Wave Life Sciences Announces Upcoming Presentations Highlighting Novel siRNA Program in Obesity and Leadership in RNA Editing

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Presentation at the Obesity & Weight Loss Drug Development Summit to review Real World Evidence for the GLP-1 class and the opportunity for Wave's INHBE program as a best-in-class approach for obesity designed to induce fat burning and preserve muscle mass with once or twice-annual subcutaneous administration

Presentations at the RNA Editing Summit to review how Wave is advancing a high-value pipeline of wholly owned RNA editing therapeutics for mRNA correction and upregulation, led by WVE-006 with proof-of-mechanism data on track for 2024

CAMBRIDGE, Mass., June 12, 2024 (GLOBE NEWSWIRE) -- Wave Life Sciences Ltd. (Nasdaq: WVE), a clinical-stage biotechnology company focused on unlocking the broad potential of RNA medicines to transform human health, today announced upcoming presentations at the 2nd Annual Obesity & Weight Loss Drug Development Summit and the 5th Annual RNA Editing Summit, both taking place in Boston on June 11-13 and June 18-20, respectively.

"Our presentations at these upcoming conferences highlight the potential of our growing, wholly owned pipeline, where we are combining novel genetic insights with our best-in-class siRNA and RNA editing capabilities to develop new treatment approaches for rare and common diseases with high unmet needs," said Erik Ingelsson, MD, PhD, Chief Scientific Officer at Wave Life Sciences. "Our INHBE silencing program reimagines obesity treatment, focusing not just on weight loss, but on the restoration and maintenance of a healthy metabolic profile. As we will highlight at the Obesity Summit, this profile may also overcome challenges with the GLP-1 class, including unwanted side effects, poor adherence, and rebound weight gain. With RNA editing, we continue to lead the field with our WVE-006 program in Alpha-1 antitrypsin deficiency, where we have initiated our RestorAATion-2 study for individuals with AATD and expect to deliver proof-of-mechanism data this year, which would be the first-ever for RNA editing. In addition to WVE-006, we are advancing a pipeline of RNA editing therapeutics across a range of high-impact hepatic and extra-hepatic targets, and this work is being accelerated using our proprietary 'Edit-verse' that maps the editable gene-disease network. We are looking forward to presenting this pioneering work at the summits."

Presentation Details:

2nd Annual Obesity & Weight Loss Drug Development Summit

- Analyzing Real-World Evidence Regarding Efficacy, Adherence and Usage of GLP-1 Drugs and New Therapeutic Directions (Ginnie Yang, PhD, Senior Vice President, Translational Medicine, Wave Life Sciences)
  Thursday, June 13, 2024 from 11:15-11:45 am ET

5th Annual RNA Editing Summit

- Unlocking the Edit-Verse: Combining Machine Learning & Multiple AIMer Applications to Build a High-Impact RNA Editing Pipeline (Ginnie Yang, PhD, Senior Vice President, Translational Medicine and Kenneth Longo, PhD, Vice President, Data Science, Wave Life Sciences)
  Thursday, June 20, 2024 from 9:00-9:30 am ET

- RestorAATion: The First Clinical Program Evaluating an RNA Editing Therapeutic in Humans (Cynthia Caracta, MD, Executive Medical Director, Wave Life Sciences)
  Thursday, June 20, 2024 from 1:00-1:30 pm ET

To read an interview with Wave's presenters at the RNA Editing Summit, visit Wave's Investor Relations website here.

About Wave's INHBE Program
Wave's INHBE clinical candidate is a GalNAc-small interfering RNA (siRNA) that utilizes Wave's next generation siRNA format and is designed to silence the INHBE (Inhibin βE) gene, with the goal of inducing lipolysis (fat-burning) while preserving muscle mass to restore and maintain a healthy metabolic profile. INHBE loss-of-function (LoF) heterozygous human carriers have a favorable cardiometabolic profile, including reduced abdominal obesity and reduced odds of type 2 diabetes and coronary artery disease. Silencing INHBE is expected to recapitulate the cardiometabolic profile of these LoF carriers and may also address limitations of GLP-1s.

