Restoring immune balance in NMOSD patients with a tolerogenic vaccine

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SUMMARY
Neuromyelitis optica (NMOSD) is a devastating autoimmune disease that causes blindness and paralysis. Current therapies for NMOSD are neither disease-specific nor curative and have side effects that are debilitating or even life-threatening, and come at a high cost (200k/patient/year).

With the goal of preventing disease exacerbation and relapse in NMOSD patients, the team is developing a specific vaccine designed to restore healthy immune homeostasis, with the potential to be curative with minimal side effects.

PROJECT GOALS
• Design optimal vaccine composition
• Demonstrate efficacy and specificity in vitro

LONG-TERM GOALS
• Approval by PEI and conduct clinical trial Phase I
• Develop a specific vaccination for NMOSD patients

PREVIOUS SPARK FUNDING
• Track 1 2022