Research Genetic Cancer Centre
Serving the United States, Canada and North Central America
Division of Turtle Healing Band
Licensed & Registered by: Indigenous HealthCare Practitioners Organization
A Private Tribal Membership Facility—*We are not open to the public.*
3105 MAIN STREET ● ROWLETT, TX 75088
TEL: 214-299-9449 ● www.rgcc-group.com

Why We Have Recommend and Used "The R.G.C.C. Cancer Test since April 2004 8.27.20 Revised

We have been using this test since April 2004. We were the first clinic in the US and Canada to start looking at a better more **Personalized Patient-Centered Cancer Care** to help those with cancer. To date we have personally ordered over 1800 tests. This has been in place in Europe before 2004. This is **not** "The Greece Cancer Cure" from Dr. Hariton-Tzannis Alivizatos of Athens, Greece. **We do not profess to cure cancer.**

Over the last 10+ years this test has emerged to be one of the most accurate and complete test of its kind we have seen to date. The test is performed in Greece by R.G.C.C., S.A. started by its present founder, Ioannis Papasotiriou, M.D., PhD, medical director of R.G.C.C., S.A.. It was good in the beginning and has consistently improved over the years to the present test, the best in my opinion and the opinion of many other physicians throughout the world. The use of this simple blood sample (**a blood biopsy**) with R.G.C.C., S.A. works with **ALL** cancers (solid tumors, blood cancers, sarcomas, etc..) except brain and central nervous system primary tumors (glioblastomas, astrocytoma, meningioma etc..), RGCC Labs can still work with these cancers when provided with a small, live tissue sample from the tumor. Results can be less effective because of using tissue samples rather than blood.

The field of oncology has become highly competitive over the past 2-3 years. This paradigm shift, can now be seen all over TV advertising and radio about "genetic testing", "personalized cancer care", targeted therapy", that helps give cancer patients a better chance of survival. At this point, none of these centers or any others we have looked at can do (or will do) what RGCC-labs of Greece does from only ~1.5 tablespoon of your blood. Now that is phenomenal use of modern day technology.

We know that cancer has been metastasizing [spreading and with a vengeance] in most all cancer patients for many, many years with little or no change. Up until recently no one knew for sure how or why this happened, just that it happened with great frequency. Now, many scientists throughout the world are saying, it is due to the circulating tumor and cancer stem cells (CTC's/CSC's). This is rapidly becoming the focus of much cancer research, how to stop these peripheral CTC's and CSC's from causing metastatic tumors which is responsible for at least 90% of all cancer related deaths. Furthermore, the CTC's and CSC's are suspected by a growing number of scientist to be the cause of almost if not all the metastasizes that do occur. With this new information what should be one of the main targets by oncologists? **Not** just the tumor (as it is now), but more importantly the circulating tumor cells (CTC's) and circulating cancer stem cells (CSC's) from each individual, these are the real trouble makers.

The primary cancer tumor is bad enough, but the CTC's and CSC's are the real problem. These cells are responsible for the metastasis and return of this chronic, systemic disease. In the last 42 years, well into the trillions of dollars have been spent on cancer research and treatment since the war on cancer was declared in 1971. The overall results of these efforts, time and money adds up to only ~2.1-7.5% increase in the 5 yr. survival rate (**see page 5, #1** for source and details). All this time, money spent, patient suffering and death, in my opinion, is not something one would be proud of. Certainly not a good return on your many billion or trillion dollars of investment.

The personalized cancer test from RGCC-Labs in Greece is known as an **ex vivo** test. **Ex vivo** (Latin: "out of the living") means that which takes place outside an organism. In science, ex vivo refers to experimentations or measurements done in or on tissues (or in this case CTC's and CSC's) in an artificial environment outside the organism with the minimum alteration of natural conditions. Ex vivo conditions allow experimentation under more controlled conditions than is possible for in-vivo experiments (in the intact organism), at the expense of altering the "natural" environment. RGCC has developed a way to not change any of the genetics (genotype and phenotype) or epigenetic expression and equally important to not change the epigenetics of the CTC's and CSC's this is very important.

In vivo (Latin: "within the living") is experimentation using a whole, living organism as opposed to a partial or dead organism, or an in vitro ("within the glass", i.e., in a test tube or petri dish) controlled environment. Animal testing and clinical trials are two forms of in vivo research. In vivo testing is often employed over in vitro because it is better suited for observing the overall effects of an experiment on a living subject. In microbiology, in vivo is often used to refer to experimentation done in live isolated cells rather than in a whole organism, for example, cultured cells derived from biopsies. In this situation, the more specific term is ex vivo. Once cells are disrupted and individual parts are tested or analyzed, this is known as in vitro.

In microbiology, in vivo is often used to refer to experimentation done in live isolated cells rather than in a whole organism, for example, cultured cells derived from biopsies or from the peripheral blood test (the RGCC Test).

In vitro (Latin: "within glass") refers to studies in experimental biology that are conducted using components of an organism that have been isolated from their usual biological context in order to permit a more detailed or more convenient analysis than can be done with whole organisms. Colloquially, these experiments are commonly referred to as "test tube experiments".

Why use the blood since only a small number of CTC's and CSC's are found in the blood?

