

Catalyst Biosciences Eyes Clinic After \$30M Series B

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The term "platform technology" has become a dirty word in biotechnology circles over the past few years. But with its \$30 million Series B, Catalyst Biosciences Inc. intends to prove the industry wrong by building a clinical pipeline from an internal drug discovery engine.

A significant reason why the South San Francisco, Calif.-based company and lead investor Morgenthaler Ventures are confident in a business model otherwise disregarded is that Catalyst is not seeking to improve the production of monoclonal antibodies or small molecules. It instead centers on the development of a new class of drugs, therapeutic proteases -- a type of enzyme -- engineered to be target specific.

According to veteran biotech investor Ralph Christoffersen, a general partner at Morgenthaler, Catalyst's technology is the first he's seen that enables the use of protein engineering to develop potent and selective proteases for therapeutic use.

Fellow new investor HealthCare Ventures joined Morgenthaler in the Series B syndicate, which also included all of Catalyst's existing shareholders: Sofinnova Ventures, Burrill & Co., RCT BioVentures and Novartis Venture Fund. Those four firms participated in a \$10.3 million Series A closed in October 2004.

The Series B was an up round, according to Catalyst President David O'Reilly, who declined to disclose the company's valuation.

Christoffersen and HealthCare Ventures Managing Director Augustine Lawlor will join the Catalyst board, replacing RCT's Michael Berendt and independent director Fred Volinsky.

O'Reilly said the round is sufficient to bring two presently preclinical programs into the clinic and the lead through proof-of-concept studies in humans.

The first program focuses on "mimicking nature by engineering drug-like proteases to regulate the complement systems," the company's president said. The complement cascade is a biologic mechanism associated with a number of disease states and often one that antibody and small molecule therapeutics have difficulty regulating.

Catalyst's first application will be the treatment of cardiovascular inflammation; at present, it is conducting investigational new drug application-enabling studies and O'Reilly expects clinical entry next year. Other potential applications for the lead program include asthma and rheumatoid arthritis.

Details of the second program remain undisclosed, but the technology is applicable to inflammatory, immunology and oncology indications, among many others.

Catalyst expects to enter a partnership this year with a large pharmaceutical company to "focus on a small set of targets of mutual interest [in other therapeutic areas]," O'Reilly said.

The use of proteases for therapeutic purposes is not completely new; products such as Genentech Inc.'s Activase and Eli Lilly & Co.'s Xigris are successful examples. But these are naturally occurring proteases that have commercial use. Catalyst stands out in that the company intends to engineer proteases for additional applications that are target specific.

Chrisoffersen suggested that existing use of proteases was advantageous for the new technology: "We already know that there are proteases that are commercially viable."

The investor also said the Catalyst deal represents part of his firm's "investment thrust to find new classes of therapeutics." In May, he led an investment in Avidia Inc., a biotherapeutics company also developing a new class of therapeutic proteins it calls Maxibodies.

Companies such as Trubion Pharmaceuticals Inc. and Compound Therapeutics Inc. are other examples of companies that arguably are all trying to mimic the success of Eyetech Pharmaceuticals' Macugen -- an aptamer-based drug designed to offer the benefits of a monoclonal antibody without the drawbacks.

Potential advantages of Catalysts' therapeutic proteases over existing compound classes such as monoclonal antibodies include lower molecular weights for increased solubility and a catalytic profile, which means the same compound can be used repeatedly and is potentially effective against large biologic cascades such as the complement system.

Catalyst intends to pursue the development of this catalysis engineering technology with the support of its existing 20 employees and expected additions to the senior management and development teams.

With the money, and the help of partnerships, O'Reilly said the Series B should carry the company through 2008.

<http://www.catalystbiosciences.com>