APF530 Thorough QT Study Showed No Effect on Cardiac Repolarization

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Results to Be Included in APF530 New Drug Application Resubmission Targeted for Mid-2012

REDWOOD CITY, CA, Mar 26, 2012 (MARKETWIRE via COMTEX) --A.P. Pharma, Inc. (OTCBB: APPA) today announced results of its thorough QT (tQT) study of APF530, its lead product candidate being developed for the prevention of both acute- and delayed-onset chemotherapy-induced nausea and vomiting (CINV). The study was conducted to assess the potential for granisetron, the active drug in APF530, to prolong the QT interval across a wide range of plasma drug concentrations. The study met its protocol-specified primary end point and demonstrated that granisetron did not have an effect on cardiac repolarization as measured by prolongation of the QT interval. A pharmacokinetic/pharmacodynamic (PK/PD) analysis demonstrated that there was no relationship between plasma granisetron concentrations and the heart-rate-corrected QT interval (QTc) (slope of zero).

"We are very pleased with the results of this tQT study, especially in light of the concerns over cardiac safety recently raised around other agents used to prevent CINV from the 5-HT3 receptor antagonist class," said John B. Whelan, A.P. Pharma's president and chief executive officer. "If approved, we believe that APF530 could represent an important therapeutic option for the many cancer patients suffering from CINV due to its long-lasting efficacy and, now, its favorable cardiac safety profile. We look forward to including these results in our APF530 New Drug Application resubmission targeted for mid-2012."

Study Details

The tQT study was a randomized, double-blind, placebo-controlled, four-way, crossover trial in 56 healthy adults that compared the effects of (1) APF530 at twice its proposed therapeutic dose, (2) intravenous granisetron at five times its therapeutic dose, (3) oral moxifloxacin (400 mg), and (4) placebo on the surface electrocardiogram with primary focus on the QT interval. The primary end point was to determine that granisetron had no clinically meaningful effect on QTc, defined as the upper bound of the one-sided 95% confidence interval for placebo-adjusted, baseline-subtracted QTc being less than 10 milliseconds at all time points. The primary end point was met irrespective of heart-rate correction methodology (QTcF, QTcI, QTcB). Moxifloxacin, the study's positive control, demonstrated QTc prolongation consistent with previous clinical experience.

The QT interval represents the amount of time the heart's electrical system takes to repolarize after each beat. Prolongation of the QT interval may increase the risk of fatal cardiac tachyarrhythmias. As such, the FDA requires a tQT study, which examines a drug's potential to prolong the QT interval, for most drugs in development. Moxifloxacin, a drug known to prolong the QT interval, is a standard positive control used in tQT studies.

About APF530

A.P. Pharma's lead product, APF530, is in development for the prevention of both acute-onset and delayed-onset chemotherapy-induced nausea and vomiting (CINV). APF530 contains the 5-HT3 receptor antagonist, granisetron, formulated in the Company's proprietary Biochronomer(TM) drug delivery system, which allows therapeutic drug levels to be maintained for five days with a single subcutaneous injection. Intravenous and oral formulations containing granisetron are approved for the prevention of acute-onset CINV, but not delayed-onset CINV. Granisetron was selected because it is widely prescribed by physicians based on a well-established record of safety and efficacy.

About A.P. Pharma

A.P. Pharma is a specialty pharmaceutical company developing products using its proprietary Biochronomer(TM) polymer-based drug delivery technology. The Company's primary focus is on its lead product, APF530, for the prevention of CINV. A.P. Pharma received a Complete Response Letter on the APF530 NDA and is targeting the resubmission of the NDA for mid-2012. The Company has additional research and development programs that utilize its bioerodible, injectable and implantable delivery systems. For further information, please visit the Company's web site at www.appharma.com.

Forward-looking Statements

This news release contains "forward-looking statements" as defined by the Private Securities Litigation Reform Act of 1995. These forward-looking statements involve risks and uncertainties, including uncertainties associated with capital resources and liquidity, timely development and regulatory approval of product candidates, satisfactory completion of clinical studies, progress in research and development programs, launch and acceptance of new products and other risks and uncertainties identified in the Company's filings with the Securities and Exchange Commission. We caution investors that forward-looking statements reflect our analysis only on their stated date. We do not intend to update them except as required by law.

Editor's Note: A.P. Pharma today announced two additional press releases, which can be accessed on the Company's website at www.appharma.com. These releases included:

-- A.P. Pharma Announces Fourth Quarter and Full Year 2011 Financial Results and Provides Update on APF530
-- A.P. Pharma Appoints Thomas Ottoboni, Ph.D. as Vice President of

Pharmaceutical Development

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