very rare disease. Each year about 3 out of 1,000,000 inhabitants contract the disease. It affects men 4 to 5 times more frequently than women.

### Age

The mean age of patients is between 50 and 55 years. However, the disease can occur at any age, except in childhood.

### **Diagnostic options**

Primarily, a complete physical examination is carried out. Subsequently, the diagnosis can be subdivided into basic and special examinations. The basic examination consists of examining the blood under a microscope and performing an ultrasound scan. The special examination consists of an examination of the blood through immunophenotyping, a bone marrow aspirate (extraction of liquid bone marrow), and a bone marrow biopsy (extraction of bone marrow tissue).

# Genetic predisposition

A mutation in the BRAF-gene is verifiable in the case of classic hair cell leukaemia. Due to the lack of case studies it is not possible to examine whether the disease is caused by environmental exposure or genetic predisposition.

## Risk factor: Insecticides, herbicides

The cause of hair cell leukaemia has not yet been

determined. However, it is argued that hair cell leukaemia might be linked to exposure to insecticides and herbicides.

# Ethnic origin

In the Western countries hair cell leukaemia affects men four to five times more often than women. However, in Japan the ratio is almost 1:1. Further regional or ethnic differences on a global scale are not known.

# A healthy lifestyle

Since the risk factors are still largely undetermined, we can only recommend to ensure that you keep a healthy lifestyle. As a general rule it is possible to reduce the risk of developing an estimated 60 percent of all cancer types, if we consider a few aspects concerning our personal lifestyle. Eating a healthy and well-balanced diet that includes a lot of fruit, vegetables and whole grain products and taking regular physical exercise, constitute a first step towards preventing cancer!

# Sources

- Hair cell leukaemia (HCL) DGHO German Society of Haematology and Oncology
  - URL: http://www.dgho-onkopedia.de/de/onkopedia/leitlinien/haarzell-leukaemie-hzl
  - [Release: September 2012]
- Hair cell leukaemia. Onkodin oncology, haematology - data and information.

URL: http://www.onkodin.de/e2/e68956/e69753/

[Release: 30.04.2011]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.52 Herbicides (weeds)	5 min.
08.53 Insecticides (insects)	5 min.
31.24 ATP production thymus	5 min.
31.25 ATP production lymph	5 min.
31.37 ATP production bone marrow	5 min.
32.00 Blood physiology complete	5 min.
34.00 Immune system physiology complete	5 min.
79.06 C-06	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.7 79.07: C-07 Hodgkin's lymphoma

### Definition

Morbus Hodgkin (Hodgkin-lymphoma) is the name of a tumour disease which belongs to the group of malignant lymphomas. A malignant lymphoma is a malignant tumor that has its primary origin in the lymphatic system. The lymphatic system forms part of the immune system. The lymph nodes, the spleen and the tonsils, amongst others, constitute the so-called lymphatic organs. Malignant lymphomas can arise in any organ with lymphatic tissue; Morbus Hodgkin's disease most likely originates from the lymph nodes. All Hodgkin-lymphomas descend from cells of the lymphatic tissue, the so-called lymphocytes. Lymphocytes are a type of white blood cells and are responsible for the immune defence. There are two types of lymphocytes, each of which fulfils different tasks: B-lymphocytes and T-lymphocytes. Morbus Hodgkin results from a degeneration of the B-lymphocytes.

### Prevalence (frequency)

Hodgkin lymphoma is one of the comparatively rare diseases in Germany. Each year there is an incidence of just two to three newly diagnosed cases in 100,000 inhabitants. This accounts for 0.5 percent of all cancers. Men contract this disease more frequently than women, at a ratio of 3:2.

### Age

The average age of disease onset stands at 41 years and is therefore very low. Four fifths of affected men and three quarters of affected women are under the age of 60 years.

### Diagnostic options

A review of the patient's medical history is followed by a complete physical examination. In case of suspected Hodgkin-lymphoma, a biopsy of the tissue of the enlarged lymph nodes is taken and histologically examined. In addition, a bone marrow punctuation will determine if the disease has spread to the bone marrow and the blood forming system. Further imaging techniques such as x-rays,

computer tomography (CT), ultrasound (sonography examination), skeletal scintigraphy, or positron emission tomography (PET) can be employed.

# Genetic predisposition

Genetic predisposition seems to play a role as children and brothers and sisters of Hodgkin patients have a considerably higher risk to develop the disease.

### Risk factor: Viruses

A connection with certain viral infections is suspected because the Epstein Barr virus (the causative agent of mononucleosis) was detectable in about 40 to 60 per cent of those affected. People who suffer from AIDS frequently develop Hodgkin's disease, which shows that virus infections or an existing immunodeficiency favour the development of the disease.

### Ethnic origin

There is no known link between ethnicity and Hodgkin lymphoma.

#### Prevention

No special measures are known with which you can prevent Hodgkin lymphoma. If you recognize characteristic symptoms (such as enlargement of the lymph nodes, unexplained weight loss, heavy night sweat, cough lasting longer than two weeks), you should consider consulting a doctor to be on the safe side.

# Sources

- Beckmann IA. Hodgkin's lymphoma German Cancer Aid – Help Research Inform.
  - "Blaue Ratgeber" (volume 21).

[Release: February 2012]

- Morbus Hodgkin (Hodgkin-lymphoma). Health portal Onmeda.
  - URL: http://www.onmeda.de/krankheiten/morbus\_hodgkin.html

[Release: 28.07.2011]

• GHSG - German Hodgkin study group. URL: http://www.ghsg.org/definition

[Release: 16.01.2013]

 $\bullet$  Morbus Hodgkin in adults. Onkodin - oncology,

haematology - data and information.

URL: http://www.onkodin.de/e2/e28067/e28068/

[Release: 16.09.2004]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
22.13 Epstein-Barr virus (EBV)	5 min.
31.24 ATP production thymus	5 min.
31.25 ATP production lymph	5 min.
31.37 ATP production bone marrow	5 min.
32.00 Blood physiology complete	5 min.
34.00 Immune system physiology complete	5 min.
79.07 C-07	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.8 79.08: C-08 Lymphoma, malignant

# Definition

Each cell of the body can degenerate as a result of certain changes or damages to the human genotype. Tumours (tissue proliferation) will be formed through the uncontrolled growth of the cancerous cells. Tumours of the lymphatic system are called lymphomas which indicates that these diseases start from the lymphatic organs such as lymph nodes and spleen or the lymphatic cells (T- and B-cells).

The term lymphoma as such reveals nothing about the seriousness or threat of the disease – in the same way as the term "tumor" simply refers to a swelling of the tissue. Only by adding the adjectives "malignant" or "benign" can we describe the illness more accurately and only then is it sensible to make a general statement about the harmfulness of the illness and the different treatment processes. The lymph cells in malignant lymphomas proliferate in an uncontrolled manner.

# Prevalence (frequency)

Malignant lymphomas are relatively rare in comparison to organ tumours such as cancer of the breast, the intestine or the lungs. Together they account for just 5 percent of all cancer diseases in Germany. About 2 - 4 of 100,000 Germans are diagnosed each year with Hodgkin- lymphoma (see C-07, Hodgkin-lymphoma). This number is relatively stable. On the other hand, the number of malignant non-Hodgkin-lymphomas has been steadily rising in the past few years (see C-10, Non-Hodgkin-lymphoma). Each year between 8 and 10 of 100,000 inhabitants are diagnosed with non-Hodgkin-lymphoma, which corresponds to 10,000 new cases per year.

# Age

The majority of Germans affected by Hodgkin-lymphoma are diagnosed aged 25–30 (and there is another small agglomeration at the age of 60 years). Most non-Hodgkin lymphoma-patients are over 60 years old, which is why the number of older and very old patients has risen in particular.

### Diagnostic options

A review of the patient's personal medical history combined with a thorough physical examination form the basis before further examinations are considered. In case of suspected malignant lymphoma, a biopsy of the tissue of the enlarged lymph nodes is taken and histologically examined. In addition, a bone marrow punctuation will determine if the disease has spread to the bone marrow and the blood forming system. Further imaging techniques such as x-rays, computer tomography (CT), ultrasound (sonography examination), skeletal scintigraphy, or positron emission tomography (PET) can be employed.

### Genetic predisposition

Genetic predisposition seems to play a role as children and brothers and sisters of Hodgkin patients have a considerably higher risk to develop the disease.

### Risk factors

Just like all the other cells in the human body, the cells in the lymphatic system can degenerate due to a number of different factors. Generally we distinguish between three kinds of carcinogenic mechanisms:

- Chemical substances (benzene, herbicides, insecticides)
- Viruses (e. g. Epstein-Barr-Virus, HI-Virus, HTLV-I)
- Radioactive radiation

### Ethnic origin

There is no known link between ethnicity and malignant lymphoma.

### Prevention

No special measures are known with which you can prevent malignant lymphomas. Avoid the above mentioned risk factors and if you recognize characteristic symptoms (such as enlargement of the lymph nodes, unexplained weight loss, heavy night

sweat, cough lasting longer than two weeks), you should consider consulting a doctor to be on the safe side.

### Sources

 Malignant lymphomas. Kompetenznet Maligne Lymphome e.EV. (Competence network Malignant Lymphomas).

URL: http://www.lymphome.de/InfoLymphome/

index.jsp

[Release: 16.01.2013]

 Non-Hodgkin-lymphoma. Health portal Onmeda. URL: http://www.onmeda.de/krankheiten/non\_hodgkin\_lymphom.html
 [Release: 24.07.2011]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.50 Pesticides complete	5 min.
22.13 Epstein-Barr virus (EBV)	5 min.
31.24 ATP production thymus	5 min.
31.25 ATP production lymph	5 min.
31.37 ATP production bone marrow	5 min.
32.00 Blood physiology complete	5 min.
34.00 Immune system physiology complete	5 min.
79.08 C-08	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.9 79.09: C-09 Mycosis fungoides

### Definition

Mycosis fungoides is a degeneration of the T-lymphocytes. T-lymphocytes are certain white blood cells which form part of the immune system. They normally fight bacteria, viruses and other invaders. The lymph in the lymphatic vessels transports the T-lymphocytes past the lymph nodes through the whole body. However, if the T-lymphocytes degenerate (as meaning that they become malignant) and start to infest the skin, this will give rise to mycosis fungoides. Mycosis fungoides belongs to the group of low-grade (of low malignity) T-cell-lymphomas. It is therefore a type of non-Hodgkin-lymphoma (see C-10 non-Hodgkin-lymphoma).

# Prevalence (frequency)

Although mycosis fungoides is a rare cancerous disease, with a proportion of 2% it still represents one of the most frequent lymphoma diseases. Women contract the disease twice as often as men.

# Age

Mycosis fungoides occurs primarily in the second half of life.

# **Diagnostic options**

A tentative diagnosis is reached after a detailed discussion of the patient's personal medical history (history taking) and the skin alterations. A tissue biopsy is taken from an affected area and microscopically examined. A reliable diagnosis can only be reached once the tumours have penetrated deeper into the skin and an increase in lymphocytes and certain anti-bodies (immunoglobulins of the class E) can be detected. Additional examination procedures like ultrasound, x-rays, computer tomography (CT) und magnetic resonance tomography (MRT) can be employed to determine if any of the internal organs are affected.

### Genetic predisposition

A link between genetic factors and mycosis fungoides has not been seen.

### Risk factors

The risk factors are largely unknown. The following risk factors that were detected in the case of non-Hodgkin disease might also promote the development of mycosis fungoides:

- Certain viruses (e. g. Epstein-Barr-Virus, HI-Virus, HTLV-I)
- Chemical substances (benzene, herbicides, insecticides)
- Radioactive radiation
- Impaired immune system

### Ethnic origin

There is no known link between ethnicity and mycosis fungoides.

# A healthy lifestyle

No specific measures are known to effectively prevent mycosis fungoides, but you can reduce the risk of suffering from about 60 percent of all cancer types significantly if you maintain a healthy lifestyle. Eating a healthy and well-balanced diet that includes a lot of fruit, vegetables and whole grain products and taking regular physical exercise constitute an important step towards preventing cancer! Mycosis fungoides begins normally with alterations of the skin that look like psoriasis or an eczema and possibly are accompanied by itching. Should you notice any symptoms of a slowly progressing cancer, it is advisable to consult a doctor since mycosis fungoides is usually completely curable.

• Mycosis fungoides Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/

mycosis\_fungoides.html [Release: 31.12.2011]

• Mycosis fungoides Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/mycosis\_

fungoides,25871.html [Release: 14.04.2011]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.50 Pesticides complete	5 min.
22.13 Epstein-Barr virus (EBV)	5 min.
31.24 ATP production thymus	5 min.
31.25 ATP production lymph	5 min.
31.37 ATP production bone marrow	5 min.
32.00 Blood physiology complete	5 min.
34.00 Immune system physiology complete	5 min.
79.09 C-09	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.10 79.10: C-10 Non-Hodgkin-lymphoma (NHL)

## Definition

A variety of malignant diseases affecting the lymphatic system fall under the designation of the non-Hodgkin lymphomas. Non-Hodgkin lymphomas belong to the group of the malignant lymphomas. All those malignant lymphomas where the presence of typical cancerous Hodgkin-cells (Reed-Sternberg cells) could not be demonstrated are referred to as non-Hodgkin lymphomas. All non-Hodgkin-lymphomas descend from cells of the lymphatic tissue, the so-called lymphocytes. We distinguish between B-cell-lymphomas and T-cell-lymphomas. Depending on the degree of malignity of the tumor, we distinguish between low-grade malignant and high-grade malignant Hodgkin lymphoma.

### Prevalence (frequency)

In contrast to other tumour diseases the non-Hodgkin lymphoma occurs with a very low frequency. Together with the Hodgkin-lymphoma this lymphoma accounts for approximately five percent of all cancerous diseases. About 15 in 100.000 people develop a non-Hodgkin lymphoma each year.

# Age

Men develop this cancerous disease of the lymphatic tissue on average at the age of 66 years and women at the age of 70 years.

### Diagnostic options

The diagnosis non-Hodgkin lymphoma (NHL) is made on the basis of a tissue sample (biopsy) taken from an enlarged lymph node. A variety of different examinations can be performed to determine the stage of the disease: physical examination, ultrasound (sonography), x-rays, magnetic resonance tomography (MRT), bone marrow puncture, lumbar puncture (examination of the cerebral fluid) and blood analysis.

# Genetic predisposition

Studies have shown that some non-Hodgkin lymphomas show aberrations in the chromosomes which are responsible for converting a healthy cell into a lymphoma cell. Such genetic changes are not innate and they are not passed on to the next generation; they occur in the course of life.

### Risk factor: Virus infection

- Epstein-Barr-virus: causative agent of the so-called Burkitt-lymphoma, a highly malignant non -Hodgkin-lymphoma.
- HI-Virus: People with advanced HIV-infection have a significantly higher risk to contract NHL.
- Human T-cell-leukaemia virus (HTLV-I): People with HTLV-I - infection have a higher risk to contract T-cell-lymphomas.

### Other risk factors

- Helicobacter pylori: bacteria that causes inflammation of the gastric mucosa and increases the risk of malignant lymphoma
- Chemical substances: Benzene, herbicides, insecticides
- Smoking

### Ethnic origin

There is no known link between ethnicity and Non-Hodgkin lymphoma.

# A healthy lifestyle

No specific measures are known to effectively prevent mycosis fungoides, but you can reduce the risk of suffering from about 60 percent of all cancer types significantly if you maintain a healthy lifestyle. Eating a healthy and well-balanced diet that includes a lot of fruit, vegetables and whole grain products and taking regular exercise are decisive factors!

- Dr. Antje Müller-Schubert. Risiko Krebs Symptome entdecken frühzeitig handeln (Risk of cancer detect the symptoms take early action).
   FALKEN 2000.
   Page 71.
- Non-Hodgkin-lymphoma (NHL).
   Health portal Onmeda.
   URL: http://www.onmeda.de/krankheiten/non\_

the German Cancer Society 'DKG'
URL: http://www.krebsgesellschaft.de/pat\_ka\_
non\_hodgkin\_lymphom\_definition,107853.html
[Release: 12.03.2012]

• Non-Hodgkin-lymphomas. Online-Information of

# Specific test protocol

hodgkin\_lymphom.html [Release: 24.07.2011]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.50 Pesticides complete	5 min.
22.13 Epstein-Barr virus (EBV)	5 min.
20.69 Helicobacter pylori	5 min.
31.24 ATP production thymus	5 min.
31.25 ATP production lymph	5 min.
31.37 ATP production bone marrow	5 min.
32.00 Blood physiology complete	5 min.
34.00 Immune system physiology complete	5 min.
79.10 C-10	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.11 79.11: C-11 Plasmacytoma

### Definition

Plasmocytom (multiple myelom, M. Kahler's disease) belongs to a specific group of cancer diseases, which is classified as low-grade malignant non-Hodgkinlymphoma (see C-10 non-Hodgkin-lymphoma). The multiple myelom descends from cells of the lymphatic tissue, the so-called lymphocytes. The plasmocytom descends from the B-lymphocytes and is therefore a B-cell-lymphoma. In the case of the plasmocytoma the plasma cells proliferate malignantly in the bone marrow and form so-called monoclonal anti-bodies. Monoclonal means that a group of identical cells which all descend from one single plasma cell (the so-called cell-clone) form identical anti-bodies. What is special about the immunoglobulins evolving in the plasmocytoma is that they usually do not fulfil the functions of antibodies. (so-called para proteins). The proliferating cell clones suppress the normal blood formation in the bone marrow. Eventually, several individual tumours form in the bone marrow (multiple myeloma) in the case of M. Kahler's disease.

# Prevalence (frequency)

Multiple myeloma are rare, however, they belong to the most common tumours of the bones and the bone marrow. Approximately three to four new cases per 100.000 inhabitants are diagnosed each year (the numbers vary depending on the ethnic origin). Men contract this disease more frequently than women.

### Age

The probability of developing the disease increases with age. Three quarters of all patients suffering from multiple myeloma are over the age of 60 years. Only 5–10 percent of the patients are under the age of 40 years.

# Diagnostic options

If there is a suspicion of plasmocytoma, different diagnostic procedures will be carried out for diagnosis. Blood- and urine-controls, conventional

x-rays, imaging techniques like computer tomography (CT), magnetic resonance tomography, (MRT) as well as a bone marrow biopsy taken from the iliac crest are among the main examinations. The blood and the urine samples are tested for the so-called "monoclonal protein". This is the protein that the malignantly growing plasma cells produce.

# Genetic predisposition

Case-matched studies from the US demonstrate that relatives of myeloma sufferers are at a higher risk of contracting the disease. The studies showed that in the course of 10 years brothers and sisters of myeloma sufferers are 4 times more likely to contract the disease as well. Nevertheless, it is not a proper hereditary disease.

# Risk factors

So far the causes of plasmocytoma (multiple myeloma, M. Kahler's disease) remain undetermined. Unlike other forms of non-Hodgkin lymphomas (NHL), there seems to be no link between plasmocytoma and certain virus infections or with a weakened immune system Possible risk factors raised for discussion are as follows:

- Chemical substances (benzene, herbicides, insecticides)
- Radioactive radiation

### Ethnic origin

Afro-Americans are more frequently affected by plasmocytoma than other ethnic groups.

### Prevention

No special measures are known with which you can prevent plasmocytoma. Try to avoid the above mentioned risk factors and make sure you eat a healthy and balanced diet with a lot of fruit, vegetables and whole grain products. Taking regular exercise and having a positive attitude towards life constitute important steps towards prevention.

 Multiple myeloma, plasmocytoma, M. Kahler's disease. Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_

plasmozytom,107871.html [Release: 28.08.2012]

 Plasmocytom (Multiple myeloma, plasmocytoma, M. Kahler's disease).

Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/

plasmozytom.html [Release: 28.07.2011]  The myeloma Definition, epidemiology, symptoms.
 APMM - Working committee plasmocytoma / multiple myeloma.

URL: http://www.myelom.org/das-myelom/definition-epidemiologie-symptome.html

[Release: Oktober 2011]

What is the multiple myeloma (plasmocytoma).
 MKgS - Myeloma contact group Switzerland.
 URL: http://www.multiples-myelom.ch/content/was-ist-das-multiple-myelom-plasmozytom

[Release: April 2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.50 Pesticides complete	5 min.
31.24 ATP production thymus	5 min.
31.25 ATP production lymph	5 min.
31.37 ATP production bone marrow	5 min.
32.00 Blood physiology complete	5 min.
79.11 C-11	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.12 79.12: C-12 Thymoma

#### Definition

The thymoma is a tumor in the thymus, a lymphatic organ behind the upper section of the breast bone. It belongs to the tumours of the mediastinum - the area between the two lobes of the lung. The thymus plays an important role in the development and the differentiation of the T-lymphocytes. 75% of all thymomas are benign. 25% of all thymomas are malignant. Depending on the appearance and the grade of differentiation of the diseased cells and their tendency to spread, they can be subdivided into malignant thymomas and thymic carcinomas. While benign thymic cells multiply slowly and do not settle outside of the organ, the cells of malignant thymoma grow very quickly and penetrate into the surrounding tissue. The cells of malignant thymoma tend to spread and flourish in the lymph vessels and the lymph stream inside the chest cavity. The cells of thymus carcinoma on the other hand also settle as metastases in organs located far away from the original tumour.

# Prevalence (frequency)

Although tumours of the thymus are rare, they do account for the most frequent tumours of the mediastinum. Malignant thymomas account for 0.2 to 1.5 percent of all cancer diseases. Each year 0.2 to 0.4 of 100.000 inhabitants are diagnosed with thymoma. Men and women are affected to approximately the same extent.

### Age

Thymomas can occur at any age, however, their incidence is highest in the age group from 50 to 60 years.

# Diagnostic options

If thymoma is suspected on the basis of suggestive symptoms, the doctor will first review the medical history of the patient and then carry out a complete physical examination of the patient. Next, an x-ray examination of the thoracic cavity is performed. Blood- and urine samples are taken and by deter-

mining the hormones present other tumour types that can occur in the thoracic cavity can be ruled out. With the aid of computer tomography (CT) and magnetic resonance tomography (MRT) the size, the location and the extension of the tumor can be determined. By this way the stage of the tumor will be determined.

# Genetic predisposition

There are no known links with any genetic factors.

#### Risk factors

Benign thymomas occur typically in connection with the following diseases:

- Myasthenia gravis, an autoimmune disease, which is associated with 20-40 percent of thymomas.
- Anaemia
- Hypogammaglobulinaemia
- Polymyositis
- Lupus erythematodes and rheumatoide arthritis
- Thyroiditis
- Sjögren's syndrome

The exact causes of the thymic carcinoma are not yet known.

### Ethnic origin

Ethnic differences have not been determined.

# Prevention

Just as in the case of many other tumour types, there are no reliable methods to prevent the disease. However, make sure that you eat a healthy and balanced diet with a lot of fruit and vegetables and whole grain products, and take regular physical exercise. As a general rule it is possible to reduce the risk of developing an estimated 60 percent of all cancer types, if we consider a few aspects concerning our personal lifestyle.

• Thymoma Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_

thymom\_definition,108152.html

[Release: 12.03.2012]

• Thymoma Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/thymom.html

[Release: 30.10.2012]

Thymoma and myasthenia gravis.
 University Hospital Freiburg.
 URL: http://www.uniklinik-freiburg.de/thoraxchirurgie/live/krankheitsbilder/thymom.html

[Release: 05.12.2011]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.50 Pesticides complete	5 min.
31.24 ATP production thymus	5 min.
31.25 ATP production lymph	5 min.
31.37 ATP production bone marrow	5 min.
32.00 Blood physiology complete	5 min.
33.20 Anaemia caused by a disorder of the erythropoesis complete	5 min.
33.22 Aplastic anaemia	5 min.
34.00 Immune system physiology complete	5 min.
36.50 Thymus gland	5 min.
53.52 Joint inflammation (arthritis)	5 min.
79.12 C-12	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.13 79.14: C-14 Bronchial carcinoma

### Definition

Bronchial carcinoma or lung carcinoma is a malignant tumor of the lungs. A bronchial carcinoma develops in the cells of the respiratory tracts, the bronchi. The cells degenerate and multiply uncontrollably. They look different from "normal" cells of the bronchi, they multiply faster and by proliferating rapidly they destroy healthy tissue. Physicians distinguish between two types of bronchial carcinoma: small cell bronchial cancer and non- small cell bronchial carcinoma. The two forms differ in terms of growth, treatment and prognosis.

### Prevalence (frequency)

Based on estimates of the Robert Koch Institute, each year more than 51,000 people are diagnosed with bronchial carcinoma in Germany. The disease affects men more frequently than women. More than 33,000 men and more than 17,000 women are diagnosed with bronchial carcinoma. The number of male patients has been declining steadily since the late 1990s whereas the number of female patients has increased by about 30 percent.

#### Age

Bronchial carcinoma occurs predominantly above the age of 40 years. The average age of disease onset stands at 68 to 69 years.

# Diagnostic options

If there is suspicion of bronchial carcinoma, a first diagnosis is reached by performing imaging examinations like x-rays or a computer tomography (CT) of the lungs – especially if the patient complains of symptoms like cough, bloody sputum, shortness of breath or fever and weight loss. If there is a suspicion of lung cancer, the doctor will carry out a bronchoscopy to confirm the diagnosis.

# Genetic predisposition

Genetic factors play an important role in the development of the disease. People whose mother

or father has had the disease have a two to threefold risk to contract the disease.

### Risk factor: Smoking

There is a range of toxic substances which promote the development of bronchial carcinoma. The main risk factor is undoubtedly cigarette smoking. Approximately 85 percent of all bronchial carcinoma patients are or were smokers. The probability for a smoker to contract a bronchial carcinoma is at least 10 times higher than that of a non-smoker. For people who started smoking as adolescents the risk to develop a bronchial carcinoma is up to 30 times higher than that for non-smokers. Passive smoking increases the risk by 1.3 to 2.

### Risk factor: Occupation

Certain occupational groups seem to be exposed to a heightened risk. These include workers who come into contact with asbestos, arsenic, chrome, nickel, beryllium, cadmium, aromatic hydrocarbons, radon and, probably, diesel exhaust.

# Other risk factors

- Air pollution (1.5-fold risk)
- Infections (e. g. Tuberculosis)

### Ethnic origin

There is no known link between ethnic origin and bronchial carcinoma.

### Prevention

The only really promising way of preventing lung cancer is to refrain from smoking! It is recommendable to enrich your diet with a lot of fruit and vegetables as the type of food we eat has an effect on the disease risk.

 Lung cancer, bronchial carcinoma, lung carcinoma. Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_

lungenkrebs\_definition,108136.htmll

[Release: 12.03.2012]

• Lung cancer (bronchial carcinoma) Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/lungen-

krebs.html

[Release: 12.10.2012]

 Lung cancer (bronchial carcinoma) NetDoktor.de.
 URL: http://www.netdoktor.de/Krankheiten/ Lungenkrebs/

[Release: 22.08.2012]

Program no. / Name	Time
08.00 Harmful substances (pollutants) complete	5 min.
31.11 ATP production lung	5 min.
34.00 Immune system physiology complete	5 min.
42.60 Bronchus complete	5 min.
42.70 Lung complete	5 min.
85.04 Beryllium (Be)	5 min.
85.24 Chromium (Cr)	5 min.
85.28 Nickel (Ni)	5 min.
85.33 Arsenic (As)	5 min.
85.48 Cadmium (Cd)	5 min.
85.86 Radon (Rn)	5 min.
79.14 C-14	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.14 79.15: C-15 Laryngeal papilloma

### Definition

A Laryngeal papilloma is a benign, loped or even nodular mucosal tumour in the area of the larynx. Tumour recidivations tend to occur, which spread intrabronchially. Papillomas always occur in an isolated form and they are characterized by sharp limitations. They are often grey white, grainy and firm. As a result the respiratory tract is increasingly constricted, which leads to hoarseness and occasionally to difficulty in breathing. Laryngeal papilloma rarely degenerate into malignant tumours.

### Prevalence (frequency)

The incidence is approximately 1 case per 100,000 inhabitants in the industrialized nations. It is said to be higher in areas with low levels of social and hygienic welfare.

### Age

Laryngeal papillomas occur in children between 1 and 4 years, and in adults particularly in the 50-60 age group.

### Diagnostic options

The diagnosis is reached by performing a laryngoscopy: the larynx is examined under local anaesthesia using a special mirror (the so-called laryngoscope). A biopsy taken from the papilloma will confirm the diagnosis.

# Genetic predisposition

There are no known links between genetic factors and laryngeal papilloma.

# Risk factor: Papilloma viruses

The exact causes of laryngeal papilloma are not yet known. Papilloma viruses can be detected in the tissue of laryngeal papillomas, so that we can conclude that papilloma viruses play a role in the development of the disease.

# Ethnic origin

There are no known links between ethnic origin and laryngeal papillomas.

# A healthy lifestyle

No special measures are known with which you can prevent laryngeal papilloma. Try to avoid the above mentioned risk factors, and make sure you eat a healthy and balanced diet with a lot of fruit, vegetables and whole grain products. Taking regular exercise and having a positive attitude towards life also constitute important steps to prevention.

### Sources

- Mark H. Beers, M. D. Handbuch Gesundheit Medizinisches Wissen und ein ärtzlicher Rat für die ganze Familie (Health manual-Doctor's advice for the whole family) Second Edition.
   Merck & Co. 2003
   Page 1579.
- Dysphonia A program about hoarseness due to diseases of the larynx. Certec LTH - Sweden URL: http://www.dysphonia.certec.lth.se/ger/ diagnosis\_definition\_ger.lasso@ID=10047.html [Release: 20.01.2013]

Program no. / Name	Time
22.18 Human papilloma virus (HPV)	5 min.
22.19 Papilloma virus	5 min.
34.00 Immune system physiology complete	5 min.
42.40 Larynx complete	5 min.
42.60 Bronchus complete	5 min.
79.15 C-15	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.15 79.16: C-16 Laryngeal carcinoma

### Definition

Laryngeal carcinoma is a malignant tumor in the larynx and belongs to the tumours of the upper aero digestive tract. Laryngeal carcinoma can also be classified in the group of head and neck tumours. Physicians classify the laryngeal carcinomas according to their position with regards to the glottis. They distinguish between tumours that are located above the glottis (supraglottic) and below the glottis (subglottic) or in the area of the glottis (glottic).

# Prevalence (frequency)

Laryngeal carcinoma only accounts for 0.8 percent of all cancer diseases, which means that it is relatively rare. Laryngeal carcinoma affects men six times more frequently than women. According to estimates of the Robert Koch Institute 3,600 men and 600 women contracted laryngeal carcinoma in the year 2012.

# Age

The peak age for contracting laryngeal carcinoma is clearly between the ages of 65 and 69 years.

# **Diagnostic options**

First, a careful inspection and probing of the visible areas of the patient's oral cavity and throat is carried out. With the aid of special mirror-applications and endoscopes the nasopharynx region, the pharynx and the larynx will then be examined (laryngoscopy). If the suspicious areas are easily accessible, a tissue sample will be taken under local anaesthesia so that a histological examination can be performed (biopsy). The task is now to evaluate the extent of the tumour and to establish if the cervical lymph nodes are affected by spread of the tumour. To achieve this, modern imaging techniques such as ultrasound, computer tomography (CT), magnetic resonance tomography (MRT) or positron emissions tomography (PET) are employed.

### Genetic predisposition

There are no known links between genetic factors and laryngeal carcinoma.

# Risk factor: Smoking and alcohol

The main risk factors for the disease are alcoholand cigarette consumption. There is, in fact, a direct correlation between the likelihood of contracting throat cancer and intensity and duration of tobacco consumption. By contrast, the harmful effect of alcohol (ethyl alcohol) has not yet been proven. The risk to develop supraglottic carcinoma seems to increase if the patient smokes and in addition consumes alcohol in excess (alcohol abuse). It seems thus that alcohol multiplies the effect of carcinogenic substances.

### Risk factor: Occupation

A workplace with frequent contact with asbestos, arsenic, chrome, nickel and benzyprene can promote the development of laryngeal carcinoma.

# Ethnic origin

Geographic, economic, social and ethnic factors play an important role in the risk to contract the disease. For example, frequent chewing of the betelnut is a major cause for the high incidence of the disease in India. A comparative study published in the Journal of the National Cancer Institute (JNCI) in 1981 showed that 37 Nigerians, 141 white and 193 black inhabitants of the US develop laryngeal carcinoma per year.

