Cue Biopharma Announces Strategic Research Collaboration with Dr. Michael Dustin and Oxford University

May 14, 2020

Collaboration to Study Immuno-STAT Biologics on T Cell Immunological Synapse Formation Using the IL-2-Based CUE-100 Series

CAMBRIDGE, Mass., May 14, 2020 (GLOBE NEWSWIRE) -- Cue Biopharma, Inc. (NASDAQ: CUE), a clinical-stage biopharmaceutical company engineering a novel class of injectable biologics to selectively engage and modulate targeted T cells within the body, announced today it has entered into a research collaboration agreement with Dr. Michael Dustin and the University of Oxford to determine the molecular mechanisms underlying the activity of its IL-2 based CUE-100 series Immuno-STAT ™*(Selective Targeting and Alteration of T cells)* Biologics.

"Cue Biopharma is pleased to enter into this strategic collaboration with Dr. Dustin and the University of Oxford," said Saso Cemerski, senior director of immuno-oncology discovery and translational immunology at Cue Biopharma. "Dr. Dustin, the scientific pioneer and founder of the T cell immune synapse field has made seminal observations contributing toward our understanding of the biophysical interactions and signaling pathways that underscore immune cell activation, including the mechanistic underpinnings of T cell recognition of antigens. Our strategic collaboration will exploit the state-of-the art technologies pioneered by Dr. Dustin's lab to elucidate the immune synapse interactions of our IL-2-based CUE-100 series that ultimately result in selective and specific activation of tumor-antigen-specific T cells."

"We look forward to working with Cue Biopharma on this innovative and promising new technology. We have long appreciated the effects of IL-2 on the immunological synapse, and this research collaboration will allow us to systematically study effects of natural IL-2 and the engineered Immuno-STAT to define potential features of the Immuno-STAT platform that may be driving the selective and preferential modulation of T cells," said Dr. Dustin, professor of immunology and Wellcome Trust Principal Research Fellow, director of research of the Kennedy Institute.

"We anticipate that the findings from this strategic research collaboration will provide important insights into the mechanism of action (MOA) of our IL-2-based CUE-100 series Immuno-STATs. Understanding the MOA will in turn enhance our ability to detect and interpret pharmacodynamic effects induced in patients treated with our lead immuno-oncology asset, CUE-101, currently being tested in patients with head and neck cancer," said Anish Suri, Ph.D., president and chief scientific officer of Cue Biopharma. "Learnings from this important work will further advance our internal efforts to build out the Immuno-STAT platform to develop new and effective therapeutics for patients suffering from solid and hematological cancers."

About the CUE-100 Series
The CUE-100 series consists of Fc-fusion biologics that incorporate peptide-MHC (pMHC) molecules along with rationally engineered IL-2 molecules. This singular biologic is anticipated to selectively target, activate and expand a robust repertoire of tumor-specific T cells directly in the patient. The binding affinity of IL-2 for its receptor has been deliberately attenuated to achieve preferential selective activation of tumor-specific effector T cells while reducing potential for effects on regulatory T cells (Tregs) or broad systemic activation, potentially mitigating the dose-limiting toxicities associated with current IL-2-based therapies.

About Immuno-STAT
Immuno-STAT™ biologics are designed for targeted modulation of disease-associated T cells in the areas of immuno-oncology and autoimmune disease. Each of our biologic drugs is designed using our proprietary scaffold comprising: 1) a peptide-MHC complex (pMHC) to provide selectivity through interaction with the T cell receptor (TCR), and 2) a unique co-stimulatory signaling molecule to modulate the activity of the target T cells.

The simultaneous engagement of co-regulatory molecules and pMHC binding mimics the signals delivered by antigen presenting cells (APCs) to T cells during a natural immune response. This design enables Immuno-STAT biologics to engage with the T cell population of interest, resulting in highly targeted T cell modulation. Because our drugs are delivered directly in the patient's body (in vivo), they are fundamentally different from other T cell therapeutic approaches that require the patients' T cells to be extracted, modified outside the body (ex vivo), and reinfused.

