Morphic Announces Corporate Highlights and Financial Results for the Full Year 2022

February 23, 2023

-Initiated and completed enrollment for EMERALD-1 phase 2a trial of MORF-057 in ulcerative colitis; topline data expected 2Q23-

-Launched EMERALD-2 phase 2b global randomized trial of MORF-057 in ulcerative colitis-

-Ended 2022 with $348 million in cash and equivalents; ~$100 million from February private placement extends cash runway into second half of 2026

WALTHAM, Mass., Feb. 23, 2023 (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 reported corporate highlights and financial results for the full year 2022.

2022 and Recent Corporate Highlights

EMERALD phase 2 trials of MORF-057 in ulcerative colitis

- Completed enrollment of the EMERALD-1 open-label phase 2a trial of MORF-057 in patients with moderate to severe ulcerative colitis (UC)
  - Study met target enrollment in the third quarter of 2022
  - EMERALD-1 topline results expected in the second quarter of 2023 including primary endpoint (change in Roberts Histopathological Index (RHI)), key secondary measures including modified mayo clinical score (mMCS), safety and pharmacokinetic data
- Initiated EMERALD-2 phase 2b study of MORF-057 in patients with moderate to severe UC
  - EMERALD-2 is a global phase 2b randomized, double-blind, placebo-controlled trial of MORF-057 in patients with moderate-to-severe ulcerative colitis
  - The primary endpoint of EMERALD-2 is clinical remission rate as measured by mMCS at 12 weeks and is expected to report in the first half of 2025

MORF-057 Preclinical and Phase 1 Studies

- Presented new MORF-057 preclinical and clinical data at European Congress for Crohn's and Colitis, the United European Gastroenterology Week, and the American College of Gastroenterology further supporting the ongoing EMERALD phase 2 trials in UC

Integrin Science and Technology

- Celebrated the publication in the scientific journal *Cell* by Albert Lin, PhD and Timothy Springer, PhD, describing critical insights into the function of integrins, a central biologic receptor class, based on conformation changes
  - The discovery made by Drs. Lin and Springer led directly to the foundation of Morphic Therapeutic
  - Dr. Springer is the Latham Family Professor at Harvard Medical School and recipient of the 2022 Lasker Prize for his pioneering work with integrins, and a founder, Director, and SAB member of Morphic
  - Dr. Lin is Executive Director of Biology at Morphic and a founder of Morphic

Morphic Operations

- Strengthened the Morphic team across research, regulatory, clinical, and executive functions
  - Key additions in 2022 included: the appointment of Dr Brihad Abhyankar as Vice President, Clinical Operations. Dr. Abhyankar was recently promoted to Senior Vice President, Clinical Development, the appointment of Joanne Gibbons as Senior Vice President of Regulatory Affairs. Ms. Gibbons was recently promoted to Senior Vice President, Regulatory Affairs and Quality

"Morphic executed well against our corporate objectives in 2022 which has positioned us ideally for a strong 2023, a key year in the clinical development of MORF-057, our oral a4b7 inhibitor in phase 2 studies for UC," commented Praveen Tipirneni, Chief Executive Officer of Morphic. "We are looking forward to the EMERALD-1 readout in the second quarter while advancing our earlier stage pipeline across multiple therapeutic areas including pulmonary hypertensive diseases, myelofibrosis, and beyond."

Financial Results for the Full Year 2022

- Net loss for the year ended December 31, 2022, was $59.0 million or $1.55 per share compared to a net loss of $95.5 million or $2.67 per share for the year ended December 31, 2021.
- Revenue was $70.8 million for the year ended December 31, 2022, compared to $19.8 million for the year ended December 31, 2021. The change was primarily due to recognition of revenue due to the conclusion of the AbbVie collaboration and reduction in the scope of the Janssen collaboration.
- Research and development expenses were $102.1 million for the year ended December 31, 2022, as compared to $87.8 million for the year ended December 31, 2021. The increase was primarily attributable to higher manufacturing and development costs along with clinical trial costs to support our lead product candidate MORF-057.
- General and administrative expenses were $32.1 million for the year ended December 31, 2022, compared to $27.8 million for the year ended December 31, 2021. The increase was due to increased headcount and higher professional and consulting costs associated with ongoing business development activities and Morphic operating as a public company.

