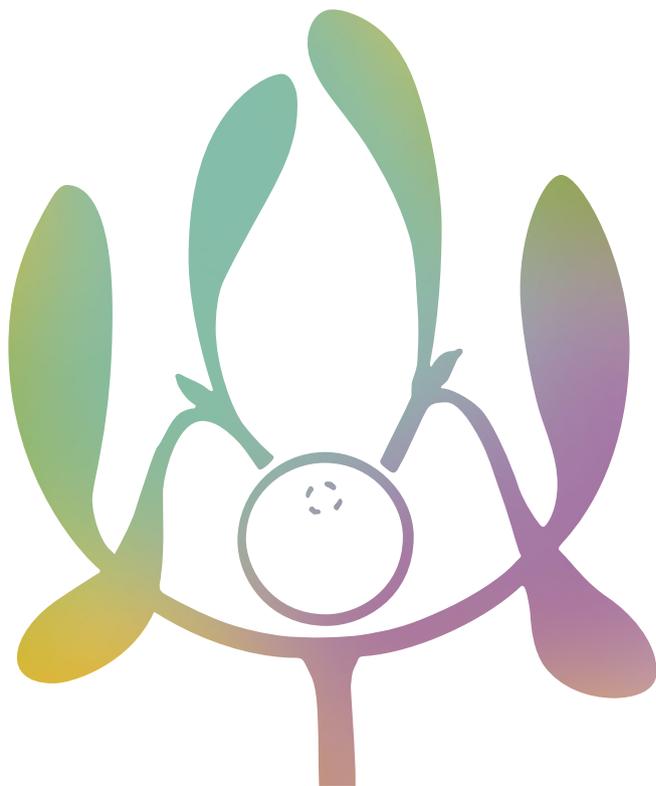


# Integrative Cancer Care



*A guide*

for patients and their loved ones

### **Note on Addresses and External Links**

Some of the publicly available links and resources we share are in German. We have included them because they may still provide helpful information. Despite careful checks, we accept no liability for the content of any external resources and the guidance they offer. Responsibility lies solely with the respective providers.

### **General Note**

This brochure «Integrative Cancer Care – A Guide for Patients and Their Loved Ones» is protected by copyright. Reprinting, inclusion in online services and on the internet as well as reproduction on data storage media – including extracts – is allowed exclusively with prior written approval of Iscador AG.

Great care has been taken in compiling the information and recommendations contained in this document to ensure they are in line with the current state of knowledge. Errors and misprints are reserved. Guarantee and liability claim of any kind are excluded.

The content of this brochure is intended for general information and educational purposes. The brochure cannot and should not replace examination, diagnosis, or consultation by a qualified physician.

The reader is solely responsible for the use of the information and any resulting consequences.

The disclaimer protects the publisher from legal liability in the event that the reader suffers harm as a result of the information provided.

In case of health problems or before starting any treatment, a medical professional should always be consulted to obtain a professional assessment.

### **Impressum**

«Integrative cancer care – guide for patients and their loved ones»

© Iscador AG, photos Jürg Buess S. 19, 23, 33, 36, 39, 42, 45, 48, 50, 53, 55  
Photos shutterstock S. 35, 47

Design & Illustration: Franziska Mbarga

# Inhalt

3 Introduction

## 4 The diagnosis

5 How does cancer develop?

6 Essential investigations:

Diagnostic methods

7 Basic procedures

10 Advanced diagnostics

15 The impact of cancer

## 22 Integrative cancer care

23 What is integrative cancer care?

23 Oncology:

cutting-edge science in the fight against cancer

29 Complementary medicine:

individualised support along the way

35 Mistletoe therapy

44 What can I do myself?

## 54 Appendix

55 Glossary of terms

59 Useful addresses

60 Notes

## *Integrative cancer care*

combines conventional medical therapies with complementary approaches like mistletoe therapy. The aim is to ease symptoms and side effects while enhancing quality of life in a way tailored to each individual.

## Introduction

This brochure is intended for anyone affected by cancer. It aims to support not only patients, but also those for whom cancer has become a significant topic within their circle of family and friends.

Today, many forms of cancer are curable. Nevertheless, a diagnosis may cause uncertainty and concern in patients and their loved ones. This makes it all the more important to work closely with the medical team to create a treatment plan tailored to the individual, their life circumstances, and their specific condition. Research has shown that considering each person's unique situation can positively influence the course of treatment.

This brochure an overview of key aspects surrounding cancer and provides information on modern treatment approaches based on the principles of integrative oncology. This concept combines conventional treatments with evidence-based complementary therapies. It is centred around the whole person and their individual needs, aiming to improve treatment tolerance and to provide meaningful support along the course of care.

With the information provided here, we hope to offer guidance to patients, their loved ones, and all those affected by cancer, helping them navigate the field of integrative cancer care.

With our warmest wishes,

Your Iscador AG Team



## How does cancer develop?

Every day, millions of cells die and are replaced in our bodies. New cells are generated by the old ones dividing and passing on all their genetic information to these new “daughter cells”, for instance, what they will look like, their specific function in the body, how often they should divide, and when their life cycle will end. If something goes wrong in this highly complex division process, a cell may develop that is unable to die but instead will produce more and more copies of itself. The result is a *carcinoma*, a cluster of identical cells that keep multiplying.

As countless cells are created anew daily, it is likely that somewhere in the body, smaller or larger errors will occur during the reproduction of genetic material. Whenever this is the case, our immune system springs into action: white blood cells (*leukocytes*) will identify any faulty cells and literally devour them, preventing them from causing harm. However, if there are too many compromised cells, or if the immune system is weakened, it may not be able to fulfil the task completely. Furthermore, cancerous cells will not respond to signals the body sends trying stop their multiplying. Instead, they will promote the growth of blood vessels to supply them with more energy and nutrients necessary for proliferation. The resulting cancer can also spread to and damage neighbouring organs. At later stages, cancer cells may also leave their site of origin and spread throughout the body via the blood or lymphatic system. This allows them to form secondary tumours (*metastases*) in more distant parts of the body.

The risk of cancer spreading is not the same in all cases. It may vary considerably between different types of cancer depending on their organ of origin and their specific growth pattern, directly affecting treatment options and possible outcomes. Many other factors may additionally influence the course of disease, like the state of the immune system. External factors straining the immune system and adversely affecting cell division include consumption of alcohol, nicotine and exposure to environmental toxins, radiation or viruses, as well as possible hidden vitamin and mineral deficiencies. Internal factors such as stress and emotional burden may also negatively

impact immune function. Certain types of cancer may be hereditary as may be indicated by a family history of cancer. In this case, consulting a specialist in human genetics may be helpful to clarify the situation and to receive information on preventive measures.

## Essential investigations: Diagnostic methods

For some cancers that are common, like breast, uterine, colorectal, skin, and prostate cancers, there are early detection screenings which are recommended to be done at regular intervals. The aim is to detect tumours at the earliest stage possible - the earlier cancer is detected, the better the chances of recovery. Oftentimes, the necessary treatment will also be less invasive.



However, if a person shows certain signs or *symptoms*, a doctor should determine as quickly as possible if it is caused by a tumour or another condition. This applies particularly to:

- non-healing wounds or open sores
- lumps, or thickening, in or under the skin, especially in the chest area, or hard swelling of lymph nodes
- changes in a wart or mole
- persistent problems with the stomach, intestines, or swallowing
- persistent cough or hoarseness
- unusual discharge from body orifices, such as blood in the stools or urine, bloody phlegm when coughing, or fluid discharge from the nipple
- vaginal discharge with blood, or bleeding, after menopause
- unintentional weight loss

A *tumour* can be non-cancerous (*benign*) or cancerous (*malignant*). Benign tumours are made up of cells that multiply but will not spread into the surrounding tissue. A carcinoma or cancer (*malignant tumour*) occurs when the tumour cells no longer recognise this boundary be-

tween themselves and other cells, and deliberately “hide” from the immune system. However, the difference may often only be established if a sample of tissue is taken or the whole tumour is removed and examined. Depending on the stage of disease and the type of cancer, a specific cancer (*oncological*) treatment is indicated with the aim of either shrinking the tumour until it can be completely removed by surgery or destroying any malignant cells that may have remained in the body after such an operation.

