Clinical Approaches to Cancer Therapy

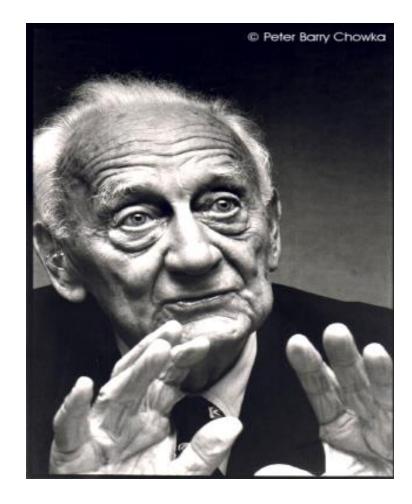
Michael B Schachter MD, CNS Schachter Center for Complementary Medicine 2 Executive Boulevard; Suite 202 Suffern, New York 10901 845-368-4700; www.schachtercenter.com Cancer Conferences in Melbourne & Sydney Australia June 21 & 23, 2016

Outline

- Resources, references, websites, further information in WORD document
- Contains links to websites if in used in the electronic form
- New theoretical approach to cancer
- Combining many relatively non-toxic approaches, including oral and IV nutrients, salvestrols, many others

Nobel Prize Winner Albert Szent-Gyorgyi

"Discovery consists of seeing what everybody has seen, and thinking what nobody has thought" My Let us open our minds to viewing cancer in a different way!!!



Thesis

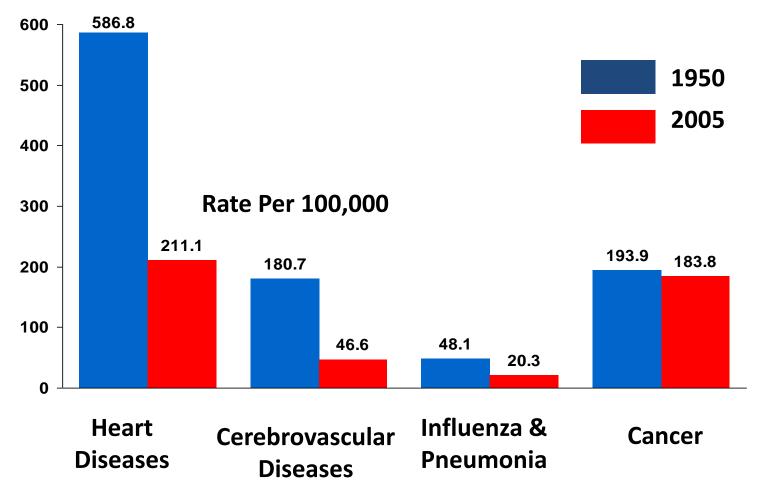
Alternative treatment protocols have the potential to be competitive if not superior to conventional treatments. They should be considered as a primary, not merely supplementary option for treatment.

Understanding of Cancer and Cancer Treatments are **Changing**

- Cancer Treatments-Generally Not very effective, except in rare cases
- Predominant conventional understanding of cancer seems to be wrong



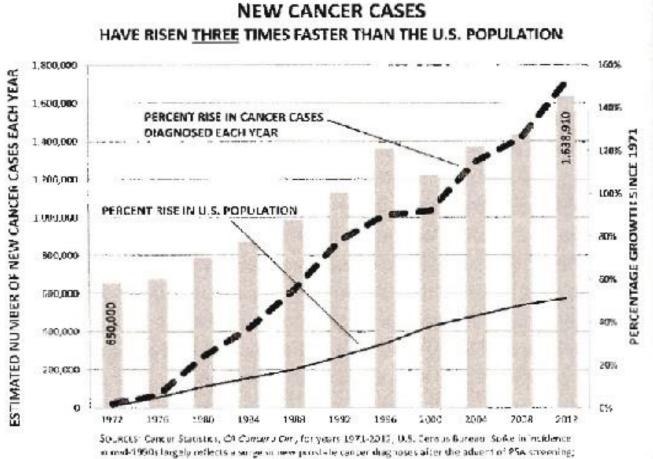
Change in the U.S. Death Rates* by Cause: 1950 & 2005



* Age-adjusted to 2000 US standard population.

Sources: 1950 Mortality Data - CDC/NCHS, NVSS, Mortality Revised. 2005 Mortality Data: US Mortality Data 2005, NCHS; CERters for 2014 and Prevention, 2008.

New Cancer Cases Rising Faster than the US Population



later adjustments in methodology corrected for this apparent anomaly.

What is Cancer According to the National Cancer Institute (NCI)?

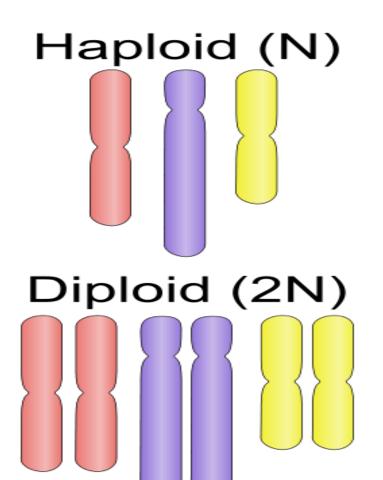
- <u>http://www.cancer.gov/about-</u> <u>cancer/understanding/what-is-</u> <u>cancer#differences-cancer-cells-normal-cells</u>
- Collection of related diseases
- Cells grow uncontrollably, invade tissues and resist dying, even when old
- Genetic disease characterized by mutations in
 - Oncogenes-Genes that accelerate growth
 - Suppressor Genes-Genes that suppress growth
 - DNA repair genes

Basics of Chromosomes and Genes

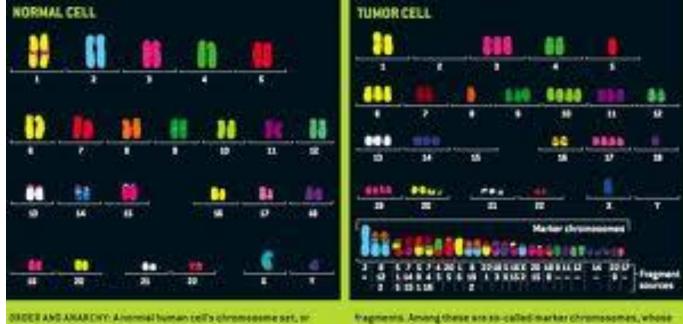
- To understand the current theory about cancer, need to understand a little about genes and chromosomes
- Each human cell has 22 pairs of chromosomes, 2 X chromosomes in women and an X and a Y chromosome in men
- Genes are located on chromosomes and contain the genetic material inherited from our parents

Ploidy

- Ploidy refers to the number of sets of chromosomes in the nucleus of a cell
- Haploid = 1 set
- Diploid = 2 sets (What we have)
- Polyploidy = More than 2 sets
- Aneuploidy refers to disorganized sets



Diploidy vs. Aneuploidy: Inside the Nucleus of a Cell



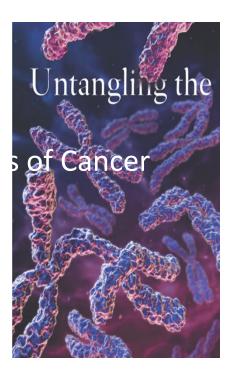
ORDER AND ANAAR CHY: A recreat human cell's chromosome set, or Karyetype [Jeft], includes pairs of 23 standard chromosomes, whereas a tumor cell, like all cancers, axhibits the irregular karyotype (right) described as anougloid, some whole chromosomes and missing, extra copies of others are present, and many have traded

tragments. Among these are so called marker chromosomes, whose distinctive procharal reamangements are seen in all the tamor's cells, indicating changes that originated in the cell that speened the cancer Numbers under each one specify the sources of its fragments plus and minut signs identify these that are larger or steaffer than usual.

Diploidy-NL Aneuploidy-CA

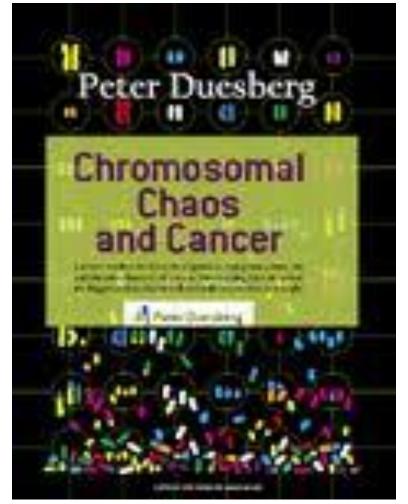
Branching Points in the Evolution of Cancer Theory: Untangling the Roots of CA

- 1914-Theodor Boveri & David Von Hansemann; aberrant chromosomes may be cause of cancer (Almost all cancer cells are aneuploidy)
- 1951-Theory proposes multiple mutations turn a cell malignant
- Vogelstein & Fearon: Sequential gene mutations lead to colon CA
- 1999-Duesberg: detailed theory of how aneuploidy may be sufficient to cause CA
- Note that there is no mention of Warburg or the mitochondrial damage genesis of CA Scientific American June 2003



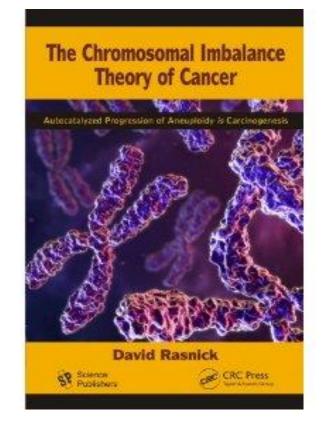
Chromosomal Chaos & Cancer: Scientific American May 2007

- The nuclei of cancer cells contain entire chromosomes, which carry thousands of genes, are severely scrambled duplicated, broken, structurally rearranged or missing entirely
- Generally ignored by NCI & conventional oncology



