Chiasma Provides Corporate Update and Previews 2020 Milestones

January 10, 2020

MYCAPSSA® NDA resubmitted to FDA; PDUFA decision expected mid-2020

MYCAPSSA® U.S. commercial launch planned for the fourth quarter of 2020

Top-line MYCAPSSA® MPOWERED Phase 3 results on track for the fourth quarter of 2020

NEEDHAM, Mass., Jan. 10, 2020 (GLOBE NEWSWIRE) -- Chiasma, Inc. (NASDAQ: CHMA), a clinical-stage biopharmaceutical company focused on improving the lives of patients with rare and serious chronic diseases, today reviewed its 2019 highlights and previewed its anticipated 2020 corporate milestones.

2019 Key Highlights:

- **MYCAPSSA New Drug Application (NDA) Resubmitted to FDA:** On December 26, Chiasma resubmitted its NDA to the U.S. Food and Drug Administration (FDA) for its investigational octreotide capsules product candidate, MYCAPSSA, for the maintenance treatment of adults with acromegaly. The positive results from the CHIASMA OPTIMAL trial, which was conducted under a Special Protocol Assessment (SPA) agreement with the FDA, support the NDA resubmission. Chiasma expects a six-month review of the NDA resubmission. The NDA resubmission marks an important milestone in the company's effort to bring an oral somatostatin analog to patients.

- **Manufacturing Plans:** Following anticipated NDA approval, and in order to have commercial supply of MYCAPSSA product for launch, Chiasma expects to submit two manufacturing supplements to provide for (i) an additional active pharmaceutical ingredient (API) manufacturer and (ii) an additional commercial-scale manufacturing site affiliated with the API manufacturer currently referenced in the NDA. Chiasma is currently procuring API from both sources in anticipation of NDA approval. Chiasma expects to have adequate product available to support its planned commercial launch in the fourth quarter of 2020, subject to FDA's timely approval of the NDA and either of the manufacturing supplements.

- **CHIASMA OPTIMAL Global Phase 3 Trial for Acromegaly Met the Primary and All Secondary Endpoints:** In July, Chiasma announced that the primary endpoint of the CHIASMA OPTIMAL (**O**ctreotide capsules vs. **P**lacebo **T**reatment **I**n **M**ultination**AL** centers) trial, the proportion of patients biochemically (IGF-1 ≤ 1.0 x ULN) controlled at the end of the trial, was achieved. Additionally, all four secondary endpoints were met. The CHIASMA OPTIMAL trial was conducted under an SPA agreement with the FDA and evaluated MYCAPSSA for the maintenance treatment of adults with acromegaly.

- **Three Posters Presented at ENDO 2019 Highlighted Significant Unmet Needs in U.S. Acromegaly Patients:** Data presented concluded that patients currently treated on injectable somatostatin analog therapies experience a significant disease burden and treatment dissatisfaction even when biochemically-controlled using existing therapies.

- **MPOWERED Phase 3 Trial Completed Enrollment and Randomization:** The MPOWERED (**M**aintenance of acromegaly **P**atients with **O**ctreotide capsules compared **W**ith injections – **E**valuation of **RE**sponse **D**urability) trial, designed to support approval of MYCAPSSA in the European Union for acromegaly, completed enrollment in June 2019. As of January 2020, the randomization was completed. Responders to the octreotide capsules were randomized per the protocol (IGF-1 < 1.3 x ULN) into the nine-month randomized controlled phase.

- **Chiasma appointed key leaders in medical affairs, market access, patient services and marketing:** Chiasma began its transformation into a commercial-ready organization with the appointment of a commercially-experienced chief executive officer and the addition of experienced leaders in marketing, market access and patient services. Chiasma has also expanded its medical affairs function, including hiring a leader with strategic medical and scientific expertise**.**

"2019 was a successful year for Chiasma, highlighted by the positive results from the Phase 3 CHIASMA OPTIMAL trial and the NDA resubmission," said Raj Kannan, Chief Executive Officer of Chiasma. "Looking ahead, 2020 has the potential to be a transformational year for our company as we focus on executing a successful launch of the first oral somatostatin analog for the treatment of acromegaly."

Anticipated 2020 Milestones and Other Guidance:

- **MYCAPSSA NDA Acceptance**: Chiasma anticipates that within 30 days of its NDA resubmission the FDA will determine whether the NDA is complete and ready for review and provide the review timeline.

- **ENDO 2020 Conference:** Chiasma has been selected to present the CHIASMA OPTIMAL Global Phase 3 results in an oral presentation at the Endo 2020 conference. Additional abstracts have been submitted to the conference which is being held March 28-31, 2020 in San Francisco, CA.

- **Publication of CHIASMA OPTIMAL Phase 3 Results:** Chiasma plans to submit the final results of the CHIASMA OPTIMAL trial to a peer-reviewed journal for expected publication in mid-2020.

- **MYCAPSSA PDUFA Decision:** Chiasma expects a six-month review of the MYCAPSSA NDA resubmission and a PDUFA decision from the FDA in mid-2020.

- **MYCAPSSA U.S. Commercial Launch:** Chiasma plans to launch MYCAPSSA in the United States in the fourth quarter of 2020, pending FDA's timely approval of the NDA and either of the planned manufacturing supplements to the NDA.

- **Top-line MPOWERED Phase 3 Results:** Chiasma expects to report top-line results from the MPOWERED Phase 3 open-label trial of MYCAPSSA in the fourth quarter of 2020.

