

Instituto Longevidad

JEUNESSE Inc.

Institute of Longevity Medicine 11/5/99

PRELIMINARY REPORT (additional test results to follow) Transfer Factor Testing

Background and rationale: Cancer is the second leading cause of death in the US. The rate of nearly every type of cancer is on the rise. Despite billions of dollars in research, the mortality rate has remained virtually unchanged since the 1960's using conventional treatments such as radiation, surgery, and chemotherapy. Thus, there is considerable interest in using immune modulation as an adjuvant for cancer therapy. Natural killer cells are particularly important in destroying cancer cells.

Purpose of study: To determine the in vitro anti-cancer effects of Transfer Factor and Transfer Factor Plus using PBMC isolated from human volunteers and assaying the increased ability of the NK cell population to kill K562 erythroleukemic cells.

Methods: 1) PBMC killing of K562 (erythroleukemic) cells

Results: 2) Transfer Factor increased NK-cell killing by 103% and Transfer Factor Plus by 248%

Conclusions: Transfer Factor and Transfer Factor Plus induced immune-based lysis of K562 cells at a level unprecedented in the director's experience or in the known medical literature. Since NK cell function is so crucial in killing cancer cells, these products are ideal candidates for cancer adjuvant therapy. In addition, NK cells form a first line of defense against infections from viruses and certain other microorganisms. Killing assays against K562 cells have also been correlated with increased activity against chronic and acute infections as well.

Darryl See, M.D.
Director, Bioassay Laboratory
Institute of Longevity Medicine
Huntington Beach, CA 92648

Transfer Factor Study

(4Life)

N.K. Assay, October 27, 1999

Sample Name	#of Live K562 Cells	#of Dead K562 Cells	Mean of Dead cells	% Increase In Killing
Baseline - a	95.8	42		
Baseline - b	96.9	3.1	3.7	
Positive (PBMC) - a	95.2	4.8		
Positive (PBMC) - b	94.8	5.2	5.0	
Negative (Flour) - a	94.2	5.8		
Negative (Flour) - b	94.7	5.3	5.6	
Transfer Factor - a	87.8	12.2		
Transfer Factor - b	89.7	10.3	11.3	103%

Transfer Factor Plus Study (4Life)

N.K. Assay November 4, 1999

Sample	#of Live K562 Cells	#of Dead K562 Cells	Mean of Dead cells	% Increase In Killing
Sample None				
Baseline - a	99	1.3		
Baseline - b	98.1	1.9	1.6	
Positive (PBMC) - a	95.8	42		
Positive (PBMC) - b	97.1	2.9	3.6	
Negative (Flour) - a	97.3	2.7		
Negative (Flow) - b	96.6	3.4	3.1	
Transfer Factor Plus(200 m l) - a	89.7	10.3		
Transfer Factor Plus(200 m l) - b	69.1	10.9	10.6	248%
Transfer Factor Plus(20 m l) - a	91.8	8.2		
Transfer Factor Plus(20 m l) - b	92.3	7.7	8.0	161%

Transfer Factor and Transfer Factor Plus Study (4Life)

Toxicity Assay November 9, 1999

Sample	Result
Transfer Factor (2 mg)	No toxicity observed
Transfer Factor (200 m g)	No toxicity observed
Transfer Factor Plus (2 mg)	No toxicity observed
Transfer Factor Plus (200 m g)	No toxicity observed

Nutraceutical Induced Increase in Natural Killer Cell (NK) Activity

Purpose of Study: To determine the *in vitro* Natural Killer Cell (NK) activation effects of 4 Life Transfer Factor and Transfer Factor Plus using peripheral blood mononuclear cells (PBMC) isolated from human volunteers and assaying the increased ability of the NK cell population to kill K562 erthroleukemic cells.

Conclusions: 4Life Transfer Factor and Transfer Factor Plus induced immune-based lysis (breakdown) of K562 cells at a level unprecedented in the director's experience or in any known medical literature, Since NK cell function is so crucial in killing dangerous Cells, these products are ideal candidates for human and animal immune support.

Nutraceutical Tested	Percent (%) Rise in NK Cell Activity
4Life Transfer Factor Plus	248%
4Life Transfer Factor	103%
IP6 (<i>highest of group Previously tested</i>)	49%
Plant Polysaccharide Formula	48%
Echinacea	47%
Shitake Mushroom	42%
Cordecep Formula	28%

Bovine Colostrum	23%
Phytonutrient Formula with Garlic	21%
Endocrine System Formula	16%
Concentrate (acemannan)	15%
Noni (Morinda citrafolia)	15%

Some of these products reflect an average of different brands.

Baseline activity is the measure of the unassisted ability of white blood cells to kill K562 leukemia (cancer) cells.

Natural Killer Cells are the body's first line of defense against cancers and viruses.

The increase in the ability of white blood cells to kill K562 cancer cells is directly related to the increase in Natural Killer Cell activity.

This study does not claim nor should it be interpreted to cure, prevent or mitigate any serious disease. The results have been reported as they were received. Seek advise from your health professional before beginning any new regimen

Fuente: <http://www.emmessar.com/colostrum/0/A/Research/p4.htm>

Información con fines exclusivamente divulgativos

Para mayor información sobre los Factores de Transferencia de 4Life contacte a la persona que le suministró este material