The Chromosomal Imbalance Theory of Cancer-Rasnick-Publication Date 12-20-11

- Gene mutations are not powerful enough to cause cancer
- Chromosomal abnormalities cause CA
- <u>Theodor Boveri's</u> 1914 chromosomal-imbalance (<u>aneuploidy</u>) theory of cancer



Alternative Understanding of Cancer

- Seeing cancer as a genetic disease results in limitations of treatment
- Cancer can be seen NOT as a genetic disease or even a totally disorganized chromosomal disease as presented by Boveri, Duesberg and Rasnick
- Cancer may be viewed primarily as disease due to damage to mitochondria of the cell & not the nucleus
- Leads to profound differences in treatment

Cancer: a Metabolic Mitochondrial Disease-NOT a Nuclear Disease

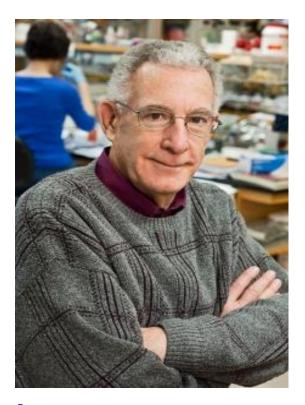
- Contrary to prevalent scientific oncological consensus, cancer is NOT primarily a nuclear genetic disease or even a nuclear chromosomal disease
- Cancer is a metabolic disease associated with mitochondrial damage
- Originally proposed by Otto Warburg MD, PhD and more recently by Thomas Seyfried PhD

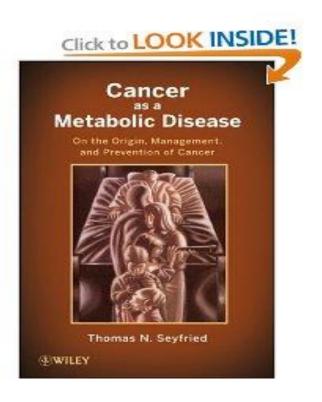
Otto Heinrich Warburg, MD, PhD

- Won Nobel Prize in Physiology or Medicine in 1931
- Described the fundamental difference between normal cells and cancer cells
- Cancer cells can't use oxygen to produce energy
- Cancer cells form as a result of low oxygen environment



Book: Cancer as a Metabolic Disease by Thomas Seyfried PhD





See Lecture at: https://www.youtube.com/watch?v=sBjnWfT8HbQ

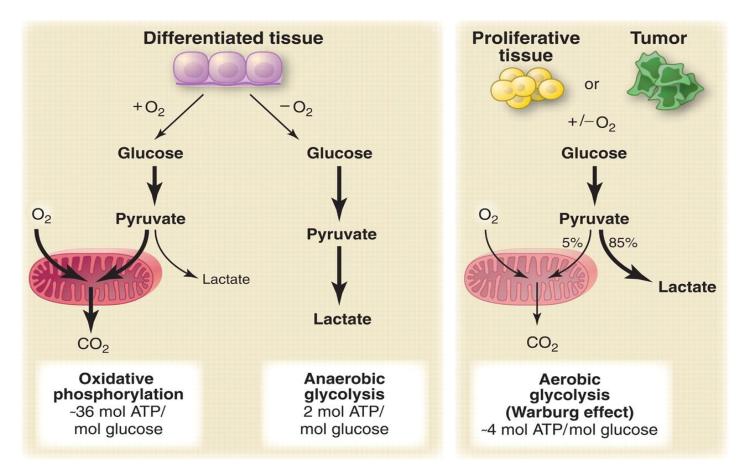
Fundamental Difference Between Cancer Cells and Normal Cells

- Energy of most biochemical reactions in the body come from ATP molecules
- Normal cells produce energy primarily by using oxygen
- Cancer cells produce energy (ATP molecules) by glycolysis, the metabolism of sugar without using oxygen, even if oxygen is present (Warburg Effect)
- This metabolic variation is the main difference-the chaotic chromosome pattern, unrestrained growth and invasiveness are **secondary** to this difference

Oxidative Metabolism Needs Less Glucose

- The Krebs cycle and electron transfer in the mitochondria use oxygen to produce between 30 and 38 molecules of ATP from 1 molecule of glucose
- Anaerobic metabolism or glycolysis produces 2 molecules of ATP from 1 molecule of glucose.
- Cancer cells use anaerobic metabolism; they do not utilize oxygen to metabolize glucose to any extent
- So, cancer cells need 15 to 19 times more glucose than normal cells to produce the same amount of energy
- Excessive sugar drives cancer growth

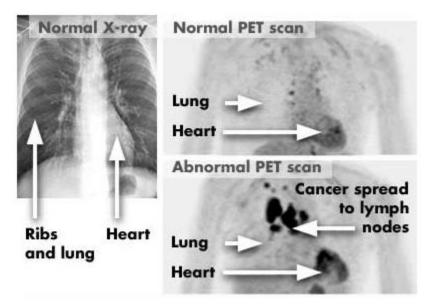
ATP Production in a Normal Cell vs. a Cancer Cell



38 ATP Molecules

2 to 4 ATPs

PET Scans Make Use of the "Warburg Effect" to Find Cancers (Positive Emission Tomography)



 A PET scan, unlike a normal X-ray, can detect cancer before organ or gland enlargement occurs. Here a normal X-ray of the chest (left) is compared with a PET scan of the chest producing normal results (top right) and a PET scan revealing cancer that's spread to the lymph nodes (black areas in bottom right. Radioactive glucose analog is used. Radioactive sugar accumulates in cancer cells and these can be seen on a PET Scan

Major Media and Cancer as a Mitochondrial Disease

- New York Times-May 16 2016: An Old Idea Revived: Starve Cancer to Death
- First sentence: "In the early 20th century, the German biochemist Otto Warburg believed that tumors could be treated by disrupting their source of energy. His idea was dismissed for decades—until now."
- The article discusses also Thomas Seyfried's work

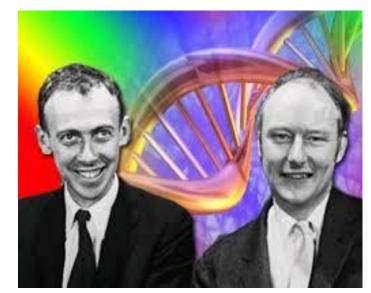
NY Times: Revolution in Understanding and Treating Cancer

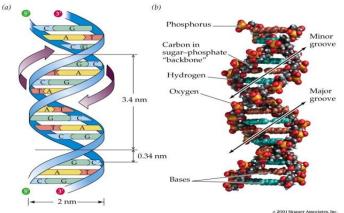
- Even Dr. James Watson (of DNA fame) at the age of 88 and still working is mentioned as believing targeting metabolism is more promising than gene-centered approaches
- Watson is quoted as saying: "I never thought until about two months ago, I'd ever have to learn the Krebs cycle. Now I realize I do."
- See:

<u>http://www.nytimes.com/2016/05/15/magazine/warbur</u> <u>g-effect-an-old-idea-revived-starve-cancer-to-</u> <u>death.html?_r=0</u>

DNA and the **Double Helix Outlined** by James Watson PhD and Francis Crick PhD

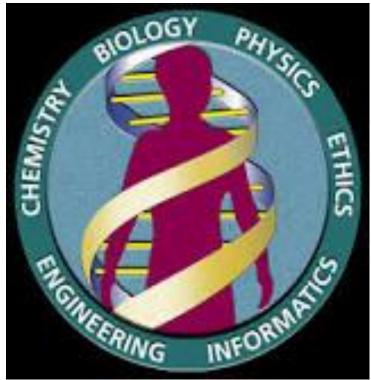
- 1953-Paper; beat Linus Pauling who was also working on the structure of genes
- Led to Human
 Genome Project; all genes worked out
 by careful research





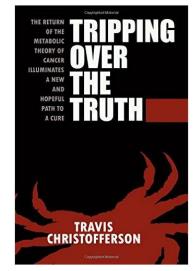
Human Genome Project Sequenced by 2003

- With the assumption that the mutational theory of cancer is correct, scientists believed that it would be easy to find a relationship between common cancers and gene sequences
- But, this was a Total Failure-Much more complex
- Numerous gene sequences even within one cancer
- Keep in mind aneuploidy in cancers



New Book 2014-Traces the History of Cancer and the Various Theories

- Shows how the less than useful theory of the somatic mutational theory of cancer fails to lead to useful treatments
- Outlines how the metabolic theory of cancer due to mitochondrial damage results in useful treatments
- Some of these groundbreaking treatments are discussed in detail
- Promoted by Dr. Mercola





Cancer Cells Develop in a Low Oxygen Environment

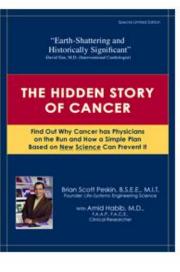
- Cancer cells are not only characterized by being unable to utilize oxygen because of damaged mitochondria, but also develop as an adaptation to a low oxygen environment
- This adaptation develops over a long period of time and becomes irreversible
- What causes a low oxygen environment in our cells?

