Chiasma Presents Long-Term Safety and Efficacy Data from the Open-Label Extension Study of its CHIASMA OPTIMAL Phase 3 Trial Evaluating MYCAPSSA® in Patients with Acromegaly at ENDO 2021

March 22, 2021

--93% of all patients who enrolled as a responder to MYCAPSSA® maintained their biochemical response at the end of the 48-week open-label extension (OLE) period--

--Safety profile during the OLE was generally consistent with the safety observed in the CHIASMA OPTIMAL trial

NEEDHAM, Mass., March 22, 2021 (GLOBE NEWSWIRE) -- Chiasma, Inc. (NASDAQ: CHMA), ("Chiasma" or the "Company"), a commercial-stage biopharmaceutical company utilizing its delivery platform technology to develop and commercialize oral therapies to improve the lives of patients with rare diseases currently treated with burdensome and painful injections, as evidenced by its recent phased launch of MYCAPSSA® as the first oral therapy for the treatment of acromegaly, today presented long-term safety and efficacy data from the first 48 weeks of the open-label extension (OLE) of the Phase 3 CHIASMA OPTIMAL (**O**ctreotide capsules vs. **P**lacebo **T**reatment **I**n **M**ultination**AL** centers) trial of MYCAPSSA (octreotide capsules) at the Endocrine Society's annual meeting, ENDO 2021, being held virtually March 20-23, 2021.

"These long-term safety and efficacy data demonstrate that MYCAPSSA maintains insulin-like growth factor 1 (IGF-1) levels in patients with acromegaly who previously required monthly injections for their disease," said Susan L. Samson, M.D., Ph.D., FRCPC, FACE, principal investigator of the trial. "The fact that 90% of the patients receiving MYCAPSSA in the CHIASMA OPTIMAL trial elected to enroll in the OLE demonstrates strong patient preference for MYCAPSSA."

Results from the ongoing OLE study show that the average IGF-1 levels of all patients (n=19) treated with MYCAPSSA who completed the double-blind placebo-controlled (DPC) period in the CHIASMA OPTIMAL trial and continued into the OLE were maintained within normal limits at the end of the 48-week OLE period (0.91 at baseline and 0.90 × upper limit of normal (ULN) at week 48). All patients who responded to MYCAPSSA (IGF within normal limits) during the DPC period and enrolled in the OLE (n=14) completed the 48-week period and 93% (13/14) maintained their IGF-1 response within the normal limit at the end of this period. The safety profile of MYCAPSSA observed during the OLE was generally consistent with the safety observed in the CHIASMA OPTIMAL trial with the number of adverse events decreasing over the time of the OLE.

Raj Kannan, Chief Executive Officer of Chiasma, added, "The long-term durability of response seen with the 48-week open label extension study further supports our belief in MYCAPSSA's potential to become the new standard of pharmacological care for patients with acromegaly."

About the CHIASMA OPTIMAL Trial

The CHIASMA OPTIMAL trial was a randomized, double-blind, placebo-controlled, nine-month Phase 3 clinical trial of octreotide capsules that was conducted under a special protocol assessment (SPA) agreement with the FDA. The trial was designed to evaluate the proportion of patients who maintain their biochemical response to MYCAPSSA® (oral octreotide capsules) compared to placebo. The trial enrolled 56 adult acromegaly patients whose disease was biochemically controlled by injectable somatostatin analogs (octreotide or lanreotide) based upon levels of IGF-1, a byproduct of increased growth hormone (GH), levels caused by acromegaly (average IGF-1 ≤ 1.0 × upper limit of normal (ULN)). The patients also had confirmed active acromegaly following their last surgical intervention based upon an elevated IGF-1 at that time of ≥ 1.3 × ULN. Patients were randomized on a 1:1 basis, to octreotide capsules 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). Patients who met the predefined withdrawal criteria, or discontinued from oral treatment for any reason, in either treatment arm during the course of the trial, were considered treatment failures, reverted to their original treatment of injections and monitored for the remainder of the trial. The primary endpoint of the trial was the proportion of patients who maintained their biochemical response at the end of the nine-month, double-blind, placebo-controlled period as measured using the average of the last two IGF-1 levels ≤ 1.0 × ULN (assessed at weeks 34 and 36). Hierarchical secondary endpoints include: proportion of patients who maintain GH response at week 36 compared to screening; time to loss of response: IGF-1 of 2 consecutive visits is > 1.0 × ULN; time to loss of response: IGF-1 of 2 consecutive visits is ≥ 1.3 × ULN; and proportion of patients requiring reversion to prior treatment. As previously announced, CHIASMA OPTIMAL met the primary endpoint and all secondary endpoints.

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 a commercial-stage biopharmaceutical company 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. In June 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, the first and only oral somatostatin analog approved by the FDA, is available for commercial sale. 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 data from the open label extension of the CHIASMA OPTIMAL trial, and statements concerning the commercial or therapeutic potential of MYCAPSSA, including its ability to become a standard of care, 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. 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 Annual Report on Form 10-K for the year ended December 31, 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.

Investor Relations and Corporate Communications:
Ashley Robinson
LifeSci Advisors, LLC
617-430-7577
arr@lifesciadvisors.com

Media Relations:
Patrick Bursey
LifeSci Communications
646-876-4932
pbursey@lifescicomms.com

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