



# The Grossgold Clinic Program for Integrative Oncology

## For Prospective Patients

Research has shown that there is a strong desire by the American public for integrative oncology. This may be due to the increasing number of studies validating these holistic and alternative therapies which are from all over the world, including Europe and Asia. We blend both conventional and alternative medicine whereby we practice integrative oncology. We offer peer-reviewed, cutting-edge, nontoxic therapies gathered from around the world.

## Are we winning the war against cancer?

According to Dr. Ian Haines who wrote in Lancet in 2014, “We have used toxic and overly aggressive chemotherapy for 40 years with incurable solid cancers and there have been no studies that show maximum tolerated dose of chemotherapy achieves longer survival or better quality of life than minimum effective doses.”

Chemotherapy uses toxic drugs to target the rapid proliferation of cancer cells. The problem is that organs and tissues also contain normal cells that are rapidly replicating, and these are therefore also targeted along with the cancer cells. This includes the gut lining, accounting for nausea and vomiting commonly seen after chemotherapy. Also, bone marrow suppression can cause anemia with low hemoglobin or neutropenia with a low white blood cell count.

Chemotherapy is disappointing because of the likelihood of cancer relapse after completing treatment. The cancer is not totally eradicated and comes back. Relapse is caused by cancer stem cells, which are quiescent, nor actively replicating, and resistant to chemotherapy drugs. Other treatments are necessary to attack these cells.

After completing a course of chemotherapy, the tumor bulk may be eradicated, with a negative PET scan. However, hidden from view are the residual microscopic circulating cancer stem cells hiding in their niche, latent, biding their time until activation is triggered, causing regrowth and relapse of the cancer. When cancer returns, the cell type may become more aggressive and resistant to further chemotherapy. Another adverse effect of chemotherapy on the host immune system is that it allows the tumor to escape immune detection and eradication. This does not happen with low-dose, gene-specific chemotherapy.

## New Genomic Targeted Oncology

There is now a paradigm shift in oncology with the use of a targeted genomic pathway approach. I feel that the existing framework for cancer drug development is insufficient and unsustainable. We should be using new technology such as systemic high throughput methods for screening of drugs for further anticancer efficacy. Understanding tumor biology is important as well as finding effective new drug combinations. We use testing from around the world. We check the complete DNA and RNA exomes of over 20000 genes and their transcription

Chemosensitivity testing, testing for efficacy of natural substances, immune evaluation, evaluation of circulating cancer stem cells towards aiming at a progressive cancer cure These allow for personalized treatments which are unique to each patient. Once these are completed and evaluated, customized treatment plans are developed. Once your cancer genome is evaluated we use targeted fractionated therapies along with cancer vaccines and intravenous phytonutrients to attain the highest therapeutic blood levels.

## Why did you get cancer?

Getting to the root cause of your cancer is crucial, so a thorough evaluation will be conducted. This may include testing for nutritional deficiencies, infections, toxins, digestive imbalances, neurotransmitter imbalances, sensitivities and allergies, genetic abnormalities, hormone imbalances, as well as evaluation of diet, dental health, and mental, emotional and spiritual factors. Approximately 30-40% of cancers can be prevented by avoiding risk factors and implementing existing evidence-based prevention strategies.

## Cancer Treatment Options

Treatments include nontoxic cancer therapies, hyperthermia with both local and total body application, low-dose genomic fractionated chemotherapy (given via insulin-potential therapy, IPT), peptide therapy, cancer vaccines, repurposed cancer drugs, restoration of the immune system, detoxification, oxygenation with hyperbaric oxygen and intravenous ozone, EBOO, HOCATT, NanoVi, pulsed electromagnetic field (PEMF), far- and near-infrared sauna, molecular hydrogen and vibrational therapy. In addition, your microbiome is restored and infections are eradicated.

- **Non-Toxic Intravenous Natural Cancer Killing**

We use many different nontoxic therapies to help kill your cancer. Remember, circulating cancer stem cells are not affected by traditional chemotherapy. For that reason, other therapies need to be used. These are usually administered intravenously and occasionally orally. Initial treatment starts with these and later low-dose chemo is introduced if indicated.

