Chiasma Announces Publication of Pivotal Data from the Phase 3 CHIASMA OPTIMAL Clinical Trial in the Journal of Clinical Endocrinology & Metabolism

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NEEDHAM, Mass., Aug. 17, 2020 (GLOBE NEWSWIRE) -- Chiasma, Inc. (NASDAQ: CHMA), a commercial stage biopharmaceutical company utilizing its delivery platform technology to develop oral therapies to reduce the burden of chronic injections for people with rare diseases, today announced the online publication of its CHIASMA OPTIMAL (**O**ctreotide capsules vs. **P**lacebo **T**reatment **I**n **M**ultination**AL** centers) Phase 3 clinical trial results in the prestigious endocrinologist-focused *Journal of Clinical Endocrinology & Metabolism*. The publication, entitled, "Maintenance of acromegaly control in patients switching from injectable somatostatin receptor ligands to oral octreotide therapy," was lead authored by Susan Samson, M.D., Ph.D., FRCPC, FACE, who served as principal investigator of the CHIASMA OPTIMAL clinical trial.

"We are honored that the results from our Phase 3 CHIASMA OPTIMAL trial will be published in the *Journal of Clinical Endocrinology & Metabolism*," said William Ludlam, M.D., Ph.D., senior vice president of clinical development and medical affairs at Chiasma. "This publication in a top tier respected journal provides validation in the scientific community of our pivotal study results and the potential benefits MYCAPSSA® could bring to patients with acromegaly. We would like to thank the authors, investigators, staff and, most importantly, patients that participated in this study for their help in bringing a novel, non-injectable oral option to those living with acromegaly."

The CHIASMA OPTIMAL trial (NCT03252353) was a randomized, double-blind, placebo-controlled, nine-month Phase 3 clinical trial to evaluate the efficacy and safety of MYCAPSSA (octreotide) capsules in patients with acromegaly who previously demonstrated biochemical control while receiving injectable somatostatin analogs (SSA), namely octreotide LAR or lanreotide depot. The trial enrolled 56 adult patients whose disease was biochemically controlled by SSA therapy based upon levels of IGF-1, a byproduct of increased growth hormone (GH), caused by acromegaly (average IGF-1 ≤ 1.0 × upper limit of normal (ULN)). Patients were randomized on a 1:1 basis, to MYCAPSSA or placebo. Patients were dose titrated from 40 mg per day (equaling one capsule in the morning and one capsule in the evening) to up to a maximum of 80 mg per day (equaling two capsules in the morning and two capsules in the evening).

Results from the study demonstrated that average IGF-1 levels were within the normal range (0.97 X upper limit of normal (ULN)) for all patients receiving MYCAPSSA at the end of the treatment compared to patients receiving placebo (1.69 X ULN). Growth hormone levels were maintained (< 2.5 ng/mL) in 77.7% of the MYCAPSSA group versus 30.4% in the placebo group (P=0.0007). Patients in the MYCAPSSA group, 75% (21/28) successfully completed the trial after 36 weeks and did not require reversion to prior injectable treatment. Most patients that reverted to injectable SSA re-established their baseline response levels after a single dose of injectable SSA suggesting that, in the clinical setting, those patients who fail to respond on treatment with MYCAPSSA may be able to quickly and safely revert to prior therapy, if necessary. The data from the study demonstrated that MYCAPSSA was well tolerated, and no new or unexpected safety signals were observed.

The full pre-print publication can be accessed at:

https://academic.oup.com/jcem/advance-article/doi/10.1210/clinem/dgaa526/5892992

In June 2020, the U.S. Food and Drug Administration (FDA) approved MYCAPSSA for long-term maintenance treatment in acromegaly patients who have responded to and tolerated treatment with octreotide or lanreotide. MYCAPSSA is the first and only oral somatostatin analog approved by the FDA and the first product approved by the FDA utilizing Chiasma's Transient Permeability Enhancer (TPE®) technology.

About MYCAPSSA
INDICATION AND IMPORTANT SAFETY INFORMATION

INDICATION AND USAGE
MYCAPSSA (octreotide) delayed-release capsules, for oral use, is a somatostatin analog indicated for long-term maintenance treatment in acromegaly patients who have responded to and tolerated treatment with octreotide or lanreotide.

