

## THERAPEUTIC TARGETING OF LDL IN ALS

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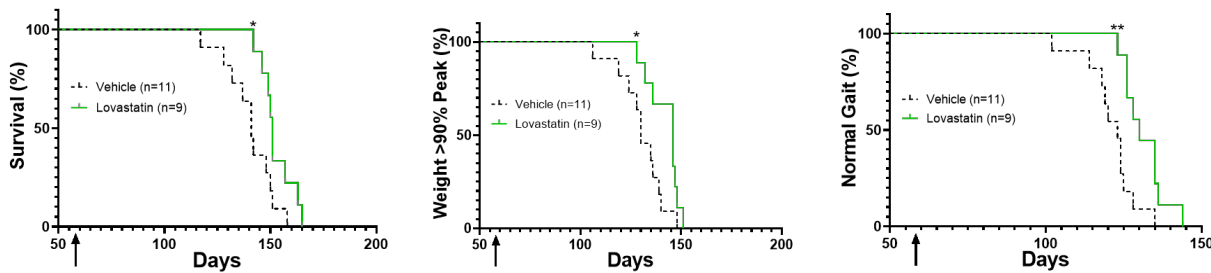
[Richards, Jennifer](#)

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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](#)