

# Biobran Workshop

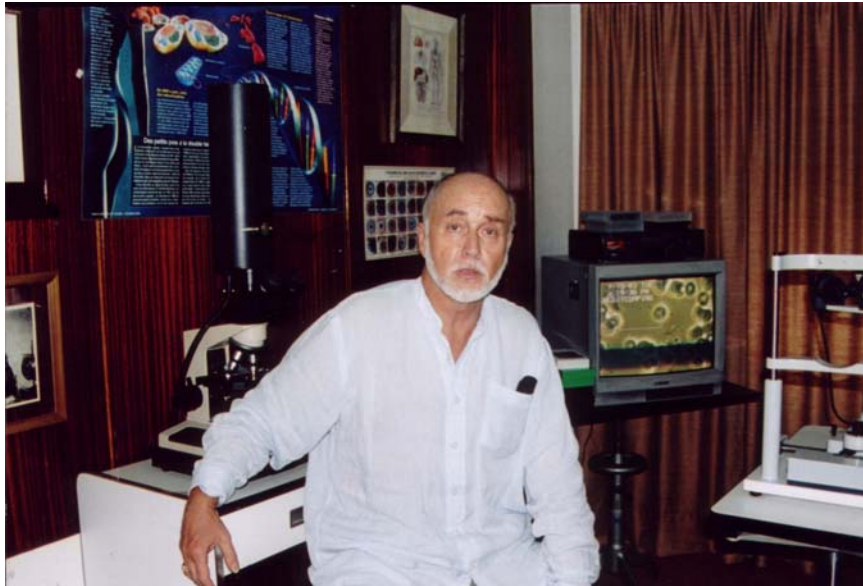
**September 26th – 2004  
St. Anne College Oxford University  
United Kingdom**

## **Presentation**

*Combination therapy with Biobran  
as innovative approach in the  
treatment of cancer.*

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**Holiterapias  
Institute of Integrative  
Medicine**

*37 years of clinical practice.*

**Peripheral Blood Analysis.**

**Chemunoluminescence for free radical  
activity.**

**Iridoscopy.**

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Dear Colleagues,

I want to thank Mr. Toshi Uchiyamada president of DHD Europe who invited me to this challenge of Biobran workshops to present some of my work and experience related to the treatment of cancer a most difficult task to achieve, followed by a presentation of some cancer cases treated with a combination therapy and Biobran.

I am not particularly a research scientist but for nearly 35 years I have been studying different avenues of cancer and have been involved with all types and grades of malignancy with a special focus on breast cancer, my speciality.

### Example of long term survival patients treated in our Institute

Description	number of years
M – Wilms tumor (no surgery-chemo/radiation)	22
F – Breast cancer (metastasis - no surgery – chemo/radiation)	17 +
M – Brain tumor (twelve months to live)	16
F – Ovary tumor	17
M – Leukemia	20
M – Colon cancer	10
F – Breast cancer (over 95 bones metastasis)	7

Some of my patients treated over twenty years ago include desperate cases that today are in good health and free of cancer, proving that no matter what we say about integrative medicine, our methods can be of great support to the destructive effects of surgery, chemotherapy and radiation that damage surrounding

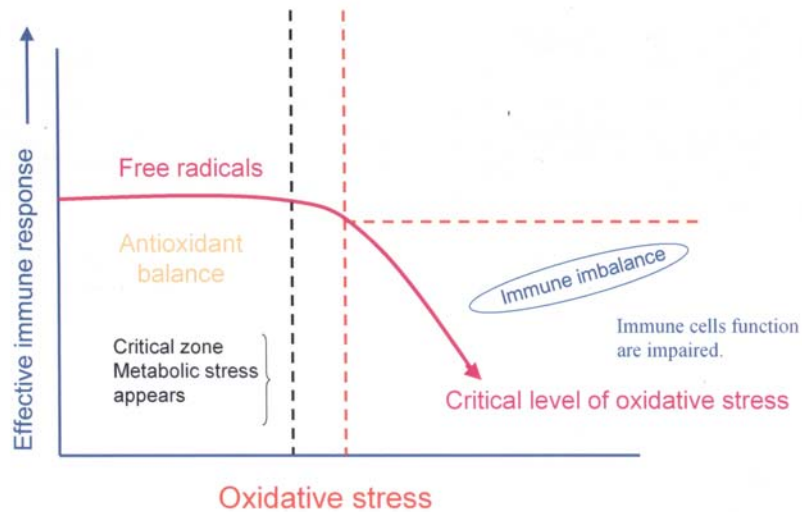
tissue and may be responsible for metastatic invasion via the vascular or lymph system, as in most cases of breast cancer.

