



Upstream Bio Presents New Data from Phase 2 VIBRANT Trial of Verekitug Demonstrating Improvement in Asthma Symptom Control in Participants with CRSwNP and Comorbid Asthma at the ATS 2026 International Conference

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- Verekitug led to statistically significant and clinically meaningful improvement in asthma symptom control as measured by the Asthma Control Questionnaire-6 (ACQ-6) in participants with CRSwNP and comorbid asthma –
- Verekitug led to improvements in nasal polyp score (NPS) in participants with and without comorbid asthma, as well as rapid and sustained reductions in blood and nasal type 2 inflammatory biomarkers –

WALTHAM, Mass., May 18, 2026 (GLOBE NEWSWIRE) -- [Upstream Bio, Inc.](#) (Nasdaq: UPB), a clinical-stage company developing treatments for inflammatory diseases, with an initial focus on severe respiratory disorders, today presented new data from the Phase 2 VIBRANT trial evaluating verekitug in participants with chronic rhinosinusitis with nasal polyps (CRSwNP). The data, presented in two posters at the American Thoracic Society (ATS) 2026 International Conference in Orlando, FL, demonstrated the positive effect of verekitug in participants with CRSwNP and comorbid asthma, as well as its impact on type 2 inflammatory biomarkers in blood and nasal secretions.

“Up to 70% of people living with chronic rhinosinusitis with nasal polyps also have asthma, and many of these individuals continue to experience a substantial symptom burden across both the upper and lower airways despite available treatments. These new analyses indicate that verekitug improves asthma control in CRSwNP patients with comorbid asthma, while delivering consistent improvements in nasal polyp burden, sinonasal symptoms, and reduced reliance on surgery or systemic steroids—reinforcing our belief in verekitug’s ability to address disease broadly across the airway,” said Aaron Deykin, MD, Chief Medical Officer and Head of Research & Development at Upstream Bio. “Together with rapid and sustained reductions in type 2 inflammatory biomarkers, these data extend our understanding of verekitug’s profile as we prepare to initiate Phase 3 trials in CRSwNP and severe asthma. We believe verekitug’s combination of potentially best-in-class efficacy and a convenient quarterly dosing interval has the potential to meaningfully advance the standard of care for people living with serious respiratory diseases.”

“Treating patients with both CRSwNP and comorbid asthma effectively remains a real challenge. The improvements observed in the VIBRANT trial with verekitug across nasal polyp burden, sinonasal symptoms, and asthma symptom control—together with reductions in the biomarkers that drive this disease, both systemically and locally in the nasal mucosa—point to meaningful benefit for people living with CRSwNP and comorbid asthma,” said Joseph K. Han, MD, Professor in the Department of Otolaryngology & Head and Neck Surgery and Chief for the Division of Allergy at Old Dominion University (Eastern Virginia Medical School), and principal investigator on the VIBRANT trial. “These efficacy outcomes, combined with a quarterly dosing interval, suggest that verekitug could represent an important new treatment option for people living with these challenging conditions.”

Approximately 60% of the 81 participants in the VIBRANT trial had comorbid asthma. Among participants with comorbid asthma, verekitug 100 mg administered every 12 weeks led to improvement in asthma symptom control at Week 24, with a placebo-adjusted least squares mean (LSM) reduction in ACQ-6 of -0.9 (95% CI: -1.6 to -0.2; nominal $p=0.014$) compared with placebo—well above the minimal clinically important change in ACQ-6 of -0.5.

Verekitug also led to improvements in NPS at Week 24 in participants with and without comorbid asthma, consistent with [the previously reported VIBRANT top-line results](#). In participants with comorbid asthma, generally greater improvements were observed across sinonasal symptom measures, including nasal congestion score (NCS), total symptom score (TSS), difficulty with sense of smell (DSS), and Lund-Mackay score, compared with participants without comorbid asthma. Among participants with comorbid asthma, verekitug reduced the need for rescue systemic corticosteroids or CRSwNP surgery by 83% (nominal $p=0.027$) compared with placebo.