It is well known and widely accepted by the scientific community that the primary tumor consists of stroma (fibroblast, monocytes, lymphocytes, vessels, etc.) and the malignant cells which are heterogeneous (not all cells are the same) since they are composed from different subgroups and subclones with different features and abilities. These are known as cancer tumor cells (CTC's). A portion of these CTC's are actually cancer stem cells (CSC's). Only very few of this population will develop metastatic ability which will allow them to invade the surrounding tissue, pass into the circulation and perform the epithelial to mesenchymal transition (EMT) creating the circulating CSC's. These cells now have all the information and ability to form micro-colonization and micro-metastases and often will later develop into potent micro-metastases, **this is why cancer returns**. **This is also why we see these CSC's still in the blood long after the patients' primary tumor is not detectable by PET/CT, MRI, CT, standard blood markers (CA 125, CA 19-9 etc.) or any other standard traditional measurements (I know for certain a minimum of 34 years).** As we have said many times before, the CSC's are the real trouble makers. Remember these CSC's are immortal (they have no Hayflick limit for cell division) and can divide as long as they live. They are circulating in your blood stream 24/7/365 days a year just waiting for the right opportunity (when your internal micro-environment {immune system} is not "up to par") to start another tumor or they may go dormant for up to 30+ years only to raise their ugly heads again. For this reason RGCC has selected blood samples as the most appropriate form for analysis since it includes the circulating cancer cells with the most relevant information for calculating the risk for both a potent metastasis and/or a reoccurrence from a few months to many years later. This is why we feel this is the best way to test, since metastasis is really what will kill most every cancer patient even 30+ years later. That is also why we use this test for regular follow-up testing to see if CTC's/CSC's remain, how many and any sudden changes in the number of CTC's/CSC's that may occur in the circulation over the months and years. This gives us a good idea, with **other standard medical measurements**, to find reoccurrences (if any) much earlier. We do not limit our recommendations to any one test. The standard medical tests and biopsies are still recommended and used as well. This gives us the best and most comprehensive way to evaluate the patient individually.

How do we analyze the harvested cells and use them to show risk of cancer relapse in clinical reality?

This is done by appropriate expansion of the CTC's. The CTC's will expand as the cancer stem cell like cell and then enter into exponential phase of growth which will generate a respectful number of CSC's (100's of billion to even trillions) in a very short period of time (~24-36 hours). At the same time we manage to keep intact both the genotype and phenotype of the cells and avoid any changes from your original CSC's. Therefore, after the final expansion we have maintained the identical genotype, phenotype and epigenetic expression. **The key to this exponential (rapid) growth phase is the cell culture. Dr. Papasotiriou has a proprietary method for this cell culture which does not change the genetics or epigenetics of the original CTC's/CSC's as shown by his patent. This is what allows R.G.C.C., S.A. to verify the actual agents as well as the genetics.** Most other labs only show results on the genetics of the tumor and what they should be sensitive to. A respectable percentage of the time they do not actually respond. Plus, RGCC results give us an actual percentage of both sensitivity and resistance to both natural substances and chemo-drugs. This is what we call **Personalized Patient-Centered Care** with no equivalent that we know of at this time.

How does RGCC assure the purity of the CTC's harvested from your blood?

R.G.C.C., S.A. uses powerful sorters and flow cytometers as well as negative selection-based interrogation. They are able to actually isolate the relevant CTC's/CSC's and not enrich them (not change your cancer cells in any way). Hence, they manage to have a pure sample of CTC's/CSC's and simultaneously harvest from just a single blood sample.

How does RGCC analyze the gene expression profile for the sensitivity/resistivity of the CSC's?

The expanded cells will be analyzed for one expression profile in a hall genome micro-array analysis. Hence, we now have all the information concerning epigenetic screening of the CTC's/CSC's. This profile will indicate to us which therapy (chemo therapeutics as well as nutritional therapeutics) your CTC's/CSC's are sensitive or resistant to and is **Personalized for each patient**. We have tested ~1000 patients with a wide variety of cancers and have never had the same protocol on any 2, even if the cancers were the same. The difference between protocols average 30-60% even in siblings with the same cancer.

How does RGCC verify that these chemosensitivity/chemoresistance results are really valid?

The information obtained from the gene expression analysis will be validated in a micro culture where the effect of each substance (chemo drugs) will be tested for 2-6 days and plotting a graph of the total number of your cells that were killed, while maintaining proper osmolality of the cell culture. The natural substances are tested by leaving the herb, vitamin, etc… in contact with your cancer cells for 48 hours. The reason, it takes this long for the natural compound to activate the caspase 3/9 and cytochrome-c pathway to induce apoptosis (cell death) of **your** cancer cells. These assays overcome the problem of linearity between gene expression and protein expression levels. The RGCC lab does not rely on the genetic assay only, as most other labs do, they actually test each individual chemo and natural substances to see if it really works and how well it works or not. No one else in the world has this capability, or accuracy, that I know of. Remember why, RGCC lab has the **proprietary method** on the cell culture which allows the growth (expansion) of the 5-200 CTC's/CSC's found in your blood sample to100's of billions up to trillions in just 24-36 hours. And RGCC does this without changing the genetics, epigenetic expression or phenotype of **your** cancer cells. This is remarkable and what no one I know of, is doing this work at this time.

What All Is Tested with the Onconomics Plus® Test?