### **Complementary Alternative Therapy at Holiterapias**

Antioxidant therapy	Low molecular weight antioxidant compound – SOD like activity – Anoxe
Immuno-enhancement	Life yeast cells – Biobran – Squalene – Germanium
Antiangiogenesis	Liquide Extract of Shark Cartilage
Intra-intestinal environmental improvement	Life yeast cells – Autolysat of human bacteria (microtherapia) – Probiotics
Increase energy level	Far-infrared ray emitting stone
Diet therapy	Serge Jurasunas special diet
Genetic therapy	Umbilical cordon from frozen embryo
Detoxification	Energy sand bath – Detoxify drink – coffe enema

Therefore in our Institute patients are treated with different therapies and various natural compounds that facilitate synergism and target the cancer cluster. For instance, free radicals and antioxidant SOD therapy is a new avenue in cancer that really works in synergy with immunotherapy providing that we can use a low-molecular-weight antioxidant to be absorbed by the body and reach target tissue.

- Metabolic stress limits the immune function -

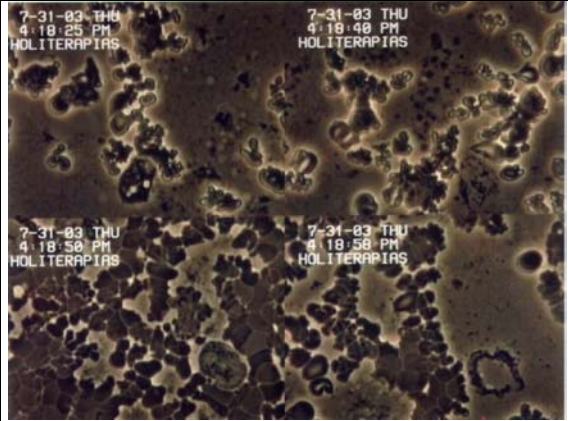
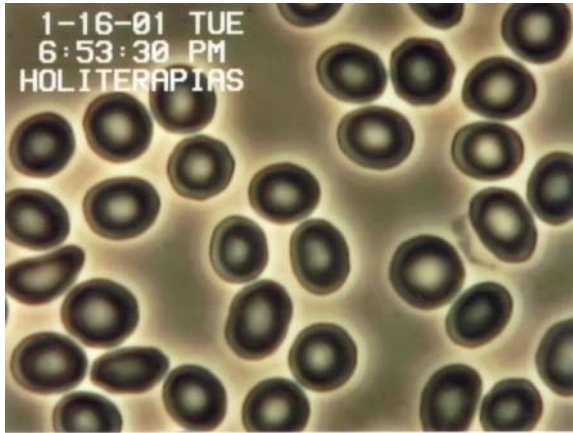


Our therapy includes detoxification, diet therapy and many functional foods used to prevent the decrease of immunity, activate enzymatic repair mechanisms and balance antioxidant defense against excess ROS, specially during chemotherapy.