In a separate post hoc analysis, verekitug 100 mg administered every 12 weeks led to rapid and sustained reductions in key type 2 inflammatory cytokines, including IL-4, IL-5, and IL-13, in both blood and nasal secretions over 24 weeks of treatment with generally greater reductions observed in nasal secretions. Verekitug also reduced additional mediators of local inflammation and fibrotic activity, including periostin, thymus and activation-regulated cytokine (TARC), macrophage-derived chemokine (MDC), and eotaxin-3, shedding light on the mechanisms by which a thymic stromal lymphopoietin (TSLP) receptor blockade may benefit patients with inflammatory airway disease.

Verekitug reduced blood eosinophils by 50% as early as Week 2, with reductions sustained through Week 24. Reductions in IgE were observed beginning at Week 4 and continued to decline through Week 24. The magnitude of IL-5 reduction in blood correlated with the magnitude of reduction in blood eosinophils following verekitug treatment (Pearson $r=0.68$).

VIBRANT (NCT06164704) was a Phase 2 global, randomized, double-blind, placebo-controlled, parallel group clinical trial that

evaluated the efficacy and safety of verekitug over 24 weeks in 81 adults with CRSwNP. Upstream Bio designed the VIBRANT trial using endpoints that, pending interactions with regulatory authorities, could produce data to support submissions for product approval. The Company plans to initiate dosing in Phase 3 registrational trials in both CRSwNP and severe asthma in the first quarter of 2027.

About CRSwNP

CRSwNP is a chronic inflammatory disease of the upper airway, marked by inflammation in the nose and sinuses and the presence of nasal polyps. CRSwNP has four main symptoms: runny nose or postnasal drip, nasal congestion, facial pressure and/or pain, and loss of smell and/or taste. Despite available treatments such as corticosteroids, surgery and, more recently, biologics, quality-of-life studies and post-surgical recurrence rates clearly show that many people with CRSwNP have uncontrolled symptoms that impact their daily life and that current treatments are not meeting their needs. It is estimated that CRSwNP affects up to 4% of the general population, of whom 40% have uncontrolled disease.

Nasal polyps are associated with significant disease burden and debilitating symptoms; it is estimated that over 40% of people with severe asthma also have CRSwNP, and that up to 70% of people with CRSwNP also have asthma, demonstrating a strong association between the two conditions.

About the Phase 2 VIBRANT Trial

The Phase 2 VIBRANT trial (NCT06164704) was a global, randomized, placebo-controlled, parallel group clinical trial, which was designed to assess the efficacy and safety of verekitug in adults with CRSwNP who were receiving concurrent intranasal corticosteroid therapy. Participants received either 100 mg of verekitug or placebo subcutaneously every 12 weeks for 24 weeks. The primary endpoint was change in endoscopic nasal polyp score at Week 24, a primary endpoint that has been used in several registrational trials for other biologic treatments for CRSwNP. Secondary endpoints included: nasal congestion score, sinus opacification, difficulty with sense of smell, total symptom score, percentage of participants requiring systemic corticosteroids or nasal polyp surgery, and time to first such interventions up to Week 24.

About Verekitug

Verekitug is a novel recombinant fully human immunoglobulin G1 (IgG1) monoclonal antibody that binds to the thymic stromal lymphopoietin (TSLP) receptor and inhibits proinflammatory signaling initiated by TSLP. It is the only known antagonist currently in clinical development that targets and inhibits the TSLP receptor.

TSLP is a cytokine that is a key driver of the inflammatory response in major allergic and inflammatory diseases, such as asthma, where disruption of TSLP signaling has been clinically validated as an effective therapeutic strategy. TSLP activation is one of the first events in the inflammatory cascade stimulated by allergens, viruses and other triggers, initiating the activation of downstream targets such as IL-4, IL-5, IL-13, IL-17 and IgE. Because TSLP is a target upstream in the inflammatory cascade, blocking the TSLP receptor presents an opportunity for a single treatment to impact the drivers of multiple pathological inflammatory processes across a broad set of diseases.

