

The following is a synopsis of Dr. Buttar's treatment methodology. This information is from a handout Dr. Buttar provides to doctors attending his lectures regarding the treatment methods used by Dr. Buttar for cancer patients presenting to his clinic.

### **A 5 Step Non-Traditional Medical Approach in the Treatment of Cancer**

This lecture will present the various etiologies of cancer that are virtually ignored in conventional oncology but are well supported in traditional oncological literature. A brief discussion of the intracellular and extracellular fat and water soluble nutrients comparing cancer patients with normal subjects will be reviewed.

Discussion of earlier methods of diagnosis will be touched upon, along with review of specific biomarkers essential in the diagnosis and especially the monitoring of cancer as well as in assessing the efficacy of treatment will be discussed. The above would comprise the first portion of this lecture.

The second portion of the lecture will review the 5 step method used in the treatment of cancer in our clinic. These 5 steps are as follows:

#### **Step 1 – Clean**

Detoxify the biological system (long term)

#### **Step 2 – Optimize**

Reconfigure the physiologic environment (re-establish)

#### **Step 3 – Repair**

Rebuild and stimulate the immune system (immune modulation)

#### **Step 4 – Identify**

Target acquisition of the cancer (AARSOV)

#### **Step 5 – Maintain**

Sustain changes achieved with the first four steps

#### **Step 1 – Clean**

Detoxify the biological system (long term)

This step is the initial and primary step of cleaning up the biological system. Heavy metals contaminants along with the persistent organic pollutants are increasing in our body's. Together, these substances do greater and greater damage to the cells that comprise our system. Add to this insult the various other etiological contributors to cancer such as UV light and electro magnetic frequencies to just name a few, it is not hard to imagine why cancer is the 2<sup>nd</sup> leading cause of death in the industrialized world. As a result of a chronic lack of good nutrition and an over abundance of the above mentioned toxicities, changes begin taking place within the physiological system as described in the earlier analogy of the volcano. Eventually, this process leads to an increase in cell mutations and the oncogenic process begins to take place. The protective

antioxidant pathways are unable to keep up with the increasing rate of cell mutations. Apoptosis (programmed cell death) which is responsible for the self destruction of abnormal, unhealthy cells begins to become suppressed, allowing cancer cells to grow unchecked. This is what begins to happen in the picture of cancer.

## Step 2 – Optimize

Reconfigure the physiologic environment (re-establish)

This step is the most time consuming and most difficult of the 5 steps with which the patient has to comply. This step includes all therapies designed to make the biological system inhospitable to cancer. This includes all aspects of treatment including nutritional intake, supplementation with vitamins, minerals, herbs and anti-oxidants, hyperthermia, autohemotherapy, hydrogen peroxide, hyperbaric oxygen or other treatments increasing oxygenation to the patient such as the infra respiratory reflex treatments. This step also includes the optimization of the gastrointestinal system and hepatic systems, support of the adrenal system to help alleviate adrenal exhaustion that virtually all these patients suffer from, and supporting the mental aspects that all cancer patients desperately need but rarely are provided. This includes spiritual, emotional and psychological components, along with re-establishment of hope. Also incorporated, are certain types of equipment which utilize electro magnetic resonance frequencies and allows us to pick up patterns of imbalance within the biological system long before a test or scan would be able to determine something wrong. It allows the physician to pick up things that may happen in the future based upon the imbalances that are currently occurring. This type of unique bio feedback energy therapy helps to optimize the environment and allows us to see the subtle changes in the body's chemistry. It helps to find the cancer in the opposite breast earlier on by showing us where the resonance is deviating or has deviated from the normal resonance of normal health cells. That is one of the methods that we are using to try and change the body's chemistry is no longer one that will allow for cancer to survive within it.

## Step 3 – Repair

Rebuild and stimulate the immune system (immune modulation)

This step is achieved using highly specific immune modulating poly-peptide analogs to rebuild, repair and reinitiate the compromised immune response. These include MPAT, PBIB, IMMP, ACP-1, ACP-3 and ACP-45, all researched and developed by us.

## Step 4 – Identify

Target acquisition of the cancer (AARSOV)

This step is used as a specific method of acquisition of the cancer by the now repaired and reinitiated immune system that was previously damaged and/or under functioning compared to a normal individual. We have named this technique with the acronym AARSOV, which stands for autogenous antigen receptor specific oncogenic vaccine.

## Step 5 – Maintain

Sustain the changes achieved with the first four steps by using maintenance techniques.