Brian Peskin and "The Hidden Story of Cancer"

- Peskin's book explains the Otto Warburg theory of cancer and why we have low oxygen in cells
- Cancer is stimulated by a low oxygen cellular environment
- Oxygen content of cells is low when cell membranes are damaged by toxic chemicals and contain ADULTERATED FATTY ACIDS



Brian Peskin



What Contributes to a Low Cellular Oxygen Environment that Leads to CA

- Peskin points out that 95% of parent essential fatty acids [Linoleic Acid-Omega 6 and Alpha Linolenic Acid-Omega 3] wind up in the cell membranes of cells
- Only 5% is used for derivatives that produce prostaglandins (GLA, EPA, DHA)
- The double bonds of these parent fatty acids within the cell membrane attract oxygen into cells

Adulterated Fatty Acids Increase Shelf Life and Distort Cell Membranes

- In order to increase shelf life, food processing companies, change the **structur**e of the fatty acids in the food (trans FA are one example)
- These "adulterated fatty acids" are incorporated into the cell membranes throughout the body
- If adulterated fatty acids replace parent essential fatty acids, oxygen content of cells can be reduced by 50% (cancer forms over time with 33% oxygen reductions, according to Warburg)

Cell Membranes Require **both Omega 6 and Omega 3** Parent Fatty Acids

- Cell membranes require both omega 6 (linoleic acid) and omega 3 (alpha linolenic acid) parent molecules
- Can be obtained from organic foods or organic oils
- Oils need to be organic and not heated
- Over time, these organic parent oils will replace the adulterated oils in the cell membranes from processed foods (OIL CHANGE)

Ratio of Omega 6 to Omega 3 in Diet

- Myth that society is overdosing in omega 6 because of failure to distinguish between adulterated to nonadulterated fatty acids
- Most omega 6 in food and in cell membranes is adulterated
- Many studies are invalid because of failure to make this distinction
- Peskin says the proper dietary ratio is between 1:1 and 2.5:1, omega 6 to omega 3
- Research of Dr. Shlomo Yehuda of Israel argues 4:1 omega 6 to omega 3 is ideal (Body Bio Balance Oil used in our practice); See:

https://www.researchgate.net/publication/227141668 Essential Fatty Acids and Stress

Adulterated Fatty Acids

- Over the last 50 years or more, the processed food industry has increased shelf life by distorting the parent essential fatty acids (so they are not easily oxidized)
- These are **adulterated fatty acids**
- Trans fatty acids are only one example of many ways to adulterate fatty acids
- Adulterated fatty acids in food become part of cell membranes
- These cell membranes do not attract oxygen and thus cellular oxygen concentration is reduced

Fish Oil Supplements Not Recommended

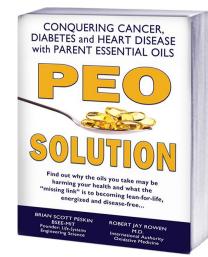
- Fish Oil Capsules and liquid are **unphysiologic** and not recommended (one capsule equals several fish meals)
- These longer fatty acids are incorporated into the cell membrane and distort it, worsening function
- Reported benefits are generally short-lived and are analogous to anti-inflammatory effect of using steroids
- Both conventional and alternative practitioners prescribe lots of fish oil
- May be useful as anti-inflammatories for a few months at relatively low doses, but many practitioners recommend them for months or years at a time
- According to Dave Vousden, a low dose combo of pure Evening Primrose Oil and Fish Oil is being used successfully with salvestrols

Major Changes in Food Habits that Have Increased Cancer

- Incorporation of adulterated fatty acids into our diet and into cell membranes have reduced oxygen to cells; so has prevalence of toxic chemicals
- High sugar intake also drives cancer growth
- The omega-6 parent fatty acid Linoleic Acid is important in attracting oxygen to cells
- Studies suggesting we are overloaded with omega 6 probably invalid because most do not consider whether or not they are adulterated

Book-PEO Solution by Brian Peskin and Co-Author Robert Rowen MD

- Explores the relationship of PEO (Parent Essential Oils) in health and disease, including cancer
- Peskin is a meat-eater and Dr.
 Rowen is a vegetarian
- Their views of a health diet showing their similarities and differences are emphasized
- See: <u>www.PEO-Solution.com</u>





Conventional Cancer Therapies

- Emphasis is removing or killing cancer cells with little attention to adverse effects on normal cells
- Surgery
- Radiation
- Chemotherapy (Also Insulin Potentiation Therapy)
- Targeted therapies (Most new drugs: Inhibit enzymes or receptors that are involved with cancer growth)
 - Generics ending in "mab" are monoclonal antibodies like Rituximab (Rituxin)
 - Generics ending in "nib" are small molecules like Imatinib (Gleevec)

Results of Conventional Cancer Treatments are **Disappointing**

- Conventional treatment benefits are exaggerated and adverse effects are minimized
- Our culture demands patients follow conventional guidelines, but thoughtful patients who do their own research often reject many conventional recommendations
 - Ex.-radiation for breast cancer and localized treatment for prostate cancer

Focus of Conventional Cancer Treatment

- Destroy cancer cells at all costs
- No emphasis on lifestyle, good nutrition
- Patients often told to avoid all nutritional supplements, as they might interfere with conventional treatment
- Measure progress by tumor shrinkage— Not a good measure of progress

Drawbacks of Radiation and Chemotherapy (4 Negative Factors)

- Carcinogenic
- Mutagenic
 - More mutations increase cancer aggressiveness
 - Recurrent cancers harder to treat
- Immune suppressive (damage protective cells)
- Cause significant adverse side effects, both short term and long term

What Questions a Patient or Support Person Should Ask

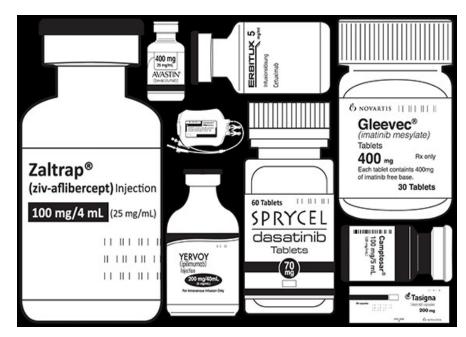
- Will survival time be increased & quality of life be enhanced?
- What risks are associated with the treatment?
 - Morbidity
 - Mortality
 - Secondary cancers
- Compare with the best available information on available alternative treatments; don't stop with only clinical trials

All Conventional Treatments Can Do Harm Because of Lack of Selectivity

- All can do harm because they damage normal cells and tissue along with cancer
- Standard of care, supported by insurance coverage largely related to consensus rather than specific studies
- Clinical trials very expensive and can only be supported by pharmaceutical companies
- Forbes 2012 study said that it cost \$4 billion to get a new drug approved; makes sense only if drug patentable

From New York Magazine Article in October 2013: **"The Cost of Living"**

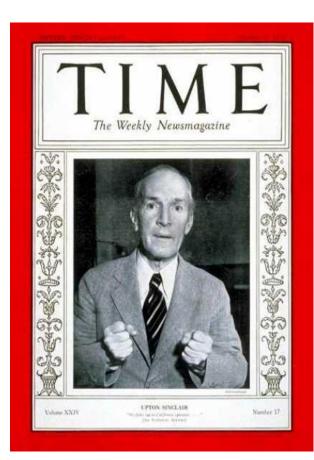
http://nymag.com/news/features/cancer-drugs-2013-10/



Avastin, \$5,000/month; Zaltrap, \$11,000/month; Yervoy, \$39,000/month; Provenge, \$93,000/course of treatment; Erbitux, \$8,400/month; Gleevec, \$92,000/year; Tasigna, \$115,000/year; Sprycel, \$123,000/year

Upton Sinclair (1878-1968)

- Author of *The Jungle,* a 1906 novel revealing the harsh living conditions of immigrant workers in the meat-packing industry
- "It is difficult to get a man to understand something, when his salary depends on his not understanding it."
- Conventional oncology it extremely profitable for oncologists and pharma
- Does this help us understand what is happening in health care today and especially with cancer?



Integrative Evaluation of the Cancer Patient

- Focus on patient as a person
- Assess strengths and weaknesses
- Evaluate support system
- Full clinical history & physical examination for many practitioners (MD, DO, PA-C, NP, etc)
- Assess current lifestyle factors
- Assess patient's ability to make changes
- Nutritional and Laboratory testing
- Assess dental issues (amalgams, root canals, etc)
- Discuss conventional treatment options (pros and cons)

Integrative Cancer Therapies May Include:

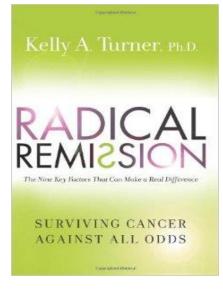
- Dietary suggestions-cornerstone-whole foods, organic when possible (reduced toxinsincreased nutrients-phytonutrients as information)
- Avoid poor quality food and toxic exposures
- Lifestyle changes-Exercise-Stress
 Management-Sunlight Exposure-Sleep
- Oral nutritional supplements

Integrative Cancer Therapies May Include

- **Detoxification**-Bowel, Liver, Skin, Saunas
- Injectable treatments-C drips, B17, Alpha Lipoic Acid
- Energy treatments-Homeopathy, Acupuncture
- Attempt to deal with attitude, stress and spiritual elements
- Deal with **dental issues**, such as root canals, mercury amalgam fillings, avoidance of fluoride
- Help with decisions relating to conventional treatment
- Trick is to prioritize for the particular patient

Radical Remission: Surviving Cancer **Against All Odds**

- At UCLA, Berkeley: getting PhD
- Shocked to learn no one studying "spontaneous remissions"
- Spontaneous remissions occur without help from conventional CA treatment
- 10 month trip to 10 countries to interview healers
- Interviewed 20 survivors and then 80 more; studied 1000 cases





9 Characteristics of Cancer Survivors in Radical Remission-Kelly Turner PhD

- Radically changing your diet
- Taking control of your health
- Following your intuition
- Using herbs and supplements
- Releasing suppressed emotions
- Increasing positive emotions
- Embracing social support
- Deepening your spiritual connection
- Having strong reasons for living

Keith Block MD: Integrative Cancer Program-Prime Representative

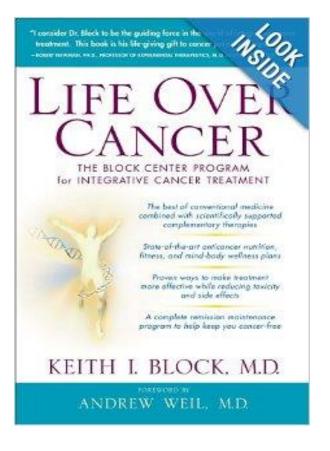
- Uses the best of conventional medicine combined with scientifically supported complementary therapies
- Proven ways to make treatment more effective while reducing toxicity and side effects
- His Center in Chicago is widely regarded as the best integrative cancer center in the USA



Keith I Block MD

Book: "Life Over Cancer" by Keith Block MD

- Some excellent recommendations regarding lifestyle factors, including nutrition, nutritional supplements, exercise and stress management
- Strong recommendations for conventional cancer treatments along with lifestyle changes
- Block's advice: Patients should certainly do conventional treatment and then reduce toxicity with lifestyle recommendations
- Dr. Block emphasizes a low fat diet, which is currently begin questioned



Problems with Integrative Oncology

- Focus of integrative oncology is how can we improve results of oncologists by improving diet, adding supplements, acupuncture, etc...
- Conventional approach is taken as a given
- The question most often asked is will the nutritional supplements interfere with conventional treatment?
- Rarely asked is: Will the conventional treatment make alternative treatment results worse?

