



Vistagen Announces Topline and Post-Hoc Data from PALISADE-4 Phase 3 Public Speaking Challenge Trial of Fasedienol for the Acute Treatment of Social Anxiety Disorder

June 30, 2026

Fasedienol did not achieve statistically significant improvement on primary and secondary endpoints

In a post-hoc analysis, fasedienol achieved a nominal statistically significant improvement on primary endpoint in patients with very severe social anxiety disorder

Favorable safety and tolerability data were consistent with previous clinical trials

Company plans to meet with FDA to discuss a potential registrational pathway for fasedienol involving a single future Phase 3 trial with the Liebowitz Social Anxiety Scale as the primary endpoint and confirmatory evidence from the PALISADE Program

SOUTH SAN FRANCISCO, Calif.--(BUSINESS WIRE)--Jun. 30, 2026-- Vistagen (Nasdaq: VTGN), a late clinical-stage biopharmaceutical company pioneering neuroscience with nose-to-brain neurocircuitry to develop and commercialize a new class of intranasal product candidates called pherines, today announced the topline results of the PALISADE-4 Phase 3 trial of intranasal fasedienol for the acute treatment of social anxiety disorder.

PALISADE-4 was a U.S. multi-center, randomized, double-blind, placebo-controlled Phase 3 clinical trial designed to evaluate the efficacy, safety, and tolerability of a single dose of fasedienol in reducing anxiety symptoms in adults with social anxiety disorder during a simulated anxiety-provoking public speaking challenge with the Subjective Units of Distress Scale (SUDS) as the primary endpoint.

In the overall trial population (n=238), fasedienol did not achieve its primary endpoint, as measured by the least squares (LS) mean change from baseline on the SUDS score for fasedienol (-9.5+/-1.7 standard error (SE)) compared with placebo (-11.4+/-1.7 SE), with a difference in the LS means of 1.9 (p=0.427). There was no treatment difference between fasedienol and placebo for the secondary endpoints. Favorable safety and tolerability data of fasedienol were consistent with previous placebo-controlled clinical trials.

In a post-hoc analysis of a subpopulation of patients with very severe social anxiety defined by a baseline score at screening of 95 or greater on the Liebowitz Social Anxiety Scale (LSAS) (n=123)¹, fasedienol was nominally statistically significant as measured by the LS mean change from baseline on the SUDS score for fasedienol (-12.8+/-3.4 SE) compared with placebo (-3.7 +/-3.4 SE), with a difference in the LS means of -9.1 (p=0.036).

Based on the totality of data to date from the fasedienol development program in social anxiety disorder, Vistagen plans to transition from the acute treatment of social anxiety disorder symptoms to a potential registrational pathway focused on the overall treatment of social anxiety disorder over time. Informed by U.S. Food and Drug Administration (FDA) Draft Guidance to Industry published in June 2026 (*Demonstrating Substantial Evidence of Effectiveness for Human Drug and Biological Products*)², Vistagen plans to meet with the FDA to discuss a registrational pathway for fasedienol potentially supported by a single, future multi-dose Phase 3 trial with the LSAS as the primary endpoint, consistent with regulatory precedent supporting previously-approved drugs based on the LSAS for the treatment of social anxiety disorder, and confirmatory evidence from its positive PALISADE-2 Phase 3 trial and other placebo-control clinical trials in the fasedienol development program, as well as what the Company believes to be sufficient aggregate safety data. The LSAS is a 24-item instrument used by clinical researchers to measure fear, anxiety, and avoidance of social and performance situations to assess the severity of social anxiety disorder.

"The results of the primary analysis of PALISADE-4 were not what we had hoped for. However, we are encouraged by the safety and tolerability data and our post-hoc analysis in which we observed a positive efficacy signal in a large subpopulation of patients with very severe social anxiety disorder," said Dr. Angel Angelov, Chief Medical Officer of Vistagen. "As we look at the totality of data across the fasedienol development program, we believe there is evidence of fasedienol's therapeutic potential for patients with social anxiety disorder."