The absolute beauty of this test is the ability to test what **your** cancer responds to without having any idea of where the primary tumor is located or even the type cancer it is. The lab will test~ **53** common chemo drugs and ~**45-49** natural substances and this is for all types of cancers, while most other labs are often limited to the approved drug list and no other lab (I am aware of in the world is interested or can test the natural substances).

RGCC, Ltd. will test **~ [45-49]** natural substances covering cytotoxic agents; immunostimulants/immunomodulators, cytokines; and increase of PBMC & NK, growth factor inhibitors of EGFr, IGFr, VEGFr, PDGFr, FGFr, and signal transduction pathways. The results show the **%** of sensitivity and/or resistance of each individual agent to induce apoptosis (cell death) to your cancer cells, i.e. ex-vivo.

The test also includes **~ [53]** chemotherapeutic agents. These include **[22]** alkylating agents, **[1]** epothilone, **[3]** inhibitors topoisomerase 1, **[9]** inhibitors topoisomerase 2, **[5]** nucleus spindle stabilizer 1, **[3]** nucleus spindle stabilizer 2, and **[10]** nucleoside analogues. You will also receive **[4]** resistance factors (MDR1, MRP, LRP, GST). The results shows, in %, the sensitivity and resistance of each agent tested. In other words which chemotherapy works best against your cancer cells.

You also receive results on **~ [73]** tumor related genes (this is very important): **[27]** related to growth factors and proliferation stimuli; **[14]** related to self-repair and resistance; **[5]** for angiogenesis; **[9]** for cell cycle regulation and immortalization/apoptosis; **[5]** covering angiogenesis-metastasis; **[13]** concerned with drug metabolism and targets; and **[7]** markers and **[48]** biological modifiers. You receive these results in % of over or under control, very exact. This will give your health care provider more detailed information about your cancer and their ability to grow and metastasize faster, their ability to resist certain drugs, the tendency to become immortal and much more. This is the true beauty of detailed **Personalized Patient-Centered Cancer Care**. I know of no other testing like it in the world.

How Do We Use All This to Personalize Support For Those With Cancer?

Our first goal is to decrease the tumor burden and the CTC's/CSC's. This severely stresses your immune system everyday 24-7. There are several ways of doing this. **First**, surgery early on will work 50% of the time for the primary tumor (rarely if ever killing any CTC's/CSC's). **Second**, is chemotherapy which can be used in conjunction with surgery. **Third** is radiation and this can be used in combination with any of the previous (rarely killing if ever any CTC's/CSC's). However, this is up to your oncologist to decide, hopefully they will choose the chemo-drug that shows to kill your cancer cells. In regard to the natural substances, (also tested to kill your cancer stem cells) our goal is to help support the immune system, help improve lifestyle, and support the physiological and biochemical processes of the human body by offering the integration of various nutritional support systems. This is also done using the test results to develop a **Personalized Patient-Centered Cancer Care** program for you. Generally, we will re-test (onco-count or onco-trail, not the entire test as in the beginning) every 3-4 months to measure the actual circulating tumor and/or stem cell like cell numbers. We also recommend you follow your oncologist schedule of ongoing PET/CT, MRI etc. testing. Since cancer is a systemic, chronic disease our goal is to help you live a quality and productive life, for as long as you should, and then leave this earth with the cancer **NOT** from the cancer. **Our goal is to have the tumors gone or stable and your cell count below 2 cells/ml.** Then we can talk about the long-term goals and mostly involves LIFESTYLE.

I have included a number of quotes and publications below that may be helpful for you to in making a truly informed decision of which lab you want testing your circulating cancer tumor and stem cells to see which chemotherapeutics and natural substances can cause the decrease of your tumor burden. While keeping in mind, the circulating CTC's/CSC's are the real ongoing, long term troublemakers for at least **90%** of cancer patients. I have also included a 6-page list of everything tested by RGCC, Ltd labs of Greece. **May you be blessed in all you do**.

If you have any questions please let us know so we can clear up any concerns, also visit our website.

We offer referrals for health care providers throughout the United States, Canada, and North Central America

****This test will NOT DETECT cancers of the brain or other cancers that have been "encapsulated" by the body, not releasing circulating tumor or stem cells (CTC, CSC) into the blood stream or if any of these cells are in dormancy. We still recommend the use of biopsy, blood markers and/or various scans with this test when cancer is suspected or known to exist. No test is 100% accurate.

RGCC, Ltd OF GREECE IS ACCREDITATED INTERNATIONALLY FOR THIS WORK

Hellenic Accreditation System S.A.
ACCREDITATION CERTIFICATE No. 860-2
of the
Center of Genetic Research of Cancer
PAPASOTIRIOU, IOANNIS Ltd
In Florina Greece
January 18th, 2013 - January 17th, 2021

APPROVED FOR THE FOLLOWING: Plus, More see: RGCC ISO EN 2021 documents

1. CTC/CSC isolation and immunophenotyping
2. Cancer cell culture viability/cytotoxicity assays after exposure to substances
3. Gene expression assays (mainly related with cancer stemness)

I hope this will help our physicians their patients and other clients understand our level of commitment to quality and remove any doubts that may have existed concerning the validity of the assay since this accreditation includes laboratory validation (performance) of the assays from different labs which we have no interest or relation).

We will utilize such tools as often as needed to promote the quality and sincerity of our work.