Corruption Involving FDA, CDC, Pharma, Organized Medicine & the Media: Ben Swan and VAXXED

- <u>https://www.facebook.com/BenSwannRealityCheck/</u> videos/1126042897460659/?pnref=story
- New series beginning this month June 2016
- How these various institutions are linked for profit and power
- VAXXED-Documentary showing corruption at the CDC and vaccines: See: <u>https://www.bing.com/videos/search?q=VAXXED+Tr</u> <u>ailer&qpvt=VAXXED+Trailer&FORM=VDRE</u>

My Heretical Suggestion

- Although the results of integrative oncology are probably better than using conventional alone, might alternative treatment be better than the combo?
- Why do we have to accept conventional treatment as a given?
- Might some patients do better without including any conventional treatment?
- I suggest that perhaps we need to consider this approach to prevent and treat cancer

Case History of Lung Cancer, Stage IIIB with Surgery Alone

- 57 year-old woman consulted us in 2007 after having a lobe of her left lung removed for Non-Small Cell CA of lung
- Found incidentally on pre-op for shoulder surgery
- Told she was stage IIIB because of the 3.1 cm size
- Advised to have chemotherapy: She refused.
- Large doses of oral Vitamin C, B17, vitamin D, many other supplements, good diet, IV C drips from once a week to once a month
- Retired recently at age 66. Feels great. Continues current program, **9 years after diagnosis of Stage IIIB lung cancer**
- Question: If she had chemo, would she have done as well?

Standard of Care for Stage I & II Breast Cancer: Is it all justified?

- Lumpectomy
- Radiation therapy
- Chemotherapy in some cases
- Anti-hormonal therapy if cancer is estrogen receptor positive (tamoxifen or aromatase inhibitor)
- Possible monoclonal therapy drug (like Herceptin) if HER2/Nu positive
- Let's first focus on radiation!

Radiation for Breast Cancer: A Questionable Standard of Care

- What is the basis for the automatic recommendation of radiation for any woman undergoing a lumpectomy for breast cancer?
- Reduces risk of a recurrence in the same breast
- Does NOT reduce regional recurrence or distant metastases
- No impact on overall survival with increased deaths from causes other than breast cancer.
- Harmful effects (e.g. heart damage, lymphedema) may occur later
- Many of our patients choose to not do radiation for breast cancer to the dismay of conventional specialists: we have many long-term survivors

Some Patients Choosing to Avoid Some Portions of Standard of Care

- Patients left with difficult choices and need to make decision with insufficient information
- Frequently need to use common sense and what feels right for them
- Many uncomfortable going against conventional suggestions
- Lots of anxiety associated with making decisions about cancer treatment-both conventional and alternative

Sometimes Conventional Cancer Therapy is Helpful-Patient with CLL

- First seen at SCCM in 2012 at age 52
- Rep of pharmaceutical industry
- Diagnosis of chronic lymphocytic leukemia 2010 clinically well, but numerous nodules throughout body
- Didn't want chemotherapy
- Treated with our protocol of dietary suggestions, oral supplements, LDN, IV C drips; but developed problems
- In 2013, began to require blood transfusions every few weeks because of severe anemia and low platelets, but refused chemo
- Retires at the beginning of 2015
- In August 2015, finally accepted chemotherapy (Treanda) along with our program with great results; no more blood transfusions, platelets normal; Minimal side effects

Benefits of Sometimes Combining Conventional and Alternative Tx

- At age 65, now 70, a male computer consultant first consulted with us in 2011
- Diagnosis was metastatic NSMC lung cancer with bone metastases to spine and possible liver mets (Stage IV)
- Had radiation to bone to reduce pain
- CEA at time of diagnosis was around 300
- Referred to us by oncologist ("won't hurt")
- Tarceva (erlotinib) started along with our program

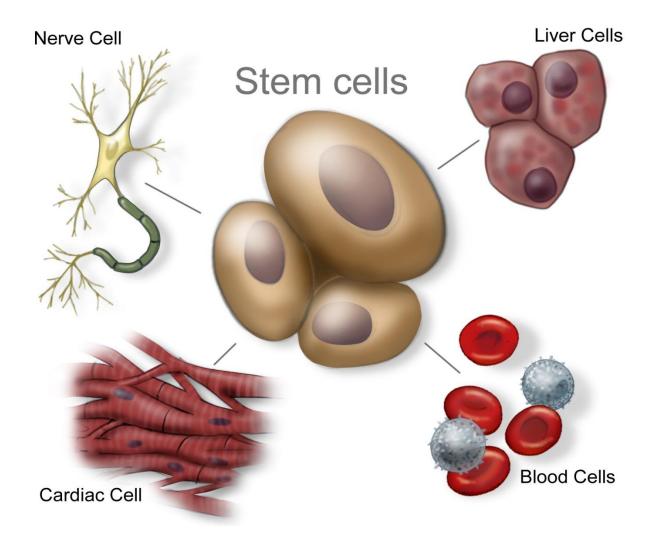
Combining Conventional and Non-Toxic Support Program-2

- Our program: C drips with amygdalin (B17, Laetrile-both oral and IV), D, K2 (MK4), extensive supplement list
- Continues to work and function
- CEA down to 5 by end of 2011 (from over 300 at start of treatment) and has remained like this until now
- Tarceva (erlotinib) stopped working and the chemotherapy agent Alimta started
- Jaw infection successfully treated with surgery & 40 HBO treatments. How much did this help cancer Tx?
- Continues to do well, working and acting in a play

Why Are the Results of Conventional Treatment for **Stage IV Cancers So Poor?**

CANCER STEM CELLS MAY BE ONE OF THE MAIN REASONS!!

Stem Cells



Origin of Normal Stem Cells

- During embryological development of the fetus, 80% of the precursors to the ova or spermatozoa become ova in women and spermatozoa in men
- The rest of these **pluripotent cells** (20% of them) are scattered throughout the body and become the stem cells, which are later used for repair
- This theory was first elaborated by embryologist John Beard MD, PhD in his trophoblastic theory of cancer in 1911. For more about this theory, see the book by the late Nicholas Gonzalez MD: "The Trophoblast and the Origins of Cancer" (2010).

Book: Trophoblast and Origins of Cancer-Nicholas Gonzalez MD



The TROPHOBLAST and the ORIGINS OF CANCER

> Our solution to the medical origins of our time

NICHOLAS J. GONZALIZ, MD LINDA E. ISAACS, MD

Cancer Stem Cells: VERY IMPORTANT

- Cancer stem cells are stem cells that have become cancerous
- Behave differently from cancer cells
- Cancer cells constitute only **1 to 5%** of solid cancers
- Cancer stem cells are the only ones that metastasize
- Resistant to radiation and chemotherapy
- Cancer stem cells have been discussed only over the last 15 years of so; they are changing conventional cancer approach
- Shrinkage of tumor not good parameter for assessing treatment results; **upsets how oncology done today**

Size of Tumor May be Misleading

- Do not be misled into thinking tumor reduction means you are making progress, as you may not be
- "If the cancer stem cell hypothesis is true, treating the majority of dividing cancer cells will shrink a tumor but won't cure the cancer unless we can target the cancer stem cells themselves. That would explain why tumor shrinkage—the gold standard for measuring a drug's effectiveness—doesn't always translate into longer survival for patients." Daniel Haber, MD and Director Mass General **Hospital Cancer Center**

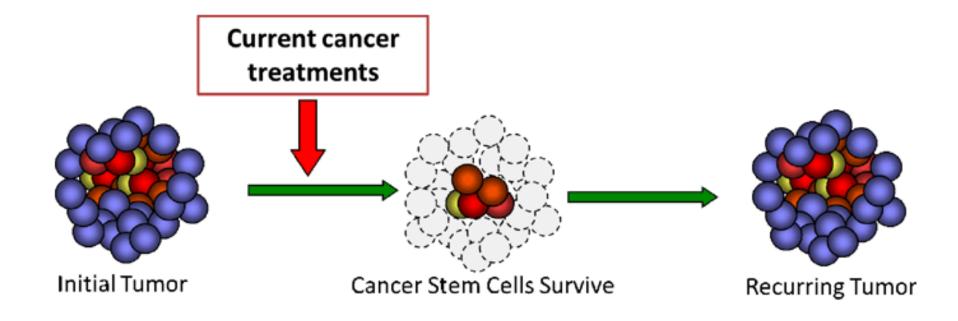
Downside of Diagnostic Procedures; Main Tool for Assessing Cancer Tx

- Scans emit considerable radiation
 - CT Scan 100 chest x-rays
 - PET Scan 500 chest x-rays
- Size of tumor not good marker for longevity of patient
- Biopsies cause inflammation and may stimulate cancer growth if CA present or contribute to the development of cancer

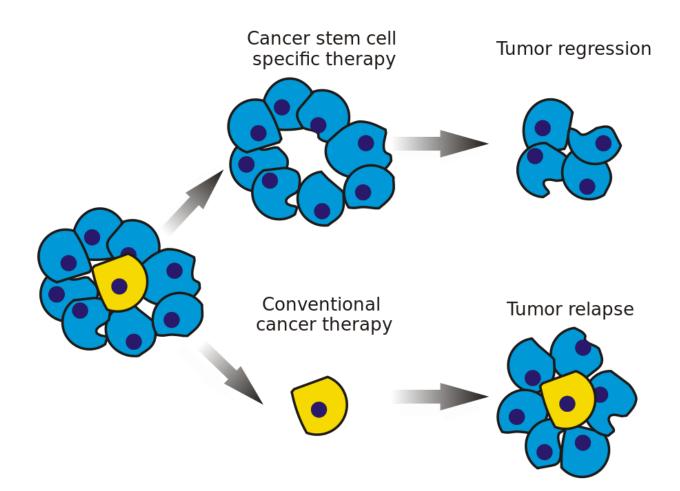
Clinical Trials: Do They Help the Patient?

