Cue Biopharma Presents Positive Updated Data from its Phase 1 Trials of CUE-101 and CUE-102 in Head and Neck Cancer and WT1 Positive Cancers at the SITC 39th Annual Meeting

November 8, 2024

- *Objective response rate (ORR) of 46%, 12-month overall survival (OS) of 91.3% and a median overall survival (mOS) of 21.8 months in first line (1L) HPV+ R/M HNSCC patients treated with CUE-101 and KEYTRUDA® (pembrolizumab)*
- *ORR of 50% in 1L patients treated with CUE-101 and pembrolizumab with low PD-L1 expression (combined positive score (CPS) 1-19)*
- *67% overall disease control rate (DCR) in late-stage pancreatic cancer patients treated with CUE-102 monotherapy, including an unconfirmed partial response (PR) with a 40% decrease in tumor burden*
- *CUE-101 data was presented in an oral session at SITC 2024 today*

BOSTON, Nov. 08, 2024 (GLOBE NEWSWIRE) -- Cue Biopharma, Inc. (Nasdaq: CUE), a clinical-stage biopharmaceutical company developing a novel class of therapeutic biologics to selectively engage and modulate disease-specific T cells for the treatment of cancer and autoimmune disease, today presented updated data from its Phase 1 dose escalation and expansion trial evaluating its lead oncology asset from the Immuno-STAT™ CUE-100 series, CUE-101, in patients with recurrent/metastatic head and neck squamous cell carcinoma (R/M HNSCC). The data was presented in an oral session at the Society for Immunotherapy of Cancer's 39th Annual Meeting (SITC 2024) being held in Houston, Texas and virtually November 6-10.

In addition, on Saturday, November 9, 2024, the Company will present a poster with data from its Phase 1 trial evaluating monotherapy activity of its second clinical asset from the CUE-100 series, CUE-102, for the treatment of patients with late-stage Wilms Tumor 1 positive (WT1+) colorectal, gastric, ovarian and pancreatic cancers. Data showed substantial evidence of selective expansion of WT1-specific T cells, with anti-tumor activity and a favorable tolerability profile with no dose limiting toxicities (DLTs) observed.

"The therapeutic responses observed with CUE-101 and pembrolizumab are very promising. The combination has been well-tolerated and demonstrates durable clinical benefit," said Christine H. Chung, M.D., Department Chair, Head and Neck-Endocrine Oncology, Moffitt Cancer Center, and a principal investigator participating in the CUE-101 clinical trial. "The latest results highlight the potential of CUE-101 to improve response rates and quality of life for this patient population."

Key data highlights from the expansion portion of the trial evaluating CUE-101 at the recommended Phase 2 dose (RP2D) of 4mg/kg in combination with pembrolizumab in 1L HPV+ R/M HNSCC patients (data cutoff of September 11, 2024) include:

- ORR of 46% and overall disease control rate (DCR) of 75% in patients with combined positive score (CPS) ≥1, compared to an ORR of 19% observed with pembrolizumab alone in the historical third-party KEYNOTE-048 trial. This includes one complete response (CR) and 10 partial responses (PR), in addition to seven durable stable diseases (DSD) of >12 weeks.
- Survival metrics continue to mature: 12-month OS of 91.3% compared to 51% with pembrolizumab alone in the historical KEYNOTE-048 trial.
- mOS of 21.8 months compared to 12.3 months in the historical KEYNOTE-048 trial.
- ORR of 50% in patients with PD-L1 CPS 1-19.

Key data highlights from the CUE-101 expansion portion of the Phase 1b trial evaluating CUE-101 at the RP2D as monotherapy with 20 second line and beyond (2L+) patients (majority third line and beyond (3L+) (data cutoff of September 11, 2024) include:

- mOS of 20.8 months, notably longer than the historical mOS of 7.5 and 8.4 months reported in historical third-party 2L R/M HNSCC trials: CheckMate 141 and KEYNOTE-040, respectively.

