

# Integrative Oncology

## New options and chances



*Immunotherapy. Integrative Oncology.*



## Editorial

**Dear reader – welcome!**

Since 1998, the “Dr. Kleef – Hyperthermia” Institute has been engaged in the research, development and application of integrative cancer therapies. Increasing numbers of people throughout the world are falling ill with cancer. New innovative prevention and therapy measures are urgently called for. It is here that integrative oncology can play an important role.

Before we tell you more about the multitude of individual applications in integrative cancer therapy, please first accompany me in the vision and reality of oncology today.

***Yours,  
Dr. med. Ralf Kleef***

## **A chasm is gaping: The case for integrative oncology**

For three quarters of a century, intensive research has been carried out in the basic research laboratories of this world on cancer's causes, emergence, prevention and therapies. Definitive healing often means surgery. In the almost seven decades since the Second World War, neither the financial outlay of innumerable thousands of billions of dollars nor the intellectual commitment of entire generations of researchers has been able to reach a breakthrough in finding a cure worldwide – or better said, in the industrial nations – for the “scourge of mankind”.

**The unresolved problem is that of metastasis.**

Admittedly, important advances exist in the application of chemotherapy in healing children's leukaemia, lymphomas or testicular cancer. Breast cancer is also considered to be curable – provided that it is detected at a sufficiently early stage. When recognised early enough, bowel cancer is deemed to be eradicated following surgical resection. The early detection of cancer continuously improves life expectancy or curability. In most types of cancer, the arsenal of established classic therapies improves prognosis; modern pain therapy takes the fear away from the illness. Radiotherapy is proving itself to be highly effective in many cases – at least in repressing the tumour cells. Also to be mentioned is “targeted therapy”. Since the new active ingredients have an influence on those processes that largely only take place in cancer cells, they promise a better impact on the illness compared to chemotherapy – as well as fewer side effects on the body's healthy cells.

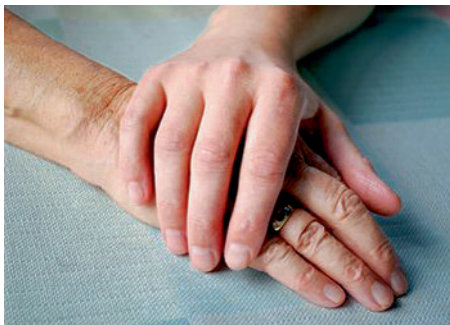
This multi-disciplinary research embraces such diverse aspects as the research of immune systems, molecular biology and genetics, environmental medicine and nutrition, sports science and psychology – in this case, particularly the area of psychoneuroimmunology: the science of the link between the brain and the immune system. The question exists as to how important a role does our mental-spiritual state play in our being confident of our ability and desire to get healthy through the treatment?

**However, a chasm is gaping: The basic researchers of this world have long been significantly more advanced than the clinical reality of the oncology being practised.**

Also, at this point, it is absolutely necessary to mention the scope of phytotherapy, empirical medicine and the numerous methods of naturopathy.

**The treasure represented by the experience made by civilisations of ethno-medicine, botany or religion, often dating back over millennia, is equally undergoing intensive global research: which role are all of these areas able to play in healing?**

**Why do I speak of a chasm?** The reason being because, both in terms of medical history and in umpteen thousands of “individual cases”, all of these areas point to very promising new paths towards healing. Globally, the fundamental research has not only begun to research the biological, cultural and socio-psychological “mechanisms” of healing. It can also prove that healing means a great deal more than the administering of chemical agents or blasting away at cancer cells with radiation. But much too little of these findings make their way into daily clinical life!



Where is the comprehensive spiritual care of tumour patients, who have to come to terms with the shock of the diagnosis? Which type of food are the patients expected to eat from the clinic's commercial kitchens? Who takes into account the fact that many chemotherapeutic agents work better at certain times during a 24-hour period (circadian rhythms) or have a better or worse impact, taking into consideration the inflammatory microenvi-

ronment of the tumour? Where is hyperthermia applied for the improvement of efficacy in chemotherapy and radiotherapy? Who advises the affected patients about the enormous positive impact of sport during the therapies and during the after-care? Who, together with the patients themselves, discusses and analyses the patient's family and professional situation, and that of their personal love of life or feelings of reluctance, so as to expose (unconscious) obstacles to health? Who prescribes massages or acupuncture in order to alleviate the pain and to reinforce the “chi”? Who stimulates the immune system with the dendritic cells? With mistletoe therapy? From the magnificent treasures of phytotherapy, who prescribes such well-known substances

as turmeric or magnesium-citramate in order to reduce tumour inflammation? Who guides patients in meditation, qigong or tai chi? This list goes on much further, but who implements all of this knowledge in the clinic?

**The patients of this world are the ones who are increasingly demanding this knowledge from their therapists, and from the institutes and industries operating in the background.**

But do industries have an interest in this integration? Yes, but only in the event that the process or the substance(s) are patentable and able to yield profits worth billions. Thus, the news is all over town that – in the post-industrial age – findings and interests have long entered into an unholy communion.

