Wave Life Sciences to Highlight RNA Editing Modality and PRISM Platform Advancements During Upcoming Scientific Conferences

September 7, 2021

Nine presentations and posters at TIDES USA and OTS

CAMBRIDGE, Mass., Sept. 07, 2021 (GLOBE NEWSWIRE) -- Wave Life Sciences Ltd. (Nasdaq: WVE), a clinical-stage genetic medicines company committed to delivering life-changing treatments for people battling devastating diseases, today announced it will highlight its ADAR-mediated RNA editing ("ADAR editing") capability and PRISM ^{TM} platform advancements at upcoming scientific conferences. These include the TIDES USA: Oligonucleotides & Peptide Therapeutics meeting and the 17th Annual Meeting of the Oligonucleotide Therapeutics Society (OTS), taking place September 20-23, 2021 and September 26-29, 2021, respectively.

"The data we'll present at this year's TIDES USA and OTS meetings underscore the remarkable progress we continue to make with our pipeline and our platform. Through the resolution provided by stereochemical control, we have identified new ways to enhance the pharmacologic profiles of our candidates, including the application of PN backbone modifications," said Paul Bolno, MD, MBA, President and Chief Executive Officer of Wave Life Sciences. "At OTS, we will also highlight our discovery-stage alpha-1 antitrypsin deficiency program, as well as our leading ADAR editing modality. These data continue to support our belief that Wave's ADAR editing modality has best-in-class potential among RNA editing approaches due to its versatility and ability to produce precise and efficient editing in the liver and central nervous system."

TIDES USA: Oligonucleotides & Peptide Therapeutics Meeting

- **Wednesday, September 22 at 5:00 p.m. EDT**
  Exploring New Oligonucleotide Backbone Chemistries and Their Deployment to Improve the Properties of Stereopure Oligonucleotides (Chandra Vargeese, PhD, Chief Technology Officer at Wave Life Sciences)
  Oligonucleotide Discovery to Clinic & CMC Track: Nucleic Acid Chemical Modifications

- **Thursday, September 23 at 8:30 a.m. EDT**
  Enhancing the Pharmacologic Profiles of CNS Targeting Therapeutic Oligonucleotides (Elena Dale, PhD, Senior Director, Head of CNS Biology at Wave Life Sciences)
  Oligonucleotide Discovery to Clinic & CMC Track: Oligonucleotides for CNS, Skin Cancer, NAFLD and Other Indications

- **Tuesday, September 21-Thursday, September 23**
  Impact of Nitrogen-containing Backbone Linkages on Stereopure Antisense Oligonucleotides in the CNS (Yuanjing Liu, PhD, Principal Scientist at Wave Life Sciences)
  Poster Available On Demand and for Viewing During Exhibit Hours

17th Annual Meeting of the Oligonucleotide Therapeutics Society

- **Tuesday, September 28 at 12:45 p.m. EDT**
  Chemically Optimized Stereopure Oligonucleotides Direct ADAR-mediated RNA Editing of SERPINA1 Transcripts, Yielding Functional Alpha-1 Antitrypsin Protein in a Mouse Model for Alpha-1 Antitrypsin Deficiency (Prashant Monian, PhD, Senior Scientist at Wave Life Sciences)
  Session VI: Genome and RNA Editing (On Demand)

- **Sunday, September 26-Wednesday, September 29**
  A Versatile Platform for ADAR-mediated RNA Editing *In Vivo* in Preclinical Models (Chikdu Shivalila, PhD, Principal Scientist at Wave Life Sciences)
  Poster Available On Demand

- **Sunday, September 26-Wednesday, September 29**
  Predicting Exon Criticality from Primary Protein Structure (Jigar Desai, PhD, Scientist II at Wave Life Sciences)
  Poster Available On Demand

- **Sunday, September 26-Wednesday, September 29**
  In Vitro Models for the Assessment of Antisense Oligonucleotide Induced Hepatotoxicity (Xuena Lin, MD, previously Senior Scientist II at Wave Life Sciences)
  Poster Available On Demand

- **Sunday, September 26-Wednesday, September 29**
  Impact of Nitrogen-containing Backbone Linkages on Stereopure Antisense Oligonucleotides in the CNS (Pachamuthu Kandasamy, PhD, Senior Director, Head of Medicinal Chemistry at Wave Life Sciences)
  Poster Available On Demand

- **Sunday, September 26-Wednesday, September 29**
  Allele-selective Reduction of Rho P23H-mutant Rhodopsin Rescues Phenotype Associated with Retinitis Pigmentosa in Preclinical Models (Michael Byrne, PhD, Senior Director, In Vivo Biology and Ophthalmology at Wave Life Sciences)
  Poster Available On Demand

About PRISM™
PRISM is Wave Life Sciences' proprietary discovery and drug development platform that enables genetically defined diseases to be targeted with stereopure oligonucleotides across multiple therapeutic modalities, including silencing, splicing and editing. PRISM combines the company's unique ability to construct stereopure oligonucleotides with a deep understanding of how the interplay among oligonucleotide sequence, chemistry and backbone stereochemistry impacts key pharmacological properties. By exploring these interactions through iterative analysis of *in vitro* and *in vivo*

outcomes and machine learning-driven predictive modeling, the company continues to define design principles that are deployed across programs to rapidly develop and manufacture clinical candidates that meet pre-defined product profiles.

About Wave Life Sciences
Wave Life Sciences (Nasdaq: WVE) is a clinical-stage genetic medicines company committed to delivering life-changing treatments for people battling devastating diseases. Wave aspires to develop best-in-class medicines across multiple therapeutic modalities using PRISM, the company's proprietary discovery and drug development platform that enables the precise design, optimization, and production of stereopure oligonucleotides. Driven by a resolute sense of urgency, the Wave team is targeting a broad range of genetically defined diseases so that patients and families may realize a brighter future. To find out more, please visit www.wavelifesciences.com and follow Wave on Twitter @WaveLifeSci.

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 remarkable progress we continue to make with our pipeline and platform; our belief that our ADAR editing modality has best-in-class potential; among other statements. 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, 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.

Investor Contact:
Kate Rausch
617-949-4827
krausch@wavelifesci.com

Media Contact:
Alicia Suter
617-949-4817
asuter@wavelifesci.com

Source: Wave Life Sciences USA, Inc.