Washington University in St. Louis
Office of Technology Management

THERAPEUTIC TARGETING OF LDL IN ALS

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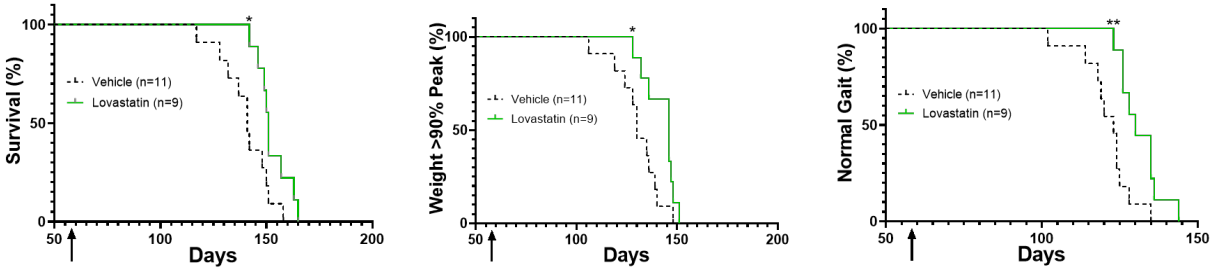
Technology Description

Researchers in Brad Racette and Tim Miller's labs at Washington University have developed a therapeutic strategy for treating ALS by using statins to lower LDL. Statins were successful at prolonging both survival and time with a normal gait.

The researchers identified drugs associated with a lower risk of developing ALS in a retrospective cohort study of Medicare patients. To better understand which drugs may be interesting therapeutic candidates, drugs were administered to a mouse model of ALS. They found that statin medications prolonged survival, preserved motor neurons and reduced ALS-related protein inclusions.



SOD1G93A mice treated with lovastatin showed prolonged survival, along with increased time to weight loss and normal gait loss

Stage of Research

The researchers used Medicare datasets to identify medications that are negatively correlated with diagnosis of ALS. Those medications were then tested in a mouse model of ALS (SOD1G93A) to determine if they prolonged survival, time to weight loss, and normal gait.

Applications

- Treatment of ALS

Key Advantages

- Prolongs survival and normal gait
- FDA-approved medication

Patents: Pending

Related Web Links: Racette Profile & Lab; Miller Profile & Lab