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Treating Prostate Cancer with Immune Therapy Using the Gorter Model

Robert Gorter, MD, PhD, and Erik Peper, PhD

I had a primary tumor. It is no longer there. You can feel it when there is a large tumor in the prostate—and you can feel it when the tumor is gone. You can also see the difference clearly on an ultrasound.

Now my PSA is in the normal range, around 6.0. Not a single urologist will frown if somebody of my age has 6.0.

I have changed my life. I feel healthy. I go for walks, swim, and cycle, and on holidays, I go mountain climbing. I need to work out to regain some muscle mass, and that will take a while…but there are no other limitations.[1]

H. Hagemeyer, treated with the Gorter Model
Six year survivor of stage IIIb prostate cancer with a Gleason Score of 9
From the documentary at: http://www.medical-center-cologne.com

Clinical research on prostate cancer treatment has shown that watchful waiting and healthier lifestyle frequently leads to an improved clinical outcome.[i]

However, for advanced cases the outcome is much less promising, especially when metastasis has occurred. Prostate cancer treatment generally focuses on surgically removing the cancer, killing the cancer cells with radiation or chemotherapy, or temporary blocking or slowing the growth of the cancer with hormone-suppressing drugs. Invasive treatment of patients with stage 3 and 4 cancers with high Gleason Scores in most cases postpones death by only a few months, while the patient's quality of life tends to deteriorate due to the side effects of the therapy. These treatments also frequently damage other tissues.

Encouraging outcomes with newer treatments suggest that supporting and enhancing the body's own immune capabilities offer significant promise in the fight against prostate cancer. This article outlines a protocol of immune therapies developed by Robert Gorter, MD, PhD, founder and director of the Medical Center Cologne, in Cologne, Germany, which provides integrative cancer treatment. Dr. Gorter holds an MD degree from the University of Amsterdam, post-doctoral training from the University of California San Francisco Medical School, a PhD from Witten/Herdecke University in Germany, and post doctoral training in anthrophosophical medicine from the Wegman and Lucas Clinics in Arlsheim, Switzerland. He has extensive clinical experience in immunology and HIV-related treatment gained

through research and clinical practice working in AIDS programs in San Francisco in the 1980s and 1990s, initially as a physician in the famous Ward 86, and subsequently as medical director of the Department of AIDS Epidemiology and Biostatistics at UCSF for four years.

Building on his training and clinical experience, he has spent the past 20 years developing a cancer treatment protocol of therapies to mobilize and improve immune function.
The Gorter Model includes a number of medical interventions that have been studied extensively in Europe, Japan, and worldwide. The details of these procedures are described in a book forthcoming from North Atlantic Press/Random House, *Fighting Cancer* (May, 2011). These therapies, combined in protocol for individualized cancer treatment, have been found to significantly enhance immune function:

- Therapeutic fever (described in the literature as total-body, fever-range hyperthermia)[ii]
- Localized hyperthermia administered to the tumor tissue[iii]
- A form of immune inoculation using dendritic cells to "restart" or improve immune activity[iv]
- Other immune-enhancing approaches such as nutrient infusions[v] and oral supplements, as used in orthomolecular medicine

Hundreds of research studies have demonstrated the clinical efficacy of dendritic cell therapy, whole-body hyperthermia, and localized or regional hyperthermia. Patients treated with the Gorter protocol experience higher total remission rates, improved clinical outcomes, and significantly improved quality of life.

What makes the Gorter Model unique is the integrative approach in applying these immune-enhancing therapies in clinical treatment, particularly the integration of hyperthermia with dendritic cell inoculation. The model provides these therapies in targeted, finely tuned protocol, calibrated over more than two decades to maximize both clinical benefit and safety.

Hyperthermia, dendritic cell inoculation, and antioxidant infusions are given in a unique sequence so they activate and enhance the body's own processes. Patients have no negative side effects other than temporary discomfort lasting a day or less, and the vast majority of patients report tangibly improved energy and quality of life—an experience very different from that associated with traditional chemotherapy, radiation, hormone suppression, and surgery.

