Weill Cornell Medicine

Pan-PPAR Agonists for the Treatment of Tauopathies and Huntington's Disease

Lead Inventor:

M. Flint Beal, M.D.

Professor Emeritus of Neuroscience, Brain and Mind Research Institute, Weill Cornell Medical College

Business Development Contact:

Donna J. Rounds

Interim Senior Technology Licensing Officer

(646) 962-7044

djr296@cornell.edu

Pan-PPAR Agonists for the Treatment of Tauopathies and Huntington's Disease

Background & Unmet Need

- Huntington's disease (HD) is a dominantly inherited progressive neurodegenerative disease characterized by progressive motor impairment, personality changes, and gradual intellectual decline
- While therapies exist to help treat symptoms, there are currently no approved therapies that stop or reverse decline
- Previous studies have identified a potential link between impairment of the peroxisome proliferator-activated receptor (PPAR)-γ-coactivator 1α (PGC-1 α) levels and activity are HD pathogenesis
- **Unmet Need:** Disease-modifying therapeutics for the treatment of HD and other neurodegenerative diseases

Technology Overview

- **The Technology:** Administration of bezafibrate or combinations of PPAR agonists for the treatment of HD and tauopathies
- **The Discovery:** Bezafibrate improved behavioral impairments, neuronal loss, and prolonged survival in mouse models of HD
- Administration of bezafibrate increased numbers of mitochondria in both brain and muscle tissue
- Bezafibrate treatment also improved the behavioral impairments and tau aggregation in mouse models of tauopathy

Inventors:
M. Flint Beal

Patents:
US Patent 9,592,212

Publications:
Johri et al. *Hum Mol Genet*. 2012.

Biz Dev Contact:
Donna Rounds
(646) 962-7044
djr296@cornell.edu

Cornell Reference:
D-5283

Weill Cornell Medicine

Pan-PPAR Agonists for the Treatment of Tauopathies and Huntington's Disease

Technology Applications

- Repurposing of bezafibrate, or novel combinations of selective PPAR agonists
- Treatment of neurological conditions

Technology Advantages

- Bezafibrate is already approved drug for other indications, which may streamline development
- Potentially applicable to multiple indications

Supporting Data / Figures

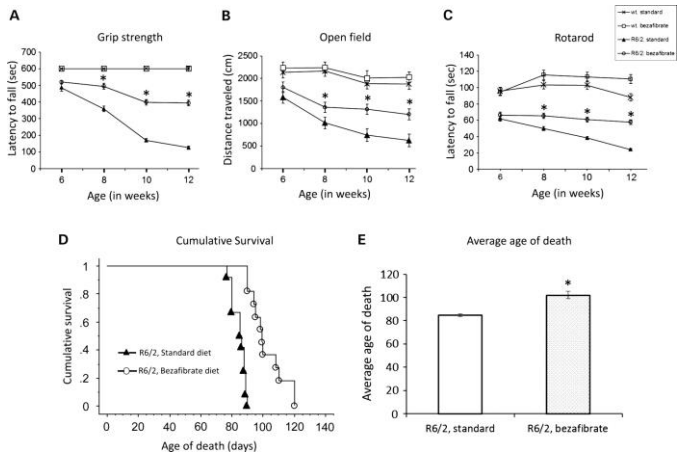

Figure 1: Bezafibrate improves the phenotype and extends survival in RG/2 mice.

Inventors:
M. Flint Beal

Patents:
US Patent 9,592,212

Publications:
Johri et al. *Hum Mol Genet*. 2012.

Biz Dev Contact:
Donna Rounds
(646) 962-7044
djr296@cornell.edu

Cornell Reference:
D-5283

Weill Cornell Medicine

Weill Cornell Medicine