NephroGenex
Innovative Therapies for Kidney Disease

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NephroGenex Announces Full Enrollment in New Pyridorin™ Clinical Trial – PYR 210

317 diabetic kidney disease patients enrolled in Phase 2b trial

Princeton, N.J. – September 9, 2009 – NephroGenex, Inc., a privately held drug development company focusing on kidney disease, today announced the completion of patient enrollment in its Phase 2b clinical trial (PYR-210) studying the safety and efficacy of its lead drug candidate Pyridorin™ (pyridoxamine dihydrochloride*)* in type 2 diabetic patients with overt diabetic nephropathy. Three hundred and seventeen (317) patients have been randomized.

The study is being conducted by the Collaborative Study Group (CSG) at approximately 65 sites in the United States, Australia and Israel. The CSG is a site management organization of nephrologists that has conducted notable landmark studies in diabetic nephropathy in the past, including studies leading to approval of drugs for this indication.

The trial is evaluating two doses of Pyridorin™ against placebo in approximately 300 patients for a one year treatment period. Recruited type 2 diabetic patients have elevated serum creatinine levels and significant proteinuria. The estimated study completion date is August 2010. Further details of PYR-210 are available at clinicaltrials.gov (Identifier NCT00734253). The design of this trial reflects the company's discussions with the FDA on the use of a surrogate endpoint that would be the basis for approval with subsequent confirmation through results based on hard clinical endpoints.

In previous Phase 2a trials, Pyridorin™ therapy demonstrated a significant treatment effect in slowing the progression of diabetic nephropathy as measured by the change in serum creatinine and serum cystatin C over six months, as well as a reduction in urine TGF_{β}.

Diabetic kidney disease afflicts about 20% of all diabetics and is the major cause of end-stage renal disease (ESRD) which is an enormous drain on healthcare expenditures. Mortality rates of ESRD patients can reach 20% annually. Pyridorin™ has been awarded Fast Track status by the FDA due to the unmet medical need of this life-threatening disease.

About NephroGenex, Inc.

NephroGenex (www.nephrogenex.com) is a drug development company focusing 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™ (pyridoxamine dihydrochloride) as a treatment to slow the progression of diabetic kidney disease. Pyridorin™ has demonstrated a significant treatment effect in slowing the progression of diabetic nephropathy in two Phase IIa clinical trials, and has been awarded Fast Track status by the FDA. Pyridorin™ is one of only a few drug candidates in advanced clinical trials for diabetic kidney disease, and possesses a distinctly new mechanism of action over currently approved treatments.