Helping our Elderly: Cell-based Tools for Alzheimer's Disease Drug Screening

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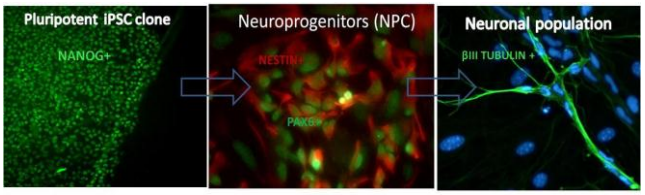
Induced Pluripotent Stem Cell (iPSC) Clones for Alzheimer's Disease

The Technology

Several disease-specific iPSC clones derived from both the sporadic and familial cases of Alzheimer's Disease (AD) including derived second generation of neuroprogenitor lines from these iPSC clones with and without GFP label have been fully characterised and are ready for distribution for research and development purposes under licence. A model developed for early detection of AD based on our transcriptomic and proteomic expression analyses will serve as a platform to the pharmaceutical industry for drug discovery and drug toxicity for AD.

T*here is no cellular model available in the market for an early detection of Alzheimer's disease.* With the emergence of small molecule and protein therapeutic discovery, these disease-specific iPSCs can be used for small molecule candidates for treating diseases. In addition to discovering new therapeutics, iPSCs cellular disease models can be used to systematically perturb cells in vitro in order to elucidate mechanisms of disease.



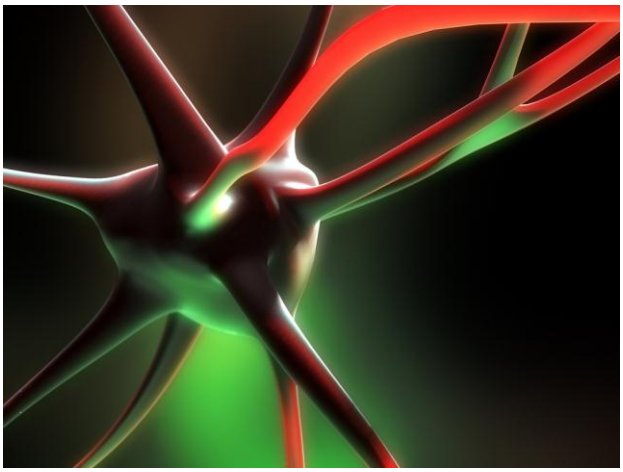
AD-specific iPSC clone, NPC differentiated to neuronal cells

Business Opportunity

AD-specific iPSC clones derived from both sporadic and familial patient's skin express the downstream disease-specific metabolic pathways and provide an excellent tool for disease modelling drug discovery including drug toxicity for AD for which there is no effective cure available.

The Market

The screening of drug candidates for toxicity is a major cause of attrition in drug development that leads to high costs and reduced number of effective clinical candidates. There is a need for early stage screening of toxic candidates for cost effective development of novel therapeutic agents.



The Team

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Investment Opportunity

New South Innovations is looking to partner with companies interested in commercializing these unique cell lines.

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