



MAP Pharmaceuticals Phase 3 Trial of LEVADEX(TM) Migraine Product Candidate Meets All Four Primary Endpoints

-- Both Rapid and Sustained Pain Relief for up to 48 Hours -- Conference Call to be Held Today at 8:30 a.m. ET -

MOUNTAIN VIEW, Calif., May 26, 2009 /PRNewswire-FirstCall via COMTEX News Network/ -- MAP Pharmaceuticals, Inc. (Nasdaq: MAPP) announced today that the efficacy portion of its first Phase 3 clinical trial evaluating its novel LEVADEX(TM) orally inhaled migraine therapy met all four primary endpoints. Additional endpoints showed that LEVADEX provided rapid and sustained pain relief for up to 48 hours after dosing.

Patients taking LEVADEX therapy (formerly referred to as MAP0004) had statistically significant improvement at two hours compared to patients on placebo for each of the primary endpoints:

- Pain relief: 58.7 percent of patients who received LEVADEX compared with 34.5 percent for placebo ($p < 0.0001$);
- Phonophobia free: 52.9 percent of patients who received LEVADEX compared with 33.8 percent for placebo ($p < 0.0001$);
- Photophobia free: 46.6 percent of patients who received LEVADEX compared with 27.2 percent for placebo ($p < 0.0001$); and
- Nausea free: 67.1 percent of patients who received LEVADEX compared with 58.7 percent for placebo ($p = 0.02$).

A total of 792 patients were included in the primary data analysis as specified in the protocol of the FREEDOM-301 study, which was conducted under a Special Protocol Assessment agreement with the U.S. Food and Drug Administration (FDA). The patient population studied had more severe migraine pain than expected, with 46 percent reporting severe pain and 54 percent reporting moderate pain prior to administration of the study drug.

Results from additional pre-defined analyses include:

- LEVADEX therapy achieved statistically significant onset of pain relief at 30 minutes after dosing ($p = 0.03$);
- While not statistically significant, 50% more of the patients receiving LEVADEX therapy than the patients receiving placebo reported pain relief at 10 minutes;
- LEVADEX therapy achieved statistically significant sustained pain relief from two to 24 hours ($p < 0.0001$), as well as two to 48 hours ($p < 0.0001$, when unadjusted for multiplicity);
- LEVADEX therapy achieved statistically significant pain freedom (pain symptom score = 0) as early as 30 minutes ($p = 0.002$, when unadjusted for multiplicity); and
- LEVADEX therapy achieved sustained pain freedom from two to 24 hours, as well as two to 48 hours ($p < 0.0001$ for both time points, when unadjusted for multiplicity).

There were no drug-related serious adverse events reported in the trial. LEVADEX was well tolerated, with the most common adverse event reported being medication aftertaste at six percent, with two percent of patients receiving placebo also reporting medication aftertaste. The next most common adverse event was nausea at five percent, compared with two percent for placebo. Symptoms or sensitivities typically associated with commonly used triptan migraine treatments, such as chest discomfort (one percent) or chest pain (0 percent), were rare and comparable to placebo. There were no changes in lung function, as measured by spirometry, between the active and placebo groups.

"These results show the potential of LEVADEX to provide both rapid and sustained relief of all migraine symptoms to patients who suffer from migraine," said Sheena Aurora, M.D., a FREEDOM-301 clinical study investigator, director of the Swedish Headache Center and assistant professor of neurology at the University of Washington School of Medicine. "Migraines are painful and can also be incapacitating, and current treatments serve only a minority of migraine sufferers. Patients continue to seek new migraine therapies that offer both fast and long-lasting relief from pain and migraine associated symptoms so that they can resume daily activities as quickly as possible. LEVADEX has the potential to address this unmet need and to be a first-line therapy for migraine."

Migraine is a common, debilitating neurological disorder that affects approximately 30 million people in the United States, according to the National Headache Foundation. Limitations of oral triptans, the class of prescription drugs widely used for migraines, include slow onset of significant pain relief between 45 and 90 minutes, substantial variability in patient response and side effects such as heightened blood pressure.

"We are very pleased with these results and look forward to continuing development of LEVADEX with the goal of bringing this differentiated therapy to the many patients who suffer from the debilitating effects of migraine," said Timothy S. Nelson, president and chief executive officer of MAP Pharmaceuticals. "Market research has shown that migraine patients want medications that can treat all symptoms of their migraine rapidly and that are long-lasting as well as convenient to take. Unlike currently available migraine therapies, we believe that LEVADEX has the potential to address all these patient needs and to offer a significant advancement in migraine therapy for this underserved patient population."

"Importantly, LEVADEX showed sustained pain relief for up to two days in this trial with fewer of the side effects generally seen with commonly used migraine treatments. We believe that, if these findings are confirmed in a second Phase 3 trial and LEVADEX is approved for marketing, LEVADEX could offer significant benefit to many of the 30 million migraine sufferers in the U.S., including many who are not helped by currently available migraine medications," said Shashidhar H. Kori, M.D., vice president of clinical development and medical affairs of MAP Pharmaceuticals.