ISO 17025 identifies the high technical competence and management system requirements that guarante your test results and calibrations are consistently accurate.

This accreditation is recognized and accepted throughout the international (all nations) scientific and laboratory communities as the standard of excellence.

1. The contribution of cytotoxic chemotherapy to 5-year survival in adult malignancies.

MATERIALS AND METHODS:

We undertook a literature search for randomized clinical trials reporting a 5-year survival benefit attributable solely to cytotoxic chemotherapy in adult malignancies. The total number of newly diagnosed cancer patients for 22 major adult malignancies was determined from cancer registry data in Australia and from the Surveillance Epidemiology and End Results data in the USA for 1998.

The overall contribution of curative and adjuvant cytotoxic chemotherapy to 5-year survival in adults was estimated to be 2.3% in Australia and 2.1% in the USA.

Clin Oncol (R Coll Radiol). 2004 Dec;16(8):549-60
http://www.ncbi.nlm.nih.gov/pubmed/15630849

Vincent T., Jr. DeVita, Theodore S. Lawrence, Steven A. Rosenberg - Cancer: Principles & Practice of Oncology: Primer of the Molecular Biology of Cancer, Lippincott Williams & Wilkins; 1 Pap/Psc edition May 2011, Page 163, 164.

The next 3 quotes come from the above textbook:

1. "Evidence for the existence of biologically distinct CSC's, first demonstrated in a hematological malignancy and in the past 5 years in several solid tumors, has shaped a new paradigm of human cancer as a hierarchical disease whose growth is sustained by a population of CSC's. This conceptual shift has important implications not only for researchers seeking to understand mechanisms of tumor initiation and progression, but also for the development and evaluation of effective anticancer therapies".
2. "Thus, research must be directed at the relevant cell populations as identified through functional assays, the ultimate goal being the rational development of therapies that interfere with the oncogenic program within the CSC's."
3. "In contrast, the CSC model postulates that with an appropriate purification strategy, the CSC's with the capacity to initiate and sustain tumor growth *in vivo* can be identified and isolated from the bulk cells that do not have tumor-initiating activity."

"Here we show that a small population of cancer stem cells is critical for metastatic colonization, that is, the initial expansion of cancer cells at the secondary site, and that stromal niche signals are crucial to this expansion process".

Malanchi I, Martinez-Santamaria A, Susanto E, Peng H, Lehr HA. Interactions between cancer stem cells and their niche govern metastatic colonization. http://infoscience.epfl.ch/record/174426/files/nature10694.pdf.

"Cancer lethality is mainly due to the onset of distant metastases and refractoriness to chemotherapy. Growing evidence indicates that a cellular subpopulation with stem cell-like features, commonly referred to as cancer stem cells (CSC's), is critical for tumor generation and maintenance".

Maugeri-Saccal M, Vigneri PG, De Maria R. Cancer Stem Cells and Chemosensitivity. *Clin Cancer Res.* 2011 Aug 1;17(15):4942-7. doi: 10.1158/1078-0432.CCR-10-2538.

"The two most important days in your life are the day you are born and the day you find out why." Mark Twain : Samuel Langhorne Clemens (1835-1903) Author & Humorist

"Whenever you find yourself on the side of the majority, it is time to pause and reflect."
Mark Twain : Samuel Langhorne Clemens (1835-1903) Author & Humorist

"Discovery consists of seeing what everyone has seen and thinking what nobody else has thought."
Albert Szent-Gyorgyi

The dumbest organ is much smarter than the smartest doctor. The wisdom of the body!

"All truth passes through three stages:
First: it is ridiculed
Second: it is violently opposed
Third: it is accepted as being self-evident"
Schopenhauer

A perfect example below:

"Ignaz Philipp Semmelweis (July 1, 1818 – August 13, 1865) (born Ignác Fülöp Semmelweis) was a Hungarian physician of German extraction now known as an early pioneer of antiseptic procedures. Despite various publications of results where hand-washing reduced mortality to below 1%, Semmelweis's observations conflicted with the established scientific and medical opinions of the time and his ideas were rejected by the medical community. Some doctors were offended at the suggestion that they should wash their hands and Semmelweis could offer no acceptable scientific explanation for his findings. Semmelweis's practice earned widespread acceptance only years after his death…"

Stress is definitely just a decrease of happiness, joy, peace, and calmness, always things are decreased as a result of stress. There is virtually nothing that stress does not effect on a physiological level in every person. Remember it is the "fight or flight" that keeps you alive on one hand and can even kill you on the other hand, with many negatives between these 2 extremes.

Epigenetics: **"**Epigenetics has also played roles in evolution and has served as a molecular driver of mutations. Moreover, the changing environment is currently reshaping the evolution of many organisms through plastic epigenetic processes. Epidemiological factors such as diet, environmental exposure, microbial infections and drugs are also influencing our daily lives through epigenetics".

Trygve, Tollefsbol- Handbook of Epigenetics, The New Molecular and Medical Genetics, Academic Press; 1st edition October 1, 2011, page 6, 978-0-12-375709-8 ISBN

Max Wicha, M.D.
Distinguished Professor of Oncology
Director, University of Michigan
Comprehensive Cancer Center

"The problem is, when we treat cancer cells with chemotherapy, the cancer stem cells are being stimulated to grow too."
"When we take mesenchymal stem cells and mix them with tumor cells, the tumors grow much more quickly in animals."
Dr. Wicha's lab has found that inflammatory molecules secreted by **dying tumor cells can hook up with the stem cells** and cause them in effect to come out of hibernation.