# Prevention

By refraining from smoking and consuming alcohol in moderation you can eliminate the major risks and can prevent laryngeal carcinoma at least indirectly. Furthermore, the diet has a significant influence on the risk of disease as eating a lot of fruit and vegetables has a highly protective effect with regards to developing cancer.

- Larynx cancer (cancer of the throat). Online-Information of the German Cancer Society 'DKG'
   URL: http://www.krebsgesellschaft.de/pat\_ka\_kehlkopfkrebs\_definition,108190.html
   [Release: 28.08.2012]
- Throat cancer (laryngeal carcinoma).

  Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/

kehlkopfkrebs.html [Release: 23.11.2012]

- Prof. Dr. Michael Hamm. Gib Krebs keine Chance (Don't give cancer a chance).
   Knaur Ratgeber Verlag. 2009.
   Page 81, 123.
- Dr. Antje Müller-Schubert.
   Risiko Krebs Symptome entdecken frühzeitig handeln (Risk of cancer - detect the symptoms take early action).
   FALKEN Verlag. 2000
   Page 49.

Program no. / Name	Time
42.40 Larynx complete	5 min.
42.60 Bronchus complete	5 min.
85.24 Chromium (Cr)	5 min.
85.28 Nickel (Ni)	5 min.
85.33 Arsenic (As)	5 min.
79.16 C-16	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.16 79.17: C-17 Paranasal sinus tumour

### Definition

Paranasal sinuses are cavities in the facial bones and are located next to (maxillary sinus), above (frontal sinus cavity) and behind the nose (sphenoid sinus and ethmoidal cells). All paranasal sinuses are connected with the nasal cavity and are lined with mucous membrane. Mucous is formed regularly in the cell system of the paranasal sinuses which the body expels via the moving cilia through the nose. The majority of malignant tumours in the head and neck area (including paranasal sinuses) are so-called squamous cell carcinomas. This means that they are tumours that originate from surface cells. Less frequent are adenocarcinomas. These are tumours of adenoid tissue that affect particularly the nose and the paranasal sinuses as well as sarcoma or soft tissue tumours and other less common types of tumor.

# Prevalence (frequency)

Malignant tumours of the main nasal cavity and the paranasal sinuses account for just 1 percent of all malignomas and are therefore rare. However, they do account for approximately 12 percent of all malignant growths in the head and neck region. Paranasal sinus tumour affects men twice as often as women.

### Age

A first diagnosis is usually reached between the ages of 50 and 70 years.

### **Diagnostic options**

Firstly the doctor reviews and discusses the personal medical history of the patient which is followed by a complete physical examination and probing of the visible areas of the oral cavity and larynx. With the aid of special mirror-applications the doctor will examine parts of the nasal cavity and ears (laryngoscopy). Total certainty about the presence of a tumour and to what extent a possible tumour has spread can only be obtained by performing an endoscopy of the upper aerodigestive tract

under local anaesthesia. Thereby tissue samples are taken from suspicious areas which are then microscopically examined. Imaging techniques such as ultrasound, computer tomography (CT), magnetic resonance tomography or a positron emissions tomography (PET) can provide further indications about possible spreading of the tumour.

# Genetic predisposition

There are no known links between genetic factors and the paranasal sinus tumour.

# Risk factor: Smoking and alcohol

The number one risk factor for paranasal sinus tumour is tobacco consumption. The risk to develop a tumour seems to increase if the patient smokes and in addition to tobacco consumes alcohol in excess (alcohol abuse). It seems thus that alcohol multiplies the effect of carcinogenic substances.

### Risk factor: Occupation

In the case of carpenters the paranasal sinus tumour can be recognized as an occupational disease because it could be caused by wood dust. Furthermore, cancer of the inner nose can also be caused by vapours in the chemical industry, in tanneries and in the processing of nickel and chrome.

# Ethnic origin

Since tobacco- and alcohol consumption vary a lot according to geographic, economic, social and ethnic factors, the ethnic origin plays an important role in disease risk.

### A healthy lifestyle

The main risk factors can be eliminated by moderate alcohol consumption and by refraining from smoking. Furthermore, the diet has a significant influence on the risk of disease as eating a lot of fruit and vegetables has a highly protective effect with regards to carcinoma.

 Head and neck cancer. Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_kopf\_hals\_tumor\_definition,108199.html

[Release: 05.06.2012]

 Malignant diseases of the head and neck area University Hospital Heidelberg.

URL: http://www.klinikum.uni-heidelberg.de/ Boesartige-Tumoren-der-inneren-Nase-und-der-

Nasenebenhoehlen.7414.0.html

[Release: 20.01.2013]

 Prof. Dr. Michael Hamm. Gib Krebs keine Chance (Don't give cancer a chance).
 Knaur Ratgeber Verlag. 2009.
 Page 81, 123.

Program no. / Name	Time
08.00 Harmful substances (pollutants) complete	5 min.
42.10 Nose/olfactory organ complete	5 min.
42.20 Sinuses complete	5 min.
85.24 Chromium (Cr)	5 min.
85.28 Nickel (Ni)	5 min.
79.17 C-17	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.17 79.18: C-18 Nasal tumour

#### Definition

Approximately 12.000 litres of breathing air flow through the nose of an adult each day. Harmful gases or dangerous dust particles are also inhaled through the nose. For this reason the nasal mucous membrane harbours adhesion molecules which filter out all the substances of the breathing air that are not meant to reach the lungs. However, unfortunately as a result of this process the mucous membrane is burdened with numerous contaminants. In some circumstances these may be carcinogenic.

Various tumour types exist in the area of the nose:

- Malignant melanoma (see C-71, Melanoma, malign)
- Basal cell carcinoma (see C-70, basal cell carcinoma)
- Spinalioma (see C-72, Spinocellular carcinoma)
- Adenocarcinoma

The adenocarcinoma develops in the glands that are responsible for humidification of the nose. This type of cancer is recognised as an occupational disease in the wood industry (woodcutters, carpenter).

# Prevalence (frequency)

So far it has not been documented how frequently these different, the nose area affecting tumour types occur within the population.

### Age

The four possible tumour types affect predominantly people of middle age (between 45 and 70 years). Men and women are affected to the same extent except in case of spinaliom. Spinaliom affects men more frequently than women.

# Diagnostic options

The doctor reviews and discusses the personal medical history of the patient, which is followed by a complete physical examination of the visible areas of the nose. With the aid of special mirror-applications the doctor will examine parts of the

nasal cavity (laryngoscopy). Thereby tissue samples are taken from suspicious areas which are then microscopically examined. Imaging techniques such as ultrasound, computer tomography (CT), magnetic resonance tomography or a positron emissions tomography (PET) can provide further indications about possible spreading of the tumour.

# Genetic predisposition

It is possible that genetic disposition plays a role in the development of the malignant melanoma, the basal cell carcinoma and the prickle-cell carcinoma. This assumption is supported by the established fact that fair skinned-people have a higher risk.

### Risk factors

The following factors can influence and promote the development of a tumour in the nose area:

- Cigarette smoke
- The sun's UV-radiation
- Wood dust (oak- and beech wood)
- Crude oil
- Chemicals of the industrial iron production
- Epstein-Barr virus

# Ethnic origin

Since tobacco consumption varies a lot according to geographic, economic, social and ethnic factors, the ethnic origin plays an important role in disease risk. Since the intensity of UV-radiation varies considerably with geographic location and fair-skinned people are at a higher risk of developing a tumour due to UV-radiation, it can be concluded that both geographic and ethnic factors play an important role in the development of these types of cancer.

# A healthy lifestyle

You can eliminate the major risks by refraining from smoking and by using sunscreen products of high quality in strong sunlight. Furthermore, the diet has a significant influence on the risk of disease as eating a lot of fruit and vegetables has a highly protective effect with regards to developing cancer.

 Skin cancer. Online-Information of the German Cancer Society 'DKG'

URL: http://krebsgesellschaft.de/pat\_ka\_hautkrebs\_definition,107796.html

[Release: 28.08.2012]

• Cancer of the nose: Often the bad smell is the initial indicator.

Wissen Gesundheit GmbH.

URL: http://www.wissen-gesundheit.de/content\_week.asp?wdid=2467&twpid=7908&tmdid=14&ts

id=0

[Release: 21.01.2013]

 Cancer of the nose. ÖGD - Public health service Public health department of Baden-Württemberg URL: http://www.gesundheitsamt-bw.de/oegd/ Gesundheitsthemen/Arbeitsmedizin/Staatlicher-Gewerbearzt/Chemische-Belastungen/Seiten/ Nasenkrebs.aspx

[Release: 21.01.2013]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.00 Harmful substances (pollutants) complete	5 min.
22.13 Epstein-Barr virus (EBV)	5 min.
34.00 Immune system physiology complete	5 min.
42.10 Nose/olfactory organ complete	5 min.
79.18 C-18	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.18 79.19: C-19 Pharyngeal carcinoma

### Definition

Pharyngeal carcinoma is a malignant tumour in the pharynx and therefore belongs to the group of head-neck tumours. Like the majority of malignant tumours in the head-neck area, the pharyngeal carcinoma is (histologically) a so-called squamous cell carcinoma (see C-72 Spinocellular carcinoma). This means that it originates in the mucous membrane of the pharyngeal cavity (throat area). It is typical of the pharyngeal carcinoma to spread from the pharyngeal cavity by penetrating the adjacent tissue structures in the early stages of the disease. Via the lymph vessels it forms metastases in the cervical lymph nodes.

Since the pharyngeal cavity is subdivided into three areas, we distinguish between three different types of pharyngeal carcinoma:

Nasopharynx: nasopharyngeal space

Oropharynx: mouth and throat

Hypopharynx: at the level of larynx

# Prevalence (frequency)

In Europe and North America nasopharynx- and oropharynx carcinomas show an incidence of 0.5 to 2 new cases per 100,000 inhabitants. In Southern China, South-East-Asia and Northern Africa the disease is locally limited, with an average of 30 new cases per 100,000 inhabitants. The proportion of pharynx carcinomas at larynx level (hypopharynx) accounts for 5 to 10 percent out of all head-neck carcinomas.

### Age

The peak age of pharynx carcinoma is between the ages of 40 and 75 years.

# **Diagnostic options**

In the case of suspected pharynx carcinoma the diagnosis is reached by performing an endoscopy of the nasopharyngeal cavity. Suspicion of a tumour in the pharynx can be formed from a combination of warning signs such as enlarged cervical lymph

nodes and other complaints (e. g. throat ache, difficulties to swallow, obstructed nasal breathing). To secure the initial diagnosis the doctor removes a small tissue sample whilst performing an endoscopy and examines it under the microscope (a so-called biopsy). To determine how far the pharyngeal carcinoma has spread, imaging techniques such as computer tomography (CT), magnetic resonance imaging (MRT), x-rays or ultrasound are employed. On suspicion that the pharynx carcinoma has already formed metastases in the bones, a skeleton scintigraphy is employed.

### Genetic predisposition

It is possible that genetic predisposition plays some role in the development of tumours in the throat.

### Risk factor: Smoking and alcohol

The main risk factor for cancer of the head-neck area is smoking. Four out of five patients suffering from a malignant tumour of the oral cavity are smokers. Depending on the amount of cigarettes smoked, smokers contract cancer of the oral cavity and the throat up to six times more frequently than non-smokers. Alcohol intensifies the negative effects of smoking even further. The combination of smoking and regular immoderate alcohol consumption is also especially dangerous.

# Other risk factors

- Virus infections (especially human papilloma virus, HPV)
- Harmful substances (asbestos, paints and coatings that contain nickel and chromium)

# Ethnic origin

Since tobacco- and alcohol consumption vary a lot according to geographic, economic, social and ethnic factors, these factors play a special role in disease risk.

### Preserve your health

If you want to prevent contracting a pharynx carci-

noma, it is recommendable to eat a healthy diet and to lead a healthy life. Amongst other things, this means that you should avoid excessive alcohol- and tobacco consumption. Maintain a healthy oral hygiene.

Sources

 Head and neck cancer. Online-Information of the German Cancer Society 'DKG'

URL: http://krebsgesellschaft.de/pat\_ka\_kopf\_

hals\_tumor\_definition,108199.html

[Release: 05.06.2012]

• Pharynx carcinoma.

Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/rachen-

krebs.html

[Release: 20.02.2012]

Program no. / Name	Time
08.00 Harmful substances (pollutants) complete	5 min.
22.18 Human papilloma virus (HPV)	5 min.
22.19 Papilloma virus	5 min.
34.00 Immune system physiology complete	5 min.
42.10 Nose/olfactory organ complete	5 min.
42.30 Throat	5 min.
42.40 Larynx complete	5 min.
46.10 Oral cavity / tongue complete	5 min.
85.24 Chromium (Cr)	5 min.
85.28 Nickel (Ni)	5 min.
79.19 C-19	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.19 79.21: C-21 Bladder carcinoma

### Definition

Bladder carcinoma is a malignant tumour that develops in the urinary bladder. In the majority of cases the bladder carcinoma evolves from special mucosal cells of the urinary bladder, the so-called transition cells. These cells line the urinary bladder from within and form, as it were, the inner skin of the urinary bladder. Depending on the growth of the tumour we distinguish between superficial bladder carcinoma and infiltrating bladder carcinoma which grows into the tissue. The infiltrating type of bladder tumour, which grows into the tissue, reaches the muscle layer of the urinary bladder which is located below the transition cells. In the further evolution of the disease it might extend to adjacent organs (in male patients e.g. the prostate gland, in female patients e. g. the womb).

# Prevalence (frequency)

16,000 people contract bladder carcinoma in Germany each year. The disease affects men three times as often as women. In total urinary bladder carcinoma accounts for 2 percent in women and 4.6 percent in men of all cancer diseases. Urinary bladder carcinoma is the fourth most common cancer in men (after cancer of the prostate gland, cancer of the intestines and lung cancer).

### Age

Urinary bladder carcinoma usually occurs at an advanced age (in the majority of cases between 71 and 73 years). Urinary bladder cancer is rare in young and mid adulthood.

### Diagnostic options

Suspicion of urinary bladder carcinoma arises on the one hand on the basis of clues in the medical history (blood in urine being one of the possible symptoms) and on the other hand as a result of the medical findings of the examining doctor. The physical examination consists of palpation of the abdomen, pelvic area, kidney zone and genital area and includes a urine examination with urine

test strip (detection of blood). Where appropriate, performing a blood analysis might provide further information. In any case an ultra sound exam of urinary bladder, kidneys or the entire urinary tract should be carried out. On conspicuous findings a cystoscopy will be performed.

### Genetic predisposition

There are no known links between genetic disposition and urinary bladder carcinoma.

### Risk factor: Infections

Caused by i.e. chronic urinary tract infections, bladder stones or permanent catheter

# Risk factor: schistosomiasis

Infectious disease that thrives in tropical areas. It is caused by the larvae of aquatic worms which enter the body and afflict various organic systems.

#### Other risk factors

- Smoking (six-fold higher risk of contracting urinary bladder carcinoma)
- Chemical substances (e. g. beta-naphthylamine, benzidine)
- Certain medications (e. g. cyclophosphamide, phenacetin)

# Ethnic origin

There is no known link between ethnic origin and bladder cancer.

#### Prevention

Refrain from smoking and if you are exposed to aromatic amines (e. g. aniline) at work, make sure that you protect yourself adequately. You should also avoid certain medications (see risk factors). Furthermore, it is wise not to bathe in lakes and rivers in tropical and subtropical countries in order to avoid the pathogens of schistosomiasis.

 Bladder cancer, urinary bladder cancer, bladder carcinoma. Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_

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[Release: 12.09.2012]

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krebs.html

[Release: 30.04.2012]

 Aetiology and prevention of urinary bladder carcinoma.

German magazine for doctors Year 104 11th edition. [16.03.2007]

Program no. / Name	Time
08.00 Harmful substances (pollutants) complete	5 min.
24.63 Schistosoma haematobium	5 min.
24.64 Schistosoma mansoni	5 min.
31.17 ATP production urinary bladder	5 min.
34.00 Immune system physiology complete	5 min.
44.20 Urinary organs complete	5 min.
79.21 C-21	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.20 79.22: C-22 Bladder papilloma

### Definition

The bladder papilloma is a tumour of the urinary bladder which originates from the mucous membrane of the urinary bladder. As long as a bladder papilloma is made up of no more than six cell layers, it is still considered benign, however, if it consists of more than six cell layers, we refer to the disease as an early form of bladder cancer and treat it accordingly. Therefore bladder papilloma is classified as precancerosis.

# Prevalence (frequency)

Men are more frequently affected. Further information on the incidence rate of bladder papilloma is not available.

### Age

Bladder papillomas occur predominantly at an advanced age, after the age of 60.

### Diagnostic options

The diagnosis is performed by means of a cystoscopy, using an endoscope through the urethra (a duct linking the bladder with the outside). The endoscope is made up of a thin metal rod with a small camera attached to it. On the camera image the tumour can be seen as a rounded formation which grows into the urinary bladder. This way the doctor can also take small tissue samples which later can be examined under the microscope (biopsy). In support of this examination the doctor will carry out an ultra sound exam and a computer tomography (CT) of the area. This will help to pinpoint the exact location of the tumour.

# Genetic predisposition

There are no known links between genetic disposition and urinary bladder papilloma.

#### Risk factors

Possible risk factors of bladder papilloma are:

Cigarette smoke

- Chemical substances (e. g. beta-naphthylamine, benzidine)
- Certain medications (e. g. cyclophosphamide, phenacetin)
- Bladder stones

# Ethnic origin

There is no known link between ethnic origin and bladder papilloma.

### Prevention

You can eliminate one major risk to contract bladder papilloma if you refrain from smoking. Make sure to protect yourself adequately if you are exposed to carcinogenic substances at work. You should also avoid certain medications (see risk factors). We recommend to follow a healthy diet with a lot of fruit, vegetables and whole grain products as this lifestyle protects you from the effect of carcinogenic substances.

### Sources

 Manke J. Blasentumoren, Blasenkrebs (Tumours of the bladder, bladder cancer). Dr. Jutta Manke. eesom AG – Ihr Gesundheitsportal – verständlich und aktuell.

URL: http://www.eesom.com/go/CFXM2RQ29T-WMTI5N5JCAR 8EODLLU9WZP

[Release: 26.09.2006]

 Bladder papilloma Jameda GmbH - The biggest physician's recommendation of Germany URL: http://www.jameda.de/gesundheits-lexikon/

blasenpapillom/

[Release: 2008]

• Dr. Antje Müller-Schubert.

Risiko Krebs - Symptome entdecken - frühzeitig handeln (Risk of cancer - detect the symptoms - take early action).

FALKEN Verlag 2000.

Page 25.

Program no. / Name	Time
08.00 Harmful substances (pollutants) complete	5 min.
31.17 ATP production urinary bladder	5 min.
44.22 Urinary bladder	5 min.
79.22 C-22	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.21 79.23: C-23 Urethral carcinoma

#### Definition

Urethral carcinoma is a malignantly growing cell proliferation (carcinoma) which originates from the urethra. This rare disease is known as urethral carcinoma.

# Prevalence (frequency)

Urethral carcinoma is a very rare cancer. It only accounts for 0.3 percent of all carcinoma diseases. According to the National Cancer Institute Surveillance, Epidemiology, and End Results Database (SEER) Swartz et al (2006) calculated that the yearly incidence per one million inhabitants is 4.3 in men and 1.5 in women. Urethral carcinoma affects women twice as frequently as men.

#### Age

75% of all patients are 50 years old or older. The peak age of onset is over the age of 70. Women after the menopause are most frequently affected by urethral cancer.

### **Diagnostic options**

After history taking and a physical examination by palpation a urethroscopy is performed if there is suspicion of urethral cancer (urethroscopy). Using this method the urethra can be viewed from within. If a tumour is found, the doctor takes a tissue sample (biopsy) which is then microscopically examined. On the basis of the biopsy the doctor gains additional information about the type, the stage, the size and the depth of the tissue penetration of the tumour. Imaging techniques can determine how far the tumour has spread into adjacent tissue. These include ultrasound (sonography), computer tomography (CT) and magnetic resonance tomography (MRT).

### Genetic predisposition

There are no known links between genetic factors and urethral cancer.

### Risk factors

The causes of urethral carcinoma are not known.

Possible triggers of urethral cancer include:

- Recurrent (chronic) infections of the urinary tract
- Venereal diseases
- Frequent injuries of the urethra as a result of certain sex practices
- Urethral caruncles (benign, pea-sized tumour in the urethra which can degenerate and develop into a urethral carcinoma).

Another risk factor for this disease is gender. Due to anatomical factors women develop urethral cancer twice as often as men. They are more susceptible to infections of the urethra because their urethra is shorter than that of men.

### Ethnic origin

There is no known link between ethnic origin and urethral cancer.

#### Prevention

Because of the above mentioned risk factors it is advisable to:

- Make sure that you receive and follow treatment for any infection of the urethra
- Use condoms to protect yourself when having sexual intercourse
- Try to avoid injuries of the urethra

#### Sources

 Urethral carcinoma Online-Information of the German Cancer Society 'DKG'

URL: http://krebsgesellschaft.de/pat\_ka\_harnroehrenkrebs,108240.html

[Release: 12.09.2012]

• Urethral cancer.

Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/

harnroehrenkrebs.html [Release: 14.07.2011]

Rübben, Herbert Uroonkologie
 Springer Verlag 2009. 5., completely revised Edition, XIII,
 Page 477.

Program no. / Name	Time
31.17 ATP production urinary bladder	5 min.
34.00 Immune system physiology complete	5 min.
44.23 Urethra	5 min.
45.40 Urethritis (inflammation of the urethra)	5 min.
79.23 C-23	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.22 79.24: C-24 Nephroblastoma

### Definition

The Wilm's tumour (nephroblastoma) is a malignant tumour of the kidneys. The tumour was named after its discoverer, the German surgeon Max Wilms (1867–1918). This cancer disease affects predominantly children and rarely occurs in adulthood. Unlike other types of cancer like leukaemia or brain tumours, the incidence rate of Wilm's tumour in childhood is relatively low. However, the Wilm's tumour is the most common type of kidney cancer in children. The Wilm's tumour grows very rapidly and forms so-called metastases at an early stage. Nevertheless, the prognosis for Wilm's tumours (nephroblastoma) is good if therapy is started at an early stage.

### Prevalence (frequency)

Nephroblastoma accounts for approximately six percent of all malignant childhood tumours. About 110 children and adolescents are diagnosed with Wilm's tumour in Germany each year. Girls are slightly more frequently affected than boys. The tumour frequently occurs in connection with congenital malformations. These congenital malformations include the WAGR syndrome, the Denis–Drash syndrome and the Beckwith–Wiedemann syndrome. In rare cases the tumour affects both kidneys at the same time.

### Age

The majority of affected patients are less than five years old.

### **Diagnostic options**

During the physical examination the doctor will palpate the abdomen of the patient to check if there are any hardenings. On suspicion of nephroblastoma, an ultrasound exam (sonography) will be carried out. Additional imaging techniques to employ include computer tomography (CT) and magnetic resonance tomography (MRT). These can help to determine if the tumour has spread to other parts of the body.

### Genetic predisposition

It has to be assumed that genetic factors have a significant influence in the development of nephro-blastoma. One important indicator of genetic causes is the fact that Wilm's tumour often goes hand in hand with congenital malformations. Scientists suspect that aberrations affecting a specific area of the genetic information – located on chromosome 11 – promote the development of nephroblastoma.

### Risk factors

Since no environmental risk factors are known, there is no feasible way to prevent nephroblastoma. Also, a familial risk exists only in a few cases and it does not play any role in the prevention of the disease.

### Ethnic origin

From experience it is known that the incidence of the disease is higher in Europe and the United States than in Asia.

### Prevention

So far it is not known how we can possibly prevent Wilm's tumour (nephroblastoma) as the causes for this cancer disease remain largely unknown. If you notice that your child has a painless bulge in his or her abdominal cavity, please consult a doctor, in particular, if your child has any hereditary malformations (for example, in the eye).

#### Sources

- Wilm's-tumour, nephroblastoma Online-Information of the German Cancer Society 'DKG'
   URL: http://www.krebsgesellschaft.de/pat\_ka\_wilmstumor.html?markierung=nephroblastom
   [Release: 12.03.2012]
- Wilm's-tumour (nephroblastoma).
   Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/wilms\_

tumor.html

[Release: 11.06.2011]

- Guidelines of the Association for Paediatric Oncology and Haematology: Nephroblastoma AWMF-Guideline-register N

  025/004, class: S1 [Release: June 2008]
- Sommer, Kathrin Springer Verlag Medicine Nephroblastoma

URL: http://www.springergesundheit.de/kooperation/praevention/content-232475.html

[Release: 23.11.2011]

Program no. / Name	Time
31.23 ATP production kidney	5 min.
31.26 ATP production adrenal gland	5 min.
44.10 Kidneys complete	5 min.
34.00 Immune system physiology complete	5 min.
79.24 C-24	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.23 79.25: C-25 Renal cell carcinoma

#### Definition

Malignant tumours of the kidney(s) may have their origin in different tissues. Renal carcinoma (also known as renal adenocarcinoma) accounts for 95 percent of all kidney cancers and is therefore the most frequently represented by far. It arises from malignant cell changes in the kidneys. If the tumour develops from various different cells of the kidney tissue, health professionals refer to it as renal cell carcinoma.

# Prevalence (frequency)

Kidney cancer is a relatively rare tumour disease. According to the latest estimates of the Robert Koch Institute each year approximately 10,000 men and 6,500 women are diagnosed with kidney cancer each year. This means that renal cell cancer accounts for a proportion of approximately two percent of all solid, malignant tumours (the tendency is increasing).

### Age

People between the 40th and 60th year of life are diagnosed particularly frequently. The average age of disease onset stands at about 65 years for men and at approximately 70 years for women.

### Diagnostic options

On suspicion of renal cell carcinoma the following steps are necessary to reach a diagnosis: physical examination (e. g. palpation of the abdomen), laboratory tests (blood- and urine tests) and ultrasound exam (sonography). To determine whether a tumor is benign or malignant and to detect possible metastases in other parts of the body, the doctor will employ additional diagnostic procedures: computer tomography (CT) of chest- and abdominal area, percutaneous sample extraction, x-ray of the chest area, magnetic resonance tomography (MRT), possibly an angiography and skeletal scintigraphy if the doctor suspects metastases in the bones.

### Genetic predisposition

Genetic factors may play a role in the formation of renal cell carcinomas. Approximately one out of 100 renal cell carcinomas develops due to a genetic predisposition for this type of cancer. The predisposition can be passed on within the family. Studies have shown that people who suffer from the so-called von-Hippel-Lindau-disease (a rare hereditary condition) also have such genetic alterations and 28 to 45% develop renal cell cancer.

#### Risk factors

- Smoking and alcohol
- Medication (certain analgesics particularly those that contain phenacetin which can lead to kidney damage)
- Medical factors (Chronic kidney failure, thorotrast)
- Overweight (particularly in women)
- Exposure to harmful chemicals at work (e. g. asbestos, lead, cadmium, wood preservatives, solvents for dry-cleaning, fuels and other petroleum products)

### Ethnic origin

There is no known link between ethnic origin and renal cell carcinoma.

#### Prevention

No specific measures are known up to date, however, it is recommended to avoid risk factors such as tobacco- and alcohol consumption. Sometimes taking certain pain killers (analgesics) is appropriate. However, if you suffer from recurring pain (e. g. severe migraines), it is recommended to consult a doctor. Also, make sure you eat a balanced, healthy diet and avoid high-fat foods. Try to maintain a healthy weight.

### Sources

Kidney cancer, renal cell carcinoma, adenocarcinoma. Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_nierenkrebs\_vorbeugung,108258.html

[Release: 09.11.2012]

• Kidney cancer. Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/nieren-

krebs.html

[Release: 11.06.2011]

 Kidney cancer (renal cell carcinoma) NetDoktor. de GmbH.

URL: http://www.netdoktor.de/Krankheiten/

Nierenkrebs/

[Release: 22.08.2012]

 Renal cell carcinoma Urology: Online course book for surgeons.

URL: http://www.urologielehrbuch.de/nierenzell-

karzinom.html

[Release: 05.01.2013]

Program no. / Name	Time
08.00 Harmful substances (pollutants) complete	5 min.
31.23 ATP production kidney	5 min.
31.26 ATP production adrenal gland	5 min.
44.10 Kidneys complete	5 min.
45.05 Kidney failure	5 min.
85.48 Cadmium (Cd)	5 min.
85.82 Lead (Pb)	5 min.
79.25 C-25	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.24 79.26: C-26 Urothelial carcinoma

### Definition

Urothelial carcinoma is a malignant tumour that originates from the cells of the urinary vessels. In 90% of all cases the tumour develops in the bladder mucosa. Obstruction of the ureter by the tumor leads to a build-up of urine which can ascend to the kidneys. Thus substances of the urine can reach the blood stream. The tumour forms metastases in the surrounding lymph nodes and, via the blood, also in the lungs, the liver and the bones.

### Prevalence (frequency)

About 20 out of 100,000 inhabitants are diagnosed with urothelial carcinoma in Europe per year. This corresponds to 2–3 percent of all tumour diseases. The disease affects men three times as often as women.

#### Age

Urothelial carcinoma rarely occurs before the 40th year of life. The disease onset is usually between the 50th and 70th year of life.

### **Diagnostic options**

The physical examination consists of palpation of the abdomen, pelvic area, kidney zone and genital area and includes a urine examination with urine test strip (detection of blood). Performing a cystoscopy is still the most reliable and informative method to detect any tumour of the bladder. Performing both an ultrasound exam (sonography) and an x-ray test of the kidneys with contrast agent is vital to evaluate if and to which extent the tumour has spread to the urinary organs (kidneys, ureter). However, in certain circumstances, particularly if locally extended tumours are present, it is recommended to perform also a computer tomography (CT) or a magnetic resonance tomography (MRT) and a skeletal scintigraphy.

## Genetic predisposition

There are no known links between genetic disposition and urothelial carcinoma.

#### Risk factors

- Chronic inflammations of the renal pelvis
- Balkan-nephritis (a certain type of kidney disease)
- Tobacco consumption (two to four times higher risk)
- Chemical substances (e. g. beta-naphthylamine, 4-aminobiphenyl, benzidine)
- Certain medications (e. g. cyclophosphamide, phenacetin)

### Ethnic origin

There is no known link between ethnic origin and urothelial carcinoma.

#### Prevention

Refrain from smoking and if you are exposed to aromatic amines (e. g. aniline) at work, make sure that you protect yourself adequately. You should also avoid certain medications (see risk factors). Make sure that you eat a healthy, balanced diet and take regular exercise.

#### Sources

 Bladder cancer (also urothelial cell carcinoma of the urinary bladder). Dr. Castringius Urologic Clinic Fachkliniken München AG.

URL: http://www.ukmp.de/images/stories/ukmp/pdf/ UKMP\_Blasenkrebs.pdf

[Release: 23.01.2013]

C66 - Malignant neoformation in the ureter.
 NetDoktor.de GmbH.

URL: http://www.netdoktor.de/Service/ICD-Diagnose/C66-Boesartige-Neubildung-des-40229.html

[Release: 23.01.2013]

Dr. Jost, Lorenz Urothelial carcinoma
 Switzerland Med Forum. 18th June 2003 No. 25
 Page 585

Program no. / Name	Time
08.00 Harmful substances (pollutants) complete	5 min.
31.17 ATP production urinary bladder	5 min.
44.20 Urinary organs complete	5 min.
45.30 Pyelonephritis (pyelitis and kidney infection)	5 min.
79.26 C-26	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.25 79.28: C-28 Anal carcinoma

### Definition

The anal carcinoma is a malignant new formation of tissue inside the anal canal (which measures three to six centimetres) that leads to the anus. Although the anal carcinoma is commonly classified as a tumour of the large intestine, it differs considerably from carcinomas of the rectum and the large intestine. The degree of its malignancy depends on the location, the size, the expansion and the histological structure of the tumour.

### Prevalence (frequency)

Anal carcinoma is significantly less frequent than other cancer diseases of the large intestine; In Germany, less than one person out of 100,000 inhabitants is diagnosed with the disease per year. In certain risk groups (e. g. women who suffer from cervical cancer or HIV-infected, homosexual men), however, the disease occurs more frequently. In general, it affects women more frequently than men.

