Cue Biopharma's Therapeutic Immuno-STAT Biologics to be Featured in Oxford University Presentation at the 67th Biophysical Society Annual Meeting

February 16, 2023

- *Collaboration with the laboratory of Dr. Michael Dustin elucidates the mechanism of action of Immuno-STATs in activating disease-specific T cells by mimicking the natural formation of immune synapses*

BOSTON, Feb. 16, 2023 (GLOBE NEWSWIRE) -- Cue Biopharma, Inc. (Nasdaq: CUE), a clinical-stage biopharmaceutical company developing a novel class of injectable biologics to selectively engage and modulate disease-specific T cells directly within the patient's body, announced today that the company's therapeutic Immuno-STAT ™ *(Selective Targeting and Alteration of T cells)* platform and biologics will be featured in a poster at the 67th Biophysical Society Annual Meeting, taking place February 18-22, 2023 in San Diego, CA. The research is part of a strategic research collaboration that Cue Biopharma initiated with Dr. Michael Dustin's laboratory at the University of Oxford in May 2020 to determine the molecular mechanisms underlying the activity of the company's interleukin 2 (IL-2) based CUE-100 series of biologics.

"The data continue to support the differentiated mechanism of action of Cue Biopharma's Immuno-STAT CUE-100 series of biologics, by uniquely mimicking the natural process of immune synapse formation," said Jesusa Capera-Aragones, Ph.D., post-doctoral researcher, Dustin laboratory of the Kennedy Institute at the University of Oxford. "By simultaneously presenting a targeted antigen and the immunostimulatory molecule IL-2, Cue Biopharma's biologics enable the specific and simultaneous engagement of IL-2 and T cell receptors, as it would occur in nature. This promotes the selective activation of disease-specific "killer" T cells, while maximizing T cell activation and minimizing off-target binding, potentially translating in a larger therapeutic window reducing toxicities seen with other IL-2-based therapies.

Dr. Anish Suri, Ph.D., president and chief scientific officer of Cue Biopharma, added "We are very pleased with the research and collaboration with Dr. Dustin's laboratory of the Kennedy Institute at the University of Oxford. The data continue to validate the platform design and support the results we are seeing as part of our Phase 1 clinical study of our lead CUE-100 candidate, CUE-101, in human papilloma virus (HPV)+ head and neck cancer, that shows activation of HPV+ specific "killer" T cells in patients. We look forward to sharing clinical progress and continue to provide clinical validation of the platform, with potential to treat a large number of cancers."

Presentation Details

Abstract title: Understanding the Spatial and Functional Link Between the IL-2R and TCR at the Immunological Synapse
Presenter: Jesusa Capera-Aragones, Ph.D., from the Kennedy Institute at the University of Oxford
Poster Session: Membrane Receptors and Signal Transduction Track A: Novel Engineered Cell Therapies and Concepts
Poster Board Number: B231
Date and Time: February 22, 2023, 10:30 a.m. PST
Location: Exhibit Hall BC
Program Number: 2481-Pos

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's body. 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 the 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
The company's Immuno-STAT ™ *(Selective Targeting and Alteration of T cells)* platform 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-major histocompatibility 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 selective T cell modulation. Because our drug candidates 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 developing a novel class of injectable biologics to selectively engage and modulate disease-specific T cells directly within the patient's body. The company's proprietary platform, Immuno-STAT ™ *(Selective Targeting and Alteration of T cells)* and biologics are designed to harness the body's intrinsic immune system as T cell engagers without the need for ex vivo manipulation or broad systemic modulation.

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

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

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. Such forward-looking statements include, but are not limited to, those regarding the company's business strategies, plans and prospects. Forward-looking statements, which are based on certain assumptions and describe the company's 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, although not all forward-looking statements contain these identifying words. All statements other than statements of historical facts included in this press release regarding the company's strategies, prospects, financial condition, operations, costs, plans and objectives are forward-looking statements. Important factors that could cause the company's actual results and financial condition to differ materially from those indicated in the forward-looking statements include, among others, the company's limited operating history, limited cash and a history of losses; the company's ability to achieve profitability; potential setbacks in the company's research and development efforts including negative or inconclusive results from its preclinical studies, its ability to secure required U.S. Food and Drug Administration ("FDA") or other governmental approvals for its product candidates and the breadth of any approved indication; adverse effects caused by public health pandemics, including COVID-19, including possible effects on the company's trials; negative or inconclusive results from the company's clinical trials or preclinical studies or serious and unexpected drug-related side effects or other safety issues experienced by participants in clinical trials; delays and changes in regulatory requirements, policy and guidelines including potential delays in submitting required regulatory applications to the FDA; the company's reliance on licensors, collaborators, contract research organizations, suppliers and other business partners; the company's ability to obtain adequate financing to fund its business operations in the future; operations and clinical the company's ability to maintain and enforce necessary patent and other intellectual property protection; competitive factors; general economic and market conditions 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 the company's 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 the company in this press release is based only on information currently available to the company and speaks only as of the date on which it is made. The company undertakes 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.

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