- Funded by pharmaceutical companies for products which are patentable
- Natural products generally not funded
- **Derivatives of natural products** funded (e.g. vitamin D vs vitamin D analogues), but **not unpatentable** natural products
- For clinical trials, a patient frequently **MUST do standard protocol first** (e.g. radiation and chemotherapy), which drastically reduces chances of responding to drugs that require an intact immune system
- My observation: Clinical trial investigators seem to be most interested in the clinical trial and not the patient
- Patient **discouraged from using natural substances** along with the clinical trial experimental drug
- **My observation**: patients in clinical trials do better with supplement support
- Rarely see benefits to patients who are doing clinical trials

Cancer Stem Cells Survive and Thrive with Conventional Therapy



Specific Cancer Stem Cell Therapy



How To Inhibit Growth of Cancer Stem Cells

- If chemotherapy and radiation do not sufficiently attack cancer stem cells, what does stop them?
- Anti-inflammatory agents inhibit cancer stem cell growth?
- Recent research shows that anti-inflammatory drugs like aspirin, NSAIDS and Celebrex inhibit cancer stem cell growth
- But, they all have bad adverse effects like bleeding

Many Natural Substances Block Inflammatory Stimulation of CSTs

• HERE ARE A FEW:

- Curcumin
- Thymoquinone from black cumin seed
- Sulforaphane and other glucosinolates and isothiocyanates from cruciferous vegetables
- Vitamin D
- Boswellia
- Parent Essential Fatty Acids (LA and A Linolenic Acid)
- Stabilized aloe vera extract

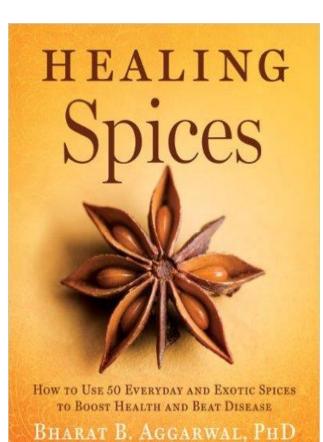
Bharat B Aggarwal PhD: Champion of Natural Anti-Inflammatory Herbs

- PhD Biochemistry from Univ. of California, Berkeley 1977
- Genentech-Research from 1980-1989
- Researched anti-cancer properties of herbs-Espec Curcumin
- MD Anderson Houston TX-Chief of Cytokine Research Center from 1989-2015-Left recently
- Published over 500 articles
- Recent retraction of 7 articles



Curcumin & Cancer Cells: How Many Ways Can Curry Kill Tumors Selectively?

- 2009 Article in the American Association of Pharmaceutical Scientists
- Extraordinary number of ways that curcumin can do this-Highly technical article
- <u>http://www.ncbi.nlm.nih.gov</u> /pmc/articles/PMC2758121/

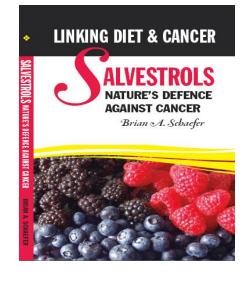


Salvestrols: Another Strategy for Killing Cancer Cells Without Harm to NL Cells

- I learned about Salvestrols about 7 years ago
- Discouraged because patients taking Salvestrols COULD NOT take B17, Laetrile, amygdalin
- Most of my cancer patients were taking B17 orally or IV at that time
- Received Brian Schaefer's book on Salvestrols-2012
- Impressed by theory and case histories
- Less controversial than B17 because almost no one knew anything about them
- Began using Salvestrols at the end of 2012

Book by Brian A Schaefer-2012

- History of the discovery of CYP1B1
 & Salvestrols
- Case histories of patients using salvestrols
- Schaefer met Burke, Potter & Daniels in the early 2000's & fascinated with CYP1B1 and Salvestrols
- Brian distributes the Salvestrol supplement in North America





Professor Dan Burke PhD: Discovered **CYP1B1** High in CA Cells; Not NL Cells

- Degrees in Biochemistry & Drug Metabolism in UK
- Authored over 200 published research studies
- Research in the Cytochrome P450 family of enzymes
- Early 1990's-Discovered the enzyme protein CYP1B1 present in cancer cells and not in normal cells (ultimately found in 26 different cancers)



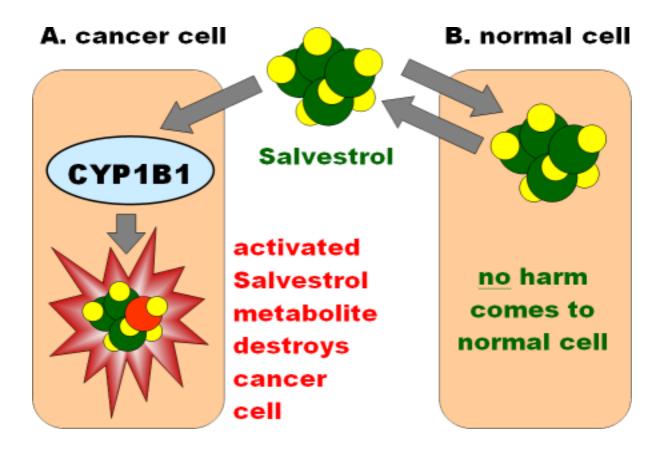
Essentials of the **Protein-Enzyme** CYP1B1

- CYP1B1 is considered a universal cancer marker by some (e.g. researchers at the Dana Farber Cancer Center in Boston in a 2008 paper, though currently not on website)
- Research has showed the presence in brain cancer cells, but NOT normal brain cells has been done at MD Anderson Cancer Center
- No mention of this concept at NIH website & this concept remains controversial in the USA
- Question: Why is CYP1B1 in cancer cells?

CYP1B1 & the Discovery of **Salvestrols**

- Hypothesis: CYP1B1 protects against cancer
- Research found a group of relatively inert substances found in organic plants
- Substances when mixed with CYP1B1 form metabolites that inhibit cancer cell growth
- Most people suffer from a deficiency of salvestrols, which predisposes them to cancer
- Salvestrols have no effect on normal cells which do not have CYP1B1

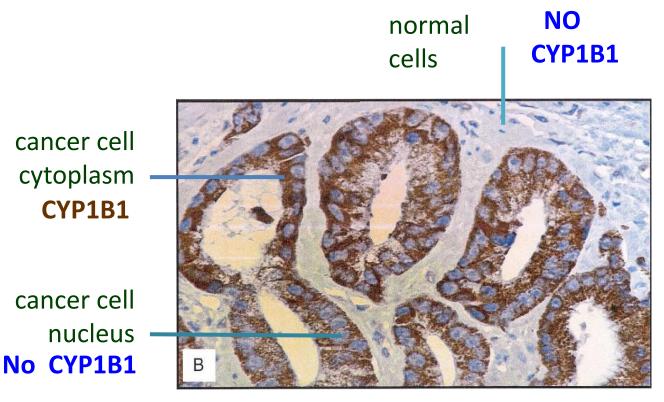
Effects of Salvestrols on Cancer Cells & Normal Cells



Correcting Salvestrol Deficiencies

- Most people are deficient in salvestrols
- By eating organic fruits and vegetables high in salvestrols, a person will convert the salvestrols to metabolites, which are capable of inducing apoptosis or otherwise slowing the growth of cancer cells
- For this to work properly, inhibitors of CYP1B1 need to be avoided
- Salvestrol deficiency can be corrected with a diet rich in salvestrols or with a salvestrol supplement
- The CYP1B1-Salvestrol system may be nature's rescue mechanism from cancer

Prostate Carcinoma Biopsy at 400x Magnif



biopsy chemically stained blue for cell structure (H&E variant) and brown for CYP1B1 (our immunohistochemical stain)

Carnell, D. et al. Int. J. Radiation Oncology Biol. Phys. **58**: 500-509 (2004)

Expression of CYPIBI in biopsies & normal tissues Murray, et. al. Cancer Res. 57: 1997

Tissue	Normal (# positive / # tested)	Cancer (# positive / # t	ested)
Bladder	0/8	8/8	(transitional cell carcinoma)
Brain	0/12	11/12	(astrocytoma)
Breast	0/10	12/12	(invasive ductal carcinoma)
Colon	0/10	11/12	(adenocarcinoma)
Connective tissue	0/9	8/9	(sarcoma)
Esophagus	0/9	8/8	(squamous carcinoma)
Kidney	0/11	11/11	(carcinoma)
Liver	0/8	Not tested	
Lung	0/8	7/8	(squamous carcinoma)
Lymph node	0/5	9/9	(non-Hodgkin's lymphoma)
Ovary	0/5	7/7	(adenocarcinoma)
Skin	0/6	6/6	(squamous carcinoma)
Small intestine	0/5	Not tested	
Stomach	0/10	9/10	(adenocarcinoma)
Testis	0/8	8/8	(malignant germ cell tumor)
Uterus	0/7	7/7	(adenocarcinoma)

Total

0/130 (0%)

122 / 127 (<mark>96%</mark>)

CYP1B1 Gene, Messenger RNA & Enzyme: Scientific Confusion

- Some reports said CYP1B1 present in non-CA cells; therefore the whole theory about CYP1B1 is incorrect
- What is the explanation for this discrepancy?
- CYP1B1 gene is found in every cell in the body
- Messenger CYP1B1 is found both in cancer cells and some non-cancer cells
- CYP1B1 enzyme is found almost exclusively in cancer cells or precancerous cells
- Confusion in medical literature about where CYP1B1 resides is largely based on confusion between the messenger form of CYP1B1 and the enzyme form