#### Age

Anal carcinomas occur predominantly after the 60th year of life. However, these cancers can also affect younger people who suffer from immunodeficiency (AIDS, leukaemia, or patients with suppressed immune system due to organ transplantation).

### **Diagnostic options**

Examination and palpation with the finger of the outer and inner anal area and, if applicable, endoscopy of the rectum (proctoscopy) will lead to diagnosis which will be confirmed by taking a tissue sample (biopsy). In case tumours in the anal canal it is also necessary to carry out an ultrasound exam, a magnetic resonance tomography (MRT), a computer tomography (CT) and x-rays.

## Genetic predisposition

Hereditary diseases seem to play no significant role as far as the anal carcinoma is concerned.

### Risk factor: Papilloma viruses

The virus (human papilloma virus, short form: HPV) is sexually transmitted and promote both cervical and vulvar cancer (see C-89 cervical carcinoma) and vulvar carcinoma (see C-88 vulva carcinoma) in women. An infection with human papilloma virus can lead to the formation of anal warts (condylomata accuminata). These, in turn, can cause new tumour formation inside the epithelial tissue (intraepithelial neoplasia) which might develop into a squamous cell carcinoma. A weakened immune system can promote the development of anal carcinoma additionally.

#### Other risk factors

- Anal warts that develop into anal carcinoma
- Immunodeficiency (e. g. AIDS)
- Passive anal sex
- Smoking
- Nutrition

### Ethnic origin

There is no known link between ethnic origin and anal carcinoma.

### Sexual hygiene, healthy lifestyle

It is important to maintain a healthy sexual hygiene and to use condoms as the development of the anal carcinoma is linked to sexually transmittable virus infections (human papilloma virus). In general: If you want to maintain your health as long as possible, you need to retain a healthy lifestyle. Eating a balanced diet which is rich in vitamins is just as important as taking sufficient exercise. Also, avoid risk factors such as smoking or alcohol.

#### Sources

Anal carcinoma Guideline of the German Association for Coloproctology. AWMF-Guideline-register N° 081/004. Stage of development: 1

[Release: November 2002]

• Anal carcinoma Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/

analkarzinom.html [Release: 19.11.2012]  Anal cancer, anal carcinoma Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/analkrebs\_

analkarzinom,25069.html [Release: 27.05.2011]

Program no. / Name	Time
22.18 Human papilloma virus (HPV)	5 min.
22.19 Papilloma virus	5 min.
23.73 Condyloma	5 min.
31.12 ATP production colon	5 min.
34.00 Immune system physiology complete	5 min.
46.50 Colon complete	5 min.
46.60 Straight bowel	5 min.
46.70 Anus	5 min.
79.28 C-28	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.26 79.29: C-29 Small intestine tumour

### Definition

Small intestinal tumours can be either benign or malignant tumours of the small intestine. Benign tumours of the small intestine (polyps) derive from the different tissues in the small intestine. They can occur individually or in greater numbers. A benign tumour of the small intestine might cause health problems due to its fast growth as it can constrict adjacent organs or obstruct the intestines as a result of its size. Malignant tumours of the small intestine (small intestinal carcinoma) can migrate via the lymphatic or blood pathways and form metastases in lymph nodes or other organs and cause additional health problems.

### Prevalence (frequency)

Most small intestinal tumours are benign. Malignant small intestinal tumors are rare. According to information supplied by the Robert Koch Institute, 0.33 men per 100,000 inhabitants and 0.24 women per 100,000 inhabitants were diagnosed with small intestinal carcinoma in Germany in the year 2003. Small intestinal carcinoma accounts for just 1 to 2 percent of all malignant tumours of the entire gastrointestinal tract.

### Age

The risk for contracting small intestinal cancer increases with advanced age. Detailed information on frequency distribution is not available.

### Diagnostic options

If, after reviewing the personal medical history and examining the patient, the doctor has the suspicion that the patient has a tumour in the small intestine, the following diagnostic procedures can be employed to reach a reliable diagnosis:

- X-rays with contrast medium
- Colonoscopy (with an endoscope)
- Ultrasound exam (sonography)
- Computer tomography (CT) and magnetic resonance tomography (MRT)

Tissue samples are taken from suspicious areas which are then microscopically examined. If a tumor could not be detected using the above mentioned diagnostic procedures and suspicion of a tumor remains, the doctor can perform an explorative laparotomy as a last resort (this means that he will open the abdominal wall and examine the organs).

### Genetic predisposition

Certain hereditary diseases increase the danger of degeneration of cells in the small intestine.

- Peutz-Jeghers syndrome
- Familial adenomatous polyposis (FAP)
- Gardner syndrome
- HNPCC or hereditary nonpolyposis colorectal cancer (HNPCC)

#### Risk factor: Nutrition

A possible risk factor for small intestinal carcinoma are harmful substances in the food. Preservatives, colouring agents and other chemical carcinogenic substances in the food can promote small intestinal cancer.

#### Other risk factors

- Crohn's disease (a chronic inflammatory intestinal disease)
- Weakened immune system (e.g. due to an HIV-infection or organ transplantation)

#### Ethnic origin

There is no known link between ethnic origin and carcinoma of the small intestine.

### Healthy lifestyle

A healthy lifestyle based on the avoidance of unfavourable habits such as the consumption of alcohol, nicotine and carcinogenic substances in the food. A healthy diet with abundant fibre, vitamins and minerals, regular physical exercise to strengthen the body's own immune defence as well as maintaining a healthy bodyweight can help to prevent cancer of the small intestine.

### Sources

 Small intestinal tumour Health portal Onmeda. URL: http://www.onmeda.de/krankheiten/duenn-darmtumor.html

[Release: 10.01.2013]

Small intestinal cancer, small intestinal tumour.
 Online-Information of the German Cancer Society
 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_duenndarmkrebs\_definition,107938.html

[Release: 30.03.2011]

• Small intestinal cancer Symptomat.de – online health portal for diagnosis.

URL: http://symptomat.de/D%C3%BCnndarmkrebs#Was\_ist\_D.C3.BCnndarmkrebs.3F

[Release: 12.01.2013]

Program no. / Name	Time
08.00 Harmful substances (pollutants) complete	5 min.
31.16 ATP production small intestines	5 min.
34.00 Immune system physiology complete	5 min.
46.40 Small bowel complete	5 min.
47.50 Crohn's disease	5 min.
79.29 C-29	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.27 79.30: C-30 Duodenal tumour

### Definition

The term duodenal tumor is used to describe tumours that are located in the duodenum area, between stomach and jejenum. These are subdivided into benign and malignant tumours. Benign duodenal tumours are Brunner's gland adenomas, adenomas, myomas, myofibromas and gastrinomas. Malignant duodenal tumours can be subdivided into carcinomas, sarcomas, neuroendocrine tumours.

### Prevalence (frequency)

Malignant tumours of the small intestine account for 2 to 3 percent of all intestinal tumours and are therefore very rare (Jemal et al., 2006). The adenocarcinoma of the large intestine occurs 50 times more frequently than that of the small intestine. 40 percent of all small intestine carcinomas appear in the duodenum, although the length of the duodenum only amounts to about 10 percent of the length of the entire small intestine. Sarcomas in the duodenum occur very rarely. Men contract this disease more frequently than women.

### Age

The majority of patients are older than 50 years. The peak age is in the sixth decade of life.

### **Diagnostic options**

Firstly, the doctor reviews the patient's personal medical history and performs a physical examination. On suspicion of duodenal tumor he will carry out a gastroscopy and an ultrasound exam (sonography) to reach a diagnosis. If appropriate and necessary, a tissue sample will be taken and examined under the microscope (biopsy). To determine if the tumor has spread to other parts of the body, the following diagnostic methods can be employed:

- X-rays with contrast medium
- Computer tomography (CT) and magnetic resonance tomography (MRT)

### Genetic predisposition

Certain hereditary diseases like Peutz-Jeghers syndrome, familial adenomatous polyposis (FAP), Gardner syndrome or hereditary nonpolyposis colorectal cancer (HNPCC) are linked to an increased risk of developing cancer of the intestines.

#### Risk factor: Nutrition

A possible risk factor for small intestinal carcinoma is the presence of harmful substances in the food. Preservatives, colouring agents and other chemical carcinogenic substances as well high levels of animal fat in the food can promote duodenal cancer.

#### Other risk factors

- Crohn's disease (a chronic inflammatory intestinal disease)
- Weakened immune system (e.g. due to an HIV-infection or organ transplantation)

### Ethnic origin

There is no known link between ethnic origin and carcinoma of the duodenum.

#### Healthy lifestyle

A healthy lifestyle based on the avoidance of unfavourable habits such as the consumption of alcohol, nicotine and carcinogenic substances in the food is a first step towards prevention. A healthy diet with abundant fibre, vitamins and minerals, regular physical exercise to strengthen the body's own immune defence as well as maintaining a healthy bodyweight can help to prevent duodenal cancer.

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   Springer Verlag/Berlin Heidelberg New York. 1996
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   Georg Thieme Verlag. 2004.
   Page. 508 et seq.
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   Page 329.

Program no. / Name	Time
08.00 Harmful substances (pollutants) complete	5 min.
31.16 ATP production small intestines	5 min.
34.00 Immune system physiology complete	5 min.
46.41 Duodenum	5 min.
47.50 Crohn's disease	5 min.
34.00 Immune system physiology complete	5 min.
79.30 C-30	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.28 79.31: C-31 Colorectal carcinoma

### Definition

The large intestine can be divided into appendix, colon and rectum. We distinguish between colon carcinoma and rectal carcinoma, depending on the affected area. Together both areas are referred to as colorectal carcinoma. Malignant tumours mainly develop in the intestinal mucous membrane.

### Prevalence (frequency)

Approximately 32,000 men and 34,000 women are diagnosed with colon- or rectum cancer in Germany per year. This means that colorectal carcinoma is the second most common cancer in both men and women.

### Age

The average age of onset of colorectal cancer is 68 years for men and 73 years for women. Few people contract the disease under the age of 40. 90 percent of colorectal cancer patients are older than 60 years.

### **Diagnostic options**

On suspicion of intestinal tumour the following diagnostic procedures are employed:

- Rectal-digital palpation
- Occult blood test (haemoccult test)
- Rectoscopy, sigmoidoscopy colonoscopy (endoscopy of the intestine)
- X-rays with contrast medium

Should the suspicion of colorectal cancer be confirmed, further tests will be carried out to determine if the tumour has formed metastases in other parts of the body.

- Ultrasound exam (sonography/endosonography)
- Computer tomography (CT) and magnetic resonance tomography (MRT)
- Laboratory tests

### Genetic predisposition

The following hereditary diseases increase the risk of contracting colorectal carcinoma:

- Peutz-Jeghers syndrome
- Familial adenomatous polyposis (FAP)
- Gardner syndrome
- HNPCC or hereditary nonpolyposis colorectal cancer (HNPCC)

### Risk factor: Nutrition

Diet plays an important role in the prevention of intestinal cancer. A very fatty, meat-oriented diet promotes cancer. Harmful substances in the food such as preservatives, colouring agents and chemical, carcinogenic substances also increases the risk.

#### Other risk factors

- Crohn's disease or ulcerating colitis (a chronic inflammatory intestinal disease)
- Overweight and lack of exercise
- Tobacco consumption

### Ethnic origin

While colorectal cancer is rather common in Western industrialised countries, it affects people in emerging and developing countries only rarely. The reason for this is the low-fibre and fatty diet in the Western industrialised countries.

## Healthy lifestyle

Regular physical exercise, a healthy diet with abundant fibre, minerals and vitamins and avoiding unhealthy lifestyle habits such as alcohol consumption, smoking and carcinogenic substances in the diet (see risk factors) help prevent colorectal cancer.

#### Sources

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[Release: 28.03.2012]

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[Release: 08.03.2012]

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 Page 1

Program no. / Name	Time
08.00 Harmful substances (pollutants) complete	5 min.
31.12 ATP production colon	5 min.
46.50 Colon complete	5 min.
46.60 Straight bowel	5 min.
46.70 Anus	5 min.
47.50 Crohn's disease	5 min.
47.60 Ulcerative colitis	5 min.
79.31 C-31	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.29 79.32: C-32 Gastric carcinoma

### Definition

Malignant tumours of the stomach (gastric carcinoma) develop in the gastric mucosa and 95 percent originate from the gland tissue. This is referred to as adenocarcinoma. The incidence of tumours in the lymphatic tissue of the stomach (so-called MALT lymphomas) is considerably lower. Tumours of the musculature of the stomach (sarcomas and gastro-intestinal stromal tumours) are also infrequent.

### Prevalence (frequency)

According to information supplied by the Robert Koch Institute about 17,000 people are diagnosed with gastric cancer in Germany each year, 9,200 of whom are men. Gastric cancer represents the sixth most common tumour disease in men and the eighth most common tumour disease in women. For more than 30 years the number of affected persons has been steadily declining. However, gastric tumour represents the most common cause of cancer-related deaths.

#### Age

The average age of disease onset stands at 69 years for men and at 72 years for women. Gastric cancer rarely affects children and young adults.

### Diagnostic options

On suspicion of gastric tumour the following diagnostic procedures are employed:

- Physical examination
- Occult blood test (haemoccult test)
- Gastroscopy (endoscopy of the stomach)

If the suspicion of gastric cancer is confirmed, additional examinations will be performed to determine if the tumor has spread (metastases):

- Ultrasound exam (sonography/endosonography)
- Computer tomography (CT) and magnetic resonance tomography (MRT)

- Laboratory tests
- X-rays of the lungs
- Laparoscopy

## Genetic predisposition

There is an increased risk of contracting this disease, if first kinship-family members (parents, children, brothers and sisters) suffered from gastric cancer.

### Risk factor: Nutrition

Eating habits play an important role in the development of gastric carcinoma. Highly salted food and little vegetables and fruit are proven causes for gastric cancer. The process of smoking and grilling food releases carcinogenic substances which also increase the risk of contracting gastric cancer.

### Other risk factors

- Infections (inflammation of the gastric mucosa caused by the bacteria helicobacter pylori)
- Previous illness of the stomach (gastric polyps, gastric ulcer).
- Smoking and alcohol

#### Ethnic origin

While comparatively many inhabitants of Japan, China, Chile, Finland, Columbia and Venezuela contract gastric cancer, those descendants of Japanese citizens who emigrated to the US, are not at an increased risk of contracting the disease any longer. We may conclude that it is mainly the type of diet we eat and to a much lesser extent genetics, which is responsible for the high occurrence of gastric cancer.

## Healthy lifestyle

A healthy diet rich in fruit and vegetables and onions is said to have a protective effect. Also, try to reduce the consumption of smoked and grilled foods. Ideally, you should avoid alcohol and tobacco consumption altogether. Consult a doctor should you suffer from gastritis and always follow treatment.

### Sources

 Gastric cancer Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_

magenkrebs\_uebersicht,134799. html

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• Gastric carcinoma Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/magen-

krebs.html

[Release: 29.03.2012]

• Gastric carcinoma – Diagnostics and therapy of adenocarcinomas of the stomach and oesophageal transit. Guidelines programme Oncology of the AWMF, German Cancer Society and German Cancer Aid. Short version.

[Release: 02.2012]

Program no. / Name	Time
08.00 Harmful substances (pollutants) complete	5 min.
31.13 ATP production stomach	5 min.
20.69 Helicobacter pylori	5 min.
34.00 Immune system physiology complete	5 min.
46.30 Stomach complete	5 min.
79.32 C-32	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.30 79.33: C-33 Oral cavity cancer

### Definition

Most cancers of the oral cavity form from the squamous epithelial cells, which is why physicians refer to this cancer as squamous cell carcinoma. They originate from the mucous membrane of the throat. Medical professionals classify these cancers as head-neck tumours.

### Prevalence (frequency)

Carcinoma of the oral cavity is the fifth most common cancer disease worldwide. The disease affects men three times as often as women. About 8,000 men and 3,000 women are diagnosed with carcinomas of the mouth cavity and the throat in Germany each year.

### Age

In the past oral cavity carcinoma affected predominantly persons from the fifth decade of life, but now it affects more and more younger people. Now many people in their fourth decade of life are diagnosed with cancer of the oral cavity.

### **Diagnostic options**

After review of the medical history of the patient. the doctor will examine the mouth and throat area of the patient with the aid of a magnifying laryngoscope. To confirm a diagnose a tissue sample will be taken and analysed under the microscope (so-called biopsy).

To determine if the tumor has spread to the lymph nodes (lymph node metastasis) the following imaging techniques will be employed:

- Ultrasound exam (sonography)
- Computer tomography (CT) and magnetic resonance tomography (MRT)

### Genetic predisposition

Genetic factors that promote carcinoma of the mouth cavity are not known.

### Risk factor: tobacco consumption

The most significant cause of carcinoma of the mouth cavity is tobacco consumption. Around 90 percent of all patients are long term smokers. The smoke of one cigarette contains more than 70 potentially carcinogenic noxious agents.

### Other risk factors

- Alcohol
- Lack of oral hygiene
- Exposure to harmful substances at work (varnishes, paints, solvents)
- Human papilloma virus (HPV)

### Ethnic origin

There are significant differences regarding the disease in various geographic regions and cultures. In some areas of Southeast Asia carcinomas of the mouth cavity account for 40 percent of all malignant cancers. This high incidence rate can be explained by the high consumption of potential carcinogenic substances like the chewing of betelnuts or used cigarette filters.

#### Healthy lifestyle

A healthy diet with a lot of fresh fruit and vegetables, avoidance of tobacco- and alcohol consumption and maintaining good oral hygiene is taking the right steps towards prevention of mouth cavity carcinoma.

### Sources

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 Kruchten A. The squamous cell carcinoma of the mouth cavity. Dissertation University hospital Giessen. 2011.

Page 14-16.

 Carcinoma of the mouth cavity - Diagnostics and therapy of the mouth cavity carcinoma. Version 2.0 Guidelines programme Oncology of the AWMF, German Cancer Society and German Cancer Aid. Short version.

[Release: 11.2012]

 Cancer of the oral cavity German Association for ENT. In: Witte, Lexikon der Krankheiten und Untersuchungen (Lexicon of diseases and examinations).

Georg Thieme Verlag KG. 2006. Page 681.

Program no. / Name	Time
08.00 Harmful substances (pollutants) complete	5 min.
31.13 ATP production stomach	5 min.
20.69 Helicobacter pylori	5 min.
34.00 Immune system physiology complete	5 min.
46.30 Stomach complete	5 min.
79.32 C-32	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.31 79.34: C-34 Labial angioma

### Definition

The labial angioma belongs to the group of the haemangioma and is an acquired strawberry mark on the lips. This is a benign tumor which forms due to overgrowth and regeneration of blood vessels. It develops in the cell layer that covers all blood vessels up to the smallest branching (the so-called capillaries) with fine lining. They usually show on the rim of the lower lip as bluish or purple papules with a diameter of up to one centimetre.

### Prevalence (frequency)

Men and women are affected to the same extent. There is no further information on frequency distribution of labial angioma available.

### Age

The risk to contract labial angioma normally only exists from the 40th year of life onwards. Most patients are in the 5th decade of life when contracting the disease.

# **Diagnostic options**

To reach a diagnosis it is usually sufficient if a doctor evaluates the affected area.

### Genetic predisposition

Genetic factors that promote labial angioma are not known.

### Risk factor: solar radiation

Solar radiation is a possible risk factor.

### Ethnic origin

There is no known link between ethnicity and the labial angioma.

### Prevention

So far targeted measures to prevent labial angioma are not known as the causes have not yet been established. Should you suspect that you have

a strawberry mark on your lip, try to avoid direct sunlight and consult a dermatologist immediately.

### Sources

 Altmeyer P, Lippe, Erkrankungen der Lippe (Chapter 4.7: Lips, lip diseases). Dermatologische Differentialdiagnose – Der Weg zur klinischen Diagnose (Dermatological differential diagnosis – The path towards clinical diagnosis).
 Springer Medicine Verlag. 2007.

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 Primary Care Dermatology Society Venous lake URL: http://www.pcds.org.uk/clinical-guidance/ venous-lake

[Release: 20.01.2013]

 Hemangioma (strawberry mark). Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/

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• Labial angioma Médico Partner

URL: http://www.medico-partner.de/glossar/lippenangiom.php?PHPSESSID=0c96ce6acdef476

0d082584969638ae4 [Release: 28.01.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
46.10 Oral cavity / tongue complete	5 min.
79.34 C-34	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.32 79.35: C-35 Oesophagial carcinoma

### Definition

Oesophagial carcinoma is a malignant tumor that can develop anywhere in the oesophagus. We distinguish between two types of oesophagial carcinoma, depending on the tissue where the tumor originated: squamous cell carcinoma and adenocarcinoma. Squamous cell carcinomas normally develop in the skin tissue. If, for example, the mucous membrane of the oesophagus degenerates and forms an oesophagial carcinoma, we refer to it as squamous cell carcinoma. If, on the other hand, the carcinoma develops from gland cells, we refer to it as adenocarcinoma.

### Prevalence (frequency)

Oesophagial carcinoma is rather rare tumour disease in Germany. Each year about 4.800 men and 1.380 women are diagnosed with the disease. This accounts for 1.3 percent of all new carcinomas. Thus, it is understood that oesophagial carcinoma is a rare tumor which affects particularly men. It affects men 3.5 times more frequently. Also, men tend to contract the disease a little earlier than women. In more than half the cases patients are diagnosed with squamous cell carcinoma. About up to 30 percent have adenocarcinoma.

### Age

The average age of disease onset is 66 years in men and 70 years in women. However, the disease can affect both men and women of younger ages.

### **Diagnostic options**

After reviewing and discussing the medical history of the patient, the following diagnostic procedures can be employed: After a physical examination an oesophagoscopy will be carried out. If appropriate, a tissue sample will be taken to be examined in detail (so-called biopsy).

If a real carcinoma is detected, further tests will have to be performed to determine if metastases are present in other parts of the body. These include:

- X-rays
- Computer tomography (CT)
- Ultrasound exam (sonography/endosonography)

## Genetic predisposition

Genetic factors that promote oesophagial carcinoma are not known.

#### Risk factors

- Tobacco and alcohol consumption are the most important risk factors.
- Very hot drinks and food (as well as very spicy food)
- Nitrosamines (are released when heating cured meat)
- Aflatoxines (mould infestation)
- Betelnut
- Barrett syndrome (pathological changes to the mucous membrane of the lower part of the oesophagus)
- Scars (for example, due to acid and alkali burns)
- Gastro-esophageal reflux (heartburn)
- High-fat diet
- Infections by helicobacter-pylori bacteria or papilloma virus

### Ethnic origin

Squamous cell carcinoma of the oesophagus is particularly widespread in individual regions in Asia and the Near East. Adenocarcinoma, on the other hand, is a disease which is prevalent in the Western world. Here the disease rate is growing exponentially.

#### Avoid risk factors

The best approach to preventing oesophageal carcinoma is to avoid the risk factors. Avoid excessive alcohol and tobacco as these are the biggest risk factors. Furthermore, it is recommended to avoid very fatty, spicy and very hot food. It is better to make sure that you eat a healthy and balanced diet with a lot of fruit, vegetables and whole grain products.

### Sources

 Oesophagial cancer (Carcinoma of the oesophaqus).

Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/speise-

roehrenkrebs.html [Release: 30.10.2012]

 Stahl M. Oesophagial cancer Carcinoma of the oesophagus). Online-Information of the German Cancer Society 'DKG'

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Speiseroehrenkrebs/ [Release: 05.09.2012]

 J. R. Siewert, H. J. Stein, F. Lordick Chapter 35: Oesophagial carcinoma. Praxis der Viszeralchirurgie – Onlologische Chrirurgie (Abdominal surgery – Oncological Surgery).

Springer Medizin Verlag. 2006.

Page 404.

Program no. / Name	Time
08.00 Harmful substances (pollutants) complete	5 min.
26.41 Aflatoxin	5 min.
22.18 Human papilloma virus (HPV)	5 min.
22.19 Papilloma virus	5 min.
20.69 Helicobacter pylori	5 min.
31.81 Scar tissue repair	5 min.
34.00 Immune system physiology complete	5 min.
46.20 Oesophagus	5 min.
47.10 Oesophagitis	5 min.
79.35 C-35	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.33 79.36: C-36 Rectal carcinoma

### Definition

Rectum is the final section of the large intestine which is 20 cm long and merges into the anus. Rectal carcinoma is a malignant tumor on this final section of the large intestine.

### Prevalence (frequency)

The incidence of rectal carcinoma is 30 new cases per 100,000 inhabitants per year. This corresponds to approximately 25,000 new cases per year. Men contract this disease more frequently than women.

### Age

The probability of developing the disease increases considerably from the 50th year of life onwards. The average age of disease onset stands at 70 years.

### **Diagnostic options**

The medical history together with physical examination will offer the first indications about possible ulcers in the area of the rectum. Subsequently the following tests can be considered:

- Rectal-digital palpation
- Rectosigmoidoscopy (better colonoscopy) is an endoscopic examination of the intestinal mucous membrane
- Removal of a tissue sample (biopsy) with microscopic analysis.

Should the suspicion be confirmed, further tests will be carried out to determine if the tumour has formed metastases in other parts of the body.

- Ultrasound exam (sonography/endosonography)
- Computer tomography (CT) and magnetic resonance tomography (MRT)

## Genetic predisposition

The following hereditary diseases increase the risk of contracting rectal carcinoma:

- Peutz-Jeghers syndrome
- Familial adenomatous polyposis (FAP)
- Gardner syndrome
- Hereditary nonpolyposis colorectal cancer (HNPCC)

Furthermore, the risk is higher, if a relative in the first degree contracted rectal cancer.

### Risk factor: Nutrition

Diet plays an important role in the prevention of this disease. A high calorific, fatty and meat-based diet promote carcinoma in the rectum. Harmful substances in the food such as preservatives, colouring agents and chemical, carcinogenic substances also increases the risk.

#### Other risk factors

- Crohn's disease or ulcerating colitis (a chronic inflammatory intestinal disease)
- Overweight and lack of exercise
- Smoking and alcohol

### Ethnic origin

The incidence of rectal cancer is much higher in Western industrialized countries than in developing countries. The reason for this is the low-fibre and fatty diet in the Western industrialised countries.

### Healthy lifestyle

A healthy diet with lots of fibre, minerals and vitamins, regular physical exercise as well as avoidance of excessive alcohol- and nicotine consumption are important steps towards the prevention of rectal carcinoma.

#### Sources

Seufferlein T. Rectal carcinoma. Ulm University Clinic - Comprehensive Cancer Center Ulm (CCCU).

URL: http://www.uniklinik-ulm.de/struktur/zentren/cccu/home/fuer-patienten-und-angehoerige/krebsbehandlung/krebs-spezifisch/rektum-karzinom.html#c51780

[Release: 28.01.2013]

• Intestinal cancer, colon cancer (colon carcinoma, rectal carcinoma). Health portal Onmeda.

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[Release: 28.03.2012]

Intestinal cancer, colon carcinoma. Online-Information of the German Cancer Society 'DKG'
 URL: http://www.krebsgesellschaft.de/pat\_ka\_

darmkrebs\_definition,107907.html

[Release: 08.03.2012]

Program no. / Name	Time
08.00 Harmful substances (pollutants) complete	5 min.
31.12 ATP production colon	5 min.
46.60 Straight bowel	5 min.
47.50 Crohn's disease	5 min.
47.60 Ulcerative colitis	5 min.
79.36 C-36	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.34 79.37: C-37 Salivary gland tumour

### Definition

A tumor of the salivary gland is a benign or malignant tumor and usually develops in the big salivary glands. It can develop from various different types of cells of the salivary glands. It affects the parotid salivary gland most frequently. On rare occasions these tumours can also form in the submandibular gland and the sublingual gland (glandula submandibularis and glandula sublingualis). 70 percent of all tumours are benign.

### Prevalence (frequency)

Salivary gland tumour accounts for approximately five percent of all tumour formations in the head-neck-region. In general, it affects women slightly more frequently than men. 95 percent of the tumours are of epithelial origin. Approximately 68 percent are pleomorphic adenomas, 22 percent are Warthin's tumors and the remainder belongs to a group of histologically very varied tumours.

### Age

This tumor occurs predominantly in the 4th and 5th decade of life.

### **Diagnostic options**

Firstly, the medical history is reviewed, followed by a clinical examination of the patient. To this end, the doctor palpated the tumor and tests its mobility. Next, an ultrasound will be performed as tumours of the parotid gland and submandibular gland are usually very clearly visible on ultrasound scans. In order to narrow down the type of node, it is recommended to carry out an aspiration cytology. If a tumour was found, the following additional diagnostic procedures can be carried out: computer tomography (CT), magnetic resonance tomography (MRT) or biopsy.

## Genetic predisposition

It is possible that genetic predisposition plays a role in the development of the tumor. For example, some specific lymphomas (so-called B-cell lymphomas) typically have genetic mutations.

### Risk factor: Smoking and alcohol

The causes for the development of parotid salivary gland tumours are mostly unknown. However, it is known that tobacco and alcohol consumption play an important role in the development of tumours in the head-neck-region. The risk of developing a tumor in the head-neck-region increases manifold for smokers. Alcohol intensifies the negative effects of smoking even further. A combination of the two is therefore particularly dangerous.

#### Other risk factors

- Virus infections (human papilloma virus)
- Harmful substances at work (asbestos, paints and coatings containing chromium and nickel, polycyclic aromatic hydrocarbons)
- UV- and radioactive radiation
- Bad oral hygiene
- Extremely weakened immune system (e.g. after an organ transplantation)

### Ethnic origin

There is no known link between ethnic origin and tumour of the salivary gland.

### Healthy lifestyle

A healthy lifestyle consisting of a healthy and balanced diet with a lot of fruit and vegetables, regular physical exercise and avoidance of excessive alcohol and nicotine consumption reduce the tumour risk significantly.

#### Sources

 Bankfalvi A. Speicheldrüsentumoren (Salivary gland tumour). IMC - Das offene, universitäre Medizin-Lexikon (The open university lexicon of medicine).

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[Release: 29.01.2013]

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URL: http://www.operation.de/speicheldruesentumor/

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 URL: http://www.krebsgesellschaft.de/pat\_ka\_kopf\_hals\_tumor\_definition,108199.html
 [Release: 05.06.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.00 Harmful substances (pollutants) complete	5 min.
22.18 Human papilloma virus (HPV)	5 min.
22.19 Papilloma virus	5 min.
34.00 Immune system physiology complete	5 min.
46.13 Salivary glands	5 min.
46.14 Parotid gland	5 min.
46.15 Submandibular gland	5 min.
46.16 Sublingual gland	5 min.
85.24 Chromium (Cr)	5 min.
85.28 Nickel (Ni)	5 min.
79.37 C-37	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.35 79.38: C-38 Tongue cancer

### Definition

Carcinoma of the tongue is a malignant tumor of the tongue. It belongs to the group of head-neck tumours and normally appears in the rear third of the tongue. Tumours of the tongue often spread to adjacent structures and organs, such as the larynx. Particularly tumours in the rear zone of the tongue can therefore cause serious tissue damage. They may exhibit different shapes and forms. There are shallow tumours that lie on the mucous membrane and there are cauliflower-shaped structures which protrude over the mucous membrane. Cancer of the tongue usually spreads in the early stages via the lymph ducts to the cervical lymph nodes and the lymph nodes of the lower jaw. However, in other organs (e. g. in the lung, the liver or in the skeleton) metastases are formed only very rarely.

### Prevalence (frequency)

Cancer of the tongue accounts for a quarter of all carcinoma diseases of the mouth. Men contract this disease much more frequently than women.

### Age

The onset of the disease mostly occurs between the 60th and the 70th year of life.

### Diagnostic options

Firstly, a complete examination of the mouth and throat area is carried out. With the aid of a mirror the doctor can explore the rear part of the tongue and the tongue base. The diagnosis will be confirmed by taking a tissue sample and examining it under the microscope (so-called biopsy). Imaging techniques such as ultrasound, computer tomography (CT), magnetic resonance tomography or a positron emissions tomography (PET) can provide further indications about possible spreading of the tumour.

## Genetic predisposition

No links are known between genetic factors and the development of cancer of the tongue.