This protocol can be used as a complete therapy and it can also be provided in tandem with conventional medical procedures to treat cancer.[vi]

Patient Outcomes
To date, of the 3,500 patients who have received care at Medical Center Cologne (MCC), 96% came to the center with an initial diagnosis of end-stage (stage IV) disease with no remaining therapeutic options. MCC was considered by them as their last hope.

Data from MCC indicate that approximately 380 of these patients have obtained complete and sustained remission.

Clinical data quoted here are based on the health histories of all patients who received three dendritic cell vaccinations or more. Periodically patients come to the center with conditions

so advanced, they are at the end of the disease process and die within a few weeks. Data on patients who begin the protocol with only days or weeks to live are not included in the following statistics on long-term patient survival.

Disease Specific Outcomes
Of patients who have received three or more vaccinations with dendritic cells, rates of complete remission have averaged:

- 18% for malignant melanoma
- 22% for breast cancer
- 48% for brain tumors (*glioblastoma multiforme* stage IV).

In addition, partial remissions are seen in roughly 60 to 70% of all cancer patients with solid tumors, many surviving five to ten years with good quality of life.

The average remission rate at MCC for primary brain tumors such as *Glioblastoma multiforme* stage IV is 48% using immume supportive therapies, in contrast with a survival rate in conventional treatment of 28% the first year for patients treated with radiation and Temodal. At three-year follow-ups, the contrast in survival is even greater. Patients with brain tumors treated at MCC with the Gorter Model have a 43% survival rate compared with a 1% survival with conventional therapy.

Currently, there are hundreds of patients treated for end-stage cancer using the Gorter Model who have lived significantly longer than their statistical prognosis, without the debilitating side effects of toxic therapy. The majority of these patients experience significantly improved quality of life. Of the end-stage cancer patients treated with the Gorter Model who have experienced complete remission, there is a 1% recurrence rate (all were patients who were persistent smokers). Patients who show the best response have received at least three vaccinations with dendritic cells and are active participants in their own healing process.

Prostate Cancer Outcomes
Approximately 60% of all prostate cancer patients treated at MCC have experienced significantly prolonged survival time, typically from five to eight years. Most of them entered treatment with stage IIIb or IV cancer and a Gleason Score between 7 and 10.

Prostate cancer patients typically show significant clinical improvement, with tangible quality of life. The clinic has also had extensive experience with metastatic prostate cancer. In cases of far-advanced forms of prostate cancers and with a Gleason score of 9 or 10, 15% of patients experience complete and sustained remission.

The Gorter Model
The clinical protocol for metastatic prostate cancer involves the integration of the following therapies:

1) **Immune inoculations.** The vast majority of cancer patients have depressed immune function, reflected in lower levels of natural killer (NK) cell activity. In the vast majority of patients, immune surveillance and detection of malignancies are also impaired. This surveillance capability is normally carried out by dendritic cells, which are antigen-presenting immune cells that circulate throughout the body and inner organs, seeking

abnormal and cancerous cells. When the dendritic cell finds a malignant cell, they initiate the destruction of that cell by alerting NK cells (and other cytotoxic cells) with the "ID" or antigen of the deviant cell. This triggers a targeted response to destroy the malignant cell(s).

When any of us develops clinical cancer, it is a sign that dendritic cells are no longer functional—no longer able to recognize malignant cells. By inoculating patients with millions of young and vital dendritic cells, the immune system is restored in its anti-cancer activities.

Specialized laboratories now have the capability of developing dendritic cell inoculations using autologous dendritic cells (extracted from the patient's own blood). In the first year of treatment, these inoculations are applied at two-week intervals (six vaccinations in total) to restart immune function and sensitize the immune system to the presence of cancer. After the initial reintroduction of dendritic cells, these inoculations are given for the following three years, one vaccination every six months. After four years, it is recommended that patients receive one vaccination per year.

The vaccine is manufactured using 80 ml—100 ml of peripheral blood drawn from the patient, which is sent to a lab where the monocytes can be isolated. In a seven-day process, dendritic cells are then developed from the patient's own monocytes. For each vaccination, a new batch of dendritic cells is created in the lab, which assures the vitality of the vaccine. Patient responses following vaccine administration indicate that in the majority of cases, each subsequent inoculation further augments the immune response.