"Vistagen remains focused on being financially disciplined and evaluating opportunities to maximize the value of our deep pipeline of clinical-stage product candidates. We plan to meet with the FDA with the goal of establishing a clear registrational path forward for fasedienol," said Shawn Singh, President and Chief Executive Officer of Vistagen. "I want to express my sincere gratitude to the patients, coordinators, investigators, and the Vistagen team whose dedication and commitment made this work possible."

Based on current operating plans and previously announced cost-management initiatives, the Company continues to expect its cash resources to support operations into 2027.

Vistagen's late clinical-stage pipeline also includes the following intranasal pherine product candidates:

- Refisolone for Moderate to Severe Vasomotor Symptoms (Hot Flashes) due to Menopause and other women's health conditions (Phase 2)
- Itruvone for Major Depressive Disorder (Phase 2)
- PH15 for Improvement of Psychomotor Impairment due to Mental Fatigue (Phase 2)
- PH284 for Cancer Cachexia (Phase 2)

CONFERENCE CALL AND WEBCAST

Vistagen will host a conference call and live audio webcast today, June 30, 2026, at 8:30 a.m. Eastern Time. A link can be found under "Events" in the Investors section of Vistagen's website. <https://www.vistagen.com/investors/news-events/ir-calendar>

Please click the webcast link and follow the registration prompts to access the call at least 10 minutes before the call. The webcast will be archived on Vistagen's website shortly after the call and will be available for at least 90 days.

For participants interested in joining the call via dial-in, please use the link below to pre-register. After registering, you will receive access details via email.

Participant Dial-in Registration: <https://register-conf.media-server.com/register/BI0d894e6d6d6f42aeb0a2cda8da037fe0>

About Fasedienol

Fasedienol, Vistagen's most advanced neurocircuitry-focused investigational pherine product candidate, is in U.S. Phase 3 clinical development for social anxiety disorder. Fasedienol's proposed mechanism of action (MOA) is fundamentally differentiated from all FDA-approved anti-anxiety medications. When administered intranasally in microgram-level doses, neurocircuitry-focused fasedienol modulates the nasal-limbic amygdala fear and anxiety neurocircuits involved in the pathophysiology of social anxiety disorder. Fasedienol is pharmacologically active without requiring apparent systemic absorption or uptake into the brain to achieve its rapid-onset anxiolytic effects. Fasedienol also has no observed binding on certain cellular receptors isolated from the brain that are associated with known drug abuse liability potential (for example, dopamine and opiate receptors) when activated by certain other pharmaceutical compounds for psychiatric disorders. Unlike benzodiazepines, fasedienol has no observed potentiation of GABA-A receptors. Because of its innovative non-systemic neurocircuitry-focused proposed MOA, Vistagen believes fasedienol has the potential to achieve rapid-onset anxiolytic effects for individuals with social anxiety disorder with a significantly reduced risk of unwanted side effects and safety concerns, such as potential drug-drug interactions, abuse, misuse, and addiction, associated with certain current oral and other systemically absorbed neuropsychiatric pharmaceuticals that act directly on neurons in the brain and are sometimes prescribed off-label for the treatment of social anxiety disorder.

About Social Anxiety Disorder

Social anxiety disorder is a highly prevalent, serious, and sometimes life-threatening psychiatric mental health disorder affecting over 30 million adults in the U.S. While often experienced on a long-term basis, social anxiety disorder can manifest over time when triggered by anxiety-provoking social and performance situations in daily life, causing anxiety, distress, and the fear of embarrassment, judgment, and humiliation. Social anxiety disorder can also significantly disrupt social life and hinder occupational functioning, as well as increase the risk of depression and substance use disorders, suicidal ideation, and suicide.

About Vistagen

Vistagen (Nasdaq: VTGN) is a late clinical-stage biopharmaceutical company leveraging a deep understanding of nose-to-brain neurocircuitry to develop and commercialize a new class of rapid-onset neurocircuitry-focused intranasal product candidates called pherines. Vistagen's pherine product candidates are designed to achieve therapeutic benefits without requiring absorption into the blood or uptake into the brain, giving them the potential to be a safer alternative to other pharmacological options, if successfully developed and approved. Vistagen's most advanced intranasal pherine product candidates are fasedienol in U.S. Phase 3 development for social anxiety disorder, itruvone for major depressive disorder, and refisolone for vasomotor symptoms (hot flashes) due to menopause. Connect at www.Vistagen.com.