### Risk factor: Smoking and alcohol

The exact causes for cancer of the tongue are not yet known. There are substantial grounds for believing that tobacco and alcohol consumption increase the risk. Tobacco and alcohol are even more harmful if they are consumed together, and combined consumption of alcohol and tobacco increase the risk to develop cancer significantly.

### Risk factor: bad oral hygiene

Chronic inflammations of the mouth and oral mucosa, for example, due to ill-fitting dentures or lack of oral hygiene, can promote cancer of the tongue.

### Ethnic origin

There is no known link between ethnic origin and tumour of the tongue.

### Healthy diet and good oral hygiene.

A consciously healthy diet with a lot of fruit and vegetables, moderate consumption of alcohol and nicotine as well as good oral hygiene is the best way to maintain a healthy mouth- and throat region.

### Sources

 Cancer of the tongue. Health portal Onmeda.
 URL: http://www.onmeda.de/krankheiten/ zungenkrebs.html

[Release: 20.09.2012]

 Mödder, Cohnen, Andersen, Engelbrecht, Fritz Chapter 7: Oral cavity, carcinoma of the mouth base. Pareto-Reihe Radiologie Head/Neck (Pareto-Raiodology series, head/neck).
 Georg Thieme Verlag KG. 2006.

Pages 168-173.

Program no. / Name	Time
34.00 Immune system physiology complete	5 min.
46.12 Tongue	5 min.
79.38 C-38	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.36 79.40: C-40 Gall bladder adenoma

### Definition

The gall bladder lies under the liver and looks like a bag-like protrusion of the bile ducts. The gall reaches the duodenum from the gall bladder via the bile ducts (ductus choledochus). The gall aids with the digestion of fats in the intestines. Gall bladder adenoma is a rare, benign tumor in the gall bladder, which originates from the gland cells of the mucous membrane of the gall bladder. Unlike the gall bladder carcinoma, the adenoma does not spread to other parts of the body.

### Prevalence (frequency)

Gall bladder adenomas are rare and affect mainly women. Detailed illness rates regarding adenomas are not available, however, in summary it can be said that approximately 2,300 men and 2,900 women contract cancer of the gall bladder or cancer of the bile duct each year, in which figure the adenoma are included.

### Age

The illness rate increases from the 60th year of life.

#### Diagnostic options

Firstly, the doctor will carry out a physical examination. In the process the doctor palpates the gall bladder under the liver to search for any existing tumours. A blood analysis can be revealing as altered parameters will indicate that a retention of bile took place, which in turn hints to disease of the gall bladder. Further tests would include imaging techniques to show the exact location of the tumor as well as possible formation of metastases. These include:

- Ultrasound exam (sonography)
- Computer tomography (CT)
- Magnetic resonance tomography (MRT)
- Extraction of tissue sample (biopsy) for histological exam under the microscope.

### Genetic predisposition

Any genetic factors that might contribute to the formation of adenoma in the gall bladder are not known.

# Risk factor: gallstones

The presence of gallstones increase the risk of producing a degeneration of the gall bladder: approximately 80 percent of the patients with gall bladder carcinoma also exhibited gallstones. Conversely, one percent of patients with gallstones also contracted cancer of the gall bladder. A connection between the two illnesses is therefore evident.

## Risk factor: porcelain gallbladder

The so-called porcelain gallbladder is regarded to be a precancerous condition. This means that the prolonged inflammations of the gall bladder will eventually lead to a calcification of the gall bladder wall.

### Other risk factors

Chronic salmonella infections (chronic salmonella carrier) and benign polyps of the gall bladder measuring more than one centimetre can degenerate into gall bladder adenoma or carcinoma.

### Ethnic origin

There is no known link between ethnic origin and gall bladder adenoma.

### Healthy lifestyle

So far no methods are known with which we can prevent a gall bladder adenoma. However, it has been established how to prevent carcinomas (adenomas included) in general. A healthy and balanced diet with a lot of fruit, vegetables and full grain products as well as regular physical exercise can reduce the general risk of contracting cancer by approximately 60 percent.

### Sources

• Gall bladder cancer, bile duct cancer Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/gallen-

blasenkrebs.html [Release: 20.09.2012]

 Greten T. Gall bladder carcinoma, gall bladder cancer. Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_

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[11.01.2013]

Program no. / Name	Time
21.18 Salmonellae	5 min.
21.19 Salmonella enteritidis	5 min.
21.20 Salmonella paratyphi	5 min.
21.21 Salmonella typhi	5 min.
31.27 ATP production gall bladder	5 min.
31.28 ATP production biliary tract	5 min.
48.20 Gallbladder complete	5 min.
49.37 Inflammation of the gall bladder / tract	5 min.
49.38 Gallstones	5 min.
79.40 C-40	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.37 79.41: C-41 Gall bladder carcinoma

### Definition

The gall bladder lies under the liver and looks like a bag-like protrusion of the bile ducts. The gall reaches the duodenum from the gall bladder via the bile ducts (ductus choledochus). The gall aids with the digestion of fats in the intestines. Gall bladder carcinoma is a rare malignant tumor, which originates in the mucous membrane of the gall bladder. The tumor tends to grow into adjacent organs, such as the duodenum and the pancreas. Metastases in the lymph nodes can also develop in the surrounding environment. Via the bloodstream the cancer can spread and form metastases in remote organs.

### Prevalence (frequency)

Gall bladder carcinomas are rare and affect mainly women. Approximately 2,300 men and 2,900 women contract carcinoma of the gall bladder or carcinoma of the bile ducts.

#### Age

The illness rate increases from the 60th year of life.

### **Diagnostic options**

A physical examination is the first step towards reaching a diagnosis. In the process the doctor palpates the gall bladder under the liver to search for any existing tumours. A blood analysis can be revealing as altered parameters will indicate that a retention of bile took place.

Further tests would include imaging techniques to show the exact location of the tumor as well as possible formation of metastases. These include:

- Ultrasound exam (sonography)
- Computer tomography (CT)
- Magnetic resonance tomography (MRT)
- Extraction of tissue sample (biopsy) for histological exam under the microscope.

# Genetic predisposition

Any genetic factors that might contribute to the

formation of cancer in the gall bladder are not known.

### Risk factor: gallstones

Approximately 80 percent of the patients with gall bladder carcinoma also exhibited gallstones. Conversely, one percent of patients with gallstones also contracted cancer of the gall bladder. A connection between the two illnesses is therefore evident.

### Risk factor: porcelain gallbladder

The so-called porcelain gallbladder is regarded to be a precancerous condition. This means that the prolonged inflammations of the gall bladder will eventually lead to a calcification of the gall bladder wall.

#### Other risk factors

Furthermore, chronic salmonella infections (chronic salmonella carrier) and benign polyps of the gall bladder measuring more than one centimetre can degenerate into gall bladder carcinoma.

#### Ethnic origin

There is no known link between ethnic origin and tumour of the gall bladder.

### Healthy lifestyle

So far no methods are known with which we can prevent gall bladder carcinoma. However, it is established knowledge that a healthy and balanced diet with a lot of fruit, vegetables and full grain products as well as regular physical exercise can reduce the general risk of contracting cancer by approximately 60 percent.

### Sources

 Gall bladder cancer, bile duct cancer Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/gallen-blasenkrebs.html

[Release: 20.09.2012]

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  - Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_gallenblasenkrebs\_definition,108006.html

[Release: 12.03.2012]

• Schäfer M. Gall bladder cancer, bile duct cancer. NetDoktor.de.

URL: http://www.netdoktor.de/Krankheiten/

Gallengangskrebs/ [Release: 06.08.2012]

Program no. / Name	Time
21.18 Salmonellae	5 min.
21.19 Salmonella enteritidis	5 min.
21.20 Salmonella paratyphi	5 min.
21.21 Salmonella typhi	5 min.
31.27 ATP production gall bladder	5 min.
31.28 ATP production biliary tract	5 min.
48.20 Gallbladder complete	5 min.
49.37 Inflammation of the gall bladder / tract	5 min.
49.38 Gallstones	5 min.
79.41 C-41	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.38 79.42: C-42 Bile duct carcinoma

### Definition

The bile duct system is made up of the intrahepatic bile ducts, which are inside of the liver, and the extrahepatic bile ducts which are located outside of the liver. The gall reaches the duodenum from the gall bladder via the bile ducts (ductus choledochus). The gall aids with the digestion of fats in the intestines. Bile duct carcinoma develops from the cells of the bile ducts. Synonyms for the disease used in medical literature are "Cholangiocellular carcinoma" and "Cholangiocarcinoma". The carcinoma tends to grow into adjacent organs, such as the duodenum and the pancreas. Lymph node metastases can form in the immediate environment and on the abdominal artery (aorta). Furthermore, there is a risk of metastases in remote organs via the bloodstream.

### Prevalence (frequency)

Cancer of the bile duct is very rare. Women are more frequently affected by cancer of the bile duct than men. Approximately 2,300 men and 2,900 women contract carcinoma of the gall bladder or carcinoma of the bile ducts. That accounts for just one percent of all carcinoma diseases.

#### Age

The disease affects mainly people who are older than 60 years.

#### Diagnostic options

After reviewing the medical history the doctor examines the patient by palpating his or her abdominal wall in the area of the liver. A blood test will detect altered parameters that are due to bile congestion.

Further tests would include imaging techniques to show the exact location of the tumor as well as possible formation of metastases. These include:

- Ultrasound exam (sonography)
- Computer tomography (CT)

- Magnetic resonance tomography (MRT)
- Extraction of tissue sample (biopsy) for histological exam under the microscope.

## Genetic predisposition

Any genetic factors that might contribute to the formation of cancer of the bile ducts are not known.

### Risk factor: gallstones

26 to 50 percent of the patients suffering from bile duct carcinoma also exhibited gallstones.

### Other risk factors

- Ulcerative colitis (chronic inflammation of the intestine)
- Caroli disease (bag-like dilation of the intrahepatic bile ducts; cysts in the ductus choledochus).
- A chronic inflammation of the bile ducts (primary sclerosing cholangitis, PSC)
- Infestation by parasites of the bile ducts (e. g. liver fluke, trematode)

### Ethnic origin

There is no known link between ethnic origin and bile duct carcinoma.

### Healthy lifestyle

So far no methods are known with which we can prevent carcinoma of the bile ducts. However, it is established knowledge that a healthy and balanced diet with a lot of fruit, vegetables and full grain products as well as regular physical exercise can reduce the general risk of contracting cancer by approximately 60 percent.

### Sources

 Gall bladder cancer, bile duct cancer Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/gallen-blasenkrebs.html

[Release: 20.09.2012]

 Greten T. Gall bladder carcinoma, gall bladder cancer. Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_gallenblasenkrebs\_definition,108006.html

[Release: 12.03.2012]

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URL: http://www.netdoktor.de/Krankheiten/

Gallengangskrebs/ [Release: 06.08.2012]

Program no. / Name	Time
24.50 Trematodes / leeches complete	5 min.
31.27 ATP production gall bladder	5 min.
31.28 ATP production biliary tract	5 min.
47.60 Ulcerative colitis	5 min.
48.20 Gallbladder complete	5 min.
48.22 Bile ducts	5 min.
49.37 Inflammation of the gall bladder / tract	5 min.
49.38 Gallstones	5 min.
79.42 C-42	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.39 79.43: C-43 Liver cell adenoma

#### Definition

Liver cell adenoma is a benign tumor of the liver. The benignancy of the tumour means that the tumor will not form metastases in nearby organs via the bloodstream. Occasionally the vessels of the liver cell adenoma burst spontaneously. In a worst case scenario this can lead to life threatening bleeding. It is also known that a liver cell adenoma can develop into a malignant liver cell carcinoma in certain circumstances.

### Prevalence (frequency)

Liver cell adenoma affects mainly women with a frequency of three to four cases per 100,000 inhabitants. About a third of patients exhibit multiple adenoma with two to three nodes. Occasionally up to ten nodes can be present.

#### Age

Liver cell adenoma affects mainly women of childbearing age between 15 and 45 years.

#### Diagnostic options

After reviewing the patient's medical history and examining the patient by palpation, the doctor performs an ultra sound scan. To make sure that the tumour is not malignant, the doctor performs both an ultrasound and a computer tomography with administration of a contrast medium for the depiction of the blood vessels. Eventually the doctor might remove a tissue sample with a fine needle from the suspicious area to examine it under the microscope.

### Genetic predisposition

Genetic factors that promote liver cell adenoma are not known.

#### Risk factor: medication

Taking medication containing sex hormones, such as oral contraception, increases the risk for women to contract liver cell adenoma five-fold. After nine years of intake the risk increases 25-fold. Also male

sex hormones can favour the development of liver cell adenoma. Excessive intake of male hormones to build the muscle structure carries a high risk (anabolic agents).

#### Ethnic origin

There is no knowledge of conspicuous ethnic factors related to liver cell adenoma.

### A healthy lifestyle

No concrete measures to prevent liver cell adenomas are known. However, be careful with the intake of hormone-based drugs. Remember that leading a healthy life is of great importance if you want to prevent cancer. Eating a healthy and well-balanced diet that includes a lot of fruit, vegetables and whole grain products and taking regular exercise form part of a healthy lifestyle.

#### Sources

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URL: http://www.onmeda.de/krankheiten/leber-krebs.html

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• Benign liver tumours. Surgical Klinik St. Josef-Hospital Bochum.

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gutartigelebertumore.html [Release: 30.01.2013]

Program no. / Name	Time
31.29 ATP production liver	5 min.
48.10 Liver complete	5 min.
64.81 Oestrogens	5 min.
64.82 Progesterone / gestagens	5 min.
64.86 Testosterone	5 min.
79.43 C-43	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.40 79.44: C-44 Liver cell carcinoma, primary

#### Definition

Liver cell carcinoma (Hepatocellular carcinoma, HCC) is a malignant tumour disease of the cells in the liver. Since the origin of the disease is inside of the liver, it is also referred to as primary. A secondary liver cell carcinoma, in contrast, refers to metastases of malignant tumours of other organs of the body.

#### Prevalence (frequency)

So far, liver cell carcinoma is considered to be a rare disease in Germany. However, nowadays it affects nine to ten inhabitants out of 100,000. Thus approximately 7.500 people are diagnosed with this type of carcinoma in Germany each year. With a rate of 500,000 to 1000,000 new diseases globally per year, this disease is considered to be the fifth most common malignant tumour. It is also the third most common cause of death. Men contract this disease two to three times more frequently than women.

### Age

The average age of disease onset stands at about 70 years for men and at approximately 73 years for women.

#### Diagnostic options

On suspicion of liver cell carcinoma, the doctor will employ the following diagnostic procedures to confirm that a tumor is indeed present:

- Medical history and physical examination of the patient
- Ultrasound exam (sonography) of the liver
- Blood test

If the suspicion is confirmed, further examination will follow to determine the type of tumor and to establish if the tumor has spread:

- Computer tomography (CT) and magnetic resonance tomography (MRT)
- Biopsy and histological examination
- Gastroscopy and colonoscopy

### Genetic predisposition

Genetic factors that promote liver cell adenoma are not known.

## Risk factor: hepatitis viruses

Lasting cell damage due to presence of hepatitis viruses, particularly an infection with the hepatitis B-virus, can lead to the formation of a liver cell carcinoma. The longer the infection persists, the higher the risk to contract the disease. A hepatitis-C infection also represents a risk.

### Risk factor: Liver cirrhosis

Pre-existing liver cirrhosis represents an additional risk factor. This can develop due to a hepatitis infection or excessive alcohol abuse.

#### Other risk factors

- Intoxication with aflatoxin (produced by the Aspergillus flavus fungus which grows in moist conditions on grain, peanuts and other foods).
- Haemochromatosis
- Intake of specific sexual hormones (e. g. anabolic agents)
- Lack of the endogenous enzyme alpha-1-antitrypsin
- Exposure to chemical substances such as solvents and pesticides

### Ethnic origin

Liver cell carcinoma is the most common malignant tumor in some countries of Southeast Asia and Africa. The disease frequency amounts to 35 to 150 cases per 100,000 inhabitants. These high disease rates are mainly related to the equally high rates of hepatitis infections in the respective countries.

# Vaccination and low alcohol consumption

The risk for a frequent cause of a disease of the liver can be reduced by carrying out a vaccination against the hepatitis B virus. If you belong to one of the risk groups, it is recommended to consult your doctor at least every six months. Furthermore, it is important to avoid excessive alcohol consumption.

#### Sources

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leberkrebs\_definition,108028.html

[Release: 08.08.2012]

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URL: http://www.apotheken-umschau.de/Leber-

krebs

[Release: 07.11.2012]

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URL: http://www.onmeda.de/krankheiten/leber-krebs.html

[Release: 29.05.2012]

Program no. / Name	Time
08.50 Pesticides complete	5 min.
22.14 Hepatitis B virus	5 min.
22.75 Hepatitis C virus	5 min.
26.41 Aflatoxin	5 min.
31.29 ATP production liver	5 min.
48.10 Liver complete	5 min.
49.15 Degeneration of the liver	5 min.
64.81 Oestrogens	5 min.
64.82 Progesterone / gestagens	5 min.
64.86 Testosterone	5 min.
79.44 C-44	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.41 79.45: C-45 Pancreas adenoma

#### Definition

Pancreas adenoma is a benign tumor of the pancreas. Generally speaking, the tumor can appear in any part of the organ. In 95 percent of the cases it affects the endocrine part of the glands which produces digestive enzymes or discharges them. Only on very rare occasions the tumor develops from hormone producing cells of the pancreas. This tumour is often diagnosed purely by chance when performing imaging techniques.

# Prevalence (frequency)

Only indirect data about the frequency of the pancreas adenoma are available. Since 80 to 90 percent of all pancreas carcinomas are in fact pancreas adenomas, which means that they are benign tumours of the pancreas, it can be said that 6,300 men and 6,500 women are affected by a pancreas adenoma each year. This means that the disease is quite rare.

### Age

The average age of disease onset stands at 69 years for men and at 76 years for women.

### **Diagnostic options**

On suspicion of pancreas adenoma the doctor will induce the necessary steps for the exam. There is a need to clarify if a tumor indeed exists, where it is located and if it has spread. The following exams are carried out:

- Physical examination
- Blood analysis (laboratory tests)
- Ultrasound exam (sonography)

If a tumor is indeed detected, the following steps will be induced:

- X-rays of the lungs
- Endoscopy of stomach and duodenum
- Computer tomography (CT) or magnetic resonance tomography (MRT)
- A special x-ray of the bile ducts and gall bladder and pancreas-glandular ducts (ERCP)

- Endoscopic ultrasound exam (sonography)
- Tissue puncture (biopsy)

#### Genetic predisposition

Genetic factors play an important role in the development of adenoma. If a relative in the first degree contracted pancreas adenoma, the risk to contract the disease is twice as high. If the relative was under 60 when s/he contracted the disease, the risk will increase three-fold.

### Risk factor: Alcohol and smoking

The risk increases about 3.5-fold for people who smoke. For people who also consume alcohol the risk seems to increase even more. It is estimated that approximately a quarter of all carcinomas of the pancreas are related to smoking.

#### Other risk factors

- The diet: nutrition that is rich in meat and fat
- Gastric ulcer due to a stomach operation
- Chronic inflammation of the pancreas

#### Ethnic origin

There are no known links between ethnic origin and pancreas adenoma.

#### Avoid risk factors

Since the exact causes are unknown, we can only try to prevent by reducing the risks. The best way of maintaining your health is to avoid alcohol and tobacco, make sure that you eat a healthy and balanced diet with a lot of fruit and vegetables and to take regular physical exercise.

#### Sources

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URL: http://www.onmeda.de/krankheiten/bauch-speicheldruesenkrebs.html

[Release: 23.11.2012]

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  - URL: http://www.krebsgesellschaft.de/pat\_ka\_bauchspeicheldruesenkrebs\_definition,107885.html

[Release: 26.10.2012]

- Kiehne K, Fölsch UR, Pankreastumore (Tumours of the Pancreas). Chapter 5.6: Diseases of the pancreas (exocrine pancreas).
  - Die Innerer Medizin Referenzwerk für den Facharzt (Internal Medicine Reference work for the medical specialist).

Schattauer. 2007 Page 590.

Program no. / Name	Time
31.14 ATP production pancreas	5 min.
47.40 Gastric ulcer	5 min.
48.30 Pancreas complete	5 min.
79.45 C-45	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.42 79.46: C-46 Pancreas carcinoma

#### Definition

Pancreas carcinoma is a malignant tumor of the pancreas. The tumour mostly develops in the head of the pancreas, near the bile ducts. In 95 percent of the cases it affects the endocrine part of the glands which produces digestive enzymes or discharges them (so-called exocrine pancreas carcinoma). Only on very rare occasions the tumour develops from hormone producing cells of the pancreas (so-called endocrine pancreas carcinoma). This tumour is often diagnosed purely by chance when performing imaging techniques.

#### Prevalence (frequency)

According to estimates of the Robert Koch Institute, approximately 15,400 people contracted carcinoma of the pancreas in Germany in the year 2012. The disease accounts for about three percent of all carcinomas in Germany. This type of cancer is the cause of death for 6.3 percent of all cases in men and for 7.5 percent of women. Cancer of the pancreas represents the fourth most common cause of death by cancer.

#### Aae

The average age of disease onset stands at 69 years for men and at 76 years for women.

### **Diagnostic options**

On suspicion of pancreas adenoma the doctor will induce the necessary steps for the exam. There is a need to clarify if a tumor indeed exists, where it is located and if it has spread. The following exams are carried out:

- Physical examination
- Blood analysis (laboratory tests)
- Ultrasound exam (sonography)

If a tumor is indeed detected, the following steps will be induced:

- X-rays of the lungs
- Endoscopy of stomach and duodenum

- Computer tomography (CT) or magnetic resonance tomography (MRT)
- A special x-ray of the bile ducts and gall bladder and pancreas-glandular ducts (ERCP)
- Endoscopic ultrasound exam (sonography)
- Tissue puncture (biopsy)

### Genetic predisposition

Genetic factors play an important role in the development of adenoma. The proportion of genetically caused tumour diseases is between five to ten percent. If a relative in the first degree contracted pancreas adenoma, the risk to contract the disease is twice as high. If the relative was under 60 when s/he contracted the disease, the risk will increase three-fold.

#### Risk factor: Alcohol and smoking

Excessive alcohol consumption increases the risk to contract pancreas carcinoma 2.5-fold. High tobacco consumption increases the risk by a factor of 3.5. A combination of the two increases the risk by 3,5. In combination the risk increases once again manifold. It is estimated that approximately a quarter of all carcinomas of the pancreas are related to smoking.

#### Other risk factors

- The diet: nutrition that is rich in meat and fat
- Gastric ulcer due to a stomach operation
- Chronic inflammation of the pancreas

### Ethnic origin

There is no knowledge of conspicuous ethnic factors related to pancreas carcinoma.

#### Avoid risk factors

Since the exact causes are unknown, we can only try to prevent by reducing the risks. The best way to prevent different types of cancer is to avoid alcohol and tobacco, make sure that you eat a healthy and balanced diet with a lot of fruit and vegetables and to take regular physical exercise.

#### Sources

• Pancreatic cancer (pancreas carcinoma) health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/bauch-

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Schäfer M. Pancreatic cancer (pancreas carcinoma) NetDoktor.de

URL: http://www.netdoktor.de/Krankheiten/

Bauchspeicheldruesenkrebs/

[Release: 06.08.2012]

Program no. / Name	Time
31.14 ATP production pancreas	5 min.
47.40 Gastric ulcer	5 min.
48.30 Pancreas complete	5 min.
79.46 C-46	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.43 79.48: C-48 Chondrosarcoma

#### Definition

Chondrosarcoma is a malignant tumor whose cells only form cartilage, but no bone ground substance. Unlike the benign variant of the chondroma, the chondrosarcoma is characterized by stronger growth and more invasive behaviour, abundance of cells, pleomorphism and nuclear atypia. In most cases the chondrosarcoma is situated near the hip joint. Furthermore, the thigh bones (femur), the iliac bone (os ilium) as well as the humerus may be affected.

### Prevalence (frequency)

About 700 patients are diagnosed with a malignant tumor of the bone in Germany per year. Men are slightly more affected than women. The chondrosarcoma accounts for ten to twenty percent of all malignant primary bone tumours. It affects women less often than men.

#### Age

The classic, central type of chondrosarcoma affects patients aged 30 and older. The disease mostly develops between the ages of 40 and 60 years.

### Diagnostic options

In order to reach a histological diagnosis and to plan further treatment of the tumor, it is usually required to perform the following tests: review of the patient's medical history, clinical examination and imaging techniques (x-rays, computer tomography (CT), magnetic resonance tomography (MRT), skeleton scintigraphy), and last but not least, an operative removal of a sample of the tumor tissue (biopsy).

## Genetic predisposition

Genetic predisposition and hereditary factors cannot be ruled out as a possible cause of chondrosarcoma.

#### Risk factor: Irradiation

Previous radiotherapy or chemotherapy treatments can promote the bone tumour chondrosarcoma. People who suffered from cancer and had to undergo chemo- or radiotherapy, contract chondrosarcoma more frequently than other people.

#### Ethnic origin

There is no evidence that ethnic origin plays a role in the development of the disease.

### A healthy lifestyle

As a general rule it is possible to reduce the risk of developing an estimated 60 percent of all cancer types, if we consider a few aspects concerning our personal lifestyle. Eating a healthy and well-balanced diet that includes a lot of fruit, vegetables and whole grain products and taking regular physical exercise constitute a first step towards preventing cancer! You should also avoid unnecessary radiation exposure.

#### Sources

Chondrosarcoma University Hospital Freiburg.
 URL: http://www.klinikum.uni-heidelberg.de/
 Chondrosarkom.110256.0.html

[Release: 18.01.2013]

 Chondrosarcoma LMU - Orthopaedic Clinic and Polyclinic - University Hospital Munich.

URL: http://www.tumororthopaedie.org/chondro-sarkom.html

[Release: 18.01.2013]

Bone cancer, malignant bone tumours, sarcoma.
 Online-Information of the German Cancer Society
 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_knochenkrebs\_definition,108294.html

[Release: 12.03.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
31.37 ATP production bone marrow	5 min.
31.41 ATP production bones	5 min.
52.05 Bone cells complete	5 min.
52.10 Skeleton complete	5 min.
52.60 Joint complete	5 min.
79.48 C-48	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.44 79.49: C-49 Ewing's sarcoma

#### Definition

Ewing sarcomas are solid malignant tumours which usually appear in the bones. It develops only on rare occasions in soft tissue (connective and fatty tissue, muscle tissue or tissue of peripheral nerves). This disease is named after the New Yorker cancer researcher James Ewing (1866–1943), who described this tumor for the first time in the year 1920. Most Ewing sarcomas grow and spread very quickly, so that the illness can have a fatal outcome unless it is treated effectively.

### Prevalence (frequency)

Ewing sarcoma is a rare tumor. About 3 out of 1,000,000 children under 15 (about 40 children per year) and 2,4 out of 1,000,000 adolescents between 15 and 25 years are diagnosed with Ewing sarcoma in Germany per year.

#### Age

More than half of the patients contracts the disease between the ages of 10 and 20 years. It affects adolescents between 12 and 17 years most frequently. However, this disease can also affect babies, toddlers, children of school age as well as adults at an advanced age. Boys and male adolescents are more often affected than girls (gender ratio 1.5:1).

### **Diagnostic options**

If, after reviewing the medical history and examining the patient, the doctor suspects Ewing-sarcoma, the following diagnostic imaging techniques will be employed:

- X-rays
- Computer tomography (CT) and/or magnetic resonance tomography (MRT)
- A tissue sample (biopsy) to confirm the diagnosis

Also, to check for possible metastases the following procedures can be used:

- Scintigraphy of the bones,
- Positron emissions tomography (PET)
- Bone marrow puncture.

#### Genetic predisposition

Genetic and hereditary factors seem to play no significant role in the development of the Ewing sarcoma. It is known that the tumour cells of the Ewing sarcoma exhibit certain alterations of the chromosomes. These alterations concern one gene on chromosome 22 (the so-called Ewing sarcomagene). However, these proven gene defects present in the tumor are not passed on genetically.

#### Risk factor: Irradiation

The causes of the Ewing sarcoma are widely unexplained. Radiotherapy or chemotherapy might represent a risk factor. It is a fact that people who suffered from cancer and had to undergo radiotherapy or chemotherapy as children, contract bone cancer more frequently.

#### Ethnic origin

There is no knowledge of conspicuous ethnic factors related to Ewing sarcoma.

#### A healthy lifestyle

Since the causes are widely unexplained, it is not possible to recommend any steps to take towards its prevention. As a general rule it is possible to reduce the risk of developing an estimated 60 percent of all cancer types if we consider a few aspects concerning our personal lifestyle. Eating a healthy and well-balanced diet that includes a lot of fruit, vegetables and whole grain products, and taking regular physical exercise constitute a first step towards preventing cancer! You should also avoid unnecessary radiation exposure.

#### Sources

Tallen G. Ewing-sarcoma (short information).
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[Release: 03.08.2012]

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URL: http://www.krebsgesellschaft.de/pat\_ka\_

knochenkrebs\_definition,108293.html

[Release: 12.03.2012]

• Bone cancer. Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/

knochenkrebs.html [Release: 18.12.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
31.37 ATP production bone marrow	5 min.
31.41 ATP production bones	5 min.
52.05 Bone cells complete	5 min.
52.10 Skeleton complete	5 min.
79.49 C-49	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.45 79.50: C-50 Osteochondroma

#### Definition

Osteochondroma is the most frequent bone tumour altogether. These benign tumours consist of cartilage und bone tissues. It does not form metastases and does not eat away tissue. They develop as individual tumours or as clusters of multiple tumours. Before they ossify, they are also referred to as cartilaginous exostoses. They appear mostly in the bone parts that are close to joints, in the upper arm bone, the upper and lower leg bone as well as in the bones of the fingers. Symptoms like pain only occur once the tumor has grown and presses on neighbouring organs.

#### Prevalence (frequency)

Information on disease frequency is not available as far as benign bone tumours are concerned. However, it is known that the individual osteochondroma occurs most frequently. Women are less frequently affected than men.

### Age

Osteochondroma is the most frequent bone tumour in childhood. It usually occurs at the ages between 10 and 20 years.

#### **Diagnostic options**

Usually the symptoms and the patient's complaints hint to bone tumour. It is clearly visible if there are deformations of bones und joints. The diagnosis includes pain tests, stress tests or an assessment of the blood supply.

The final diagnostic results can only be obtained by performing diagnostic procedures with imaging techniques, such as:

- X-ravs
- Computer tomography (CT) and/or magnetic resonance tomography (MRT)
- A tissue sample (biopsy) to confirm the diagnosis
- Scintigraphy of the bones,

#### Genetic predisposition

It was observed that osteochondroma is sometimes hereditary and therefore we cannot rule out that genetic factors have some influence in the development of the disease. However, more detailed information on the cause is not available.

#### Risk factor: Irradiation

One risk factor for osteochondroma is ionizing radiation. About 12 percent of patients with bone tumour had undergone radiotherapy as children. Further risk factors are not known.

#### Ethnic origin

No conspicuous characteristics are known as far as ethnic factors are concerned which could influence in the development of osteochondroma.

#### Prevention

The causes for osteochondroma are widely unexplained. If you notice pain or even visible deformations of bones, consult a doctor immediately. Additionally, a balanced and healthy diet with a lot of fruit and vegetables and regular physical exercise ensure maintaining good health.

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lung/2011-07-04-355 [Release: 01.02.2013]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
31.37 ATP production bone marrow	5 min.
31.41 ATP production bones	5 min.
52.05 Bone cells complete	5 min.
52.10 Skeleton complete	5 min.
79.50 C-50	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.46 79.51: C-51 Osteosarcoma

#### Definition

Osteosarcoma is a rare, malignant tumor of the bones. The degenerated cells grow rapidly and aggressively and cause severe bone and joint damage. Since the cancerous cells grow and spread very quickly, early treatment can make the difference between life and death. Osteosarcoma is a solid tumor and since it develops directly from the bone tissue, they are also referred to as primary bone tumours. Osteosarcomas develop mainly in the long (hollow) bones, frequently in the immediate vicinity to the knee joint.