**High Resolution Blood Morphology – (peripheral blood assessments)  
(A developed microscopy with multi-phase optical system and the highest variable magnification (40 x 25,000))**

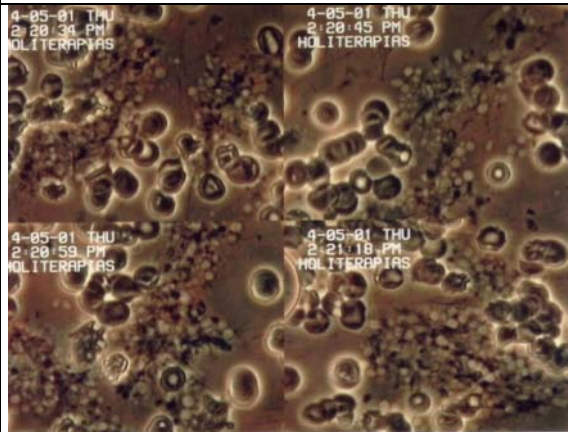
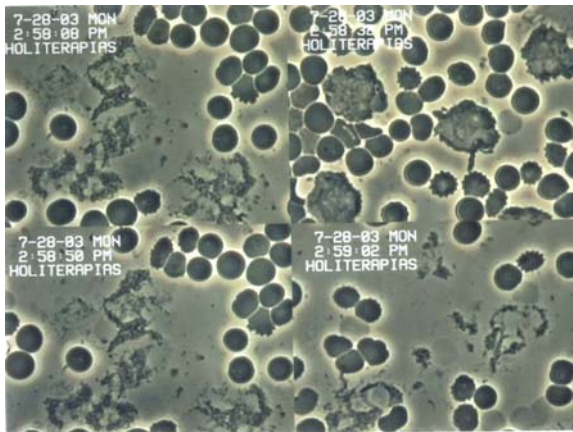
- Oxidative stress profile (morphology of red blood cells).
- Lipids status (oxidize lipids).
- Platelets aggregation
- Immune status (WBC's fragile, desintegrated, phagocytosis).
- Fungal and bacterial invasion.
- Nutritional status.

Healthy red blood cells.



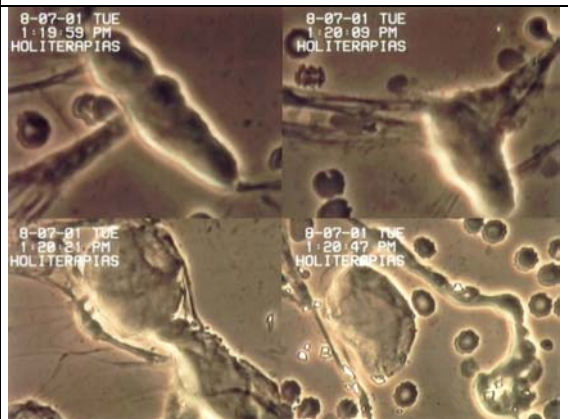
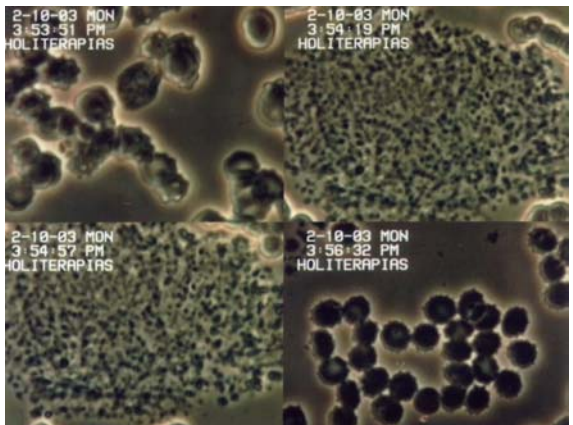
High oxidation and destruction of red cells in cancer patient.

Excess of WBC's damaged by free radicals – Metabolic stress.



Fungal invasion and candida after chemotherapy.

Red cells Lysis, oxidative stress and platelets aggregation after chemotherapy.



Oxidize lipid strand in breast cancer patient – low antioxidants defense.

Additionally we use a wide range of non conventional diagnostic tests including a peripheral blood analysis (or high resolution blood morphology) with advanced microscope with a multi-phase optical system and variable magnification (40 x 2,000x) that monitor immediately over 36 information such as:

- oxidative stress through red blood cell membrane morphology
- lipid status
- platelet aggregation
- immune status
- bacterial and fungal invasion
- nutritional status

A few years ago we decided to experiment with Biobran MGN3, a rice bran arabinoxylan derivative obtained by hydrolysing hemicelluloses of rice bran with shitake enzyme mushrooms, which have a strong immunomodulatory effect (1) specially by increasing NK cell activity which is usually lower in cancer (2) and reducing adverse reactions to anticancer drugs.