CYP1B1 Inhibitors (1)

- Amygdalin=Vitamin B17 = Laetrile or sources like bitter apricot kernels (CAN'T USE WITH SALVESTROLS)
- Resveratrol in high doses
- Citrus flavanone naringenin from grapefruit, especially grapefruit juice
- Carbon monoxide (present in cigarette smoke)
- Various herbicides and pesticides, such as Roundup, as well as many household chemicals

CYP1B1 Inhibitors (2)

- Herbs, such as: Cannabis, St. John's Wort, Ginkgo biloba, Gin Seng, Hesperidin
- Artificial Sweeteners interfere with the absorption of salvestrols & should be avoided
- Calcium D Glucarate may also reduce absorption or interfere with salvestrols getting into cells
- Metformin Drug used for diabetes and cancer
- There are undoubtedly others
- Need to avoid CYP1B1 inhibitors for them to work properly & interact with salvestrols

Salvestrols-Relative Effectiveness: Effect on Cancer Cells vs Normal Cells

Compound:	Classification:	Selectivity score:	
Methotrexate	chemotherapy	= 1	
S40	salvestrol	= 10	
S31G	salvestrol	= 22	
S52	salvestrol	= 32	
S54	salvestrol	= 1,250	
Stilserene	synthetic salvestrol	= 4,304	
S55	salvestrol	= 23,000	

Phytonutrients found +	Enzyme intrinsic	=	Apoptosis –
in fruit & vegetables	to cancer cells		cell death
Salvestrols +	CYP1B1	-	Anticancer agent

Salvestrol Supplement

- Some salvestrols > 20,000 to 1
- Potency measured with Point system
- Good organic diet contains about 300 points
- Each capsule is 2000 Points
- Dose depends on severity of condition



Salvestrol Point System & Dosages

- Based on the **selectivity of action** on CA vs NL cells
- Excellent organic food diet contains 300 points daily
- Each Salvestrol Platinum Capsule[™] contains 2,000 points [4 extracts (2 from citrus & 2 from bilberry)]; Taken with or after meals; Two of the Salvestrols in the capsule have Selectivity Scores > 20,000
- Also a topical cream is available with 1 salvestrol
- Approximate dosages: preventive 2,000 (1 capsule); moderate deficiency 4,000 to 8,000 (2 to 4 capsules); Severe deficiency 12,000 to 20,000 (6 to 10 capsules); maintenance (history of cancer) 4,000 (2 capsules) points daily

Known Supportive Nutrients to increase CYP1B1 or help Convert Salvestrol to Metabolite

- Iron-Check Hgb and Ferritin; the backbone of every cytochrome P450 Enzyme contains iron
- Magnesium-400 mg Enhances conversion of salvestrol to metabolite that induces cancer cell death; Supports CYP1B1 activity
- Niacin or niacinamide-100 mg twice daily; Enhances conversion of salvestrol to metabolite
- **Biotin** 1 mg to 5 mg daily-stimulates CYP1B1 production
- Selenium at least 200 mcg
- Vitamin C 1 to 3 grams daily in divided dosage; helps with detoxification
- Vitamin B2
- Oxygen is crucial for Salvestrol-CYP1B1 Activity (attaches to iron)

What is the Evidence that Salvestrols Work in People?

- No clinical trials or controlled studies; but there are reported and documented case histories
- There are case studies, reported in 3 journal articles by Brian Schaefer
- There are intriguing case histories reported by patients on Salvestrol blogs on the Internet
- Informal case reports given to developers of Salvestrol, especially in New Zealand
- New reports from China
- A few initial **preliminary** case reports of my own

Salvestrol Use in China at Renkang Hosp-Southern Med. University (Near Hong Kong)

- Oncologists Dr. Zhao and Dr. Wang began using salvestrols & have been doing this for the past 2 to 3 years
- Now, they say they use it with all cancer patients along with conventional treatment and some other alternative treatments, such as SPDT (Sonophotodynamic Therapy)



Dr. Zhao



Dr. Wang

Salvestrols in New Zealand from Dave Vousden-Distributor of Salvestrols

- Began to study this in March 2012
- Had a positive personal experience with salvestrols
- Has worked with 23 children or adolescents with terminal cancer-mostly brain or CNS, but some with blood cancers
- 2 have died
- 21/23 are stable or improved on Salvestrols



Schachter Center Cases

- Lymphoma with brain involvement-almost 3 years, living and well (No conventional Tx during this time)
- Anal melanoma after surgery-no recurrence-4 years
- Glioblastoma Multiforme-living 39 months from time of diagnosis, working full time, but struggling with a recent recurrence
- Many prostate CA and breast Ca pts doing well

Non-Hodgkin's Lymphoma with Brain Involvement: SCCM Case (1)

- 62 year-old at the time of her first visit, married professional woman was first seen in Nov 2007 at our Center with a marginal B Cell Lymphoma first diagnosed in Dec 2005 with CT scan and inguinal lymph node biopsy
- Six months of Rituxin and CHOP chemotherapy; many adverse reactions, including chemo brain
- Cancer getting worse at time of 1st visit with us after a remission of 6 months from the chemotherapy
- She wanted alternative to chemotherapy
- Stable from 2007 to 2012 with C drips, Laetrile and many other strategies; did great for 5 years

Non-Hodgkin's Lymphoma with Brain Involvement: SCCM Case (2)

- 2012-At the age of 67, developed impaired balance, cognitive dysfunction and confusion; diagnosis was lymphoma involvement of brain
- Treated with just a month of chemotherapy by oncologist at major teaching institution in addition to our program (oncologist told her to stop C drips and all supplements but she ignored his request) and had a dramatic response with complete cessation of symptoms and normal MRI
- Oncologist recommends more chemotherapy starting in Dec 2012 or Jan 2013; warned of a rapid recurrence if this is not done

Non-Hodgkin's Lymphoma with Brain Involvement (3)

- Dr. Schachter consulted with patient & husband in January 2013 regarding possible use of salvestrols and Beljanski Pao V FM, which crosses the blood brain barrier (along with many other supplements and C drips)
- Monitor carefully for evidence of brain recurrence; Can always restart chemotherapy if brain symptoms reappear and/or abnormalities on MRI
- Against the wishes of her oncologist and husband, patient begins the salvestrol program
- B17 was stopped and Salvestrols were started at 5000 points daily & later increased as high as 16,000 points daily
- At first, oncologist continued to recommend chemotherapy in spite of no neurological symptoms and several normal MRI's, BUT PATIENT REFUSED

Non-Hodgkin's Lymphoma with Brain Involvement (4)

- Oncologist amazed she has had no recurrence and stopped pushing chemotherapy
- Now, slightly less than 4 years from time of the additional chemo recommended feels well & seems fine
- She has not returned to the oncologist for about 2 years, continues on salvestrols 16,000 points and Pao V FM, many other supplements and C drips
- Still has issues, such as dental issues, but doing well

Glioblastoma Multiforme-Stage IV Brain Cancer (1)

- 20 year-old (now 23), single female teacher was first seen at SCCM 6-5-13
- Diagnosis of glioblastoma multiforme at major medical center in NYC in March 2013
- Surgery: Removal of tumor March 2013; then radiation and chemotherapy Temodar during radiation and for 8 months after radiation (5 days on and 23 days off)
- Started on intensive supplement program in June 2013

Glioblastoma Multiforme-Stage IV Brain Cancer (2)

- Supplement program included: high dose Salvestrols, Pao Pereira (anti-cancer Beljanski herbal supplement that crosses the blood brain barrier), a Beljanski product that helps prevent damage from radiation, optimal amounts of D, K2 (MK4), balanced minerals, parent essential fatty acids and diet devoid of sugar and processed foods with an emphasis on organic foods
- She saw oncologist every 3 months for MRI (NORMAL); oncologist unaware of supplement program
- Had continued to work full time until this time, but developed a problem two months ago
- MRI's in late 2015 and early 2016, showed slight changes, but oncologist thought it was scar tissue

Glioblastoma Multiforme-Stage IV Brain Cancer (3)

- In early May 2016, patient developed weakness and unsteadiness of her left hand
- MRI done. Oncologist says recurrence of inoperable GB; patient offered Avastin and an experimental immunotherapy drug
- I doubt this will be helpful
- Recent statistics for 2-year survival of GM with conventional therapy, including Temodar, 2 years; patient is now 40 months after her Dx and still working in spite of weakness of left side
- Parents and patient exploring alternatives involving oxygen therapy and other approaches in addition to intensifying current program

Patient with Anal Malignant Melanoma (1)

- 57 year-old, married professional diagnosed with malignant melanoma of rectum in July 2012; it was surgically removed; history of previous melanoma of skin surgically removed
- Followed by rectal surgeon, dermatologist, oncologist specializing in melanoma, radiotherapist at major medical center
- Radiation recommended and refused
- Examined every few months by rectal surgeon

Anal Malignant Melanoma (2)

- Rare and aggressive malignancy
- No known risk factors
- Surgical excision remains the cornerstone of therapy
- No long-term survivors of stage II or III disease
- No trials definitively proving abdominal perineal resection (APR) or wide local excision (WLE) to yield superior long-term survival

Clin Colon Rectal Surg. 2006 May; 19(2): 78–87

Anal Malignant Melanoma (3)

- Feb 2013: Salvestrols-Started at 5,000 Points daily; and increased to 16,000 Points for maximum aggressive program
- March 2016-Negative exam; feels great; Now 4 years since the original diagnosis and no evidence of recurrence or spread of cancer (A PET scan was negative after 3 years)
- Time will tell if program appears to help prevent recurrence and metastases

Salvestrols at Schachter Center for Complementary Medicine (SCCM)

- Using them for only about 42 months; some patients using as preventive 1 or 2 capsules daily
- We estimate that 350 patients have taken or are taking salvestrols at SCCM
- No apparent side effects noted even in very sensitive people
- Not a panacea: Two patients with extremely extensive metastatic disease started on Salvestrols, but succumbed within 2 months
- Much more work needed to see limitations of treatment and how well they work with other non-toxic therapies; but results so far very promising

Our Approach to Preventing and Treating Cancer

- DO NOT ACCEPT CONVENTIONAL TREATMENT AS A GIVEN (e.g. radiation for breast cancer or any conventional treatment for prostate CA)
- Start with lifestyle changes, dietary changes, exercise, good sleep habits, reduction of medications when possible
- IV infusions of Vitamin C or Alpha Lipoic Acid
- Powerful supplements with little negative adverse side effects
- Use of low dose naltrexone

Dietary Principles for Cancer Patients: Where is the Agreement?