However, this may not always be successful. Some remaining cells may have broken away from the original tumour (*primary tumour*). If they manage to escape the immune system’s radar, a tumour can reappear years later (*recurrence*). If they have travelled through the blood or lymphatic system to another part of the body, they can form a secondary tumour (*metastasis*). A patient is considered to be cured (*in remission*) if there has been no recurrence of tumour for a period of five years.

## Basic procedures

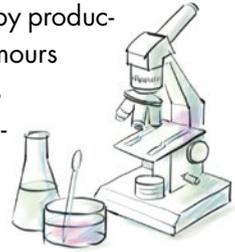
The cells in our body differ greatly from one organ to another – as do the different types of cancer. Some tumours grow very slowly and do not “spread”, i.e. will not form metastases, while others have a strong tendency to grow and multiply. Once a tumour has been detected, it is important to identify its characteristics as quickly and as accurately as possible in order for the most suitable treatment to be determined and initiated.

Depending on the type and location of the tumour, various examinations (*diagnostic procedures*) are carried out to determine whether the tumour is benign or malignant and to *classify* it accurately.

### Blood tests

Decisive information may already be obtained by testing a blood sample in the laboratory. This applies, for example, to the *immune status determined* by examining the type and number of immune cells contained in such a sample.

The immune system may respond to certain tumours by producing large numbers of certain immune cells. Other tumours may give themselves away by producing substances like hormones or proteins in unusually great quantities, releasing them into the bloodstream. These substances are known as *tumour markers* and may be used to monitor the course of disease.



## Imaging

Imaging is of great importance in oncology. X-rays were the first method to enable doctors to visualise the inside of the body. Other imaging techniques include ultrasound, computed tomography (CT), magnetic resonance imaging (MRI), scintigraphy, and positron emission tomography (PET). Each of these technologies has a specific ability to reveal certain structures and processes in the body.

### X-rays

In the 19th century, it was discovered that X-rays - a special type of electromagnetic wave - could penetrate through the body and be captured on special film. Some organs allow the rays to pass through, but others, such as bones, are too dense for them to penetrate, causing a “shadow” to appear on the X-ray image. They are still essential in many situations. In many cases, more modern and more precise methods have replaced, or are significantly supplementing, X-ray diagnostics.

### Ultrasound Sonography (USG)

Ultrasound, also known as *sonography*, uses sound waves to create images of the body’s interior. Like X-rays, sound waves can pass through the body and may be reflected by certain structures. The resulting signals can then be picked up by a microphone and converted into an image the examiner will view directly on a monitor in order to detect changes in organs and tissues. Because it uses sound waves, an ultrasound examination does not involve any exposure to radiation, as is the case with X-rays. Ultrasound is particularly useful for detecting changes in internal organs and soft tissues. However, ultrasound alone is usually not precise enough to distinguish cancer from other, more benign and harmless changes.

## Computed Tomography (CT)

*Computed tomography* (CT) is a modern X-ray-based technology providing a much more detailed view of the body's inside than conventional X-rays. Organs and tissues are scanned "slice by slice", from which the computer will create a digital image. Computed tomography is used to confirm the presence of a suspected tumour, or to monitor the development of a tumour during treatment. The scan is carried out with the patient lying down in a kind of open ring structure and is quick and easy to perform. If necessary, a contrast dye can be used during a CT scan to enhance the visibility of certain structures on the image. The radiologist discusses the exact course of action with the patient and their relatives during a preliminary consultation.

## Magnetic Resonance Tomography (MRT, MRI)

*Magnetic resonance tomography* (MRT), also called *Magnetic resonance imaging* (MRI), delivers high resolution images, even from deep tissue layers using a combination of a strong magnetic field and radio waves. It is used in oncological diagnostics to precisely map the location and size of a tissue process. The person being scanned lies in a kind of tube, with voice contact maintained for the duration of the scan. If necessary, contrast dye may be used to further enhance image quality.

## Scintigraphy

*Scintigraphy* (from the Latin *scintilla*, "spark") is used to visualise metabolic processes – i.e. energy consumption – in selected body areas. As tumour cells consume a lot of energy due to their rapid proliferation, they may thus be detected and visualised. For scintigraphy, a weakly radioactively labelled contrast agent is administered, which will generally be absorbed more quickly and more strongly by tumour cells than by normal tissue. A computer connected to a special camera will create images based on the different radiation levels measured, making it possible to detect even small tumours and metastases that might not have been detected with other methods.

## Positron Emission Tomography (PET, PET-CT)

*Positron emission tomography* (PET) is another way to view metabolic processes in the body. As with scintigraphy, low-level radioactive substances are administered *intravenously* (i.e. injected) and accumulate in tumour cells, making them visible for high precision instruments. A further development from scintigraphy, PET-CT is able to generate three-dimensional images, showing the exact localisation of altered tissue that may need to be treated, for example, by surgery.

## Advanced diagnostics

### Taking a tissue sample (*biopsy*)

The word *tumour* simply means “swelling” without regard of being benign or cancerous. Infections or other harmless causes may also cause swelling, e.g., of lymph nodes, which then are felt as lumps under the skin. However, symptoms cannot be reliably distinguished from cancer by sight or touch alone. In order to have certainty, it may be necessary to take cells or a tissue sample and examine them more closely.

Taking such a sample is usually a small procedure and is called a biopsy. The tissue sample is then examined microscopically in a laboratory. Taking a biopsy is recommended in cases such as:

- a newly detected lump in the breast
- changes in the lining of the stomach, bowel or bladder
- long-term changes in the lining of the cervix
- abnormal palpation of the prostate with an elevated PSA level
- thyroid nodules
- unclear skin changes
- persistent swelling of the lymph nodes

If the lesion is small, the entire suspect site may be removed immediately. This includes small, conspicuous moles and other skin changes, some lymph nodes or even intestinal polyps, which can be removed directly during a *colonoscopy*.

### Tumour classification: staging & grading

After the initial diagnosis, the stage of cancer should be determined as quickly as possible (*staging*), and the tumour further characterised *histologically* (*grading*). This information is key to devise the right treatment.

There are many different types of tumours with very different characteristics. Each individual case of cancer needs to be described as accurately as possible for treatment planning and follow-up. This includes information about the tumour's origin, its size and its possible spread to lymph nodes or other parts of the body, as well as the extent to which the cells have changed compared to normal cells (*malignancy* or *dysplasia*).

In order to determine how far cancer cells have changed compared to the healthy cells of their organ of origin, the tumour material from a biopsy or operation is examined histologically under a microscope. If the tumour cells are still very similar to normal cells, they are described as *low grade* or "less malignant". They are also called *differentiated*. The more cancer cells "degenerate", the more they focus on growth and proliferation and no longer display the properties of their original tissue - they *dedifferentiate*. This can lead to a situation where they look completely "faceless" under the microscope and can no longer be easily assigned to a specific tissue. This is referred to as *undifferentiated* or *anaplastic* tissue.

To express the degree of differentiation, there is an internationally harmonised medical standard developed by the UICC (Union internationale contre le Cancer) working group.

### Histological Grading of Tumour cells according to UICC (Union internationale contre le Cancer)

**G1 (Grade 1):** The examined cells show a high degree of similarity with the cells of the original tissue. They are well differentiated. This is also referred to as low grade dysplasia.

