

EDISON, N.J., April 21 /PRNewswire/ -- Nostrum, a privately-held company based in Edison, New Jersey, announced today that it has successfully completed its early, primate, proof-of-concept study for its novel thrombolytic clot-buster protein currently known as SMRX11. Nostrum's Symmetrix subsidiary, based in Singapore, is developing this therapeutic protein drug under Nostrum's license from the Institute of Microbial Technology, Chandigarh, India, which Nostrum obtained in July 2006.

SMRX11 is an engineered plasminogen activating hybrid protein produced by recombinant DNA technology. The hybrid protein activates plasminogen only in the presence of a blood clot. In the absence of the blood clot protein, Fibrin, SMRX11 displays no plasminogen activation. This unique product therefore potentially avoids the adverse reactions currently faced by thrombolytics in the market. Such adverse reactions include blood thinning and severe bleeding due to a significant degree of spontaneous plasminogen activation even in the absence of Fibrin. Moreover, SMRX11 protects fibrinogen levels in the blood, while dissolving the clot, and hence further lowering the risk of bleeding.

Nostrum recently successfully completed a proof-of-concept study in a non-human primate thrombolysis model that is expected to bear a close relationship with the future studies in humans. In this study, an appropriate dose of SMRX11 was administered as an intravenous bolus and successfully restored femoral arterial blood flow in cynomolgus monkeys following a stable thrombus formation. The animal model utilized has been previously validated on other, FDA approved thrombolytic products such as tPA. More recently, a similar study with SMRX11, which Nostrum conducted in a canine thrombolysis model, has confirmed the results observed in the primate study. "We have seen promising results in this primate model. We were clearly able to demonstrate the utility of SMRX11. Further studies will be conducted to show efficacy and safety of the product prior to our planned clinical studies in humans," said Yatindra Prashar, Ph.D., co-founder of Symmetrix.

"We are excited about the possibility of treating millions of patients suffering from several cardiovascular conditions including Acute Myocardial Infarction, Ischemic Stroke, Peripheral Arterial Disease and Pulmonary Embolism in a cost efficient manner," said Nirmal Mulye, Ph.D., founder and President of Nostrum.

Nostrum will first pursue the clinical development and launch of SMRX11 in India followed by a worldwide launch. Nostrum's intellectual property as it relates to this technology is protected by patents obtained in the United States, Europe and India.