PREDIX PHARMACEUTICALS HOLDINGS INC
Form 425
April 19, 2006

Filed by EPIX Pharmaceuticals, Inc.
Pursuant to Rule 425 under the Securities Act of 1933, as amended
Subject Company: Predix Pharmaceuticals Holdings, Inc.
Commission File Number: 000-51551

The following communication contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, that are based on current expectations of the companies management. These statements are neither promises nor guarantees, but are subject to a variety of risks and uncertainties, many of which are beyond the control of EPIX Pharmaceuticals, Inc. (EPIX) or Predix Pharmaceuticals Holdings, Inc. (Predix), and which could cause actual results to differ materially from those contemplated in these forward-looking statements. Such forward-looking statements include statements regarding: the belief that PRX-08066 has the potential to meet a significant unmet need among patients suffering from the debilitating effects of pulmonary hypertension; the expectation that, based on the results from the Phase Ib trial, a Phase IIa trial of PRX-08066 in pulmonary hypertension associated with chronic obstructive pulmonary disease will be initiated in the second half of 2006; the belief in the potential for PRX-08066 to provide symptomatic improvement- through selective dilation of diseased pulmonary blood vessels- and to slow disease progression- by inhibiting the thickening of the pulmonary artery vessels; the belief that PRX-08066 is the first 5-HT2B selective antagonist under development for pulmonary hypertension and is selective for pulmonary vessels, showing no effect on systemic blood pressures; the belief that the preliminary results of the Phase Ib trial indicate that in a human model for pulmonary hypertension, PRX-08066 significantly reduces pulmonary artery blood pressure during hypoxic exercise, without affecting systemic blood pressure; the belief that, because of the selectivity PRX-08066 has shown for hypoxia-induced pulmonary hypertension in preclinical and clinical studies, that this 5-HT2B antagonist should lack the systemic blood pressure effects of currently approved therapies for patients with pulmonary hypertension of various types; the results of exploring other potential indications targeting the 5-HT2B receptor such as the treatment of irritable bowel syndrome and other diseases in which this receptor may play a key role; the belief that pulmonary arterial hypertension afflicts nearly 60,000 people in the United States and overall 146,000 in the United States, Europe and Japan and that the global market for pulmonary arterial hypertension drugs will grow to an estimated $1.8 billion in 2010 as more patients are diagnosed and initiated on drug therapy; the expectation that Predix will complete the first of at least two pivotal Phase III clinical trials for generalized anxiety disorder for its lead drug candidate, PRX-00023, in the second half of 2006; and the expectation that PRX-03140 for the treatment of Alzheimer s disease, will enter Phase II trials in 2006. The following factors, among others, could cause actual results to differ materially from those described in the forward-looking statements: costs related to the merger, failure of EPIX s or Predix s stockholders to approve the merger, EPIX s or Predix s inability to satisfy the conditions of the merger, the risk that EPIX s and Predix s businesses will not be integrated successfully, the combined company s inability to further identify, develop and achieve commercial success for new products and technologies, the possibility of delays in the research and development necessary to select drug development candidates and delays in clinical trials, the risk that clinical trials may not result in marketable products, the risk that the combined company may be unable to successfully secure regulatory approval of and market its drug candidates, the risks associated with reliance on outside financing to meet capital requirements,

risks associated with Predix s new and uncertain technology, the development of competing systems, the combined company s ability to protect its proprietary technologies, patent-infringement claims, risks of new, changing and competitive technologies and regulations in the U.S. and internationally. You are urged to consider statements that include the words may, will, would, could, should, believes, estimates, projects, potential, expects, intends, continues, forecast, designed, goal, or the negative of those words or other comparable words to be unce and forward-looking. These factors and others are more fully discussed in EPIX s periodic reports and other filings with the SEC.

EPIX and Predix undertake no obligation and do not intend to update these forward-looking statements to reflect events or circumstances occurring after the date of this communication. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this communication. All forward-looking statements are qualified in their entirety by this cautionary statement.

****

THE FOLLOWING IS THE PRESS RELEASE ISSUED BY PREDIX ON APRIL 19, 2006.