**G2 (Grade 2):** The examined cells still show a clearly recognisable similarity to the cells of the original tissue. They are moderately differentiated. This is also referred to as intermediate grade dysplasia.

**G3 (Grade 3):** The examined cells show little resemblance to the cells of the original tissue. They are poorly differentiated. This is also referred to as high grade dysplasia.

**G4 (Grade 4):** The examined cells no longer show any resemblance to the cells of the original tissue. They are undifferentiated or anaplastic. In such a case, the tumour can no longer be assigned to the original tissue, or it can only be done by means of special microscopic examinations. This is also referred to as high grade dysplasia.

**GX (Grade X):** The designation "Grade X" indicates that based on the currently available information, a grade classification could not be established.

Based on this classification, a prognosis can be made, e.g. an initial assessment of the future course of the disease including a statistical prediction of survival time. Based on the scientific knowledge on treatment options for cancer available worldwide, a prognosis may be "favourable" or "less favourable". However, it is important to remember that statistics only represent *probabilities*. Conclusions about life

expectancy and disease progression based on statistical averages may never predict with certainty how the disease will progress - positively or negatively – in individual patients.

While a biopsy may already reveal the degree of change in the tumour cells (*grading*), a complete classification (*staging*) requires careful imaging before and after surgery.

### Staging: Categorising the stage of disease according to the TNM system

In order to ensure a standardised approach to diagnosis and treatment, an internationally valid system for classifying tumour cases has been developed. This *TNM system* makes it possible to summarise the essential information on the stage of the disease with only a short combination of letters and numbers. This type of “coding” is therefore often found in doctors’ notes and patient records.

The letters are abbreviations of the English words ‘*tumour*’, ‘*node*’ and ‘*metastasis*’.

- T (Tumour): indicates the size and spread of the original or primary tumour.
- N (Nodes): indicates whether cancer cells have been found within lymph nodes near the primary tumour, and if so, the number of affected lymph nodes.
- M (Metastasis): indicates whether cancer cells have been found in other parts of the body.

### Corresponding Numbers

Numbers are added to the letters to indicate the stage of the disease. Possible stages are T1 to T4, N0 to N3, and M0 and M1. A zero (N0, M0) means that no lymph nodes or distant metastases have been found. An “x” after a letter means that no conclusive information on the respective aspect has been available at the given point in time.

### T1 to T4 for the Primary Tumour

In the T category, the numbers 1 to 4 describe the size of the primary tumour. Depending on the type of tumour, there may be specific addi-

tional small letters from a to d that give further information about the situation of the primary tumour. For example, in prostate cancer, there are not only stages T1 to T4, but also stages T2a to T2c and T3a and T3b. Depending on the type of primary tumour, this can be important for the prognosis and further treatment.

### **N0 to N3 for the Lymph Nodes**

The numbers in the N category are based on the number and location of regional lymph nodes affected by cancer cells. Lymph nodes are filter stations that can be assigned to the lymphatic drainage system of an organ or a region of the body. When cancer cells break away from a tumour, they often travel through the lymphatic system to other parts of the body. In that case they are often first found in the lymph nodes close to the tumour. For example, the lymph nodes in the armpit are often removed during breast cancer surgery to check for metastases, as these are the lymph nodes closest to the breast. "N0" means that no cancer cells have been found in the regional lymph nodes of the organ affected by the tumour. N1, N2 and N3 describe the involvement of an increasing number of local lymph nodes or lymph nodes distant from the tumour. The criteria for classification in category N also depend on the type of tumour.

### **M0 and M1 for distant metastases**

In the M category, a distinction is only made as to whether distant metastases have been detected (M1) or not (M0). The designation "Mx" in turn means that no respective information is available at the moment.

## The impact of cancer

At first, a *cancer* diagnosis may feel overwhelming, triggering a flood of questions, fears, and uncertainties.

Further assessments and treatment sessions need to be planned. What is required most of all can seem to be wearing thin at this moment: time and patience. Seeking out specialists, scheduling appointments, and managing daily life can feel exhausting. Effective treatments may help against the disease but cause uncomfortable side effects. Pain due to the tumour or following an operation may require special care. Markers of physical wellbeing like sleep quality, appetite, the ability to focus, or temperature regulation may become impaired by the treatment, but also by the disease itself. Finally, the stress, anxiety, and uncertainty about the future can deeply affect daily life, relationships, and overall wellbeing. Thus, cancer isn't a disease of the body but causes ripples throughout every aspect of life.

### The physical body

Our healthcare system views cancer primarily as a physical illness - an issue of faulty cells growing where they shouldn't. Due to their ability to spread, the focus is on removing or controlling these cells through treatments tailored to offer the best possible outcome. This process begins with medical assessments, appointments, and procedures, all centred around the body. Treatments such as surgery, chemotherapy, or radiation target the illness directly, but they may bring side effects such as weight loss, hair loss, nausea, and fatigue, although modern oncology has made significant progress in improving tolerability.

Yet, cancer does not exist in isolation from a patient's life, a personal history, thoughts and feelings, responsibilities, needs, hopes and dreams.

Sustainable and patient-centred care recognises that healing is not just about the body, but about supporting the whole person.

## The level of energy

Cancer places immense strain on the immune system, often leading to profound exhaustion both physically and mentally. This deep fatigue must not be mistaken for a mere response to psychological stress, or a depression; rather, it is a complex condition known as *cancer-related fatigue*, caused by all physical and mental factors surrounding the disease, often including treatment itself. The toll the disease takes on the immune system may additionally manifest in an increased susceptibility to colds and infections, but also plays a role in patients' heightened sensitivity to cold due to an impaired ability to regulate temperature. *Vegetative* functions such as sleep, appetite, and digestion can become disturbed, further impacting overall quality of life.

Challenges to the human body and vital energy will always affect the emotional, mental, social, and spiritual wellbeing, because all aspects of human existence are interconnected.

If you experience fatigue or any side effects, do not hesitate to discuss them with your doctor. Both *supportive* and *complementary therapies* offer a range of options that can provide relief and improve quality of life.

## The mental and emotional aspect

Being diagnosed with cancer can be overwhelming, as if a sudden change has turned life upside down, leaving patients and loved ones with urgent questions: How far has the cancer progressed? What are the chances of recovery? What's next?

Yet, there can never be a definite answer to the most pressing question – the likelihood of successful treatment. The healthcare system relies on statistics and probabilities, but every person's journey is unique. The only thing we know for sure is that early detection and treatment improve the chances of recovery.

While physical challenges caused by the disease as well as the treatment may impact wellbeing and everyday life, uncertainty and anxiety in the face of a serious illness can pose an additional emotional burden. Many patients find themselves oscillating be-

tween hope (“I can get through this”) and despair (“I feel powerless”). The emotional state, however, may even influence physical symptoms like pain or fatigue.

The weight of a cancer diagnosis can affect all levels of being. In general, illnesses and major life challenges are easier to cope with when an individual is “psychologically stable” or “emotionally resilient”. But the confrontation with one’s own mortality can shake even the most balanced individuals. Questions naturally arise: What will happen to my plans, my goals, my responsibilities, my dreams? What will become of my life? In the first moments, there are no answers ready at hand. That’s why understanding and support from loved ones and one’s immediate surroundings are so vital for those living with cancer.

To help individuals affected by cancer and their loved ones cope with this exceptional situation, specially trained psychologists known as *psycho-oncologists* provide targeted support to both patients and relatives as they navigate the changes in their lives brought about by the illness. If you or someone you know is struggling, don’t hesitate to reach out - your attending doctor can guide you to the right support.

### The social impact

In a world that values productivity and strength, topics like illness, fear, and mortality are often avoided or brushed aside.

