Ficerafusp Alfa Plus Pembrolizumab Demonstrated Differentiated Three-Year Overall Survival and Deep Responses Driven by TGF-β Inhibition in 1L R/M HPV-Negative HNSCC

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At a median follow-up of three years, 1500mg of ficerafusp alfa weekly in combination with pembrolizumab demonstrated an estimated 31% overall survival, approximately doubling OS compared to a retrospective analysis of standard of care

Phase 1b dataset of ~90 patients in 1L R/M HPV-negative HNSCC across all three doses demonstrated that deep responses translated into durable long-term outcomes across DOR, PFS, and OS, with a generally well-tolerated safety profile and no new safety signals

Pooled analyses reinforced the TGF-β contribution and demonstrated that deep responders have greater durability of response and appeared more likely to remain progression-free and alive

Company to host conference call and webcast on Friday, May 22, 2026 at 8:30 a.m. ET

BOSTON, May 21, 2026 (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 extended follow-up data out to three years from the Phase 1/1b study of ficerafusp alfa in combination with pembrolizumab in first-line (1L) recurrent/metastatic (R/M) human papillomavirus (HPV)-negative head and neck squamous cell carcinoma (HNSCC). The data, which included the 750mg weekly (QW), 1500mg QW, and 2000mg every-other-week (Q2W) expansion cohorts, demonstrated deep, durable responses observed to be driven by TGF-β inhibition. The data will be presented at the 2026 American Society of Clinical Oncology (ASCO) Annual Meeting in Chicago, IL.

Ficerafusp alfa is a bifunctional epidermal growth factor receptor (EGFR)-directed monoclonal antibody bound to a human transforming growth factor beta (TGF-β) ligand trap designed to enable increased tumor penetration to drive deep and durable responses and potentially improve survival outcomes. Bicara is currently evaluating ficerafusp alfa at 1500mg QW in combination with pembrolizumab in the Phase 3 portion of the ongoing FORTIFI-HN01 pivotal study. Additionally, the company plans to initiate a study evaluating a 12-week loading dose followed by a 2250mg every-three-weeks maintenance dose regimen in the third quarter of 2026 to support long-term administration.

“Ficerafusp alfa continued to deliver deep, durable responses with up to three years of follow-up in 1L R/M HPV-negative HNSCC, reinforcing its best-in-class potential in this setting. At our pivotal study dose of 1500mg QW, an estimated one in three patients was alive at three years – approximately doubling the survival rate observed in retrospective analysis with standard of care pembrolizumab in HPV-negative patients,” said Bill Schelman, M.D., Ph.D., Chief Medical Officer of Bicara Therapeutics. “TGF-β inhibition was observed to be the mechanistic foundation of this clinical benefit: driving tumor penetration, enabling immune cell infiltration, and translating depth of response into durable, long-term survival – a clinical profile no other EGFR-directed therapy in head and neck cancer has demonstrated.”

Up to three years of follow-up reinforces ficerafusp alfa’s best-in-class potential in 1L R/M HPV-negative HNSCC

Across all dose cohorts of ficerafusp alfa in combination with pembrolizumab, the data demonstrated deep, durable responses and a generally well-tolerated safety profile. All three dose cohorts also demonstrated clinically meaningful duration of response (DOR), progression-free survival (PFS) and overall survival (OS), representing substantial improvements over standard of care treatment.

Notably, complete response (CR) rates have continued to mature across all three cohorts since prior data presentation - increasing to 13% at 750mg QW, 25% at 1500mg QW, and 30% at 2000mg Q2W as of the March 31, 2026 data snapshot.

Additionally, deep responses of at least 80% tumor shrinkage were observed at doses of ficerafusp alfa that resulted in greater TGF-β inhibition and tumor penetration, with more than three-fourths of responders in the 1500mg QW and 2000mg Q2W cohorts achieving deep responses.