2) **Therapeutic fever.** Almost all cultures have had some form of heat therapy, from Indian sweat lodges to contemporary infra-red saunas. The rationale for the therapeutic benefits of heat and induced fever are found throughout the medical literature.[vii] Research conducted over the past 150 years indicates that fever is the signal which activates the immune response. Once the immune system reaches an alarm phase of 101° F (38.5 °C) the level of immune activity begins to rapidly double. This activation is reflected in higher levels of T cells,[ii] interleukins,[viii] dendritic cells,[ix] heat shock proteins,[x] and other immune factors.

   In terms of the effect of fever on cancerous tissue, once the body mounts a fever, cancer cells drop their escape mechanism and become more visible to dendritic cell detection. The cancer cells also begin overproducing lactic acid and eventually die from excessive intracellular lactic acid production.

   Clinical data from the Medical Center Cologne indicate that the combination of "fever-range, total-body hyperthermia" and dendritic cell vaccinations is more effective than either treatment in isolation. Many of our patients who had been told to prepare for death are able to get back to living their lives and some experience complete remission.

Total-body hyperthermia is provided to approximately 70% of all MCC patients. Each of these hyperthermia treatments lasts about 4 hours, which includes the gradual heating and cooling of the body. During hyperthermia patients are carefully monitored for both temperature and pulse rate, and receive infusions to avoid dehydration and to restore levels of antioxidant nutrients. New patients are given at least six sessions of hyperthermia and six dendritic cell injections during the first year.

All patients are carefully screened for their appropriateness for hyperthermia–patients with a heart condition or brain tumor, or too weak to withstand the four hours of heat stress—are treated with other therapies such as localized hyperthermia, but not with whole body hyperthermia.

3) **Localized or regional hyperthermia**. In localized hyperthermia, heat is applied directly to the tumor tissue. In regional hyperthermia, a "region" or area of the body is selectively heated so that only the cancer cells increase in temperature. In the treatment of prostate cancer, these targeted heat treatments may be applied to the pelvis, the prostate region, and at locations where metastases are present. Localized hyperthermia is used with approximately 99% of our patients.

   Each session of localized hyperthermia takes one hour. This targeted heating increases the temperature within the the malignant cells to 107.6 °F (42 °C) so they die due to the increased intra-cellular lactic acid production. Only the tumor cells are increased in temperature—surrounding healthy cells are not affected. The localized temperature elevation and the resulting cancer cell death also usually activate an immune response.

   Another reason localized hyperthermia is so effective is that cancerous cells contain abnormal proteins which are coarser and thousands of times larger than normal proteins. During hyperthermia, these tumor proteins absorb energy when exposed to a MRI-like electromagnetic field. This causes the targeted cells to heat up to a very high temperature, resulting in the destruction of the malignant cells (*necrosis*).

   The electro-hyperthermia equipment used for localized hyperthermia causes no risk of burns and can be focused exclusively on any area of the body. Unlike total-body hyperthermia, with this localized technique the tumor cells can be selectively heated. This enables us to provide interventions for areas of the body that would normally be difficult to treat, such as bone tissue, the lungs, and the head. The fact that localized hyperthermia can be efficacious in treating brain tumors was borne out by a recent Phase III study for patients with brain lesions, in which hyperthermia proved to support significantly better results in terms of illness-free time and survival when compared with radiation and/or medication (Temodal).

4) **Infusion therapy.** Patients are treated with infusions of vitamin C, magnesium, thymus and spleen peptides, minute amounts of selenium, meteoric iron, zinc, gold, antimony, and other immune enhancing supplements, given in conjunction with both localized and whole-body hyperthermia. Patients experiencing significant weight loss receive infusions of amino acids to prevent or reverse wasting.

The efficacy of infusions in cancer treatment has been documented in research from the NIH published in 2004, comparing the efficacy of vitamin C given orally and via IV.