However, each year, cancer causes tens of thousands of people in the US and the UK to leave the workforce, and tens of thousands more are affected as family members, friends, or colleagues. Yet, despite its prevalence, cancer has remained a difficult topic in society. Many patients hesitate to share their feelings or experiences, not wanting to burden their loved ones or risk being met with misunderstanding, awkwardness, or well-intended but unhelpful advice. Some prefer to keep their relationships unchanged, hoping to separate their illness from their friendships, family dynamics, or workplace interactions.

Ironically, a patient’s desire to shield others from discomfort can lead to greater loneliness and disconnection. Cancer treatment demands

time and energy, often pulling people away from their social routines. The sense of belonging may start to slip away although it is vital to human wellbeing. The resulting isolation can pose just as heavy an emotional burden as the illness itself.

At the same time, friends, family, and colleagues may struggle to know how best to support someone with cancer. On the one hand, they want to help, on the other, many feel restrained by insecurity and awkwardness: Should I bring up the topic or wait for them to mention it? Do they need space, or do they want company? Should I acknowledge their fears, or rather try to keep things light in order to give them a break amidst all their burdens?

This hesitation in the face of serious illness is natural and even medical professionals navigate these same uncertainties, as in a life and death-situation, each person's needs and emotions are deeply personal.

In the worst case, mutual insecurities may cause meaningful connections to fade, leaving the patient feeling even more alone. Even well-intended phrases like "Let me know if you need anything" can feel too open-ended for someone already overwhelmed. Instead, offering specific acts of kindness can be much more helpful: "Would you like to talk about this, or would you prefer another topic altogether?" "What would ease your burden the most right now?" "If chemotherapy leaves you exhausted, I'd be happy to pick up your groceries so you can rest." Often, just listening without trying to offer solutions can be the greatest gift. While practical advice can feel impersonal, genuine presence and understanding can bring immense comfort to patients in distress.

It is crucial for cancer patients to remember that they are not alone in this uncharted territory. Every year, thousands of people receive a cancer diagnosis, and while the experience is deeply personal, support is available. Numerous programmes are designed to meet the unique needs of those affected, offering guidance, connection, and reassurance.



For some, knowledge is empowering: understanding their illness can help reduce anxiety and foster confidence in making the right treatment decisions. Others find comfort in spirituality, whether through a deeper exploration of faith or a personal journey of inner reflection.

Self-help groups provide a space to connect with others facing similar challenges, offering mutual support, shared experiences, and practical advice.

Additionally, psychosocial counselling, social services, and religious services provided either by hospitals or cancer support networks can help patients and their families navigate available resources and find the assistance they need.

On the following pages, this brochure aims to offer impulses how an integrative approach in cancer care may best be utilized to address not only the physical aspects of the illness but also the emotional, psychological, and spiritual well-being of each individual. Research has shown that a whole-person centred approach can positively influence the course of the disease and improve recovery outcomes.



## Integrative cancer care

No other field of medicine has seen a more rapid development over the recent decades than the field of cancer medicine (*oncology*). Many types of cancers can now be cured. Treatments are better tolerated and more targeted than would have been possible just a few years ago.

However, even the most advanced cancer treatments have side effects that may severely and sometimes permanently affect the quality of life of those affected. The field of *supportive care* in oncology has been developed for the prevention and adequate treatment of these side effects. Here, many therapeutic modalities and procedures from the field of *complementary medicine* have become established alongside modern drugs.

To support patients and medical professionals in understanding which complementary treatments have been scientifically validated for specific situations, the S3 Guideline on “Complementary Medicine in the Treatment of Oncological Patients” was published in Germany in 2021 under the auspices of four medical societies. The treatment methods presented below are based on the recommendations in this guideline. Further information may be found in the patient guideline (in German):



[www.leitlinienprogramm-onkologie.de](http://www.leitlinienprogramm-onkologie.de)

### **Note on addresses and external links**

Some of the external links and resources we share are in German. We have included them because they may still provide helpful information. Despite careful checks, we accept no liability for the content of external links or addresses. Responsibility for the content of linked pages and listed addresses lies solely with their respective providers.

## What is integrative cancer care?

Integrative cancer care combines the best of two worlds: modern medicine at the cutting edge of science is applied to stop the proliferation of cancer cells. To help the patient cope with the disease at the level of body, vitality, mind and spirit, scientifically researched methods from the field of *complementary medicine* are used, often drawing on time-honoured knowledge from traditional medicine, to maintain quality of life and make cancer treatment more tolerable. The resulting treatment is tailored to the individual and their needs, focusing on the person rather than the disease.

## Oncology: cutting-edge science in the fight against cancer

### The classical pillars of oncological therapy

As cancer cells are constantly multiplying, the first and most important goal of oncological, or *conventional*, cancer treatment is their destruction. In the 20th century, the three “classical pillars” of cancer treatment emerged:

- Surgery
- Radiotherapy
- Chemotherapy

Often, two or more of these procedures are combined with each other. When radiotherapy or chemotherapy are prescribed following surgery in order to neutralise any *cancer cells* left in the body, it is called *adjuvant* (supportive) treatment. In certain situations, pre-treating the tumour with radiotherapy and/or chemotherapy may be used to shrink the tumour before surgery. Since this well-established approach is more recent than the first example, it is also called *neoadjuvant* therapy (from the Greek *neos* = new).

## Surgery

Surgery is still the main form of treatment for most cancers. It can range from a very small, superficial removal of a suspicious skin lesion to a major operation, for example in the chest or abdomen. Not only is the tumour removed, but lymph nodes and metastases are also removed if necessary and possible. In some cases, it is also possible to have the first course of chemotherapy or radiotherapy while under anaesthesia during the operation.

Wherever possible, modern surgery favours techniques that are least damaging to the skin and soft tissues. They are also known as *minimally invasive* or “keyhole” techniques and are used, for example, for operations in the chest (*thoracoscopy*) or abdomen (*laparoscopy*). The surgeon makes incisions only a few centimetres in size through which a camera and tiny surgical instruments are inserted. This type of surgery usually results in a shorter operation time, less stress due to anaesthesia and faster recovery and wound healing.

However, if the tumour cannot be completely removed, if a large number of lymph nodes or metastases needs to be removed, or if additional intraoperative treatments such as chemotherapy or radiotherapy is required, *minimally invasive* surgery is not always the method of choice.

Before any planned surgery, patients will always have a detailed discussion with the surgeon and anaesthetist. The planned procedure will be explained in depth and the attending physicians will be available to answer questions from patients and their relatives.

## Radiotherapy

The second pillar of conventional oncology is radiotherapy. Cancer cells are specialists in rapid growth. However, they are much more sensitive to suffer terminal damage from high-energy radiation than our healthy body cells. If the location and type of tumour are particularly suitable, radiotherapy can be used as the main treatment.

If indicated, radiotherapy may also be used as a pre-treatment (*neoadjuvant*) before surgery, for example to reduce the size of the tumour, or as a post-treatment (*adjuvant*) after surgery to eliminate any cancer cells left in the body.

Depending on the situation, different types of radiation are used for radiotherapy. These include X-rays, gamma rays and electrons. All of them are high-energy forms of radiation able to penetrate body tissues and to destroy the cells situated at the point of highest concentration. Healthy body cells can repair the stress or damage caused by high-energy radiation, while cancer cells are unable to do this.

The possible side effects of radiotherapy depend on the type of radiation, the dose, the size of the radiation field and the sensitivity of the organs affected. Individual tolerance also depends on the patient's general condition and stage of disease. Temporary skin changes resembling a sunburn or superficial burns may occur.

Due to the increased energy required by the repair systems operating within the healthy tissues, many patients experience symptoms such as tiredness, fatigue, loss of appetite or headaches for a short time after radiotherapy. These symptoms usually last for a short time before subsiding on their own.