#### Prevalence (frequency)

Osteosasarcomas are the most frequent malignant bone tumours in childhood and adolescence. According to the German Childhood Cancer Registry in Mainz, two to three children under 15 years out of 100,000 (that means, about 40 children in total) are diagnosed with osteosarcoma in Germany each year. This means that the disease accounts for approximately 2.3 percent of all carcinoma diseases in this age group. It affects boys more frequently than girls.

### Age

The frequency peak shows at 14 years for girls and 16 years for boys, during the pubertal growth period.

### Diagnostic options

If the doctor indeed finds signs of a malignant tumor in the bones, he can employ the following imaging technique procedures for examination:

- X-ravs
- Computer tomography (CT) and/or magnetic resonance tomography (MRT)
- A tissue sample (biopsy) to confirm the diagnosis

To check further if metastases are present, the following diagnostic procedures can also be employed:

- Scintigraphy of the bones and/or
- Positron emissions tomography (PET)

#### Genetic predisposition

Genetic factors seem to play a role in the development of osteosarcoma. Some hereditary diseases as bilateral retinoblastoma, Li-Fraumeni syndrome or Paget's disease (Morbus Paget), increase the risk to develop osteosarcoma.

#### Risk factor: radio- and chemotherapy

People who suffered from cancer and had to undergo radiotherapy or chemotherapy as children, contract osteosarcoma more frequently. The ionized radiation and the cytoxins (cytostatic agents) can damage the genetic material which is responsible for the formation of the bone cells and so cause the development of a bone tumour. However, for the majority of the patients with osteosarcoma (about 90 percent) no risk factors can be established.

### Ethnic origin

No conspicuous characteristics are known as far as ethnic factors are concerned which could influence in the development of osteosarcoma.

#### Prevention

Concrete steps that help prevent osteosarcoma are not known. However, you can take certain measures to reduce the risk as much as possible. If you eat a healthy diet, try to refrain from smoking and drink alcohol only moderately, you have already taken significant steps to reduce the probability of developing cancer. Furthermore, chances of recovery are better, if the cancer is detected and treated early. For this reason, you should not treat long-lasting symptoms lightly, but consult a doctor in good time.

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knochenkrebs.html [Release: 18.12.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
31.37 ATP production bone marrow	5 min.
31.41 ATP production bones	5 min.
52.05 Bone cells complete	5 min.
52.10 Skeleton complete	5 min.
79.51 C-51	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.47 79.53: C-53 Acoustic nerve neurinoma

#### Definition

A neurinoma (Neuron = nerve cell) is a benign, slowly growing tumor which mostly develops in the posterior cranial fossa. It mainly affects the eighth cranial nerve – the balance– and auditory nerve (Nervus vestibulocochlearis, formerly: N. statoacusticus). It affects primarily the balance nerve (N. vestibularis). In this case the doctors refer to it as acoustic neuroma. Unlike malignant tumours, the acoustic neuroma does not penetrate adjacent tissues nor does it form metastases.

### Prevalence (frequency)

Eight to ten percent of all brain tumours and 80 to 90 percent of tumours at the basis of the skull are acoustic neuromas. Figures from different countries reflect that about 8 to 10 out of 1 million inhabitants are diagnosed with acoustic neuroma per year. It can be assumed that many tumours remain undetected as they are small and do not usually cause any noticeable symptoms.

#### Age

It affects particularly middle-aged people. Symptoms occur specially around the 50th year of life.

#### **Diagnostic options**

Various balance- and hearing tests give the doctor first indications about the presence of an acoustic neuroma. For example, he can measure how the hearing cells react to acoustic stimuli. For reaching a precise neurinoma diagnosis and for planning the treatment the doctor employs imaging techniques, for example, magnetic resonance tomography (MRT).

#### Genetic predisposition

If there are neurinomas on both sides of the balance nerves and auditory nerves, the cause is usually a hereditary disease: the so-called neurofibromatosis type 2. The affected patients become fully deaf. However, this genetic defect is rare (globally about 1 out of 35,000 births).

#### Risk factors

The risk factors for acoustic neuroma and the causes for the formation of a tumour by the so-called Schwann cells are generally unknown.

#### Ethnic origin

There is no known link between ethnic origin and acoustic neuroma.

#### Healthy lifestyle

Since the causes of the disease are not known, there is no known prophylaxis. As with all other diseases, if you want to prevent acoustic neuroma, it is recommended to lead a healthy life in order to strengthen your immune system and to reduce the disease risk in general. The onset of the disease cannot be prevented by following this advice alone. Nutrition, exercise and a strong psyche all contribute to a healthy lifestyle. A strong immune system is important for successful rehabilitation after any illness.

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 Acoustic nerve neurinoma Brain tumour AN and interest group IGAN.

URL: http://www.akustikusneurinom.info/

[Release: 04.04.2012]

Program no. / Name	Time
31.34 ATP production cerebellum	5 min.
31.35 ATP production cerebrum	5 min.
54.10 Central nervous system complete	5 min.
54.20 Peripheral nervous system, complete	5 min.
79.53 C-53	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.48 79.54: C-54 Astrocytoma

#### Definition

An astrozytoma is a tumor that develops from the cells which form the support frame for the nerve cells. The corresponding cells are called astrocytes—hence the expression astrocytoma. The support frame consists not only of astrocytes. Other cell types (e. g. oligodendrocytes) also exist. We also refer to the supporting tissue as a whole as glia. All tumors that develop from this tissue, can be included under the general term glioma. We distinguish between two groups:

- The group of the diffusely ingrowing actrocytic tumours that consist of the diffuse astrocytoma (WHO grade II), the anaplastic astrozytoma (WHO grade III) and the Glioblastom (WHO grade IV).
- The group of the actrocytic tumours with better differentiated growth with respect to the brain tissue, whose main representative is the pilocytic astrocytoma (WHO grade I).

#### Prevalence (frequency)

Gliomas account for 45-50 percent of the intracranial tumours. About 50 percent of the gliomas are glioblastomas (astrocytoma WHO grade IV). Astrocytomas (WHO grades I and III) account for approximately 25 percent of the gliomas and oligodendrogliomas for less than 5-18 percent. Men are generally more frequently affected than women.

## Age

People between 50 and 70 years are most frequently affected. A second, significantly smaller frequency peak is in childhood.

### Diagnostic options

The most important diagnostic procedure is magnetic resonance tomography (MRT) of the skull. If this is not available, computer tomography (CT) is employed. To confirm the diagnosis the doctor carries out the operative removal of a sample of

the tumour tissue (biopsy). In the area of the visual nerve, however, this is involved with the risk of development or increase of disorder of vision.

## Genetic predisposition

In the case of a hereditary disease, the so-called neurofibromatosis of type 1, the pilocytic astrocytoma occurs particularly frequently.

## Risk factor: increased radiation exposure

The energy of some radiation is so strong that it causes ionizations in atoms and molecules, which means that it can change the charge of atoms and molecules. It can also break down the bonds between individual molecules. This is the case of radiation of radioactive substances and x-rays which is referred to as "ionizing". Such radiation can promote the development of tumours.

#### Other risk factors

- Carcinogenic chemicals and harmful substances
- Cigarettes and alcohol

#### Ethnic origin

In the US, Northern Europe and Israel seven to eleven people out of 100,000 inhabitants are newly diagnosed with astrocytoma each year. In India or the Philippines, on the other hand, the incidence is just two to four. In how far ethnic influences or simply the general availability of medical care play a role in this situation, is not yet known.

#### Healthy lifestyle

In general: If you want to maintain your health as long as possible, you need to retain a healthy lifestyle. Eating a balanced diet which is rich in vitamins is just as important as sufficient exercise. Avoid risk factors such as unnecessary exposure to radiation, carcinogenic chemicals, smoking or alcohol.

#### Sources

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[Retrieval: 18.01.2013]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.00 Harmful substances (pollutants) complete	5 min.
31.34 ATP production cerebellum	5 min.
31.35 ATP production cerebrum	5 min.
54.00 Nervous system physiology complete	5 min.
79.54 C-54	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.49 79.55: C-55 Ependymoma

#### Definition

Ependymoma are glial tumours that derive from the ependymal cells of the inner ventricle of the brain and the central channel in the spinal cord. They account for five to ten percent of the gliomas. They are solid tumours that develop from malignant degeneration of the cells in the brain and the spinal cord. Since they develop directly in the central nerve system, they are also referred to as primary brain, spinal cord, or, collectively, as CNS tumours. Therewith they are delimited from metastases which form in another organ.

#### Prevalence (frequency)

Three out of 100,000 children and adolescents under the age of 15 are diagnosed with ependymoma in Germany per year. Tumours of the central nervous system account for 23 percent of all cancers and account for the second most common carcinoma disease in children and adolescents (behind leukaemia). Representing just ten percent of all brain tumours, the actual ependymomas are a rather rare disease in children and adolescents. It affects adults with two to three percent of all tumours of the central nervous system even less frequently. Boys and male adolescents are more often affected than girls (gender ratio 1.2:1).

### Age

The first frequency peak lies in childhood, at the age of five years. The second frequency peak is in adulthood, between 30 and 40 years.

### Diagnostic options

If the doctor finds indications of the presence of a malignant tumor when reviewing the patient's medical history and during the physical examination, the patient will be transferred to a hospital specializing in carcinoma diseases in children and young people (a hospital for paediatric haematology and oncology). The employment of computerand magnetic resonance tomography (MRT) is given maximum attention when reaching the diagnosis because the location, size and extension of the tumor can be determined this way. Since there is a connection to the cerebral fluid ducts, the tumor can spread via these connections. This happens only on rare occasions. For this reason it is necessary to examine the cerebral fluid in addition to carrying out a magnetic resonance tomography. The diagnosis will be confirmed by removing a tissue sample and performing a biopsy.

### Genetic predisposition

Although it is known that the degeneration of ependymal cells goes hand in hand with alterations in the genetic material, it is not yet known why genetic alterations occur. In general, these genetic alterations are not hereditary. Taking into account the current scientific knowledge, these genetic alterations occur at a very early moment of the development. Very rarely, ependymomas occur in connection with the hereditary disease Turcot syndrome.

#### Risk factor: Radiation therapy

A radiation therapy of the brain in childhood, for example, to treat acute leukaemia, or a malignant eye tumour like the retinoblastoma, will increase the risk for a brain tumour later in life significantly, even if the doses of the radiation is very low.

### Other risk factors

- Other carcinoma diseases (e. g. rhabdoid tumour, retinoblastoma)
- Various environmental factors (e. g. nutrition, mobile phones, chemical substances, tobacco smoke, viruses)

#### Ethnic origin

No conspicuous characteristics are known as far as ethnic factors are concerned which could influence in the development of ependymoma.

#### Prevention

General measures that help prevent brain tumour

are not known. In general, it is recommended to avoid unnecessary radiation (especially for children) as well as contact with carcinogenic chemicals and harmful substances. On the other hand we recommend a healthy lifestyle with a balanced and varied diet with a lot of fruit, vegetables and whole grain. Furthermore, it is advisable to renounce cigarettes and alcohol and to take regular exercise.

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[Release: 22.05.2012]

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URL: http://www.hirntumorhilfe.de/hirntumor/

tumorarten/ependymom/ [Retrieval: 02.02.2013]

Program no. / Name	Time
04.00 Electrosmog complete	5 min.
04.30 Radiation, protection	5 min.
08.00 Harmful substances (pollutants) complete	5 min.
22.00 Viruses complete	5 min.
31.34 ATP production cerebellum	5 min.
31.35 ATP production cerebrum	5 min.
54.00 Nervous system physiology complete	5 min.
79.55 C-55	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.50 79.56: C-56 Glioblastoma

#### Definition

The glioblastoma belongs to the group of the astrocyte gliomas (see C-54, Astrozcytoma) and is an extremely malicious tumor, which develops from the cells of the central nervous system (CNS). These degenerated cells grow and spread quickly and destroy the healthy brain tissue. For this reason the World Health Organisation (WHO) classified glioblastoma as grade IV tumor (grade I low to grade IV highly malignant). The cells of these tumours can migrate distances of various centimetres and so cause the formation of new tumours.

#### Prevalence (frequency)

Brain tumours in general account for two to three percent of all carcinoma and rate as rare carcinomas. It is estimated that about 6,800 people contract a brain tumor or a tumor of the spinal chord in Germany each year. Glioblastoma is the most common astrocytic tumor. They account for more than half of all gliomas and they occur predominantly in the cerebrum. Men contract this disease more frequently than women.

#### Age

Generally speaking, a brain tumor can occur at any age. People between 50 and 70 years are most frequently affected.

### **Diagnostic options**

The most important diagnostic procedure is magnetic resonance tomography (MRT). If this is not possible, a computer tomography (CT) will be carried out. To confirm the diagnosis the doctor will carry out the operative removal of a sample of the tumour tissue (biopsy). It is currently being determined if it would make sense to carry out certain laboratory tests (MGMT) as a routine to decide whether to include chemotherapy in the treatment.

# Genetic predisposition

In most cases it remains unclear why genetic changes occur. Possibly various factors have to combine, before a highly malignant glioma arises. It is known that people with certain hereditary diseases are exposed to a significantly higher risk to contract a highly malignant glioma. These include:

- Type I neurofibromatosis (NF 1),
- Li-Fraumeni syndrome,
- Hippel-Lindau syndrome,
- Turcot syndrome and
- Bloom syndrome.

### Risk factor: increased radiation exposure

A radiation therapy of the skull in childhood, for example, to treat acute leukaemia, or a malignant eye tumour, will increase the risk for highly malignant gliomas later in life significantly, even if the radiation dose was very low.

#### Other risk factors

- Carcinogenic chemicals and harmful substances
- Cigarettes and alcohol

#### Ethnic origin

No links between the disease and ethnic origin are known.

#### Healthy lifestyle

If you want to maintain your health as long as possible, you need to retain a healthy lifestyle. It is generally recommended to make sure that you eat a balanced diet that is rich in vitamins, and that you take regular exercise. Avoid risk factors such as unnecessary exposure to radiation, carcinogenic chemicals, smoking or alcohol.

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URL: www.kinderkrebsinfo.de/hochmaligneGliome

[Release: 21.07.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.00 Harmful substances (pollutants) complete	5 min.
31.34 ATP production cerebellum	5 min.
31.35 ATP production cerebrum	5 min.
54.00 Nervous system physiology complete	5 min.
79.56 C-56	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.51 79.57: C-57 Medulloblastoma

#### Definition

A medulloblastoma is a malignant embryonic brain tumor of the cerebellum, which was classified as grade IV according to the WHO-classification of tumours of the central nervous system. The tumor develops in the cerebellum and usually grows into the adjacent cerebral ventricle. From there on the medulloblastoma can spread quickly to the nearby healthy tissue, often also to the brain stem (truncus cerebri). Through the contact with the spinal fluid (liquor) metastases can form in the areas that are in contact with the liquor. These so-called subarachnoid spaces include the cerebral ventricles and the meninges which envelop the brain and the spinal cord.

#### Prevalence (frequency)

Brain tumours develop in approximately 50 out of 100,000 inhabitants per year. Among the primary brain tumours the medulloblastoma represents a rather rare type of tumour. It accounts for just five percent of the primary brain tumours. However, with a frequency of 30 percent it is the most frequent brain tumour in children and adolescents, although the number of new diseases is at 0.5 out of 100,000 children under 15 years.

#### Age

The average age of disease onset is at seven years and the disease affects boys two to three times as frequently as girls. About a quarter of all medulloblastomas occur in young adults. 70 percent of all affected are younger than 16 and only very few patients are older than 50 years.

## **Diagnostic options**

As with all brain tumours, diagnostic imaging techniques and physical examination are vital. Next to computer tomography (CT) a magnetic resonance tomography (MRT) is of great importance because the doctor can obtain very detailed results. This way he can see where the tumor is located, how big it

is and how much it has spread. On an MRT image he can evaluate in how far tumours have spread to the spinal fluid. Since the medulloblastoma tends to form metastases in the spinal canal even though a MRT image had been taken on which no malignant cell accumulations were recognizable, the doctor needs to perform a lumbar puncture to reach a reliable diagnosis. To do this, spinal fluid is taken from the spinal canal and examined for tumour cells.

### Genetic predisposition

The medulloblastoma develops from the so-called embryonic immature cells which degenerate. In most cases the tumor arises spontaneously. During the last years the role played by genetic factors in the development of brain tumours has gained much importance, although it is not relevant for most brain tumours. Alterations in the chromosome 17 have often been observed. Furthermore, brain tumours form growth factors which cause the tumour cells to grow exceptionally quickly.

#### Risk factors

The causes for the degeneration of cells have not been explained yet.

#### Ethnic origin

No links between the disease and ethnic origin are known.

#### Healthy lifestyle

In general no concrete measures are known with which we can prevent medulloblastoma. As far as general prevention measures are concerned, it is recommended to avoid unnecessary exposure to radiation (especially for children) as well as carcinogenic chemicals. The focus should be on a healthy lifestyle with a varied, low-fat diet and regular exercise. Furthermore, it is advisable to renounce cigarettes and alcohol.

#### Sources

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oblastom.html

[Release: 22.05.2012]

Program no. / Name	Time
31.34 ATP production cerebellum	5 min.
31.35 ATP production cerebrum	5 min.
54.00 Nervous system physiology complete	5 min.
79.57 C-57	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.52 79.58: C-58 Meningeoma

#### Definition

Meningioma are benign tumours that develop in the meninges. The meninges encloses the brain and the spinal cord and acts like a protective cover. Often meningioma are attached to the interior of the hard meninges. They can also grow in the spinal cord. The tumor is enclosed in a capsule and suppresses the adjacent tissue without penetrating it. Malignant, metastasizing meningiomas are very rare. This tumor does not normally form metastases. Meningiomas grow slowly and rarely develop symptoms. If so, it takes years for them to show. This carcinoma is usually found incidentally and attract attention in the context of carrying out other exams. WHO distinguishes between three types of meningioma: 85 percent belong to type I (grows very slowly, a long time without any symptoms), ten percent belong to type II (also called atypical meningioma) and the remaining five percent belong to type III (aggressive course, also called anaplastic meningioma).

### Prevalence (frequency)

The meningioma accounts for 30 percent of all tumours inside the skull. Women contract the disease twice as often as men. Every year about 100,000 people are diagnosed with meningioma.

#### Age

The risk increases with age. Most meningioma patients are around the age of 45 years.

### **Diagnostic options**

As with all brain tumours, imaging techniques like computer tomography (CT) and magnetic resonance tomography (MRT) are the most important instruments for reaching a diagnosis. A contrast medium for examination is nearly always necessary as it accumulates inside the tumor substantially. In rare cases an angiography is indicated. This method allows to make blood vessels visible and to close them before operating the tumor. If the doctor can see a homogeneous growth on the CT and MRT images, a tumour which touches on the broad area

of the meninges and if the meninges is thickened at the contact surface, then he is most probably looking at a meningioma.

## Genetic predisposition

Meningioma occurs frequently together with the hereditary disease neurofibromatosis type 2. Furthermore, deletions of the genetic material on chromosome 22 have been found.

## Risk factor: radiation therapy

Like with most tumours the cause of meningioma remains unclarified. However, it was observed that children who had to undergo radiation therapy for cancer treatment, are at a higher risk to develop tumours, particularly malignant tumors.

#### Ethnic origin

There are no known links between meningioma and ethnic factors.

### Healthy lifestyle

In general no concrete measures are known with which we can prevent meningioma. Generally speaking, you should avoid unnecessary radiation (especially children) and carcinogenic substances. A healthy lifestyle with varied, low-fat diet and regular exercise strengthens the body's immune system and reduces the general disease risk. Furthermore, it is advisable to renounce cigarettes and alcohol.

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[Release: 11.07.2012]

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[Release: 10.01.2013]

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[Retrieval: 03.02.2013]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
31.34 ATP production cerebellum	5 min.
31.35 ATP production cerebrum	5 min.
54.00 Nervous system physiology complete	5 min.
79.58 C-58	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.53 79.59: C-59 Neurinoma (schwannoma)

#### Definition

A neurinoma (Neuron = nerve cell) is a benign, slowly growing tumor which mostly develops in the posterior cranial fossa. It mainly affects the eighth cranial nerve – the balance– and auditory nerve (Nervus vestibulocochlearis, formerly: N. statoacusticus). It affects primarily the balance nerve (N. vestibularis). In this case the doctors refer to it as acoustic neuroma (see C53, Acoustic nerve neuronima). Unlike malignant tumours, the acoustic neuroma does not penetrate adjacent tissues nor does it form metastases.

#### Prevalence (frequency)

Six to seven percent of all brain tumours are neurinomas; with 25 percent spinal neurinomas are the most frequent spinal tumours. Acoustic neuroma is the most frequent neurinoma. About 80 percent of all tumours in the cerebellopontine angle are acoustic neuroma. Figures from different countries reflect that about 8 to 10 out of 1 million inhabitants are diagnosed with acoustic neuroma per year. It can be assumed that many tumours remain undetected as they are small and do not usually cause any noticeable symptoms.

#### Age

It affects particularly middle-aged people. Symptoms occur especially around the 50th year of life.

#### Diagnostic options

Additional imaging techniques to employ include computer tomography (CT) and magnetic resonance tomography (MRT) for a precise diagnosis. These procedures take image cuts of the whole body from head to feet. These cuts will then be joined together to form a three-dimensional image. The MRT will show more detailed information on existing tumours.

### Genetic predisposition

The most frequent known cause for neurinoma is commonly a hereditary disease: the so-called neurofibromatosis Type II (very rarely also neurofibromatosis Type I). In this case there is a mutation of one gene, on chromosome 22. It is a so-called NF 2-mutation which is passed on by dominant inheritance.

People who are affected by this hereditary disease become deaf in both ears. However, this genetic defect is rare (globally about 1 out of 35,000 births).

#### Risk factors

The risk factors for neurinoma and the causes for the formation of a tumour by the so-called Schwann cells are generally unknown.

#### Ethnic origin

There is no known link between ethnic origin and neurinoma.

#### Healthy lifestyle

Since the causes of the disease are not known, there is no known prophylaxis. As with all other diseases, if you want to prevent neurinoma, it is recommended to lead a healthy life to strengthen your immune system and to reduce the disease risk in general. The onset of the disease cannot be prevented by following this advice alone. Nutrition, exercise and a strong psyche all contribute to a healthy lifestyle. A strong immune system is important for successful rehabilitation after any illness.

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[Release: 19.09.2012]

Program no. / Name	Time
31.34 ATP production cerebellum	5 min.
31.35 ATP production cerebrum	5 min.
54.00 Nervous system physiology complete	5 min.
79.59 C-59	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.54 79.60: C-60 Neuroblastoma

### Definition

Neuroblastoma is a tumour disease of the nervous system which develops from degenerated, immature (embryonic) cells of the so-called sympathetic nervous system. The sympathetic nervous system forms part of the autonomic nervous system which controls the activity of the heart, blood circulation, intestines and the bladder. Neuroblastomas can appear wherever there is sympathetic nerve tissue. Most frequently they form in the suprarenal marrow (approximately 50 percent of all cases) and in the nerve plexuses on both sides of the spinal column, in the so-called sympathetic trunk. They can appear at any level and position, however, in the majority of cases they are found at the height of the abdomen.

#### Prevalence (frequency)

Neuroblastoma is the second most common carcinoma disease in childhood behind acute lymphatic leukaemia. It affects one out of 100,000 children per year. According to the German Childhood Cancer Registry in Mainz, approximately 150 children are diagnosed with neuroblastoma each year. This means that the disease accounts for seven to eight percent of all childhood cancers. Boys are slightly more frequently affected than girls.

#### Age

The probability of contracting neuroblastoma decreases with increasing age. In about half of the cases the disease occurs in the first 15 months of life. About 90 percent of the affected children are under the age of six years. In individual cases neuroblastoma can occur in adulthood.

## Diagnostic options

On suspicion of neuroblastoma the doctor initiates the required examinations. These include:

- Physical examination
- Laboratory tests
- Ultrasound exam (sonography)

 Computer tomography (CT) or magnetic resonance tomography (MRT)

If indeed neuroblastoma is detected, further tests will be carried out to confirm the diagnosis and to determine if and to what extent the tumour has spread:

- Ultrasound exam the liver
- MIBG-SPECT scintigraphy and skeletal scintigraphy
- Examination of bone marrow biopsy
- Computer tomography (CT) or magnetic resonance tomography (MRT) of the skull

#### Genetic predisposition

Possibly, aberration of new nerve cells starts already before birth and it could be a consequence of chromosome- and gene alterations (mutations). Genetic inheritance in the proper meaning of the word can be ruled out on the current state of scientific research. However, there are patients who exhibit a higher incidence of neuroblastomas in the family (about 0.2 percent of patients).

#### Risk factors

Unfortunately, nothing is known about the causes of neuroblastoma. This is the case of many child-hood carcinomas. Researchers are working intensively to discover the causes of the disease.

#### Ethnic origin

There is no known link between ethnic origin and neuroblastoma.

## Healthy lifestyle

Since the causes for the disease have not yet been determined, it is not possible to recommend measures to prevent the disease. Generally speaking, it is important to lead a healthy life to strengthen the immune system and to reduce the risk of illness in general. A balanced and nutritious diet, avoidance of carcinogenic substances, physical exercise and a strong psyche all form part of a healthy lifestyle.

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Program no. / Name	Time
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31.35 ATP production cerebrum	5 min.
54.00 Nervous system physiology complete	5 min.
79.60 C-60	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.55 79.61: C-61 Oligoastrocytoma

#### Definition

Oligoastrocytoma are gliomas that have characteristics of both oligodendroglioma (see C-62, Oligodendrogiom) and astrozytoma (see C-54, Astrozytom). For this reason these rare brain tumours are also referred to as mixed gliomas. Here we distinguish between two different types:

- the slowly growing oligoastrozytoma, which, according to WHO-classification for tumours of the central nervous system is classified as WHO grade II.
- and the quickly growing anaplastic oligoastrocytoma which is classified WHO grade III.

#### Prevalence (frequency)

An oligoastrocytoma which is located in the cerebrum is diagnosed in five to ten percent of all gliomas. Men contract this disease slightly more frequently than women.

#### Age

This tumor occurs most often in midadulthood between 35 and 40 years. However, some rare cases of the disease were detected in children at the age of about 10 years.

#### **Diagnostic options**

If after reviewing the medical history and examining the patient there is suspicion of the presence of oligoastrocytoma, the doctor will initiate further examination procedures. One of the most important procedures is magnetic resonance tomography (MRT) of the skull. Pictures are taken both with and without contrast medium. An accumulation of contrast medium in the tumor indicates that an anaplastic oligoastrocytoma is present. If this is not possible, a computer tomography (CT) will be carried out. The diagnosis will be confirmed by taking a tissue sample (biopsy).

## Genetic predisposition

No genetic factors are known that could have an impact on the development of oligoastrocytoma.

#### Risk factors

The causes for oligoastrocytoma are not known. In the case of oligodendroglial tumours it is believed that higher levels of radioactive radiation (for example, when undergoing radiotherapy) can promote this type of tumor.

According to Wikipedia there are individual cases where scars left after radiation of the central nervous system or brain injury can promote the development of oligodendroglial tumours. These diseases were also observed in patients with multiple sclerosis. Further risk factors are not known.

#### Ethnic origin

There is no known link between ethnic origin and oligoastrocytoma.

#### Healthy lifestyle

So far no measures for prevention of oligoastrocytoma are known. In general it is recommended to reduce the general disease risk as much as possible. Make sure that you maintain a healthy lifestyle by eating a balanced and nutritious diet. Avoid carcinogenic substances (including alcohol and cigarettes) and take regular exercise.

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[Release: 29.12.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
31.34 ATP production cerebellum	5 min.
31.35 ATP production cerebrum	5 min.
31.81 Scar tissue repair	5 min.
54.00 Nervous system physiology complete	5 min.
55.43 Multiple Sclerosis	5 min.
79.61 C-61	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.56 79.62: C-62 Oligodendroglioma

#### Definition

An oligodendroglioma is a tumor that develops from the cells which form the support frame for the nerve cells. These cells are called oligodendrocytes. We also refer to the supporting tissue as a whole as glia. All tumours that develop from this tissue, can be included under the general term glioma. These degenerated cells are predominantly being found in the frontal lobe of the brain. The cells spread shaped like mushrooms up to the outer layer of the brain, to the cortex. In the process they can also afflict the meninges which envelope the brain. The tumor also tends to cause calcium deposits. Depending on the location of the tumor, there can be various different symptoms.

From a microscopic point of view, these gliomas can be subdivided into two types:

- The slow growing oligodendroglioma (WHO grade II)
- The more fast growing anaplastic oligodendroglioma (WHO grades III-IV)

#### Prevalence (frequency)

Oligodendrogliomas account for about ten percent of all gliomas. Men and women are affected to the same extent.

#### Age

Oligodendroglioma affects mainly adults in mid adulthood, between 35 and 50 years.

#### Diagnostic options

On suspicion of oligodendoglioma most doctors opt for magnetic resonance tomography (MRT) of the skull as a diagnostic procedure as it illustrates to what extent the tumor has spread. Pictures are taken both with and without contrast medium. Computer tomography (CT) is also often employed. This allows for the detection of calcifications in the oligodendroglioma. The diagnosis will be confirmed by removing a tissue sample (so called biopsy).

### Genetic predisposition

Molecular genetic studies have shown that oligodendrogliomas often go hand in hand with the loss of the short arm of chromosome 1 and with the loss of the long arm of chromosome 19.

#### Risk factor: Radiation

The risk factors for oligodendroglioma are unknown. It is believed that higher levels of radioactive radiation (for example, when undergoing radiotherapy) can promote tumor development. According to Wikipedia there are individual cases where scars left after radiation of the central nervous system or brain injury can promote the development of oligodendroglial tumours.

#### Other risk factors

According to Wikipedia these diseases were also observed in patients with multiple sclerosis. Further risk factors are not known.

### Ethnic origin

There is no known link between ethnic origin and oligodendroglioma.

### Healthy lifestyle

Since the risk factors remain largely undetermined, it is not possible to recommend concrete measures to prevent oligodendroglioma. Generally speaking, doctors recommend to eat a balanced, low-fat diet, renounce drugs, tobacco and alcohol and opt for regular exercise and relaxation to support the body's natural resistance.

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Program no. / Name	Time
04.30 Radiation, protection	5 min.
31.34 ATP production cerebellum	5 min.
31.35 ATP production cerebrum	5 min.
31.81 Scar tissue repair	5 min.
54.00 Nervous system physiology complete	5 min.
55.43 Multiple Sclerosis	5 min.
79.62 C-62	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.57 79.63: C-63 Choroid plexus carcinoma

## Definition

Choroid plexus tumours develop from cells of vascular bundles which produce the cerebral fluid (liquor). Depending on the growth rate, the benign, slow growing tumour cells are called papillomas and the aggressive cells carcinomas. In childhood they develop predominantly in the large lateral cerebral ventricle, whilst in adults they grow predominantly in the posterior cranial fossa. Because of their position inside of the cerebral fluid ducts they tend to spread to the head and spinal canal.

## Prevalence (frequency)

Plexus carcinomas account for just 0.5 percent of all brain tumours and are therefore very rare. The proportion for children, however, is between one and four percent. About ten patients were registered as plexus carcinoma sufferers in Germany in the last few years. Worldwide there are about 30 new diagnoses per year.

## Age

This type of brain tumours occurs usually at a young age. So the share of plexus carcinomas among the brain tumours accounts for one to four percent. In the first year of life it is higher, at 13 percent. In adulthood the carcinoma is rather rare, with a share of just one percent of all brain tumours.

## Diagnostic options

At the centre of all diagnostic procedures is the magnetic resonance tomography (MRT) which can determine the exact location, the size and the extension of the tumor. Since there is a connection to the brain water ducts, the tumour cells can spread via these connections. For that reason an MRT of the spinal canal and an examination of the cerebral fluid are just as important. The diagnosis will be confirmed with a histological examination of the surgically removed tumor. After the examination the tumor will be classified according to the WHO grading from grade I to III (Grade I: Plexus papilloma, Grade II: anaplastic papilloma and grade III:

plexus carcinoma). Intermediate forms are known as anaplastic or atypical choroid plexus tumours.

