



For Immediate Release

**CHIMERIX'S ANTIVIRAL CMX157 DEMONSTRATES POSITIVE PHASE 1
CLINICAL RESULTS WITH FAVORABLE PHARMACOKINETICS,
SAFETY AND TOLERABILITY**

Exhibits Potent In Vitro Activity Against XMRV and Highly Resistant HIV

DURHAM, NC, DECEMBER 13, 2010 - Chimerix, Inc., a pharmaceutical company developing orally-available antiviral therapeutics, today announced first-in-human Phase 1 clinical trial results for CMX157 demonstrating a favorable safety, tolerability and drug distribution profile. In addition, results from a series of preclinical studies showed that CMX157 exhibited highly potent *in vitro* activity against human immunodeficiency virus (HIV), including HIV strains resistant to current therapies, and potent *in vitro* activity against xenotropic murine leukemia virus-related virus (XMRV), a blood-borne retrovirus recently associated with chronic fatigue syndrome (CFS). CMX157 clinical and preclinical findings were presented in an oral abstract, titled "CMX157 (Hexadecyloxypropyl Tenofovir), a Clinical Stage Antiretroviral with In Vitro Activity against HIV and XMRV" at the HIV DART™ 2010 Frontiers in Drug Development for Antiretroviral Therapies conference.

"CMX157's promising safety profile and efficient conversion to the active drug in peripheral blood mononuclear cells, coupled with the potent *in vitro* antiviral activity across diverse drug-resistant strains of HIV, indicate that this compound may directly address the limitations of current HIV therapies," said Randall Lanier, Ph.D., Senior Director of Virology of Chimerix. "We are also excited about CMX157's *in vitro* antiviral activity against XMRV, a retrovirus recently associated with chronic fatigue syndrome."

"Our CMX001 and CMX157 programs are producing compelling clinical and preclinical evidence of how Chimerix's PIM Conjugate Technology transforms the way compounds are absorbed, distributed, metabolized and excreted, creating new agents with improved antiviral action and reduced toxicities. The promising clinical and preclinical data being reported for CMX157 strengthen our commitment to advancing this novel antiviral for the treatment of HIV and other applications, including its potential to address XMRV associated with chronic fatigue syndrome," said Kenneth I. Moch, President and Chief Executive Officer of Chimerix. "We believe CMX157 holds promise as a highly competitive anti-HIV agent, suitable for combination regimens, with a favorable pharmacokinetic and tolerability profile, and potential for once-weekly dosing. Further, we have intriguing *in vitro* data showing our PIM Conjugate Technology may facilitate CMX157 access across the blood-brain barrier to address latent retrovirus in compartments that otherwise have proven to be inaccessible by conventional anti-HIV agents. There's a significant need for new HIV therapies to help refractory and inadequately treated patients, and our next step is to evaluate CMX157 in HIV patients."

CMX157 Phase 1 Clinical Trial Results

CMX157 is a new chemical entity created by applying Chimerix's PIM (Phospholipid Intramembrane Microfluidization) Conjugate Technology to chemically modify tenofovir, the molecule underlying the prodrug Viread[®], an antiviral agent approved for the treatment of human immunodeficiency virus (HIV) and chronic hepatitis B. The CMX157 Phase 1 clinical study was a randomized, blinded, dose-escalation trial to evaluate safety, tolerability and pharmacokinetics. Healthy volunteers received a single dose ranging from 25 mg to 400 mg of CMX157 or a standard dose of Viread for comparison of intracellular levels of the active antiviral, tenofovir diphosphate (TFV-PP). CMX157 was well tolerated and there were no laboratory, vital sign, electrocardiogram changes or adverse event trends attributable to drug. In addition, plasma concentrations of CMX157 increased linearly with dose and target plasma levels were attained. The active antiviral, TFV-PP, was measurable in peripheral blood mononuclear cells (PBMC) from all patients after a single 400 mg dose of CMX157. PBMC levels of TFV-PP remained detectable for six days after the single 400 mg dose of CMX157, suggesting the possibility of a convenient, once-weekly dosing regimen.

CMX157 *In Vitro* Activity

The *in vitro* antiviral activity of CMX157 was evaluated in PBMCs for wild-type and nucleotide reverse transcriptase inhibitors (NRTI)-resistant HIV strains. CMX157 was effective and highly potent against all clinically-important HIV strains, including drug resistant isolates that are known to be unresponsive to tenofovir. CMX157 was observed to have highly potent antiviral activity against XMRV *in vitro*, with an EC₅₀ approximately 20-fold more potent than the anti-retroviral drug azidothymidine (AZT) and 800-fold more potent than tenofovir. Data were also presented that showed CMX157 is not a substrate *in vitro* for human Organic Anion Transporter 1 (hOAT1), which actively transports tenofovir into renal proximal tubule cells of the kidney and is linked to tenofovir-induced nephrotoxicity. Consequently, CMX157 has significantly reduced potential to cause nephrotoxicity.

CMX157 findings were featured in an oral presentation, *CMX157 (Hexadecyloxypropyl Tenofovir), a Clinical Stage Antiretroviral with In Vitro Activity against HIV and XMRV*, by Randall Lanier, Ph.D., Senior Director of Virology of Chimerix, at the HIV DART 2010 Frontiers in Drug Development for Antiretroviral Therapies conference. A copy of Dr. Lanier's oral presentation and poster are available on the Chimerix website at www.chimerix.com.

About CMX157

CMX157 is a new chemical entity created by applying Chimerix's PIM (Phospholipid Intramembrane Microfluidization) Conjugate Technology to chemically modify tenofovir, marketed as the prodrug Viread, an antiviral agent approved for the treatment of HIV and chronic hepatitis B. Chimerix's proprietary PIM Conjugate Technology is being employed to improve the absorption and distribution profile of tenofovir, with the goal of increasing antiviral efficacy while decreasing potential toxicity. Chimerix is developing CMX157 for the treatment of patients who are refractory to or not sufficiently treated by existing HIV therapies.

About Chimerix

Chimerix is developing novel antiviral therapeutics with the potential to transform patient care in multiple settings, including transplant, oncology, acute care and global health.

The company's lead candidate, CMX001, is in Phase 2 clinical studies in immunocompromised transplant and cancer patients for the treatment of life-threatening viruses, including cytomegalovirus and adenovirus. Over 325 people have received CMX001 to date. CMX001 has been well tolerated in all studies, with a growing body of evidence of the compound's antiviral activity in humans. In Chimerix's ongoing placebo-controlled studies, CMX001 has been administered to more than 200 patients and healthy volunteers. In addition, at the request of leading physicians at over 45 medical centers throughout the United States, Canada, Europe and Israel, CMX001 has been administered to more than 125 patients under investigator-held Emergency Investigational New Drug applications (EINDs) for the treatment of a wide range of infections caused by dsDNA viruses for which there are either no approved treatments or where patients have failed the available treatment. To date, CMX001 has been used to treat patients with 12 different dsDNA viral infections across all five families of dsDNA viruses that affect humans. CMX001 is also being developed as a medical countermeasure in the event of a smallpox release. Chimerix has received significant funding from the National Institutes of Allergy and Infectious Disease to develop CMX001 for smallpox.

Chimerix's second clinical-stage antiviral compound, CMX157, has completed Phase 1 clinical studies. CMX157 is in development as a potent nucleoside analogue against multi-drug resistant HIV infections.

Led by a world-class antiviral drug development team, Chimerix is also leveraging the company's extensive chemical library to pursue new treatments for hepatitis C virus, malaria and other global public health needs. For additional information on Chimerix, please visit <http://www.chimerix.com>.

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