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Proteomic therapy utilizes the chaperone protein for therapeutic cellular stabilization

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Proteomic treatment utilizes Chaperone Proteins (CP) to enhance the body's ability to move toward a harmonized, homeostatic level of intra cellular protein production. As we age and in certain disease states, our cellular ability to translate a transcribed mRNA code into a functional protein is impaired. Although the genesis of this clinical condition can be somewhat complex, it is characterized by intra-cellular protein accumulation. This accumulation not only decreases cellular function, but also impedes the translational capacity of the cell. This "flows backwards" to decrease both primary transcription as well as "forward" to decrease translation of this message into a protein, hence the need for Proteomic Therapy. Our fundamental hypothesis is that the primary etiology of this is a decrease in CP function inside the cell. To find treatment strategies, our group has utilized exogenous CP (Chaperonze®) and

have demonstrated significant disease alleviation in renal insufficiency (Cat and Human). We have demonstrated that this treatment strategy alters the Chaperone Protein Axis (CPA) as measured by Heat Shock Protein 70 (HSP70) and have also recently concluded that this effect is coupled with cell membrane stabilization as measured by cell free DNA (cfDNA). In the current study we report that cellular aging is marked by an increase in both circulating HSP70 and cfDNA, which are significantly correlated to each other. We also report that treatment with Chaperonze® can significantly decrease these 2 biomarkers which in turn leads to enhanced cellular stability. Results of this study substantiate that proteomic treatment of cells with Chaperonze® not only harmonizes translational dynamics within the cell but also leads to stabilization of the cellular membrane.

Biography

Kampon Sriwatanakul is an internationally recognized pioneer of Celltherapy who received M.D. degree and Ph.D. degree from Mahidol University where he had an academic career for more than 35 years. He also received training in Clinical Pharmacology from University of Leicester, U.K. and University of Rochester, N.Y., USA. His present academic position is Advisor of Alternative Medicine, Mae Fah Luang University Hospital. He is a member of Thailand's Medical Association, the Pharmacological and Therapeutic Society and the Toxicological Society. He was the Founder of the Thai Society of Cellular Therapy (TSCT) and is now its Executive Secretary. He is also member of the International Society for Cellular Therapy (ISCT). Dr.Kampon has spearheaded a number of important research and development activities related to Stem Cell Technology in Thailand, including setting up of Cord Blood and Tooth cell banking. Dr.Kampon has received several awards for research and innovation from British and American academic institutions and the National Innovation Agency of Thailand.

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