Human Neural Progenitors Secreting Glial Cell Line-Derived Neurotrophic Factor (CNS10-NPC-GDNF) for the Treatment of Amyotrophic Lateral Sclerosis

Grant Award Details

Grant Type: Clinical Trial Stage Projects
Grant Number: CLIN2-09284

Project Objective: A phase 1 trial of Human Neural Progenitors Secreting Glial Cell Line-Derived Neurotrophic Factor (CNS10-NPC-GDNF) for the Treatment of Amyotrophic Lateral Sclerosis

Investigator:

Name: Clive Svendsen
Institution: Cedars-Sinai Medical Center
Type: PI

Disease Focus: Amyotrophic Lateral Sclerosis, Neurological Disorders
Human Stem Cell Use: Adult Stem Cell
Award Value: $6,154,067
Status: Active

Grant Application Details

Application Title: Human Neural Progenitors Secreting Glial Cell Line-Derived Neurotrophic Factor (CNS10-NPC-GDNF) for the Treatment of Amyotrophic Lateral Sclerosis
Public Abstract: Therapeutic Candidate or Device

CNS10-NPC-GDNF - a neural progenitor cell secreting GDNF

Indication

ALS

Therapeutic Mechanism

This therapy will replace damaged astrocytes. The new astrocytes will release paracrine factors. As the cells have been modified to release GDNF they will also provide this factor to dying motor neurons.

Unmet Medical Need

There is no treatment or cure for ALS. Thus there is a huge unmet medical need.

Project Objective

Phase 1/2a clinical trial

Major Proposed Activities

Assess clinical safety of the therapeutic product

Statement of Benefit to California:

ALS is a devastating disease and there are over 6,000 cases in CA. If this treatment works it will provide one of the only ways to slow down motor neuron disease progression. This illness costs the state of California millions of dollars in healthcare costs and immense suffering to those Californians affected by the disease.