NEWS RELEASE

FOR IMMEDIATE RELEASE

Contact:
Sheryl Seapy, Pure Communications
(949) 608-0841

PREDIX ANNOUNCES PRELIMINARY RESULTS FROM PHASE IB TRIAL OF PRX-08066 IN HYPOXIA-INDUCED PULMONARY HYPERTENSION

Predix Expects to Initiate Phase IIa Trial of PRX-08066 in Pulmonary Hypertension Associated with Chronic Obstructive Pulmonary Disorder in Second Half of 2006

LEXINGTON, Mass., April 19, 2006 Predix Pharmaceuticals, which recently announced a definitive agreement to merge with EPIX Pharmaceuticals (Nasdaq: EPIX), today announced that it has completed a Phase Ib clinical trial to study the pharmacodynamics and tolerability of PRX-08066 in 15 adults conditioned to exercise at high altitudes, with elevated pulmonary artery pressures induced by low oxygen levels (hypoxia). Preliminary results from this trial indicate that treatment with PRX-08066 resulted in a statistically significant reduction in systolic pulmonary blood pressure during exercise hypoxia.

We are very pleased with the preliminary results from this Phase Ib trial of PRX-08066, said Michael G. Kauffman, M.D., Ph.D., president and CEO of Predix. We believe PRX-08066 has the potential to meet a significant unmet need among patients suffering from the debilitating effects of pulmonary hypertension (PH).

Stephen Donahue, M.D., vice president of clinical and regulatory affairs for Predix added, Measuring effects on hypoxia-induced PH is a trial design that has been used by others to evaluate the pulmonary arterial pressure effects of other drugs. Based on the promising results from this Phase Ib trial, we expect to initiate a Phase IIa trial of PRX-08066 in PH associated with chronic obstructive pulmonary disease (COPD), a form of PH with particularly limited treatment options.

Summary of Preliminary Results

This Phase Ib trial explored the effects of PRX-08066 on pulmonary blood pressure during hypoxia challenges in athletic adults who are conditioned to low oxygen pressure environments, such as high altitudes. Because of their conditioning at high altitudes, these volunteers are more able to tolerate increases in pulmonary pressures when challenged with inhalation of hypoxic gas mixtures.

Preliminary results from this Phase Ib trial show that a reduction in the systolic pulmonary blood pressure during resting hypoxia and during exercise hypoxia was observed with PRX-08066 treatment, at a dose level of 200 mg given orally bid (twice daily). This dose level demonstrated a statistically significant, 40% reduction in the hypoxia-induced increase in pulmonary blood pressure compared to placebo during hypoxia exercise.

Trial Design

This Phase Ib trial featured a randomized, double-blind, three-period crossover design, where each subject received drug or placebo twice daily for 3 days in three separate periods, with an interval of approximately 2 weeks between visits. During each dosing day, subjects were challenged with hypoxic conditions for 90 minutes to induce increases in pulmonary blood pressure. The pharmacodynamics of PRX-08066 were characterized by the noninvasive measurement of pulmonary artery blood pressure using an echocardiogram, or heart ultrasound. Ten of the 15 subjects who received at least one dose of study drug completed all phases of the trial and were included in the current analysis.

About PRX-08066

Discovered and designed using its proprietary structure-based drug discovery technology and approach, Predix is developing PRX-08066 to provide both symptomatic improvement through selective dilation of diseased pulmonary blood vessels and to also slow disease progression by inhibiting the thickening of the pulmonary artery vessels. Predix believes PRX-08066 is the first 5-HT2B selective antagonist under development for pulmonary hypertension. The 5-HT2B receptor represents a novel target for the treatment of pulmonary hypertension, as it has been linked to both pulmonary vasoconstriction, as well as the smooth muscle hypertrophy found in pulmonary vessels during pulmonary hypertension of various types. Unlike many commonly used vasodilators, Predix believes that PRX-08066 is selective for pulmonary vessels, showing no effect on systemic blood pressures. PRX-08066 has demonstrated selective pulmonary vasodilation in both acute and chronic animal models of PH, as well as potential disease-modifying effects in *in vitro* biochemical pathway studies. The preliminary results of the Phase Ib trial indicate that in a human model for PH, PRX-08066 significantly reduces pulmonary artery blood pressure during hypoxic exercise, without affecting systemic blood pressure.