Science based on love and the quest for truth has long given way to the pragmatism of medical corporations worth billions of dollars, which primarily have their eyes on their “return of investment – ROI” and, as a result, must also have according to the logic for approval processes for new substances and methods.

The clinical trial, originally planned by the legislator for the protection of patients and proof of efficacy, has long become a powerful weapon of the industry, since it alone has the staying power over ten years and has access to the estimated one billion dollars necessary for the approval of new substances and methods. The social insurance systems of all countries compliantly serve this paradigm and have thus, in broad areas, practically become industry’s henchmen. Evidence-based medicine is the name of the sacred cow. Empirical medicine, naturopathy, the “individual cases” or the “miracle” of healing, and patients’ very personal capabilities, are not listened to and are almost systematically excluded. However, which smaller companies have the financial resources or the time to get approval for therapies using mistletoe, enzymes or dendritic cells, for example? Where are the advocates for psychotherapy or spiritual support? Where are the means for comprehensive nutritional advice, for changes in lifestyle?



**Countless patients bear testimony to this change in how they think about their lives: They become experts on their own health.**

A re-think is taking place, a metanoia on the part of those concerned – first made possible on account of global networking through the Internet.

And deeply affected individuals have an instinctive feeling; they seek and find those so essential common denominators of a possible cure. They trust their intuition, their stomachs and their hearts concerning the paths to healing that appear to them to be the most promising. Naturally, these must absolutely take into account the opinion of experienced oncologists, since no patient should or can singlehandedly decide which therapy options are sensible and scientifically proven in a particular stage of the cancer. But it is essential to collect second, third and fourth opinions. Frequently, a therapy's anticipated "benefit" is only a temporary reduction in tumour size at the cost of quality of life. Or the therapy doesn't work at all and valuable time has been lost, the immune system further weakened. Clear, well-documented and indisputable is the fact that active debate with the illness can decisively improve the prognosis.

**Man's autonomy, his active quest and the absolute will to survive form the indispensable foundation of every cure.**

Which oncologist has the right to deny patients this autonomy and hope? The verdict, "you are incurable", stabs into people like a knife, preventing and incontrovertibly destroying the great power of belief, prayer or meditation.

It quite literally breaks the zest for life. "They have no wine" was significantly the first public work of Jesus of Nazareth, the master of the Occident at the Marriage at Cana. They have run out of wine, in other words their happiness has gone. And he later recalls the most important commandment: "Love thy neighbour as thyself". This love is mankind's greatest strength. Anyone, who experiences and gives it, lives in happiness. Thus, the individual (recently) diagnosed with cancer sees itself confronted with the paradox challenge – in view of the diagnosis – to find love for themselves, happiness and confidence: strengths, which have a direct impact on the immune system and its healing process, indeed make it come about. Let's not destroy, through thoughtless words, through brutal denial, the possibility of this rediscovery, the regaining of the individual's love for themselves: Anyone, who finds this and lives

this love, has cured themselves. I write these lines as a doctor, who has been seeking and treading paths towards an integrative oncology for more than 20 years. My most important teachers during this period were my patients themselves. Time and again, they have demonstrated to me: there are more possibilities, with the result that they let me search – for the expansion and implementation of new, but also unconventional therapy processes. Holistic medicine – school medicine: I find this classification to be terrible. In my opinion there is only good and bad medicine, and what matters in the end: “He who heals is right”. We must be wary of the “true believers”, the doctors who are too convinced by the schools of therapy that they represent.

A self-critical scepticism and constant questioning is necessary... how would I want to treat myself? If I were in the place of the patient sitting or lying opposite me, what would I wish for and need from the doctor?

**At the beginning of the 90's,  
Prof. Lloyd Old, my clinical teacher  
at the MSKC cancer research institute  
in New York, once said to me:  
“The good scientist tries to prove  
himself wrong.”**

### **A chasm is gaping.**

On the one hand, there is the sobering, often hectic daily life of doctors in the clinic, who find too little time for their patients, who are even described by many patients as being inhuman. Naturally, there are countless exceptions of colleagues and clinics that increasingly attempt to run a more “human” oncology, to integrate naturopathic therapies. But those who tread new paths are still far too few. On the other hand, there is the truly enormous, unexploited treasure of the research of new natural substances, of the integration of the intellectual-spiritual dimension in the research and realisation of healing, of all of the aspects that have previously outlined in brief. It's about the development of an applied integrative oncology, which builds the bridge between high-tech science and naturopathy, between randomised clinical studies and empirical medicine. The bridge has been built, but it is still populated by far more patients than doctors and scientists.



I wish all patients, and all colleagues from clinics and science, more patients who undergo a change in the way they think. They challenge us to continually expand our horizon and allow us to share the “miraculous healing”, as expressed in his television film of the same name by Kurt Langbein, the well-known Viennese science journalist, who is himself diagnosed and cured with cancer.

Healing always takes place on all levels of our being: physically, spiritually and intellectually.