We use four separate primary methods of monitoring efficacy of this 5 step treatment approach, comparing the periodic results to the baseline measurements of these same parameters. To summarize, these four parameters are used to assess the efficacy of treatment for cancer in our clinic as well as to monitor the progression or regression of the cancer include measuring natural killer cell profiles, lymphocyte subpopulations, levels of apoptosis and the cell cycle analysis. Each parameter provides a unique vantage point into the physiology of the cancer patient and the response of that physiology to the treatment to which we are subjecting the patient.

Natural killer (NK) cell profiles look at the functioning of the specific cells that are responsible for identifying the cancer and killing the cancer. We look at how many of these NK cells are still functioning within the body, how well or the level of performance of each of these NK cells that are functioning, and which ones are NKHD3 positive (immunocompetent) or negative (immunosuppressed). We also look at things from a genetic standpoint. Heavy metals are a big component of toxicity as are persistent organic pollutants and other organic compounds which effect the genotype by changing the expression of the genetic code, also referred to as phenotype. Another way of looking at this is the environmental expression of the genotype is the phenotype. These are some of the substances that contribute to the cause of cancer (the spark) but they do not cause the destruction itself (fire). The NK cytotoxic activity of healthy subjects has been documented to be far greater than in patients with different immune disorders. It is a failure at this juncture which I believe is where the cancer first gets a foot hold.

The next method we discussed was how to assess the physiology of the system and the manner in which the system is responding by monitoring the lymphocyte sub-population analysis. Lymphocytes are more commonly referred to as the white blood cells in the body. They comprise the defense mechanisms of the body. There are certain components of these lymphocytes that should be evaluated which included CD2, CD3, CD4, CD8, CD16, CD19, CD20 and CD56 and together comprise what we refer to as a lymphocyte sub-population analysis.

Level of apoptosis or programmed cell death was the third method discussed that we use to monitor patients and assess efficacy of therapy. This is the suicide program within the cell that allows the self destruction if abnormalities develop within the cell. It is a mechanism designed to preserve the whole system by the cell itself realizing that it is malfunctioning and self-triggering this suicide program to kill itself. A delicate balance between apoptosis (cell death) and proliferation (cell growth) is required in order to maintain normal tissue and cellular homeostasis. An imbalance between the processes of growth and death can result in either tissue atrophy or uncontrolled tissue growth (cancer).

Apoptosis is the suicide program that is within every cell. As soon as a cell starts to rapidly grow without any control mechanism, this suicide program kicks in and tells the cell to kill itself. Apoptosis is a sort of "self destruct" sequence that all cells have in order to protect the entire system and is occurring inside us all the time. Our cells have a regulation mechanism to grow and they have a suicide program designed to prevent the cancer as soon as the cell becomes mutated and starts growing uncontrollably so that we should never have cancer. Cells are mutating constantly and apoptosis is triggered to

initiate the self-destruct sequence to prevent these damaged cells from reproducing. This is where the antioxidant pathways come into the picture. As this balance starts to switch, the antioxidant pathways start to fail in keeping up with the demand and the biological burdens if not adequately addressed, contribute to the oncogenic process which eventually manifests as cancer. The apoptotic cascade includes the Inducer stage, followed by the Sensors or Trigger phase and culminating in the Executioner phase.

The last parameter we discussed was the cell cycle analysis looking at the growth cycle of cells. Each cell has a specific life cycle that it goes through. The cell cycle clock is the executive decision-maker of the cell. In the normal cell, the clock integrates the mixture of growth-regulating signals received by the cell and then decides whether the cell should pass through its life cycle. If the answer is positive, the clock leads the process. The first part of the cycle is G0/G1, which is the rest phase of the cycle. About 90% of the cells should be in this phase. The next phase is the S phase, or rapid DNA synthesis phase, which is indicative of rapid chromosomal duplication preparing for the final reproduction phase. The final phase is G2/M which is mitosis or the reproduction phase where the cell actually divides from one cell into two cells.

This cell “clock” runs rampant in virtually all types of human cancer. Cancer cells proliferate excessively because either genetic mutations cause induction of stimulatory pathways that issue too many “go ahead” signals or inhibitory pathways can no longer control or keep up with the stimulatory pathways. This altered cell cycle that we are referring to in cancer is evidenced by G0/G1 being less than 85%, since most cells should be in the G0/G1 rest phase. Furthermore, cancer will show a high S phase which is measuring how many cells are in the rapid DNA synthesis phase versus how many cells are in rest phase. The lower the G0/G1 percentage and the higher the S phase percentage, the more aggressive the cancer, the greater the progression of the disease and the worse the prognosis. However, note the changes in the cell cycle analysis in the upcoming case examples and notice the drastic discrepancies between G0/G1 and S phases and how the picture of cancer was completely, diametrically, changed.