- Adult stem cells exist in most tissues, and go into action to repair damage from wounds or infections.
- In cancer, they can mutate and no longer obey normal bodily signals to stop growing, Dr. Wicha said.
- He and other researchers say that even when **chemotherapy and radiation cause tumors to shrink dramatically, these stem cells can stay alive,** living under the radar until they are once again spurred into action.
- They also believe **stem cells are probably the ones that break away from an original tumor** and cause cancer to spread elsewhere in the body.
- Chemo and radiation kill off the fastest-growing cells in the body, which applies to most cancer cells, but **the cancer stem cells** that create those rapidly dividing tumor cells actually grow much more slowly themselves, and **are less susceptible** to those therapies, he said.
- One tactic to address this problem is to kill off both types of cancer cells at once, Dr. Wicha said.

- A recent experimental trial with advanced breast cancer patients at the University of Michigan, Baylor University in Texas and the Dana-Farber Cancer Institute at Harvard University used standard chemotherapy **along with a substance designed to block one of the biochemical pathways of stem cells.**
- The approach **killed off more than 90 percent of the cancer stem cells**, Dr. Wicha said, and researchers now hope to expand the treatment to a much larger group of patients.
- **Ultimately, he hopes cancer treatments can avoid general chemo altogether, with its debilitating side effects, and just use targeted therapies against the stem cells.**
- There is still a long road ahead, he said, and "my feeling is, to really knock these stem cells out, we're probably going to have to use **multiple inhibitors**. "

You Tube http://weeksmd.com/?p=5014 and

http://wn.com/professor_max_wicha__breast_cancer_stem_cell_regulation

NOW read the Public "retraction" ….

"Cancer patients follow recommended care!

"An article published by the Post-Gazette claimed that our research suggests cancer treatments "not only often fail to eradicate cancer but can make it worse" This statement has been misinterpreted by patients currently receiving radiation or chemotherapy treatments. I have been contacted by both my own patients and Pittsburgh-area patients who have questioned whether they should continue with their chemotherapy. In fact, these treatments are lifesaving for many patients.

Our work does suggest that the resistance of a small population of tumor cells to these treatments may account for some of their limitations. Based on this, we are working to develop new approaches to target this specific cell population — treatments that could augment chemotherapy and radiation therapy. New treatments based on this theory are in their early testing stages. Only through the conduct of rigorous clinical trials will we be able to determine whether addition of these new therapies improves the outcome for patients with cancer.

In the meantime, patients diagnosed with cancer need to follow their doctors' recommendations for treatment according to the current standards of care and inquire whether they are eligible for a clinical trial".

MAX WICHA, M.D.
Distinguished Professor of Oncology
Director, University of Michigan Comprehensive Cancer Center Ann Arbor, Mich.

2 Important questions you should ask your oncologist:

1. Will the surgery, radiation and/or chemo or other therapy you will be recommended remove-kill-or stop the circulating cancer stem cells from creating another metastasis in the future?
2. **If no**, how do you recommend dealing with these circulating cancer stem cells to avoid future reoccurrences of my cancer? **If yes**, how do you test for these cells and how accurate is the test?

Dr Bruce Zetter Professor of Cancer Biology in the Department of Surgery, Boston Children's Hospital
"As many as 90% of all cancer deaths can be attributed to metastatic disease. Cells from the primary tumor, after travel to regional or distant sites, cause failure of essential organs including the lungs, liver, brain and bone marrow. Significant advances in the field make this an exciting time for the study of metastasis. Genetic signatures in primary tumors as well as circulating tumor cells and oligonucleotide or protein biomarkers hold the promise of predicting cancer outcomes and allowing selection of optimal drug candidates. The isolation of circulating tumor cells has further improved our ability to analyze the tumor genotype. The ability to metastasize is influenced by the invasive potential of cells in the primary tumor and particularly by self-renewing tumor cells that have properties of cancer stem cells".

http://www.fusion-conferences.com/conference4.php .

PEASE READ CAREFULLY, THIS IS VERY, VERY IMPORTANT!!

Question: How large does a tumor have to be in order to have access to the blood stream?

The Answer: between ONLY 1-2 mm (which is only 1/4 to 1/2 the size of a BB @ 4.4mm). This is how early cancer can send out the circulating CTC's and CSC's into your blood stream, no wonder we have such a problem with cancer metastasis. Most all CT, MRI, PET scans cannot even see the tumor at this size, even if they knew where to look and this early you would have absolutely no symptoms!

…"most primary solid tumors probably go through a prolonged state of avascular, and apparently dormant, growth in which the maximum size attainable is ~1–2 mm in diameter. Up to this size, tumor cells can obtain the necessary oxygen and nutrient supplies they require for growth and survival by simple passive diffusion; (ii) these microscopic tumor masses can, in some way, eventually switch on angiogenesis by recruiting surrounding mature host blood vessels to begin sprouting new blood vessel capillaries which grow toward, and eventually infiltrate the tumor mass, thus setting in motion the potential for relentless expansion of the tumor mass and hematogenous metastatic spread as well"…

Robert S. Kerbel ,Tumor angiogenesis: past, present and the near future, Carcinogenesis (2000) 21(3): 505-515 doi:10.1093/carcin/21.3.505

WHAT DOES PERSONALIZED PATIENT-CENTERED CARE REALLY MEAN?

