



Brief Description

Cyrus Biotechnology is a pre-clinical-stage AI-driven therapeutics company with an internal pipeline of novel biologics primarily in autoimmune indications. Cyrus is advancing an IdeS IgG protease in IgG-mediated immunogenicity program, with half life extension and immunogenicity optimization, in IND-enabling, as well as multiple discovery stage cytokine programs.

Overview

Cyrus Biotechnology is advancing a set of biologics derived from optimized natural proteins using a unique AI and physics based modeling platform along with large-scale protein screening via surface display. Cyrus is advancing a half-life-extended, low immune response IdeS IgG protease for autoimmune indications in IND-enabling, a potent IL22 variant for tissue protection/autoimmune gastrointestinal indications, a novel broadened therapeutic index IL15 in oncology, and other partnered programs. Cyrus was co-founded with Prof. David Baker, inventor of Rosetta and numerous protein design AI tools, and has worked with dozens of Pharma firms on protein redesign for novel therapeutics, including Genentech and Janssen, and has contributed to cytokine optimization with half a dozen partners. In 2021 Cyrus started to develop its own therapeutics. Our lead investor is Orbimed, with Agent Capital, Hillhouse, Alexandria, and others.

Programs: Internal

- IdeS (IgG protease for auto-immune indications): A low-immunogenicity and stabilized IdeS for IgG-mediated autoimmune applications Early IND enabling studies
- IL22 for gastrointestinal autoimmune disease and metabolic disease. Unique BP disinhibited leads with >100x specificity modification for improved potency.
- IL15 with broadened therapeutic index

Key Partnerships

- (COVID) an ACE2-based receptor decoy for SARS-CoV-2 that is variant-resistant, binds all known variants of concern and may be effective against other coronaviruses. Under Collaboration agreement with a major Pharma as of April 2023. Multiple patents.
- IdeS partnering for gene therapy pre-treatment
- A partnership with Selecta building a novel Treg-specific IL-2 for autoimmune disorders ("ImmTOR-IL"),
- A CRISPR immunogenicity reduction program with The Broad Institute, Zhang lab.
- An undisclosed partnership in metabolic disease using small proteins with a major VC firm.
- Cyrus is a Co-founder of OpenFold molecular AI consortium with Genentech, Amazon, NVIDIA and others

Financing

Cyrus is raising a \$55m round to advance the IdeS program through Ph1, the IL15 and IL22 to early IND enabling, and advance our partnership programs.

This use of proceeds funds:

- IdeS through PhI readout
- IL22 to pre-IND studies
- IL15 to pre-IND studies
- Discovery work in other programs based on natural protein optimization