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## NEWSRELEASE

## NephroGenex Licenses Advancement from Vanderbilt University Covering Pyridoxamine Therapy for Acute Renal Failure

*Cary, N.C. – January 14, 2006 –* NephroGenex, Inc, a privately held drug development company focusing on kidney disease, announced today the signing of a licensing agreement with Vanderbilt University Medical Center covering advancements that provide for the application of pyridoxamine as a potential treatment for acute renal failure (ARF).

NephroGenex has acquired exclusive commercial rights to advances by Dr. Billy Hudson, Dr. Paul Voziyan, and Dr. Alp Ikizler from Vanderbilt University Medical Center's Department of Medicine, that demonstrate pyridoxamine can scavenge 'reactive oxygen species' (ROS) and carbonyl compounds, which have been shown in a study by Dr. Ikizler and his colleagues to be dramatically elevated in ARF patients, and suspected of contributing to the high mortality rates seen in this patient population.

"We were surprised to see such a dramatic increase in oxidative stress-induced reaction products in acute renal failure patients, even when compared to end stage renal disease patients on dialysis" said Dr. Ikizler. "These oxidative reaction products have been thought to play a significant role in the inflammatory response seen in organ failure and other critical care conditions. Our results highlight their potential pathogenic significance in ARF".

Dr. Hudson's laboratory had previously identified pyridoxamine to be a potent inhibitor of advance glycation end-product (AGE) formation, a known pathogenic factor in diabetic nephropathy. Pyridoxamine has been evaluated in two Phase II clinical trials against diabetic nephropathy, demonstrating a significant treatment effect in both studies.

"These pathogenic compounds are also believed to contribute to diabetic microvascular disease", said Dr. Hudson. "The observed inhibitory effects

toward the formation and reactivity of ROS and activated carbonyls noted here could also account for pyridoxamine's effectiveness in slowing the progression of diabetic nephropathy."

"Approximately 100,000 cases of ARF develop in critically-ill patients in the US each year", said Dr. Wesley Fox, President and CEO of NephroGenex. "This constitutes a significant market opportunity for NephroGenex. In addition, if pyridoxamine proves effective against ARF, it may also have application to other types of organ failure syndromes, such as acute respiratory distress syndrome and acute pancreatitis, and in cases of serious tissue/organ injury, where oxidative stress-induced reactive products are also believed to be a significant contributing factor."

## About NephroGenex, Inc.

NephroGenex is a drug development company with a focus on kidney disease. More than 20 million Americans have some form of chronic kidney disease, and over 400,000 in the US have end stage renal disease requiring dialysis, making renal disease one of the costliest illnesses to treat. The Company is developing Pyridorin<sup>™</sup> (pyridoxamine dihydrochloride) as a treatment to slow the progression of diabetic kidney disease. Pyridorin <sup>™</sup> has demonstrated a significant treatment effect in slowing the progression of diabetic nephropathy in two Phase II clinical trials, and has been awarded Fast Track status by the FDA. Pyridorin is currently a leading drug candidate in advanced clinical trials for diabetic kidney disease. NephroGenex has initiated a new Phase IIb clinical trial (PYR-210) that is evaluating the safety and efficacy of Pyridorin in slowing the progression of overt nephropathy in patients with type 2 diabetes. NephroGenex will seek a partner for Phase III development and commercialization.