UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(d) of the SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): August 7, 2023

Vistagen Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Nevada	**000-54014**	**20-5093315**
(State or other jurisdiction of incorporation)	*(Commission File Number)*	*(IRS Employer Identification Number)*

343 Allerton Ave.
South San Francisco, California 94080
(Address of principal executive offices)

(650) 577-3600
(Registrant's telephone number, including area code)

Not Applicable
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a -12)
☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d -2(b))
☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e -4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.001 per share	VTGN	Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR 230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR 240.12b-2)

Emerging Growth Company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act ☐

Item 7.01 Regulation FD Disclosure.

On August 7, 2023, Vistagen Therapeutics, Inc. (the "*Company*") announced positive statistically significant top-line results from its Phase 3 PALISADE-2 clinical trial of fasedienol (PH94B), the Company's investigational neuroactive nasal spray for the treatment of adults with social anxiety disorder. A copy of the press release is attached to this Current Report on Form 8-K as Exhibit 99.1.

The information in Section 7.01 of this Current Report on Form 8-K, including the information set forth in Exhibit 99.1, is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "*Exchange Act*"), nor shall Exhibit 99.1 filed herewith be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits Index

Exhibit No.	Description
99.1	Press Release issued by Vistagen Therapeutics, Inc., dated August 7, 2023.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Vistagen Therapeutics, Inc.

Date: August 7, 2023

By: */s/ Shawn K. Singh*

Shawn K. Singh

Chief Executive Officer

Vistagen

Vistagen Announces Positive Top-Line Results from Phase 3 PALISADE-2 Trial of Fasedienol (PH94B) Nasal Spray in Social Anxiety Disorder

First positive U.S. Phase 3 study of an investigational therapy for social anxiety disorder in over 15 years

Statistically significant rapid-onset reduction in patient-reported Subjective Units of Distress Scale (SUDS) score compared to placebo in a public speaking challenge (primary endpoint, p=0.015)

Trial also met the secondary endpoint, demonstrating a statistically significant reduction in proportion of responders compared to placebo as measured by the Clinical Global Impressions Improvement (CGI-I) scale (secondary endpoint, p=0.033)

Fasedienol was well-tolerated and demonstrated a favorable safety profile consistent with all prior trials of fasedienol in social anxiety disorder

Over 25 million Americans are living with social anxiety disorder[1]

SOUTH SAN FRANCISCO, Calif., August 7, 2023 – Vistagen (NASDAQ: VTGN), a clinical-stage biopharmaceutical company aiming to transform the treatment landscape for individuals living with anxiety, depression and other central nervous system (CNS) disorders, today announced positive top-line results from its Phase 3 PALISADE-2 trial evaluating the efficacy, safety, and tolerability of fasedienol (PH94B) nasal spray in adults diagnosed with social anxiety disorder (SAD). The trial met its primary endpoint, with fasedienol demonstrating a statistically significant difference in average SUDS score during a public speaking challenge compared to placebo (p=0.015). The trial also met its secondary endpoint, demonstrating a statistically significant difference in the proportion of clinician-assessed responders between fasedienol and placebo as measured by the CGI-I scale (p=0.033). Fasedienol was well-tolerated and demonstrated a favorable safety profile consistent with all prior trials.

“We are thrilled that these compelling top-line results from the Phase 3 PALISADE-2 trial confirm what was seen in the Phase 2 studies in social anxiety disorder and highlight the potential for fasedienol, with its novel and unique proposed mechanism of action, to transform what is possible for more than 25 million people living with social anxiety in the U.S. and millions more affected worldwide,” stated Shawn Singh, Chief Executive Officer of Vistagen. “As a new class of medicines, our pherine nasal spray pipeline holds the potential to transform the treatment landscape across numerous therapeutic areas. At the head of that class, fasedienol’s potential, as demonstrated in this Phase 3 trial, sets the stage for the first fundamentally new class of medicine for individuals living with SAD in more than 20 years.”