Together with patients, doctors and scientists from across the globe, we will build a bridge over the chasm and tread new paths that put people's immune systems and spirits at the focus of all endeavours for curing cancer. ■

***Yours,  
Dr. Kleef***

*Dear reader, please continue reading about paths and opportunities of Integrative oncology. My team and I will inform you about specific methods and therapies we apply for and with our patients.*

*... "Pain says: Refrain!  
Yet all joy wants eternity --  
-- Wants deep, wants deep eternity."*

*(Friedrich Nietzsche)*



# Development of Integrative Oncology (IO) in austria

Successful prevention and treatment of chronic diseases, especially cancer, requires a comprehensive biological-naturopathic basic idea, which integrates, as far it is possible all knowledge of the so-called conventional medicine and natural science, but tries to greatly expand these measures with integrative methods.

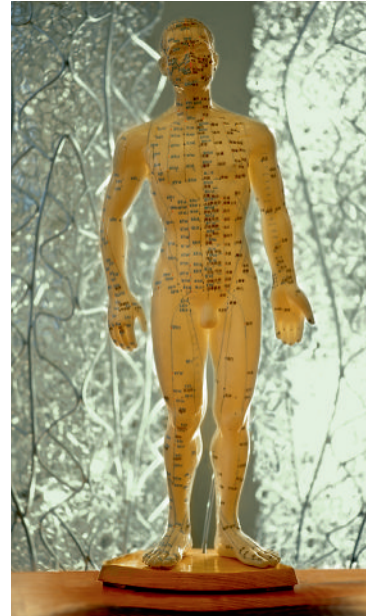
We do not stand in contrast to conventional medicine, but see our offerings as a meaningful “add-on” to complement the traditional forms of therapy.

## **The need for Integrative Oncology (IO) is based on the following points**

(Oncology) Patients increasingly expect comprehensive care that meets the need for integration of questions about nutrition, psycho-oncology, (empowerment), orthomolecular medicine and naturopathic support options such as immunotherapy, TCM, acupuncture or homeopathy.

In the area of research there gapes a huge discrepancy between the research funding of university research in oncology, the research being almost exclusively on the genetic and molecular level, and the study of methods of integrative oncology worldwide.

A welcome exception is the OCCAM founded 1998 in the United States as “Office of Cancer Complementary and Alternative Medicine” at the NIH in Washington. Also worth mentioning is the young, independent, Brussels based non-profit foundation. [www.reliablecancertherapies.com](http://www.reliablecancertherapies.com).



The term Integrative Oncology (IO) describe a useful combination of different therapies and is looking at natural remedies like TCM and homeopathy, procedures such as hyperthermia, psycho-oncology, nutritional medicine and immunology not opposed to, but as essential, medically useful addition to the three traditional pillars of surgery, radiation - and chemotherapy.

### **There are increasing studies showing that the use of the possibilities of Integrative Oncology**

- ➔ not only dramatically advances the known improvements in health-related quality of life
- ➔ but also achieves an improvement in progression-free survival (PFS), and
- ➔ demonstrates an improvement in overall survival (OS).

Patients incorporating methods of IO, in average often describe a significantly improved health-related quality of life. Furthermore, several analyzes suggest **that the use of methods of the IO can save costs in health care.** Above all, it is more than justified to assume that the mental-emotional health of patients and their „coping mechanisms“ such as autonomy and mobilization of internal resources have a significant impact on successful treatment, reduction of recurrence rates and overall survival. This for example, has repeatedly been pointed by Grossarth-Maticcek.

### **Methods of Integrative Oncology (selection)**

To describe all methods of IO here is beyond the scope of this article and only a representative selection of different, often applied systems of IO will be outlined briefly here. Therefore, this outline does not claim to be complete.

#### **Add-on therapy to chemotherapy or radiation treatments:**

Chemotherapy or radiation therapy can cause significant side effects. The long-term treatment experience shows that the add-on of Integrative Oncology methods improves effectiveness of chemotherapy or radiotherapy while simultaneously side effects of classical treatments significantly decrease. These effects have been scientifically confirmed.

### Benefits of basic adjunctive IO therapy:

- Significantly improved quality of life
- The defense capacity of the immune system remains largely intact
- The effect of chemotherapy and radiation is amplified
- Faster recovery

	Side effects	Standard therapy (Chemotherapy/radiation)	Standard therapy and Multimodal cancer therapy
1	nausea/vomiting	moderate to strong	low
2	mucosal inflammation	yes	no
3	blood dyscrasias	yes	slightly
4	hair loss	yes	no
5	nervous disorders	yes	reduced
6	heart damage	often	less often
7	allergies	yes	no
8	kidney/bladder problems	yes	low
9	quality of life	significantly reduced	well
10	psyche	considerable strain	balanced
11	efficacy	yes	yes, improved

### Selection of adjunctive therapies before, during and after chemotherapy and radiotherapy, and surgery:

- Individual ortho-molecular therapy according to the latest study findings
- Building the immune system
- Colon Cleansing
- Individual infusion program
- Homeopathic accompaniment
- Psycho-oncological accompaniment
- Dietary advice including BIA measurements and creating an individual nutrition plan
- Learn relaxation techniques: yoga, Meditation, autogenous training, relaxation response...
- Individual therapy for chemotherapy-induced side effects (eg, paresthesias, mucous problems, hair loss, ...)
- 24 hours after chemotherapy performance of whole-body hyperthermia

Activate the immune system against cancer:

All cancers have in common that they can fool the immune system and thus evade the body's natural defenses. With selected treatments, the immune system is activated and modulated so that the body itself can again act against the cancer.