Three-year follow-up from the 1500mg QW dose cohort, as of the March 31, 2026 data snapshot, showed an estimated OS rate of 31%, approximately doubling the survival rate observed in retrospective analysis with standard of care pembrolizumab in HPV-negative patients.[1]

Table 1. Key Efficacy Results Across Ficerafusp Alfa Dose Cohorts in Combination with Pembrolizumab in 1L R/M HPV-Negative HNSCC

	750mg QW (n=30)	1500mg QW (n=28)	2000mg Q2W (n=27)
Confirmed overall response rate	57%	54%	48%
CR rate	13%	25%	30%
Deep (≥80%) responses	47%	80%	77%
Median time to response	1.6 months	1.4 months	1.6 months
Median DOR	NR (>16.6 months)	21.7 months	NR (>12.8 months)
Median PFS	6.9 months	9.9 months	12.7 months
Median OS	NM (>19.4 months)	21.3 months	NM (>12.7 months; >23.6 months in patients with > 2-year follow-up)*

Data snapshot as of March 31, 2026. NR = not reached; NM = not mature
**Data maturation reflects a bimodal enrollment distribution: in the initial 15 efficacy evaluable patients (median follow-up: 27 months) median OS is not mature but has surpassed 23.6 months. The remaining 12 efficacy evaluable patients had a median follow-up of 11.7 months.*

TGF-β inhibition drove depth and durability of response

Biomarker analyses across all three dose cohorts demonstrated sustained TGF-β inhibition and immune activation with ficerafusp alfa, reinforcing the mechanistic link between intra-tumoral TGF-β inhibition, immune activation, and the deep, durable responses.

Deep responses translated to improved durability and long-term outcomes for patients

Ficerafusp alfa's depth of response, as demonstrated by CR rates and proportion of deep responders, has been well-established and is clinically differentiating. The updated data further reinforced depth of response as a driver of long-term outcomes in patients with 1L R/M HPV-negative HNSCC. Across a pooled cohort analysis, two-thirds of responders achieved deep responses of greater than 80% tumor shrinkage and experienced more durable disease control, with meaningfully longer DOR, PFS, and OS compared to patients with partial responses of less than 80% tumor shrinkage.

Across the pooled analysis comparing deep responders to partial responders of less than 80% tumor shrinkage, deep responders demonstrated:

- A median DOR of 31.6 months;
- A median PFS of 36.9 months, with a 65% reduction in the risk of disease progression or death; and
- A median OS that has not been reached, with a 63% reduction in the risk of death.

This updated dataset provides compelling evidence for depth of response as a clinical surrogate for differentiated long-term outcomes with ficerafusp alfa treatment.

ASCO 2026 Poster Presentations
Annual Meeting | Chicago, IL | May 30 – June 3, 2026

Poster 1 (Wong et al.): Sustained Depth and Durability of Response with TGF-β Trapping in 1L R/M HPV-Negative HNSCC
Sustained depth and durability of response with TGF-β trapping in recurrent or metastatic (R/M) HPV-negative head and neck squamous cell carcinoma (HNSCC): Long-term results from two expansion cohorts of a phase 1/1b study of ficerafusp alfa plus pembrolizumab
Authors: Wong DJ, et al. | Abstract #6040 | Poster Board: 497 | May 30, 2026, 1:30-4:30 p.m. CDT

Poster 2 (Kaczmar et al.): Impact of Depth of Response on Long-Term Clinical Outcomes
The impact of depth of response on long-term clinical outcomes: Exploratory analyses from multiple expansion cohorts of a phase 1/1b study of ficerafusp alfa plus pembrolizumab in first-line recurrent/metastatic (R/M) HPV-negative head and neck squamous cell carcinoma (HNSCC)
Authors: Kaczmar J, et al. | Abstract #6058| Poster Board: 515 | May 30, 2026, 1:30-4:30 p.m. CDT

Poster 3 (Ferrarotto et al.): FORTIFI-HN01 Trial in Progress
A multicenter, randomized, double-blind, phase 2/3 study of ficerafusp alfa (BCA101) or placebo in combination with pembrolizumab for first-line treatment of PD-L1-positive, recurrent or metastatic head and neck squamous cell carcinoma: FORTIFI-HN01
Authors: Ferrarotto R, et al. | Abstract #TPS6129| Poster Board: 584A | May 30, 2026, 1:30-4:30 p.m. CDT

1. Based on a retrospective analysis of Supplementary Figure 1C, Vasiliadou, Ifigenia, et al. International Journal of Cancer 155.5 (2024): 883-893. No head-to-head studies have been conducted, and cross-trial comparisons differences in molecule composition, trial design, and patient population and characteristics.