Case examples of actual patients and their monitored parameters will be presented, with some examples provided.

Case No. 2 - John C.		ISL Lab Report Number	122514	123897
		Date of Lab Test	06-Mar-02	04-Apr-02
MPIS Cancer Research Panel	Reference Range	Before TX	After TX	
NK Cell Activity	20 - 50 Lus	6.5	8.8	
NK Cell Activity per Cell	5.1 - 10 mm3	4.7	5.8	
% Natural Killer Cells	5.5% - 20%	22.00%	27.00%	
% Immunocompetent NKHT3+ Cells	1.5% - 5%	4.00%	4.00%	
Total WBC	4800 - 10800 mm3	5,700.0	8,000.0	
Total Lymphocyte	960 - 4320 mm3	627.0	560.0	
Total T Cells (CD 2)	586 - 3672 mm3	413.0	347.0	
Total T3 Positive Cells (CD 3)	509 - 3413 mm3	420.0	341.0	
Total T Helper Cells (CD 4)	336 - 2376 mm3	301.0	258.0	
Total T Suppressor Cells (CD 8)	192 - 1598 mm3	94.0	73.0	
% Lymphocyte	20 - 40% mm3	11.0%	7.0%	
% T Cells (CD 2)	61 - 85% mm3	66.0%	62.0%	
% T3 Positive Cells (CD 3)	53 - 79% mm3	67.0%	61.0%	
% T Helper Cells (CD 4)	35 - 55% mm3	48.0%	46.0%	
% T Suppressor Cells (CD 8)	20 - 37% mm3	15.0%	13.0%	
Total B Cells (CD 19 & CD 20)	48 - 648 mm3	31.0	50.0	
Total Natural Killer Cells (CD 16 & CD 56)	52 - 864 mm3	138.0	151.0	
Total Immunocompetent NKHT3+ Cells	14 - 216 mm3	25.0	22.0	
Total CD 3 & CD 26 (dipeptidylpeptidase)	10 -1944 mm3	270.0	252.0	
% B Cells (CD 19 & CD 20)	5 -15% mm3	5.0%	9.0%	
% Natural Killer Cells (CD 16 & CD 56)	5.5 - 20% mm3	22.0%	27.0%	
% Immunocompetent NKHT3+ Cells	1.5 - 5% mm3	4.0%	4.0%	
% CD 3 & CD 26	1 - 45% mm3	43.0%	45.0%	
CD 4 / CD 8 Ratio	1 - 2.5 mm3	3.2	3.5	
Apoptosis	0 - 5% Percent	22.00%	2.00%	
Cell Cycle - G0/G1	85% - 90%	38.20%	94.00%	
Cell Cycle - S	0% - 5%	61.80%	5.00%	
Cell Cycle - G2/M	0% - 5%	0.00%	1.00%	

ISL Lab Report Number		152947	154915
Case No. 3 - Elrene T.		18-Sep-03	29-Oct-03
Date of Lab Test		18-Sep-03	29-Oct-03
MPIS Cancer Research Panel	Reference Range	Before TX	6 wks after
NK Cell Activity	20 - 50 Lus	11.0	18.2
NK Cell Activity per Cell	5.1 - 10 mm3	3.0	6.8
% Natural Killer Cells	5.5% - 20%	24.00%	20.00%
% Immunocompetent NKHT3+ Cells	1.5% - 5%	7.00%	1.00%
Total WBC	4800 - 10800 mm3	6,300.0	7,100.0
Total Lymphocyte	960 - 4320 mm3	1,512.0	1,349.0
Total T Cells (CD 2)	586 - 3672 mm3	1124.0	1061.0
Total T3 Positive Cells (CD 3)	509 - 3413 mm3	1,104.0	1,065.0
Total T Helper Cells (CD 4)	336 - 2376 mm3	771.0	755.0
Total T Suppressor Cells (CD 8)	192 - 1598 mm3	272.0	216.0
% Lymphocyte	20 - 40% mm3	24.0%	19.0%
% T Cells (CD 2)	61 - 85% mm3	74.0%	79.0%
% T3 Positive Cells (CD 3)	53 - 79% mm3	73.0%	79.0%
% T Helper Cells (CD 4)	35 - 55% mm3	51.0%	56.0%
% T Suppressor Cells (CD 8)	20 - 37% mm3	18.0%	16.0%
Total B Cells (CD 19 & CD 20)	48 - 648 mm3	76.0	81.0
Total Natural Killer Cells (CD 16 & CD 56)	52 - 864 mm3	363.0	269.0
Total Immunocompetent NKHT3+ Cells	14 - 216 mm3	106.0	13.0
Total CD 3 & CD 26 (dipeptidylpeptidase)	10 - 1944 mm3	665.0	540.0
% B Cells (CD 19 & CD 20)	5 - 15% mm3	5.0%	6.0%
% Natural Killer Cells (CD 16 & CD 56)	5.5 - 20% mm3	24.0%	20.0%
% Immunocompetent NKHT3+ Cells	1.5 - 5% mm3	7.0%	1.0%
% CD 3 & CD 26	1 - 45% mm3	44.0%	40.0%
CD 4 / CD 8 Ratio	1 - 2.5 mm3	2.8	3.5
Apoptosis	0 - 5% Percent	16.00%	6.00%
Cell Cycle - G0/G1	85% - 90%	69.30%	96.00%
Cell Cycle - S	0% - 5%	30.70%	2.00%
Cell Cycle - G2/M	0% - 5%	0.00%	2.00%