About Cue Biopharma
Cue Biopharma, a clinical-stage biopharmaceutical company, is engineering a novel class of injectable biologics to selectively engage and modulate targeted T cells within the body to transform the treatment of cancer and autoimmune diseases. The company's proprietary platform, Immuno-STAT ™ *(Selective Targeting and Alteration of T cells)* is designed to harness the body's intrinsic immune system without the need for ex vivo manipulation.

Headquartered in Cambridge, Massachusetts, we are led by an experienced management team and independent Board of Directors with deep expertise in the design and clinical development of protein biologics, immunology and immuno-oncology.

For more information, visit www.cuebiopharma.com and follow us on Twitter https://twitter.com/CueBiopharma.

About Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences (NDORMS) The Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences (NDORMS**)** is a multi-disciplinary department focusing on discovering the causes of musculoskeletal and inflammatory conditions to deliver excellent and innovative care that improves people's quality of life. The largest European academic department in its field, NDORMS is part of the Medical Sciences Division of the University of Oxford, and is a rapidly growing community of more than 500 orthopaedic surgeons, rheumatologists and scientists all working in the field of musculoskeletal disorders.

The research work of the department takes place in several locations across the Nuffield Orthopaedic Centre, namely the Botnar Research Centre, the

Kennedy Institute of Rheumatology, and the Kadoorie Centre. The co-location with NHS services puts the department in an excellent position with basic researchers working alongside clinicians. This substantially improves research capacity, improving access for researchers to patients, and facilitating the interaction between clinicians and scientists that is essential for successful medical research.
www.ndorms.ox.ac.uk

Forward-Looking Statements
This press release contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, that are intended to be covered by the "safe harbor" created by those sections. Forward-looking statements, which are based on certain assumptions and describe our future plans, strategies and expectations, can generally be identified by the use of forward-looking terms such as "believe," "expect," "may," "will," "should," "would," "could," "seek," "intend," "plan," "goal," "project," "estimate," "anticipate," "strategy," "future," "likely" or other comparable terms. All statements other than statements of historical facts included in this press release regarding our strategies, prospects, financial condition, operations, costs, plans and objectives are forward-looking statements. Examples of forward-looking statements include, among others, statements we make regarding anticipated results of our drug development efforts, including study results, and our expectations regarding regulatory developments and expected future operating results. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. Our actual results and financial condition may differ materially from those indicated in the forward-looking statements. Therefore, you should not rely on any of these forward-looking statements. Important factors that could cause our actual results and financial condition to differ materially from those indicated in the forward-looking statements include, among others, our limited operating history, limited cash and a history of losses; our ability to achieve profitability; potential setbacks in our research and development efforts including negative or inconclusive results from our preclinical studies, our ability to secure required U.S. Food and Drug Administration ("FDA") or other governmental approvals for our product candidates and the breadth of any approved indication; adverse effects caused by public health pandemics, including COVID-19, including possible effects on our operations and clinical trials; negative or inconclusive results from our clinical studies or serious and unexpected drug-related side effects or other safety issues experienced by participants in our clinical trials; delays and changes in regulatory requirements, policy and guidelines including potential delays in submitting required regulatory applications to the FDA; our reliance on collaborators, contract research organizations, suppliers and other business partners; our ability to obtain adequate financing to fund our business operations in the future; ; and the other risks and uncertainties described in the Risk Factors and in Management's Discussion and Analysis of Financial Condition and Results of Operations sections of our most recently filed Annual Report on Form 10-K and any subsequently filed Quarterly Report(s) on Form 10-Q. Any forward-looking statement made by us in this press release is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

Investor Contact
Ashley R. Robinson
LifeSci Advisors
arr@lifesciadvisors.com

Media Contact
Alison Chen
LifeSci Communications
achen@lifescicomms.com

Source: Cue Biopharma, Inc.