Phathom Pharmaceuticals Completes Patient Enrollment in Phase 3 PHALCON-NERD-301 Daily Dosing Trial of Vonoprazan in Non-Erosive Gastroesophageal Reflux Disease (NERD)

October 24, 2022

- A total of 776 patients with symptomatic NERD have been enrolled and randomized in the multisite trial across the U.S.
- Topline data for the primary endpoint is expected in Q1 2023 with full trial results available in late-2023
- NERD is the largest subcategory of gastroesophageal reflux disease (GERD) and affects an estimated 45 million people in the U.S.

FLORHAM PARK, N.J., Oct. 24, 2022 (GLOBE NEWSWIRE) -- Phathom Pharmaceuticals, Inc. (Nasdaq: PHAT), a biopharmaceutical company focused on developing and commercializing novel treatments for gastrointestinal diseases and disorders, today announced it has completed enrollment in its PHALCON-NERD Daily Dosing Phase 3 trial of vonoprazan in non-erosive gastroesophageal reflux disease (NERD). Vonoprazan is an investigational first-in-class potassium-competitive acid blocker (PCAB) from a novel class of medicines that block acid secretion in the stomach. The Company expects to share topline data from the primary endpoint in the first quarter of 2023 and full results from the study in late 2023.

If successful, Phathom believes that the trial will form the basis of a supplemental New Drug Application (sNDA) for vonoprazan as once daily therapy for the treatment of symptomatic NERD in adults in 2023.

NERD is the largest subcategory of gastroesophageal reflux disease (GERD) and is characterized by reflux-related symptoms in the absence of esophageal mucosal erosions. There are estimated to be over 65 million individuals with GERD in the U.S., and it is estimated that seventy percent (70%) of this population have NERD.

The primary endpoint of the double-blind Phase 3 PHALCON-NERD-301 study is evaluating the efficacy of vonoprazan 10 mg and 20 mg as a daily dosing (QD) treatment, as compared to placebo (QD), in the relief of heartburn over four weeks in participants with symptomatic NERD. The trial also includes a unique blinded 20-week long-term extension period to further evaluate the safety and efficacy of both doses of vonoprazan after six months.

“NERD is a highly prevalent acid-related disorder that impacts the overall quality of life of millions of people and can present painful and chronic symptoms including episodic heartburn and chest pain,” said Azmi Nabulsi, M.D., Chief Operating Officer at Phathom. “We are pleased to have marked another milestone with the completion of enrollment in our Phase 3 daily dosing trial of vonoprazan in NERD, bringing Phathom another step closer to provide a much-needed novel therapy for a disease that has not seen a new class of therapeutics introduced in the U.S. in over 30 years. We look forward to sharing the topline results in the first quarter of 2023.”

Phathom is also currently in discussions with FDA on a second Phase 3 trial design to support the novel dosing regimen for vonoprazan as an on-demand or “as needed” treatment for episodic heartburn relief in patients with NERD, a dosing treatment regimen not approved in the U.S. for proton pump inhibitors (PPIs).

About Phathom Pharmaceuticals, Inc.

Phathom Pharmaceuticals is a biopharmaceutical company focused on the development and commercialization of novel treatments for gastrointestinal diseases and disorders. Phathom has in-licensed the exclusive rights in the United States, Europe, and Canada to vonoprazan, a first-in-class potassium-competitive acid blocker (PCAB). Vonoprazan-based regimens are approved in the U.S. as part of a co-packaged product in combination with antibiotics for the treatment of *H. pylori* infection in adults, marketed as VOQUEZNA™ TRIPLE PAK™ (vonoprazan, amoxicillin, clarithromycin) and VOQUEZNA™ DUAL PAK™ (vonoprazan, amoxicillin). Phathom has a New Drug Application under review by the FDA for vonoprazan in erosive esophagitis (EE) and is studying the use of vonoprazan for the treatment of non-erosive reflux disease (NERD). For more information about Phathom, visit the Company’s website at www.phathompharma.com and follow the Company on LinkedIn and Twitter.