## Hyperthermia

Cancer cells develop as they grow their own, poorly organized blood supply, which makes them particularly sensitive to heat. The type of hyperthermia depends on the location of the tumor: whether it just under the skin or deep inside the body, whether it is clearly limited or has already metastasized. But whatever type of cancer you are dealing with – located – hyperthermia is never given as a sole therapy, but only in combination with radiation, chemotherapy or immunotherapy.



The **local surface hyperthermia** is used in limited tumors that are located just beneath the skin, such as in recurrent breast cancer, melanoma and non-operable nodes in the neck.

The **Regional deep hyperthermia** treats cancer hidden deep inside the body, but are still limited to particular regions, such as tumors in the pelvis or in the gut, in the arms or legs.

The **part-body hyperthermia** is a further development of the regional deep hyperthermia and is also suitable for larger, not limited tumors in the lower abdomen.

The **whole-body hyperthermia** heats the whole body under close medical supervision at fever temperatures, using modern water-filtered infrared-A technologies. Effects are based on the one hand in synergies to chemotherapy and radiation, on the other hand, on complex immunological mechanisms that increase the immunological defense against cancer.

### **Metronomic thermo chemotherapy (MT-CHT)**

This is a specialized chemotherapy (CHT) in doses that will harm the cancer but not the immune system. In conjunction with long-term whole-body hyperthermia these MT-CHT also shows significant effect in advanced tumors. This special treatment can increase the effects of the immune system indirectly significantly and fights the cancer cells directly. Side effects of CHT are reduced significantly. This innovative method – although promising – is still rarely used in the standard medicine.

### **More to metronomic chemotherapy thermal and long-term whole-body hyperthermia with a variety of important effects:**

- formation of heat shock proteins on cancer cells. This makes that the cancer cells become visible to the immune system and can now be directly attacked.
- improvement of microcirculation in tumors: thus chemotherapeutics AND immune cells can penetrate better into the tumor micro environment.
- Reduction of „interstitial“ tissue pressure: the same effects as mentioned just before are achieved.
- by breaking the oxygen depletion of tumors, tumor cells are more sensitive to radiation, the formation of new blood vessels is inhibited and the progression of tumor disease prevented (Warburg effect, dedifferentiation).

### **Hyperthermia effect on tumor cells:**

Through intensive thermodynamic basic biological research that has been ongoing since the 70s, we now know that temperatures of 40.5 °C and above can be cytotoxic to malignant tissues, ie, a cell-killing or inhibiting effect on tumors. The technique of locoregional hyperthermia achieves heating of tumor cells by means of high-frequency waves, which leads to an evolution of an intracellular acidic environ-

ment as well as a depletion of nutrients in the tumor. As a result cell metabolism is severely disrupted, so this may eventually lead to the death of cancer cells (apoptosis).

### **Activation of the immune system:**

Another effect of hyperthermia is the clear activation of the immune system. The heat leads to changes of the cancer cells, so that they can be better distinguished from healthy tissue. This effect called „heat shock proteins“ that serve the defense cells as a badge. These proteins appear at overheating on the surface of tumor cells, but not on „healthy“ cells.

### **Other therapies for the activation of the immune system**

**Dendritic cell therapy:** From one's own blood white blood cells (monocytes) are filtered and used for producing of a dendritic cell vaccine. Dendritic cells have a messenger function; identify the enemy for the killer cells (cytotoxic T cells).

**Fever therapy:** By giving special inactivated bacteria, an attack of fever is triggered for several hours in the body. Excessive temperatures are here endogenously produced by the body itself. For some cancers, such as non-Hodgkin's lymphoma or breast cancer, this treatment is highly recommended.

**SSI Immunotherapy:** A specific activation of the immune system, depending on the localization of tumors or metastases specifically selected for the location of the cancer. It shows an increased immune response in the tumor development (macrophage Shift Class II to Class I macrophages).

**Thymus:** particularly successful for use in immune systems pre-damaged by chemotherapy and radiation.

**Orthomolecular Therapy:** For optimal performance of the immune system an excellent source of quality nutrients is essential. It turns out that the current WHO guidelines represent only an absolute threshold, but no recommendation for the purposes of an optimally functioning immune systems. We use

materials through special manufacturing processes can be absorbed much better (Phytosomen principle, Nano technology). Micronutrients in our food loss is induced by long transportation and storage as well as the kitchen scale processing (storing, preparing, processing, roasting, grilling, frying, cooking, processing in the microwave, cooking).

Inadequate micronutrient intake (nutrients) in the body can lead to disturbed metabolic processes as well as to an increase in free radicals. Free radicals are very aggressive highly reactive oxygen molecules or chemical or organic compounds that contain oxygen. Especially in oncology, the importance of free radicals and their therapy is probably selected by substances such as turmeric, selenium, vitamin C, silibinin, incense and many others. It is undisputed that the targeted delivery of these nutrients engages particularly in chronic inflammatory process, which is called in oncology „malignant inflammation”.

