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Vertex Pharmaceuticals Reports Positive Results from First-in-Human Study for VX-950, an Investigational Oral Protease Inhibitor for the Treatment of Hepatitis C

-Encouraging Results Support Initiation of Phase Ib Clinical Study-

Boston, MA November 1, 2004 -- The investigational hepatitis C virus (HCV) protease inhibitor VX-950 is well-tolerated and has favorable pharmacokinetic properties in healthy volunteers, according to Phase Ia clinical results presented by researchers from Vertex Pharmaceuticals (Nasdaq: VRTX) at the Annual Meeting of the American Association for the Study of Liver Diseases (AASLD) held this week in Boston. Based on the positive results from this study, Vertex is now planning to initiate a Phase Ib clinical trial of VX-950 in healthy volunteers and in patients with chronic hepatitis C virus infection.

"VX-950 is a novel approach to the treatment of chronic hepatitis C that directly targets an enzyme the virus requires for replication," stated John Alam, M.D., Senior Vice President for Drug Evaluation and Approval at Vertex. "We look forward to demonstrating VX-950's clinical activity in a first study in HCV patients, which we expect to initiate in the next several weeks."

VX-950 Results and Clinical Plans

The Phase I study reported today involved healthy volunteers and was placebo-controlled. Researchers assessed safety, tolerability and pharmacokinetics in escalating, single oral doses of VX-950 ranging from 25 mg to 1250 mg. In the study, VX-950 was well-tolerated at all dose levels and was not associated with any serious adverse events. In addition, there did not appear to be an increase in adverse events with increasing dose levels.

Pharmacokinetic assessments showed that VX-950 is orally bioavailable and achieved desired blood concentrations at and above the middle range of the doses tested. Liver exposures to VX-950 were predicted based on integrated preclinical and clinical data. These analyses suggest that average liver concentration values are up to 57-fold above the replicon 90% inhibitory concentration ("IC90") and 113-fold above the 50% inhibitory concentration ("IC50") based on antiviral activity of VX-950 in the replicon assay. The liver is the target organ for antiviral therapies directed against hepatitis C infection.

Based on the encouraging results from this study, Vertex expects to initiate a multi-dose, Phase Ib clinical study with VX-950 in November 2004. The study will be conducted in Europe. This placebo-controlled trial will be designed to evaluate the safety, tolerability, pharmacokinetics and antiviral activity of up to 14 days of dosing with VX-950 in both healthy volunteers and in patients with HCV infection.

Additional VX-950 Preclinical Data Presented by Vertex Researchers at AASLD

In addition to the Phase Ia clinical study results for VX-950 being reported today, Vertex scientists presented or will present the following poster or oral presentations related to the VX-950 research and development program:

- "In Vitro Resistance Mutations Against VX-950 and BILN 2061, Two HCV Protease Inhibitor Clinical Candidates: Single-Resistance, Cross-Resistance, and Fitness"; Poster # 552
- "A Novel Animal Model to Assess HCV NS3-4A Protease Inhibitors Validated Using VX-950 and BILN 2061"; Poster # 546
- "Development of a Hepatitis C Virus (HCV) Infectious Virus Assay"; Poster # 1213
- "Expression of HCV Protease in the Liver of Mice Results in Liver Injury which can be Inhibited by VX-950"; Oral Presentation #266

About VX-950 and Hepatitis C

VX-950 is Vertex's lead oral HCV protease inhibitor and one of the most advanced of a new class of antivirals in development for HCV. Beginning in 1997, Vertex scientists pioneered novel chemistry and virology-based approaches to design oral inhibitors of HCV protease, efforts which contributed to the discovery of VX-950. Preclinical data have shown that VX-950 significantly reduces levels of HCV-RNA in both the replicon system and infectious virus assays within days. Preclinical pharmacokinetic studies completed to date have indicated that VX-950 is orally bioavailable and achieves excellent exposure in the liver, the target organ for HCV treatment. Vertex holds exclusive development and marketing rights to VX-950 worldwide, except for Japan and certain Far East countries where Vertex is collaborating with Mitsubishi Pharma Corporation.

Chronic hepatitis C virus (HCV) infection is a serious public health concern affecting approximately 2.7 million people in the United States. HCV causes inflammation of the liver, which may lead to fibrosis and cirrhosis, liver cancer and ultimately, liver

failure. Cirrhosis of the liver resulting from chronic HCV infection is the leading indication for liver transplantation in the U.S. Due to the asymptomatic nature of HCV infection, it often goes undetected for up to 20 years following initial infection. Worldwide, the disease strikes as many as 185 million people. Each year, 8,000 to 10,000 people in the U.S. die from complications of HCV.

About Vertex

Vertex Pharmaceuticals Incorporated is a global biotechnology company committed to the discovery and development of breakthrough small molecule drugs for serious diseases. The Company's strategy is to commercialize its products both independently and in collaboration with major pharmaceutical partners. Vertex's product pipeline is principally focused on viral diseases, inflammation, autoimmune diseases and cancer. Vertex co-promotes the new HIV protease inhibitor, Lexiva(R), with GlaxoSmithKline.

This press release may contain forward-looking statements, including statements that (i) Phase I clinical results support the initiation of a Phase Ib clinical study in patients with chronic hepatitis C; (ii) a Phase Ib study is expected to commence in November 2004; (iii) adverse events did not increase with increasing dose levels of VX-950; (iv) Vertex looks forward to demonstrating the antiviral activity of VX-950 in patients; and (v) the concentrations of VX-950 observed in the bloodstream of healthy volunteers increase the likelihood that antiviral activity will be observed in HCV-infected patients. While management makes its best efforts to be accurate in making forward-looking statements, such statements are subject to risks and uncertainties that could cause Vertex's actual results to vary materially. These risks and uncertainties include, among other things, the risks that clinical trials for VX-950 may not proceed as planned due to technical, scientific, supply or patient enrollment issues, that antiviral effects of VX-950 observed in nonclinical studies will not be replicated in a human clinical setting, that the pharmacokinetic results obtained in the initial clinical study will not be replicated in future studies, that observed bloodstream concentrations of VX-950 will not produce expected antiviral activity, and other risks listed under Risk Factors in Vertex's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 15, 2004 and amended on September 8, 2004.

Lexiva(R) is a registered trademark of the GlaxoSmithKline group of companies.

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