



Versant Ventures Launches Lycia Therapeutics with \$50 Million

-- Newest company to emerge from Inception Discovery Engine in San Diego --
-- Foundational know-how in glycobiology and protein degradation from Carolyn Bertozzi --
-- Aetna Wun Trombley joins as CEO --

June 09, 2020 05:00 AM Pacific Daylight Time

SAN FRANCISCO & SAN DIEGO--([BUSINESS WIRE](#))--Biotechnology company Lycia Therapeutics, Inc. today exited stealth mode with a \$50 million commitment from founding investor Versant Ventures. Proceeds are being used to develop lysosomal targeting chimeras, or LYTACs, as therapeutics for a broad set of currently intractable cell surface targets.

Interest in the field of protein degradation continues to grow, as classical approaches to developing small molecule and biologic therapeutics have proven to be ineffective on many disease-relevant targets. This is especially the case for extracellular and secreted proteins that have inaccessible active sites, complex and challenging molecular structures, and other limiting factors.

“Our understanding of the biological pathways and targets relevant to certain diseases has far outreached our ability to develop effective therapeutic modalities,” said Lycia CEO Aetna Wun Trombley, Ph.D. “LYTACs offer the promise of targeting a wider array of proteins on the cell surface or in the extracellular compartment. Many of these have been linked to cancer, autoimmune and other serious diseases.”

Targeting extracellular proteins with LYTACs

Versant established Lycia in 2019 within the firm’s San Diego-based Inception labs in collaboration with academic founder Carolyn Bertozzi, Ph.D., professor of chemistry and HHMI investigator at Stanford University. The initial aim was to develop and validate a drug discovery platform.

The LYTACs platform leverages decades of work in the field of lysosomal biology. In a 2019 publication, Dr. Bertozzi’s team at Stanford demonstrated that a cation-independent receptor called CI-M6PR could be exploited to capture and drag extracellular proteins into cells, trafficking them to the lysosome for destruction.

In addition to CI-M6PR, Lycia has now extended this approach and leveraged other tissue-specific internalizing receptor systems to further expand the technology’s therapeutic potential.

“Our understanding of multiple receptor systems including M6PR offered Lycia the opportunity to take the protein degradation field in a new direction,” said Dr. Bertozzi. “I look forward to working closely with the team to advance the science and explore the broader applications to developing effective therapeutics for intractable cancers and many other challenging diseases.”

Relevance to numerous diseases and modalities

With the Inception team, Lycia has been able to validate, optimize and expand this approach. Confirmatory studies have shown targeted degradation of cell surface proteins such as EGFR, PD-L1, as well as secreted proteins like ApoE4. Collectively these results suggest that LYTACs can potentially serve as effective therapeutics for a wide range of difficult-to-treat conditions. Further work continues to target other membrane proteins, including receptor tyrosine kinases, and pathogenic immune complexes in circulation.

Moreover, the platform has the potential to extend the reach of other modalities including gene therapy, which cannot be chronically dosed due to the production of autoantibodies. The platform can be exploited to develop a LYTAC binder able to capture and drag the autoantibodies into a lysosomal trafficking pathway.

Advisors and operating plans

The Lycia team will work alongside experienced entrepreneurs and leading scientists who have made important contributions in the field and bring relevant experience to the company.

Carolyn Bertozzi, Ph.D., who chairs Lycia’s Scientific Advisory Board, is the Anne T. and Robert M. Bass Professor of Chemistry and Professor of Chemical & Systems Biology and Radiology at Stanford University, and an Investigator of the Howard Hughes Medical Institute. Dr. Bertozzi’s research interests span the disciplines of chemistry and biology with an emphasis on studies of cell surface glycosylation pertinent to disease states. She is an elected member of the Institute of Medicine, National Academy of Sciences, and American Academy of Arts and Sciences. She has been awarded the Lemelson-MIT Prize, the Heinrich Wieland Prize, and a MacArthur Foundation Fellowship, among many others.

Randy Schekman, Ph.D., is an investigator of the Howard Hughes Medical Institute and a Professor of Cell and Developmental Biology in the Department of Molecular and Cell Biology at the University of California at Berkeley. He was awarded the Nobel Prize in Physiology or Medicine in 2013.