The company plans to present further data from this trial at an upcoming medical conference.

FREEDOM-301 Trial Design

FREEDOM-301 is a multi-center, randomized, double-blind, placebo-controlled Phase 3 trial designed to evaluate the safety and efficacy of LEVADEX as a potential treatment for acute migraine. Primary efficacy measures include pain relief, and being phonophobia, photophobia and nausea free at two hours after dosing. FREEDOM-301, the first Phase 3 study of LEVADEX therapy, was conducted pursuant to a Special Protocol Assessment with the U.S. Food and Drug Administration.

A total of 792 patients (ages 18 to 65) were included in the modified intent to treat population used for primary data analysis, as specified in the protocol. Patients enrolled in the trial were evaluated for the treatment of a single moderate or severe migraine, and then were given the option to continue in an open label, long-term safety arm. This safety arm is targeting 300 patients for six months and 150 patients for 12 months, and over 500 patients are continuing in this arm of the trial.

About LEVADEX(TM)

LEVADEX orally inhaled migraine therapy is a novel migraine therapy in Phase 3 development. Patients administer LEVADEX themselves using the company's proprietary TEMPO(R) inhaler. LEVADEX has been designed to be differentiated from existing migraine treatments. It is a novel formulation of dihydroergotamine (DHE), a drug used intravenously in clinical settings to effectively and safely treat migraines. Based on clinical results, the company believes that LEVADEX has the potential to provide both fast onset of action and sustained pain relief and other migraine symptom relief in an easy-to-use and non-invasive at-home therapy.

LEVADEX is designed to incorporate the multiple beneficial mechanisms of action that allow DHE to block initiation of migraine, limit pain, reduce inflammation and stop a migraine at any point in the migraine cycle. Based on research to date, including the FREEDOM-301 trial, the company believes the unique pharmacokinetic profile of LEVADEX has the potential to effectively treat migraines, while minimizing the side effects commonly seen with DHE and other currently available medicines.

About Migraine

Common symptoms of migraine include recurrent headaches, nausea, vomiting, photophobia (sensitivity to light) and phonophobia (sensitivity to sound). According to the National Headache Foundation, most migraines last between four and 24 hours, but some last as long as three days. On average, migraine sufferers experience 1.5 migraine attacks monthly, although 25 percent of them experience one or more attacks weekly, according to published studies. Migraine patients report that currently approved drugs do not fully meet their needs due to slow onset of action, short duration of effect, inconsistent response and unacceptable side effect profiles. The economic burden of migraine remains substantial despite existing

treatments, with the direct and indirect costs of migraine in the United States estimated at over \$20 billion annually.

Conference Call

MAP Pharmaceuticals will host a conference call at 8:30 a.m. ET today to discuss the results of the FREEDOM-301 study. The conference call will be simultaneously web cast on the Investor Relations section of the company's website at www.mappharma.com. A replay will also be available on the website within 24 hours for at least seven days following the conference call.

Conference call details:

Date: Tuesday, May 26, 2009

Time: 8:30 a.m. ET

Dial-in (U.S.): 877-795-3604

Dial-in (International): 719-325-4769

About MAP Pharmaceuticals

MAP Pharmaceuticals is dedicated to developing and commercializing new therapies for children and adults suffering from conditions that are not adequately treated by currently available medicines. The company has two product candidates in Phase 3 clinical development. Unit Dose Budesonide is being developed in collaboration with AstraZeneca for the potential treatment of asthma in children, and LEVADEX inhaled therapy is being developed for the potential treatment of migraine. In addition, MAP Pharmaceuticals generates new pipeline opportunities by applying its proprietary drug particle and inhalation technologies to enhance the therapeutic benefits of proven drugs, while minimizing risk by capitalizing on their known safety, efficacy and commercialization history.

LEVADEX and TEMPO are trademarks of MAP Pharmaceuticals, Inc.

Forward-Looking Statements

In addition to statements of historical facts or statements of current conditions, this press release contains forward-looking statements, including with respect to MAP Pharmaceuticals' LEVADEX product candidate. The reader is cautioned not to unduly rely on the forward-looking statements contained in this press release. Actual results may differ materially from current expectations based on risks and uncertainties affecting the company's business, including, without limitation, risks and uncertainties relating to the following: the conduct and completion of clinical trials, risks related to the failure to achieve favorable clinical outcomes or to have the company's LEVADEX product candidate approved for commercial use by the U.S. Food and Drug Administration as a first line therapy or at all, as well as risks related to the potential commercialization and market acceptance of the company's LEVADEX product candidate. MAP Pharmaceuticals expressly disclaims any intent or obligation to update these forward-looking statements, except as required by law. Additional information on potential factors that could affect MAP Pharmaceuticals' results and other risks and uncertainties are detailed in its Quarterly Report on Form 10Q, filed with the SEC on May 8, 2009, and available at <http://edgar.sec.gov>.

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