Forward Looking Statements

This press release contains certain forward-looking statements within the meaning of the federal securities laws, including, without limitation, statements regarding Vistagen's plans to meet with the FDA, the planned regulatory path forward for fasedienol potentially consisting of a single, multi-dose Phase 3 trial with the LSAS as the primary endpoint and confirmatory evidence from trials completed as a part of the PALISADE Phase 3 program, Vistagen plans to transition from the acute treatment of social anxiety disorder symptoms to a potential registrational pathway focused on the overall treatment of social anxiety disorder over time, Vistagen's belief about the meaningfulness of the efficacy signal in a subgroup of patients in PALISADE-4 with very severe social anxiety disorder and the totality of data across the fasedienol development program, Vistagen's plans to remain financially disciplined and focused on evaluating opportunities to maximize the value of fasedienol and the other late clinical-stage pherine product candidates in its pipeline, the success, cost, timing and potential indications of our product development activities and clinical trials, and Vistagen's belief that its cash resources to support operations into 2027. In some cases, you can identify forward-looking statements by the use of words such as "may," "could," "expect," "project," "outlook," "strategy," "intend," "plan," "seek," "anticipate," "believe," "estimate," "predict," "potential," "strive," "goal," "continue," "likely," "will," "would" and variations of these terms and similar expressions, or the negative of these terms or similar expressions. Such forward-looking statements are necessarily based upon estimates and assumptions that, while considered reasonable by Vistagen and its management, are inherently uncertain. As with all pharmaceutical products, there are substantial risks and uncertainties in the process of development and commercialization, and actual results or developments may differ materially from those projected or implied in these forward-looking statements. There can be no guarantee that any of Vistagen's product candidates, including fasedienol, will successfully complete any future clinical trials, receive regulatory approval or be commercially successful. Other factors that may cause such a difference include, without limitation, risks and uncertainties relating to completing clinical development work within Vistagen's fasedienol PALISADE Phase 3 program, as currently expected or at all; Vistagen's ability to successfully employ cash preservation measures and/or secure adequate financing for its operations, including financing or collaborative support for continued clinical development of its product candidates; submission of a NDA to the FDA for any of Vistagen's product candidates, including fasedienol; and the ability of any clinical trial information submitted by Vistagen to the FDA to successfully support an NDA. These risks and others are more fully discussed in the section entitled "Risk Factors" in Vistagen's Annual Report on Form 10-K for the period ended March 31, 2026, as well as discussions of potential risks, uncertainties, and other important factors in our other filings with the U.S. Securities and Exchange Commission (SEC). Vistagen's SEC filings are available on the SEC's website at www.sec.gov. You should not place undue reliance on these forward-looking statements, which apply only as of the date of this press release and should not be relied upon as representing Vistagen's views as of any subsequent date. Vistagen explicitly disclaims any obligation to update any forward-looking statements other than as may be required by law. If Vistagen does update one or more forward-looking statements, no inference should be made that Vistagen will make additional updates with respect to those or other forward-looking statements.

Footnotes

1. The post-hoc analysis for the very severe social anxiety disorder subpopulation (defined by LSAS ≥ 95) excludes data from one site (n=15) for irregularities documented and communicated before database lock that led to site disqualification from the trial. The post-hoc analysis also excluded data to account for Public Speaking Challenge (PSC) ceiling and placebo effects: 1) subjects who had SUDS scores > 90 at visit 2 or visit 3 at baseline could not be provoked effectively by the PSC to have higher SUDS scores for the experiment to work effectively (SUDS scale is from 0-100 with above 90 being extreme anxiety) (n=5); and 2) subjects who had SUDS score improvement higher than 20 from baseline at visit 2 (the placebo run-in) either were placebo responders or could not be provoked effectively by the PSC (n=1).
2. June 2026, *FDA.gov, Demonstrating Substantial Evidence of Effectiveness for Human Drug and Biological Products, Draft Guidance for Industry*

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