

Molecular Templates Announces Completion of \$12M Series C Financing

Georgetown, Tex – (BUSINESS WIRE) – September 15th, 2014. Molecular Templates, Inc., a biopharmaceutical company focused on the discovery and development of a new class of biologic therapies announced today that it has expanded its series C financing with an additional \$3.5M investment from AJU IB Investment. Molecular Templates had previously raised \$8.5M in the series C financing led by Excel Ventures with participation by Santé Ventures. As part of the financing, Timothy Sullivan, a partner at AJU Life Sciences Overseas Expansion Platform Fund, will join the Board of Directors. “Molecular Templates’ Shiga-toxin based platform has yielded several antibody drug conjugate candidates that, through a novel mechanism of action, should prove to be meaningful as treatment for several forms of cancer,” said Mr. Sullivan. “We are excited to join the Company as it prepares to enter its lead program, MT-3724, into the clinic for B-cell non-Hodgkin’s lymphoma.”

Eric Poma, CEO and CSO of Molecular Templates stated, “We are extremely pleased to have another respected and experienced institutional investor join our Company. We believe the next several months will be transformational for Molecular Templates as our lead compound, MT-3724, enters the clinic for the treatment of refractory non-Hodgkin’s lymphoma. The additional financing will let us continue to expand the utility of our platform and move more compounds to the clinic.”

About the Technology

Molecular Templates has developed a powerful biologics platform technology known as Engineered Toxin Bodies (ETBs) that can be used to develop a multitude of different therapeutics against a variety of diseases. An ETB is comprised of two components: 1) a single-chain variable fragment of an antibody that specifically binds only to a tumor cell, or other target cell, and 2) a component of Shiga-toxin engineered to safely enter targeted cells and kill them. This makes ETBs highly specific for killing tumors while having little effect on non-tumor cells. ETBs have the potential to re-invigorate existing antibody cancer drugs (e.g., Rituxan™) that often lose their efficacy due to tumor resistance.

The lead compound MT-3724 potently and specifically destroys malignant B-cell lymphomas that express the CD20 transmembrane protein. CD20 has been validated as an important target for the destruction of malignant B-cells but past efforts have been limited to indirect mechanisms of cell kill targeting CD20 or the use of radio-immunotherapies against the CD20 target. MT-3724 represents the first non-radioactive, targeted mechanism of direct cell-kill against CD20.

About Molecular Templates

Molecular Templates is a venture-backed biopharmaceutical company focused on the discovery and development of a new class of targeted biologic therapeutics with distinct advantages over existing Antibody Drug Conjugates (ADCs). This biologic platform technology is being used to develop multiple therapies across a wide range of cancers. For more information, please visit www.moleculartemplates.com

About AJU Life Sciences Overseas Expansion Platform Fund

AJU Life Sciences Overseas Expansion Platform Fund is part of AJU IB Investment Co., Ltd., a leading venture capital firm headquartered in Seoul Korea with approximately USD \$1 billion in capital under management. AJU Life Sciences Overseas Expansion Platform Fund, which is represented by AJU IB Investment's US office in Boston, MA, invests exclusively in companies developing pioneering new therapies or medical technologies with an emphasis on platforms. For more details, visit www.ajuib.com.

About Excel Venture Management

Excel Venture Management builds companies that apply transformative technologies to solve problems in healthcare and beyond. The Excel investment portfolio is balanced across healthcare IT and services, diagnostics, and medical devices, plus life science platforms that address adjacent markets including energy, chemicals, defense and agriculture. Excel's investments include leading companies such as Tetrphase Pharmaceuticals (TTPH), Aileron Therapeutics, Cleveland Heart Lab, Synthetic Genomics, and IlluminOss. More information can be found at <http://www.excelvm.com>.

About Santé Ventures

Santé Ventures is a life sciences venture capital firm that invests exclusively in early-stage companies developing innovative new medical technologies or healthcare delivery models. The firm was founded in 2006 and has \$260 million in capital under management in two funds. For more information, visit www.santeventures.com.