Mark M. Davis, Ph.D. is the Director of the Stanford Institute for Immunology, Transplantation and Infection (ITI), a Professor of Microbiology and Immunology and a Howard Hughes Medical Institute Investigator at Stanford University. He received a B.A. from Johns Hopkins University and a Ph.D. from the California Institute of Technology. Dr. Davis is well known for identifying many of the T-cell receptor genes, which are responsible for the ability of these cells to recognize a diverse repertoire of antigens. His current research focuses on obtaining a systems level understanding of the human immune system.

Brian Druker, M.D., is Professor of Medicine and Director of the OHSU Knight Cancer Institute and the JELD-WEN Chair of Leukemia Research. His research focuses on activated tyrosine kinases with an emphasis on their role in cancer. His work resulted in Gleevec, the first drug to target the molecular defect of a cancer while leaving healthy cells unharmed. He has been recognized with numerous awards, including the Warren Alpert Prize from Harvard Medical School, the Lasker-DeBaake Award for Clinical Medical Research, the Japan Prize in Healthcare and Medical Technology, and most recently, the 2018 Tang Prize in Biopharmaceutical Science.

Alanna Schepartz, Ph.D., is the T.Z. and Irmgard Chu Distinguished Chair in Chemistry and Professor of Molecular and Cell Biology at the University of California at Berkeley. Her research spans the fields of chemical and synthetic biology. A primary focus is to uncover the chemistry that drives complex cellular processes and apply this knowledge to design or discover molecules – large and small – that possess unique or useful properties.

Monther Abu-Remaileh, Ph.D., is Assistant Professor of Chemical Engineering at Stanford University. His lab is focused on identifying novel pathways that enable cellular and organismal adaptation to metabolic stress and changes in environmental conditions, as well as how these pathways go awry in human diseases such as cancer, neurodegeneration and metabolic syndrome, in order to engineer new therapeutic modalities.

Laurent Fischer, M.D., who is an independent member of Lycia's Board of Directors, was senior vice president and head of the liver therapeutic area at Allergan. Before that, he was CEO of Tobira Therapeutics, which Allergan acquired in 2016 for \$1.7 billion. Dr. Fischer has held numerous CEO roles at biotechnology companies, as well as senior leadership positions at large pharmaceutical companies. He has been involved in the launch of multiple drugs.

Lycia will be headquartered in the San Francisco Bay Area and will continue collaborating with the San Diego-based Inception team during the startup phase. With this financing, the company plans to build out its foundational LYTAC platform, develop an internal pipeline, and will also consider discovery-stage partnerships to fully exploit the potential of this novel approach.

"The team at Lycia has begun to translate recent insights on the utility of targeted lysosomal trafficking into a new class of therapeutics," said Clare Ozawa, Ph.D., Versant managing director and a Lycia board member. "With this financing, we hope to build on this progress and to generate a broad pipeline of development candidates."

About Lycia Therapeutics, Inc.

Lycia Therapeutics, Inc. is a biotechnology company using its lysosomal targeting chimeras (LYTACs) platform to discover and develop first-in-class therapeutics that degrade extracellular and membrane-bound proteins that drive a range of difficult-to-treat diseases, including cancers and autoimmune conditions. Lycia was established in 2019 within founding investor Versant Ventures' San Diego-based Inception Discovery Engine, and now is headquartered in the San Francisco Bay Area. Visit www.lyciatx.com for more information.

About Versant Ventures

Versant Ventures is a leading healthcare venture capital firm committed to helping exceptional entrepreneurs build the next generation of great companies. The firm's emphasis is on biotechnology companies that are discovering and developing novel therapeutics. With \$3.2 billion under management and offices in the U.S., Canada and Europe, Versant has built a team with deep investment, operating and R&D expertise that enables a hands-on approach to company building. Since the firm's founding in 1999, more than 75 Versant companies have achieved successful acquisitions or IPOs. Versant is currently investing out of its seventh fund, Versant Venture Capital VII, a \$600 million global biotech fund closed in December 2018. In parallel the firm co-invests out of its Canadian strategic fund Versant Voyageurs I and its later-stage biotech opportunity fund Versant Vantage I. For more information, please visit www.versantventures.com.

Contacts

Steve Edelson, senior director of communications and investor relations

sedelson@versantventures.com

415-801-8088