Functional Assessment of Pharmacological Telomerase Activators in Human T Cells

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Clinical Research

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Molgora B, Bateman R., Sweeney G., Finger D., Dimler T., Effros R.B., Valenzuela H.F., *Cells Journal*. 2013 January 14: ISSN 2073—4409

This human study demonstrates that TA-65MD® nutritional supplements increase telomerase activity and proliferation in human CD4 and CD8 T cells. It highlights the importance of Telomerase Activation in relation to age-associated pathologies.

Study Method: CD4 and CD8 T cells from healthy subjects were treated with TA-65MD®. These samples were measured for telomerase activity 72 hours after primary stimulation. This process was repeated after 18-21 days for a second stimulation.

Findings, Method of Action: TA-65® increased telomerase activity in all subjects' T cells during primary and secondary stimulations. The results show that TA-65® likely uses the MAPK pathway to activate telomerase. This result was observed in both CD4 and CD8 T cells but most significantly in CD8 T cells that were stimulated for the

second time.

Findings, Health Effects: This study confirms that TA-65® rapidly induces telomerase activity, which other studies have linked to enhanced healthspan indicators, during an acute viral infection.

The most significant findings of this preliminary study are:

- Clinical situations that require enhanced T cell telomerase activity should benefit from TA-65®
- Acute viral infections protocols may benefit from the addition of TA-65®

Findings, Safety: No adverse side effects, interactions, or any other negative effects were reported during this study nor have any negative results been reported from any other study associated with TA-65®. No unregulated cell growth was observed during this study.