## Genetic predisposition

Some plexus carcinomas are based on a Li-Fraumeni syndrome. This relates to an autosomal dominant, hereditary tumour preposition. Usually there is an aberration of the tp53 tumour suppressor gene. Additionally, the expression and copy number of one of the genes for PDGF receptors is elevated.

#### Risk factors not known

Despite intensive research endeavours to find the causes for the development of primary tumours of the nervous system, there is still too little known. In most patients the tumours appear spontaneously, without any triggering factors. In this case the doctor refers to sporadic tumours and distinguishes them from hereditary tumours. In the majority of cases primary tumours develop only to a very small extent as a result of a genetic disposition which promotes the development of tumours in the nervous system. So far there is no evidence that nutrition, smoking, alcohol, brain injuries, certain environmental influences such as electromagnetic fields close to high-voltage power lines or the excessive use of mobile phones could lead to an increase of brain tumours.

## Ethnic origin

There is no noticeable variation in the frequency with which plexus carcinoma occur in relation to ethnic origin.

## Healthy lifestyle

Risk factors for the plexus carcinoma remain undetermined and for that reason it is not possible to recommend measures to prevent the disease. Generally speaking, doctors recommend to eat a balanced, low-fat diet, renounce drugs, tobacco and alcohol and opt for regular exercise and relaxation to support the body's natural resistance.

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[Retrieval: 05.02.2013]

Program no. / Name	Time
31.34 ATP production cerebellum	5 min.
31.35 ATP production cerebrum	5 min.
54.00 Nervous system physiology complete	5 min.
79.63 C-63	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.58 79.65: C-65 Eyelid carcinoma

## Definition

Eyelid tumours on the upper- and lower eyelid can be benign or malignant. This description addresses the malignant eyelid carcinoma. Basal cell carcinoma - also called basalioma - is by far the most common malignant eyelid carcinoma (see C-70, Basalioma) The incidence of other malignant eyelid carcinomas, such as the squamous cell carcinoma, the sebaceous glands carcinoma, or the malignant melanoma, is much lower than that of the basalioma. In AIDS patients the so-called Kaposi sarcoma (less often vessel tumour) can also occur in the eyelids.

## Prevalence (frequency)

Basal cell carcinoma (basalioma) accounts for 90 percent of all eyelid tumours and is by far the most frequent malignant eyelid tumour. In Central Europe it belongs to the most common malignant tumours altogether. Each year 100 out of 100.000 inhabitants are diagnosed with the disease in Germany. Men and women are affected to approximately the same extent.

#### Aae

The average age of disease onset is at approximately 60 years, however, younger people contract the disease increasingly.

# Diagnostic options

Usually it is either the ophthalmologist or the dermatologist who makes the diagnosis. If, after completion of medical history review and examination of the skin, the doctor suspects eyelid tumour, he will use the dermatoscope (a magnifying glass with a light source) to give the affected skin area a close inspection. The diagnosis will be confirmed by an examination of a tissue sample under the microscope. If, for example, a malignant melanoma is detected, further exams will be carried out. These include x rays, ultrasound (sonography) and computer tomography (CT) as well as magnetic resonance tomography (MRT) and help to detect possible metastases in other parts of the body.

## Genetic predisposition

In case of the malignant melanoma genetic factors do play a role. This fact is also shown in the cases of the so-called melanoma families. If a member of the family was diagnosed with malignant melanoma, the rest of the family members automatically have a higher risk to contract the disease as well. People with very light skin or blond or red hair are also exposed to a higher risk.

#### Risk factor: UV radiation

UV radiation of the sun represents the highest risk factor. UV radiation promotes the development of basal cell carcinomas, squamous cell carcinomas and melanomas. These types of tumour can develop in any location of the skin, but the eye is especially vulnerable because of its location. The temporary, acute, intense sun radiation which causes sunburn increases the risk of skin cancer.

## Risk factor: X rays

Excessive x rays which can trigger the formation of melanomas and represent another possible risk factor for eyelid carcinoma.

## Ethnic origin

Links to ethnic factors are not known in relation with the eyelid carcinoma.

## Healthy lifestyle

Since the causes of eyelid carcinoma have only been partially clarified to date, the measures you can take to prevent the disease are limited. In general, you should avoid intense sunlight – especially sunburn. You can take limited measures to prevent eyelid tumour by using high quality sun filters and by wearing sunglasses that will provide additional protection for the eyes. If you notice skin alterations in the eyelid like poorly healing wounds, discolourations and skin elevations, you should consult your dermatologist as soon as possible.

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[Release: 18.01.2013]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
31.31 ATP production eyes	5 min.
56.00 General visual organ physiology	5 min.
79.65 C-65	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.59 79.66: C-66 Retinal tumour (Hippel-Lindau disease)

## Definition

The Von Hippel-Lindau disease (VHL) is a rare, autosomal dominant inherited tumour disease which is based on a mutation of the so-called VHL-tumour suppressor genes. Retinal capillary angiomas occur within the context of the Von Hippel-Lindau syndrome. These are benign tumours which form from vascular cells of the retina. The angiomas tend to form in the external area of the retina and less frequently in the optic disc.

## Prevalence (frequency)

It is assumed that one out of 36,000 people is affected by VHL syndrome. Men and women are affected to the same extent.

#### Age

Retinal angiomas frequently occur between the 20th and 30th year of life. However, angiomas can also occur in children.

## Diagnostic options

On suspicion of retinal angioma the following exams will be carried out:

- Review of medical/ family history
- Ophthalmoscopy
- Fluorescence angiography (FAG) to obtain differential diagnostic indications
- Retinal exam (funduscopy)

## Genetic predisposition

VHL syndrome is an autosomal-dominant inherited tumour disease which is caused by germ line mutation of a tumour suppressor gene. About 80 percent of patients inherited the disease from one of the also affected parent. Siblings of VHL patients are exposed to a 50 percent risk to contract the disease. Children of VHL patients are exposed to a 50 percent risk to be carrier of the disease.

#### Risk factors

Retinal capillary angiomas occur within the context

of the Von Hippel-Lindau syndrome. The Von Hippel-Lindau syndrome is based on a genetic defect which is passed on genetically. Risk factors that promote this effect have not been identified.

## Ethnic origin

No data are available regarding retinal tumour and possible links with ethnic origin.

## Regular health checks

VHL-patients should consult their ophthalmologist for regular health checks. It is recommended to choose a doctor who is experienced in examining and treating VHL patients. Although concrete risk factors are not known and therefore no concrete measures can be recommended to VHL patients, it is always worth recommending that patients maintain a healthy lifestyle by eating a healthy diet and by taking regular exercise to reduce the general disease risk. You should also refrain from smoking.

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Program no. / Name	Time
31.31 ATP production eyes	5 min.
56.34 Retina	5 min.
79.66 C-66	10 min.
01.00 Vitalisation complete	5 min.

## 18.7.60 79.67: C-67 Retinoblastoma

#### Definition

Retinoblastoma is a malignant tumor of the eye which develops from immature cells of the retina (from the Greek retina and blastos = germ). The trigger of the uncontrolled cell growth is a deficient tumour suppressor gene. We distinguish between two types of retinoblastomas:

- A hereditary or familial retinoblastoma develops from a mutated gene copy that is passed on by the parents or if the second gene copy mutates at a later stage in the body of the child.
- A sporadic retinoblastoma occurs when the damage in both gene copies occurred in the body of the affected child.

## Prevalence (frequency)

Retinoblastoma is a rare tumour disease in Germany. However, it is the most frequent eye tumour in children. Approximately one out of 20,000 children is affected by retinoblastoma. It is estimated that about 60 children contract this type of tumour each year. It affects both sexes to the same extent.

## Age

Since the retinoblastoma can only form from an immature retina cell, it almost always develops before the fifth year of life. About 80 percent of the sick children are younger than four years. The peak age is under the age of one year.

#### Diagnostic options

A white gleaming pupil (e.g. on photographs taken with flashlight) is usually the first indication of presence of a retinoblastoma. The doctor can detect the tumor in the eye with the aid of a so-called ophtalmoscopy. With the help of imaging techniques like ultrasound, computer tomography (CT) and magnetic resonance tomography (MRT) the doctor can determine in how far the tumor has spread inside the eye. Usually the parents and siblings of retinoblastoma patients also get involved in the process of the diagnosis to rule out that the retinoblastoma developed as a result of a genetic defect.

## Genetic predisposition

The cause for retinoblastoma is a permanent alteration (so-called mutation) of the genetic material (DNA). This change leads to an uncontrolled growth of the retina cells and so to the development of a tumor in the eye. The change can affect exclusively the retina cells or also other body cells. The mutation is a change on chromosome 13, in the tumour suppressor gene RB1 (=retinoblastoma suppressor gene). These genes carry the information regarding the control of cell growth. If the gene is damaged (or disabled) due to mutations, the cell growth will effect without control. People with hereditary retinoblastoma generally have a higher risk to develop tumours. With a certainty of 50% the person concerned will pass this genetic defect on to the next generation.

## Risk factors not known

Risk factors that promote retinoblastoma are not known.

## Ethnic origin

Links to ethnic factors are not known in relation with retinoblastoma.

## Screening and early detection

There are no measures known for a targeted prevention of retinoblastoma. However, you can take advantage of the offered preventive programs and make sure that you consult an ophthalmologist as soon as possible if you notice a white gleam in your pupil or squinting in one of your eyes. Most retinoblastomas affect children under two years and an early diagnosis and therapy are vital to ensure that the tumor can be healed without the risk of vision loss.

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Program no. / Name	Time
31.31 ATP production eyes	5 min.
56.34 Retina	5 min.
79.67 C-67	10 min.
01.00 Vitalisation complete	5 min.

## 18.7.61 79.69: C-69 Actinic keratosis

## Definition

The term actinic keratosis refers to a particular type of skin change which is caused by light (actinic = caused by rays): The permanently light-damaged skin is characterised by a proliferation of the so-called keratocytes (Greek. keras = horn, kytos = cell).

The actinic keratosis is considered by definition a precancerous stage and even an early stage (carcinoma in situ) of a certain form of light skin cancer: actinic keratosis can merge into a so-called prickle-cell carcinoma (or squamous cell carcinoma). At the beginning this only affects the top cell layer of the skin, the so-called epithelial tissue (carcinoma in situ). However, the tumor might penetrate into the underlying tissue at any time.

## Prevalence (frequency)

Actinic keratosis affects pale-skinned people with high frequency. Countries with high UV radiation exhibit high disease rates: it affects one third of all women. In Great Britain 15 percent of men and 6 percent of women suffer from actinic keratosis. The probability of developing such skin changes is on an upward trend.

## Age

Age is an important risk factor with regards to the skin changes. Accordingly, actinic keratosis used to occur predominantly at an advanced age in the past. However, due to changes in the environmental conditions and recreational behaviour, it affects more and more younger people nowadays.

## **Diagnostic options**

The diagnosis is made according to the symptoms caused by typical skin changes. To confirm the diagnosis the doctor will remove a small tissue sample of the affected skin area (a so-called biopsy).

## Genetic predisposition

Hereditary diseases that go hand in hand with a damaged DNA repair mechanism can promote the development of actinic keratosis.

## Risk factor: UV radiation

Actinic keratosis is caused by strong UV radiation which will act on the skin for a period sufficient to produce permanent skin changes: the top skin layer (the so-called epidermis) is provided with a sophisticated repair mechanism which can correct the changes in the DNA of skin cells that were caused by exposure to light. If the UV radiation is persistent or very strong, the capacity of the repair mechanism will be exceeded. As a consequence, atypical cells will start to form. These pathologically altered skin cells multiply without control and cause actinic keratosis.

#### Other risk factors

- Pale skin
- Severe sunburn in childhood
- Lasting impairment of the immune system (e. g. patients who have received a transplant and who are treated with immunosuppressive drugs).

## Ethnic origin

Severely affected are light-skinned Australians. In Australia half of all light-skinned men between 30 and 70 years are affected by actinic keratosis; it affects about a third of the women. In Great Britain 15 percent of men and 6 percent of women suffer from actinic keratosis.

## Protection against UV radiation

Intelligent dealing with sunlight and artificial UV light is essential. Avoid midday sunshine, make sure that you use high quality sun filter and avoid artificial UV radiation in solariums.

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[Release: 30.03.2011]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
31.38 ATP production skin	5 min.
31.81 Scar tissue repair	5 min.
34.00 Immune system physiology complete	5 min.
62.10 Skin complete	5 min.
79.69 C-69	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.62 79.70: C-70 Basalioma

#### Definition

Basal cell carcinoma (basalioma) develop from cells of the so-called basal cell layer of the skin and the root sheet of the hair follicle. The tumours grow aggressively as they penetrate into the neighbouring tissue also affecting cartilages and bones. On the other hand, the tumours rarely spread to other organs and they do not form metastases. Although this is not a medical term, the basalioma as well as the spinalioma (squamous cell carcinoma) –another skin cancer type – is often referred to as light or white skin cancer, in order to differentiate it from melanoma, which is also known as malignant skin cancer. Very thin red veins (so-called telangiectasia) on the edge of the tumor are typical for basalioma.

## Prevalence (frequency)

Amongst the light-skinned population basal cell carcinoma is the most frequent skin cancer type. In Germany 100 out of 100,000 inhabitants contract basal cell carcinoma per year. This figure corresponds to a frequency rate of 0.1 percent.

## Age

Basalioma (basal cell carcinoma) occurs predominantly at an advanced age (the average age of disease onset is at 60 years). Due to changed recreational behaviour (e. g. use of solariums or travel to areas with intense sunlight), more and more younger people contract the disease nowadays.

## **Diagnostic options**

The doctor can often recognize the typical skin changes of basalioma (basal cell carcinoma) so that the diagnosis is unequivocal. To confirm the diagnosis, the doctor will remove a small tissue sample (biopsy) which will be examined under the microscope. Additionally, the dermatologist can employ photodynamic therapy (PDT) to reach a diagnosis. With the aid of PDT, the doctor can determine in how far the basal cell carcinoma (also called white or light skin cancer) has grown and extended inside the skin.

## Genetic predisposition

Genetic predisposition in connection with a pale skin type, albinism, basal cell nevus syndrome and xeroderma pigmentosum are considered proven causes. The term xeroderma pigmentosum refers to a hereditary skin disease which is characterized by hypersensitivity to light. Cause of the disease is a genetic defect.

## Risk factor: UV radiation

Excessive UV radiation (e. g. sunlight, solarium) damages the genetic material (DNA) of the cells. Cells that are affected by this kind of damage mostly die. However, if the DNA-damage remains in the cells, this can give rise to the development of tumour cells. Furthermore, excessive UV radiation can debilitate the immune system, which will lead to disturbances of the endogenous defence system—this can also trigger the development of basalioma.

#### Other risk factors

- Carcinogenic substances (e. g. arsenic)
- Scars and benign abnormalities of the skin

## Ethnic origin

This disease affects primarily light-skinned people, so it can be said that skin colour has a more important role to play than ethnic origin.

## Protection against UV radiation

Protect your skin and - that of your children -against intense sunlight and sunburn. Use high quality sunscreen with a high sun protection factor. Also, it is recommended to wear a sun hat with a wide brim in strong sun light.

#### Sources

Basal cell carcinoma (basalioma). Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_hautkrebs\_basaliom,107802.html

[Release: 28.8.2012]

- Basalioma (basal cell carcinoma). Health portal Onmeda.
  - URL: http://www.onmeda.de/krankheiten/basali-

om.html

[Release: 30.04.2012]

Deutsche Krebshilfe e.V. Hautkrebs – ein Ratgeber für Betroffene, Angehörige und Interessierte (German Cancer Aid: Skin cancer – a guidebook for patients, relatives and interested parties.)
 "Blaue Ratgeber" (volume 5).

[Release: October 2011]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
31.38 ATP production skin	5 min.
31.81 Scar tissue repair	5 min.
34.00 Immune system physiology complete	5 min.
62.10 Skin complete	5 min.
79.70 C-70	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.63 79.71: C-71 Melanoma, malign

## Definition

Melanoma is a malignant type of skin cancer. It develops from the pigment cells that are responsible for the skin colour (the so-called melanocytes). These cells lie in the epidermis and contain the pigment melanin.

Melanomas appear predominantly in those skin areas of the body that are very much exposed to the sun. These include face, neck, arms and lower legs. About 60 percent of all melanomas develop from a mole (nevus), which previously did not raise any suspicion. Once the melanoma reaches a vertical pathway through the epidermis and up to the blood- and lymph vessels, the malignant cells can spread and form metastases.

## Prevalence (frequency)

The incidence of melanoma has risen considerably, but the chances of recovery have improved considerably. About 17,800 people are diagnosed with melanoma in Germany per year. Thus melanoma accounts for 3.8 percent of all malignant new formations. This carcinoma accounts for 1.2 percent of all cancer-related deaths. In the category skin cancers melanoma is responsible for 90 percent of cancer-related deaths. Men contract this disease more frequently than women.

## Age

Melanomas occur predominantly in the second half of life. The average age of disease onset is 60 years in women and 66 years in men. On the other hand, melanoma can affect younger adults as well.

## Diagnostic options

A first diagnosis can be made by the doctor simply by inspecting the skin changes with the naked eye. The ABCDE rule is helpful in this visual assessment as it helps to ascertain whether the skin alterations are indeed caused by melanoma. More accurate estimations can be made with the aid of a dermatoscope, a special appliance with a magnifying glass, using reflected-light microscopy. Further imaging

procedures such as ultrasound (sonography), x-rays, magnetic resonance tomography (MRT) or a bone scintigraphy will indicate if and where the tumour has formed metastases. Where appropriate, performing a blood analysis might provide further information.

## Genetic predisposition

Studies have shown that genetic factors do play a role in the case of melanoma. If a close relative develops a melanoma, the rest of the family is automatically exposed to a higher risk of developing a melanoma as well.

#### Risk factor: UV radiation

The risk of developing melanoma increases with excessive exposure of the skin to UV radiation (by sunlight or in a solarium). What is particularly harmful is acute and intense exposure to UV radiation of a body that is not used to intense sunlight and gets sunburnt as a consequence, rather than regular, prolonged sunbathing.

## Other risk factors

- Light skin type, blonde and red headed people
- Severe sunburns in childhood
- Weakened immune system due to infections (e. g. HIV) or medication
- Moles

#### Ethnic origin

Depending on ethnic origin melanomas develop with varying frequency: whereas melanoma hardly occurs in sub-Saharan Africa, it is rather frequent in a country like Germany. In New Zealand and Australia the incidence of melanoma is particularly high. Melanoma affects light-skinned people six times more often than dark-skinned people.

# Avoid intense UV radiation.

Avoiding the midday sunlight in midsummer and using high-quality sun filters with a high sun factor is particularly important for the protection

of light-skinned people. Light-proof clothing, head wear and UV-resistant sunglasses are also helpful. Consult your doctor as soon as possible if you notice any unusual skin changes.

## Sources

Melanoma (malignant melanoma).
 Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/

melanom.html

[Release: 18.01.2013]

Melanoma (malignant melanoma). Online-Information of the German Cancer Society 'DKG'
 URL: http://www.krebsgesellschaft.de/pat\_ka\_hautkrebs\_melanom,107801.html
 [Release: 28.8.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
31.38 ATP production skin	5 min.
34.00 Immune system physiology complete	5 min.
62.10 Skin complete	5 min.
79.71 C-71	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.64 79.72: C-72 Spinocellular carcinoma

## Definition

Spinalioma (squamous cell carcinoma) is a malignant tumor of the skin which originates in the prickle cell layer (stratum spinosum). Looking from the centre outwards - the prickle cell layer is the second of five layers of the epidermis. Since the epidermis consists of multi layered, keratinizing squamous cell tissue, this tumor is also referred to as squamous cell carcinoma of the skin. In approximately five out of 100 patients metastases develop in the lymph nodes or other tissues.

## Prevalence (frequency)

Spinocellular carcinoma is the second most common skin cancer after basal cell carcinoma. It affects light-skinned people in particular. Especially in Central Europe the incidence of spinocellular carcinoma is rather high, with 30 new diagnoses per 100,000 inhabitants each year. Squamous cell carcinoma forms preferentially on the lower lips, the genitals and the oral mucous membrane. Men are more frequently affected by spinocellular carcinoma than women.

#### Aae

Spinocellular carcinomas tend to occur at advanced ages. The average age of disease onset is 70 years.

## **Diagnostic options**

An experienced dermatologist is able to identify the typical skin changes of spinocellular carcinoma with the naked eye. To confirm the diagnosis the doctor takes a tissue sample for histological examination. Since there is a risk of metastases in the case of spinocellular carcinoma, the doctor proceeds to examine the nearby lymph nodes. If appropriate, he will employ imaging techniques like ultrasound, x-rays, computer tomography (CT) or magnetic resonance tomography (MRT) to check for possible metastases in other parts of the body.

## Genetic predisposition

So far no genetic factors are known that promote the development of spinocellular carcinoma.

## Risk factor: UV radiation

The main cause for development of spinocellular carcinoma is long-term exposure to sunlight. The cumulative sun exposure seems to play an important role here. People with a weakened immune system due to medication, an infection (such as HIV) or organ transplant are particularly at risk.

#### Other risk factors

However, other factors can be responsible for skin damage. These include:

- Chronic wounds and inflammations
- Certain skin diseases
- Scars and burn injuries
- ionizing radiation like x-rays and gamma rays
- Contact with carcinogenic substances such as arsenic and tar.

## Ethnic origin

Spinocellular carcinoma is more frequent in very sunny countries such as Australia and New Zealand.

## Avoid risk factors

The best way to prevent spinocellular carcinoma is by avoiding the risk factors. In other words, you should

- Avoid strong and prolonged exposure to the sun,
- Use sufficient sun protection, if appropriate,
- Avoid contact with carcinogenic substances and
- Undergo surgery for phimosis if you are a man.

## Sources

Spinalioma (squamous cell carcinoma).
 Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/spinaliom.html

[Release: 03.08.2012]

 Spinocellular carcinoma (Spinalioma) Online-Information of the German Cancer Society 'DKG' URL: http://www.krebsgesellschaft.de/pat\_ka\_hautkrebs\_plattenepithelkarzinom,107803.html

[Release: 11.12.2012]

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URL: http://www.netdoktor.de/Krankheiten/ Hautkrebs/Wissen/Stachelzellkrebs-Spinali-

om-1189.html

[Release: 18.08.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.00 Harmful substances (pollutants) complete	5 min.
31.38 ATP production skin	5 min.
31.81 Scar tissue repair	5 min.
34.00 Immune system physiology complete	5 min.
62.10 Skin complete	5 min.
79.72 C-72	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.65 79.74: C-74 Pituitary adenoma

## Definition

Pituitary adenoma is a pathological formation (tumor) of the pituitary gland (hypophysis) which originates from hormone-producing cells. The pituitary gland consists of the anterior and the posterior lobe. A pituitary tumour usually originates from the anterior lobe (the so-called adenohypophysis). Thus its name pituitary adenoma. We distinguish between two groups: one group belongs to the hormonally active pituitary tumours which are responsible for hormone excess in the blood and the other group belongs to the hormonally inactive pituitary tumours. This can cause hormone deficiency. In most cases the adenoma is benign, however, in some cases the adenoma grows aggressively (invasive), which leads to the destruction of tissue.

# Prevalence (frequency)

Pituitary adenoma accounts for 15 percent of all brain tumours. Most pituitary adenomas are so-called prolactinomas – an adenoma which produces the hormone prolactin. This is followed by growth hormones producing adenomas (probability of 15 percent) and then by the hormonally inactive tumours.

## Age

People at the age of 35 to 45 years are most frequently affected by pituitary adenomas.

#### Diagnostic options

One of the most important procedures is magnetic resonance tomography (MRT) of the sellar region. The doctor administers a contrast medium to make it easier to distinguish tumours from healthy tissue. Also a computer tomography (CT) can be useful. If the tumours are small (so-called microadenomas), an ophthalmological exam and visual field testing need to be included in the diagnostic process. To determine the status of hormone production it is also required to perform an endocrinological diagnostic and/or to carry out a blood analysis.

## Genetic predisposition

In some individual cases pituitary adenoma can be attributed to genetic disposition. This includes the MEN-1 syndrome (multiple endocrine neoplasia), a rare hereditary disease. It has the tendency to form pituitary adenoma or other pituitary tumours.

## Risk factors not known

Since the causes for development of the pituitary adenoma have not yet been determined, it is not possible to state what the risk factors are. Although we do know that the pituitary tumour originates from a degenerated cell in the hypophysis, we are not sure about what triggers the cell to degenerate. It seems unlikely that environmental factors contribute to the development of the tumor.

## Ethnic origin

There is no known link between ethnic origin and pituitary adenoma.

## Healthy lifestyle

Since we do not know the exact causes of pituitary adenoma we are not yet in a position to recommend measures for its prevention. As a precaution it is advisable to avoid unnecessary radiation as well as carcinogenic substances. It always makes sense to opt for a healthy lifestyle. This includes:

- A varied diet which is low in fat
- Renouncing nicotine and alcohol
- Taking regular exercise.

This reduces the general disease risk.

#### Sources

• Pituitary tumour. Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/hypophysentumor.html

[Release: 27.09.2012]

 Pituitary tumours, pituitary adenoma. Online-Information of the German Cancer Society 'DKG' URL: http://www.krebsgesellschaft.de/pat\_ka\_ hirntumor\_hypophysentumor,108177.html

[Release: 09.11.2012]

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Gehirntumor/

[Release: 18.08.2012]

Gumpert N. Pituitary tumour. Dr-Gumpert.de.
 URL: http://www.dr-gumpert.de/html/hypophysentumor.html

[Release: 31.01.2013]

Program no. / Name	Time
5 ,	
04.30 Radiation, protection	5 min.
08.00 Harmful substances (pollutants) complete	5 min.
31.34 ATP production cerebellum	5 min.
31.35 ATP production cerebrum	5 min.
64.20 Pituitary gland complete	5 min.
79.74 C-74	10 min
01.00 Vitalisation complete	5 min.

# 18.7.66 79.75: C-75 Craniopharyngioma

## Definition

Craniopharyngioma (from Greek. kranion = skull, Pharynx = throat) is a benign brain tumour in the region of the pituitary glands (hypophysis). In this area a duct is formed before birth (embryonic) which disappears at a later stage of brain maturation: the ductus craniopharyngeus (Rathke's pouch). The remaining cells can cause craniopharyngiomas due to pathological proliferation. For this reason the tumor typically forms above the hypophysis or close to the pituitary stalk. The hypophysis is responsible for the production of different hormones which, amongst others, influence the growth, the pubertal development and the fluid and weight regulation in the body. Since the increasing size of the craniopharyngioma can lead to compression of certain structures, malfunctions of all adjacent organs may occur.

## Prevalence (frequency)

Craniopharyngioma accounts for four percent of brain tumours in childhood. They account for 50 percent of all tumours of the hypophyseal region. This disease affects men and women to the same extent.

#### Aae

This brain tumour affects predominantly children. It shows its frequency peak between the fifth and the 10th year of life. However, also adults between the 50th and 75th year of life can develop craniopharyngiomas.

## **Diagnostic options**

The most important diagnostic procedure is magnetic resonance tomography (MRT) of the sellar region. On the other hand, computer tomography is also employed to detect possible calcifications. In this process the solid parts of the craniopharyngioma and inside the wall of cysts will accumulate contrast medium. Since it is possible that the visual nerve is also affected, an ophthalmological exam including visual field testing has to be employed as well. Furthermore it is important to check the hormonal status of the body so that possible

malfunctions can be detected. Review of the waterand salt metabolism is also important.

## Genetic predisposition

There are no known links between genetic factors and the craniopharyngioma.

#### Risk factors not known

The causes for the development of craniopharyngioma can be attributed to a malformation: craniopharyngiomas form within the area of the pituitary gland from the remains of Rathke's pouch, a duct formed by the embryo, which disappears later on. However, it is not clear why the remaining cells start to grow uncontrollably allowing a tumor to grow. This is why there is no information on risk factors available.

## Ethnic origin

Data about ethnic origin in connection with craniopharyngiomas are not available.

## Healthy lifestyle

To date there is no information on effective measures for the prevention of craniopharyngiomas. Since the exact causes are unknown, it is difficult to establish what the risk factors are. This means that we can only take general measures to reduce the disease risk and the cancer risk in particular. Eating a healthy and well-balanced diet that includes a lot of fruit, vegetables and whole grain products and taking regular exercise form part of a healthy lifestyle. Furthermore, you should avoid alcohol, nicotine and drugs. Especially children should not be exposed to unnecessary x-rays. These unhealthy factors could also promote the development of a benign craniopharyngioma.

#### Sources

 Craniopharyngeal duct tumour Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/kranio-pharyngeom.html

[Release: 10.01.2012]

- Craniopharyngeal duct tumours Online-Information of the German Cancer Society 'DKG'
   URL: http://www.krebsgesellschaft.de/pat\_ka\_hirntumor\_kraniopharyngeom,108178.html
   [Release: 31.03.2011]
- Craniopharyngeal duct tumour The German Society of Endocrinology Hormones and metabolism.
   URL: http://www.endokrinologie.net/kraniopha-

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[Release: 09.02.2013]

Craniopharyngeal duct tumour Symptomat.de – Medical dictionary and health diagnosis
 U R L: h t t p://s y m p t o m a t . d e / Kraniopharyngeom#Ursachen\_ f.C3.BCr\_Kraniopharyngeom

[Release: 13.01.2013]

Program no. / Name	Time
31.34 ATP production cerebellum	5 min.
31.35 ATP production cerebrum	5 min.
64.20 Pituitary gland complete	5 min.
79.75 C-75	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.67 79.76: C-76 Thyroid adenoma

## Definition

Thyroid tumours are benign in 99 percent of all cases. Benign thyroid tumours degenerate on very rare occasions. When it does happen, it is usually an autonomous adenoma. In this case cells proliferate and form a node. The cells in this node have errors so that the hormone production is no longer controlled by the brain and the pituitary gland. As a consequence the hormones will then be produced according to a random principle and not according to the body's needs.

## Prevalence (frequency)

In iodine-deficient areas multiple nodes develop in up to 50 percent of the population. A Germany-nationwide study of 100.000 healthy persons between the ages of 18 and 65 years showed that nearly 30 percent suffered from nodes. In general, it affects women seven times more frequently than men.

## Age

Thyroid adenoma can occur at any age. However, it mainly affects people between 30 and 45 years.

## **Diagnostic options**

After reviewing the medical history and carrying out the physical examination of the patient, the doctor will perform an ultrasound exam (sonography) of the entire thyroid gland. Another important exam is the thyroid scintigraphy. Before the actual exam procedure the patient receives a technetium injection, a slightly radioactive substance, in the vein. This will enable the doctor to distinguish between autonomous thyroid adenomas and thyroid carcinomas. To confirm the diagnose a thyroid puncture (fine needle puncture) can be carried out. The doctor introduces a fine needle in the suspicious node and removes a few cells for histological examination under the microscope.

## Genetic predisposition

Thyroid tumours are also based on genetic predisposition. It affects female patients more frequently and the familial disposition also contributes to the risk factor, although this will only promote the development. Additional genetic factors are necessary to give rise to an adenoma.

## Risk factor: iodine deficiency

The risk to contract thyroid adenoma increases in areas with iodine deficiency. Often a deficient thyroid tissue develops as a result of an iodine-deficiency struma, which has been existing and growing for years. This is an enlargement of the thyroid gland due to iodine deficiency.

#### Risk factor: Radiation

Another risk group is formed by people who underwent x-ray treatment in the neck area as children or adolescents. Also persons whose thyroid glands were burdened by strong radioactive iodine radiation are at a higher risk.

## Ethnic origin

It is known that both thyroid adenomas and thyroid carcinomas are more frequent in areas with high iodine deficiency.

#### Prevention

To prevent thyroid adenoma it is important to understand the causes of adenoma. Make sure that you get sufficient iodine in your diet. Germany is a country with iodine deficiency. This means that the local food does not contain sufficient iodine to fulfil daily requirements. Regular fish consumption helps with the prevention as iodine content is high in fish. Relevant companies as well as health care institutions follow special guidelines to protect people from unnecessary radiation exposure.

## Sources

 Thyroid cancer (thyroid carcinoma). Health portal Onmeda.