Conference Call Information
Bicara will host a live conference call and webcast on Friday, May 22, 2026 at 8:30 a.m. ET. Individuals may register for the conference call by clicking the link here. Once registered, participants will receive dial-in details and a unique PIN that will allow them to access the call. An audio webcast will be accessible through the Investor Relations section of Bicara's website under Events and Presentations. An archived replay will also be available for 30 days following the event.

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. The U.S. Food and Drug Administration (FDA) has granted Breakthrough Therapy Designation 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. Ficerafusp alfa is currently being evaluated in FORTIFI-HN01, a pivotal Phase 2/3 clinical trial in patients with 1L R/M HNSCC.

About Bicara Therapeutics
Bicara is a clinical-stage biopharmaceutical company committed to bringing transformative bifunctional therapies to patients with solid tumors. Bicara has built a platform designed to facilitate the development of bifunctional therapies that precisely target the tumor and deliver a tumor-modulating payload to the tumor site. This approach was deployed in the development of Bicara's lead program ficerafusp alfa, formerly BCA101, a bifunctional epidermal growth factor receptor (EGFR) directed monoclonal antibody bound to a human transforming growth factor beta (TGF-β) ligand trap. By combining these two clinically validated targets, ficerafusp alfa has the potential to exert potent anti-tumor activity by simultaneously blocking both cancer cell-intrinsic EGFR survival and proliferation, as well as the immunosuppressive TGF-β signaling within the tumor microenvironment (TME). Ficerafusp alfa directs the TGF-β inhibitor into the immediate TME through the binding of EGFR on tumor cells, which Bicara believes will lead to deep and durable responses and an increase in overall survival, while reducing the potential adverse effects previously associated with systemic TGF-β inhibition. 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 and 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, express or implied statements regarding Bicara's strategy, business plans and focus; the clinical development of ficerafusp alfa, including the initiation, timing, progress, results and future data releases of Bicara's ongoing and planned clinical trials; the advancement of the FORTIFI-HN01 pivotal trial in 1L HPV-negative R/M HNSCC and the ongoing Phase 1/1b expansion cohorts; the initiation of an alternate dose study in the third quarter of 2026 to evaluate a loading and every-three-week maintenance dosing regimen of ficerafusp alfa; the expected therapeutic potential and clinical benefits of ficerafusp alfa, including potential efficacy, depth, durability, tolerability and overall survival as compared to the existing standard of care; and the potential for regulatory approval and U.S. launch of ficerafusp alfa. 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 relating to Bicara's research and development activities; Bicara's ability to execute on its business plans and strategy, including obtaining the requisite regulatory approvals on the expected timeline, if at all; uncertainties relating to the clinical development of ficerafusp alfa; the Company's dependence on third parties; risks related to the Company's financial condition and need for additional funds in order to commercialize ficerafusp alfa, if approved; risks related to regulatory developments and approval processes of the U.S. Food and Drug Administration and comparable foreign regulatory authorities; risks related to establishing and maintaining Bicara's intellectual property protections; and risks related to the competitive landscape for ficerafusp alfa; as well as other risks described in "Risk Factors," in Bicara's most recent Annual Report on Form

10-K and subsequent Quarterly Reports on Form 10-Q, as well as discussions of potential risks, uncertainties, and other important factors in Bicara's subsequent filings with the U.S. Securities and Exchange Commission (SEC). 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.

Bicara intends to use its Investor Relations website as a means of disclosing material nonpublic information and for complying with its disclosure obligations under Regulation FD. Accordingly, investors should monitor the Company's Investor Relations website, in addition to following the Company's press releases, SEC filings, public conference calls, presentations, and webcasts.

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