



NormOxys Initiates Phase 1 Clinical Trial of Allosteric Effector of Hemoglobin, OXY111A

—Novel Therapeutic Candidate Targets Increased Oxygen Release to Hypoxic Tissues for Treatment of Chronic Heart Failure and Cancer—

Wellesley, MA – May 24, 2010 --NormOxys Inc., a biotechnology company developing a novel class of small molecule drugs which enhance the body's ability to deliver oxygen to diseased tissues, today announced that it has initiated a Phase 1 clinical trial of OXY111A, a novel allosteric modulator of affinity of oxygen to hemoglobin. NormOxys plans to initially develop this compound as a treatment for chronic heart failure and cancer indications. The Phase 1 trial will evaluate OXY111A in healthy volunteers at escalating dose levels.

The randomized, single-blind, ascending dose design will assess the safety, tolerability and pharmacokinetics of single intravenous doses of OXY111A in healthy volunteers. Biomarkers in this study include the measurement of P50, which evaluates the proof of pharmacology by quantifying changes in oxygen affinity produced by OXY111A as well as cardiopulmonary exercise testing to assess clinical improvements in oxygen delivery. Following this study will be safety and efficacy studies in chronic heart failure and oncology indications.

"This move into clinical development validates NormOxys' powerful scientific approach and also demonstrates the significant progress we have achieved within the last year," said Martin Tolar, M.D., Ph.D., chief executive officer of NormOxys. "We plan to initiate additional trials to evaluate the efficacy of OXY111A in chronic heart failure and cancer later this year and we are looking forward to advancing additional candidates within our pipeline."

NormOxys is developing a novel class of small molecule drugs, oxyrens, which enhance the body's ability to deliver oxygen more efficiently to diseased tissues with oxygen deficiency. This new class of drugs can be potentially developed in a broad range of clinical indications where therapeutic benefit can be obtained through an increased, regulated delivery of oxygen to hypoxic tissue, such as chronic heart failure and cancer. OXY111A, NormOxys' lead oxyren drug candidate, has shown in animal studies that it enhances oxygen delivery to hypoxic tissues and successfully inhibits the growth and metastasis of several types of tumors.

"In chronic heart failure patients, OXY111A has tremendous potential to improve clinical outcome both in terms of morbidity and mortality and also improved exercise tolerance and therefore quality of life. This Phase 1 study builds on preclinical cardiovascular studies in which we have shown that OXY111A enhances the exercise capacity of normal mice as well as of mice with severe heart failure caused by dilated cardiomyopathy, and additionally OXY111A attenuates the left ventricular remodeling seen in mice post MI, with no apparent side effects in either model," said David Clark, M.D., Chief Medical Officer, NormOxys. "In this first Phase 1 study in healthy volunteers,

we will evaluate both proof of pharmacology with the P50 biomarker measurement and improvements in exercise capacity with cardiopulmonary exercise testing, in addition to the safety endpoints. Our ability to utilize biomarkers at such an early stage provides us with valuable efficacy signals early in the clinical process to maximize our confidence and enhance our study design for evaluating clinical efficacy of OX111A in subsequent patient studies.”

About OXY111A and Oxyrens

OXY111A is one of a new class of allosteric effectors of hemoglobin, called oxyrens (oxygen release enhancers). Oxyrens are allosteric modulators of the affinity of oxygen to hemoglobin, which permit hemoglobin to release much more than the "normal" 25 percent of their bound oxygen. Because of this increase in oxygen delivery capacity, oxygenation of diseased hypoxic tissues and organs is brought to normal levels. As an oxyren, OXY111A is transported into the red blood cell via a specific transporter, binds irreversibly to hemoglobin, and once in the red blood cell, remains there for the life of the cell.

About NormOxys

NormOxys is developing a novel class of small molecule drugs, oxyrens, which enhance the body's ability to deliver oxygen more efficiently to diseased tissues with oxygen deficiency. This new class of drugs can be potentially developed in a broad range of clinical indications where therapeutic benefit can be obtained through an increased, regulated delivery of oxygen to hypoxic tissues, such as cancer, cardiovascular diseases, anemia, stroke and diabetic retinopathy. The company is based in Wellesley, MA and was founded by Prof. Claude Nicolau, PhD, and Nobel Laureate Prof. Jean-Marie Lehn, PhD, based on their groundbreaking investigations in chemistry and cellular biophysics. To learn more about NormOxys, please visit the Company's website at www.normoxys.com.

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