CONTRAINDICATIONS
Hypersensitivity to octreotide or any of the components of MYCAPSSA. Anaphylactoid reactions, including anaphylactic shock, have been reported in patients receiving octreotide.

IMPORTANT SAFETY INFORMATION

Warnings and Precautions
MYCAPSSA can cause problems with the gallbladder. Monitor patients periodically. Discontinue if complications of cholelithiasis are suspected.

Blood sugar, thyroid levels, and vitamin B_{12} levels should be monitored and treated accordingly.

Bradycardia, arrhythmia, or conduction abnormalities may occur. Treatment with drugs that have bradycardia effects may need to be adjusted.

ADVERSE REACTIONS
The most common adverse reactions (incidence >10%) are nausea, diarrhea, headache, arthralgia, asthenia, hyperhidrosis, peripheral swelling, blood glucose increased, vomiting, abdominal discomfort, dyspepsia, sinusitis, and osteoarthritis.

DRUG INTERACTIONS
The following drugs require monitoring and possible dose adjustment when used with MYCAPSSA: cyclosporine, insulin, antidiabetic drugs, calcium channel blockers, beta blockers, lisinopril, digoxin, bromocriptine, and drugs mainly metabolized by CYP3A4. Counsel women to use an alternative

non-hormonal method of contraception or a back-up method when MYCAPSSA is used with combined oral contraceptives.

Patients taking proton pump inhibitors, H2-receptor antagonists, or antacids concomitantly with MYCAPSSA may require increased dosages of MYCAPSSA.

PREGNANCY
Advise premenopausal females of the potential for an unintended pregnancy.

To report SUSPECTED ADVERSE REACTIONS, contact the product information department at 1-844-312-2462 or FDA at 1-800-FDA-1088 or *www.fda.gov/medwatch*

The full Prescribing Information for MYCAPSSA is available at www.MYCAPSSA.com.

About Acromegaly
Acromegaly typically develops when a benign tumor of the pituitary gland produces too much growth hormone, ultimately leading to significant health problems. Common features of acromegaly are facial changes, intense headaches, joint pain, impaired vision and enlargement of the hands, feet, tongue and internal organs. Serious health conditions associated with the progression of acromegaly include type 2 diabetes, hypertension, respiratory disorders and cardiac and cerebrovascular disease. Chiasma estimates that approximately 8,000 adult acromegaly patients are chronically treated with somatostatin analog injections in the United States.

About Chiasma
Chiasma is focused on developing and commercializing oral therapies to improve the lives of patients who face challenges associated with their existing treatments for rare and serious chronic diseases. Employing its Transient Permeability Enhancer (TPE®) technology platform, Chiasma seeks to develop oral medications that are currently available only as injections. On June 26, 2020, Chiasma received FDA approval of MYCAPSSA for long-term maintenance therapy in acromegaly patients who have responded to and tolerated treatment with octreotide or lanreotide. MYCAPSSA is the first and only oral somatostatin analog approved by the FDA. Chiasma is headquartered in Needham, MA with a wholly owned subsidiary in Israel. MYCAPSSA, TPE and CHIASMA are registered trademarks of Chiasma. For more information, please visit the company's website at www.chiasma.com.

Forward-Looking Statements
This release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including, but not limited to, statements regarding the commercial or therapeutic potential of MYCAPSSA and the anticipated market acceptance of MYCAPSSA. Such statements are subject to numerous important factors, risks and uncertainties, many of which are beyond the company's control, that may cause actual events or results to differ materially from the company's current expectations. Management's expectations and, therefore, any forward-looking statements in this press release could be affected by risks and uncertainties relating to a number of factors, including the following: the content and timing of decisions made by the FDA, the timing and costs involved in establishing a commercial organization and the impact the ongoing COVID-19 pandemic may have on the company's business, including its expected development, manufacturing, regulatory and commercialization timelines for MYCAPSSA. For a discussion of these and other risks and uncertainties, and other important factors, any of which could cause the company's actual results to differ from those contained in the forward-looking statements, see the section entitled "Risk Factors" in Chiasma's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, and in subsequent filings with the Securities and Exchange Commission. All information in this press release is as of the date of the release, and Chiasma undertakes no duty to update this information unless required by law.

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