Biobran MGn3 is a rice bran arabinoxylan derivative obtained by hydrolyzing hemicellulose of rice bran with shitake enzyme mushroom which have immunomodulatory effects (1) specially by increasing NK cells activity to over 300% (2) usually lower in cancer and reduce adverse reactions to anticancer drugs (3).

1 – Ghoneum M. Enhancement of Human Natural Killer cell activity by Modified Araboxylan from rice bran (MGn3) Int. Immunotherapy XIV (2): 89-99-1998.

2 – Ghoneum M. And Galal N. – NK immunomodulatory function in 27 cancer patients by MGn3, a modified araboxylan from rice bran – 87th annual meeting AACR – Washington – April 1996.

3 – Jacoby H., Wnorowski, Sakata K. and

Biobran is included in our combination therapy with our antioxidant compound Anoxe made from modified plants and seeds that contain a large quantity of antioxidants to extract full potential low-molecular-weight-antioxidant components (3) acting with SOD-like activity with strong effects against an excess of ROS activity (4) and acting also as a prooxidant to control tumor growth (5).

Anoxe a new molecular weight antioxidant developed from modified plants and seeds that contain large quantity of antioxidants components (1).

Include: Glutathione, catechins, catalase, tanin, riboflavin, carotenoids, flavonoids, polyphenols, vitamin C and E etc...

With a SOD like activity –  $2.6 \times 10,000$  unit/g

Anoxe has a strong effect against excess of ROS, a strong oxidative character and redox potential (2).

1 – Niwa Y. And Miyachi Y. – Antioxidant action of natural health product and chinese herbs – inflammation – 10-79-91-1986.

2 – Prof. John G. Ionescu, Prof. Serge Jurasunas, Dietmar Weber Ph.D. Effects of natural SOD like compounds on Redox potential and free radical generation in venous blood and plasma. Research dept. od Spezialklinik – Neukirchen – Germany 2002.



We selected 6 different types of cancer patients with different ages treated by conventional therapy (except one case of prostate cancer).

**Selected cancer cases where Biobran was experimented together with a combination therapy.**

Age	Sex	year	Primary lesion	Conventional therapy	2004
39	Male	Nov99	Multiple myeloma	Chemo to 2001 No bone marrow transplant	Remission 2001
54	Male	1999	Lung – stage III	Surgery Chemo/radiation	Stable No recurrence
36	Male	2002	Myeloma (lung-liver) recurrence	Chemotherapy radiation	Remission 2004
64	Male	2001	Large intestine	Surgery Chemo/radiation	Remission 2004
63	Male	2002	Prostate Bone metastasis	No surgery Chemo/radiation	Remission 2003
60	Female	1998	Breast – 17cm Stage III	Mastectomy Chemo/radiation metastasis	Remission 1999

Patients have been under treatment in periods from one year to four years with regular evaluation of the karnofsky score, and electrobiological, organic field-tested through the computerized segment electrography device Vegacheck.

Their blood status has been regularly monitored through the observation of the peripheral blood analysis.

As you may observe in the figure, illustrating the six different cases, each patient follows the treatment up to four years. As we know,

Biobran MGn3 has a long-term effect up to four years without side effects.

The patients suffer fewer side effects from chemotherapy with more effectiveness and less treatments which is one advantage of Biobran itself but of the combination therapy.

Each patient is today in complete remission and free of metastases.

**Our combination therapy is based on the theory of chronic inflammation and cancer.**

Growing evidence demonstrates that chronic inflammation through excessive free radical activity and hypoxia may cause edema in the connective tissue influencing the structure of the extra cellular matrix components that play an active role in the regulation of angiogenesis promoters.