### **Psychotherapy – Empowerment – Autonomy training**

The science of the connection between the brain and immune system, Psycho-Neuro-Immunology (PNI) was founded early 80s of the last millennium. Our thoughts and feelings affect crucially our immune function and thereby the healing process. Therefore we offer a unique approach of training your immune system through aware-



ness, meditation and mind control (2-day intensive seminar-Life program). Of particular importance is our cooperation with the leading clinic for Integrative Oncology in Canada: [//www.inspirehealth.ca/](http://www.inspirehealth.ca/).

Together with Inspire Health, we have built our Life Program. A two-day intensive program for (newly) diagnosed cancer patients, in which the theme of „empowerment“ plays a central role.

(see also: <http://www.dr-kleef.at/lifeprogramm.html> )

## “Life Program“

Our institute is adopting a new Canadian approach to the „empowerment“ of (newly) diagnosed cancer patients. We receive patients in a healing environment in addition to high-tech medicine including meditation, mindfulness training, yoga, mental coaching and psychotherapy.

Patients should be able to take an active role in their treatment:  
the improvement in overall survival and reducing  
the risk of cancer recurrence thereby is secured.

In treatment programs, we encourage patients to self-help and encourage capability of decision and freedom. The individual patient is being provided the necessary basic information, support and knowledge to make their own personal healing environment and the way to it.

- ➔ make informed choices regarding treatment. Self-determination rather than other-directed.
- ➔ to take responsibility for your life and your health and make the appropriate action measure itself
- ➔ Develop a supportive environment to involve your family and friends with
- ➔ Figuring out how the meaning and goals in life affects your health
- ➔ Practical ways to learn how to reduce stress and lead a healthy communication with physicians, family members and friends
- ➔ rediscover the passion and joy in your live
- ➔ allow the process of self-discovery and inner growth in a safe and loving atmosphere with joy
- ➔ To activate your self-healing powers
- ➔ Understand the latest research and developments in cancer research



The two-day LIFE program consists of a 12 hours of education and experiential, intensive group educational experience. The programs are conducted exclusively by experienced doctors and health scientists. 10-20 patients (and their families) experience together all aspects of integrated care of cancer patients and healing, including an exploration of the foundations of our health and healing, meditation, exercise, healthy diet, visualization, group formation, decision making and autonomy training, vitamins and minerals.

**Participants, both cancer patients and their families, value this as invaluable experience. They learn how to transform the fear of a cancer diagnosis with each other in inspired action and how to implement ways to support their own health and healing.**

After the first extended visit to the doctor and the two-day Life Program we invite patients for a period of four weeks, to weekly attend two-hour group sessions. These sessions conducted by one of our doctors, offer the possibility to explore the concepts of health and healing in depth, since patients have begun to implement these changes in their lives.

In addition to the above programs, we provide core health Classes: Cooking for optimum health, nutritional support sessions, meditation, yoga, visualization and relaxation with a number of support groups. These classes support the individual survival plan of the patient.

### **The need for integrated care:**

There is clear and growing evidence that the inclusion of cancer patients in their own healing process (in the English language one uses the successful concept of „Healing Journey“) with an integrative approach massively can accelerate and improve (ie, exercise, healthy diet, emotional support, etc.) the (healing-) outcome. This significantly improves the quality of life, reduces the risk of relapse, increases survival rates and reduces overall healthcare costs.

### Some examples:

**Exercise and healthy diet** are associated with a significant risk reduction in a wide range of cancers, including the most common types of cancer (ie, breast, prostate, lung and colon cancer)

**Sports/exercises** is associated with a 20-50% reduction in breast cancer recurrence and mortality risk of the disease.



### Vitamin D Supplementation

Through vitamin D supplementation it was found that the occurrence of cancer can be reduced by 60% (by 78%, when supplementing with vitamin D was continued for more than one year). Two recent studies (breast cancer, colon cancer) have clearly shown that the vitamin D blood levels at the

time of cancer diagnosis strongly correlated with survival, which strongly suggests that vitamin D has an important role, not only in cancer prevention, but also in therapy. Patients with high vitamin D levels had a 50% lowered risk of recurrence of their disease compared to patients with low vitamin D levels. Potentially 12,000 or more cases of cancer could be prevented each year in Austria alone with sufficient vitamin D supplements.

**A randomized controlled trial (RCT)** has clearly shown that healthy lifestyle changes PSA progression reverses in early prostate cancer, which can change the course of this disease significantly.

**Numerous RCTs have found** that melatonin, a simple inexpensive addition of the sleep hormone may enhance survival in a variety of advanced cancers significantly; there were more than double the one-year survival rates and the response observed on chemotherapy while reducing the „side effects.“

**Through the combination of fish oil and vitamin E** (two simple and inexpensive supplements) it has been established that the function of the immune system is greatly improved, and survival in patients with advanced cancer is prolonged.

## **Further evidence that the approaches of IO can be advantageous in the synergy for conventional cancer treatment**

Two studies have found that patients with colon cancer, who perform sports regularly, have a 50 - 60% reduction in cancer mortality. A remarkable result: better than the results that can be achieved exclusively with chemotherapy and radiation. In a large-scale RCT it has been found that a low-fat diet combined with a modest weight loss, the recurrence of breast cancer is reduced by 24%, similar to the range of results that can be achieved by tamoxifen for five years, but at a fraction of the cost.