- **Pipeline Expansion Leveraging Transient Permeability Enhancer (TPE®) Technology**: Chiasma plans to announce its indication and pipeline expansion plans to develop one or more oral therapies targeting rare and serious chronic diseases with unmet needs following the anticipated approval of MYCAPSSA for the maintenance treatment of adults with acromegaly.

- **Cash:** As of December 31, 2019, Chiasma had approximately $92 million in cash, cash equivalents and marketable securities, which is expected to fund its operations, as currently planned, through at least 2020, including key milestones such as the planned FDA approval of MYCAPSSA, the anticipated U.S. commercial launch, and the release of top-line MPOWERED Phase 3 results.

Chiasma management will be available to meet with institutional investors and analysts at the 2020 LifeSci Advisors Corporate Access Event, which is being held from January 13-15, 2020, in San Francisco, CA.

CHIASMA OPTIMAL Trial Design

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 SPA agreement with the FDA. The trial enrolled 56 adult acromegaly patients whose disease was biochemically controlled by injectable somatostatin analogs (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 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 and 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 that are expected to be considered by the FDA in evaluating the totality of evidence for octreotide capsules treatment 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 rescue treatment.

MPOWERED™ Phase 3 Trial

Chiasma is also conducting an international Phase 3 clinical trial under a protocol accepted by the EMA for the company's octreotide capsules product candidate for the maintenance therapy of adult patients with acromegaly. The trial, referred to as MPOWERED, is a global, randomized, open-label and active-controlled, 15-month trial intended to support approval in the European Union. Chiasma completed enrollment of 146 adult acromegaly patients into the trial in June 2019, of which 92 patients who are responders to octreotide capsules per the protocol following a six-month run-in were randomized to either octreotide capsules or injectable somatostatin receptor ligands (octreotide LAR or lanreotide autogel) and are being followed for an additional nine months. The trial is designed to evaluate the proportion of patients who maintain their biochemical response to octreotide capsules and patient-reported outcomes in patients treated with octreotide capsules, compared to patients treated with standard of care injectable somatostatin receptor ligands. Chiasma expects to release top-line data from the MPOWERED Phase 3 clinical trial during the fourth quarter of 2020.

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. We believe that approximately 8,000 adult acromegaly patients are chronically treated with somatostatin analogs in the United States.

About Chiasma

Chiasma is focused on improving 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 July 2019, the company reported positive topline data from its CHIASMA OPTIMAL Phase 3 clinical trial for its octreotide capsules product candidate, conditionally trade named MYCAPSSA, for the maintenance therapy of adult patients with acromegaly in whom prior treatment with somatostatin analogs has been shown to be effective and tolerated. Prior to trial initiation, the company reached agreement with the FDA on the design of the trial through a special protocol assessment. In December 2019, Chiasma resubmitted to the FDA its NDA seeking marketing approval for MYCAPSSA in the United States. 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 company's development of octreotide capsules, conditionally named MYCAPSSA, for the treatment of acromegaly, the data from the CHIASMA OPTIMAL trial and whether the data and the rest of the regulatory submission will support the acceptance by the FDA of the company's NDA resubmission for octreotide capsules as complete and ready for review and ultimately regulatory approval, statements regarding the timing of regulatory review, including the acceptance of the NDA and the company's anticipated eligibility for a six-month PDUFA review cycle, and potential approval, statements concerning the nature of the FDA's review of any such NDA resubmission and whether the data submission will be sufficient to support regulatory approval, statements regarding the company's plan to submit manufacturing supplements for an additional API manufacturer and API manufacturing site following a potential NDA approval and the company's expectations regarding the availability of product supply, statements concerning the timing of potential commercial launch of MYCAPSSA in the United States, statements regarding the release of top-line date from the MPOWERED Phase 3 trial, statements concerning the commercial or therapeutic potential of MYCAPSSA, if approved, statements regarding the company's cash forecasts, including its expected cash and investment balances as of the end of 2019 and that it has sufficient existing cash and investments on hand to fund its operations through key milestones such as the planned FDA approval of MYCAPSSA, the anticipated U.S. commercial launch and the release of top-line MPOWERED Phase 3 data and that its cash and investments balance is sufficient to fund operations as currently planned through at least 2020, and statements concerning future announcements of indication and pipeline expansion plans. 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. For example, there can be no guarantee that the FDA will agree that the NDA resubmission is a complete response to the FDA's April 2016 complete response letter or that MYCAPSSA qualifies for marketing approval in the United States based on the results from the CHIASMA OPTIMAL trial and other information contained in the NDA. Further, there can be no guarantee that, even if the NDA is approved, the company will submit manufacturing supplements to the NDA for an additional API manufacturer and additional API manufacturing site to provide commercial API supply or that the FDA will accept the filing of either supplement or approve such additional API manufacturer or additional API manufacturing site, in each case, in a timely manner or at all. 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, including with respect to the NDA and any manufacturing supplements to the NDA we may submit to the FDA, the results of any inspections of the company's third-party manufacturers, the company's reliance on third parties to manufacture API and commercial octreotide capsules, the company's ability to obtain and retain requisite regulatory approvals for the commercial launch of octreotide capsules in the United States, and the timing and costs involved in establishing a commercial organization. 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, 2018, 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.

Corporate Contact:
Dawn Schottlandt
Vice President, Investor Relations and Corporate Communications
617-928-5208
dawn.schottlandt@chiasmapharma.com

Source: Chiasma, Inc.