Specialists (radiologists and nuclear medicine physicians) will design a personalised radiotherapy plan tailored to each patient's situation, with the aim of destroying the tumour as completely as possible while sparing the skin and healthy tissue.

## Chemotherapy

The third pillar of conventional cancer treatment is chemotherapy. This treatment uses special drugs (*cytostatics*) that can attack particularly rapidly dividing cells by inhibiting or slowing down their growth. Tumour cells have a particularly fast growth and reproduction rate, which sets them apart from healthy cells. However, this special ability comes at the cost of being unable to repair and recover from damage, making them more susceptible to *cytotoxic* drugs and radiation treatments.

However, cytotoxic drugs affect not just the tumour tissue. Side effects can occur wherever cells in the body divide rapidly and frequently even in a healthy state. For example, in the bone marrow, the gut lining or the hair follicles. For this reason, a carefully calculated combination of different cytostatic drugs is used to target the tumour cells and minimise the effects on the rest of the body.

The potential side effects are the reason chemotherapies need to be carefully planned and monitored by the doctors treating the patient, as they are ultimately intended to help, not harm, the patient. Severe side effects, such as nausea and vomiting or anaemia, may require the dose of chemotherapy to be reduced or the treatment to be paused altogether. This is not ideal in terms of the desired outcome - the destruction of the tumour cells. Here too, supplementing oncological therapy with certain complementary treatments has emerged as a way of reducing side effects and achieving better tolerability.

## Modern oncological treatments

In recent years, modern, innovative techniques have become firmly established in cancer treatment. They complement 'classic' oncological therapies and in some cases have even replaced them. What they have in common is that they no longer interfere with cell division but instead act at the level of the body's own transfer of information. This often makes them more targeted and better tolerated.

## (Anti-)hormone therapies

Hormones are messenger substances steering and timing important processes in the body, such as energy expenditure (thyroid hormones), blood sugar levels after eating (insulin), sleep (melatonin), stress levels (cortisol), the menstrual cycle and growth. Some tumours are stimulated to grow by certain hormones. This is where (anti-) hormone therapies come in, using drugs that will stop the growth signal from reaching the tumour: the “anti-hormones” will either suppress the body’s own production of a hormone, or its effect on the tumour cells by “occupying” the cell’s signal receptors so that the hormone has no effect. Antihormones administered as tablets or injections act throughout the body. This way, they also act on hidden cancer cells that may have escaped diagnosis, thus inhibiting relapse or metastases. However, they can also cause side effects by blocking the body’s own hormone signals in healthy organs.

The decision to use (anti-)hormone therapy mainly depends on the tumour’s responsiveness to hormone signals but is also influenced by the stage of the disease. Anti-hormone therapy is often used in the treatment of breast cancer or prostate cancer.

## Immunotherapies

### Monoclonal antibodies

Antibodies are proteins normally produced by immune cells as a reaction to having encountered structures (*antigens*) in the body that seem foreign or somehow altered. Antibodies attach to these structures and mark them for scavenger cells. The scavenger cells then destroy the marked cells, rendering them harmless. Tumour cells are also antigens. However, they have usually developed ways to escape from being recognized by immune cells

This is why (*monoclonal*) antibodies have been developed for cancer treatment. They attach to the cell surface of tumour cells and disrupt their growth programme. Like anti-hormones (see above), monoclonal antibodies can also block receptors where contact with an en-

ogenous hormone, for example, would otherwise accelerate tumour growth. Antibody therapy is mostly used as an adjunct to another oncological treatment, such as chemotherapy.

### Immune checkpoint inhibitors

In recent years, antibodies have been developed that can release specific “brakes” (*checkpoints*) normally holding the immune system back - control mechanisms meant to prevent the immune system from overreacting against healthy cells. However, some tumours use “immune checkpoints” to hide from the immune system: Immune cells that should recognise and attack the tumour are therefore slowed down. Checkpoint inhibitors counteract this. Immune cells are then able to recognise the tumour again and attack it directly. Side effects of this therapy include an increased propensity to inflammation and the risk of developing autoimmune reactions, in which the immune system may turn against healthy body tissues. Treatment with immune checkpoint inhibitors therefore needs to be carefully monitored.

### Cellular immunotherapy (CAR T-cell therapy)

This type of treatment involves activating immune cells directly against cancer cells. The immune cells are taken from the patient and then given a receptor (*chimeric antigen receptor*, a type of docking site) in the laboratory. The receptor functions like an additional “power button” that will be activated strongly in the presence of a cancer cell and triggering an immune response against it. Once the patient has received the modified immune cells, they will reproduce independently and maintain their protective function against the cancer cells over an extended period of time. CAR T-cell therapies are one of the latest developments in oncology and are so far only approved for a few types of blood cancer. They are currently only offered in specialised centres.

## Complementary medicine: individualised support along the way

Naturopathic and regulative (*complementary*) medicine can be used alongside conventional oncological therapies to reduce side effects and support the physical, emotional and spiritual resources of people with cancer so that they can maintain as high a quality of life as possible during and after cancer treatment. This combination of modern and traditional treatments, which address all levels of the human being and can be combined according to individual wishes and needs, is called *integrative* or holistic cancer care. However, not all complementary therapies are appropriate and useful in every given situation. For this reason, four major medical associations in Germany have published the S3 Guideline “Complementary Medicine in the Treatment of Oncological Patients” to provide guidance to both patients and their healthcare professionals based on scientific evidence. Below is a selection of these recommendations.

## Homeopathy

Homeopathy was developed by the German physician Samuel Hahnemann (1755-1843) after he had deeply studied the laws of self-healing in the human body. Hahnemann was able to show that substances that cause symptoms when ingested could be used in highly diluted, mechanically processed form to relieve patients with similar symptoms. Hahnemann formulated the principle of “*like cures like*” on the assumption that the observed reaction was based on a kind of endogenous healing response. Homeopathic remedies are made from natural substances. Critics argue that the mechanism of action has still not been fully understood. However, based on the current state of scientific research, the S3 guideline “Complementary Medicine in the Treatment of Oncological Patients” recommends that classical homeopathic treatment, with a careful initial consultation and prescription of the appropriate homeopathic remedy by a specially trained health professional, may be considered in individual cases to improve the quality of life of cancer patients.

## Anthroposophic medicine

Anthroposophic medicine was developed in Switzerland and Germany in the 1920’s to complement conventional medicine by addressing the patient’s soul, spirit and vitality in addition to treating the body. Anthroposophic medicine sees the human being as part of nature, and disease as resulting from the body, vitality, mind and soul having become imbalanced. In the case of cancer, anthroposophic medicine aims to activate the patient’s self-healing capacities and to support them holistically on the path to recovery. In addition to modern oncological treatment, this includes treatments tailored to the patient’s individual situation, such as herbal medicines, external applications, movement therapy (*eurhythm*), art, music, and speech therapy. Based on the current state of research, the S3 guideline “Complementary Medicine in the Treatment of Oncological Patients” gives an optional recommendation for an individualized treatment according to anthroposophic medicine to improve chronic *fatigue* in breast cancer survivors.



## Acupuncture

Acupuncture is a modality from *Traditional Chinese Medicine (TCM)* using thin needles that are inserted into specific reflex points on the body. According to TCM, these points are located on channels through which the body's vital energy (*qi*) circulates over the course of one day and one night. Disease and pain are understood as a consequence of this flow of energy having become disturbed. Targeted acupuncture stimulation is used to rebalance the flow of *qi*, thereby optimising the body's self-healing capacities. Although its working mechanism has not been completely understood, there is a large body of clinical evidence supporting the efficacy of acupuncture, particularly in the treatment of chronic pain. The S3 guideline "Complementary Medicine in the Treatment of Oncological Patients" recommends acupuncture for the reduction of tumour pain, with the aim of saving painkillers and reducing side effects, and for the reduction of joint pain in patients receiving oncological therapy with aromatase inhibitors.