### **Focus on prevention and personal responsibility**

Cancer and conventional treatments have a huge impact on the patients and their families. Cancer patients have a significantly higher risk (than the general population) to develop a second cancer due to the latent carcinogenic effects of chemotherapy and radiation. This also relates to the increased risk for other diseases including diabetes, cardiovascular disease, obesity and osteoporosis. These physical and psychosocial effects of cancer and its treatment reduce the quality of life for cancer survivors.

Many of them also complain about persistent problems with emotional stress, fatigue, reduced energy consumption and loss of stamina. In short, survivors have almost twice the likelihood of functional limitation than the general population. The economic costs of depreciation are enormous for individuals, their families and friends, cancer care, our health care system and the taxpayer.

**The frequency and effects of many of these diseases can be reduced through healthy lifestyle changes, including exercise, healthy diet, weight control and smoking cessation.**

### **Improving patient belief systems – impact on healthcare costs**

Along with evidence that healthy lifestyle changes can reduce the risk of relapse significantly, the chances of survival for people with cancer increase significantly (and thus reduced total health care costs). There is increasing evidence that this integrative approach to support health during cancer treatment has significant advantages in terms of reducing the total cost. Hopelessly set cancer patients consume 130% more medical benefits, including 130% more hospital days as autonomous, hopeful patients.



This has a significant financial impact, as hopelessness and suffering in people with cancer are extremely common. Worldwide studies in cancer patients identified in 37% of patients the criteria for very severe psychological pressure. Another study of 386 patients from twelve U.S. medical centers demonstrated that 35% of patients experience severe psychological stress and an even larger study consisting of 4,496 cancer patients showed in 35.1% of the patients enormous emotional strain.

Not surprisingly is therefore the growing demand to promote the above described interventions and support programs for the mental and emotional well-being of cancer patients. Canadian studies found that the length of hospitalization was reduced dramatically by 78%, a decline in hospitalization frequency by 67% and a reduction in emergency room visits by 45% if patients used IO concepts. The potential cost savings associated with such a simple and inexpensive intervention is considerable.

In summary, we believe that the multidisciplinary methods of Integrative Oncology achieve a substantial reduction in cancer mortality and health care costs. The integrated cancer care is reasonable and necessary, the demand for these services is growing rapidly. ■

*"Walk ways that no one has travelled before,  
so you leave behind traces."*

*(Antoine de Saint-Exupéry)*

## **Our Vienna Institute and Integrative Oncology**



Our Vienna Institute is one of the leaders of integrative cancer care and is supported by a non-profit organization in the research. Since 1998, our institute has supervised more than 6,300 patients. Our programs are designed to provide an optimal cancer healing environment („Healing Environment“) and are supported by current evidence-based research. This integrated approach addresses the prevention, personal responsibility and the broader context of the life of a patient. We value the achievements and values of conventional cancer therapies, at the same time we are aware of the immense importance of supporting health by enhancing the immune functions of the body, mind and soul. Decisive is the autonomy of the patient, to take responsibility over their own health and healing. Patients should be able to take an active role in their treatment: improvement in overall survival and reducing the risk of cancer recurrence is secured thereby. **The result is a higher quality of life with a reduced financial and social burden on patients, families, communities and taxpayers.**

We – this is a team of dedicated people from different disciplines: doctors, nurses, nursing assistants, nutritionists, medical massage therapist, practice managers, secretaries, yoga/ meditation teacher, psycho-therapist, scientists and medical students of the Medical University Vienna.

**In our work one motivation moves us: we want to help our patients as we would want it ourselves.** We achieve this through love in dealing with ourselves, our environment and community. Our goal: to support the patients entrusted to us on their way to healing in every way. ■