As of December 31, 2022, Morphic had cash, cash equivalents and marketable securities of $348.2 million, compared to $408.1 million as of December 31, 2021. In 2022, Morphic raised net proceeds of $39.2 million from the use of our At-The-Market (ATM) facility through its use on a single day in the second quarter. To date in 2023, Morphic has not issued any stock through its ATM facility. On February 13, 2023, the Company entered into a securities purchase agreement pursuant with existing investors for a private placement where the Company agreed to sell and issue 848,655 shares of its common stock at a price of $35.35 per share and pre-funded warrants to purchase 1,980,198 shares of common stock at a purchase price of $35.3499 for an aggregate net proceeds of approximately $100.0 million. We believe that our cash, cash equivalents and marketable securities of $348.2 million as of December 31, 2022, together with the $100.0 million raised in our private issuance of common stock and pre-funded warrants in February 2023, will enable us to fund our operating expenses and capital expenditure requirements into the second half of 2026.

About MORF-057

Morphic is developing MORF-057 as a selective, oral small molecule inhibitor of the α4β7 integrin for patients with inflammatory bowel disease (IBD). α4β7 has been clinically validated as a target for the treatment of IBD by the success of the approved injectable antibody therapeutic vedolizumab. MORF-057, like vedolizumab, is designed to block the interactions between α4β7 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 avoiding inflammation that is associated with IBD.

About the EMERALD-1 Study

EMERALD-1 (MORF-057-201) is an open-label multi-center phase 2a trial designed to evaluate the efficacy, safety, and tolerability of MORF-057 in adults with moderate to severe ulcerative colitis. EMERALD-1 has completed enrollment of the main cohort of 30-35 patients who will be treated with 100 mg BID (twice daily) at sites in the United States and Europe. The primary endpoint of the trial is the change in Robarts Histopathology Index (RHI), a validated instrument that measures histological disease activity in ulcerative colitis at 12 weeks compared to baseline. Patients will then continue for an additional 40 weeks of maintenance therapy followed by a 52-week assessment. Secondary and additional outcome measures in the EMERALD-1 study include change in the modified Mayo clinic score, safety, pharmacokinetic parameters and key pharmacodynamic measures including α4β7 receptor occupancy and lymphocyte subset trafficking.

About the EMERALD-2 Study

EMERALD-2 (MORF-057-202) is a global phase 2b randomized, double-blind, placebo-controlled trial of MORF-057 that is currently enrolling patients with moderate-to-severe ulcerative colitis. The primary endpoint of EMERALD-2 is clinical remission rate as measured by the Modified Mayo Clinic Score (mMCS) at 12 weeks. EMERALD-2 will also measure several secondary and exploratory endpoints based on the mMCS as well as histologic, pharmacokinetic and pharmacodynamic measures, and safety parameters. Patients in the EMERALD-2 study will be randomized to receive either 200 mg BID (twice daily) MORF-057, 100 mg BID MORF-057, a QD (once daily) dose of MORF-057, or a placebo dose. Following the 12-week induction phase, all patients will receive MORF-057 for 40 weeks of maintenance dosing. For more information about the EMERALD clinical trials of MORF-057, please click here.

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 collaboration with 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 the future MORF-057 phase 2 clinical trial, 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 filings 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.

-Financial tables to Follow-

Morphic Holding, Inc.

Condensed Consolidated Statements of Operations

(unaudited)

(in thousands, except share and per share data)

	Year Ended December 31,	
	2022	**2021**
Collaboration revenue	$ 70,808	$ 19,794
Operating expenses:		
Research and development	102,062	87,789
General and administrative	32,142	27,811
Total operating expenses	134,204	115,600
Loss from operations	(63,396)	(95,806)
Other income:		
Interest income, net	4,567	272
Other expense, net	(145)	(8)
Total other income, net	4,422	264
Loss before provision for income taxes	(58,974)	(95,542)
Provision for income taxes	(67)	—
Net loss	$ (59,041)	$ (95,542)
Net loss per share, basic and diluted	$ (1.55)	$ (2.67)
Weighted average common shares outstanding, basic and diluted	38,112,498	35,797,969

Morphic Holding, Inc.

Condensed Consolidated Balance Sheets

(unaudited)

(in thousands)

	December 31, 2022	**December 31, 2021**
Assets		
Cash, cash equivalents and marketable securities	$ 348,248	$ 408,135
Other current assets	13,934	10,199
Total current assets	362,182	418,334
Other assets	6,407	7,956
Total assets	$ 368,589	$ 426,290
Liabilities and Stockholders' Equity		
Current liabilities	$ 17,126	$ 38,264
Long-term liabilities	2,344	51,327
Total liabilities	19,470	89,591
Total stockholders' equity	349,119	336,699
Total liabilities and stockholders' equity	$ 368,589	$ 426,290

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