Wave's INHBE GalNAc-siRNA has demonstrated highly potent (ED50 < 1mg/kg) and durable silencing following one low-single-digit dose in preclinical mouse models, supporting every-six-month or annual subcutaneous dosing. Data also demonstrated weight loss with no loss of muscle mass and a reduction in fat mass with preferential effects on visceral fat, consistent with the profile of INHBE LoF carriers in human genetics.

Additionally, in an ongoing head-to-head study in diet-induced obese mice, Wave observed a weight loss effect from a single dose of its INHBE GalNAc-siRNA similar to semaglutide. In addition, upon cessation of semaglutide treatment, Wave's INHBE siRNA curtailed expected rebound weight gain. Wave expects to initiate a clinical trial for its INHBE candidate in 1Q 2025.

About WVE-006 and RNA Editing at Wave
Wave is pioneering RNA editing as a new therapeutic modality, capable of correcting or upregulating mRNA to repair or restore proteins. Its lead program, WVE-006, is GalNAc-conjugated, subcutaneously delivered, RNA editing oligonucleotide that is uniquely designed to address AATD-related lung disease, liver disease, or both. WVE-006 does not use a lipid-nanoparticle (LNP) delivery system. WVE-006 is currently being investigated in the Phase 1b/2a RestorAATion-2 study in AATD patients, with proof-of-mechanism data expected in 2024.

In addition to WVE-006, Wave continues to advance its pipeline of wholly owned RNA editing therapeutics across a range of high-impact GalNAc-hepatic and extra-hepatic targets. Powered by genetic datasets and deep learning models, Wave is utilizing its proprietary “Edit-verse” to identify new RNA editing targets that leverage easily accessible biomarkers, offer efficient paths to proof-of-concept in humans, address diseases of high unmet need, and represent meaningful commercial opportunities. Wave plans to share new preclinical data from its wholly owned RNA editing pipeline in 2024.

About Wave Life Sciences
Wave Life Sciences (Nasdaq: WVE) is a biotechnology company focused on unlocking the broad potential of RNA medicines to transform human health. Wave’s RNA medicines platform, PRISM™, combines multiple modalities, chemistry innovation and deep insights in human genetics to deliver scientific breakthroughs that treat both rare and prevalent disorders. Its toolkit of RNA-targeting modalities includes editing, splicing, RNA interference and antisense silencing, providing Wave with unmatched capabilities for designing and sustainably delivering candidates that optimally address disease biology. Wave’s diversified pipeline includes clinical programs in Duchenne muscular dystrophy, Alpha-1 antitrypsin deficiency and Huntington’s disease, as well as a preclinical program in obesity. Driven by the calling to “Reimagine Possible”, Wave is leading the charge toward a world in which human potential is no longer hindered by the burden of disease. Wave is headquartered in Cambridge, MA. For more information on Wave’s science, pipeline and people, please visit www.wavelifesciences.com and follow Wave on X (formerly Twitter) and LinkedIn.

Forward-Looking Statements
This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, the potential benefits of our wholly owned pipeline and our siRNA and RNA editing capabilities, including our AIMers, and the anticipated timing for sharing new preclinical data; the benefits of RNA medicines generally for both rare and common diseases; the potential for certain of our programs to be best-in-class; the potential benefits that our “edit-verse” may provide us, including identifying new RNA editing targets; the potential benefits of our GalNAc-conjugated siRNA program targeting INHBE; the anticipated timing for initiating a clinical trial for our INHBE candidate; our expectations of potential advantages of our INHBE program compared to others; the potential of WVE-006 to treat AATD; and our expectations and anticipated timing for delivering proof-of-mechanism clinical data in AATD patients treated with WVE-006. The words “may,” “will,” “could,” “would,” “should,” “expect,” “plan,” “anticipate,” “intend,” “believe,” “estimate,” “predict,” “project,” “potential,” “continue,” “target” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Any forward-looking statements in this press release are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this press release and actual results may differ materially from those indicated by these forward-looking statements as a result of these risks, uncertainties and important factors, including, without limitation, the risks and uncertainties described in the section entitled “Risk Factors” in Wave’s most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC), as amended, and in other filings Wave makes with the SEC from time to time. Wave undertakes no obligation to update the information contained in this press release to reflect subsequently occurring events or circumstances.

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