## Literary:

- Beliveau, R and D. Gingras. Role of Nutrition in Preventing Cancer Can Fam Physician. 2007 November; 5311: 1905.
- Johnson, IT and E. K. Lund. Review Article: Nutrition, Obesity and Colorectal Cancer Aliment Pharmacol Ther. 2007 Jul 15; 262: 161-181.
- Barnard, RJ Prostate Cancer Prevention by Nutritional Means to Alleviate Metabolic Syndrome Am J Clin Nutr. 2007 Sep; 863: S. 889-93.
- Willer A. Cancer risk reduction by physical exercise. World Rev Nutr Diet 2005; 94: 176-88.
- Monninkhof, EM, S. G. Elias, F. A. Vlems, et al. Physical Activity and Breast Cancer: A Systematic Review Epidemiology. 2007 Jan; 181: 137-157.
- Holmes, MD, W. Y. Chen, D. Feskanich, C. H. Kroenke and G. A. Colditz. Physical Activity and Survival After Breast Cancer Diagnosis JAMA. 2005 May 25; 29320: 2479-2486.
- Ornish, D, G. Weidner, W. R. Fair, et al. Intensive Lifestyle Changes may Affect the Progression of Prostate Cancer J Urol. 2005 discussion 1069-70; Sep; 1743: 1065-1069.
- Mills, E, P. Wu, D. Seely and G. Guyatt. Melatonin in the Treatment of Cancer: A Systematic Review of Randomized Controlled Trials and Meta-Analysis J Pineal Res. 2005 Nov; 394: 360-366.
- Lissoni, P, S. Barni, M. Mandalà, et al. Decreased Toxicity and Increased Efficacy of Cancer Chemotherapy Using the Pineal Hormone Melatonin in Metastatic Solid Tumor Patients with Poor Clinical Status Eur J Cancer 1999 35(12):1688-1692.
- Gogos, CA, P. Ginopoulos, B. Salsa, E. Apostolidou, N. C. Zoumbos and F. Kalfarentzos. Dietary Omega-3 Polyunsaturated Fatty Acids Plus Vitamin E Restore Immuno deficiency and Prolong Survival for Severely Ill Patients with Generalized Malignancy: A Randomized Control Trial. Cancer. 1998 Jan 15; 822: 395-402.
- Lappe, JM, D. Travers-Gustafson, K. M. Davies, R. R. Recker and R. P. Heaney. Vitamin D and Calcium Supplementation Reduces Cancer Risk: Results of a Randomized Trial Am J Clin Nutr. 2007 Jun; 856: 1586-1591.
- Ng, K, J. A. Meyerhardt, K. Wu, et al. Circulating 25-Hydroxyvitamin D Levels and Survival in Patients with Colorectal Cancer Journal of Clinical Oncology. 2008 Jun 20; 2618: 2984-2991.
- Palmieri, C, T. MacGregor, S. Girgis and D. Vigushin. Serum 25-Hydroxyvitamin D Levels in Early and Advanced Breast Cancer J Clin Pathol. 2006 Dec; 5912: 1334-1336.
- Meyerhardt, JA, E. L. Giovannucci, M. D. Holmes, et al. Physical Activity and Survival After Colorectal Cancer Diagnosis Journal of Clinical Oncology. 2006 Aug 1; 2422: 3527-3534.
- Meyerhardt, JA, D. Heseltine, D. Niedzwiecki, et al. Impact of Physical Activity on Cancer Recurrence and Survival in Patients with Stage III Colon Cancer: Findings from CALGB 89803 J Clin Oncol. 2006 Aug 1; 2422: 3535-3541.
- Chlebowski, RT, G. L. Blackburn, C. A. Thomson, et al. Dietary Fat Reduction and Breast Cancer Outcome: Interim Efficacy Results from the Women's Intervention Nutrition Study J Natl Cancer Inst. 2006 Dec 20; 9824: 1767-1776.
- BC Health 2007 Strategic Plan.pdf, p.11.
- Brown, BW, C. Brauner, and M.C. Minnottee, Noncancer deaths in white adult cancer patients. Journal of National Cancer Institute, 1993. 85: p.979-997.
- Bines, J. and W. J. Gradishar, Primary care issues for the breast cancer survivor. Compr Ther, 1997. 23: p. 605-611.
- Yoshikawa, T., et al., Insulin resistance in patients with cancer: Relationships with tumor site, tumor stage, body weight loss, acute-phase response, and energy expenditure. Nutrition, 2001. 17: p. 590-593.
- Balkau, B., et al., Hyperinsulinemia predicts fatal liver cancer but is inversely associated with fatal cancer at some other sites: The Paris Prospective Study. Diabetes Care, 2001. 24: p. 843-849.
- Rock, C.L. and W. Demark-Wahnefried, Nutrition and survival after the diagnosis of breast cancer: A review of the evidence. Journal of Clinical Oncology, 2002. 20: p. 3302-3316.
- Chlebowski, R.T., E. Aiello, and A. McTiernan, Weight loss in breast cancer patient management. Journal of Clinical Oncology, 2002. 20: p. 1128-1143.
- Nuver, J., A.J. Smit, and A. Postma, The metabolic syndrome in long-term cancer survivors, an important target for secondary measures. Cancer Treat Rev, 2002. 28: p. 195-214.
- Schultz, P.N., et al., Health profiles in 5836 long term cancer survivors. Int Journal Cancer, 2003. 104: p. 488-495.
- Twiss, J.J., et al., Bone mineral density in postmenopausal breast cancer survivors. Journal Am Acad Nurse Pract, 2001. 13: p. 276-284.
- Ramaswamy, B. and C.L. Shapiro, Osteopenia and osteoporosis in women with breast cancer. Semin Oncol, 2003. 30: p. 763-775.
- Diamond, T.H., et al., Osteoporosis in men with prostate carcinoma receiving androgen-deprivation therapy: Recommendations for diagnosis and therapies. Cancer 2004. 100: p. 892-899.
- Hewitt, M., N. Breen, and S. Devesa, Cancer prevalence and survivorship issues: Analyses of the 1992 National Health Interview Survey. Journal of the National Cancer Institute, 1999. 91: p. 1480-1486.
- Demark-Wahnefried, W., et al., Riding the crest of the teachable moment: Promoting long-term health after the diagnosis of cancer. Journal of Clinical Oncology, 2005. 23(24): p. 5814-5830.
- Broeckel, J., et al., Quality of life after adjuvant chemotherapy for breast cancer. Breast Cancer Research and Treatment, 2000. 62: p. 141-150.
- Hewitt, M., J.H. Rowland, and R. Yancik, Cancer survivors in the United States: Age, health, and disability. J Gerontol A Bio Sci Med Sci, 2003. 58: p. 82-91.
- Chirikos, T.N., A. Russell-Jacobs, and P.B. Jacobsen, Functional impairment and the economic consequences of female breast cancer. Women Health, 2002. 36: p. 1-20.
- Cramp, F and J. Daniel. Exercise for the Management of Cancer-Related Fatigue in Adults Cochrane Database of Systematic Reviews. 2008 2: 006145.
- McNeely, ML, K. L. Campbell, B. H. Rowe, T. P. Klassen, J. R. Mackey and K. S. Courneya. Effects of Exercise on Breast Cancer Patients and Survivors: A Systematic Review and Meta-Analysis CMAJ. 2006 Jul 4; 1751: 34-41.
- Browne, Arpin, Corey, Fitch and Gafni. (1990). Individual Correlates of health Service Utilization and the Cost of Poor Adjustment to Chronic Illness. Med Care. 281:43-58.
- Carlson, Linda E and Bultz, Barry D. (2004). Efficacy and Medical Cost Offset of Psychosocial Interventions in Cancer Care: making the Case for Economic Analyses. Psycho-Oncology 13:837-849.
- Kaiser Permanente study (Sobel, 2000) cited in Carlson, Linda E and Bultz, Barry D. (2004). Efficacy and Medical Cost Offset of Psychosocial Interventions in Cancer Care: making the Case for Economic Analyses. Psycho-Oncology 13:837-849.
- Ashbury, Findlay, Reynolds, and McKerracher. (1998). A Canadian Survey of Cancer Patient's Experiences: Are their Needs being Met? Journal of Pain & Symptom Management. 165:298-306.
- Smith, Smith, and Toan. 1989.
- Radford, Woods, Lowe, and Rogers. (2004). A UK Multi-Centre Pilot Study of Speech and Swallowing Outcomes Following Head and Neck Cancer. Clinical Oncology & Allied Sciences. 294:376-381.
- Blanchard, CM, Courneya, KS, Stein, K. Cancer Survivors' Adherence to Lifestyle Behavior Recommendations and Associations with Health-related Quality of Life: Results from the American Cancer Society's SCS-II. J Clin Onco 2008 26(13):2198-2204.