Many patients treated for pulmonary hypertension have relatively low systemic blood pressure and do not tolerate multiple drugs with both systemic and pulmonary vasodilatory effects. Because of the selectivity PRX-08066 has shown for hypoxia-induced PH in preclinical and clinical studies, Predix believes that this 5-HT2B antagonist should lack the systemic blood pressure effects of currently approved therapies for patients with pulmonary hypertension of various types. Predix has completed three Phase I clinical trials of PRX-08066 in healthy

volunteers, including this Phase Ib trial in athletes conditioned to exercise at high altitudes with PH that has been induced by breathing a gas with a reduced oxygen level.

Predix is also exploring other potential indications targeting the 5-HT2B receptor such as the treatment of irritable bowel syndrome and other diseases in which this receptor may play a key role.

About PH

High blood pressure in the arteries that supply the lungs is called pulmonary hypertension. There are several types of pulmonary hypertension (PH). Pulmonary arterial hypertension (PAH) is a serious, often fatal cardiovascular disease characterized by elevation of pulmonary artery blood pressure and progressive thickening and narrowing of the blood vessels of the lungs, which can lead to heart failure. Like other heart failure syndromes, symptoms of PAH include fatigue after minimal exertion, dizzy spells, chest pain, shortness of breath and fainting. Predix believes that PAH afflicts nearly 60,000 people in the United States and overall 146,000 in the United States, Europe and Japan. According to *Datamonitor*, the global market for PAH drugs is growing rapidly, from over $800 million in 2005, to an estimated $1.8 billion in 2010, as more patients with PAH are diagnosed and initiated on drug therapy.

Another form of PH is associated with chronic lung diseases such as chronic obstructive pulmonary disease (COPD). According to *Datamonitor*, PH is estimated to be present in approximately 15-20% of patients who have COPD, a progressive lung disease affecting nearly 30 million people worldwide which is characterized by airflow obstruction that interferes with normal breathing and impairs the ability to exercise and perform daily activities. There are currently no approved drugs for the treatment of PH associated with COPD.

About Predix Pharmaceuticals Holdings, Inc. Predix Pharmaceuticals Holdings, Inc., based in Lexington, MA is a pharmaceutical company focused on the discovery and development of novel, highly selective, small-molecule drugs that target G-Protein Coupled Receptors (GPCRs) and ion channels. Using its proprietary drug discovery technology and approach, Predix has advanced three internally discovered drug candidates into clinical trials and has six additional programs in preclinical development and discovery. Predix is expected to complete the first of at least two pivotal Phase III clinical trials for generalized anxiety disorder for its lead drug candidate, PRX-00023, in the second half of 2006. Predix has two other clinical-stage drug candidates: PRX-03140 for the treatment of Alzheimer s disease, which is expected to enter Phase II trials later this year, and PRX-08066 for the treatment of pulmonary arterial hypertension and pulmonary hypertension associated with chronic obstructive pulmonary disease, which is expected to enter Phase IIa trials in the second half of 2006. Additional information about Predix can be found on the company s website at www.predixpharm.com.

Additional Information About the Merger And Where To Find It

EPIX intends to file a registration statement on Form S-4 with the Securities and Exchange Commission containing a joint proxy statement/prospectus in connection with the proposed merger. Investors and security holders are advised to read the joint proxy statement/prospectus (including any amendments or supplements thereto) regarding the proposed merger when it becomes available because it contains important information about EPIX, Predix and the proposed transaction and other related matters. The joint proxy statement/prospectus will be sent to stockholders of EPIX and Predix seeking their approval of the proposed transaction. Investors and security holders may obtain a free copy of the joint proxy statement/prospectus and any amendments or supplements thereto (when they are available) and other documents filed by EPIX at the Securities and Exchange Commission s web site at www.sec.gov. The joint proxy statement/prospectus and such other documents may also be obtained for free by directing such request to EPIX Pharmaceuticals, Inc. 161 First Street, Cambridge, Massachusetts, Attn: Investor Relations, tel: (617) 250-6000; e-mail: ahedison@epixpharma.com or Predix Pharmaceuticals Holdings, Inc., 4 Maguire Road, Lexington, Massachusetts 02421, Attn: Investor Relations, tel: (781) 372-3260; e-mail: investors@predixpharm.com.

