Chiasma and Lonza Announce Progression of Oral Octreotide Capsules Development and Definitive Commercial Supply Agreement

- Chiasma recently completed enrollment of its CHIASMA OPTIMAL Phase 3 clinical trial of octreotide capsules, the first potential oral somatostatin analog for the maintenance treatment of acromegaly.
- Chiasma is developing octreotide capsules utilizing the company’s proprietary Transient Permeability Enhancer technology in combination with Lonza’s liquid-filled hard capsule technology.
- Lonza will continue its long-term relationship with Chiasma for the development and anticipated commercial manufacture of encapsulated octreotide at Lonza’s Edinburgh (UK) site.

Waltham, MA (USA) and Basel (CH), 14 May 2019 – Chiasma, Inc. (NASDAQ: CHMA), a clinical-stage biopharmaceutical company focused on improving the lives of patients with rare and serious chronic diseases, and Lonza (SWX:LONN) today announced that the companies have entered into a commercial supply agreement for Chiasma’s oral somatostatin analog candidate, conditionally trade named MYCAPSSA®.

Chiasma is conducting a Phase 3 clinical trial under a Special Protocol Assessment agreement reached with the U.S. Food and Drug Administration for its octreotide capsules product candidate, MYCAPSSA®, for the maintenance therapy of adult patients with acromegaly. If approved, Chiasma believes MYCAPSSA will be the first oral somatostatin analog for the treatment of acromegaly, a disorder that typically develops when a benign tumor of the pituitary gland produces too much growth hormone.

Chiasma and Lonza have signed a manufacturing contract to support the anticipated launch and ongoing commercial supply of MYCAPSSA® at Lonza’s Edinburgh (UK) site. The agreement extends a collaboration between the two companies that has been in place since 2012.

Octreotide acetate is currently only available by injection for patients suffering from acromegaly. MYCAPSSA uses Chiasma’s proprietary Transient Permeability Enhancer technology (TPE®) to produce the octreotide capsules formulation manufactured using Lonza’s liquid-filled hard capsule technology (LFHC). As part of the collaboration, Chiasma and Lonza jointly invested in specialized milling equipment, large-scale LFHC coating equipment and in-house printing capabilities to support the processing, filling, and other manufacturing activities performed by Lonza for MYCAPSSA manufacturing.

“Extending our partnership with Chiasma demonstrates our commitment to supporting innovator companies from early phases through to commercial supply,” said Dr. Christian Dowdeswell, VP and Head of Dosage Forms & Delivery Systems, Lonza Pharma Biotech & Nutrition. “Chiasma’s technology when combined with Lonza’s delivery systems has the potential to improve the treatment options for adult patients with acromegaly.”

The Phase 3 trial, referred to as CHIASMA OPTIMAL (Octreotide capsules vs. Placebo Treatment In MultinationAL centers), is a global, randomized, double-blind, placebo-controlled, nine-month trial. Top-line data is expected during the third quarter of 2019. Assuming positive CHIASMA OPTIMAL data, an NDA submission for MYCAPSSA is expected by year-end 2019.

“We believe MYCAPSSA, if approved, will potentially become a standard of care for the maintenance treatment of adults suffering from acromegaly,” said Mark Fitzpatrick, President and Chief Executive Officer of Chiasma. “Lonza-Edinburgh has been a valuable partner helping us advance this specialized drug product from development through
clinical trial manufacture and to potential commercialization, and we look forward to continuing this mutually beneficial relationship."

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 October 2018, the Company completed enrolment in CHIASMA OPTIMAL, its third 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 a Special Protocol Assessment (SPA) agreement with the FDA on the design of the trial through a Special Protocol Assessment. Chiasma is headquartered in Waltham, 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.

CHIASMA OPTIMAL Phase 3 Trial
The CHIASMA OPTIMAL trial is a randomized, double-blind, placebo-controlled, nine-month clinical trial of octreotide capsules being conducted under a SPA agreement with the FDA. The trial enrolled 56 adult acromegaly patients whose disease was biochemically controlled, based upon levels of IGF-1, by a-by-product of increased growth hormone (GH) levels caused by acromegaly, by injectable somatostatin receptor ligands at baseline (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. The trial was randomized on a 1:1 basis, octreotide capsules versus placebo. Patients are being dose titrated from 40 mg per day to a maximum of 80 mg per day, equaling two capsules in the morning and two capsules in the evening. Patients who meet predefined withdrawal criteria or withdraw from oral treatment in either treatment arm for any reason during the course of the trial will be considered treatment failures; those patients will be offered their original treatment of injections and monitored for the remainder of the trial. The primary endpoint of the trial is the proportion of patients who maintain their biochemical response compared to placebo 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. Chiasma anticipates the release of top-line data from this Phase 3 clinical trial in the third quarter of 2019.

About Lonza
Lonza is an integrated solutions provider that creates value along the Healthcare Continuum®. Through our Pharma Biotech & Nutrition segment and our Specialty Ingredients segment businesses, we harness science and technology to serve markets along this continuum. We focus on creating a healthy environment, promoting a healthier lifestyle and preventing illness through consumers’ preventive healthcare, as well as improving patient healthcare by supporting our customers to deliver innovative medicines that help treat or even cure severe diseases.

Patients and consumers benefit from our ability to transfer our pharma know-how to the healthcare, hygiene and fast-moving consumer goods environment and to the preservation and protection of the world where we live.

Founded in 1897 in the Swiss Alps, Lonza today is a well-respected global company with more than 100 sites and offices and approximately 15,500 full-time employees worldwide at the end of 2018. The company generated sales of CHF 5.5 billion in 2018 with a CORE EBITDA of CHF 1.5 billion. Further information can be found at www.lonza.com.
development of octreotide capsules, conditionally trade-named MYCAPSSA®, for the treatment of acromegaly, the Company’s efforts to potentially obtain regulatory approval in the United States by conducting the Phase 3 CHIASMA OPTIMAL clinical trial under a Special Protocol Assessment, the timing of receipt and announcement of top-line and other clinical data and submission of regulatory filings and anticipated regulatory review and commercial launch timing in the U.S., including the Company’s ability to release top-line data from the CHIASMA OPTIMAL trial in the third quarter of 2019, and if positive, to resubmit the NDA by year-end 2019. Any forward-looking statements in this press release are based on management’s current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. For a discussion of these and other risks and uncertainties, and other important factors, any of which could cause our 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.