When you treat a disease, you will win some and loose some.
When you treat the patient with the compassion they deserve, everyone wins regardless of the outcome.
Paraphrased from the movie Patch Adams.

"The doctor cannot overcome what the patient cannot or will not do." Unknown This is "Patient-Centered Care"

William Osler: Canadian Physician one of the four founding professors of Johns Hopkins Hospital (Opened on May 7, 1889). July 12, 1849- December 29, 1919. The 3 quotes below:

"It is much more important to know what sort of a patient has a disease than what sort of a disease a patient has."

"The good physician treats the disease; the great physician treats the patient who has the disease".

"The future is today".

AND THIS IS EXACTLY WHY WE USE THE RGCC CANCER TEST, THE BEST OF THE BEST!

Our Philosophy is the Principles and Practice of Naturopathic Medicine

Naturopathy "nature disease" coined in 1895 by John Scheel. Modern naturopathy grew out of the Natural Cure movement of Europe and popularized by Benedict Lust, the "father of U.S. naturopathy"

First, Do No Harm— *primum non nocere*
The Healing Power of Nature— *vis medicatrix nature*
Treat the Whole Person Individually— *tolle totum*
Identify and Treat the Causes Not Just the Effect— *tolle causem*
Preventive Medicine Is the Best— *previnare*
Doctor as Teacher, of Healthy Lifestyle— *docere*

Serving the United States, Canada and North Central America

Division of Turtle Healing Band
Licensed & Registered by Indigenous HealthCare Practitioners Organization
A Private Tribal Membership Facility—***We are not open to the public.*** **(8.27.20)**
3105 MAIN STREET, ROWLETT, TX 75088
TEL: 214-299-9449 -- 214-299-9923
office2@rgccusa.com **or** **info@rgccusa.com** **WEBSITE:** www.rgcc-group.com

THESE LISTS ARE UP TO DATE AS OF 8.27.20 EVERY ITEM ON THESE 6 PAGES ARE TESTED ON EVERY CANCER PATIENT SHOWING EXACT % OF EFFECTIVENESS OF EACH PRODUCT. NO LAB IN THE WORLD EVEN COMES CLOSE!!

(53) CHEMOTHERAPEUTIC AGENTS TESTED + (7) RESISTANCE FACTORS

ALKYLATING AGENTS (22)

ACNU—NIMUSTINE
ALTRETAMINE—HEXALEN
BCNU—CARMUSTINE
BENDAMUSTINE—TREANDA
BLEOMYCIN—BLENOXANE
CARBOPLATIN—PARAPLATIN
CCNU—LOMUSTINE
CHLORAMBUCIL—LEUKERAN
CISPLATIN—PLATINOL
CYCLOPHOSPHAMIDE—CYTOXAN
DTIC—DACARBAZINE
ESTRAMUSTINE—EMCYT
HYDROXYUREA—DROXIA/HYDREA
IFOSFAMIDE—IFEX
MELPHALAN—ALKERAN
MITOMYCIN—MITOMYCIN C
NEDAPLATIN— AQUPLA
OXALIPLATIN—ELOXATIN
PROCARBAZINE—MATULANE
TEMOZOLOMIDE—TEMODAR
TREOSULFAN—TRECONDI
TROFOSFAMIDE—IXOTEN

EPOTHILONES (1)

IXABEPILONE—IXEMPRA

INHIBITORS OF TOPOISOMERASE I (3)

CPT11—IRINOTECAN
GIMATECAN
TOPOTECAN—HYCAMTIN

****You must always remember, we are testing CSC's/TIC's from the blood not tumor cells from a biopsy (pathology). And there's often a great difference in test results because there's a great difference between these 2 cells.**

CHEMOTHERAPEUTIC AGENTS TESTED CONTINUED (8.27.20)

INHIBITORS OF TOPOISOMERASE II (9)

AMRUBICIN-HYDROCHLORIDE—CALSED
DACTINOMYCIN—COSMEGEN
DAUNORUBICIN—CERUBIDINE
DOXORUBICIN—ADRIAMYCIN
EPIRUBICIN—PHARMORUBICIN
ETOPOSIDE—VEPESID
IDARUBICIN—IDAMYCIN
LIPOSOMAL DOXORUBICIN—DOXIL
MITOXANTRONE—NOVANTRONE

NUCLEUS SPINDLE STABILIZER I (5)

ABRAXANE—PACLITAXEL
CABAZITAXEL—JEVTANA
DOCETAXEL—TAXOTERE
ERIBULIN—HALAVEN
PACLITAXEL—TAXOL

NUCLEUS SPINDLE STABILIZER II (3)

VINBLASTINE—VELBAN
VINCRISTINE—ONCOVIN
VINORELBINE—NAVELBINE

NUCLEOSIDE ANALOGUES (10)

5FU—5-FLUOROURACIL
CAPECITABINE—XELODA
CYTARABINE—CYTOSINE ARABINOSIDE
FLUDARABINE—FLUDARA
FUDR—FLOXURIDINE
GEMCITABINE—GEMZAR
MTX—METHOTREXATE
PEMETREXED—ALIMTA
RALTITREXED—TOMUDEX
UFT—URACIL—TEGAFUR

