



EQUILIBRIO BIOSCIENCES

Company Overview

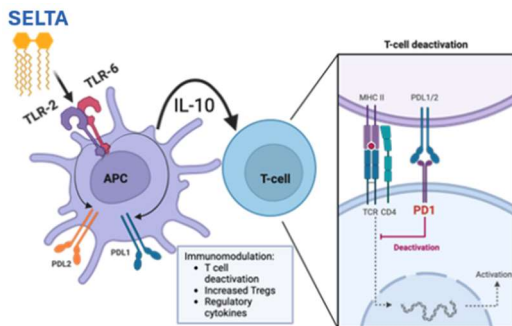
Equilibrio Biosciences, a Delaware corporation, and spin-out of Northwestern University, is an emerging biopharmaceutical company developing **SELTA**, a **first-in-class therapeutic** derived from a commensal strain of *S. epidermidis*.

SELTA is a lipoteichoic acid that has been shown to have a unique mechanism of action with the potential for **multiple clinical applications** in autoimmune diseases and neuropathy/pain.

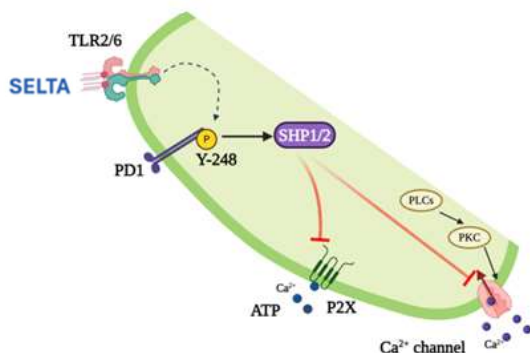
Mechanism of Action

SELTA has a **dual mechanism of action** targeting Toll-like receptor 2/6 (**TLR2/6**) and Programmed cell death protein 1 (**PD-1**):

A. SELTA binds TLR2 receptor on antigen presenting cells to increase checkpoint molecules and mediate immunomodulation.



B. SELTA binds TLR2 on neurons to increase PD-1 expression and is an **exogenous activator of PD-1 inhibitory signaling** which mediates anti-nociceptive effects.



Pre-Clinical Highlights

The SELTA mechanism has been **validated in four standard murine models of human disease**: 1) peripheral neuropathy, 2) plaque psoriasis, 3) rheumatoid arthritis, and 4) chronic pelvic pain.

In every animal model tested to date, SELTA has demonstrated **rapid and durable efficacy responses** superior to experimental controls, suggesting the **potential for clinical development in a range of diseases**.

Derived from a commensal *S. epidermidis* strain, SELTA is unique and is expected to be well-tolerated, with multiple potential routes of administration (e.g. topical, injectable, oral).

SELTA has been structurally characterized and can be purified using optimized methods. The potential to develop additional structures with therapeutic activity exists.

Clinical Development Plan

Disease Target	Proposed Formulation(s)	Discovery	IND-Enabling	Clinical
Diabetic Peripheral Neuropathy	Topical, injectable			
Autoimmune:				
Plaque Psoriasis	Topical			
Rheumatoid Arthritis	Injectable			
Chronic Pelvic Pain	Instillation			

Leadership

Lou Pascarella

Chief Executive Officer

Praveen Thumbikat, PhD

Co-founder and Chief Scientific Officer

David Arvan

Chief Business Officer

Investor and Company Contact:

Lou Pascarella

louis@equilibriobiosciences.com

(908) 403-6048