Oxidative stress releases the arachidonic acid cascade that generates certain prostaglandins and leukotrienes such as:

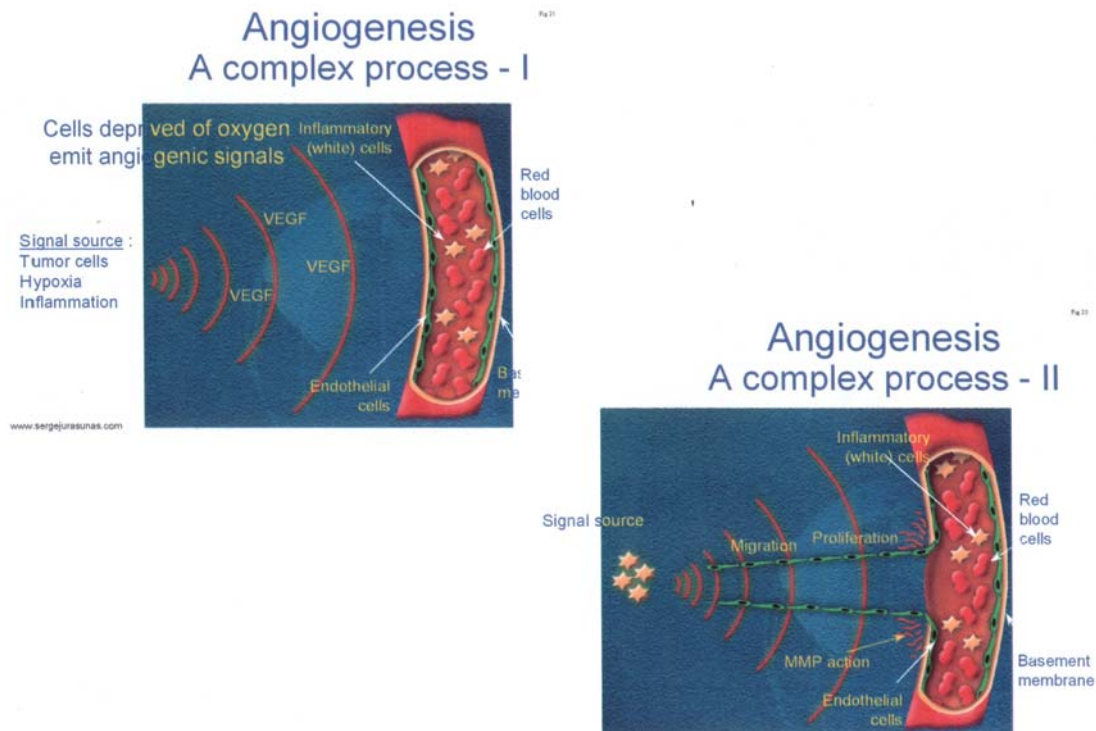
- Prostaglandin E2 (PGE2) promoting more inflammation and edema by increasing vascular permeability.
- Free radicals in excess disturb the cell's membrane and therefore the synthesis of PGE, releasing excess of PGE2 and decrease PGE1 (anti-inflammatory).
- PGE2 generated via the cyclooxygenase and lipoxygenase pathways is involved in tumor development, progression and invasion.

## PGE2 also has an immunosuppressive effect

An excess of PGE2 has a potent immune suppressive effect probably as a negative feedback mechanism to prevent excessive immune response with down regulation of T-cells, B-cells proliferation and specially NK cells (5).

## PGE2 and angiogenesis

PGE2 induces the activation of metalloproteinase MMP1 – MMP2 - a critical step for angiogenesis and the degradation of the extra cellular matrix to favour tumor invasion (6).



