

Molecular Templates Announces Start of Phase 1 Clinical Trial of MT-3724 in Refractory Non-Hodgkin's Lymphoma

- *CD20 targeting immunotoxin with differentiated direct cell-kill mechanism of action*

Georgetown, TX – March 5th, 2015 – Molecular Templates, a clinical stage biotechnology company, announced today that the first cancer patient has been dosed in the Phase 1 clinical trial of MT-3724 for the treatment of refractory non-Hodgkin's lymphoma (NHL). The Phase 1 study is being conducted at the Memorial Sloan Kettering Cancer Center, the MD Anderson Cancer Center, and the Perlmutter Cancer Center at NYU Langone Medical Center. Recruitment in the clinical study is underway and is expected to enroll up to 40 patients.

The multicenter, Phase 1, dose-escalation study will evaluate the safety, pharmacokinetics, and pharmacodynamics of MT-3724 in refractory non-Hodgkin's lymphoma patients who have failed previous therapies. The study will also measure the anti-tumor activity of MT-3724 in these patients. Further details of the study are available on clinicaltrials.gov.

“We are excited to initiate clinical development of MT-3724 in this area of high unmet medical need. The Phase 1 study is being conducted at some of the premier clinical oncology research centers in the world and we hope this exciting first step will ultimately translate into clinical benefit for patients with NHL. We look forward to seeing the results from the ongoing Phase 1 study throughout the course of the year,” said Eric Poma, Ph.D., CEO and CSO of Molecular Templates.

About Molecular Templates

Molecular Templates is a clinical stage biotechnology company focused on the discovery, development, and commercialization of a new class of targeted biologic therapies called Engineered Toxin Bodies (ETBs). The Company harnesses the unique biological properties of toxins to identify promising biologic therapies that work through unique mechanisms of action. The ETB biologic platform technology is being used to develop multiple therapies across a wide range of cancers. The Company's lead compound, MT- 3724, targets the CD20 cell surface receptor and is currently in Phase 1 clinical trials. For more information, please visit www.moleculartemplates.com.