Verekitug has advanced into three separate global, placebo-controlled, randomized Phase 2 clinical trials, including the positive VIBRANT trial (NCT06164704) in patients with CRSwNP and the positive VALIANT trial (NCT06196879) in patients with severe asthma. The VENTURE trial (NCT06981078) in patients with moderate-to-severe chronic obstructive pulmonary disease (COPD) is ongoing. Additionally, in May 2025, Upstream Bio initiated the VALOUR trial (NCT06966479), a long-term extension study in eligible participants with severe asthma who completed the VALIANT Phase 2 clinical trial.

About Upstream Bio

Upstream Bio is a clinical-stage biotechnology company developing treatments for inflammatory diseases, with an initial focus on severe respiratory disorders. The Company is developing verekitug, the only known antagonist currently in clinical development that targets and inhibits the receptor for thymic stromal lymphopoietin (TSLP), a cytokine which is a clinically validated driver of inflammatory response positioned upstream of multiple signaling cascades that affect a variety of immune-mediated diseases. The Company has advanced this highly potent monoclonal antibody into separate Phase 2 trials for the treatment of chronic rhinosinusitis with nasal polyps (CRSwNP), severe asthma, and chronic obstructive pulmonary disease (COPD). Upstream Bio's team is committed to maximizing verekitug's unique attributes to address the substantial unmet needs for patients underserved by today's standard of care. To learn more, please visit www.upstreambio.com.

Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, each as amended. These statements may be identified by words such as "aims," "anticipates," "believes," "continue," "could," "estimates," "expects," "forecasts," "goal," "intends," "may," "plans," "possible," "potential," "predict," "project," "seeks," "should," "target," "will" and variations of these words or similar expressions. 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: the clinical development of verekitug for the treatment of severe asthma, CRSwNP and COPD, including the initiation, timing, progress and results of ongoing and planned clinical trials; expectations for future discussions with regulatory authorities and the potential of the endpoints of the Company's clinical trials to produce data that could support submissions for product approval; the potential for verekitug to be a best-in-class treatment; expectations regarding the differentiation, safety, efficacy, tolerability, and/or extended dosing interval of verekitug; and expectations for the size and growth potential of the market for verekitug and the Company's ability to serve that market. Any forward-looking statements in this press release are based on the Company's current expectations, estimates and projections only as of the date of this release and are subject to a number of risks and uncertainties that could cause actual

results to differ materially and adversely from those set forth in or implied by such forward-looking statements. Readers are cautioned that actual results, levels of activity, safety, efficacy, performance or events and circumstances could differ materially from those expressed or implied in the Company's forward-looking statements due to a variety of risks and uncertainties, which include, without limitation, risks and uncertainties related to: Upstream Bio's ability to advance verekitug through clinical development, and to obtain regulatory approval of and ultimately commercialize verekitug on the expected timeline, if at all; the initiation, timing, progress and results of clinical trials; Upstream Bio's ability to fund its development activities and achieve development goals; Upstream Bio's dependence on third parties to conduct clinical trials and manufacture verekitug, and commercialize verekitug, if approved; Upstream Bio's ability to attract, hire and retain key personnel, and protect its intellectual property; Upstream Bio's financial condition and need for substantial additional funds in order to complete development activities and commercialize verekitug, if approved; regulatory developments and approval processes of the U.S. Food and Drug Administration and comparable foreign regulatory authorities; Upstream Bio's competitors and industry; and other risks and uncertainties described in greater detail under the caption "Risk Factors" in Upstream Bio's most recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q, as well as any subsequent filings with the SEC. Any forward-looking statements represent Upstream Bio's views only as of today and should not be relied upon as representing its views as of any subsequent date. Upstream Bio explicitly disclaims any obligation or undertaking to update any forward-looking statements contained herein to reflect any change in its expectations or any changes in events, conditions or circumstances on which any such statement is based except to the extent required by law, and claims the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

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