Biomea Fusion Presents Long-Term Follow-Up Data Showing Improved Glycemic Control after 22 Weeks Off Treatment in Ongoing Phase II Study (COVALENT-111) of BMF-219 in Adults with Type 2 Diabetes in a Poster Presentation at the World Congress Insulin Resistance, Diabetes & Cardiovascular Disease (WCIRDC)

December 8, 2023

BMF-219 is an investigational novel covalent menin inhibitor developed to regenerate insulin-producing beta cells with the aim to cure diabetes

- At Week 26, 22 weeks after the last dose of BMF-219, participants in the 100 mg QD (without food) cohort saw an improved placebo adjusted mean reduction in HbA1c of 0.8% (compared to a 0.7% placebo adjusted mean reduction in HbA1c at Week 4)
- Observed HbA1C reduction was supported by an increase from baseline in placebo adjusted mean HOMA-B (+270%) and in mean stimulated C-peptide AUC (+22%) at Week 26 in responders (defined as HbA1c reduction ≥0.5% at Week 26) with baseline below the HOMA-B upper limit of normal (<200)
- BMF-219 was generally well tolerated; no dose reductions, dose discontinuations, or severe or serious adverse events and no symptomatic or asymptomatic hypoglycemia was observed
- BMF-219 was shown to up-regulate the expression of PbK, a known menin dependent genetic modulator of beta cell replication and improved beta cell function, congruent with an observed increased insulin production and expansion of beta cells in preclinical ex-vivo human islet experiments
- The company will share topline data from the escalation portion of COVALENT-111 including topline updates from the 200 mg dosing cohort at 26 weeks at the conclusion of WCIRDC

REDWOOD CITY, Calif., Dec. 08, 2023 (GLOBE NEWSWIRE) -- Biomea Fusion, Inc. (“Biomea”) (Nasdaq: BMEA), a clinical-stage biopharmaceutical company dedicated to discovering and developing novel covalent small molecules to treat and improve the lives of patients with genetically defined cancers and metabolic diseases, today announced the poster presentation of long-term 26 weeks follow-up data from the first two cohorts of adults with type 2 diabetes (T2D) enrolled in the ongoing Phase II clinical study (COVALENT-111) and data from preclinical ex-vivo human islet experiments of BMF-219, the company’s investigational oral covalent menin inhibitor.

“Our goal with BMF-219 is to create a short-term treatment regimen for patients with diabetes that results in long term glycemic control. With the preclinical data we have published at the WCIRDC here in Los Angeles, we believe we have provided initial proof for menin’s important role in diabetes, as it controls a highly relevant pathway known to reestablish beta cell health and function. We believe we have also shown that our investigational covalent agent, BMF-219, is a very targeted and effective menin inhibitor that has been generally well tolerated in our human studies to date. So far, we have only reported on patients in COVALENT-111 with our first dose of BMF-219 at 100 mg, at our first dose duration of 4 weeks. These early clinical results of improved glycemic control over time while patients are off treatment have been very impressive. Our preclinical data suggests that we should be able to improve them even further with longer dosing durations,” said Thomas Butler, Biomea Fusion’s Chief Executive Officer and Chairman of the Board.

Clinical Update for COVALENT-111 at WCIRDC 2023

40 patients were enrolled in the first three Multiple Ascending Dose (MAD) cohorts of COVALENT-111, with the first cohort (Cohort 1) comprising 16 healthy volunteers (HVs); 12 HVs received 100 mg of BMF-219 once daily (QD) and 4 HVs received placebo QD for two weeks and thereafter followed off treatment for an additional six weeks. In Cohorts 2 and 3, T2D patients (n=12 per cohort with 10 patients treated with 100 mg BMF-219 QD and 2 placebo patients QD) were treated for four weeks with or without food, respectively, and then followed for 22 weeks after treatment. In these two treatment cohorts, enrolled patients had T2D diagnosed within the last 15 years, were between the ages of 18 to 65, had been treated with lifestyle management with up to three standard-of-care anti-diabetic medications, excluding sulfonylureas and insulin, with a stable dosing regimen for at least two months prior to screening, had a BMI ≥25 and ≤40 kg/m^2, and had poorly controlled diabetes (HbA1c ≥7.0% and ≤10%). At baseline, diabetic patients in Cohorts 2 and 3 had a mean HbA1c of 8.0% and 8.1%, respectively.