contact and information:  
[www.dr-kleef.at](http://www.dr-kleef.at)

## Dr. Ralf Kleef

### VITA

#### STUDIED MEDICINE AT THE UNIVERSITIES:

1984-1991

- Ruhr University Bochum
- Private University of Witten/Herdecke
- Medical Faculty, University of Vienna
- Guy's Hospital London

1991 State exam in medicine, Private University of Witten/Herdecke

1992 Promotion and license to practice medicine

1994 Specialist in general medicine and naturopathy

1994-1996 Basic research as a Postdoctoral Research Fellow at Memorial Sloan-Kettering Cancer Center (MSKCC), New York City, USA

1996 Postdoctoral fellow in Immunology at MSKCC in New York City

1996-1998 Head of a commission of experts to fever therapy of cancer at the Office of Alternative Medicine (OAM)/National Institutes of Health (NIH), Washington, USA

### SINCE

1997 Training Manager for the module "naturopathic physician" in Germany

### SINCE

1998 Medical practice and research in Vienna

1999 Foundation of the Institute for Heat and Immune Therapy (IWIT) in Vienna

2003 Integration of hyperthermia as a course in the curriculum of the University of Vienna

2004 Entry in the list of experts as "Sworn court certified expert for hyperthermia and Complementary Medicine"

2005 Beginning of the academic teaching practice, Medical University of Vienna

2007 Initiation and Scientific Director of the first Austrian hyperthermia Congress

2010 Start of cooperation with RCT: [www.reliablecancertherapies.com](http://www.reliablecancertherapies.com)

2011 Establishment of the Foundation for Integrative Oncology,

Opening of the new center in Vienna-Hietzing

# Dr. Kleef Hyperthermia

*Immunotherapy. Integrative Oncology.*



IMPRESSUM Copyright by:

Dr. med. Ralf Kleef, Allgemeinmedizin, Immunologie und Naturheilverfahren

Auhofstrasse 1-3 • 1130 Wien - Österreich

Telefon: +43.1.585 73 11 • Telefax: +43.1.585 73 11-20

E-Mail: [office@dr-kleef.at](mailto:office@dr-kleef.at) • Homepage: <http://www.dr-kleef.at>

Redaktionelle Beratung:

Europäische Akademie für Naturheilverfahren und Umweltmedizin  
(EANU) Berlin, Dagmar Moldenhauer

Grafik-Design: EANU Jochen Friedrich, Berlin

Bildquellen: Dr. Kleef, Joe Haider, Fotolia.com: photocrew, Stefan Balk, Kaththea,  
lily, Jürgen Fälschle, Amaro, flashpics.