[1] 2021 National Health and Wellness Survey

“Fasedienol demonstrated a rapid and very clinically meaningful reduction in SUDS score, indicating a single administration has the potential to reduce anxiety symptoms during an anxiety-provoking situation,” stated Dr. Michael R. Liebowitz, innovator of the Liebowitz Social Anxiety Scale (LSAS), former Columbia University psychiatrist, director and founder of the Anxiety Disorders Clinic at the New York State Psychiatric Institute, and current Managing Director of The Medical Research Network LLC in New York City. “A future Phase 3 study involving multiple administrations of fasedienol over several weeks on a patient-tailored, as-needed basis will build on the body of evidence now demonstrated in PALISADE-2 and multiple Phase 2 studies. Fasedienol could be an optimal treatment for social anxiety patients given its ability to be used acutely to reduce anxiety while helping to reduce SAD severity over time.”

Primary Efficacy Endpoint

The PALISADE-2 trial (n=141) met its primary efficacy endpoint, the difference in mean SUDS score during the public speaking challenge at baseline (Visit 2) and treatment (Visit 3) for patients who received fasedienol (n=70) compared to placebo (n=71) at Visit 3. Fasedienol-treated patients demonstrated a statistically significant greater change in mean SUDS score (least-squares (LS) mean = -13.8) compared to placebo (LS mean = -8.0), for a difference between groups of -5.8 (p=0.015).

Secondary Efficacy Endpoint

The trial met its secondary endpoint, demonstrating a statistically significant difference in the proportion of clinician-assessed responders between fasedienol and placebo as measured by the CGI-I scale. Responders were identified as those who were rated ‘very much less anxious’ or ‘much less anxious’ with 37.7% (n=70) of fasedienol-treated patients rated as responders, as compared to 21.4% (n=71) of those treated with placebo (p=0.033).

Exploratory Efficacy Endpoints

The trial met an important exploratory endpoint of the difference in the proportion of patient-assessed responders between fasedienol and placebo as measured by the Patient’s Global Impression of Change (PGI-C) scale. Responders were identified as those who self-rated ‘very much less anxious’ or ‘much less anxious’ with 40.6% (n=70) of fasedienol-treated patients rated as responders, as compared to 18.6% (n=71) of those treated with placebo (p=0.003).

The trial also met the exploratory endpoint of the difference in the proportion of patients in each treatment group with a 20-point improvement in patient-assessed SUDS score from baseline (Visit 2) to treatment (Visit 3). Of the fasedienol-treated patients, 35.7% (n=70) demonstrated this statistically significant and clinically meaningful improvement in SUDS score, as compared to 18.6% (n=71) in the placebo-treated group (p=0.020).

Safety

Fasedienol was observed to be well-tolerated in the study with no severe or serious adverse events (AEs) reported. All treatment-emergent adverse events reported for the overall study were mild or moderate. There were no AEs reported in the fasedienol treatment arm above 2% occurrence.

About the Phase 3 PALISADE-2 Trial

PALISADE-2 was a multi-center, randomized, double-blind, placebo-controlled, Phase 3 clinical study in adults diagnosed with SAD. The study was designed to evaluate the efficacy, safety, and tolerability of the acute administration of fasedienol to relieve anxiety symptoms in adult patients with SAD during a simulated anxiety-provoking public speaking challenge, as measured using the patient-reported SUDS score.

Enrolled patients had a diagnosis of SAD and demonstrated marked social anxiety at enrollment, as evidenced by a baseline score on the LSAS of at least 70. A total of 141 patients were enrolled in the U.S. multi-center trial. The total enrollment reflects the pause in enrollment after receiving top-line results from PALISADE-1 to allow for independent third-party biostatisticians to conduct an interim analysis of the 141 patients randomized in the trial up to the date of the pause. Although the results of the independent interim analysis indicated that continuation of PALISADE-2 would not be futile, Vistagen determined the best course of action was to close the PALISADE-2 study given the expense, time and methodological complexities involved in resuming PALISADE-2.

Additional analysis of data from the Phase 3 PALISADE-2 trial is ongoing, with plans to present these results at future scientific meetings.