Efficacy Data

- 26 Week Glycemic Data:
  - At Week 26, 22 weeks after the last dose of BMF-219, participants in 100 mg BMF-219 QD (without food) cohort

saw an improved placebo adjusted mean reduction in HbA1c of 0.8% [As reported in March 2023 at the end of the 4-week dosing period, 0.7% placebo adjusted mean reduction in HbA1c was achieved in 100 mg BMF-219 QD (without food) cohort]; Participants in 100 mg BMF-219 QD (with food) cohort saw an improved placebo adjusted mean reduction in HbA1c of 0.2% at Week 26

- 20% of patients from the 100mg dose cohorts displayed a reduction in HbA1c of 1% or more, compared to 0% of patients for placebo at Week 26
- After only four weeks of dosing and 22 weeks off treatment, participants in BMF-219 100 mg QD without food cohort demonstrated an 80% response rate – with any reduction in HbA1c (40% response rate in 100 mg QD with food cohort)

- 26 Week Pharmacokinetic Data:
  - Cohort 3 resulted in approximately 2.7-fold higher BMF-219 exposure than Cohort 2
  - Higher exposure resulted in greater reduction in HbA1c
- Increase in mean HOMA-B and AUC C-peptide in Responders at Week 26:
  - After 4 weeks of once daily BMF-219, responders (defined as HbA1c reduction ≥0.5% at Week 26) with baseline HOMA-B <200 (upper limit of normal) across both cohorts, achieved a greater increase from baseline in placebo-adjusted HOMA-B (+270%) and stimulated C-peptide AUC (+22%) at Week 26

Safety Data

- Generally well-tolerated with no severe or serious adverse events
- No symptomatic or clinically significant hypoglycemia
- No dose discontinuation or modification

Preclinical Ex-Vivo Human Islet Data:

- BMF-219 was observed to upregulate the expression of key cell-cycle proteins, PbK and CCNA2 (Cyclin A2), in a glucose-dependent fashion. When not sequestered to menin, PbK expression was known to be upregulated by JunD, which is a glucose-sensitive menin binding partner.
- Dependent on dose concentration and also dependent on dose duration, BMF-219 was observed to increase beta cell mass and function, as well as promote controlled proliferation and enhance insulin content in beta cells. Proliferation was observed only under elevated glucose conditions, which mimics diabetic levels, and with continuous drug exposure.

Next Steps and Updates with BMF-219

- BMF-219 in Type 1 and Type 2 Diabetes
  - Complete dose escalation for all dose levels in COVALENT-111
  - Initiate dose expansion portion of COVALENT-111 with longer durations of treatment (for up to 12 weeks) at two dose levels including 100 mg and 200 mg
  - Explore utility of BMF-219 in type 1 diabetes and initiate enrollment of COVALENT-112 trial

COVALENT-111

COVALENT-111 is a multi-site, randomized, double-blind, placebo-controlled Phase I/II study. In the completed Phase I portion of the trial, healthy patients were enrolled in single ascending dose (SAD) cohorts to evaluate safety at the prospective dosing levels for type 2 diabetic patients. Phase II consists of multiple ascending dose (MAD) cohorts and includes adult patients with type 2 diabetes uncontrolled by current therapies. Additional information about the Phase I/II clinical trial of BMF-219 in type 2 diabetes can be found at ClinicalTrials.gov using the identifier NCT05731544.

About Menin's Role in Diabetes

Loss of functional beta cell mass is a core component of the natural history in both types of diabetes — type 1 diabetes (mediated by autoimmune dysfunction) and type 2 diabetes (mediated by metabolic dysfunction). Beta cells are found in the pancreas and are responsible for the synthesis and

secretion of insulin. Insulin is a hormone that helps the body use glucose for energy and helps control blood glucose levels. In patients with diabetes, beta cell mass and function have been observed to be diminished, leading to insufficient insulin secretion and hyperglycemia. Menin is thought to act as a brake on beta-cell turnover and growth, supporting the notion that inhibition of menin could lead to the regeneration of normal, healthy beta cells. Based on these and other scientific findings, Biomea is exploring the potential for BMF-219-mediated menin inhibition as a viable therapeutic approach to potentially halt or reverse progression of type 2 diabetes.

