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IDENIX PHARMACEUTICALS ANNOUNCES COMPLETION OF PROOF-OF-CONCEPT STUDY FOR IDX899 IN TREATMENT-NAÏVE HIV-INFECTED PATIENTS

- 100 mg cohort demonstrates potent antiviral activity and favorable safety profile-

Cambridge, MA – September 4, 2008 - Idenix Pharmaceuticals, Inc. (NASDAQ: IDIX), a biopharmaceutical company engaged in the discovery and development of drugs for the treatment of human viral and other infectious diseases, today announced that it has completed the proof-of-concept study evaluating IDX899, a non-nucleoside reverse transcriptase inhibitor (NNRTI) being developed for the treatment of HIV-1. Data from the study demonstrate that the 100 mg/day cohort achieved a mean plasma viral load reduction of 1.87 $\log_{10}$ after seven days of treatment, similar to the potency observed with the other evaluated doses of 800 mg, 400 mg and 200 mg/day in this study. As with the other cohorts, no treatment-related serious adverse events were reported for any of the patients receiving 100 mg/day of IDX899 and no patients discontinued the study.

"We are pleased that HIV-1-infected patients receiving IDX899 in this trial achieved potent viral suppression at all doses tested," said Douglas Mayers, M.D., Idenix's chief medical officer. "With the promising antiviral activity and safety profile seen to date, especially at low doses, we believe that IDX899 could become an important part of combination antiretroviral therapy."

The phase I/II clinical trial was designed to evaluate the safety, tolerability, antiviral activity and pharmacokinetics of IDX899. Four cohorts of 800 mg/day, 400 mg/day, 200 mg/day and 100 mg/day were completed with ten HIV-1-infected treatment-naïve patients randomized 8:2 in each cohort to receive oral once-daily IDX899 or matching placebo, respectively, for seven days.

Patients (n=32) receiving once-daily oral administration of 800 mg, 400 mg, 200 mg and 100 mg of IDX899 achieved mean viral load reductions of 1.78, 1.78, 1.84 and 1.87 $\log_{10}$, respectively, after seven days of treatment as tested with the Roche Amplicor® 1.5 assay. Patients (n=8) receiving placebo achieved a mean plasma viral load increase of 0.10 $\log_{10}$. As with IDX899-treated patients in the 800 mg, 400 mg and 200 mg cohorts, all patients receiving 100 mg/day of IDX899 showed a consistent response with all patients exhibiting a one log or greater (range: 1.3 – 2.4 $\log_{10}$) reduction in viral load after seven days of treatment. No treatment-related serious or non-serious adverse events were reported and no patients discontinued the study. The most common adverse events observed were dyspepsia, headache and nausea; the rate of these events was similar between IDX899-treated patients and those receiving placebo. Additionally, no patterns in laboratory abnormalities between treatment groups were observed during the treatment period.

Two additional studies were also completed that evaluated the potential for a pharmacokinetic drug-drug interaction between IDX899 and other drugs for the treatment of HIV-1, as well as the safety and tolerability of IDX899 when administered in combination with those drugs. These separate studies were conducted using Reyataz® and Truvada® in combination with IDX899 and concluded that the study drugs were well tolerated and there were no clinically relevant drug-drug interactions.

About Idenix
Idenix Pharmaceuticals, Inc., headquartered in Cambridge, Massachusetts, is a biopharmaceutical company engaged in the discovery and development of drugs for the treatment of human viral and other infectious diseases. Idenix's current focus is on the treatment of infections caused by hepatitis C virus and HIV. For further information about Idenix, please refer to www.idenix.com.

Forward-looking Statements
This press release contains "forward-looking statements" within the meaning of The Private Securities Litigation Reform Act of 1995. Such forward-looking statements can be identified by the use of forward-looking terminology such as "anticipate," "could," "may," "will," or similar expressions, or by express or implied statements with respect to the company's clinical development programs in HIV, or any potential pipeline candidates for the treatment of HIV, including any expressed or implied statement regarding the efficacy and safety of IDX899 and any future clinical trials involving IDX899. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results to be materially different from any future results, performance or achievements expressed or implied by such statements. There can be no guarantees that the company will advance any clinical product candidate or other component of its potential pipeline to the clinic, to the regulatory process or to commercialization. In particular, management's expectations could be affected by unexpected regulatory actions or delays; uncertainties relating to, or unsuccessful results of, pre-clinical studies and/or clinical trials, including additional data relating to the ongoing pre-clinical studies and/or clinical trials evaluating its product candidates, including IDX899; the company's ability to obtain additional funding required to conduct its research, development and commercialization activities; the company's dependence on its collaboration with Novartis Pharma AG; changes in the company's business plan or objectives; the ability of the company to attract and retain qualified personnel; competition in general; and the company's ability to obtain, maintain and enforce patent and other intellectual property protection for its product candidates and its discoveries. These and other risks which may impact management's expectations are described in greater detail under the caption "Risk Factors" in the company's annual report on Form 10-K for the year ended December 31, 2007 and the Quarterly Report on Form 10-Q for the quarter ended June 30, 2008, each as filed with the Securities and Exchange Commission (SEC) and other filings that the company makes with the SEC.

All forward-looking statements reflect the company's expectations only as of the date of this release and should not be relied upon as reflecting the company's views, expectations or beliefs at any date subsequent to the date of this release. Idenix anticipates that subsequent events and developments may cause these views, expectations and beliefs to change. However, while Idenix may elect to update these forward-looking statements at some point in the future, it specifically disclaims any obligation to do so.

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