EPIX and Predix and their respective directors, executive officers and other members of management and employees may be deemed to be participants in the solicitation of proxies with respect to the adoption of the merger agreement and the transactions associated with the merger. A description of any interests that EPIX and Predix directors and executive officers have in the merger will be included in the registration statement containing the proxy statement/prospectus that will be filed with the Securities and Exchange Commission and available free of charge as indicated above. Information regarding EPIX s executive officers and directors is also available in EPIX s proxy statement for its 2005 Annual Meeting of Stockholders, which was filed with the Securities and Exchange Commission on April 29, 2005. You can obtain free copies of these documents using the contact information above.

This press release contains forward-looking statements that are based on current expectations of Predix Pharmaceuticals Holdings, Inc., including, but not limited to, statements about: the expected timing, progress and success of our current and anticipated clinical trials and preclinical research programs; the anticipated efficacy of our drug candidates; the expected benefits of our drug candidates over other therapies; and statistical information concerning the markets in which we expect our drug candidates to compete, if approved. These statements are neither promises nor guarantees, but are subject to a variety of risks and uncertainties, many of which are beyond our control, and which could cause actual results to differ materially from those contemplated in these forward-looking statements. Such risks include, among others: the risk that Predix will be unable to consummate the merger with EPIX Pharmaceuticals, Inc.; the risk that the results of early clinical testing will not be predictive of results that will be obtained in larger scale, advanced-stage clinical trials, the possibility of delays in the research and development necessary to select drug development candidates and delays in clinical trials, the risk that clinical trials may not result in marketable products, the risk that Predix may be unable to successfully secure regulatory approval of and market our drug candidates, risks associated with our new and uncertain technology, and risks of new, changing and competitive technologies and regulations in the U.S. and internationally. You are urged to consider statements that include the words may, will, would, could, should, believes, estimates, projects, potential, expects, plans, anticipates, intends, continues, forecast, designed, goal, or the negative of those words or other comparable words to be uncertain and forward-looking. We undertake no obligation and do not intend to update these forward-looking statements to reflect events or circumstances occurring after this press release. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this press release. All forward-looking statements are qualified in their entirety by this cautionary statement.

****

EPIX intends to file a registration statement on Form S-4 with the Securities and Exchange Commission containing a joint proxy statement/prospectus in connection with the proposed merger. Investors and security holders are advised to read the joint proxy statement/prospectus (including any amendments or supplements thereto) regarding the proposed merger when it becomes available because it contains important information about EPIX, Predix and the proposed transaction and other related matters. The joint proxy statement/prospectus will be sent to stockholders of EPIX and Predix seeking their approval of the proposed transaction. Investors and security holders may obtain a free copy of the joint proxy statement/prospectus and any amendments or supplements thereto (when they are available) and other documents filed by EPIX at the Securities and Exchange Commission s web site at www.sec.gov. The joint proxy statement/prospectus and such other documents may also be obtained for free by directing such request to EPIX Pharmaceuticals, Inc. 161 First Street, Cambridge, Massachusetts, Attn: Investor Relations, tel: (617) 250-6000; e-mail: ahedison@epixpharma.com or Predix Pharmaceuticals Holdings, Inc., 4 Maguire Road, Lexington, Massachusetts 02421, Attn: Investor Relations, tel: (781) 372-3260; e-mail: investors@predixpharm.com.

EPIX and Predix and their respective directors, executive officers and other members of management and employees may be deemed to be participants in the solicitation of proxies with respect to the adoption of the merger agreement and the transactions associated with the merger. A description of any interests that EPIX and Predix directors and executive officers have in the merger will be included in the registration statement containing the joint proxy statement/prospectus that will be filed with the Securities and Exchange Commission and available free of charge as indicated above. Information regarding EPIX s executive officers and directors is also available in EPIX s proxy statement for its 2005 Annual Meeting of Stockholders, which was filed with the Securities and Exchange Commission on April 29, 2005. You can obtain free copies of these documents using the contact information above.