About Type 2 Diabetes

Diabetes is considered a chronic health condition that affects how the body turns food into energy and results in too much sugar in the bloodstream. Over time, this can cause serious health problems and damage vital organs. Most people with diabetes have a shorter life expectancy than people without this disease. The CDC estimates about 2 in 5 of the adult population in the USA are now expected to develop diabetes during their lifetime. More than 37 million people of all ages (about 11% of the US population) have diabetes today. 96 million adults (more than 1 in 3) have pre-diabetes, blood sugars that are higher than normal but not high enough to be classified as diabetes. Diabetes is also one of the largest economic burdens on the United States health care system with $1 out of every $4 in US health care costs being spent on caring for people with diabetes. Despite the current availability of many diabetes medications, there remains a significant need in the treatment and care of patients with diabetes.

About Biomea Fusion

Biomea Fusion is a clinical stage biopharmaceutical company focused on the discovery and development of covalent small molecules to treat patients with genetically defined cancers and metabolic diseases. A covalent small molecule is a synthetic compound that forms a permanent bond to its target protein and offers a number of potential advantages over conventional non-covalent drugs, including greater target selectivity, lower drug exposure, and the ability to drive a deeper, more durable response.

We are utilizing our proprietary FUSION™ System to discover, design and develop a pipeline of next-generation covalent-binding small molecule medicines designed to maximize clinical benefit for patients with various cancers and metabolic diseases, including diabetes. We aim to have an outsized impact on the treatment of disease for the patients we serve. We aim to cure.

Visit us at biomeafusion.com and follow us on LinkedIn, Twitter and Facebook.

Forward-Looking Statements

Statements we make in this press release may include statements which are not historical facts and are considered forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These statements may be identified by words such as "aims," "anticipates," "believes," "could," "estimates," "expects," "forecasts," "goal," "intends," "may," "plans," "possible," "potential," "seeks," "will," and variations of these words or similar expressions that are intended to identify forward-looking statements. Any such statements in this press release that are not statements of historical fact, including statements regarding the clinical and therapeutic potential of our product candidates and development programs, including BMF-219, the potential of BMF-219 as a treatment for type 1 and type 2 diabetes, our research, development and regulatory plans, including our pursuit of BMF-219 in metabolic diseases, our plans to continue the evaluation of BMF-219 for type 2 diabetes in our COVALENT-111 study, the availability of future data from the Phase II portion of the study, our plans to complete dose escalation, identify optimal dose levels, initiate dose expansion, explore longer duration of treatment and additional dosage forms and explore the potential utility of BMF-219 in type 1 diabetes, and the timing of such events, may be deemed to be forward-looking statements. We intend these forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act and Section 21E of the Exchange Act and are making this statement for purposes of complying with those safe harbor provisions.

Any forward-looking statements in this press release are based on our current expectations, estimates and projections only as of the date of this release 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, including the risk that initial results may not be indicative of final results in later clinical trials, we may encounter delays, regulatory challenges or unforeseen and/or adverse results in preclinical or clinical development, we may face difficulties in patient enrollment and in the initiation, conduct and completion of our ongoing and planned clinical trials and other research, development and regulatory activities. These risks concerning Biomea Fusion's business and operations are described in additional detail in its periodic filings with the U.S. Securities and Exchange Commission (the "SEC"), including its most recent periodic report filed with the SEC and subsequent filings thereafter. Biomea Fusion explicitly disclaims any obligation to update any forward-looking statements except to the extent required by law.

Investor Relations Chunyi Zhao, PhD Sr. Manager of Investor Relations & Corporate Development czhao@biomeafusion.com Media Relations Neera Chaudhary, PhD Chief Commercial Officer – Diabetes nchaudhary@biomeafusion.com