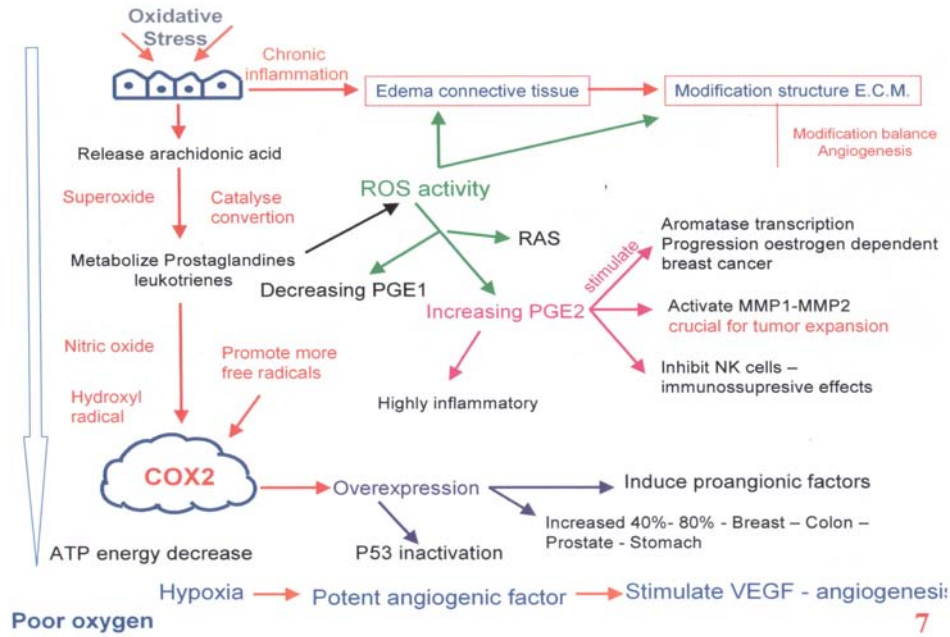
More free radicals activate the overexpression of the enzyme COX2 now recognized as necessary for blood vessel development and tumor expansion.

COX 2 induces proangiogenic factors known as vascular Endothelial Growth Factors (VEGF) and is associated with the activation of matrix metalloproteinase MMPs.

COX2 may be dangerously implicated in several other ways such as inactivation of the P53 apoptosis pathway. Association of COX 2 with mutated Ras has been found to lead to uncontrolled activation of cell division (7).

Overexpression of COX2 correlates with various types of cancer and there is a relationship between COX2 and survival in breast, colon, gastric and lung cancer has been reported in retrospective studies.

For instance, increased COX2 expression is associated with chemotherapy resistance and outcome in ovarian cancer patients. Inhibition of COX 2 in cancer patients is one main goal with decreasing oxidative load and immunosuppression in our integrative therapy.



At last a decreasing oxygen supply leads to a decreasing output of ATP energy, necessary to keep a high degree of differentiation in tissue and cellular repair and also to a condition of hypoxia in which the tumor uses as external stimuli angiogenic factors in a attempt to get more oxygen supply to survive.

Hypoxia is therefore a potent angiogenic factor expression inducing a signal cascade pathway to increase the transcription of Vascular Endothelial Grow Factor (VEGF) (8).

### Three main approaches to cancer treatment

1 – Anti-angiogenesis therapy against the generation of blood capillaries and promotion of MMPs necessary to tumor expansion.

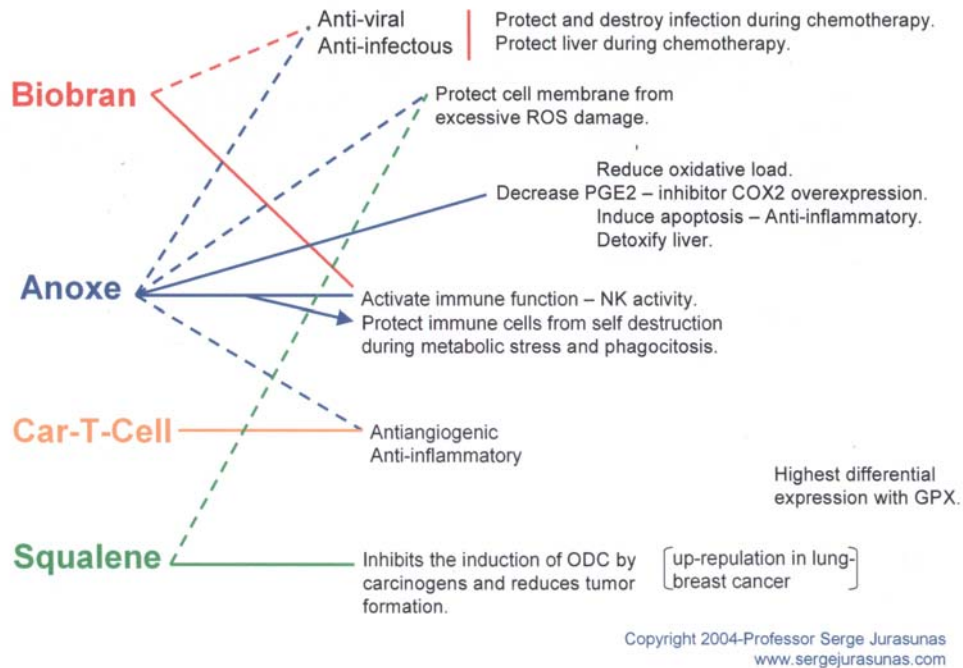
2 – Immune therapy, to increase the function of the immune defense (particularly the natural killer cells) and against adverse reactions of anticancer drugs.

