Biomea Fusion Presents Preclinical Data Showing Icovamenib (BMF-219) Enhanced Effectiveness of GLP-1-Based Therapies and Introduces BMF-650, a Next-Generation, Oral Small-Molecule GLP-1 Receptor Agonist Candidate

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- Preclinical data from ex vivo human islet experiments showed that icovamenib (BMF-219) was able to enhance the activity of glucagon-like peptide-1 (GLP-1)-based therapies, potentially leading to increased insulin secretion and improved glycemic control in patients with diabetes
- Phase II study (COVALENT-211), combining icovamenib with a GLP-1-based therapy, planned to begin in 2025
- BMF-650, an investigational next-generation, oral small-molecule GLP-1 receptor agonist (GLP-1 RA), demonstrated positive early preclinical activity, including improved glucose-stimulated insulin secretion, reduction in blood glucose concentration, and appetite suppression in cynomolgus monkeys

REDWOOD CITY, Calif., Oct. 30, 2024 (GLOBE NEWSWIRE) -- Biomea Fusion, Inc. (“Biomea” or “the Company”) (Nasdaq: BMEA), a clinical-stage biopharmaceutical company dedicated to discovering and developing oral covalent small molecules to improve the lives of patients with diabetes, obesity, and genetically defined cancers, today presented preclinical data showing icovamenib enhanced the activity of GLP-1-based therapies, along with early preclinical efficacy and pharmacokinetic data for BMF-650, a next-generation, oral small-molecule GLP-1 RA candidate.

“Menin plays a central role in the pancreas, not only impacting the proliferation of beta cells but also the expression of GLP-1 receptors. We observed that icovamenib, when combined with either of the two most commonly used GLP-1-based therapies, tirzepatide or semaglutide, enhanced the responsiveness of human islets to the GLP-1-based therapy, leading to substantial insulin secretion under hyperglycemic conditions. The dose-dependent improvements, where glucose-stimulated insulin secretion more than doubled, are highly promising,” stated Juan Pablo Frias, MD, Biomea Fusion’s Chief Medical Officer. “Additionally, we believe the results we’ve seen with our own GLP-1 RA product candidate, BMF-650, highlight a strong potential as a next-generation, oral GLP-1 RA for both diabetes and obesity. We believe these findings open exciting new avenues for treatment.”

Icovamenib (BMF-219) in Combination with a GLP-1-Based Therapy
Key Highlights:

- Preclinical studies evaluated insulin secretion by GLP-1-based therapies (tirzepatide and semaglutide) using human islets cultured ex vivo under hyperglycemic conditions, with and without icovamenib treatment.
- We hypothesized that menin inhibition would enhance the effectiveness of GLP-1-based therapies and showcased functional data, indicating stronger insulin responses with both tirzepatide and semaglutide when combined with icovamenib treatment.
- Further studies with orforglipron also indicated that icovamenib pretreatment improved insulin secretion, approximately doubling the effect-size depending on the dose.
- Additionally, BMF-650, Biomea’s next-generation, oral small molecule GLP-1 RA product candidate, used alone or in combination with icovamenib, yielded even further improved results supporting the potential for therapeutic benefits.
- The initiation of a Phase II study, COVALENT-211, to evaluate the combination of icovamenib with a GLP-1-based therapy, is planned for 2025.

In addition, the Company announced additional details about its investigational, next-generation, oral small-molecule GLP-1 RA candidate, BMF-650.

BMF-650 - an Investigational, Next-Generation, Oral Small Molecule GLP-1 Receptor Agonist - Key Highlights:

- We conducted preclinical studies to evaluate the properties of BMF-650 in comparison to a leading oral GLP-1 RA. BMF-650 exhibited higher bioavailability and a less variable pharmacokinetic profile, which may translate to improved tolerability and support successful dose escalation in patients. The estimated human dose will be approximately 100 mg once daily.
- In human donor islet studies, BMF-650 significantly enhanced glucose-stimulated insulin secretion.
- In cynomolgus monkey studies, BMF-650 showed significant improvements in glucose stimulated insulin secretion, in line with findings from the human donor islet experiments. BMF-650 also demonstrated superior glucose control.
- Appetite suppression studies revealed that daily oral BMF-650 dosing significantly reduced food intake during peak drug concentration, with sustained effects throughout the day for a six-day study period.

- These findings highlight BMF-650's potential as an oral treatment for diabetes and obesity.

"Our preclinical findings about the inhibition of menin in the GLP-1 pathway, announced today, may support the profile of icovamenib as a potential combination agent for GLP-1-based therapies. With the combination of icovamenib, less GLP-1 RA dosing may be required, which may support the overall benefits of these therapeutics. We believe, icovamenib may contribute to improved efficacy, tolerability and adherence, which ultimately will lead to more patients having longer benefits from these agents. We plan to clinically evaluate icovamenib as an adjunct to GLP-1-based therapies," stated Thomas Butler, Biomea Fusion's Chief Executive Officer and Chairman of the Board. "We are equally excited with the early results of our newest asset, BMF-650, which demonstrated clear advantages, including when compared to a leading GLP-1 RA in our preclinical studies. BMF-650 has shown superior insulin secretion, better glucose control, a smoother pharmacokinetic profile and higher bioavailability; all of which point to the potential for a greater therapeutic window and support our plans to evaluate BMF-650 as a next-generation oral treatment for diabetes. The appetite suppression results were particularly exciting, as they signal a new and impactful profile which we believe may support an impact on obesity."

Conference Call and Webcast Details
Webcast, and related presentation, of Biomea's investor update on Wednesday, October 30 at 4:30 pm ET will be available to registered attendees under the Investors and Media section of the company's website at https://investors.biomeafusion.com/news-events/events. A replay of the presentation will be available on Biomea's site following the event.

About Obesity
Obesity is a chronic disease necessitating long-term management, associated with diminished life expectancy and a spectrum of severe health complications. These include metabolic disorders such as type 2 diabetes and non-alcoholic fatty liver disease; cardiovascular diseases like heart attack, stroke, and hypertension; and increased risks of chronic kidney disease, certain cancers, and chronic inflammation. The CDC estimates that over 40% of adults in the U.S. are considered obese, contributing to a significant burden on public health and healthcare systems. Globally, over 650 million adults are living with obesity, and these numbers are steadily rising.

About GLP-1 Receptor Agonists
Glucagon-like peptide-1 (GLP-1) is a naturally occurring incretin hormone that plays a vital role in glucose homeostasis and appetite regulation. GLP-1 receptor agonists (GLP-1 RAs) are a class of medications that bind to and activate GLP-1 receptors, mimicking the effects of native GLP-1. These agents have demonstrated robust clinical efficacy in improving glycemic control, promoting weight loss, and enhancing insulin sensitivity in individuals with type 2 diabetes and obesity.

About Biomea Fusion
Biomea Fusion is a clinical-stage biopharmaceutical company focused on the discovery and development of oral covalent small molecules to improve the lives of patients with diabetes, obesity, and genetically defined cancers. 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. 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, X 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, programs and their potential relative to approved products marketed by third parties; our research, development and regulatory plans, the progress of our ongoing and upcoming clinical trials, the progress and timing of pre-clinical development in our programs; the anticipated enrollment of patients and availability of data from our clinical trials, anticipated milestones, 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 preliminary or interim results of preclinical studies or clinical trials may not be predictive of future or final results in connection with future clinical trials and the risk that we may encounter delays in preclinical or clinical development, patient enrollment and in the initiation, conduct and completion of our ongoing and planned clinical trials and other research and development 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 (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.

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