Bicara Therapeutics Announces Ficerafusp Alfa Granted Breakthrough Therapy Designation by U.S. FDA for 1L HPV-Negative R/M HNSCC

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Designation supported by results from multiple dose cohorts from the Phase 1/1b trial of ficerafusp alfa in 1L HPV-negative R/M HNSCC

BOSTON, Oct. 13, 2025 (GLOBE NEWSWIRE) -- Bicara Therapeutics Inc. (Nasdaq: BCAX), a clinical-stage biopharmaceutical company committed to bringing transformative bifunctional therapies to patients with solid tumors, today announced that the U.S. Food and Drug Administration (FDA) has granted Breakthrough Therapy Designation (BTD) to ficerafusp alfa in combination with pembrolizumab for the first line (1L) treatment of patients with metastatic or with unresectable, recurrent (R/M) head and neck squamous cell carcinoma (HNSCC) whose tumors express programmed death-ligand 1 with combined positive score (CPS) ≥1, excluding human papillomavirus (HPV)-positive oropharyngeal squamous cell carcinoma.

This designation from the FDA underscores the growing recognition of HPV-negative HNSCC as a distinct clinical indication within head and neck cancer – one with particularly poor outcomes, limited therapeutic options, and that represents the vast majority of patients.

“This recognition highlights the urgent unmet need for patients with HPV-negative R/M HNSCC,” said David Raben, MD, Chief Medical Officer of Bicara Therapeutics. “It also reinforces our conviction that depth and durability of response, driven by ficerafusp alfa's ability to synergize with pembrolizumab and enable tumor penetration, are key to achieving long-term clinical benefit.”

BTD was supported by results from multiple Phase 1/1b dose cohorts evaluating ficerafusp alfa in combination with pembrolizumab in patients with 1L HPV-negative R/M HNSCC. Data most recently presented at the 2025 American Society of Clinical Oncology (ASCO) Annual Meeting, demonstrated deep and durable clinical benefit with a median duration of response of 21.7 months, and a median overall survival of 21.3 months, alongside a favorable safety and tolerability profile.

BTD is intended to expedite the development and review of potential new medicines that show substantial improvement over available therapies for serious or life-threatening conditions, providing greater interaction with the FDA, involvement of senior agency leadership, and eligibility for rolling and priority review.

“BTD provides external validation of the importance of ficerafusp alfa’s best-in-disease potential, and solidifies the foundation for our ongoing pivotal trial, FORTIFI-HN01,” said Claire Mazumdar, PhD, MBA, Chief Executive Officer of Bicara Therapeutics. “We look forward to working closely with the FDA to bring this therapy to patients as quickly as possible.”

About FORTIFI-HN01
FORTIFI-HN01 is a global, randomized, double-blinded, placebo-controlled, pivotal Phase 2/3 trial that aims to enroll approximately 650 R/M HNSCC patients, excluding patients with human papillomavirus (HPV)-positive with oropharyngeal squamous cell carcinoma. Patients enrolled in the trial must have a PD-L1 CPS greater than or equal to one, and not have received systemic therapy in the R/M setting. The primary endpoints are overall response rate based on RECIST v1.1 and overall survival, with results potentially supporting regulatory filings for both accelerated approval and full approval. Secondary endpoints include progression free survival and duration of response.

About Head and Neck Squamous Cell Carcinoma
Head and neck squamous cell carcinomas (HNSCCs) develop from the mucosal epithelium in the oral cavity, pharynx and larynx and are the most common malignancies that arise in the head and neck. HNSCC is one of the most common cancers in the United States and globally with a rising incidence anticipated to reach one million new global cases annually by 2030. Ten percent of HNSCC patients are diagnosed with metastatic disease and up to 30% develop a recurrence or metastases over time after receiving initial treatment for advanced HNSCC.