- Avoid all processed foods and refined carbohydrates
- Avoid foods containing artificial chemicals, artificial sweeteners, various additives
- Avoid adulterated fats
- Use organic foods whenever possible
- Drink pure water free of fluoride, chlorine and other additives and impurities

What are the **Dietary Controversies?**

- What should be the relative amounts of proteins, fats and carbohydrates (e.g. high fat, low carbohydrate OR relatively low fat and high unprocessed carbohydrates with lots of fiber?
- How much of diet should consist of veggies and fruits?
- Should fruits be allowed? If so, how much and what types? (Ketogenic diet can be high in good fats and low in carbohydrates)
- Should raw vegetable juices be used?
- Individualize for particular patient-Plans are not fixed or rigid; consider patients likes and dislikes

Other Procedures at the SCCM

- Check Vitamin D status
- Check Iodine status (Random urine iodine) and optimize
- Optimal fat soluble vitamins of D, A and K2 (MK4)
- Monitor bone density
- Well-balanced vitamin-mineral formula (one good one is Daily Essential Nutrients from Nutratek)
- Use of probiotics
- Use of detoxification (coffee enemas, saunas, exercise)

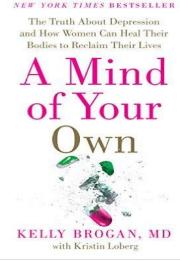
Other Procedures at the SCCM-2

- Help patients to taper prescription drugs (especially psychotropic meds) when possible
- Improve sleep using natural methods as much as possible. Healing takes place during sleep
- Encourage exercise program, involving aerobic, stretching and strengthening
- Extensive use of supplements to optimize body functioning (Mushroom extracts, Beljanski products, fermented wheat germ, many others)

Why You Should **Avoid Medication**: 2016 Book- *A Mind of Your Own*

- Kelly Brogan MD-Psychiatrist-with excellent academic background
- Concludes that in many cases medications may do more harm than good. See: <u>www.kellybroganmd.com</u>
- Emphasizes lifestyle and inflammation in the development of depression, similar to what we see in cancer
- Strategies with re-orienting yourself and tapering medications





Utilizing Available Information for Non-Toxic Approaches to Cancer

• See website:

www.fromcancertohealth.com

- Good information on website to help support cancer patients with or without conventional treatment
- Program consists of a combination of dietary suggestions, many nutrients (like D, K2, Selenium, iodine and many others); some remarkable results



Abraham Safirstein

 We use Cyto-Control & Myco-Control at the SCCM

Resources for Information about Relatively Non-Toxic CA Approaches

- <u>https://thetruthaboutcancer.com/</u> Series of DVDs available with interviews of practitioners and patients benefitting from alternative approaches
- <u>www.cancercontrolsociety.com</u> Annual California conferences and DVDs of lectures
- <u>www.annieappleseedproject.org</u> Annual conferences and recordings of past conferences

Brief Sampling of Relatively Non-Toxic Approaches to Cancer at SCCM

- Vitamin D3: Testing and treatment
- Vitamin K2 (MK4)
- Iodine
- Beljanski products (4 basic products)
- Fermented wheat germ (Avemar, Metoprolol)
- High dose oral and IV Vitamin C
- Low Dose Naltrexone
- Alpha Lipoic Acid IV and oral

Studies Suggesting Link of Vitamin D Levels and Cancer

- 3,000 studies indicating that serum 25 Hydroxy vitamin D levels inversely associated with cancer
- 75 epidemiologic studies
- Vitamin D upregulates or downregulates about 3,000 genes (generally anti-inflammatory and anti-cancer genes)
- Number of genes affected keeps rising!!!
- Vitamin D receptor protein with vitamin D is necessary for producing Macrophage Activating Factor (MAF), which stimulates the innate immune system to attack cancer cells

Professors at Harvard Medical School at Mass General Hospital: Vit D Review

- Sadeq A. Quraishi MD-Anesthesiologist and Critical Care work
- Carlos Arturo Camargo Jr. MD, DrPH; Emergency Room
- Journal of Restorative Medicine, Vol 1, Number 1; Sept 2012; pp 9-23.
- Vitamin D and Major Chronic Illness
- Excellent review article with 123 references
- Reviewed Pubmed-indexed articles in English from Jan 2003 to June 2012
- No affiliation mentioned in paper





Vitamin D & Major Chronic Illness

- Conclusion: Optimizing 25(OH) levels to range of 30 to 50 ng/ml is reasonable to optimize potential benefits and minimize potential risks; contrast with IOM recommendation of 20nG/ml
- <u>http://restorativemedicine.org/journal-viewer/?a=aHR0cDovL3d3dy5yZXN0b3JhdGl2ZW</u> Zvcm11bGF0aW9ucy5jb20vVml0YW1pbi1ELWFuZ C1NYWpvci1DaHJvbmljLUlsbG5lc3M ZnJhbWVD b250ZW50PTE&w1=650&h1=2000&t=Vitamin% 20D%20and%20Major%20Chronic%20Illness

Vitamin D and the **DINOMIT Model**

- See video: DINOMIT Theory of Cancer (17 minutes)
- http://www.youtube.com/watch?v=3GM0CnO6-ds
- Cedric Garland Dr. PH-University of CA-San Diego
- All of the following stages of cancer are affected in a positive direction by up or down regulation of genes
 - D = Disjunction: Uncoupling of Cells
 - I = Initiation
 - N = Natural selection
 - O = Overgrowth
 - M = Metastasis
 - I = Involution
 - T = Transition



Cedric Garland Dr. PH

Cancer Immunotherapy with Macrophage Activating Factor

- <u>https://truemedmd.com/2013/06/canc</u> <u>er-immunotherapy-with-macrophage-</u> <u>activating-factor/</u>
- GcMAF discovered by in 1990 by Dr. Yamamoto at the Socrates Institute in Philadelphia (Activates innate immune system)
- 3 Successful Clinical Trials with breast, colorectal and prostate cancer
- May be able to make at home: See: <u>https://gcmaf.se/bravo-probiotic-</u> <u>assayed-and-proven-to-contain-gcmaf/</u>



Jeffrey Dach MD

Testing and Administration of D3 (1)

- Serum 25 Hydroxy D-Best way of determining the nutritional status of Vitamin D3 (Reference range in USA 30 to 100 ng/ml which equals 75nmol/L to 150 nmol/L in some other countries (Conversion factor Multiply ng/mg by 2.5 to get the nmol/L)
- Our goal for Cancer patients is about 80 ng/ml
- Administer only D3 and not D2 which is inferior
- Test frequently. Keep the 25 Hydroxy D level below 100 ng/ml

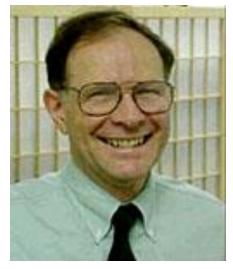
Testing and Administration of D3 (2)

- Test frequently. Keep the 25 Hydroxy D level to below 100 ng/ml
- Make sure that Vitamin K2 (MK4) is used along with Vitamin D; (dosage should be about 45 mg per day, especially if bone density is low
- Vitamin A works with D as a team. We use about equal amounts of A, as long as patient does not develop headaches of dry lips

Article: The Anticancer Effects of Vitamin K

Alternative Medicine Review; Vol. 8, No. 3; 2003

- Associate of Jonathan Wright MD
- Most interesting to me is his review of K2 (MK4), including in vitro studies, a few controlled trials and case histories
- Most supplements contain K2 (MK7) rather than MK4
- <u>https://www.researchgate.net/pu</u>
 <u>blication/10591470</u> The antican
 <u>cer effects of vitamin K</u>



Davis Lamson ND; Colleague/Jon Wright MD

Vitamin K2 (MK4) and Cancer

- Both in vitro and in vivo studies show that K2 (MK4) has anticancer effects
- K2 (MK4) inhibits cancer cell lines of liver, colon, leukemia, lung, stomach, lymphocyte, nasopharynx, breast, oral epidermoid, osteosarcoma, glioma, leukemic blast cells
- No effect on normal bone marrow cells
- Several impressive case reports from Japan, using MK4 in doses of 45 mg or more per day

Evaluate Iodine Status and Supplement Carefully

- Check random urine iodine; most Americans are deficient in Iodine; WHO says below 100 is deficient
- Iodine needs to be supplemented carefully
- Safe and effective protocols for iodine administration exist
- Milligram quantities of iodine necessary for anticancer effects
- See my published papers at our website for a well referenced section on lodine: www.schachtercenter.com

Mirko Beljanski PhD

- Useful Supplements to Support
 Cancer Patients
 - Extracts with anti-cancer and anti-inflammatory properties (Pao V and Rovol V)
 - RNA primers that increase WBCs & Platelets, which may help cancer patients undergoing chemotherapy and radiation (Real Build)
 - Special extract which may reduce fibrosis from radiation (Ginkgo V)
- See: <u>www.naturalsource.com</u>