- **Full-Body Hyperthermia**

Full-body hyperthermia targets abnormal cells and pathogens by elevating the temperature of the entire body. We use an insulated chamber to raise the body temperature. The goal is usually to raise the oral temperature to approximately 101.5 degrees Fahrenheit. The core body temperature will then rise about 2 additional degrees, and at that temperature, cancer cells are lysed and start to break apart. All temperatures are personalized and we always start with low levels and work up to higher temperatures. At the same time, oxygen is administered because the patient's head is kept out of the chamber. This also helps kill your cancer. The effectiveness of chemotherapy and radiation is increased with hyperthermia.

In addition, hyperthermia stimulates heat shock proteins which activate antitumor immunity during tumor cell necrosis. Such induced immunity was shown to assist in tumor regression as well as reduce the occurrence of metastasis.

- **Local Hyperthermia**

We use a highly advanced monopolar radiofrequency device to raise temperature locally at the site of the tumor to temperatures of 104 to 113 degrees Fahrenheit. The constant elevated temperatures deprive cancer cells of their ability to conserve substances they need to survive. By destabilizing the blood vessels that feed the tumors, they die.

Hyperthermia inhibits tumor blood flow resulting in collapse of the tumor's vascular system. Not only does it cause cancer cells to break down, but it increases the immune system response as well as increases tissue oxygenation and detoxification. It also promotes cellular repair and regeneration. In the European Journal of Cancer in 2001, hyperthermia doubles the 5-year survival rate of those that used it in addition to conventional therapy.

- **Insulin Potentiation Therapy with Low-Dose/Fractionated Chemotherapy**

Low-dose fractionated genomic chemotherapy via insulin potentiation therapy (IPT) is a method that uses insulin to more effectively transport chemotherapy into the cancer cell. Cancer cells have seven times the amount of insulin receptors on their cell membranes, and 10 times as many insulin growth factors as normal cells. We normally use 1/10<sup>th</sup> the dose of traditional chemotherapy but sometimes higher depending on the patient. Our choice of chemotherapy is based on the chemosensitivity testing that we obtain prior to the initiation of therapy.

The chemotherapy is given once or twice a week. There is much less collateral damage and fewer side effects. Our patients do not lose their hair or have diarrhea or nausea. Whatever side

effects they do have usually occur within the first 24 hours following treatment and are mild and subside quickly. We do not use this therapy on all patients, but rather on a case-by-case basis. The patient is monitored closely, and blood tests are obtained to monitor white blood cell counts and red blood cell counts as well as platelets.

- **Immune Peptides for Cancer**

Cancer therapy with peptides is a new approach to target the abnormal cancer exome. Therapies can stimulate the innate immune system and evaluate the need for specific immunotherapies and specific chemotherapy and/or natural substances.

When profiling certain cancer, it is vitally important to include all the data available. Urine proteomics along with next-generation sequencing is very powerful as well as understanding profiling of the tumor microenvironment and the excretion behavior. Next-generation sequencing profiles are genes that are associated with tumor development, proliferation and resistance.

Urine proteomics distinguish excretion products that may be associated with certain immune proteins, metabolic remnant proteins, and other important biomarkers that may not be discovered with next-generation sequencing alone.

The urine proteins that are uniquely expressed by your cancer and tumor RNA can then become the product base for precision peptides designed for each patient.

Therapeutic peptides have great potential in the treatment of cancer. They are small and can penetrate the cell membrane. They also have a high activity and specificity with minimal drug-to-drug interaction. They do not accumulate in specific organs. They target cancer cell membranes and can induce cancer cell death either by necrosis or apoptosis. These peptides are genomic and personalized to each patient.

- **Cancer Vaccines**

These include cytotoxic T-cell vaccines, natural killer cell vaccines, dendritic cell vaccines, supportive oligonucleotides, and others. By activating your own immune system, we can more effectively treat your cancer. These are manufactured from the circulating cancer stem cells found in your blood.