CUE-101 has been well tolerated as a monotherapy and in combination with pembrolizumab. No significant safety concerns have emerged in either the monotherapy or combination trials, and adverse events have been readily managed with appropriate medical care.

Key data highlights from the completed CUE-102 dose escalation and ongoing dose expansion parts of the Phase 1 clinical trial (data cutoff of October 29, 2024) include:

- 67% overall DCR in late-stage pancreatic cancer patients treated with CUE-102 at 2 and 4mg/kg, including an unconfirmed PR with a 40% decrease in tumor burden.

- Evidence of selective stimulation and expansion of WT1-specific CD8 T cells, with no apparent increase in total numbers of non-specific CD8 T cells.
- No dose-limiting toxicities occurred in patients treated during the dose escalation phase at doses ranging between 1-8mg/kg of CUE-102.

Matteo Levisetti, M.D., chief medical officer of Cue Biopharma, added, "We are pleased with the positive results from both the CUE-101 and CUE-102 ongoing trials as the data continue to mature. The CUE-102 data further demonstrates the mechanism of action of Immuno-STAT biologics to activate and expand tumor-specific T cells, as well as its translation into evidence of clinical benefit. The versatility of the Immuno-STAT platform holds significant potential for treating a variety of cancers."

All posters will be available to conference attendees as e-posters on the virtual meeting platform November 7, 2024, at 9 a.m. CST through January 7, 2025. The CUE-101 oral presentation and CUE-102 poster will also be available on November 8, 2024, in the Investors & Media section of the Company's website at www.cuebiopharma.com, under Scientific Publications and Presentations.

About the CUE-100 Series
The CUE-100 series consists of Fc-fusion biologics that present two signals to T cells. Signal #1 is a tumor-specific peptide linked to a major histocompatibility complex (pMHC) to enable selectivity and specificity. Signal #2 is a rationally engineered interleukin 2 (IL-2) molecule to trigger T cell activation. These singular biologics are 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 CUE-101 and the Phase 1 trial
CUE-101 is Cue Biopharma's lead clinical drug candidate from the CUE-100 series of interleukin 2 (IL-2)-based biologics. It is designed to activate and expand HPV16 tumor-specific T cells by presenting the HPV E7 protein to the HPV-specific T cell receptor. CUE-101 is currently being evaluated in a fully enrolled Phase 1 open-label, dose escalation and expansion study, for the treatment of HPV16+ driven recurrent/metastatic head and neck squamous cell carcinoma in second line (2L) and beyond patients as a monotherapy, and as a first line (1L) therapy in combination with pembrolizumab (KEYTRUDA®).

About CUE-102 and the Phase 1 trial
CUE-102 is Cue Biopharma's second clinical drug candidate from the CUE-100 series of interleukin 2 (IL-2)-based biologics. It is designed to activate and expand Wilms' Tumor 1 (WT1)-specific T cells by presenting the WT1 peptide to the WT1- specific T cell receptor. WT1 is a well-recognized onco-fetal protein known to be over-expressed in a number of cancers, including solid tumors and hematologic malignancies. CUE-102 is being evaluated in a Phase 1 open label, two-part dose escalation and expansion study, for patients with late-stage colorectal, gastric/gastroesophageal junction, pancreatic and ovarian cancers that express WT1.

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 curative potential of the body's intrinsic immune system through the selective modulation of disease-specific T cells without the adverse effects of broad systemic immune 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 X and LinkedIn.

Forward-Looking Statements
This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements include, but are not limited to, those regarding: the company's belief regarding the potential benefits and applications of its drug candidates and programs, including the CUE-100 series and the potential of the Immuno-STAT platform to treat a variety of cancers; and 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," "promise" 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 ability to shift its focus to its autoimmune assets and achieve the cost savings that it is projecting; 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 or clinical trials or the company's ability to replicate in later clinical trials positive results found in preclinical studies and early-stage clinical trials of its product candidates; serious and unexpected drug-related side effects or other safety issues experienced by participants in clinical trials; 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 possible effects on the company's operations and 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 and ability to continue as a going concern; 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 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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Source: Cue Biopharma, Inc.