

**FOR IMMEDIATE RELEASE**

**BIOLEX ANNOUNCES ORAL PRESENTATION OF PRECLINICAL RESULTS  
FOR DIRECT-ACTING THROMBOLYTIC BLX-155 AT ISTH MEETING**

**Preclinical Results Show Superior Thrombolytic Activity for  
BLX-155 Compared to t-PA**

**PITTSBORO, NORTH CAROLINA, July 16, 2009** - Biolex Therapeutics, Inc. announced that results were presented today at the XXII Congress of the International Society on Thrombosis and Haemostasis (ISTH) in Boston demonstrating that the thrombolytic activity of the Company's full-length recombinant human plasmin (BLX-155) was superior to t-PA in a preclinical study. BLX-155 is a direct-acting thrombolytic (clot dissolving) agent currently in preclinical development and is designed to break up blood clots in patients with diseases or conditions such as acute peripheral arterial occlusive disease and deep vein thrombosis, each of which currently lacks an approved thrombolytic agent.

The preclinical study was undertaken by researchers at the University Medical Center Utrecht, University of Utrecht, with assistance from researchers at the Erasmus Medical Center, University of Rotterdam, and the Academic Medical Center, University of Amsterdam. The study results were presented by John Humphries, M.D., Senior Clinical Consultant, Biologics Consulting Group, Inc., at the ISTH conference in an oral presentation titled "Efficacy of Full-length Recombinant Human Plasmin in a Porcine Model of Arteriovenous Graft Thrombosis." In the study, graft thrombosis was induced in pigs, and the clots were stabilized for 72 hours before treatment. The animals were administered either BLX-155, t-PA or a placebo. The animals were evaluated 60 minutes after injection through angiography and clot quantification. The researchers determined that treatment with BLX-155 significantly reduced the release of clot particles into the circulation in comparison to t-PA. In addition, overall thrombolytic (clot dissolving) activity was highest after treatment with BLX-155. The researchers concluded that the thrombolytic activity of BLX-155 was superior to t-PA and decreased the risk of emboli.

"The development of BLX-155 using the LEX System may allow exploitation of the natural binding, efficacy and safety attributes of native plasmin without the limitations or risks associated with truncated plasmin, plasma-derived plasmin, t-PA, or alteplase," said Jan Turek, President and Chief Executive Officer of Biolex. "In addition to the thrombolytic activity outlined in the research presented today, prior preclinical studies have shown that plasmin has a substantially lower risk of bleeding than t-PA, demonstrating the potential of BLX-155 to provide a safety advantage to patients suffering from blood clots."

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BLX-155 is an investigational therapeutic candidate and has not been approved for sale by the United States Food and Drug Administration or any international regulatory agency.

### **Scientific Basis for Recombinant Full-Length Plasmin (BLX-155)**

BLX-155, recombinant full-length human plasmin, is a direct-acting thrombolytic agent designed to dissolve blood clots in patients. Plasmin is the key enzyme in the human body that dissolves the fibrin component of blood clots. In fact, dissolution of blood clots, whether it is accomplished naturally within the body or through treatment with indirect-acting drugs like t-PA, is ultimately accomplished by plasmin. Researchers believe that plasmin's accepted role in dissolving clots makes it the logical basis for a direct-acting thrombolytic, as it combines the potential for superior clot dissolution with substantial safety advantages.

In contrast, plasminogen activators like t-PA work indirectly by converting plasminogen in the clot into the active protein plasmin which in turn dissolves the clot. However, blood clots only a week old may have inadequate quantities of plasminogen remaining and available for activation by t-PA. Research suggests that t-PA has only limited effectiveness in conditions such as acute peripheral arterial occlusive disease which are generally associated with older clots lacking adequate levels of plasminogen for activation.

Full-length plasmin is a complex protein whose structure includes five kringle domains that provide a high affinity and specificity for binding to the fibrin component of blood clots. Biolex believes that full-length plasmin's high affinity to fibrin may result in a therapy that is more effective than t-PA in recent and older clots, and is also more effective than other direct-acting thrombolytics in development such as truncated forms of plasmin and alteplase, each of which lacks the five kringle domains of full-length plasmin. Additionally, as a naturally occurring protein, plasmin is regulated by a number of inhibitors within the body that exist in high quantities and serve to rapidly inactivate any plasmin that circulates beyond the immediate site of the clot. In addition, inhibition of plasmin by the key inhibitor, alpha-2-antiplasmin, requires the plasmin kringle region for optimal inhibition. This safety mechanism may decrease the risk of bleeding complications in comparison to the therapeutic administration of other thrombolytics such as t-PA and alteplase.

Full-length, active plasmin has been proposed as a potential thrombolytic agent for several decades, but historically no traditional recombinant system has demonstrated the ability to produce full-length plasmin at commercially viable levels. Biolex's proprietary LEX System is the only recombinant system in which the production of full-length human plasmin at commercially viable levels has been reported, enabling the development of BLX-155 as a product candidate.

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### **About Biolex Therapeutics**

Biolex is a clinical-stage biopharmaceutical company that uses its patented LEX System<sup>SM</sup> to develop hard-to-make therapeutic proteins and to optimize monoclonal antibodies. The LEX System is a novel technology that genetically transforms the aquatic plant *Lemna* to enable the production of biologic product candidates. The company's product candidates are designed to provide superior efficacy/tolerability profiles and to address large, proven pharmaceutical markets. Biolex's lead product candidate, Locteron®, is in Phase 2b clinical testing for the treatment of chronic hepatitis C. Biolex has also developed two other product candidates that capitalize on the benefits of the LEX System which it is advancing toward clinical trials: BLX-155, a direct-acting thrombolytic designed to dissolve blood clots in patients; and BLX-301, a humanized anti-CD20 antibody it is optimizing for the treatment of non-Hodgkin's B-cell lymphoma and other diseases.

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