Case No. 4 - Lillian W.		ISL Lab Report Number	142245	149505	155010
		Date of Lab Test	04-Mar-03	11-Jul-03	30-Oct-03
MPIS Cancer Research Panel	Reference Range	Before TX	3 wks after	6 wks after	
NK Cell Activity	20 - 50 Lus	27.3	34.3	38.6	
NK Cell Activity per Cell	5.1 - 10 mm3	5.9	0.1	15.4	
% Natural Killer Cells	5.5% - 20%	22.00%	15.00%	13.00%	
% Immunocompetent NKHT3+ Cells	1.5% - 5%	2.00%	2.00%	1.00%	
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Total WBC	4800 - 10800 mm3	4,100.0	4,200.0	4,600.0	
Total Lymphocyte	960 - 4320 mm3	2,091.0	1,974.0	1,932.0	
Total T Cells (CD 2)	586 - 3672 mm3	1373.0	1224.0	1223.0	
Total T3 Positive Cells (CD 3)	509 - 3413 mm3	1,359.0	1,263.0	1,236.0	
Total T Helper Cells (CD 4)	336 - 2376 mm3	878.0	790.0	792.0	
Total T Suppressor Cells (CD 8)	192 - 1598 mm3	544.0	454.0	406.0	
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% Lymphocyte	20 - 40% mm3	51.0%	47.0%	42.0%	
% T Cells (CD 2)	61 - 85% mm3	66.0%	62.0%	63.0%	
% T3 Positive Cells (CD 3)	53 - 79% mm3	65.0%	64.0%	64.0%	
% T Helper Cells (CD 4)	35 - 55% mm3	42.0%	40.0%	41.0%	
% T Suppressor Cells (CD 8)	20 - 37% mm3	26.0%	23.0%	21.0%	
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Total B Cells (CD 19 & CD 20)	48 - 648 mm3	314.0	454.0	464.0	
Total Natural Killer Cells (CD 16 & CD 56)	52 - 864 mm3	460.0	296.0	251.0	
Total Immunocompetent NKHT3+ Cells	14 - 216 mm3	42.0	0.4	0.2	
Total CD 3 & CD 26 (dipeptidylpeptidase)	10 -1944 mm3	439.0	553.0	696.0	
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% B Cells (CD 19 & CD 20)	5 -15% mm3	15.0%	23.0%	24.0%	
% Natural Killer Cells (CD 16 & CD 56)	5.5 - 20% mm3	22.0%	15.0%	13.0%	
% Immunocompetent NKHT3+ Cells	1.5 - 5% mm3	2.0%	2.0%	1.0%	
% CD 3 & CD 26	1 - 45% mm3	21.0%	28.0%	36.0%	
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CD 4 / CD 8 Ratio	1 - 2.5 mm3	1.6	1.7	2.0	
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Apoptosis	0 - 5% Percent	11.00%	9.00%	9.00%	
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Cell Cycle - G0/G1	85% - 90%	74.40%	87.10%	85.80%	
Cell Cycle - S	0% - 5%	19.30%	12.90%	13.60%	
Cell Cycle - G2/M	0% - 5%	6.30%	0.00%	0.60%	

Special emphasis will be placed on the 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> steps of this 5 step program. Specific cases examples of stage IV / end stage cancer patients will be presented using before and after results of objective parameters including lymphocyte subpopulations, NK cell profiles, apoptosis and cell cycle analysis. A number of case studies will be presented as seen above.

The details of each of the 5 steps, how results were achieved, caveats in course of treatment, pitfalls that must be avoided, and normal sequence of events that should be expected will be reviewed during the workshop period. Specific protocols for each of the 5 steps will also be detailed so that the physicians attending the workshop can begin implementing these steps immediately. The goal would be to make the workshop portion of the lecture as practical as possible for the physician attendees.

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