Telocyte Newsletter
Q4 2020

TELOCYTE™
A future beyond Alzheimer's

Michael Fossel, MD, PhD

We all share the disruption of our world due to the ongoing pandemic. For many the disruption has been life-changing, for some it has been a problem, for a few it has been fatal. The pandemic is a universal experience that has been felt in the biotech and gene therapy world as well. The impact upon clinical trials has been unprecedented and will echo for years. Funding has been disrupted for many in the field, although perhaps less so than predicted. Regardless, the pandemic has affected all of us.

Telocyte has been lucky. Our clinical trials have not yet begun and our investors have pulled back. We continued our plans, continued our work, and continued our investor discussions. We have lost very little, while (perhaps unexpectedly) gaining in efficiency.

Ironically, our approach might help treat Covid infections. The greatest single COVID risk factor is age, but the underlying risk is cell aging, which is precisely what Telocyte will target in our FDA trials. Our intervention should have a profound effect upon Alzheimer's and other age-related diseases, as we reset cell aging at its most fundamental level. If we reset cell aging in the immune system, then the risk of Covid mortality might fall to that seen in younger patients.

In aging disease, the question is not the chronologic age, nor is the key issue any of the dozens of biomarkers which we associate with aging: the key issue is cell aging itself. The single most important risk factor for age-related disease (and that includes Covid infections which have higher risk in the elderly) is not any set of symptoms or biomarkers, but the cellular age of those cells involved in the disease. If we were to list all of the biomarkers of aging or of any age-related disease, such as Alzheimer's disease, we would not be one whit closer to an effective therapy. Biomarkers are not diseases, nor do they contribute to our understanding of disease. Understanding a disease – and our ability to cure a disease – require that we actually understand the system itself. Only then can we intervene. We at Telocyte are focused on that understanding. Rather than focus on genes, beta amyloid, tau tangles, or other biomarkers – that are, frankly, misleading – we focus on the fundamental disease process itself, weaving a complete and complex understanding of Alzheimer's that encompasses all of the known risk factors, all of the known biomarkers, and all of the clinical data, with the result that we understand the disease and the key point of intervention to cure and prevent Alzheimer's. We intend to test that point of intervention in rigorous and carefully executed clinical trials. This can best be

accomplished through accepted regulatory channels, such as the FDA and the EMA, in order to ensure patient safety, clinical efficacy, and global credibility.

With that in mind, we have moved carefully, selecting individuals for our SAB (scientific advisory board) and CAB (clinical advisory board). Our website shows many of these board members, but we have new members as well. These include Richard Mohs PhD (of the Global Alzheimer's Platform Foundation) and Kurt Whittemore PhD (at Harvard's Boston Children's Hospital) who have both joined our Scientific Advisory Board. Our Clinical Advisory Board now includes not only Russell Swerdlow, MD (Co-Director of the KUMC Alzheimer's Disease Center, who moved to our clinical board), but Mario Masellis, MD (of Sunnybrook Research Institute in Toronto), Lon Schneider, MD (of the Keck School of Medicine at USC), Steven Arnold, MD (Professor of Neurology at Harvard Medical School) with another globally known Alzheimer's researcher likely to join soon. In addition, we have contracted with Worldwide Clinical Trials to help us in our FDA hearings and help with our human trials.

Finally, our lead investor group has issued the following public statement supporting Telocyte and our program as "A Vote of Confidence in Telocyte":

> Pharma Capital Partners is a private equity drug development firm that invests exclusively in companies with promising late-preclinical or IND-stage therapeutic assets. An area of major interest for us is neurodegenerative diseases, including Alzheimer's dementia. Disappointingly, every therapeutic candidate to reverse or arrest progression of this dementia to date has failed in late-stage clinical trials. A number of interesting new drug candidates in that space have come to our attention but none has bolstered our hope for a cure as much as the novel gene therapy proposed by Telocyte. We are engaged in extensive due diligence regarding their approach, and we are very supportive of their plans. Importantly, their proposed gene therapy has been validated in an animal model of aging brain that seems as translational as any other so-called model of Alzheimer's dementia. The safety of the viral vector Telocyte intends to use to deliver the therapeutic gene directly into the central nervous system, moreover, has been demonstrated in clinical investigations of other neurodegenerative conditions, such as Parkinson's disease, so we are comfortable with that route of administration. Telocyte will undertake its clinical trials in accordance with best practices and FDA Guidance. It is high time for a systems approach to the devastating disease Alzheimer's dementia, and Telocyte is the first to undertake such an approach in the right way. Pharma Capital Partners affirms its confidence in the outcome and looks forward to collaborating with Telocyte in implementing its well-conceived development plan.