



FOR IMMEDIATE RELEASE

TransMolecular Announces Presentation of Data Highlighting Anti-angiogenic and Tumor-targeting Properties of TM601 at ASCO Annual Meeting

CAMBRIDGE, MA – May 21, 2009 – TransMolecular, Inc. today announced that new data highlighting the anti-angiogenic and tumor-targeting properties of TM601 will be discussed in a poster presentation and in a published abstract at the 45th Annual Meeting of the American Society of Clinical Oncology (ASCO), being held May 29-June 2, 2009 in Orlando, FL. TM601 is a novel, wholly synthetic peptide, found to have robust anti-angiogenic activity in neovascular diseases, including cancer and ophthalmic disease.

Poster presentation #2041 is titled, “A Phase 1 evaluation of intravenous TM601 in recurrent glioblastoma: use of perfusion MRI to monitor anti-angiogenic effects,” and will be presented on Sunday, May 31, in the Central Nervous System Tumors General Poster Session from 8:00 am - noon ET (Level 2, West Hall C).

Abstract #e14507 titled, “A Phase 1 evaluation of intravenous (IV) ¹³¹I-chlorotoxin delivery to solid peripheral and intracranial tumors,” was accepted for publication on the ASCO website and is available at www.asco.org and www.jco.org.

About TM601

TM601 is a novel, wholly synthetic peptide found to have robust anti-angiogenic activity in neovascular diseases, including cancer and ophthalmic disease.

For oncology applications, TM601 is highly specific and selective in targeting both primary tumors and metastases in the periphery and in the central nervous system. TM601 has the unique properties of highly specific tumor cell binding, uptake and internalization. Clinical studies confirm that TM601 targets and binds to a receptor expressed on a wide range of tumor cells, but not on normal, healthy cells. TransMolecular is expanding the TM601 tumor-targeting platform to deliver a range of therapeutic agents, including novel and currently used chemotherapeutic agents, as well as RNAi molecules, to tumor cells.

Most recently, the effects of TM601 on the neovasculature were validated in animal models of ophthalmic disease, including wet age-related macular degeneration (AMD).

About TransMolecular, Inc.

TransMolecular, Inc. is committed to discovering and developing novel therapeutic products that help patients combat cancer and neovascular diseases. TransMolecular’s product pipeline is based on the TM601 platform, a novel synthetically derived polypeptide, which has both highly specific tumor binding properties and anti-angiogenic therapeutic properties. More information can be found at www.transmolecular.com.

This press release contains forward-looking statements. The Company wishes to caution the reader of this press release that actual results may differ from those discussed in the forward-looking statements and may be adversely affected by, among other things, risks associated with litigation, clinical trials, the regulatory approval process, reimbursement policies, commercialization of new technologies, intellectual property, and other factors.

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