RESISTANCE FACTORS (4)

MDR1- multi drug resistance
MRP- multi resistant protein
LRP- lung resistant protein
GST- glutathione s-transferase

BIOLOGICAL MODIFIERS TESTED (63) (8.27.20)

5-AZACYTIDINE—VIDAZA
ABIRATERONE—ZYTIGA
AFATINIB—GILOTRIF
ALEMTUZUMAB—CAMPATH
ANASTROZOLE—ARIMIDEX
ANTIANDROGEN (GOSERELIN)
ATEZOLLIZUMAB—TECENTRIQ
AVELUMAB— BAVENCIO®
AXITINIB—INLYTA
BEVACIZUMAB—AVASTIN BORTEZOMIB—VELCADE
BORTEZOMIB—VELCADE
BRENTUXIMAB VEDOTIN—ADCETRIS
CABOZANTINIB— COMETRIQ
CATUMAXOMAB—REMOVAB
CELECOXIB—CELEBREX
CETUXIMAB (225)—ERBITUX
CRIZOTINIB—XALKORI
DABRAFENIB—TAFINLAR
DASATINIB—SPRYCEL
ERLOTINIB—TARCEVA
EVEROLIMUS/TEMSIROLIMUS—AFINITOR, ZORTRESS
EXEMESTANE—AROMASIN®
FULVESTRANT—FASLODEX
GEFITINIB—IRESSA
GEMTUZUMAB OZOGAMICIN—MYLOTARG
GOSERELIN—ZOLADEX
IBRITUMOMAB—ZEVALIN
IMATINIB-MESYLATE—GLEEVEC
IPILIMUMAB—YERVOY
LAPATINIB—TYKERB
LEUPROLIDE—ELIGARD, LUPRON DEPOT
NILOTINIB—TASIGNA
NINTEDANIB—OFEV & VARGATEF
NIRAPARIB— ZEJULA
NIVOLUMAB—OPDIVO
OCTREOTIDE—SANDOSTATIN
OFATUMUMAB—ARZERRA
OLAPARIB—AZD-2281
OSIMERTINIB—TAGRISSO
PALBICICLIB—IBRANCE
PANITUMUMAB—VECTIBIX
PAZOPANIB—VOTRIENT
PEMBROLIZUMAB—LAMBROLIZUMAB
PERTUZUMAB—PERJETA
PONATINIB—ICLUSIG
RAMUCIRUMAB—CYRAMZA®
REGORAFENIB—STIVARGA
RITUXIMAB—RITUXAN
RUXOLITINIB—JAKAFI
SEMAXANIB—SU5416
SORAFENIB—NEXAVAR
SUNITINIB—SUTENT
TAMOXIFEN— NOLVADEX
TEMSIROLIMUS—TORISEL
TOSITUMOMAB—BEXXAR
TRABECTEDIN—YONDELIS

TRAMETINIB—MEKINIST
TRASTUZUMAB—HERCEPTIN
VANDETANIB—CAPRELSA
VELIPARIB—ABT-888
VEMURAFENIB—ZELBORAF
VORINOSTAT—ZOLINZA
ZIV-AFLIBERCEPT—ZALTRAP

ABT-888 // VELIPARIB
ADCETRIS // BRENTUXIMAB VEDOTIN
AFINITOR, ZORTRESS // EVEROLIMUS/TEMSIROLIMUS
ARIMIDEX // ANASTROZOLE
AROMASIN®// EXEMESTANE
ARZERRA // OFATUMUMAB
AVASTIN BEVACIZUMAB
AZD-2281 // OLAPARIB
BAVENCIO® // AVELUMAB
BEXXAR // TOSITUMOMAB
VELCADE // BORTEZOMIB
CAMPATH // ALEMTUZUMAB
CAPRELSA // VANDETANIB
CELEBREX // CELECOXIB
COMETRIQ CABOZANTINIB
ELIGARD, LUPRON DEPOT // LEUPROLIDE
ERBITUX // CETUXIMAB (225)
FASLODEX // FULVESTRANT
GILOTRIF // AFATINIB
GLEEVEC // IMATINIB-MESYLATE
GOSERELIN // ANTIANDROGEN
HERCEPTIN // TRASTUZUMAB
IBRANCE // PALBICICLIB
ICLUSIG // PONATINIB
INLYTA // AXITINIB
IRESSA // GEFITINIB
JAKAFI // RUXOLITINIB
LAMBROLIZUMAB// PEMBROLIZUMAB
MEKINIST// TRAMETINIB
MYLOTARG // GEMTUZUMAB OZOGAMICIN
NEXAVAR // SORAFENIB
NOLVADEX// TAMOXIFEN
OFEV & VARGATEF // NINTEDANIB
OPDIVO // NIVOLUMAB
PERJETA // PERTUZUMAB
REMOVAB // CATUMAXOMAB
RITUXAN // RITUXIMAB
SANDOSTATIN // OCTREOTIDE
SPRYCEL // DASATINIB
STIVARGA // REGORAFENIB
SU5416 // SEMAXANIB
SUTENT // SUNITINIB
TAFINLAR// DABRAFENIB
TAGRISSO // OSIMERTINIB
TARCEVA // ERLOTINIB
TASIGNA // NILOTINIB
TECENTRIQ // ATEZOLLIZUMAB
TORISEL // TEMSIROLIMUS
TYKERB // LAPATINIB
VECTIBIX // PANITUMUMAB
VELCADE // BORTEZOMIB