- **Repurposed Cancer Drugs**

A repurposed drug is an old drug that the FDA originally approved for a specific purpose that is now used “off-label” for something else. There are now hundreds of re-purposed cancer drugs. The revolution in cancer treatment is happening with a grassroots movement of people using these repurposed drugs to target metabolic pathways in both the original tumor and the circulating cancer stem cells. In our opinion, this is a historic revolution in the history of medicine.

With repurposed cancer drugs, we attempt to block several different cancer pathways. These include glycolysis, oxidative phosphorylation, the electron transport chain and autophagy. These are nontoxic therapies that have been found to be quite useful. It is necessary to impede all

pathways because cancer cells have tumor plasticity so that they may survive. If only one pathway is blocked, the cancer cell is very intelligent and can navigate down another pathway.

It is especially important that we follow our patients because these drugs can and do have side effects. Are our therapeutic blood levels adequate? Are there adverse effects of drug toxicity? Is the drug useful for humans? Is the drug too toxic for human use? Are there any drug-to-drug interactions? Monitoring is essential.

- **Restoration of Your Innate Immune System**

This is of paramount importance in your successful treatment. Multiple different therapies are incorporated into our programs that work towards the goal of restoring your immunity. Raising your immune function is of paramount importance when it comes to cancer.

- **Detoxification**

Our environment has changed drastically. We have polluted our air, soil, food and water with synthetic chemicals, electromagnetic radiation and other toxins which have in turn polluted every cell in our body. Every day the planet becomes more toxic with thousands of new chemicals and pollutants. Obviously, detox starts with avoidance. You need to make healthy lifestyle choices, and we can direct you on that.

Detoxification is especially important for late-stage cancer patients who have undergone chemotherapy and radiation because these therapies have great toxicity in the cells, and in turn affect the health and integrity of the cells. The body has many different ways to eliminate toxins, but the main ones are through your breath, your skin, your urine, and your bowel movements.

Modalities employed include juicing, coffee enemas and colonics, sauna, promotion of good bowel function, lymphatic drainage, liver and gallbladder cleansing, therapeutic breathing, heavy metal removal, dental detoxification, and creating a healthy, low-tox living environment. Especially important is the review of your toxin exposure through diet, personal care products, and cleaning products, which we have incorporated into our programs.

The electromagnetic field toxicity with constant exposure to WiFi, smart meters, cell phones, power lines, appliances and computers can cause cells to vibrate more rapidly divide and mutate. Thousands of studies have linked electromagnetic fields to cancer and other diseases.

- **Hyperbaric Oxygen Therapy (HBOT)**

Cancer cells do not survive well in an oxygenated environment. Therefore, any therapy that increases oxygen to your cells can help you heal from cancer. Hyperbaric oxygen involves delivering oxygen to the body under high pressure via a chamber. Oxygen is then dissolved into all the body fluids, which then transports the oxygen to the central nervous system, lymphatic system, and skeletal system where tumor(s) may be present.

Many studies support hyperbaric oxygen's benefits in cancer therapy. In Medical Oncology in 2016, it was concluded that "hyperbaric oxygen can provide many clinical benefits in the treatments of the tumor, including management of highly malignant gliomas, a type of brain cancer." Researchers also stated that it can enhance the effectiveness of conventional therapies.

- **Ozone Therapy**

Ozone has been used for many years in integrative oncology. It floods cancer cells with oxygen as well as stimulates immune function. In addition, there is an increase in microcirculation in healthy cells, which can aid in cell repair. We can also add ultraviolet blood irradiation, which is synergistic with intravenous ozone. Other ways to deliver ozone include via injection, 10 pass, and EBOO, a form of dialysis that employs ozonation and filtering of the blood as well as ultraviolet light.

- **HOCATT Therapy**

HOCATT stands for "hyperthermic ozone and carbonic acid transdermal therapy". This modality includes sauna, topical ozone and carbonic acid, light therapy, and PEMF. The heat coupled with carbonic acid increases the absorption of oxygen.