1923-1998



Sylvie Beljanski

Two Herbs with Anti-Cancer Properties

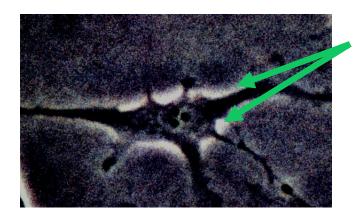


Pao Pereira (Pao V)



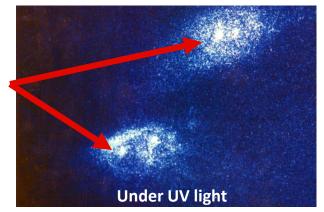
Rauwolfia Vomitoria (Rovol V)

Selectivity of Action



Naturally fluorescent, Pao pereira can be seen outside a healthy cell (astrocyte), unable to penetrate its nonporous membrane

The Pao pereira extract can be seen penetrating the cancerous cell (glioblastoma))



Fermented Wheat Germ Extract (FWGE) and Metatrol: Mate Hidvegi PhD

- Dr. Albert Szent-Gyorgyi was upset about development of mustard gas chemotherapy drugs after seeing the effects of them during his personal World War I experiences
- His motivation to find answers for new cancer treatments accelerated after his wife & daughter got cancer and died
- He believed that natural quinones & related compounds could enhance oxidative metabolism in normal cells and inhibit anaerobic hyper metabolism in cancer
- 1996-Mate Hidvegi developed FWGE called Avemar



Mate Hidvegi PhD

Mechanisms of Action of Avemar

- Inhibits glycolysis and enhances aerobic metabolism
- Immune modulation
- Induces apoptosis
- Anti-angiogenesis
- Anti-metastatic
- Inhibits cancerous DNA synthesis

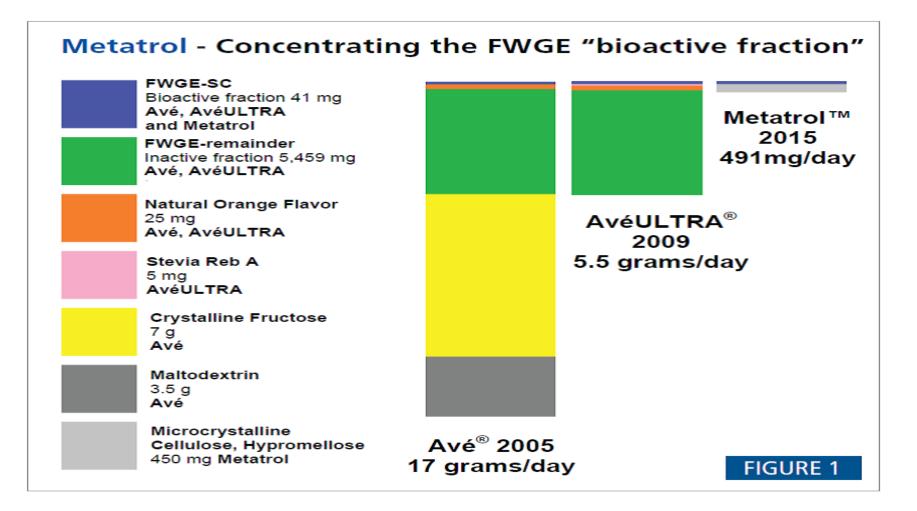
Controlled Human Studies Showing Benefits of **FWGE in Cancer Pts**

- Primary colorectal cancer patients in the British Journal of Cancer
- Stage III melanoma patients at high risk for recurrence in the *International Cancer Congress*
- Oral cancers: Stage II, III and IV
- See: <u>www.avemar.com</u> for the references

Metatrol (Concentrated Form of Fermented Wheat Germ Extract-FWGE)

- Developed by American BioScience Corp.
- Metatrol: short for "metabolic control"
- Supports oxid. metabolism; inhibits anaerobic metab.
- AvéULTRA FWGE is non-toxic and so is Metatrol
- Concentrates the bioactive molecules in FWGE and filters out gluten and non-active molecules.
- Dosage: 2 capsules for patients < 200 lbs; 4 capsules per day for people over 200 lbs. Can take with other supplements
- Contains < 100 molecules with very low molecular wts
- Take Metatrol anytime. See: <u>http://www.metatrol.com/</u>

Metatrol Compared to Other Forms of Fermented Wheat Germ Extract (FWGE)

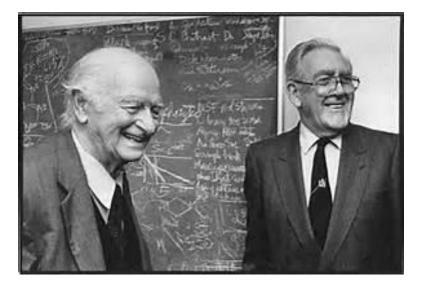


High Dose IV Ascorbate (Vit.C) Drip to Treat Cancer at Schachter Center

- Used at our Center-more than 35 years
- Published clinical cases show treatment plausible
- Dosage of Vitamin C-25 to 100 Grams (our usual maximum dose is 60 grams per infusion)
- Administered over 2-3 hours
- Treatment one to three times a week or more
- When used with chemotherapy-patients feel much better (we don't use chemotherapy)

Don't Forget High Dose Oral Vitamin C

- <u>https://www.csom.ca/wp-content/uploads/2013/03/Vitamin-C-and-Cancer-ls-There-A-Use-For-Oral-Vitamin-C-28.1.pdf</u>
- <u>http://www.peakenergy.com</u> /news/VitaminC Cancer w <u>Comments.pdf</u>
- <u>http://vitamincfoundation.o</u> <u>rg/alerts.php</u>
- 10 grams or more of C extends life of cancer patients



Linus Pauling PhD and Ewan Cameron MD: Champions of Oral C for Cancer

LDN & Bernard Bihari MD (1931-2010)

- In the 80's worked with heroin addicts in NYC; many had AIDS
- 1984-Naltrexone approved
- Blocks highs from heroin & alcohol in approved dose 50mg
- People felt awful because it blocked endorphins
- Discovered AIDS patients had very low endorphins (20% of NL)
- Showed Naltrexone in doses from 1.5 to 4.5 increased endorphins Called LDN



LDN results in Endorphins Enhancement & Better Immune Functioning

- Stimulates the production of opioid receptors
- Enhances natural killer cells
- Improves immune functioning
- AIDS patients lived longer
- Strong anti-cancer effect with LDN
- Dr. Bihari noted this first in a friend who had remission of lymphoma with LDN
- Subsequently, many other cancer patients responded
- Seems to be useful for many people with autoimmune diseases, like MS and Crohn's disease

Low Dose Naltrexone

- <u>http://www.lowdosenaltrexone.org/</u> Updated
- <u>www.ncbi.nlm.nih.gov</u> Govt Information
- <u>http://www.drwhitaker.com/what-is-low-dose-naltrexone/</u> Article in Whitaker Newsletter 2008
- <u>http://www.lowdosenaltrexone.org/gazorpa/inte</u> <u>rview.html</u> This is Dr. Kokayi's transcript
- <u>https://www.sciencebasedmedicine.org/low-dose-naltrexone-bogus-or-cutting-edge-science/</u> (Critical Article)

Bert Berkson MD, PhD-Alpha Lipoic Acid and Low Dose Naltrexone

- <u>http://www.townsendletter.com/Dec2007/alp</u>
 <u>halipo1207.htm</u> Article by Bert Berkson MD,
 PhD
- ALA 1948-First discovered; 1951 structure determined
- Early 1970's Berkson successfully treated mushroom poisoned patients with IV ALA
- 2006-Long term survival of Pancreatic CA with mets (78 months in 2009); (Ref in above article)
- 2009-3 more cases of Pancreatic CA: good results (Ref in above article)



Protocol for Alpha Lipoic Acid and Low Dose Naltrexone for CA Patients

- Alpha Lipoic Acid (ALA) 300 to 600 mg IV twice a week
- Low Dose Naltrexone 3 to 4.5 mg orally at bedtime
- Oral ALA 300 mg twice daily
- Selenium 200 mcg orally twice daily
- Milk Thistle 300 mg 1 cap 4 times daily
- B complex (3 high dose capsules daily)

Many Other Non-Toxic Strategies

- Amygdalin=Laetrile=Vitamin B17 (can't be used with salvestrols)
- **Proteolytic enzymes** (Nick Gonzalez approach)
- Essiac herbs
- Hoxsey protocol
- Energy Therapies like acupuncture, Bemer technology, Reiki, massage and others
- Many other non-toxic strategies alone or in combination

Oxygen Baths In Budapest, Hungary

- New technology that increases oxygen in tissues with 3 baths daily
- Anecdotal reports of advanced cancer patients that have recovered
- Relatively inexpensive
- <u>http://www.kaqun.eu/pr</u> <u>oducts-services/bath-</u> <u>therapy</u>



National Center for Complementary and Integrative Health (NCCIH) and the National Cancer Institute (NCI)

- https://nccih.nih.gov/health/cancer/camcancer.htm
- "A substantial amount of scientific evidence suggests that some complementary health approaches may help to manage some symptoms of cancer and side effects of treatment. For other complementary approaches, the evidence is more limited"
- Unproven products or practices should not be used to replace or delay conventional medical treatment for cancer.
- I disagree with this last principle

How Far Can We Go With a Minimum Amount of Conventional Tx?

- Insights of "Radical Remission"
- Knowledge of nutrition, detoxification, exercise and stress management
- New insights involving cancer stem cells
- Awareness that entire medical system and research today is fueled by profits and patentable approaches (No Clinical Trials involving these alternative approaches and they may not be possible)
- Awareness of practitioners and patients of the true science-Individual responsibility

Summary

- More and more patients are becoming educated as to options regarding a cancer prevention and treatment program
- Many are choosing to forego the standard of care with careful monitoring
- We attempt to help educate the patient and partner with them to navigate their care
- See handout for more information, details and some important links.

Schachter Center on 2nd Floor; Suffern NY in Rockland County-45 min from NYC