VIDAZA //5-AZACYTIDINE
VOTRIENT // PAZOPANIB
XALKORI // CRIZOTINIB
YERVOY // IPILIMUMAB
YONDELIS // TRABECTEDIN
ZALTRAP // ZIV-AFLIBERCEPT
ZEJULA // NIRAPARIB
ZELBORAF // VEMURAFENIB
ZEVALIN // IBRITUMOMAB
ZOLADEX // GOSERELIN
ZOLINZA // VORINOSTAT
ZYTIGA // ABIRATERONE

(73) TUMOR RELATED GENES TESTED + (7) MARKERS (8.27.20)

GROWTH FACTORS & PROLIFERATION STIMULI (27)

SS-r
Progesterone Receptor
Estrogen Receptor
p180
COX2
5-LOX
NFkB
IkB(a,b,c)
EGF
Ras/Raf/MEK/Erk
mTOR
c-erb-B1
c-erb-B2
Bcr-abl
ALK
EML-4-ALK
NPM-ALK
CD 117(c-kit)
RET
IGF-r 1
IGF-r-2
NR3C4-A Testosterone receptors
NR3C4-B DHT receptors
JAK ½
PTEN
c-Jun
c-fos

SELF REPAIR-RESISTANCE (14)

HSP 27
HSP 72
HSP 90
Gamma GC (gene for drug resistance)
DNA METHYLTRANSFERASE 1
DNA DEMETHYLASE

06-METHYL-DNA-TRAN
TGF-b (transforming growth factor-beta)
Histone deacylase dipeptide
HDAC
HAT
CXCR4
CXCR12
CXCL12

TUMOR RELATED GENES TESTED CONTINUED (8.27.20)

ANGIOGENESIS (5)
VEGF (vascular endothelial growth factor
FGF (fibroblast growth factor)
PDGF (platelet derived growth factor)
ANG 1
ANG 2

CELL CYCLE REGULATION & IMMORTALIZATION/APOPTOSIS (9)
E2F1
CDC6
P27 (gene of the cycle-dependent kinase inhibit
P53 (gene; DNA gene guardian)
P16 (tumor suppressor gene; stops tumor cell death)
BCL-2
H-TERT (HUMAN TELOMERASE) M2
Bax
CD95 (fas-r)

ANGIOGENESIS-METASTASIS (5)
KISS-1-r
Nm23 nonmetastatic gene 23
MMP (matrix metalloproteinase)
c-MET (mesenchymal to epithelial transition)
67LR (Laminin receptor)

DRUG METABOLISMS & TARGETS (13)
CES1&2 carboxyesterase
DPD dihydropyrimidine dehydrogenase
UP Uridine phosphorylase
NP Nucleoside phosphorylase
TP (thymidine phosphorylase)
TS
DHFR (dihydrofolate reductase)
SHMT serine Hydroxymethyl- transferase)
GARFT
RIBO-NUCLEOSIDE REDUCTASE
CypB1
ERCC1
RRMI

MARKERS (6)

CD33 MYELOID CELL ORIGIN
CD52 LEUKEMIA MARKER
CD20 LYMPHOMA RELATED ANTIGEN
EPCAM EPITHELIAL MARKER
PD-L1 IMMUNOREGULATORY MARKER
PD 1 IMMUNOREGULATORY MARKER
PD-L2 IMMUNOREGULATORY MARKER

NATURAL SUBSTANCE LIST TESTED (50) (8.27.20)

AGARICUS BLAZEI MURILL//
ALPHA LIPOIC ACID//
AMYGDALIN (B-17, LAETRILE)//
ANGIOSTOP//
APIGENIN//
AROMAT8-PN™//
ARTECIN®//
ARTESUNATE//
ASCORBIC ACID (INTRAVENOUS)//
AVEMAR PULVIS//
BIO-D-MULSION®//
BOSWELLIA SERRATTA//
BRESTIN//
BUTYRIC ACID//
CoQ10//
CORDYCEPS SINENSIS//
C-STATIN//
CURCUMIN (TUMERIC) CURCUMA SORB (formally MERIVA®)//
DCA (dichloroacetate)//
DDG (2 DEOXY d GLUCOSE)//
DOXYCYCLINE//
FRANKINCENSE//
FUCOIDAN//
GcMAF//
GENISTEIN//
INDO 3 CARBINOL//
LYCOPENE//
MELATONIN//
MISTLETOE//
MITO-BOOSTER//
MITOCHONDRIE n FORMULAR

NALTREXONE//
ONKOBEL PRO//
OXALOACETATE//
PAW-PAW//
POLY-MVA®//
POLYPHENOLE CA//
PURE QUERCETIN//
QUERCETIN//
RESVERATROL//
RIBAXX//
SALICINIUM™//
SALVESTROL PLATINUM //
SUPER ARTEMISININ//
THEAFLAVIN//
THYMEX®//
UKRAIN//
VASCUSTATIN//
VIRXCAN™//
VITANOX//