UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 8-K

Current Report

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): October 1, 2006

A.P. Pharma, Inc.

-----(Exact name of registrant as specified in its charter)

000-16109

(Commission File Number)

Delaware

94-2875566 ----------(State or other jurisdiction (I.R.S. Employer of incorporation) Identification No.)

> 123 Saginaw Drive Redwood City, CA 94063

(Address of principal executive offices, with zip code)

(650) 366-2626

-----(Registrant's telephone number, including area code)

N/A

-----(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the 1 Г Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the 1 Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) 1 under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) Γ] under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01 Entry into a material Definitive Agreement

On October 1, 2006, the Company and RHEI Pharmaceuticals, Inc. (RHEI) issued a joint press release announcing that the Company had granted exclusive license to RHEI to develop and sell APF530 in Greater China (as defined in the release). APF530 is currently in Phase 3 trials in the United States for the prevention of acute and delayed chemotherapy induced nausea and vomiting. The text of the press release is attached hereto as Exhibit 99.1.

The agreement calls for an up front payment to the Company and includes provisions for milestone payments and double digit percentage royalties on future net sales. Specific license terms were not disclosed.

Item 9.01 Financial Statements and Exhibits. (c) Exhibits Exhibit 99.1 Press release dated October 1, 2006

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

A.P. PHARMA, INC.

Date: October 3, 2006 Stephen C. Whiteford Vice President, Finance and Chief Financial Officer Exhibit 99.1

A.P. Pharma Logo

News Release

A.P. PHARMA LICENSES APF530 TO RHEI PHARMACEUTICALS FOR DEVELOPMENT IN GREATER CHINA

REDWOOD CITY, Calif. and NEW HAVEN, Conn. (October 2, 2006) - A.P. Pharma, Inc. (NASDAQ: APPA) and RHEI Pharmaceuticals, Inc. today announced that A.P. Pharma has granted an exclusive license to RHEI Pharmaceuticals to develop and sell APF530 in Greater China, which for the purposes of this agreement includes China, Taiwan, Hong Kong and Macau. APF530 is currently in Phase 3 trials in the U.S. for the prevention of acute and delayed chemotherapy-induced nausea and vomiting.

While specific license terms were not disclosed, the agreement calls for an upfront payment to A.P. Pharma, and includes provisions for milestone payments and double digit percentage royalties on future net sales.

"We are delighted to enter into our first international licensing agreement for APF530 as part of our ongoing strategy for regional partnerships with specialty pharmaceutical companies which are being actively pursued. We are encouraged by RHEI Pharmaceuticals' track record of developing and marketing a number of cancer-related products in Greater China," said Michael O'Connell, chief executive officer of A.P. Pharma. "RHEI provides the key factors to make APF530 a success in that region, including regulatory and marketing expertise combined with an experienced sales network with access to extensive hospital coverage."

Based in New Haven, Conn., RHEI is a specialty pharmaceutical company that acquires, licenses, develops and commercializes therapies in China. RHEI partners with pharmaceutical and biotech companies to expedite global development timelines and extend market entry to China and Asia.

"The development of oncology compounds is one of the core competencies at RHEI," said Dr. Sylvia He, chief executive officer of RHEI Pharmaceuticals. "As the incidence of cancer continues to grow in China, the use of chemotherapy agents also continues to rise. Therefore, we believe APF530 will fulfill an important role in cancer patient management."

About APF530

APF530, which contains the 5HT3 antagonist anti-nausea drug granisetron formulated with the Company's proprietary Biochronomer(TM) bioerodible drug delivery system, is being developed for the prevention of acute and delayed chemotherapyinduced nausea and vomiting (CINV) in patients undergoing either moderately or highly emetogenic chemotherapy. No other 5HT3 antagonist is currently approved for the prevention of both acute and delayed CINV for both moderately and highly emetogenic chemotherapy.

About A.P. Pharma

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A.P. Pharma is a specialty pharmaceutical company focused on the development of ethical (prescription) pharmaceuticals utilizing its proprietary polymer-based drug delivery systems. The Company's primary focus is the development and commercialization of its bioerodible injectable and implantable systems under the trade name Biochronomer. Initial target areas of application for the Company's drug delivery technology include anti-nausea, pain management, antiinflammation and DNA/RNAi applications. For further information visit the Company's web site at www.appharma.com.

About RHEI Pharmaceuticals

RHEI Pharmaceuticals is a venture backed specialty pharmaceutical company with operations in the U.S. and in China that acquires, licenses, develops and commercializes in China proprietary drug therapies based upon the unmet needs of the emerging China pharmaceuticals market. RHEI leverages its proprietary and extensive network of experienced clinical development and regulatory professionals in China to expedite approvals for pharmaceuticals new to the China market. RHEI's growing sales and marketing capabilities then provide broad patient access in China to these new and critically necessary therapeutics. RHEI specializes in hospitalbased proprietary products with a therapeutic focus on urgent unmet needs in the areas of cancer, cardiovascular disease, neurology, pulmonary disease, pain, anti-infective, anti-viral, and other life threatening conditions.

Forward-looking Statements

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Except for historical information, this news release contains certain forward-looking statements that involve risks and uncertainties including, among others, uncertainty associated with timely development, approval, launch and acceptance of new products, satisfactory completion of clinical studies, establishment of new corporate alliances, progress in research and development programs, and the ability of RHEI Pharmaceuticals to develop APF530 in Greater China. Other risks and uncertainties associated with the Company's business and prospects are identified in the Company's filings with the Securities and Exchange Commission. The Company does not intend to revise these forward-looking statements to reflect events or circumstances occurring in the future.

Contact Information

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For RHEI Pharmaceuticals: Scott B. Kozak Vice President, Commercial Operations 1-203-624-RHEI (7434)

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