

Telomerase Therapy

FIGHT AGING!

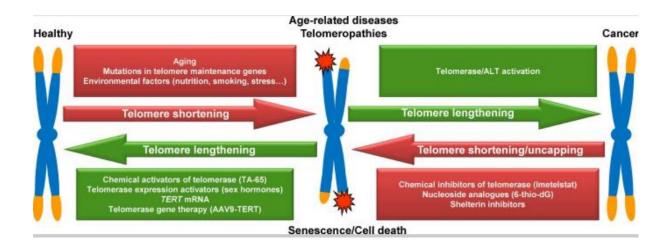
Do you want to live a longer life in good health? Simple practices can make some difference, such as exercise or calorie restriction. But over the long haul all that really matters is progress in medicine: building new classes of therapy to repair and reverse the known root causes of aging. The sooner these treatments arrive, the more lives will be saved. Find out how to help »

Telomerase therapy is considered in some quarters to be a viable treatment for aging. Telomeres are the caps of repeated DNA sequences at the ends of chromosomes. They are an important part of the mechanism limiting the number of times that somatic cells in the body can divide, the Hayflick limit.

A little telomere length is lost with each cell division, and short telomeres trigger cellular senescence or programmed cell death, halting replication. Stem cell populations use telomerase to lengthen their telomeres and thus self-renew to provide a continual supply of new somatic daughter cells with long telomeres to replace those lost to the Hayflick limit. Average telomere length is reduced over the course of aging because stem cell function declines.

This division between a few privileged stem cells and the vast majority of limited somatic cells is the way in which higher forms of life have evolved to reduce the risk of cancer. Somatic cells largely do not last long enough to develop mutational damage sufficient to become cancerous. When cancer does

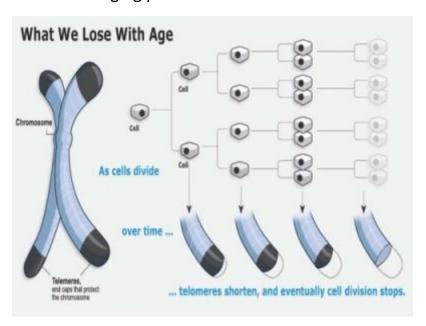
occur, most cancer lineages use expression of telomerase in order to lengthen their telomeres, allowing for unfettered replication. This biochemistry of cancer is the primary reason for caution in the matter of the clinical application of telomerase therapies in human medicine.



We have developed a therapeutic strategy by using AAVs to transiently activate telomerase in adult tissue. Treatment with Telomere therapy using nonintegrative, replication-incompetent AAV9 vectors was able to delay aging and increase longevity by decreasing age-related pathologies such as osteoporosis and glucose intolerance, as well as neuromuscular and cognitive decline. Furthermore, the onset of cancer was delayed. AAV9-Tert after infarct treatment led to lower fibrotic scarring of the heart and increased cardiac myocyte proliferation concomitant with transcriptional changes suggestive of a regenerative signature. These findings support the notion that telomere shortening is at the origin of age-related diseases and that, by reverting this process with telomerase expression, it is possible to delay and more effectively treat age-associated pathologies, such as cardiovascular diseases. In addition, TT therapy is particularly attractive for the clinical treatment of human telomere syndromes associated with telomerase mutations and short telomeres.

What are telomeres & what do they have to do with aging?

Telomeres are the caps at the end of the DNA strand. Visualize the plastic cases that cap the end of shoelaces: This is what a telomere is like. Telomeres protect the chromosomes. Over time, telomeres shorten. This shortening can impact the cellular aging process.



Certain activities and factors can dramatically hasten the telomere's natural degeneration, including:

Smoking

Severe stress

Obesity

Poor nutrition

Lack of exercise

Reverse Aging Effects at the Cellular Level

Telomere shortening impacts the aging process at the cellular level. We utilize telomere therapy treatment to help our patients slow or reverse the effects of aging. This therapy can result in healthier skin, hair, and immune systems — in short, healthier and more robust and energetic lives.

The natural potent ingredients inside the small IMMI Vegetal Placenta Evo softgels and the IMMI Telomere Therapy vials detoxify, regenerate, and heal damaged tissues and organs. IMMI Evo stimulates cellular renewal, improves the oxygen supply to cells, and enhances the protein synthesis in the skin to maintain its youthfulness. IMMI Evo strengthens skin cells against premature photo-aging and chronological aging, giving you finer, rejuvenated, revitalized, and regenerated skin.

TT = Telomerase Therapy

Softgels 1 package 30pcs for 1 month 399,- EUR

Vial for injection 2ml 444,- EUR