About Non-Erosive Gastroesophageal Reflux Disease (NERD)

NERD is the largest subcategory of gastroesophageal reflux disease (GERD) and is characterized by reflux-related symptoms in the absence of esophageal mucosal erosions.[1,2] There are estimated to be over 65 million individuals with GERD in the U.S., and it is estimated that seventy percent (70%) of this population have NERD.[2] Symptoms of NERD impact overall quality of life and can include episodic heartburn, especially at night, regurgitation, problems swallowing, and chest pain.[3,4]

INDICATIONS AND USAGE

VOQUEZNA™ TRIPLE PAK™ is a co-packaged product containing vonoprazan, a potassium-competitive acid blocker (PCAB), amoxicillin, a penicillin-class antibacterial, and clarithromycin, a macrolide antimicrobial. VOQUEZNA™ DUAL PAK™ is a co-packaged product containing vonoprazan and amoxicillin. Both products are indicated for the treatment of *Helicobacter pylori* infection in adults.

To reduce the development of drug-resistant bacteria and maintain the effectiveness of VOQUEZNA TRIPLE PAK, VOQUEZNA DUAL PAK, and other antibacterial drugs, both products should be used only to treat or prevent infections that are proven or strongly suspected of being caused by bacteria.

IMPORTANT SAFETY INFORMATION

CONTRAINDICATIONS
VOQUEZNA TRIPLE PAK and VOQUEZNA DUAL PAK are contraindicated in patients with known hypersensitivity to vonoprazan or amoxicillin, any other components of the formulation, any other beta-lactams, or in patients receiving rilpivirine-containing products.

Due to the clarithromycin component, VOQUEZNA TRIPLE PAK is also contraindicated in patients with any known hypersensitivity to clarithromycin or any macrolide antibiotic, in patients receiving pimozide, lomitapide, lovastatin, simvastatin, ergotamine, dihydroergotamine, colchicine in patients with renal or hepatic impairment, or those with a history of cholestatic jaundice/hepatic dysfunction.

WARNINGS AND PRECAUTIONS
Hypersensitivity Reactions: Serious and occasionally fatal reactions (e.g., anaphylaxis) have been reported with components of VOQUEZNA TRIPLE PAK and VOQUEZNA DUAL PAK. If hypersensitivity reactions occur, discontinue use and institute immediate therapy (e.g., anaphylaxis management).

Severe Cutaneous Adverse Reactions (SCAR): Discontinue use of VOQUEZNA TRIPLE PAK or VOQUEZNA DUAL PAK at first signs or symptoms of SCAR or other signs of hypersensitivity and consider further evaluation. SCAR, including Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) have been reported with the components of both products. In addition, drug reaction with eosinophilia and systemic symptoms (DRESS), and acute generalized exanthematous pustulosis (AGEP) have been reported with amoxicillin and clarithromycin.

***Clostridioides difficile*-associated diarrhea (CDAD):** Evaluate if diarrhea occurs with VOQUEZNA TRIPLE PAK or VOQUEZNA DUAL PAK. CDAD has been reported with use of acid suppressing therapies and nearly all antibacterial agents, and may range in severity from mild diarrhea to fatal colitis. If CDAD is confirmed, discontinue therapy and treat appropriately.

Rash in Patients with Mononucleosis: A high percentage of patients with mononucleosis who receive amoxicillin (a component of VOQUEZNA TRIPLE PAK and VOQUEZNA DUAL PAK) develop an erythematous skin rash. Avoid use of both products in patients with mononucleosis.

Interactions with Diagnostic Investigations for Neuroendocrine Tumors: Serum chromogranin A (CgA) levels increase secondary to drug-induced decreases in gastric acidity. The increased CgA level may cause false positive results in diagnostic investigations for neuroendocrine tumors. Assess CgA levels at least 14 days after VOQUEZNA TRIPLE PAK and VOQUEZNA DUAL PAK treatment and consider repeating the test if initial CgA levels are high.

VOQUEZNA TRIPLE PAK Warnings or Precautions Due to the Clarithromycin Component:
QT Prolongation: Avoid VOQUEZNA TRIPLE PAK in patients with known QT prolongation or receiving drugs known to prolong the QT interval, ventricular arrhythmia (*torsades de pointes*), hypokalemia/hypomagnesemia, significant bradycardia, or taking Class IA or III antiarrhythmics.

Hepatotoxicity: Discontinue use of VOQUEZNA TRIPLE PAK if signs and symptoms of hepatitis occur.