The guideline also recommends acupuncture to prevent side effects such as nausea and vomiting during platinum-based chemotherapy or hot flushes during anti-hormone therapy. It is furthermore recommended as an option to

- improve overall quality of life during and after oncological treatment and relieve chemotherapy-induced peripheral neuropathic pain
- reduce *cancer-related fatigue*
- relieve insomnia and sleep disturbances
- prevent a dry mouth
- restore bowel function after colonic surgery
- reduce depression and anxiety in breast cancer patients after chemotherapy or during treatment with aromatase inhibitors.





---

*Experience our  
production process*

Follow mistletoe on the journey from  
manual harvest to the ampoule:  
[www.iscador.com/manufacture](http://www.iscador.com/manufacture)

---

## Mistletoe therapy

Mistletoe is an extraordinary plant that grows on trees and bushes and is spread by birds. Since ancient times, it has been one of the most important medicinal plants in European naturopathy. While in the Middle Ages mistletoe were used to treat liver disease and high blood pressure, in French folk medicine the plant had long been known as a tonic. In 1917, in the absence of any established medical treatment of cancer, Dutch-Indonesian doctor Ita Wegman, together with a Swiss pharmacist, developed an injection to support her oncological patients. Upon promising results, the first mistletoe extract was registered in Switzerland in 1926. 100 years later, mistletoe preparations are among the best studied and most frequently prescribed herbal medicines used in supportive cancer care. The main aim of mistletoe therapy is to maintain the patient's quality of life during and after oncological treatment. During mistletoe therapy, many patients experience an improvement in general well-being, sleep, appetite, vitality, and immune function.

## The botany of mistletoe

Virtually no other plant embodies the interconnectedness of life like mistletoe. In the depths of winter, its branches are studded with bright-shining white berries, long celebrated across Europe as symbols of light, renewal, and the return of the sun, a tradition that has made mistletoe a beloved Christmas decoration. Beyond its symbolic significance, mistletoe plays a vital role in winter ecosystems. Its berries provide nourishment for birds like the thrush, the waxwing, and the blackcap. While the thrush and waxwing excrete the seeds, often leaving them stuck to tree branches, the blackcap consumes the berries' pulp and skin, sticking the seed directly onto its perch. The emerging mistletoe seedling develops a root-like structure known as sinker (*haustorium*). Over time, the *host tree's* wood envelops this structure, allowing the mistletoe to tap into the tree's water and nutrient supply. Unable to survive without its host, the mistletoe grows slowly and symmetrically, over years developing its distinctive spherical shape. It takes five to seven years before the mistletoe produces its first flowers. Only after 10 to 15 years, can it be harvested and processed into medicinal preparations.

## Mistletoe in European mythology

As recorded by the Roman writer Pliny, the Celts revered mistletoe as "the panacea," or universal remedy. Its bright white berries shining through the dark winter months, its ability to bloom in defiance of the cold, and its unusual way of growing into an evergreen, spherical form suspended in the air, nourished by its *host tree*, untouched by gravity, captivated our ancestors. This awe likely led to early experimentation with its medicinal properties. In French folk medicine, mistletoe was valued as a tonic - a concept that may sound familiar to comic fans. After all, isn't it reminiscent of the magic potion that granted Asterix and Obelix their legendary strength? Beyond Celtic traditions, mistletoe held a sacred place in Greco-Roman mythology. A symbol of life and light, it guided the hero Aeneas on his perilous journey through the underworld. With a mistletoe in hand, he passed safely through the realm of the dead and returned unharmed to the world of the living.



*More than just a legend*

The oak of Isigny-le-Buat – our “Q1” – laid the foundation for the cultivation of oak mistletoe.

## The archetypal nature of deciduous and coniferous trees

According to the ancient European knowledge of nature, conifers - evergreens growing upright, reaching towards the sky - are associated with a solar signature. Deciduous trees, in contrast, embody the lunar signature, exhibiting softer forms, more complex metabolic processes, and transformations according to the rhythms of the year, indicative of the manifesting, nurturing, and regenerative forces of nature.



### The apple tree

This small tree from the rose family is known for its rounded crown, soft wood, delicate blossoms, and juicy fruits. It evokes the gifts of nature: joy, nourishment, fertility, and pleasure. The apple tree represents sweetness, affection, and generosity as essential life elixirs.

### The oak

Among deciduous trees, the oak carries a solar signature: strong, upright, and enduring. Its hard wood, deep roots, and longevity embody strength, endurance, and protection. In many European cultures, the oak is revered as the tree of gods and ancestors, due to its particularly resilient life force and natural strength.



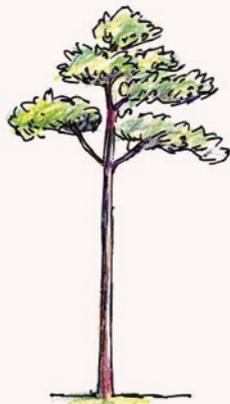


### The elm

The elm features a balance in solar and lunar qualities. Its expansive crown and tall stature seemingly connect the sky and the earth. An ancient symbol of harmony and communication, elms were gathering points for negotiations and agreements. The elm represents ease in giving and receiving, and liberation through letting go of outdated patterns.

### The pine

The pine is strongly associated with warmth and light. Its slender, fast-growing trunk reaches straight toward the sun. When sunbeams filter through its long, fine needles they seem to spark with energy just like the fragrant, resin-rich wood chips once used as kindling to bring light and warmth into winter's darkness.



### The fir

The tallest tree to be found on the European continent embodies steadfastness and focus. Though solar in signature, its affinity with water lends it lunar traits as well. Its dense branches with short, soft needles offer shelter, shade, coolness and moisture to many creatures during summer. In winter, the evergreen fir becomes a symbol of unwavering vitality and endurance.



## Mistletoe in Integrative Oncology

Three distinct subspecies of white berried mistletoe (*Viscum album* L.) are used in integrative cancer treatment: deciduous tree mistletoe, pine mistletoe, and fir mistletoe. Since mistletoe produce different active compounds in summer and winter, they are harvested (at least) twice a year. The exact composition of mistletoe extracts varies depending on the *host tree* (e.g., apple, oak, pine, or fir) and the extraction method used. This diversity results in a broad range of mistletoe preparations, allowing for personalised treatment based on the patient's condition and needs.

Mistletoe extracts are typically administered as subcutaneous injections two to three times per week, preferably into a skin fold in the region of the abdomen. While some key mistletoe compounds exhibit antitumoral effects in laboratory studies, their primary clinical benefit lies in *modulating* the immune system. This can help reduce the side effects of chemotherapy and radiotherapy, ultimately improving quality of life. Additionally, mistletoe therapy has been shown to alleviate tumour-related exhaustion (*fatigue*) and to support temperature regulation, appetite, and sleep quality. Mistletoe extracts are also recognised for their mood-enhancing and pain-relieving effects.

Mistletoe's *immunomodulating effect*, i.e. supporting and strengthening the activity of the immune system, offers three key benefits during cancer treatment:

- Immune cells may better recognise tumour cells and play a more active part combatting the disease.
- Cancer therapies such as chemotherapy, surgery, and radiotherapy strain the immune system. Supporting the body with mistletoe therapy may help reduce side effects, boost *resilience*, and accelerate post-operative recovery.
- A well-functioning immune system may reduce the risk of relapse (*recurrence*) after cancer therapy. For this reason, mistletoe therapy can be continued even after oncological therapy has concluded.

