



TECHNOLOGY

Novel Biomaterial Platform to Promote Antigen-specific Tolerance During Auto-immune Disease Therapy

OVERVIEW

Background

A recent report from American Autoimmune Related Diseases Association and National Coalition of Autoimmune Patient Groups estimates the disease burden of autoimmune disorders to be >\$50 billion. A major disadvantage in the immunosuppressive treatments to autoimmune disorders is the non-specific suppression of immune system exposing the patient to opportunistic pathogens. A minimally invasive delivery mechanism that can selectively modulate the immune system towards a specific antigen will greatly improve not only the quality of autoimmune disorder therapy but also the outcomes of treatment.

Innovative Technology

Researchers at the University of Maryland developed a unique biomaterial platform and a novel method that can promote systemic tolerance to a self-antigen through localized programming of the immune system via intra-lymph node injections.

Advantages

- Local delivery of immunomodulators resulting in systemic tolerance
- Highly efficient immune system reprogramming and hence treatment of the disorders

Applications

- Treatment of a multitude of autoimmune disorders (e.g. multiple sclerosis, rheumatoid arthritis, psoriasis etc.)

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Additional Information

INSTITUTION

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PATENT STATUS

Pending

LICENSE STATUS

Contact OTC for licensing information

EXTERNAL RESOURCES