Serious adverse reactions due to concomitant use with other drugs: Serious adverse reactions can occur with VOQUEZNA TRIPLE PAK due to drug interactions of clarithromycin with colchicine, some lipid lowering agents, some calcium channel blockers, hypoglycemic agents including insulin, quetiapine, warfarin, benzodiazepines, and other drugs.

Embryo-Fetal Toxicity: VOQUEZNA TRIPLE PAK is not recommended for use in pregnancy as clarithromycin may cause fetal harm.

Myasthenia Gravis: Exacerbation of myasthenia gravis can occur with VOQUEZNA TRIPLE PAK since it has been reported in patients receiving clarithromycin tablets.

ADVERSE REACTIONS
VOQUEZNA TRIPLE PAK: The most common adverse reactions (≥2%) include dysgeusia (4.6%), diarrhea (4.0%), vulvovaginal candidiasis (3.2%), headache (2.6%), abdominal pain (2.3%), and hypertension (2.0%).

VOQUEZNA DUAL PAK: The most common adverse reactions (≥2%) include diarrhea (5.2%), abdominal pain (2.6%), vulvovaginal candidiasis (2.0%), and nasopharyngitis (2.0%).

DRUG INTERACTIONS
Components of VOQUEZNA TRIPLE PAK and VOQUEZNA DUAL PAK have the potential for clinically important drug interactions. See full Prescribing Information for important drug interactions.

USE IN SPECIFIC POPULATIONS
Lactation: Breastfeeding not recommended during treatment, but a lactating woman can pump and discard breast milk during treatment and for 2 days after VOQUEZNA TRIPLE PAK and VOQUEZNA DUAL PAK administration.

Geriatrics: VOQUEZNA TRIPLE PAK increased risk of *torsades de pointes* due to clarithromycin.

Renal and Hepatic Impairment: Avoid use in patients with severe renal impairment and avoid use in patients with moderate to severe hepatic impairment.

You are encouraged to report suspected adverse reactions by contacting Phathom Pharmaceuticals at 1-888-775-PHAT (7428) or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

Please see full Prescribing Information for VOQUEZNA TRIPLE PAK and VOQUEZNA DUAL PAK.

Forward Looking Statements
Phathom cautions you that statements contained in this press release regarding matters that are not historical facts are forward-looking statements. These statements are based on the Company's current beliefs and expectations. Such forward-looking statements include, but are not limited to, statements regarding the expected availability of results from the PHALCON-NERD-301 trial, whether such trial will form the basis for an sNDA for vonoprazan as a once-daily treatment for NERD, and the timing for the submission of such sNDA with the FDA. The inclusion of forward-looking statements should not be regarded as a representation by Phathom that any of its plans will be achieved. Actual results may differ from those set forth in this press release due to the risks and uncertainties inherent in Phathom's business, including, without limitation: the inherent risks of clinical

development of vonoprazan; Phathom's dependence on third parties in connection with product manufacturing, research and preclinical and clinical testing; regulatory developments in the United States and foreign countries; Phathom's ability to successfully launch and commercialize vonoprazan; unexpected adverse side effects or inadequate efficacy of vonoprazan that may limit its development, regulatory approval and/or commercialization, or may result in recalls or product liability claims; Phathom's ability to obtain and maintain intellectual property protection for vonoprazan; Phathom's ability to comply with its license agreement with Takeda; Phathom's ability to maintain undisrupted business operations due to the ongoing impact of the COVID-19 coronavirus, including delaying or otherwise disrupting its clinical trials, manufacturing and supply chain and launch and commercialization efforts; Phathom's ability to achieve and maintain adequate levels of coverage and reimbursement for vonoprazan; Phathom's ability to access additional capital under each of its term loan facility and its revenue interest financing agreement is subject to certain conditions, and other risks described in the Company's prior press releases and the Company's filings with the Securities and Exchange Commission (SEC), including under the heading "Risk Factors" in the Company's Annual Report on Form 10-K and any subsequent filings with the SEC. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof, and Phathom undertakes no obligation to update such statements to reflect events that occur or circumstances that exist after the date hereof. All forward-looking statements are qualified in their entirety by this cautionary statement, which is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

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