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URL: http://www.eesom.com/go/YAYR2V9E7WZ-FUPAVRPSELMPASU8KOJAB
[Release: 03.09.2008]

Draggam no / Nama	T: a
Program no. / Name	Time
04.30 Radiation, protection	5 min.
07.26 lodine	5 min.
31.32 ATP production parathyroid gland	5 min.
31.33 ATP production thyroid gland	5 min.
64.30 Thyroid gland	5 min.
64.35 Parathyroid gland	5 min.
79.76 C-76	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.68 79.77: C-77 Thyroid carcinoma

## Definition

Thyroid carcinoma is a rare, malignant tumor which originates from the cells of the thyroid. Depending on the type of cells which gave rise to the carcinoma, we distinguish between various types of thyroid carcinomas:

- Follicular carcinoma
- Papillary carcinoma
- Medullary carcinoma (also called C-cell-carcinoma)
- Anaplastic carcinoma

The thyroid gland produces important hormones. The gland cells produce and store the thyroid hormones thyroxine (T4) and triiodothyronine (T3) and pass them on to the bloodstream. Together with many other messenger substances these hormones control the energy balance and influence different bodily functions like, for example, the heart rate.

## Prevalence (frequency)

About 6,100 people are diagnosed with thyroid carcinoma in Germany each year. This means that thyroid carcinoma is one of the rare tumour diseases. Women contract this disease much more frequently than men.

#### Age

Thyroid carcinoma can occur at any age, however, the frequency peak shows at 52 years for women and 56 years for men.

## **Diagnostic options**

Upon suspicion of thyroid carcinoma the following examinations will be initiated:

- Physical examination
- Laboratory tests
- Ultrasound of the neck (sonography)
- Fine needle biopsy

To find out if the tumour has spread, the following diagnostic tests can be carried out:

Thyroid scintigraphy

- x-ray of the chest organs
- Computer tomography (CT) and magnetic resonance tomography (MRT)
- Endoscopy of the larynx, the trachae and the oesophagus

## Genetic predisposition

The predisposition to contract thyroid carcinoma could be hereditary. Especially in the case of medullary carcinoma of the thyroid in some families it occurs more often due to the MEN syndrome II (MEN = multiple endocrine neoplasia).

## Risk factor: iodine deficiency

The risk to contract thyroid carcinoma increases in areas with iodine deficiency. Often a deficient thyroid tissue develops as a result of an iodine-deficiency struma, which has been existing and growing for years. This is an enlargement of the thyroid gland due to iodine deficiency.

## Risk factor: Radiation

Another risk group is formed by people who underwent x-ray treatment in the neck area as children or adolescents. Also persons whose thyroid glands were burdened by strong radioactive iodine radiation are at a higher risk.

## Ethnic origin

It is known that thyroid carcinomas are more frequent in areas with high iodine deficiency.

#### Prevention

The best way to prevent thyroid carcinoma is to avoid the causes for its development. Make sure that you get sufficient iodine in your diet. Germany is a country with iodine deficiency. This means that the local food does not contain sufficient iodine to fulfil daily requirements. Regular fish consumption helps with the prevention as iodine content is high in fish. Relevant companies as well as health care institutions follow special guidelines to protect people from unnecessary radiation exposure.

## Sources

- Thyroid cancer (thyroid carcinoma). Health portal Onmeda.
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[Release: 12.11.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
07.26 lodine	5 min.
31.32 ATP production parathyroid gland	5 min.
31.33 ATP production thyroid gland	5 min.
64.30 Thyroid gland	5 min.
64.35 Parathyroid gland	5 min.
79.77 C-77	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.69 79.79: C-79 Endometrial carcinoma

## Definition

The endometrial carcinoma (Latin endometrium = uterine lining) is a malignant tumor of the womb which usually originates from the cells of the endometrium.

We distinguish between two types of endometrial carcinoma:

- Type I carcinoma: oestrogen dependent carcinoma
- Type II carcinoma: oestrogen independent carcinoma

## Prevalence (frequency)

Globally around 140,000 women are diagnosed with endometrial carcinoma each year. In Germany there are 11,000 new diagnoses each year. This means that endometrial carcinoma is among the four most common carcinoma diseases in women.

## Age

The risk to contract endometrial carcinoma increases with age. The majority of women contract the disease after the menopause. The average age of disease onset is 69 years.

## **Diagnostic options**

An early diagnosis can be made by routine tests, smear tests or by palpation of the mouth of the uterus. On suspicion of endometrial carcinoma the following examinations can be performed to confirm the diagnosis:

- Ultrasound exam
- Curettage: the inside of the uterus is scraped to provide a tissue sample to test in the laboratory.
- Hysteroscopy: the doctor inserts a fibre-optic telescope into the uterus to examine the uterus lining.
- Computer tomography (CT) and magnetic resonance tomography (MRT): to determine if the cancer has spread to other parts of the body and if so, where the metastases are located.

## Genetic predisposition

Hereditary factors can play a role, if the patient is affected by a HNPCC syndrome (hereditary nonpolyposis-colon-cancer-Syndrom or Lynch-Syndrom). The chance to pass this syndrome on to the next generation stands at 50 percent. In this case one or several relatives in the first degree also contracted the disease.

## Risk factor: Oestrogens

The female sex hormone oestrogen is considered a relevant impact factor. The risk increases according the concentration of oestrogens and the duration of their presence in the body. This can be decisive if the onset of puberty is very early or if menopause is very late. Women who take preparations that include only oestrogen over a prolonged period of time are also exposed to a higher risk of contracting endometrial carcinoma.

#### Other risk factors

- Metabolic syndrome: This includes visceral obesity (adipositas), lipid metabolism disorder (high cholesterol), high blood pressure (hypertension) and a sugar metabolism disorder (insulin resistance, later on diabetes mellitus)
- PCO-syndrome (so-called polycystic ovary syndrome)
- Childlessness (so-called nullipara)
- Breast cancer
- Tamoxifen therapy
- Radiation exposure of the pelvis and the abdominal cavity

## Ethnic origin

There are regional differences in the incidence of this disease. North America and Western Europe are global leaders.

## Prevention

Although regular gynaecological check-ups do not prevent endometrial carcinoma, its early diagnosis

and a timely operation offer very good prognosis. Also, avoid the above mentioned risk factors and make sure that you lead a healthy life. This includes eating a healthy diet and taking regular physical exercise. To reduce the general disease risk, it is recommended to renounce tobacco and alcohol.

## Sources

• Uterine cancer (endometrial carcinoma). Health portal Onmeda.

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Cancer of the uterus, endometrial carcinoma.
 Online-Information of the German Cancer Society
 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_gebaermutterkoerperkrebs\_definition,107771.html

[Release: 21.09.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
31.20 ATP production uterus	5 min.
31.21 ATP production uterine cervix	5 min.
39.60 High blood pressure (hypertension)	5 min.
51.30 Fat metabolism disorder	5 min.
51.40 Diabetes mellitus	5 min.
64.81 Oestrogens	5 min.
66.33 Uterus	5 min.
79.79 C-79	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.70 79.80: C-80 Endometrial cancer

## Definition

Malignant uterine tumours are the most frequent carcinoma of the female genitals. Uterine cancer describes malignant uterine tumours which almost always originate from uterine lining (endometrium). Thus uterine carcinoma and endometrial carcinoma are closely linked. For this reason a uterine tumor is also referred to as endometrial carcinoma.

## Prevalence (frequency)

Data of the Robert Koch Institute show that 11.280 women are diagnosed with uterine carcinoma per year. This is the equivalent of 27 women per 100.000 inhabitants. Uterine carcinoma is among the four most common cancer diseases affecting women.

## Age

The majority of women contract the disease after the menopause. The average age of disease onset is 69 years.

## **Diagnostic options**

A first diagnosis can be made by routine tests, smear tests (Pap test, cytology) or by palpation of the mouth of the uterus. On suspicion of uterine carcinoma the following diagnostic exams can be performed to confirm the diagnosis:

- Ultrasound exam (sonography)
- Curettage: the inside of the uterus is scraped to provide a tissue sample to test in the laboratory.
- Hysteroscopy: the doctor inserts a fibre-optic telescope into the uterus to examine the uterus lining.
- Computer tomography (CT) and magnetic resonance tomography (MRT): to determine if the cancer has spread to other parts of the body and if so, where the metastases are located.

## Genetic predisposition

A genetic predisposition for the development of uterine carcinoma can be passed on to the next generation. This includes the HNPCC-syndrome (hereditary-nonpolyposis-colon-cancer-syndro-

me or Lynch-syndrome). The chance to pass this syndrome on to the next generation stands at 50 percent. In this case one or several relatives in the first degree also contracted the disease.

## Risk factor: Oestrogens

The female sex hormone oestrogen plays an important role in the development of both endometrial cancer and uterine cancer. The risk increases according the concentration of oestrogens and the duration of their presence in the body. This can be decisive if the onset of puberty is very early or if menopause is very late. Women who take preparations that include only oestrogen over a prolonged period of time are also exposed to a higher risk of tumor in the uterine body.

## Other risk factors

- Metabolic syndrome: This includes visceral obesity (adipositas), lipid metabolism disorder (high cholesterol), high blood pressure (hypertension) and a sugar metabolism disorder (insulin resistance, later on diabetes mellitus)
- PCO-syndrome (so-called polycystic ovary syndrome)
- Childlessness (so-called nullipara)
- Breast cancer
- Tamoxifen therapy
- Radiation exposure of the pelvis and the abdominal cavity

## Ethnic origin

There are regional differences in the incidence of this disease. North America and Western Europe are global leaders.

#### Prevention

Regular gynaecological check-ups ensure timely detection of uterine cancer. When surgery is performed in the early stages of the disease, the chances of recovery are actually very good. Also, avoid the above mentioned risk factors and make sure that you lead a healthy life. This includes eating a

healthy diet and taking regular physical exercise. To reduce the general disease risk, it is recommended to renounce tobacco and alcohol.

#### Sources

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[Release: 21.09.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
31.20 ATP production uterus	5 min.
31.21 ATP production uterine cervix	5 min.
39.60 High blood pressure (hypertension)	5 min.
51.30 Fat metabolism disorder	5 min.
51.40 Diabetes mellitus	5 min.
64.81 Oestrogens	5 min.
66.33 Uterus	5 min.
79.80 C-80	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.71 79.81: C-81 Mammary carcinoma

## Definition

Mammary carcinoma is a malignant tumor of the mammary gland which affects predominantly women. The tumor behaves invasively and penetrates into the healthy tissue to destroy it. It can also form metastases in other areas and organs of the body. Metastases form mostly in the bones, the liver, the lungs and the brain. Mammary carcinomas can be subdivided into different forms. The most frequent forms include ductal carcinoma (lactiferous duct) and lobular carcinoma (lobes).

## Prevalence (frequency)

Mammary carcinoma accounts for 32.1 percent of most common cancer diseases among women. Each year 71,100 people are diagnosed with mammary carcinoma. Also men can contract breast carcinoma, but this only occurs very rarely. Out of 100 breast cancer patients, one is a man.

## Age

The risk to contract mammary cancer increases with age. Starting from the 40th year of life and especially after the 50th year, the risk increases progressively. The average age of disease onset lies a few years below the average of all carcinoma diseases: at approximately 64 years.

## Diagnostic options

Firstly, the doctor will review the medical history followed by a physical examination of the breasts. Later an ultrasound exam (sonography), and an x-ray of the breast (mammography) will be carried out. To reach a definitive diagnosis, the doctor will remove a small tissue sample using a fine needle (biopsy). The pathologist then examines the sample for cancer cells. In individual cases the doctor will employ a magnetic resonance tomography (MRT) to confirm the diagnosis. If metastases are present, further ultrasound and x-ray exams or a bone scintigraphy will be carried out.

## Genetic predisposition

About five to ten percent of all mammary carcinomas are hereditary. Triggers for the degeneration of cells can be alterations in the BRCA-1- and BRCA-2-genes, however, there are several different types of genes which might be responsible for some malignant breast tumours.

## Risk factor: Oestrogens, progesterone

Female hormones (oestrogens, progesterone) play a significant role in the development of the mammary carcinoma. These can promote the development and the growth of some tumour cells. This is also the case of synthetic hormones in the birth control pill or in preparations for hormone therapy during the menopause. The risk increases according to the concentration of oestrogens and the duration of their presence in the body. This can be decisive if the onset of puberty is very early or if menopause is very late.

## Other risk factors

- Smoking and alcohol
- Lasting high-fat diet
- Overweight

## Ethnic origin

Mammary carcinoma is the most frequent malignant disease in women in Western countries. In Northern and Western Europe 70 to 120 out of 100,000 inhabitants are diagnosed with mammary carcinoma each year. In Southern Europe, on the other hand, the incidence lies at 25 to 40 new cases out of 100,000 inhabitants, and therefore it is significantly lower than the incidence rate in Northern and Western Europe. The disease rate is lowest in Asia.

#### Prevention

You can prevent mammary carcinoma to a certain extent if you aim to avoid the risk factors. Hormone products to relieve the symptoms associated with the menopause should only be taken under strict medical control and only for a limited period. Early detection by regular self examination of the breast is also recommended.

## Sources

Breast cancer (mammary carcinoma).
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URL: http://www.onmeda.de/krankheiten/brust-

krebs.html

[Release: 18.09.2012]

 Breast cancer, mammary carcinoma. Online-Information of the German Cancer Society 'DKG' URL: http://www.krebsgesellschaft.de/pat\_ka\_

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[Release: 06.09.2012]

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[Release: 17.10.2005]

Program no. / Name	Time
31.36 ATP production mammary gland	5 min.
64.81 Oestrogens	5 min.
64.82 Progesterone / gestagens	5 min.
66.15 Mammary glands with mamillae	5 min.
66.16 Lactiferous glands	5 min.
66.17 Lactiferous tubules	5 min.
79.81 C-81	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.72 79.82: C-82 Ovarian fibroma

## Definition

The ovarian fibroma is a benign connective tissue-tumor of the ovaries which occurs predominantly in postmenopausal women. Often these tumours do not cause any symptoms and are detected by chance in the course of a gynaecological exam. The ovaries are the female gonads. The two oval ovaries are located in the small pelvis to the right and to the left of the womb.

## Prevalence (frequency)

The lifetime risk of contracting ovarian tumours lies at about 1,8 percent. However, only four percent of the solid ovarian tumours account for ovarian fibromas.

## Age

Ovarian fibromas can occur at any age. However, they occur most frequently in midlife. From 50 years onwards the frequency declines steadily.

## **Diagnostic options**

On suspicion of ovarian tumour the doctor palpates the abdominal wall and the female genital organs carefully to look for tumours. Further exams follow:

- Ultrasound (sonography) of the abdominal region and the vagina,
- Computer tomography (CT) and magnetic resonance tomography (MRT)
- Removal of tissue (biopsy) followed by a microscopical examination by a pathologist.

## Genetic predisposition

Meigs syndrome is a genetic defect of the diaphragm; the liquid gets from the abdominal cavity into the pleural cavity. In the process ovarian fibromas can form.

#### Risk factor: Ascites

The risk factors are largely unknown. It was observed that 40 percent of fibromas are accompanied by accumulation of fluid (ascites) in the abdominal cavity.

## Ethnic origin

There are no known links between ovarian fibroma and ethnic factors.

## A healthy lifestyle

Targeted prevention of a ovarian fibroma is not possible. However, you can reduce the general disease risk by maintaining a healthy life style. A healthy lifestyle consisting of a healthy and balanced diet with a lot of fruit and vegetables, regular physical exercise and avoidance of excessive alcohol and nicotine consumption reduce the tumour risk significantly.

#### Sources

Ovarian cancer (Ovarian carcinoma).
 Health portal Onmeda.

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[Release: 18.09.2012]

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Page 220.

Program no. / Name	Time
31.22 ATP production ovaries	5 min.
66.31 Ovaries	5 min.
79.82 C-82	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.73 79.83: C-83 Ovarian carcinoma

## Definition

The ovarian carcinoma is a malignant tumor of the ovaries. The ovaries are the female gonads. The two oval ovaries are located in the small pelvis on the right side and on the left side of the womb. Growing ovarian tumours often remain undetected at the beginning. In half of the cases both ovaries are affected by the tumor. If the tumor breaks through the outer ovarian capsule, it can spread metastases via the bloodstream and lymph to other parts of the body.

## Prevalence (frequency)

It's the second most frequent tumor of the female sex organs. According to data provided by the Robert Koch Institute, in the year 2008 7,790 women were diagnosed with ovarian cancer in the year 2008. The lifetime risk of contracting ovarian tumours lies at about 1,8 percent.

#### Age

Ovarian tumours occur predominantly in the second half of life, after the menopause. The average age of disease onset stands at 69 years. The incidence of the disease in women under 50 years is very low.

## **Diagnostic options**

On suspicion of ovarian tumor the doctor palpates the abdominal wall and the female genital organs carefully to look for tumours. Further exams follow:

- Ultrasound (sonography) of the abdominal region and the vagina,
- Computer tomography (CT) and magnetic resonance tomography (MRT)
- x-rays of the lungs
- Removal of tissue (biopsy) followed by a microscopical examination by a pathologist.

## Genetic predisposition

Certain gene changes (mutations) are known which increase the risk of the carrier to contract ovarian

carcinoma. The gene lies on the 17th chromosome and is called BRCA-1 (BReast CAncer) and is responsible for breast caster and ovarian cancer. About 50 percent of the women who carry this gene contract ovarian cancer in the course of their lives.

#### Risk factors

- Increased age
- Harmful environmental influences.
- High fat diet
- Overweight or obesity (adipositas)
- Hormone replacement therapy during or after the menopause
- Infertility
- No breastfeeding

## Ethnic origin

There are no known links between ovarian carcinoma and ethnic factors.

#### Prevention

If other family members have already suffered from breast- or ovarian cancer, it is recommended to carry out a genetic examination for BRCA-a and BRCA-2 gene. If the gene indeed is present, the affected person should make use of gynaecological check-ups every six months. Further protective factors are: previous pregnancies, long breastfeeding periods and the birth control pill.

#### Sources

• Ovarian cancer (Ovarian carcinoma).

Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/eierstockkrebs.html

[Release: 18.09.2012]

Ovarian cancer, ovarian carcinoma. Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_eierstockkrebs\_definition,107737.html

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[Release: 08.03.2012]

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[Release: 07.11.2012]

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krebs.html

[Release: 11.12.2012]

Program no. / Name	Time
08.00 Harmful substances (pollutants) complete	5 min.
31.22 ATP production ovaries	5 min.
65.10 Female hormonal balance basic regulation	5 min.
66.31 Ovaries	5 min.
79.83 C-83	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.74 79.84: C-84 Uterine myoma

## Definition

Uterine myoma (also called leiomyomas and fibromyomas) are benign tumours of the uterus which are made up of muscle- and connective tissue. Many women do not notice their myomas and experience no symptoms. However, for some women the symptoms are so severe that they need treatment. Myomas can take different sizes. They can be as small as a coin or exceed the size of a melon. Usually there is one big myoma or a cluster of numerous small myomas.

## Prevalence (frequency)

Uterine myomas are very common, but there are also very small and therefore cause no problems. In about 20 to 40 percent of all women over 35 years the myomas reach a relevant size.

#### Age

Growth of the myomas begins usually when a woman is in her 20s and 30s, but the first symptoms are only felt when she is about 40.

## **Diagnostic options**

The gynaecologist can detect myomas by gynaecological palpation. In this procedure the uterus is examined through the vagina, the rectum and via the abdominal wall. An ultrasound examination (vaginal sonography) or a magnetic resonance tomography (MRT) provide additional information about the size and the location of the myoma. In some cases the doctor decides to carry out a hysteroscopy or a laparoscopy. If the myoma presses on the ureter, an ultrasound or an x-ray of the kidneys will also sometimes be carried out.

## Genetic predisposition

Scientists have linked the uterine myoma with a genetic predisposition whereby enhanced sensitivity to hormone stimulation arises.

## Risk factor: sex hormone oestrogen

The exact causes for the development of uterine

myoma are not known, however, scientists have found out that female sex hormones (oestrogens) have a strong influence on the growth of myomas. Once the oestrogen production has decreased after the menopause, usually no more myomas are formed and pre-existing nodes tend to recede slowly.

#### Other risk factors

- Excess weight
- Infertility

## Ethnic origin

African women develop uterine myomas more frequently and earlier than women belonging to other ethnic groups. The cause for this could be linked to genetic factors.

#### Prevention

So far no information is available on targeted measures to prevent myomas, but you should aim to maintain a healthy lifestyle. Eating a healthy diet that includes a lot of fruit, vegetables and whole grain products and taking regular exercise form part of a healthy lifestyle. To reduce the general disease risk, it is recommended to renounce tobacco and alcohol.

#### Sources

Uterine myoma

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URL: http://www.netdoktor.de/Krankheiten/

Gebaermut termyom/ [Release: 06.03.2012]

Program no. / Name	Time
31.20 ATP production uterus	5 min.
31.21 ATP production uterine cervix	5 min.
64.81 Oestrogens	5 min.
66.33 Uterus	5 min.
79.84 C-84	10 min.
01.00 Vitalisation complete	5 min.

## 18.7.75 79.85: C-85 Uterine carcinoma

## Definition

Uterine carcinoma refers to a malignant tumor of the epithelial cells (carcinoma) of the uterus. It is a generic term for different forms of uterine tumour disease. Depending on the localisation of the tumor we distinguish between the following:

- Uterine cancer describes malignant uterine tumours which almost always originate from uterine lining (endometrium).
- The endometrial carcinoma (endometrial tumor) which is closely linked to the uterine cancer.
- Cervical carcinoma is a tumor of the womb neck.

## Prevalence (frequency)

Data of the Robert Koch Institute show that approximately 11.000 women in Germany are diagnosed with either uterine or endometrial cancer per year. On the other hand, nearly 5,000 women contract cervical carcinoma each year.

#### Age

The majority of the affected women contract uterine or endometrial cancer after the menopause. The average age of disease onset is 69 years. In the case of cervical cancer most women contract the disease aged between 40 and 49 years.

## Diagnostic options

A uterine tumor may first be detected in the course of routine check-ups with cell smear or by palpation. If the doctor suspects uterine carcinoma, further exams will follow:

- Ultrasound exam (sonography)
- Curettage of the uterus and laboratory analysis
- Cervical conization: the doctor removes through the vagina a conical tissue sample of the portio.
- Hysteroscopy: the doctor inserts a fibre-optic telescope into the uterus to examine the uterus lining.
- Computer tomography (CT) and magnetic resonance tomography (MRT)

- x-rays of the lungs and the pelvis
- Endoscopy of rectum and bladder

## Genetic predisposition

Genetic predisposition for uterine carcinoma include the HNPCC-syndrome (hereditary-nonpolyposis-colon-cancer-syndrome). Genetic influences can bring about shortcomings in the immune system so that the human papilloma virus cannot be sufficiently combated. This, in turn, can give rise to development of cervical carcinoma.

## Risk factors

- Sex hormone oestrogen
- Metabolic syndrome (due to visceral obesity (adipositas), lipid metabolism disorder (high cholesterol), high blood pressure (hypertension), insulin resistance (later on diabetes mellitus)).
- PCO-syndrome (so-called polycystic ovary syndrome)
- Childlessness (so-called nullipara)
- Breast cancer
- Tamoxifen therapy
- Radiation exposure of the pelvis and the abdominal cavity
- Human papilloma virus (HPV)
- Tobacco consumption
- Weakened immune system (due to HIV Infection, medication, organ transplant)
- · Lack of hygiene

## Ethnic origin

There are regional differences in the incidence of this disease. North America and Western Europe are global leaders.

## Prevention

Regular gynaecological exam can ensure that uterine cancer is detected and treated in its early stages. This is vital since timely surgery offers very good prospects of recovery. Also, avoid the above menti-

oned risk factors and make sure that you lead a healthy life. This includes eating a healthy diet and taking regular physical exercise.

#### Sources

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URL: http://www.onmeda.de/krankheiten/gebaer-

mutterkrebs.html [Release: 29.05.2012]

 Uterine body cancer, uterine cancer, endometrial cancer, endometrial carcinoma. Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_gebaermutterkoerperkrebs\_definition,107771.

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[Release: 21.09.2012]

Cervical cancer (cervical carcinoma).
 Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/gebaer-

mutterhalskrebs.html [Release: 29.11.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
22.18 Human papilloma virus (HPV)	5 min.
22.19 Papilloma virus	5 min.
31.20 ATP production uterus	5 min.
31.21 ATP production uterine cervix	5 min.
34.00 Immune system physiology complete	5 min.
39.60 High blood pressure (hypertension)	5 min.
51.30 Fat metabolism disorder	5 min.
51.40 Diabetes mellitus	5 min.
66.33 Uterus	5 min.
79.85 C-85	10 min.
01.00 Vitalisation complete	5 min.

## 18.7.76 79.86: C-86 Uterine sarcoma

#### Definition

In the case of the uterine sarcoma malignant cells develop in the musculature or the connective tissue of the mucous membrane of the uterus. In this process benign myomas degenerate into malignant sarcomas. We distinguish between leiomyosarcoma, malignant mixed mesodermal tumours and endometrial stromal sarcomas.

## Prevalence (frequency)

Uterine sarcoma accounts for 4.5 percent of all malignant tumours of the uterus. The incidence for uterine sarcoma is 0.67 per 100,000 women over the age of 20.

## Age

This disease occurs almost exclusively in women during and after the menopausal years.

## Diagnostic options

Normally a gynaecological palpation test will be carried out first of all. This will determine the size of the uterine and will detect any irregularities. In this process a nodular tumor might be found in the uterus. Much more reliable, on the other hand, is an ultrasound exam (sonography). The doctor could also perform a curettage: this method allows for stretching the cervix so that a tissue sample can be removed with a spoon-shaped instrument from the innermost wall of the uterus. The tissue will then be microscopically examined for degenerated cells. If a tumor is indeed found, further procedures will be employed to determine if the tumor has spread to other parts of the body and if it formed metastases. These include:

- Computer tomography (CT) and magnetic resonance tomography
- Or an endoscopy of the bladder and the intestine.

## Genetic predisposition

No links are known between this disease and genetic factors.

## Risk factor: radiation therapy

The risk factors for uterine sarcoma are largely unknown. One thing is clear, however: women who were treated with high-dose x-rays (external beam radiotherapy), have a higher risk to develop a uterine sarcoma.

## Risk factor: several uterine myomas

It is believed that having several uterine myomas can increase the risk to develop uterine sarcoma slightly.

## Ethnic origin

African women develop uterine sarcoma more frequently than white women. Possibly this is the result of a genetic disposition.

## Prevention

An effective preventive program is not in place. Usually they appear spontaneously, apparently for no reason. It is well-known, however, that radiation can promote the degeneration of the cells. Make sure that you only undergo x-ray treatment if this is strictly necessary. If you have irregular bleeding or suffer from strong abdominal pain, you should consult a doctor. Make sure you maintain a healthy lifestyle with a healthy diet and regular exercise. Refrain from alcohol- and tobacco consumption as both increase the general disease risk.

#### Sources

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URL: http://flexikon.doccheck.com/de/Uterussar-

kom

[Retrieval: 13.02.2013]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
31.20 ATP production uterus	5 min.
31.21 ATP production uterine cervix	5 min.
31.84 Myomata	5 min.
66.33 Uterus	5 min.
79.86 C-86	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.77 79.87: C-87 Vaginal carcinoma

#### Definition

Vaginal cancer is a malignant tumor of the vagina. Depending on the type of cells we distinguish between various types. About 95 percent of all malignant vaginal tumours are so-called squamous cell carcinomas. They develop in the top cell layer of the of the mucous membrane. The remaining tumours are so-called adenocarcinoma, malignant melanomas and – in childhood – the so-called rhabdomyosarcomas.

## Prevalence (frequency)

Malignant tumours of the vagina are rare. Only one to two percent of all cases are tumours of the female sex organs. From 100,000 women only one will develop vaginal carcinoma.

## Age

It usually affects older women. The average age of disease onset stands at 74 years. If a younger woman contracts vaginal cancer, it is often due to an HPV-Infection.

## **Diagnostic options**

Vaginal cancer vagina is usually detected by chance, in the course of a routine check-up. The doctor removes some cells from the mucous membrane of the vagina performing a smear test and the sample is examined under the microscope. If the cells show indeed conspicuous changes, a small tissue sample will be removed (biopsy) and examined to confirm the diagnosis. The colposcope is an important tool to reach a reliable diagnosis. The colposcope is a magnifying instrument which the doctor uses to inspect the mucous membrane and to remove tissue samples from the suspicious areas. If the suspicion of vaginal carcinoma is confirmed, procedures with imaging techniques will be employed to find out if the tumor has spread and if it has formed metastases. The following diagnostic procedures make sense:

- Ultrasound exam (sonography) of the vagina, pelvic organs and liver,
- Computed- (CT) and magnetic resonance imaging of the pelvis organs,
- Endoscopy of the urinary tract (urethrocystoscopy) and the rectum (retroscopy)

## Genetic predisposition

No links are known between the disease and genetic factors.

## Risk factor: Human papilloma virus (HPV)

Human papilloma virus (HPV) infections, especially with type 16, are associated with the development of vaginal carcinomas. These infections occur frequently, however, the therefrom resulting tumor occurs relatively rarely.

## Risk factor: Diethylstilbestrol (DES)

This refers to an artificial oestrogen preparation that was administered to pregnant women to avoid miscarriage. It was prohibited and withdrawn from the market in 1971. Many of the affected women's daughters would develop vaginal carcinoma before the age of 20.

## Ethnic origin

There is no known link between ethnic origin and vaginal carcinoma.

#### Vaccination

Targeted prevention is only possible by vaccination against the human papillomavirus of type 16 and 18, respectively. Further measures for prevention are not known. If you have any symptoms, however, you should not hesitate to consult a gynaecologist as soon as possible because a vaginal carcinoma that is detected and treated early promises very good chances of recovery. Make sure you maintain a healthy lifestyle with a healthy diet and regular exercise. Refrain from alcohol- and tobacco consumption as both increase the general disease risk.

Vaginal cancer (vaginal carcinoma).
 Health portal Onmeda.

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[Release: 11.07.2012]

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 URL: http://www.krebsgesellschaft.de/pat\_ka\_scheidenkrebs,107689.html

[Release: 12.03.2012]

Program no. / Name	Time
22.18 Human papilloma virus (HPV)	5 min.
22.19 Papilloma virus	5 min.
34.00 Immune system physiology complete	5 min.
66.36 Vagina	5 min.
79.87 C-87	10 min.
01.00 Vitalisation complete	5 min.

## 18.7.78 79.88: C-88 Vulva carcinoma

## Definition

The term vulva is derived from the Latin "vulva" (external female genitals). Vulvar cancer is a malignant tumor of the external female sex organs. It mostly affects the big vulvar lips and only rarely the small vulvar lips and the clitoris region. The vulvar cancer is a generic term for different types of tumour that all have in common that they originate from vulva cells. 90 percent of the malignant tumours account for the so-called squamous cell carcinoma. They develop from the top layer of the mucous membrane cells. The remaining ten percent are represented by malignant melanoma, basal cell carcinomas, adenocarcinomas, sarcomas and cancer of the Bartholin gland.

## Prevalence (frequency)

Vulvar carcinomas occur very rarely. Cervical cancer is 5 times more frequent. About two out of 100,000 women are diagnosed with the disease each year.

## Age

Usually older women are affected by vulvar carcinomas. The frequency peak lies at 70 years.

## **Diagnostic options**

The first signs of the disease are usually detected by the patients themselves or they are found by chance, in the course of a routine check-up. On suspicion of carcinoma the gynaecologist will use the so-called colposcope to examine the mucous membrane of the female genitals. The colposcope enables doctors to inspect the suspicious areas enlarged under a magnifier as well as to remove small tissue samples for examination under the microscope. If the suspicion is confirmed, further imaging techniques will be employed to find out whether there are metastases. The following procedures will be employed:

 Ultrasound exam (sonography) of the vagina, the inguinal lymph nodes, the pelvic organs and the liver,

- Computer tomography (CT) and magnetic resonance tomography (MRT) of the pelvis
- Endoscopy of the urinary tract (urethrocystoscopy) and the rectum (retroscopy)
- x-rays of the lungs

## Genetic predisposition

No links are known between the disease and genetic factors.

## Risk factor: Human papilloma virus (HPV)

Human papilloma virus (HPV)-infections represent the biggest risk factor for vulvar carcinoma. Particularly HPV types 16 and 18 respectively are often linked with the carcinoma. These viruses represent globally the most frequent pathogens of sexually transmitted viral illnesses.

