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To the Figshare Community,

I am excited to share a novel research idea titled "Inducing Immune Tolerance in Multiple Sclerosis via CRISPR-Edited Autoreactive CD4+ T Cells" on Figshare. This concept emerged from my independent exploration of Multiple Sclerosis (MS) treatment strategies, inspired by recent literature on T-cell dynamics.

This proposal outlines a method to address the autoreactive T-cell-driven pathology of MS by using CRISPR/Cas9 to reprogram autoreactive CD4+ T cells into regulatory T cells (Tregs). The aim is to induce specific immune tolerance to myelin antigens, such as MBP and MOG, while maintaining systemic immunity against pathogens. This approach seeks to overcome the limitations of broad immunosuppressive therapies by targeting the root cause of MS. I am sharing this idea here to establish its originality and invite feedback from the scientific community. I plan to refine this concept through experimental validation, such as in the EAE model, and welcome insights or collaboration opportunities to advance this work.

Thank you for engaging with this submission.

Sincerely,

Fatemeh Rezazadeh