



## **In vivo data confirms effectiveness of the NanoActive™ technology in improving bioavailability**

Budapest, Hungary - 27 June 2010 – NanGenex Inc., the proprietary NanoActive™ continuous flow technology platform company, has completed the first round in vivo testing of NanoActive™ nanoformulations of block-buster drugs.

Low water solubility and/or dissolution rate is the rate limiting step of oral absorption and bioavailability of several marked drugs including several angiotensin II receptor antagonists used in the treatment of hypertension. Using the NanoActive™ technology NanGenex has managed to increase the water solubility of three such drug compounds that are widely used in clinical practice. Laboratory tests showed a 10-1000 fold increase in water solubility for the different compounds. Furthermore, the redispersibility and dissolution of the compounds in biological relevant medium was practically instantaneous in these tests.

In order to assess whether improvement in solubility and dissolution rate results in increased oral absorption and bioavailability animal studies using Sprague-Dawley rats and beagle dogs were performed. For all three compounds there was a significant (2-7 fold) increase in bioavailability after oral administration of the NanoActive™ formulation when compared to administration of the reference compound via the same route. Moreover, maximal blood concentrations were detected earlier following administration (30-45 minutes for the NanoActive™ formulations, 120 minutes for the reference compounds) indicating faster oral absorption of the NanoActive™ formulations.

The obtained in vivo data clearly show that the NanoActive™ technology successfully increase the oral bioavailability of poorly water soluble drugs. Using the new formulations the same therapeutic blood concentrations can be achieved by administering significantly lower drug doses. Furthermore, instantaneous release of the drug from the formulation could result in faster onset of action for compounds where dissolution is the rate limiting step of oral absorption.

### **About NanGenex Inc.**

NanGenex is a proprietary NanoActive™ continuous flow technology platform company based and anchored as a member of the oldest and largest technology corporation network in Hungary which was established more than 25 years ago. It provides breakthrough solutions to develop new generations of NanoActive™ products with significant performance benefits over conventional approaches. The company has a unique platform of proprietary technology solutions encompassing the full R&D and commercialization value chain from upstream research and discovery to full scale product manufacturing and commercialization.

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