About Fasedienol Nasal Spray

Vistagen’s fasedienol (PH94B) is a first-in-class, rapid-onset investigational pherine nasal spray with a novel proposed mechanism of action (MOA) that regulates the olfactory-amygdala neural circuits of fear and anxiety and attenuates the tone of the sympathetic autonomic nervous system, without systemic distribution, potentiation of GABA-A receptors or direct activity on neurons in the brain. Vistagen is developing fasedienol in a Phase 3 program for the treatment of social anxiety disorder. Designed for intranasal administration in low microgram doses, the proposed novel MOA of fasedienol is fundamentally differentiated from all currently approved anti-anxiety medications, including all SSRIs and SNRIs as well as benzodiazepines prescribed off-label.

About Social Anxiety Disorder

Social anxiety disorder (SAD) affects over 25 million Americans. A person with SAD feels intense, persistent symptoms of anxiety or fear in certain social situations, such as meeting new people, making comments in a business meeting, dating, being on a job interview, answering a question in class, or talking to a cashier in a store. Doing common, everyday things in front of people causes profound anxiety or fear of being embarrassed, evaluated, humiliated, judged, or rejected. SAD can get in the way of going to work, attending school, or doing a wide variety of things in a situation that is likely to involve interpersonal interaction. It can lead to avoidance and opportunity costs that can significantly impact a person's employment and social activities and can be very disruptive to their overall quality of life. SAD is commonly treated long-term with certain FDA-approved antidepressants, which have a slow onset of effect (several weeks) and provide limited therapeutic benefits, and with benzodiazepines, which are not FDA-approved for treating SAD. Both antidepressants and benzodiazepines have known side effects and significant safety concerns that may make them unattractive to individuals affected by SAD.

About Vistagen

Vistagen (Nasdaq: VTGN) is a late clinical-stage biopharmaceutical company aiming to transform the treatment landscape for individuals living with anxiety, depression and other CNS disorders. Vistagen is advancing therapeutics with the potential to be faster-acting, and with fewer side effects and safety concerns, than those currently available for the treatment of anxiety, depression and multiple CNS disorders. Vistagen's pipeline includes six clinical-stage product candidates, including fasedienol (PH94B), itruvone (PH10), PH15, PH80, and PH284, each an investigational agent belonging to a new class of drugs known as pherines, as well as AV-101, which is an oral prodrug antagonist of the N-methyl-D-aspartate receptor. Pherines are administered as low microgram dose level nasal sprays and are designed with a novel mechanism of action that activates chemosensory neurons in the nasal cavity and can beneficially impact key neural circuits in the brain without systemic uptake or direct activity on CNS neurons in the brain. Vistagen is passionate about transforming mental health care and redefining what is possible in the treatment of anxiety, depression and several other CNS disorders. Connect at www.vistagen.com.

Forward Looking Statements
This press release contains certain forward-looking statements within the meaning of the federal securities laws. These forward-looking statements involve known and unknown risks that are difficult to predict and include all matters that are not historical facts. 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 development may differ materially from those projected or implied in these forward-looking statements. Among other things, there can be no guarantee that any of Vistagen’s product candidates will successfully complete ongoing or future clinical trials, successfully replicate the results of past clinical trials (including PALISADE-2), receive regulatory approval or be commercially successful. Other factors that may cause such a difference include, without limitation, risks and uncertainties relating to Vistagen’s ability to secure adequate financing for its operations, including financing or collaborative support for continued clinical development of fasedienol and/or other product candidates; the completion and results of Vistagen’s ongoing and/or future clinical studies for any of Vistagen’s product candidates; other risks and uncertainties related to delays in launching, conducting and/or completing ongoing and planned clinical trials; the scope and enforceability of Vistagen’s patents; fluctuating costs of materials and other resources and services required to conduct Vistagen’s ongoing and/or planned clinical and non-clinical trials; market conditions; the impact of general economic, industry or political conditions in the United States or internationally; and other technical and unexpected hurdles in the development, manufacture and commercialization of Vistagen’s CNS drug candidates. These risks are more fully discussed in the section entitled "Risk Factors" in Vistagen’s most recent Annual Report on Form 10-K for the fiscal year ended March 31, 2023, 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. Additionally, you should not place undue reliance on these forward-looking statements in the future, because they 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.

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