May 16, 2018

Molecular Templates to Present Clinical Data at the American Society of Clinical Oncology (ASCO) Annual Meeting 2018

ASCO Posters to Feature Data on MT-3724 and Evofosfamide

AUSTIN, Texas, May 16, 2018 (GLOBE NEWSWIRE) -- Molecular Templates, Inc., (Nasdaq:MTEM) a clinical stage biopharmaceutical company focused on the discovery and development of Engineered Toxin Bodies, a new class of targeted biologic therapies that possess unique mechanisms of action in oncology, today announced that data on two of its pipeline programs will be presented at the American Society of Clinical Oncology (ASCO) Annual Meeting 2018, to be held June 1-5 in Chicago, Illinois.

Date:	Monday, June 4
Time:	8:00am – 11:30am Central Time
Location:	Hall A, Poster Board #217
Abstract #:	7580
Session:	Hematologic Malignancies – Lymphoma and Chronic Lymphocytic Leukemia
Poster Title:	*Safety and Efficacy of Anti-CD20 Immunotoxin MT-3724 in Relapsed/Refractory B-cell non-Hodgkin Lymphoma (NHL) in a Phase 1 Study*
First Author:	Paul A. Hamlin, MD, Memorial Sloan Kettering Cancer Center

The poster summarizes interim results from a Phase I study of B-cell non-Hodgkin's lymphoma (NHL) patients treated with MT-3724 who had previously relapsed after prior response to anti-CD20 Mab and chemotherapy. The results showed that MT-3724 has clinical anti-tumor activity in heavily pre-treated patients with relapsed or refractory B-cell NHL. Consistent with the mechanism of action, the best activity is observed in patients with rapidly growing diffuse large B-cell lymphoma (DLBCL).

Date:	Monday, June 4
Time:	8:00am – 11:30am Central Time
Location:	Hall A, Poster Board #394
Abstract #:	2568
Session:	Developmental Therapeutics – Clinical Pharmacology & Experimental Therapeutics
Poster Title:	*Unexpected Pharmacokinetics of Evofosfamide Observed in Phase III MAESTRO Study*
First Author:	Jack P. Higgins, Ph.D., Molecular Templates, Inc.

This study compares the pharmacokinetic (PK) profile of Evofosfamide from the Phase II and Phase III trials completed in patients with pancreatic ductal adenocarcinoma (PDAC). A new ethanol-based formulation of Evofosfamide was introduced following Phase 2, with the goal of improving drug product solubility. The resultant decrease in drug exposure may explain why the efficacy seen in the Phase 2 study was not replicated in Phase 3.

About Molecular Templates

Molecular Templates is focused on the discovery, development and commercialization of next-generation immunotoxins called Engineered Toxin Bodies (ETBs) for the treatment of cancers and other serious diseases. For additional information, please visit Molecular Templates' website at www.mtem.com.

Forward-Looking Statements
This press release contains forward-looking statements for purposes of the Private Securities Litigation Reform Act of 1995 (the "Act"). Molecular Templates disclaims any intent or obligation to update these forward-looking statements, and claims the protection of the Act's Safe Harbor for forward-looking statements. All statements, other than statements of historical facts, included in this press release regarding strategy, future operations, future financial position, future revenue, projected expenses, prospects, plans and objectives of management are forward-looking statements. In addition, when or if used in this press release, the words "may," "could," "should," "anticipate," "believe," "estimate," "expect," "intend," "plan," "predict" and similar expressions and their variants, as they relate to Molecular Templates may identify forward-looking statements. Examples of such statements include, but are not limited to, statements relating to the development of the Company's lead program, MT-3724; the expected timing of submitting various IND applications and initiating studies; and the Company's belief that its proprietary biologic drug platform technology, or ETBs, provides for a differentiated mechanism of action that may address some of the limitations associated with currently available cancer therapeutics.

Forward-looking statements are not guarantees of future performance and involve risks and uncertainties. Actual events or results may differ materially from those discussed in the forward-looking statements as a result of various factors including, but not limited to, the uncertainties inherent in the preclinical and clinical development process; whether the Company's cash resources will be sufficient to fund its continuing operations for the periods and/or trials anticipated; the ability of the Company to protect its intellectual property rights; and legislative, regulatory, political and economic developments, as well as those risks identified under the heading "Risk Factors" in the Company's filings with the SEC. Any forward-looking statements contained in this press release speak only as of the date hereof, and the Company specifically disclaims any obligation to update any forward-looking statement, whether because of new information, future events or otherwise.

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