- When terminally ill cancer patients were provided with *oral* megadoses of vitamin C of 10 grams a day, no clinical benefit was observed.
- By comparison, IV infusions produced blood levels of vitamin C that were "140-fold higher than those from maximum oral doses.[xi]

The conclusion of this NIH team (including Riordan and others) was that "only intravenous administration of vitamin C [and not oral vitamin C] produces high plasma and urine concentrations that might have antitumor activity."

5) **Infusions of biphosphanates for bone metastases.** In cases of metastases, we recommend patients receive monthly infusions with 4 mg of Zometa. This medication belongs to the group of biphosphanates that strengthen bone by increasing calcium content. This has been found to limit the development of existing bone metastases and also prevent new bone metastases. We have documented remarkable success in treating bone metastases and often these patients go into permanent and complete remission within a few months when we apply Zometa in combination with localized or regional hyperthermia. Usually patients receive monthly infusions of Zometa for a full year and then about one infusion every two months for the next six months. By then, there is often no need to continue giving the Zometa routinely.

6) **European mistletoe (*Viscum album L.)*.** In European oncology, mistletoe is one of the most studied of all botanicals. There are thousands of research studies showing beneficial effects in both cancer patients and in people living with chronic viral infections.[xii] One of the clinical benefits of mistletoe is the improvement of NK cell levels, and other similar cytotoxic cells responsible for destroying malignancies.

   At the Medical Center Cologne it was found that approximately 90% of all cancer patients have significantly decreased NK cell functions. That could explain why large cohort studies of mistletoe show great benefit in quality of life and significantly prolonged survival when cancer patients with solid tumors took mistletoe for at least three months. In Central Europe, it is estimated that about 70% of all cancer patients receive mistletoe on prescription from their treating oncologist or family practitioner. Patients generally self-inject the mistletoe subcutaneously, given every 3 days in the morning, approximately twice a week.

7) **Lifestyle and self-care.** Prostate cancer patients receive education on nutrition and lifestyle issues. They are also prescribed supplements, some in orthomolecular dosages. Supplementation typically includes vitamins A, B complex, C, D, and E, curcumin, and other immune-restoring substances, among them trace elements such as selenium and zinc and plant-derived medications from dandelion, chicory, and horsetail. Melatonin is recommended to help restore circadian rhythm,

All these protocol can be combined with conventional therapies such as chemotherapy or radiation, so patients are not forced to choose between treatment options. They simply continue working with their community oncologist and when the integrative treatment takes hold and their scans have confirmed this, the more toxic therapy is gradually phased out.

These protocol have been so successful, it is our hope that in the future cancer patients will have access to this type of treatment at a much earlier stage. Research on nontoxic therapies such as Newcastle Disease virus in stage II and III cancer patients found in long-term follow-ups that the majority of patients were surviving 10 and 15 years with good quality of life. These therapies expand the options for patients who are contraindicated for a more conventional approach, for example due to sensitivity to medication, impaired detoxification, very young or very advanced age, or other health issues that would preclude invasive treatment.

More information can be found on the website: http://www.medical-center-cologne.com
The website also includes documentary videos that provide a sense of the exceptional health and vitality of many of our patients using these non-toxic protocols. The documentaries feature patients who have experienced total remission even though they came to the medical center with stage IV cancer, having been told that they had no treatment options and only little time left.

This protocol is described in greater detail in the forthcoming book by Robert Gorter, MD, PhD, and Erik Peper, PhD. *Fighting Cancer: Mobilize Your Immune System Using the Gorter Model*, published by North Atlantic/Random House, May 2011.

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Contact Information:

Robert Gorter, M.D, Ph.D.
Director, Medical Center Cologne at Eduardus Krankenhaus
Custodisstrasse 3-17
50679 Cologne, Germany
r.gorter@medical-center-cologne.com
+49 221 788 030

Erik Peper, Ph.D.
Professor, Institute for Holistic Health Studies/Department of Health Education
San Francisco State University
1600 Holloway Avenue
San Francisco, CA 94132
epeper@sfsu.edu

+1 510 681 6301

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