Most cases of HNSCC are thought to result from accumulated mutations caused by carcinogenic exposures such as tobacco smoke or HPV infection. Approximately 80% of patients with R/M HNSCC are HPV-negative. These HPV-negative tumors often exhibit a recurrence pattern that is primarily local and are associated with severe morbidities, including fatal tumor bleeding, intense pain, difficulty swallowing, significant weight loss, and cachexia. This highlights a critical unmet need for therapies that have the potential to deliver durable anti-tumor responses, ultimately leading to meaningful improvements in patients' quality of life.

About Ficerafusp Alfa
Ficerafusp alfa is a first-in-class bifunctional antibody designed to drive tumor penetration by breaking barriers in the tumor microenvironment that have challenged the treatment of multiple solid tumor cancers. Specifically, ficerafusp alfa combines two

clinically validated targets: an epidermal growth factor receptor (EGFR) directed monoclonal antibody with a domain that binds to human transforming growth factor beta (TGF-β). Through this targeted mechanism, ficerafusp alfa reverses the fibrotic and immune-excluded tumor microenvironment driven by TGF-β signaling to enable tumor penetration that drives deep and durable responses.

Ficerafusp alfa is currently being evaluated in FORTIFI-HN01, a pivotal Phase 2/3 clinical trial in patients with first line (1L) recurrent/metastatic (R/M) head and neck squamous cell carcinoma (HNSCC).

About Bicara Therapeutics
Bicara Therapeutics is a clinical-stage biopharmaceutical company committed to bringing transformative bifunctional therapies to patients with solid tumors. Bicara's lead program, ficerafusp alfa, is a first-in-class bifunctional antibody designed to drive tumor penetration by breaking barriers in the tumor microenvironment that have challenged the treatment of multiple solid tumor cancers. Specifically, ficerafusp alfa combines two clinically validated targets: an epidermal growth factor receptor (EGFR) directed monoclonal antibody with a domain that binds to human transforming growth factor beta (TGF-β). Through this targeted mechanism, ficerafusp alfa reverses the fibrotic and immune-excluded tumor microenvironment driven by TGF-β signaling to enable tumor penetration that drives deep and durable responses. Ficerafusp alfa is being developed in head and neck squamous cell carcinoma, where there remains a significant unmet need, as well as other solid tumor types. For more information, please visit www.bicara.com or follow us on LinkedIn or X.

Forward-Looking Statements
This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. These statements may be identified by words such as "may," "might," "will," "could," "would," "should," "plan," "anticipate," "intend," "believe," "expect," "estimate," "seek," "predict," "future," "project," "potential," "continue," "target" and similar words or expressions, or the negative thereof, are intended to identify forward-looking statements, although not all contain identifying words. Any statements in this press release that are not statements of historical fact may be deemed to be forward-looking statements. These forward-looking statements include, without limitation; the impact of Breakthrough Therapy Designation on the development and review of ficerafusp alfa, the timing and outcomes of regulatory submissions and reviews, express or implied statements regarding the clinical development of ficerafusp alfa; and the expected therapeutic potential and clinical benefits of ficerafusp alfa, including potential efficacy, depth, durability and tolerability. 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 and uncertainties that are difficult to predict. Factors that could cause actual results to differ include, but are not limited to, risks and uncertainties related to uncertainties inherent in the development of product candidates, including the conduct of research activities and the conduct of clinical trials; uncertainties as to the availability and timing of results and data from clinical trials; whether results from prior preclinical studies and clinical trials will be predictive of the results of subsequent preclinical studies and clinical trials; regulatory developments in the United States and foreign countries; whether Bicara's cash resources will be sufficient to fund its foreseeable and unforeseeable operating expenses and capital expenditure requirements; as well as the risks and uncertainties described in greater detail under the caption "Risk Factors" in Bicara's most recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q,as well as any subsequent filings Bicara makes with the Securities and Exchange Commission. In addition, any forward-looking statements represent Bicara's views only as of today and should not be relied upon as representing its views as of any subsequent date. Bicara explicitly disclaims any obligation to update any forward-looking statements. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements.

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