- **NanoVi**

This is a form of bioidentical signaling to help maintain normal protein folding and function. Additionally, it can help eliminate free radicals which can cause genetic damage to cells. Studies done before and after treatment can measure the damaged DNA in the urine. Many patients with chemical and other toxicity had decreased levels of DNA damage after treatment. It can also help reduce inflammation, improve mitochondrial function and boost the immune system.

- **Pulsed Electromagnetic Frequency (PEMF)**

As explained in the Cancer Medicine article from 2016 titled "Mechanisms and therapeutic effectiveness of pulsed electromagnetic field therapy and oncology", PEMF has several advantages in the treatment of cancer.

This therapy has been extensively studied in vitro using human cell lines such as in breast and colon cancer. Studies have shown that PEMF therapy inhibits proliferation by causing mitotic

spindle disruption. It also blocks the development of neovascularization required for tumor blood supply. It can effectively target cancer cells and not normal cells.

In vitro studies with breast cancer in mice were notable. Mice exposed to PEMF for 60 and 180 minutes daily showed a 30% and 70% breast tumor reduction respectively at 4 weeks. Hepatocellular cancers showed the same effectiveness.

- **Far- and Near-Infrared Saunas**

Saunas produce heavy natural sweating that mobilizes toxins to move them out of the body. In addition to detoxification, far- and near-infrared sauna treatments can increase levels of white blood cells, which can help fight infections and cancer, decrease inflammation, reduce pain, boost mitochondrial function and improve circulation and blood flow.

- **Vibration Therapy**

Compared with traditional physical therapy, vibration therapy has more positive results in a shorter period of time. It can help promote an increase in skeletal muscle tissue, which can increase muscle volume and strength and prevent muscle atrophy.

Skeletal muscle contraction is also involved with circulation, lymphatic drainage, nerve function, protein metabolism, insulin sensitivity, bone mineral density and blood pressure regulation.

- **Molecular Hydrogen Inhalation**

In cancer, there is growing evidence that shows hydrogen gas can alleviate the side effects of chemo and radiation. In a combined study with doxorubicin, a type of chemotherapy, there was an improvement in heart function and a decrease in toxicity with the injection of hydrogen. The hydrogen ameliorated the mortality and cardiac dysfunction caused by the chemotherapy.

Hydrogen is anti-inflammatory, and in some cancers, hydrogen suppresses the growth of cancer. Very important to note is that hydrogen gas selectively scavenges and neutralizes the hydroxyl free radical to lower free radical damage.

We utilize an inhalation machine that makes 99.9999% pure hydrogen. We can also generate hydrogen water.

- **Harmonic Egg**

The Harmonic Egg is a form of mind-body-energy healing. The resonant chamber sends out sound and color frequencies that your body detects and decodes as healthy resonate frequencies and healing vibrations. You can release old negative energy and improve your

physical condition and emotional and spiritual health. Sound healing works by activating genetic changes to damage cancer cells. Our patients receive energy therapy that is controlled, consistent and repeatable.

There are now many studies on light, sound and vibrational therapy and their positive effects on cellular health.

## Summary

We have studied with the greatest practitioners in the world teaching integrative oncology. We have brought the most effective treatment modalities from around the world together under one roof.

We continually develop and deliver cutting-edge, research-based, effective and non-toxic therapies and protocols to provide our patients with the best care possible anywhere in the world. We are convinced that the treatment of cancer is multi-dimensional and that therapies must be synergistic. Our mission is to become known as one of the world's number one choices for integrative cancer care.

If you need more information, please give us a call at 727-330-3844.



## **The Grossgold Clinic**

**Andreas Grossgold, MD, PhD | Dean R. Silver, MD MD(H)**

609 Lakeview Road, Clearwater, FL 33756

Ph: (727) 330-3844 | Fax: (727) 491-5624

[drgrossgold.com](http://drgrossgold.com)