## Other risk factors

- Herpesviruses (Herpes simplex Type 2)
- Chlamydia and Treponema pallidum (Syphilis pathogens)
- Leukoplakia
- Lichen sclerosus (chronic inflammatory skin disease)
- Immunosuppressed patients (HIV, medication)
- Smoking

## Ethnic origin

There is no known link between ethnic origin and vulvar carcinoma.

#### Vaccination

With a vaccination against the human papilloma virus (HPV) type 16 and type 18 the main risk factor can be avoided. If you notice any symptoms, however, you should consult a gynaecologist as soon as possible. The earlier the carcinoma is diagnosed, the better the chances of healing. Make sure you maintain a healthy lifestyle with a healthy diet and regular exercise. Refrain from alcohol- and tobacco consumption as both increase the general disease risk.

 Vulvar carcinoma (vulvar cancer). Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/vulva-

karzinom.html

[Release: 11.07.2012]

Vulvar cancer, vulvar carcinoma. Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_

vulvakrebs,107690.html [Release: 12.03.2012]

Program no. / Name	Time
21.69 Treponema pallidum	5 min.
21.82 Chlamydiaceae	5 min.
21.86 Chlamydia trachomatis	5 min.
22.15 Herpes simplex	5 min.
22.18 Human papilloma virus (HPV)	5 min.
22.19 Papilloma virus	5 min.
34.00 Immune system physiology complete	5 min.
63.60 Lichen (ruber planes)	5 min.
66.11 Labia majora	5 min.
66.12 Clitoris	5 min.
66.13 Labia minora	5 min.
66.14 Bartholin's glands	5 min.
66.36 Vagina	5 min.
79.88 C-88	10 min.
01.00 Vitalisation complete	5 min.

## 18.7.79 79.89: C-89 Cervical carcinoma

## Definition

Malignant tumours of the neck of the womb are also called cervical carcinomas. They develop from the squamous cells skin in the neck of the womb. They develop predominantly in the transitional area between the mucous membrane of the uterus and the squamous cells skin of the vagina.

## Prevalence (frequency)

It was once the most frequent carcinoma in women, but now it accounts for just 2.2 percent of all malignant tumours. Thanks to better early detection the cancer is now in the 12th place of the frequency list of malignant tumours in women. The most recent dates of the Robert Koch Institute and the GEKID of 2012 show that there are about 4,900 new diagnoses each year.

#### Age

The onset of the disease is typically between the 40th and the 59th year of life. A second frequency peak shows after the 60th year of life.

## **Diagnostic options**

The initial diagnosis is usually made in the course of a regular routine check-up with palpations and smear tests. If there is a suspicion of cervical carcinoma, the doctor will remove a small tissue sample with a colposcope which will be examined. Where appropriate, a cervical conization can also be carried out: a cone shaped tissue sample will be removed from the portio and be examined. If the suspicion is confirmed, further procedures will be initiated to evaluate if and how far the tumour has spread:

- Ultrasound exam (sonography)
- Curettage: scraping of the lining of the uterus
- X-rays of the lungs and the pelvis
- Computer tomography (CT) and magnetic resonance tomography (MRT)
- Endoscopy of rectum and bladder
- Blood analysis (HPV-Test)

## Genetic predisposition

Differences in the genetic material could be responsible for an insufficient functioning of the immune system, so that viruses are not sufficiently combated by the body's own defence system. However, this factor does not seem to play an important role.

## Risk factor: Human papilloma virus

Human papilloma virus (HPV) of type 16 and type 18 represents the biggest risk factor. They are transmitted, inter alia, through unprotected sex. However, only about three percent of HPV-infected women contract also cervical cancer.

#### Other risk factors

- So-called dysplasia is present (a precancerous condition)
- Frequent change of sexual partners and the related genital infections and diseases: a.o. HPV
- Chronic diseases: e. g. gonorrhoea or herpes genitalis
- Weakened immune system: for example, as a result of HIV or medication
- Lack of hygiene
- Smoking and passive smoking

## Ethnic origin

In comparison with other countries on a global scale, Spain shows the lowest disease rate (five women per 100,000) and Columbia the highest (48 women per 100,000). The incidence in Germany fluctuates between 15,1 in Saarland and 27,1 per 100,000 in the former GDR.

#### Prevention

You can prevent a cervical carcinoma if you protect yourself against the HP-virus by using condoms during sexual intercourse and if you get vaccinated against HPV. In November 2007 the vaccination for girls between 12 and 17 years was incorporated in the service catalogue of the statutory health insurances. Furthermore, an early diagnosis offers very good chances of recovery, so it is recommen-

ded to take advantage of regular gynaecological examinations. With a healthy diet, regular exercise and refraining from drinking and smoking, you can strengthen your immune system and promote general health.

#### Sources

• Cervical cancer (cervical carcinoma).

Health portal Onmeda.
URL: http://www.onmeda.de/krankheiten/gebaer-

mutterhalskrebs.html [Release: 29.11.2012]

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   URL: http://www.krebsgesellschaft.de/pat\_ka\_gebaermutterhalskrebs\_definition,107760.html
   [Release: 21.09.2012]
- Schneider A, Dürst M, Jochmus I, Gissmann L. Epidemiologie, Äthiologie und Prävention des Zervixkarzinom (Epidemiology, aetiology and prevention of the cervical carcinoma). Gynaecologist.

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Program no. / Name	Time
20.17 Neisseria gonorrhoeae	5 min.
22.18 Human papilloma virus (HPV)	5 min.
22.19 Papilloma virus	5 min.
31.20 ATP production uterus	5 min.
31.21 ATP production uterine cervix	5 min.
34.00 Immune system physiology complete	5 min.
66.33 Uterus	5 min.
66.36 Vagina	5 min.
79.89 C-89	10 min.
01.00 Vitalisation complete	5 min.

## 18.7.80 79.91: C-91 Testicular adenoma

#### Definition

Adenomas are benign growths that form from gland cells. A benign growth is a tumor which grows, but unlike the malignant tumor (carcinoma), does not destroy healthy tissue and does not form metastases. However, an adenoma can degenerate into a malignant tumour. It is then referred to as adenocarcinoma. The testicles form part of the male sex organs, they are formed in a pair of two. Normally only one of the two testicles is affected by adenoma.

## Prevalence (frequency)

Testicular adenoma are very rare, however, there are no precise data available.

## Age

Testicular adenoma can occur at any age. There is no detailed information on age available.

## Diagnostic options

Firstly, the medical history is reviewed, followed by a palpation of the testicles. In the course of the examination, the doctor will screen the scrotum by means of a so-called diaphanoscopy in order to detect nodes and hardenings. To confirm the suspicion of an adenoma or to rule out the possibility of a carcinoma, an ultrasound exam (sonography) can be carried out. The informative value of an ultrasound in the area of the testicles is very high. Normally an experienced doctor can detect immediately if it is an adenoma or a carcinoma. Whenever the result is not clear, the exam can be followed up by a tissue examination (biopsy). Furthermore, a blood analysis will provide information about the general condition of the patient and the functioning of the organs in the body.

## Genetic predisposition

There are no indications that genetic factors play any role in the development of testicular adenomas.

#### Risk factors

So far there is no information available about risk factors for the development of testicular adenomas. However, you need not worry as this is about a benign tumour with very good chances of recovery, if detected early.

## Ethnic origin

There is no known link between ethnic origin and testicular adenoma.

## Healthy lifestyle

Since the causes for the development of testicular adenoma are not fully clarified, it is not possible to recommend any targeted preventive measures. However, you can reduce the general risk to develop any type of tumours considerably, if you focus on living and maintaining a healthy lifestyle. If you follow these rules:

- eat a healthy diet with plenty of fruit, vegetables, whole grain products and low-fat foods,
- take regular physical exercise,
- maintain a strong psyche
- and refrain from consuming alcohol and tobacco,

you will strengthen your physical resistance considerably and conserve your good health for as long as possible.

#### Sources

• Testicular cancer. Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/hoden-krebs.html

[Release: 27.02.2012]

 Adenoma. Apotheken Umschau – Brockhaus Gesundheits-Lexikon (Health-Lexicon).

URL: http://www.apotheken-umschau.de/Krank-heiten/Adenom-79583.html

[Release: 07.12.2012]

- Benign and malignant tumour types. MedizInfo: Medicine and Health.
  - URL: http://www.medizinfo.de/krebs/allgemein/

tumorarten.shtml [Retrieval: 14.02.2013] D29 - Benign neoplasia in male genital organs.
 NetDoktor.de - Gesundheit und Medizin (Health and Medicine).

URL: http://www.netdoktor.de/Service/ICD-Diagnose/D29-Gutartige-Neubildung-

der-40286.html

[Retrieval: 14.02.2013]

Program no. / Name	Time
31.19 ATP production testicles	5 min.
64.85 Testicles complete	5 min.
79.91 C-91	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.81 79.92: C-92 Testicular carcinoma

## Definition

Testicular carcinoma is a malignant tumour disease which develops in 90 percent from the germ cells of the testicles. The semen cells (sperm) also develop from these cells. Since there are different types of germ cells in the testicles, we divide the tumours according to their origins in seminomatous and non-seminomatous tumours. Mixed forms of the two types also develop. Further, less frequent testicular tumours include:

- Tumours that arise from the supporting tissue of the testicle,
- Lymphomas of the testicle
- Metastases of other tumor types.

## Prevalence (frequency)

Testicular cancer accounts for 1.6 percent of all carcinoma and is considered a rare type of tumour. According to data provided by the Robert Koch Institute, about 4.000 men are diagnosed with a malignant testicular tumor each year.

#### Age

However, testicular cancer is relevant as it affects young men between 20 and 40 years in particular. For this age-group – accounting for 20 to 30 percent of all cancer cases – it represents one of the most common tumour diseases in men.

## Diagnostic options

Firstly, the medical history is reviewed, followed by a palpation of the testicles. In the course of the examination, the doctor will screen the scrotum by means of a so-called diaphanoscopy. Then an ultrasound exam (sonography) will be performed to visualize the structure of nodes. Furthermore, a blood analysis will offer relevant information on tumour markers in the form of proteins that point to a possible presence of tumours. If there is indeed suspicion of testicular cancer, the doctor will carry out surgery to expose and assess the tumour. If the suspicion is confirmed, the testicle needs to be removed surgically. Subsequently, further exams

will follow which will show if the lymph nodes are affected and if metastases have formed in other parts of the body. These include:

- X-rays of the lungs
- Computer tomography (CT) and magnetic resonance tomography (MRT)

## Genetic predisposition

There is evidence that testicular cancer can be influenced by genetic disposition. The risk is actually higher if one's brother contracted the disease than if one's father contracted testicular cancer. This indicates that there is likely to be X-chromosomal association.

## Risk factor: undescended testicle

Starting from the second month of embryonic development, the testes normally migrate from the abdominal cavity to the scrotal sacks. However, if this process is disrupted and the testicles remain in the wrong position, we call this undescended testicle. In this case men acquire a 1 to 30-fold risk of developing testicular cancer.

#### Other risk factors

- Sterility
- Underdeveloped testicles
- If one of the testicles has already been affected by tumor, there is an increased risk to develop cancer in the other testicle too.
- An increased oestrogen level of the mother during pregnancy

## Ethnic origin

There is no known link between ethnic origin and testicular cancer.

## Healthy lifestyle

There are no targeted measures to prevent testicular cancer. However, you can perform a self-examination and palpate your testicles cautiously to check for any changes. Early detection of tumours offers good chances of recovery. Furthermore, you can

reduce the general risk of developing any type of tumours considerably, if you make certain changes in your lifestyle habits and focus on living a healthy lifestyle. If you eat a healthy diet, take regular exercise and avoid cigarettes and alcohol, then this will strengthen your defences and conserve good health.

## Sources

Testicular cancer. Health portal Onmeda.
 URL: http://www.onmeda.de/krankheiten/hoden-krebs.html

[Release: 27.02.2012]

 Testicular cancer. Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_hodenkrebs\_definition,108242.html

[Release: 23.08.2012]

 Heidenreich A, Hofmann R. Testicular cancer. NetDoktor.de - Gesundheit und Medizin (Health and Medicine).

URL: http://www.netdoktor.de/Krankheiten/

Hodenkrebs/

[Release: 10.08.2012]

Program no. / Name	Time
31.19 ATP production testicles	5 min.
64.85 Testicles complete	5 min.
79.92 C-92	10 min.
01.00 Vitalisation complete	5 min.

## 18.7.82 79.93: C-93 Penis carcinoma

## Definition

95 percent of the penis tumours are carcinomas of the skin of the penis and its mucous membrane (so-called squamous cell carcinomas). At the tip of the penis is the glans which is covered by the foreskin. Dead mucous cells accumulate under the foreskin (the so-called smegma). This sebum can only be removed if the foreskin was previously pulled back. Most tumours develop in this area. The tumor can extend to the cavernous body of the penis, and even further to the abdominal wall. The penis carcinoma tends to spread via the lymph vessels, however, it can also reach other organs via the blood vessels and form metastases.

## Prevalence (frequency)

This is a relatively rare disease. About 600 men are diagnosed with penis carcinoma in Germany each year.

#### Age

Penis carcinomas affect mainly older men. Men at the age of around 60 years are exposed to the highest risk.

## **Diagnostic options**

It is usually the urologist who reaches the diagnosis. The specialist recognizes a penis carcinoma in the course of the physical examination. The diagnosis will be reached by removing a small piece of tissue sample and examining it under the microscope (so-called biopsy). If a carcinoma is detected, further diagnostic procedures will be employed to determine if the tumor has spread to other parts of the body and if and where metastases are present in lymph nodes and other organs. The following procedures will be employed:

- Ultrasound exam
- Computer tomography (CT) and magnetic resonance tomography (MRT)
- X-rays of the lungs
- Skeleton scintigraphy

## Genetic predisposition

Genetic factors that promote development of penis carcinomas are not known of.

#### Risk factor: Phimose

Scientists have observed that men who were circumcised as new-born babies are less likely to develop penile cancer. For this reason the experts assume that there is a link between accumulation of smegma and the development of penis tumour. This assumption is confirmed by the fact that men who are suffering from phimosis contract penis carcinomas more frequently. Men suffering from phimosis have greater difficulties to pull back the foreskin and to clean the penis. This means that tumour development is also related to poor hygiene.

## Other risk factors

- Human papilloma-virus (HPV) infection, usually transmitted by unprotected sexual intercourse.
- Changes in the mucous membrane: certain alterations like leukoplakia are considered pre-cancerous conditions.

## Ethnic origin

In those countries and cultural circles where new-born baby boys are circumcised the incidence for penis carcinoma is significantly lower.

## Prevention through cleanliness

You can prevent penis carcinoma by ensuring that your foreskin is kept clean and by removing any smegma accumulations. Men suffering from phimosis often experience difficulties when trying to clean the foreskin. In this case it is recommended to have the foreskin surgically removed by an urologist or a surgeon. Please do not hesitate to consult a doctor whenever you notice any changes in the genital area because an early diagnosis offers very good recovery prospects.

 Penile cancer (penis carcinoma). Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/penis-

krebs.html

[Release: 11.07.2012]

 Penile cancer. Online-Information of the German Cancer Society 'DKG'

URL: http://www.onmeda.de/krankheiten/penis-

krebs.html

[Release: 12.03.2012]

Program no. / Name	Time
68.12 Penis	5 min.
79.93 C-93	10 min
01.00 Vitalisation complete	5 min.

## 18.7.83 79.94: C-94 Prostate carcinoma

#### Definition

The prostate gland (Lat. prostata) forms part of the male reproductive organs and is about the size of a chestnut. It is located below the urinary bladder and encloses the initial portion of the urethra. A malignant tumor of the prostate gland is referred to as prostate cancer. Usually the tumour affects the outer region of the prostate gland. The carcinoma has a tendency to extend beyond the limits of its own capsule via the nerve fibres in the lymphatic ducts and nodes and as well as to the bones. Metastases can form in the bones.

## Prevalence (frequency)

Prostatic carcinoma accounts for a quarter of all carcinomas in men and it also represents the most frequent cancer in men. 63,440 men are newly diagnosed with prostatic cancer in Germany each year.

#### Age

The average age of disease onset stands at 70 years. Onset of prostatic cancer before the age of 50 years is very rare.

## **Diagnostic options**

After review of the medical history and palpation (digital rectal examination) the doctor will proceed to carry out a blood analysis (so-called PSA test) to establish the prostate specific antigen (PSA) values in the blood. If the value is higher than normal, a tissue sample will be taken (biopsy) and examined. Another method is the transrectal ultrasound exam which is only used in addition to other methods. Once the diagnosis is confirmed and a prostate carcinoma is present, further exams will be initiated to establish if the cancer has spread and if there are any metastases in other parts of the body. These include: Computer tomography (CT) and magnetic resonance tomography, skeleton scintigraphy and x-ray exams.

## Genetic predisposition

Prostate carcinoma is partially attributable to genetic disposition. If father or brother contracted the disease, the risk to develop it as well is twice as high (the risk amounts to 13 percent). If even more relatives are affected by it (grandfather, uncle), the risk could increase to up to 50 percent.

## Risk factor: Hormones

Hormones play an important role in the development of prostate cancer although their role is not entirely clear. There is evidence, however, that prostate carcinoma could not develop without the presence of the male sex hormone testosterone in the body. It is possible that other hormones also represent a risk factor.

## Risk factor: Vitamin D insufficiency.

Studies show that the vitamin D level also plays an important role in the development of carcinomas. Patients with a low vitamin D level are exposed to a significantly higher risk of developing the disease than patients with a high vitamin D level. Other research has shown that people who live in very sunny places are much less likely to develop prostate cancer.

## Ethnic origin

Prostate carcinomas are more frequent among men of African descend than among white men. In Europe and Northern America the incidence is relatively high, whereas it is relatively low in East Asia (Japan and China). Differences in diet and lifestyle seem to play a role.

## A healthy lifestyle

You can help prevent prostate cancer by considering a few behavioural measures. Regular physical exercise, normal body weight and a healthy diet (a lot of fruit and vegetables, little animal fats) are likely to show a positive effect and can help prevent prostate cancer.

- Prostate cancer, prostate carcinoma. Online-Information of the German Cancer Society 'DKG' URL: http://www.krebsgesellschaft.de/pat\_ka\_ prostatakrebs\_uebersicht,108268.html [Release: 06.09.2012]
- Prostate cancer (prostate carcinoma). Health portal Onmeda. URL: http://www.onmeda.de/krankheiten/prosta-

[Release: 21.09.2012]

takrebs.html

- Spitz J, Grant WB Krebszellen mögen keine Sonne - Vitamin D - der Schutzschild gegen Krebs, Diabetes und Herzerkrankungen (Cancer cells do not like the sun - Vitamin D - protective shield against cancer, diabetes and heart disease). Mankau Verlag GmbH. 2011. 2nd edition. Page 59-60.
- Staehler I. Prostate cancer (prostate carcinoma). NetDoktor.de

URL: http://www.netdoktor.de/Krankheiten/

Prostatakrebs/

[Release: 29.08.2012]

Program no. / Name	Time
07.32 Vitamin D	5 min.
31.18 ATP production prostate gland	5 min.
64.86 Testosterone	5 min.
65.20 Male hormonal balance basic regulation	5 min.
68.26 Prostate gland	5 min.
79.94 C-94	10 min.
01.00 Vitalisation complete	5 min.

# 18.7.84 79.96: C-96 CUP syndrome

## Definition

CUP syndrome: the abbreviation stands for "Cancer of Unknown Primary" (metastases are present, but we do not know where the primary tumour is). This means that metastases of a malignant tumor can be found, but it is unknown where the primary tumor started to develop. The spreading evolves via the lymphatic vessels which means that lymph nodes metastases will form – or it takes place via the bloodstream which will give rise to formation of remote metastases (e. q. liver, lungs).

## Prevalence (frequency)

The CUP-syndrome accounts for two to four percent of all carcinoma diseases. In Germany the disease incidence is approximately 8.4 out of 100,000 inhabitants (according to data of 2010) per year. Men contract this disease slightly more frequently than women.

#### Age

CUP-syndrome has its peak age of onset between 53 and 62 years.

#### Diagnostic options

The principal aim at the start is to find out if and how the disease can be cured. This is much more important than trying to establish the origin of the primary tumour. Several examinations are carried out, for example the following: a physical examination, blood analysis (blood values, tumour marker etc), saliva test, urine analysis, stool test, histological analysis of a tissue sample of the metastasis, x-rays, ultrasound, computer tomography (CT), magnetic resonance tomography (MRT), endoscopic exams, skeleton scintigraphy and positron emissions tomography (PET) and genetic tests, if appropriate.

## Genetic predisposition

We cannot comment on possible genetic factors as the CUP syndrome can originate from different types of carcinoma.

#### Risk factors

The CUP syndrome arises from different carcinoma diseases, all of which have their own origin and cause. For this reason it is not possible to list risk factors in this case.

In any case, there are different possible reasons why the primary tumour cannot be found immediately:

- The tumor is too small to detect and identify it by means of the common diagnostic procedures.
   In fact, the stem cells of primary tumours grow very slowly while the daughter cells reach other organs in the form of metastases and grow very quickly there.
- The tumor does not exist any longer at the time of diagnosis. This can happen as a result of spontaneous remission. This means that the primary tumour decomposed after having released metastases in other areas. It is also possible that the primary tumour was removed unnoticed, for example, because it was thought that the tumour was really a benign skin growth or a intestinal polyp.

## Ethnic origin

Data on ethnic origin is not available since CUP syndrome can refer to a variety of different cancers.

## A healthy lifestyle

There are no specific, targeted measures to prevent CUP syndrome. Generally speaking, it is recommendable to make sure that you live a healthy lifestyle to reduce the general disease risk as much as possible. This includes a balanced diet with plenty of fruit and vegetables and little animal fats, regular physical exercise and the avoidance of toxins like tobacco- and alcohol consumption.

• CUP syndrome Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_

cup\_syndrom,108291.html

[Release: 11.12.2012]

• CUP syndrome Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/cup\_

syndrom.html

[Release: 12.10.2012]

• CUP syndrome German Cancer Research Centre
- The Cancer Information Service.

URL: http://www.krebsinformationsdienst.de/tumorarten/metastasen/cup-syndrom.php

[Release: 01.07.2008]

Program no. / Name	Time
79.96 C-96	10 min.
01.00 Vitalisation complete	5 min.

## 18.7.85 79.97: C-97 Carcinoid

## Definition

A carcinoid (it means literally "like cancer") is per definition a new formation of tissue that develops from neuroendocrine cells. Carcinoids belong to the group of GEP tumours. GEP refers to the gastroenteropancreatic tumours as they develop most frequently in the stomach (gastro), the intestine (entero) and the pancreas. GEP tumours are classified in different sub-groups, whereby the carcinoid belongs to the group of the hormone producing tumours of the gastrointestinal tract. Carcinoid accounts for nearly 50 percent of all GEP tumours and is therefore the most common GEP tumour. It can form at different locations of the gastrointestinal tract, but preferentially it forms in different sections of the small intestine. Further preferential locations for development are both stomach and the large intestine.

## Prevalence (frequency)

Carcinoids are very rare. Approximately 0,5 to 1 new cases per 100,000 inhabitants occur each year. 400 to 800 people are diagnosed with neuroendocrine carcinoma in Germany each year. Men and women are affected to the same extent.

## Age

Carcinoids occur predominantly at advanced ages.

## Diagnostic options

The doctor might suspect carcinoids after reviewing blood- and urine test results if the results show that high concentrations of hormones and messenger substances or their respective degradation products were detected. The explanation for this is that active carcinoids produce these substances in excess. On suspicion of carcinoids the doctor will employ imaging techniques to localize the tumor. These include: ultrasound (sonography), endoscopy, computer tomography (CT) and magnetic resonance tomography (MRT).

## Genetic predisposition

There is no information available on genetic disposition for carcinoids.

## Risk factors not known

So far the causes for development of carcinoids remain largely unknown. One of the reasons for this is the rare occurrence of this type of tumor as it makes it more difficult to investigate the causes and the background of the tumor.

## Ethnic origin

Data on possible links between ethnic origin and carcinoid are not available.

## Preventing by living a healthy life

There are no measures known for a targeted prevention of carcinoids. Neither are early detection measures available. Generally speaking, it is recommendable to make sure that you live a healthy lifestyle to reduce the general disease risk as much as possible. This includes a balanced diet with plenty of fruit and vegetables and little animal fats, regular physical exercise and the avoidance of toxins like tobacco- and alcohol consumption.

#### Sources

Carcinoids, neuroendocrine tumor. Online-Information of the German Cancer Society 'DKG'

URL: http://www.krebsgesellschaft.de/pat\_ka\_karzinoide, 108292.html

karzinoide, 108292.htm [Release: 12.03.2012]

Carcinoid (neuroendocrine tumor).
 Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/karzinoid.html

[Release: 20.12.2012]

 GEP-tumours. Bundesorganisation Selbsthilfe NeuroEndokrine Tumoren e.V. (Federal organisation for self-help neuroendocrine tumours) URL: http://www.net-shg.de/net\_karzinoide.

html#karzinoid\_syndrom [Retrieval: 15.02.2013]

• Scherübl H. Neuroendocrine tumours (NET) /

carcinoids.

URL: http://www.karzinoidtumore.de/

[Retrieval: 15.02.2013]

Program no. / Name	Time
79.97 C-97	10 min.
01.00 Vitalisation complete	5 min.

## 18.7.86 79.98: C-98 Neuro-endocrine tumour

## Definition

Neuroendocrine tumour (abbreviated NET) refers to several benign and malignant diseases with very diverse symptoms. These tumours have one thing in common: they all originate from neuroendocrine tissue. The tumours develop from hormone producing (endocrine) cells which are present everywhere in the gastrointestinal system and which are responsible for the production of certain substances that regulate the digestion processes. With respect to their origins these cells belong to the nervous system and with respect to their elimination function they belong to the inner glands. For this reason they are called "neuroendocrine cells". Neuroendocrine tumours are also referred to as GEP tumours as they develop most frequently in the stomach (gastro), the intestine (entero) and the pancreas. GEP tumours are classified in different sub-groups, whereby the carcinoid belongs to the group GEP tumours (see C-97, Carcinoid).

## Prevalence (frequency)

Neuroendocrine tumors are rare. Every year between five and ten new tumours are registered per 100,000 inhabitants. In Germany there are 400 to 800 new cases per year. Men and women are affected to the same extent.

#### Aae

Neuroendocrine tumours occur mainly at an advanced age.

## **Diagnostic options**

Active tumours can be detected by means of bloodand urine tests as they produce high concentrations of hormones and messenger substances. On suspicion of a carcinoid the doctor will employ imaging techniques to localize the tumor. These include: ultrasound (sonography), endoscopy, computer tomography (CT) and magnetic resonance tomography (MRT). If the tumor belongs to the subgroup gastrinoma which produces the hormone gastrin, the diagnostic method somatostatin receptor scintigraphy also makes sense. On the surface of the cells of gastronima there are so-called binding sites for the messenger substances somatostatin. This is how the doctor can determine where the tumor has spread. Finally any diagnosis with neuroendocrine tumor needs to be confirmed by means of the removal of sample tissue and its histological examination (so-called biopsy).

## Genetic predisposition

It is not known if there is a link between genetic factors and neuroendocrine tumours.

#### Risk factors not known

The causes and risk factors remain largely unresearched as the rare occurrence of neuroendocrine tumours makes it difficult to investigate the tumor and its background.

## Ethnic origin

Data on possible links between ethnic origin and neuroendocrine tumours are not available.

## Healthy lifestyle

The causes and risk factors are largely unresearched. So far we do not know which targeted measures could be taken to prevent this type of tumor. Neither are early detection measures available. Generally speaking it is recommendable to make sure that you live a healthy lifestyle to reduce the general disease risk as much as possible. This includes a balanced diet with plenty of fruit and vegetables and little animal fats, regular physical exercise and the avoidance of toxins like tobacco- and alcohol consumption.

## Sources

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Carcinoid (neuroendocrine tumor).
 Health portal Onmeda.

URL: http://www.onmeda.de/krankheiten/karzi-

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Program no. / Name	Time
79.98 C-98	10 min.
01.00 Vitalisation complete	5 min.

## 18.7.87 79.99: C-99 Soft-tissue sarcoma

## Definition

The soft-tissue sarcoma is a malignant tumor of the soft tissue. Soft tissues include fatty tissue, muscle tissue, connective tissue as well as blood vessels and nerves. Altogether these tissues account for 50 percent of the total body mass. The term sarcoma (Greek. sarx, sarkos = meet) differentiates these tumours from carcinomas which originate from gland tissue, as is the case, for example, of the carcinoma of the lung or the carcinoma of the bowel. The term malignant means that the tumours have the capacity to form metastases. Metastases are new growths which appear in other organs.

## Prevalence (frequency)

Soft-tissue sarcomas occur very rarely. Only about two out of 100,0000 inhabitants contract the disease each year. Thus sarcomas only account for one percent of all malignant tumours in adulthood.

#### Age

This disease can occur at all ages. The frequency peak shows in childhood and adolescence and there is another accumulation between 45 and 55 years of age.

## **Diagnostic options**

The diagnose begins with the review of the medical history and the physical examination of the patient. Subsequently, an ultrasound (sonography) of the abdominal cavity will be carried out. If the suspicion is confirmed, a magnetic resonance tomography (MRT) will also be performed to determine possible spreading of the tumor. To rule out metastases in the bone structure, x-rays will be taken of adjacent bones. Further imaging techniques can be employed to look for distant metastases in the body: x-rays of the chest, computer tomography (CT) of the chest and skeleton scintigraphy. Finally, a biopsy has to be carried out to perform a histological analysis of the tumour cells (so-called biopsy).

## Genetic predisposition

Soft tissue sarcomas can occur in connection with certain genetic defects, however, these symptoms occur very rarely and form a minute proportion of all sarcomas. For example, genetic neurofibromatosis (Morbus Recklinghausen) increases the risk of developing a malignant tumor of the nerve sheath tissue.

## Risk factor: Industrial toxins.

The causes for soft tissue sarcomas remain largely unresolved, however, the exposure to certain industrial toxins is considered to be a possible risk factor. These include toxins like pvc, dioxin and asbestos.

## Risk factor: Radiation therapy

Furthermore, soft tissue sarcomas affect those people more often who had to undergo radiation therapy for treatment of another cancer as children. The sarcomas occur in the area that was treated in the past.

#### Ethnic origin

Data on possible links between ethnic origin and soft tissue sarcoma are not available.

## Prevention through mindfulness

There are no targeted measures to prevent a soft tissue sarcoma. Try to avoid unnecessary radiation exposure and direct contact with carcinogenic substances like dioxin, asbestos or pvc. Generally speaking, it is recommended to lead a healthy lifestyle. This includes a balanced diet with plenty of fruit and vegetables and little animal fats, regular physical exercise and the avoidance of toxins like tobacco- and alcohol consumption.

Information on soft tissue sarcomas for patients.
 University Hospital Heidelberg.

URL: http://www.klinikum.uni-heidelberg.de/fileadmin/medizinische\_klinik/Abteilung\_5/docs/patinfo/PatinfoWeichteilsarkom.pdf

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[Release: 12.03.2012]

Program no. / Name	Time
04.30 Radiation, protection	5 min.
08.00 Harmful substances (pollutants) complete	5 min.
79.99 C-99	10 min.
01.00 Vitalisation complete	5 min.



# **Application form**

Hereby I apply to be	accepted	
Titel		
Name, first name		
Occupation		
Street		
Postcode, place		
Date of birth		
Telephone		
Mobile telephone		
Telefax		
E-Mail		
	ur Förderung der Schwingungsmedizin debited against my account.	e. v.
IBAN		
BIC		
Name of the bank		
Membership fee: The membership fee currently stands at euro 52, per year, the membership fee for passive membership is currently euro 21, per year. Spouses and unmarried partners can become a member for a reduced membership fee of 30,00 euro/year.		Plese send to: Vereinigung zur Förderung der Schwingungsmedizin e.V. Schonefeldstr. 12 I 57368 Lennestadt (Germany) or per telefax: 07 00 / 37 24 94 64 kontakt@vereinigung-schwingungsmedizin.de
Date		Signature :