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Innovative NeuroTechnologies, Inc.

Innovative NeuroTechnologies, Inc. (INT) is a development-stage biotechnology company operating in "virtual mode" that is currently pursuing a pipeline of *novel biologically-based and disease-modifying* therapeutic solutions to prevent, delay, or ameliorate the cognitive decline associated with neurodegenerative tauopathies, including:

- Alzheimer's disease (AD),
- Frontotemporal dementia (FTD or Pick's disease),
- Chronic traumatic encephalopathy (CTE) or dementia pugilistica,
- Progressive supranuclear palsy (PSP),
- Corticobasal degeneration (CBD), and
- Parkinson's disease dementia (PDD).

The pathology of these seemingly disparate conditions is similar in that they involve dysregulation of the Tau protein and development of neurofibrillary tangles (NFTs), synaptic dysfunction, and/or neuronal loss, which underlie the observed dementia or cognitive deficits. Unfortunately, there are no effective therapies presently available for this spectrum of disorders, and neurodegenerative tauopathies remain a *very significant socioeconomic burden and tremendous unmet medical need worldwide*.

INT is seeking an investment of \$5 million to undertake a Phase I clinical trial. We estimate the current valuation of INT to be \$15 million and expect this figure to increase substantially before our exit in the next 3-4 years.

Our Focus Biologics for the treatment of Tauopathies

INT is developing three monoclonal antibodies (mAbs) against three separate and key epitopes of Tau, which address three proposed mechanisms of pathogenesis, as potential passive immunotherapies for tauopathies. INT is solidly focused on modulation of Tau as the primary means of preventing or reducing the cognitive or memory deficits observed in tauopathies. These programs provide INT with a strong portfolio of candidates and position the company as a very attractive acquisition target.

The choice of biologics as therapeutics significantly reduces the risks associated with development since *humanized mAbs have historically demonstrated very little chance of failure in preclinical toxicology or Phase I clinical trials*. Due to the considerable increase in valuation achieved through the successful completion of such a trial, we will take at least one anti-Tau program into Phase I before partnering or selling the company. INT is seeking investment to complete a Phase I clinical trial of its most promising anti-Tau mAb. Founder, President & CEO: Shawn Mojtahedian, Ph.D.

The INT Difference

What differentiates INT from other companies is our focus on the underlying mechanisms responsible for Tau dysregulation and dementias. We are developing *disease-modifying biotherapeutics* to prevent, delay, or ameliorate the cognitive deficits resulting from tauopathies, such as in AD, FTD, or CTE, using passive immunization. This will at least delay onset or mitigate these dementias.

In addition, INT intends to target an orphan indication, such as PSP or CBD, with its anti-Tau candidates to gain prospective "fast-track" designation through the FDA with smaller and more cost effective clinical trials.

Technology

INT is currently in a partnership agreement with the expert group at Panorama Research, Inc. (PRI; <u>www.pano.com</u>) and is receiving development funding through a Small Business Innovation Research (SBIR) grant from the NIH. We are testing our three anti-Tau mAbs in relevant animal models for tauopathies. Animal efficacy data support the therapeutic benefits of our approach and our lead anti-Tau candidate (after toxicology testing) will be moved into Phase I clinical testing. Our goal for initiation of Phase I clinical trials is 2017.

There appear to be three pathological hallmarks associated with AD and other related tauopathies, namely, the development of beta-amyloid (A β) plaques, NFTs, and/or synaptic dysfunction and cell death. One or more of these pathologies are associated with every form of dementia and all three may be attributed to the dysregulation of Tau. Dysregulation occurs when Tau is hyperphosphorylated in ways that lead to loss of synaptic signaling, neuronal death, development of NFTs, and/or A β plaque formation.

Rather than focusing on one particular pathology associated with dementias (e.g., $A\beta$ plaques), INT is focused on *addressing the underlying cause of dementias*. This will allow INT to develop potential disease-modifying therapies for the cognitive impairment or memory loss typically seen in AD, CTE, and other related tauopathies. Due to the high incidence of dementia and onset of various neurological problems, traumatic brain injuries (TBIs) and CTE are presently of great interest to the U.S. Department of Defense (DoD) and professional contact sports (e.g., American football, ice hockey, wrestling, soccer, rugby, and boxing). Thus, our strategy is quite simple:

- Remain very capital efficient and virtual with emphasis strictly on further development of therapeutic candidates into clinical trials,
- Continue pursuit of non-dilutive funding from NIH, DoD, and other institutional sources,
- Focus on the underlying causes of the diseases (not one pathology), and
- Develop biologics to prevent, delay, or mitigate the cognitive impairement associated with tauopathies.

Developing biologics provides us almost certain success through Phase I safety testing. This positions the company well for a significant return to investors.

Return on Investment

INT is seeking \$5 million to advance its lead anti-Tau mAb through Phase I clinical trials.

Recent comparable deals in the field include the June 2012 licensing agreement with AC Immune valued at approximately \$418 million (<u>link</u>), and the April 2014 acquisition of iPierian valued at \$725 million (<u>link</u>). These comparables suggest that INT's valuation upon exit, in the next 3-4 years, will likely be upward of \$400 million.

It is important to recognize that acquisition of such therapeutic programs or assets results in a milestone-based return. For example, if INT were acquired in 2019, it would be for upfront cash and downstream milestones. Downstream revenue would result from milestones for successful completion of Phase II clinical trials (paid for by the prospective sponsor or partner), Phase III clinical trials, subsequent commercialization, and likely a percentage of actual sales revenue.



- In 2013, 44.4 million people globally suffered from dementia and a new case is diagnosed every 7 seconds.
- The total estimated worldwide costs of AD and other dementia were over \$604 billion in 2010.
- The total U.S. costs of AD and other dementias were over \$214 billion in 2014.
- Alzheimer's will cost an estimated \$1.2 trillion (in today's dollars) in 2050.
- An estimated 5.5 million Americans are currently diagnosed with AD, and AD is the 6th leading cause of death in the U.S.
- In the U.S. alone, introduction of a drug that delayed the onset of AD by 5 years would result in savings of \$150 billion over the first 20 years of use.



- Recent estimates suggest that between 250,000 500,000 of the 2.5 million U.S. military service members deployed to Iraq and Afghanistan may be affected by TBI.
- The estimated costs of treatment, just for blast-related TBI in the U.S., is \$2.5 billion annually.
- The estimated percentage of athletes that suffer from mild cognitive impairment (MCI) due to repetitive sub-concussive or concussive brain injuries varies widely, but is estimated to be about 50% among boxers and about 33% for professional football players.