3 – Antioxidant therapy to reduce oxidative load, decrease PGE2 – inhibitor of COX2. To control the cell's signalling pathway, cellular differentiation and induce apoptosis.

### The combination therapy

Anti-angiogenesis	Liquid Cartilage Extract (1) (Car-T-cell) – Frozen form 10 to 20ml per day
Immunotherapy	Biobran (MGn3 compound granule) 9g per day
Antioxidant (SOD) therapy (angiogenic property)	Anoxe From 18 to 27g per day
Squalene (2)	9 to 24 capsules per day From 1 to 5 per day
<p>1 – Lee, A. and Langer, R. Shark Cartilage contains inhibitors of angiogenesis – Science 1983, 221 – 1185 – 1187</p> <p>2 – Inhibits the induction of ODC by carcinogens and reduces tumor formation.</p>	

## Synergism of a Combination Treatment



For more information on my research on cancer, chronic inflammation with scientific references, peripheral blood analysis, clinical cases and published documents.

### Consult:

[www.sergejurasunas.com](http://www.sergejurasunas.com) - Email: [sergejurasunas@natiris.pt](mailto:sergejurasunas@natiris.pt)

### Documents and conferences:

The Biological Approach to Breast cancer – Deutscher Heilpraktikertag 27/28 March 2004 – Dusseldorf – Germany

An Integrative and Naturopathic Approach to Breast Cancer  
Townsend Letter for Doctors and Patients

A colour chart that include our strategy and complementary intervention including Biobran MGn3 to treat breast cancer.

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2 – Minimizing cancer risk using Molecular Techniques. A review Part III- Aresto Vajdani- Marudoch Ghoneum, Paul Choppa. TLDP 1001-97-1999.

3 – Marudoch Ghoneum at Drew University of Medicine and Science - Los Angeles – California.

4 – Niwa Y. Kanoh. T. Kasama. T and Negishi M. activation of antioxidant activity in natural medicinal products by heating, brewing and hipophilisation. A new drug delivery system. Drugs Exptl clini. Res. 14.361.72.1988.

5 – Prof. John Ionescu, Prof. Serge Jurasunas, Dietmar Weber. Effects of natural SOD – like compounds on redox potential and free generation in blood and plasma. Preliminary results. Research Dept. of the Spezialklinik Neukirchen – Germany 2002.



6 – Carole Nicco, A Laurent. C. Chereau, C. Goulvestre et al, .Superoxide dismutase (SOD) mimics control tumor growth by modulating endogenous production of reactive oxygen species. Lab. Immunologie, Service Oncologie. Faculté de médecine et hospital Cochin. Université Paris V. 3<sup>o</sup> International Conference on Superoxide Dismutases – Institut Pasteur – June 10.11.2004 – Paris.

7 – Stolina M. Scharma S., Zhu L. Et al, lung cancer, cyclooxygenase – 2 dependent inhibition of dendritic cell maturation and function. Proc. Am. Assoc. Cancer Res. 2000.41.619 (abs 620).

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10 – Shweiki D. Itin A, Stroffer D. Keshet E. Vascular endothelial growth factor induces by hypoxia may mediate hypoxia – initiated angiogenesis – Nature 359.843.1992.