## Administering mistletoe extract

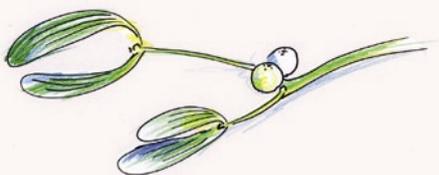
Mistletoe extract is administered as a subcutaneous *injection*. Like a prophylaxis for thrombosis, it is administered under the skin (*subcutaneous*) by the patient themselves. It is recommended that the first injection be administered under the guidance of a healthcare professional, who can provide detailed instructions on the proper technique.

As dosage is increased gradually, a localised skin reaction, i.e. redness around the injection site up to 5 cm in diameter, may appear 6 to 12 hours after injection and last 24 to 72 hours. This is a favourable response indicating the mistletoe extract to have successfully stimulated the immune system. The next injection should only be given once the redness has subsided, typically after at least 48 hours.

To prevent skin irritation, it is important to rotate injection sites regularly. Avoid injecting into inflamed skin, as well as into areas scheduled for surgery or radiotherapy.



[www.iscador.com/videotutorial](http://www.iscador.com/videotutorial)





## What can I do myself?

### Non-pharmacological approaches in holistic cancer treatment

#### Yoga

Yoga is an ancient practice from India that combines physical postures (*asanas*), breathing exercises (*pranayama*), and meditation to improve strength, enhance flexibility, and restore harmony between body and mind. Practicing yoga can help reduce stress, cultivate mindfulness, and promote relaxation. It is accessible to people of all ages and fitness levels, as exercises may be adapted to individual needs.

The S3 guideline “Complementary Medicine in the Treatment of Oncological Patients” strongly recommends yoga as an effective way to reduce exhaustion (*fatigue*) during and after cancer treatment. Scientific studies also support its benefits for improving sleep, reducing anxiety and depression, and enhancing quality of life in cancer patients. As part of preventive healthcare programmes, German statutory health insurance covers up to 80% of the participation fees for certified yoga courses twice a year.



A woman in a light-colored top is standing in a kitchen in the background, slightly out of focus. In the foreground, a dark wooden table is covered with a variety of fresh produce, including a potted basil plant, oranges, a red apple, a head of broccoli, fennel, strawberries, radishes, carrots, and bell peppers (one yellow, one red). There are also baskets and bowls containing nuts and seeds.

*Consider a colourful diet*

Take your time to enjoy your meals with all senses.

## Nutrition

The topic of cancer nutrition may be a sensitive one for many people. Patients are often told to “just eat whatever they like” in order to maintain their quality of life. However, with a little consideration, the daily diet may be adjusted in ways equally able to support cancer prevention and treatment. A diet tailored to the specific stage of disease can support the immune system, promote healing, and help alleviate the side effects of treatments such as chemotherapy or radiotherapy. It can also help prevent *cachexia*, a common challenge in the later stages of cancer often leading to fatigue, weight loss, and reduced quality of life. Certain foods or nutrients have anti-inflammatory effects, while others might need to be avoided as they can interfere with the efficacy of certain medications. Professional nutritional counselling adapted to the medical situation is an important part of cancer care. It not only supports the patient as a whole person but can also improve the effectiveness and tolerability of treatments while helping to preserve a sense of wellbeing and joy in everyday life. Individually tailored meal plans can ensure adequate intake of calories, protein, and micronutrients. Centres specialising in integrative cancer care often offer assessments and nutritional counselling by trained dietitians. If there is a risk of malnutrition or if it has already developed, targeted nutritional therapy can help address it. Please consult your doctor about the options available to you.





## Sport and exercise

Physical activity plays a crucial role in holistic cancer treatment, as research has shown it to improve quality of life and to favourably impact the course of disease. Regular exercise strengthens the immune system, boosts circulation, and helps reduce cancer-related *fatigue*. It can alleviate side effects of chemotherapy and radiotherapy while lowering the risk of recurrence.

Exercise also supports mental health, reducing stress and helping to prevent depression. Maintaining or rebuilding muscle mass, which may decline due to illness or treatment, is another key benefit. Importantly, exercise doesn't have to be intense; even regular walks in the fresh air can support metabolism, circulation, and overall well-being. Dancing can also be a joyful way to reduce stress, enhance immunity, and uplift the spirit through movement, music, and social connection.

To ensure safety and effectiveness, personalized training plans should be based on cancer type, treatment phase, and individual fitness levels. Ask your attending physician about locally available exercise programmes. Organizations like the National Cancer Societies provide resources and guidance on physical activity for cancer patients.

## Mindfulness-Based Stress Reduction (MBSR) & Mindfulness

*Mindfulness-Based Stress Reduction (MBSR)* is a scientifically researched meditation technique rooted in Buddhist traditions. It plays a key role in integrative cancer care, helping patients cope with emotional and physical stress. By fostering awareness of thoughts, emotions, and bodily sensations, mindfulness helps to reduce stress, harmonise body and mind, and improve well-being. Studies show that MBSR may alleviate chronic stress, anxiety, and depression, enhancing quality of life. Mindfulness can also help to strengthen personal *resilience*, the capacity to navigate and adapt to difficult situations more effectively. Based on the latest scientific evidence, the German S3 Guideline “Complementary Medicine in the Treatment of Oncology Patients” recommends MBSR as an optional approach for improving both cancer-specific and general quality of life, reducing fatigue and sleep disturbances, and alleviating symptoms of depression and anxiety.



## Forest bathing & nature-based therapies

Forest bathing and “*nature-based therapies*” or “green care” are gaining recognition in integrative cancer treatment. The concept of forest bathing (*Shinrin Yoku*) originated in Japan, where forest bathing was first scientifically validated for its ability to reduce stress, lower blood pressure, and strengthen the immune system. The forest air contains plant compounds called terpenes, which have been shown to enhance the activity of natural killer cells, a key component of immune defence against cancer. Beyond its physiological benefits, forest bathing fosters mental and emotional well-being. The colours, scents, and sounds of nature create a deeply calming environment, offering a retreat from the stress of modern life. The combination of gentle movement, fresh air, and mindfulness can be particularly beneficial for cancer patients coping with diagnosis and treatment stress.



*A walk in the woods*

is calming and restorative

# Appendix

## **Glossary of terms**

All italicised terms in the text are briefly explained in the glossary on the following pages.

## **Useful addresses**

Here you will find a selection of associations, professional societies, and self-help groups related to cancer, as well as a list of integrative therapy centres in Switzerland and the UK.

# Glossary of terms

---

**Adjuvant therapy:** a supplementary or supportive treatment to reduce the risk of recurrence after successful surgery.

---

**Anaplastic tumour:** a tumour with cells so highly altered that the original tissue type is no longer recognisable.

---

**Antigen:** a substance or structure recognised by the immune system as «alien», triggering a response involving specific antibodies and specialised T-lymphocytes.

---

**Asanas:** structured physical exercises performed slowly and meditatively, commonly found in yoga practices.

---

**Autonomic regulation:** involuntary bodily processes that occur without conscious control.

---

**Benign:** non-cancerous.

---

**Cancer:** a condition involving uncontrolled cell growth that damages the body.

---

**Cancer diagnostic procedures:** key methods include biopsies, imaging techniques (X-ray, ultrasound, CT, MRI), and blood tests for tumour markers.

---

**Cancer-related fatigue (CRF):** a profound, cancer-associated fatigue that does not improve with rest or sleep.

---

**Carcinoma:** a type of cancer where cells divide uncontrollably. Derived from the Greek «karkinos» (crab).

---

**Checkpoint inhibitors:** A modern class of medicines that activate the immune system to respond more aggressively to cancer cells.

---

**Chimeric antigen receptor T cells (CAR-T cells):** immune cells taken from the patient's blood, modified in a lab to express receptors allowing them to identify and destroy cancer cells.

---

**Classify:** to categorise or assign into groups.

---

**Complementary medicine:** therapies like homoeopathy, naturopathy, anthroposophic medicine, and acupuncture that may support conventional treatment by reducing side effects or chronic symptoms.

