

Morphic Presents New Positive MORF-057 Phase 1 Data at UEG Week 2022

October 10, 2022

200 mg BID dose demonstrates receptor saturation and statistically significant increases in key circulating T lymphocyte populations

Lymphocyte changes consistent with approved α4β7 inhibitor

WALTHAM, Mass., Oct. 10, 2022 (GLOBE NEWSWIRE) -- Morphic Therapeutic (Nasdaq: MORF), a biopharmaceutical company developing a new generation of oral integrin therapies for the treatment of serious chronic diseases, today announced the presentation of new phase 1 data from MORF-057 phase 1 studies at the United European Gastroenterology (UEG) Week 2022. These new data describe a 200 mg BID (bis in diem) MORF-057 dose cohort and build upon the previously reported safety and pharmacodynamic data from the MORF-057-101 study. MORF-057 is being developed as an oral α4β7 inhibitor candidate for the treatment of inflammatory bowel disease (IBD) with an initial focus in ulcerative colitis (UC).

"The MORF-057 data presented at UEG Week 2022 reinforce data from previous studies indicating that MORF-057 drives activity consistent with vedolizumab, the biologic α4β7 inhibitor approved the treatment of ulcerative colitis. These new UEG data demonstrate saturating α4β7 receptor occupancy at the 200 mg BID dose and statistically significant changes in key lymphocyte subsets," commented Bruce Rogers, PhD, President of Morphic. "We believe that these data strongly underpin the EMERALD studies in ulcerative colitis, including the ongoing open-label phase 2a study of MORF-057, and may provide additional understanding of the dose-related activity of MORF-057 to be evaluated in the upcoming EMERALD-2 global randomized controlled phase 2b trial."

In the phase 1 study, subjects receiving MORF-057 at 200 mg BID twice daily demonstrated $\alpha4\beta7$ receptor saturation and statistically significant increases in circulating central memory, effector memory T lymphocyte and switched memory B lymphocyte populations compared with placebo. At the 25 mg and 50 mg BID exploratory doses, directionally increasing trends were also observed in key pharmacodynamic measures. No safety signals were observed in the study.

About the MORF-057Phase 1 Study

The MORF-057 phase 1 study was a randomized phase 1 study evaluating the safety, receptor occupancy and other key biomarker changes in healthy volunteers who received 200 mg BID of MORF 057 or placebo over a 14-day period.

About the MORF-057 UEG Week 2022 Poster

Title: Increase In Circulating T and B Lymphocyte Subsets After Treatment with the Potent, Selective, Oral, Small Molecule α4β7 Inhibitor MORF-057 In Healthy Subjects

Presenter: Ali Hussain

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The MORF-057 poster, PO417, is available under the investors tab at morphictx.com

About MORF-057

MORF-057 is currently being evaluated in the EMERALD Phase 2 studies for patients with mild to moderate ulcerative colitis. Morphic is developing MORF-057 as a selective, oral small molecule inhibitor of the $\alpha4\beta7$ integrin for patients with inflammatory bowel disease (IBD). $\alpha4\beta7$ has been clinically validated as a target for the treatment of IBD by the success of the approved injectable antibody therapeutic vedolizumab. MORF-057 is designed to block the interactions between $\alpha4\beta7$ on the surface of lymphocytes and the mucosal endothelial cell ligand MAdCAM-1, substantially reducing lymphocyte migration from the bloodstream into intestinal mucosal tissues and causing inflammation that is associated with IBD.

About Morphic Therapeutic

Morphic Therapeutic is a biopharmaceutical company developing a portfolio of oral integrin therapies for the treatment of serious chronic diseases, including autoimmune, cardiovascular, and metabolic diseases, fibrosis, and cancer. Morphic is also advancing its pipeline and discovery activities in collaborations with Janssen and Schrödinger using its proprietary MInT technology platform which leverages the Company's unique understanding of integrin structure and biology. For more information, visit www.morphictx.com.

Cautionary Note Regarding Forward-Looking Statements

This press release contains "forward-looking" statements within the meaning of the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, and of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, including, but not limited to: the MInT Platform's ability to discover drug candidates, Morphic's plans to develop and commercialize oral small-molecule integrin therapeutics and any proposed timing thereof, the initiation, execution and completion of MORF-057 phase 2 clinical trials, any expectations about safety, efficacy, timing and ability to commence or complete clinical studies and/or trials and to obtain regulatory approvals for MORF-057 and other candidates in development, the timing of further data presentation and the ability of MORF-057 to treat inflammatory bowel disease, including ulcerative colitis, or related indications. Statements including words such as "believe," "plan," "continue," "expect," "will be," "develop," "signal," "potential," "anticipate" or "ongoing" and statements in the future tense are forward-looking statements. These forward-looking statements involve risks and uncertainties, as well as assumptions, which, if they do not fully materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. Forward-looking statements are subject to risks and uncertainties that may cause Morphic's actual activities or results to differ significantly from those expressed in any forward-looking statement, including risks and uncertainties in this press release and other risks set forth in our fillings with the Securities and Exchange Commission, including Morphic's or a partner's ability to complete a current or future clinical trial of any of our current or future product candidates, develop or obtain regulatory approval for or commercialize any product candidate,

Morphic's ability to protect intellectual property, the potential impact of the COVID-19 pandemic, and the sufficiency of our cash, cash equivalents and investments to fund our operations. These forward-looking statements speak only as of the date hereof and Morphic specifically disclaims any obligation to update these forward-looking statements or reasons why actual results might differ, whether as a result of new information, future events or otherwise, except as required by law.

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