

Parvus enters licensing and collaboration agreement with Novartis for the development of immunomodulatory Navacims nanotechnology for type 1 diabetes - April 24, 2017

Parvus Therapeutics recently [announced](#) that it has entered a license and collaboration agreement with Novartis to advance the development of its nanotechnology-based treatment for type 1 diabetes. The immunomodulatory "Navacims" technology involves nanoparticles (NPs) coated with disease-specific peptide-major histocompatibility complexes (pMHCs) that bind and reprogram T cells to a regulatory T cell (Treg)-like state. Under the terms of the agreement, Novartis will receive exclusive rights to Parvus' Navacim technology and will be responsible for clinical-stage development and commercialization activities. Parvus will be responsible for finalizing the ongoing preclinical work and filing the IND. The company received an upfront payment from Novartis and will also receive research funding and, if Navacims reach the market, additional sales milestone payments and product royalties. This agreement signals a strong vote of confidence in Parvus' work and we are eager to follow the progress of this unique technology. Parvus recently demonstrated in a proof-of-concept study [published](#) in Nature that Navacims increased the number of cells with that Treg-like phenotype and restored normoglycemia in a mouse model of type 1 diabetes - a promising sign for this innovative therapeutic approach. Tregs can promote immune tolerance by "re-educating" the immune system to mitigate beta cell destruction while preserving disease-fighting immune capabilities. Although Treg-based therapies make up only a small fraction of the type 1 diabetes cure and prevention [competitive landscape](#), we have witnessed increasing momentum in this arena. Just recently, Caladrius Biosciences [announced](#) \$12 million in funding to support its phase 2 CLBS03 therapy, which involves amplifying an individual's own Tregs to provide them with a "booster dose" of this regulatory arm of the immune system. This news also signals increasing investment in diabetes and metabolic disease on Novartis' part. The company's [portfolio](#) currently includes the DPP-4 inhibitor Galvus (vildagliptin), Lucentis (intravitreal ranibizumab) for diabetic retinopathy, and a deep pipeline of NASH candidates. Notably, the Parvus collaboration marks Novartis' first dedicated foray into type 1 diabetes and we're very pleased to see this powerhouse pharma company invest in this area.

-- by Abigail Dove, Helen Gao, and Kelly Close