---

**Conventional cancer treatment:** standard oncology treatments including surgery, radiotherapy, chemotherapy, hormone therapy, and immunotherapy.

---

**Cytostatics:** pharmacologic substances that destroy or inhibit the growth of cells, especially cancer

---

---

**Cytotoxicity:** the ability of a substance (e.g., drug, virus, or immune cell) to damage or destroy living cells.

---

**Dedifferentiated tumour cells:** tumour cells so altered that they can hardly be linked to their tissue of origin. See Anaplastic Tumour.

---

**Degree of dysplasia:** see Grading and Malignancy Grade.

---

**Differentiated tumour cells:** tumour cells retaining features of their tissue of origin; typically, slower-growing and less aggressive than dedifferentiated cells.

---

**Dysplasia:** abnormal cellular changes.

---

**Eurythmy therapy:** a movement therapy according to anthroposophic medicine.

---

**Grading:** the process of assessing how altered or aggressive a tumour appears under the microscope.

---

**High-grade dysplasia:** poorly differentiated tumour cells with little resemblance to their tissue of origin.

---

**Histological examination:** microscopic examination of tissue to determine if changes are benign or malignant.

---

**Holistic cancer treatment:** see “integrative cancer care” below.

---

**Host tree:** the tree on which mistletoe grows.

---

**Immune status:** a laboratory test that provides information about the condition of the immune system and its ability to fight infections and alien cells such as cancer cells.

---

**Immunomodulation / immunomodulatory:** modifying immune function using pharmaceutical substances.

---

**Integrative cancer care:** using complementary therapies (e.g., natural medicine) alongside conventional cancer treatments, supporting body, vitality, soul, and self, including the immune system.

---

**Intermediate-grade dysplasia:** moderately differentiated tumour cells with partial resemblance to their tissue of origin.

---

**Laparoscopy:** minimally invasive surgical procedure using small incisions and a camera to examine or operate on the abdominal, thoracic, or pelvic area.

---

**Leucocytes:** white blood cells that defend the body against infections and toxins.

---

**Low-grade dysplasia:** well-differentiated tumour cells closely resembling the original tissue, usually less aggressive.

---

**Malignancy grade:** a measure of how fast cancer cells divide, ranked from G1 (low) to G3 (high).

---

---

**Malignant:** cancerous; describing cells that grow uncontrollably and may invade surrounding tissue.

---

**Metastasis:** spread of tumour cells to distant organs via the blood or lymphatic system.

---

**Mindfulness-based stress reduction (MBSR):** a method of reducing stress and improving wellbeing through mindfulness techniques.

---

**Minimally invasive:** surgical procedures performed through very small incisions to reduce tissue damage. See Laparoscopy.

---

**Monoclonal antibodies:** laboratory-made antibodies designed to attach to specific targets on cancer cells, marking them for immune attack.

---

**Nature-based therapies:** therapies that use the healing potential of nature to support emotional, psychological, and physical wellbeing.

---

**Neoadjuvant therapy:** treatment (e.g., chemotherapy, radiotherapy) given before surgery to shrink the tumour.

---

**Nuclear medicine:** diagnostic methods using radioactive substances to detect metabolic changes, often in cancer.

---

**Oncological treatment:** cancer treatment using surgery, radiotherapy, medication (e.g., chemotherapy, hormone or immunotherapy), and supportive care.

---

**Oncology:** the branch of medicine focused on cancer.

---

**Positron emission tomography (PET):** an imaging method in nuclear medicine to visualise metabolic activity. See Nuclear Medicine.

---

**Pranayama:** breathing exercises to support health, mindfulness, and vitality.

---

**Primary tumour:** the original tumour from which other areas of cancer may spread.

---

**Proteins:** also known as proteins; essential biological molecules made of amino acids.

---

**Radiology:** the medical field that uses imaging technologies (e.g., X-ray, CT, ultrasound, MRI) for diagnosis and treatment.

---

**Recovery (convalescence):** gradual return to health following illness.

---

**Recurrence (relapse):** the return of cancer after a period of improvement.

---

**Resilience:** The ability to cope with and recover from difficult life events.

---

**Scintigraphy:** a nuclear medicine test where radioactive substances highlight metabolic activity, e.g., in tumours.

---

**Shinrin yoku:** «forest bathing» – spending time in nature to reduce stress and boost immune function.

---

---

**Sonography:** ultrasound imaging.

---

**Staging:** assessment of a tumour's size and how far it has spread in the body.

---

**Supportive medicine:** therapies that ease symptoms and side effects, aiding recovery but not intended to cure the disease itself.

---

**Symptoms:** signs or indicators of illness or injury.

---

**Thoracoscopy:** a minimally invasive procedure to examine the chest cavity. See Laparoscopy.

---

**TNM system:** a global system for classifying cancer: T = tumour size, N = lymph node involvement, M = distant metastases.

---

**Traditional chinese medicine (TCM):** a holistic system with a 5,000-year history, including acupuncture, diet, herbal medicine, meditation, movement, and massage.

---

**Tumour:** abnormal growth of tissue due to cell proliferation. Benign tumours stay localised; malignant tumours may spread.

---

**Tumour classification:** a biopsy is used to examine tissue under a microscope and determine how different the tumour is from normal tissue.

---

**Tumour markers:** proteins or molecules in the blood or body fluids that may indicate the presence or recurrence of a tumour.

---

## Useful addresses

### **Camphill Wellbeing Trust**

St. Devenicks, Murtle Estate, Bielside  
Aberdeen AB15 9EP  
United Kingdom  
[www.camphillwellbeing.org.uk](http://www.camphillwellbeing.org.uk)

### **National Centre for Integrative Medicine**

Chapel Pill Lane, Pill  
Bristol BS20 0HH  
United Kingdom  
[ncim.org.uk](http://ncim.org.uk)

### **NHS Centre for Integrative Care**

Gartnavel Hospital  
1053 Great Western Road  
Glasgow G12 0NR  
United Kingdom  
<https://www.nhsggc.scot/hospitals-services/main-hospitals/gartnavel-general-hospital/nhs-centre-for-integrative-care/>

### **Friends of NHS Centre for Integrative Care**

1053 Great Western Rd  
**Glasgow G12 0YN**  
United Kingdom  
[friendscic.org](http://friendscic.org)

### **Penny Brohn UK**

Ham Green House,  
Chapel Pill Lane, Pill  
Bristol BS20 0HH  
United Kingdom  
[pennybrohn.org.uk](http://pennybrohn.org.uk)

### **Physicians Association for Anthroposophic Medicine (PAAM)**

PO Box 880  
Moab, UT 84532  
United States of America  
[anthroposophicmedicine.org](http://anthroposophicmedicine.org)

### **Royal London Hospital for Integrated Medicine**

60 Great Ormond Street  
London WC1N 3HR  
United Kingdom  
[www.uclh.nhs.uk](http://www.uclh.nhs.uk)

### **St Luke's Therapy Centre**

53 Cainscross Rd  
Stroud GL5 4EX  
United Kingdom  
[www.stluketherapycentre.co.uk](http://www.stluketherapycentre.co.uk)

### **Synthesis Clinic**

Castle End Business Park  
6, Castle End Rd  
Reading RG10 9XQ  
United Kingdom  
[www.synthesisclinic.co.uk](http://www.synthesisclinic.co.uk)

### **Yes to Life**

Integrative Cancer Care Charity  
71-75 Shelton Street  
Covent Garden  
London WC2H 9JQ  
United Kingdom  
[yestolife.org.uk](http://yestolife.org.uk)

A list of ISCADOR distribution partners worldwide is available on our website: [www.iscador.com](http://www.iscador.com)

Please note that due to regulatory requirements, our products may only be available by prescription in certain countries.

# Notes



