

As filed with the Securities and Exchange Commission on July 12, 2024.

Registration No. 333-\_\_\_\_\_

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

FORM S-1  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

**CNS Pharmaceuticals, Inc.**  
(Exact Name of Registrant as Specified in Its Charter)

**Nevada**  
(State or other jurisdiction of  
incorporation or organization)

**2834**  
(Primary Standard Industrial Classification Code  
Number)

**82-2318545**  
(I.R.S. Employer Identification No.)

**2100 West Loop South, Suite 900**  
**Houston, Texas 77027**  
(Address, including zip code, and telephone number, including area code, of registrant's  
principal executive offices)

**John Climaco**  
**Chief Executive Officer**  
**2100 West Loop South, Suite 900**  
**Houston, Texas 77027**  
((Name, address, including zip code, and telephone number, including  
area code, of agent for service))

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**Approximate date of commencement of proposed sale to the public:** From time to time after the effective date of this Registration Statement.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☒

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act:

|                         |                                     |                           |                                     |
|-------------------------|-------------------------------------|---------------------------|-------------------------------------|
| Large accelerated filer | <input type="checkbox"/>            | Accelerated filer         | <input type="checkbox"/>            |
| Non-accelerated filer   | <input checked="" type="checkbox"/> | Smaller reporting company | <input checked="" type="checkbox"/> |
|                         |                                     | Emerging growth company   | <input checked="" type="checkbox"/> |

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 7(a)(2)(B) of the Securities Act. ☐

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. The selling shareholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell, nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion Dated July 12, 2024

**CNS Pharmaceuticals, Inc.**

**2,359,000 Shares of Common Stock  
Issuable upon Exercise of Outstanding Warrants**

This prospectus relates to the resale, from time to time, by the selling shareholders identified in this prospectus under the caption "Selling Shareholders," of up to 2,359,000 shares of our common stock issuable upon exercise of certain outstanding common stock purchase warrants issued to the selling shareholders.

We are not selling any shares of common stock under this prospectus and will not receive any proceeds from the sale of shares of common stock by the selling shareholders. We will receive proceeds from any cash exercise of the warrants, which, if exercised in cash with respect to all of the 2,359,000 shares of common stock offered hereby, would result in gross proceeds to us of a maximum of approximately \$4.4 million; however, we cannot predict when and in what amounts or if the warrants will be exercised and it is possible that the warrants may expire and never be exercised, in which case we would not receive any cash proceeds.

The selling shareholders may sell the shares of our common stock offered by this prospectus from time to time on terms to be determined at the time of sale through ordinary brokerage transactions or through any other means described in this prospectus under the caption "Plan of Distribution." The shares of common stock may be sold at fixed prices, at market prices prevailing at the time of sale, at prices related to prevailing market price or at negotiated prices.

Our common stock is listed on the NASDAQ Capital Market under the symbol "CNSP." On July 11, 2024, the last sale price for our common stock as reported on the NASDAQ Capital Market was \$1.26 per share. There is no established public trading market for the warrants, and we do not expect a market to develop. In addition, we do not intend to apply for a listing of the warrants on any national securities exchange.

We are an "emerging growth company" as defined in Section 2(a) of the Securities Act of 1933, as amended, and we have elected to comply with certain reduced public company reporting requirements.

**Investing in our securities involves a high degree of risk. See the section entitled "[Risk Factors](#)" appearing on page 8 of this prospectus for a discussion of information that should be considered in connection with an investment in our securities.**

**Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.**

The date of this prospectus is \_\_\_\_\_, 2024

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**ABOUT THIS PROSPECTUS**

This prospectus relates to the resale by the selling shareholders identified in this prospectus under the caption "Selling Shareholders," from time to time, of up to an aggregate of 2,359,000 shares of our common stock issuable upon exercise of certain outstanding common stock purchase warrants. We are not selling any shares of our common stock under this prospectus, and we will not receive any proceeds from the sale of shares of common stock offered hereby by the selling shareholders, although we will receive cash from the exercise of the outstanding common stock purchase warrants.

You should read this prospectus, any documents that we incorporate by reference in this prospectus and the information below under the caption "Where You Can Find More Information" and "Incorporation By Reference" before making an investment decision. You should rely only on the information contained in or incorporated by reference into this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference herein. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus. You must not rely on any unauthorized information or representation.

You should assume that the information in this prospectus is accurate only as of the date on the front of the document and that any information

we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.

The distribution of this prospectus and the issuance of the securities in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the issuance of the securities and the distribution of this prospectus outside the United States. This prospectus does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, the securities offered by this prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

## PROSPECTUS SUMMARY

*This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information that you should consider before deciding to invest in our securities. You should read this entire prospectus carefully, including the "Risk Factors" section in this prospectus and under similar captions in the documents incorporated by reference into this prospectus. The terms the "Company", "our", or "we" refer to CNS Pharmaceuticals, Inc. and its subsidiaries.*

### Overview

We are a clinical pharmaceutical company organized as a Nevada corporation as of July 2017 to focus on the development of anti-cancer drug candidates for the treatment of brain and central nervous system tumors, based on intellectual property that we license under license agreements with Houston Pharmaceuticals, Inc. ("HPI") and The University of Texas M.D. Anderson Cancer Center ("UTMDACC") and own pursuant to a collaboration and asset purchase agreement with Reata Pharmaceuticals, Inc. ("Reata").

We believe our lead drug candidate, Berubicin, may be a significant development in the treatment of Glioblastoma and other CNS malignancies, and if approved by the U.S. Food and Drug Administration ("FDA"), could give Glioblastoma patients an important new therapeutic alternative to the current standard of care. Glioblastomas are tumors that arise from astrocytes, which are star-shaped cells making up the supportive tissue of the brain. These tumors are usually highly malignant (cancerous) because the cells reproduce quickly, and they are supported by a large network of blood vessels. Berubicin is an anthracycline, which is a class of drugs that are among the most powerful and extensively used chemotherapy drugs known. Based on limited clinical data, we believe Berubicin is the first anthracycline that appears to cross the blood brain barrier in significant concentrations targeting brain cancer cells. While our focus is currently on the development of Berubicin, we are also in the process of attempting to secure intellectual property rights to additional compounds that we plan to develop into drugs to treat CNS and other cancers.

Berubicin was discovered at UTMDACC by Dr. Waldemar Priebe, the founder of the Company. Through a series of transactions, Berubicin was initially licensed to Reata. Reata initiated several Phase I clinical trials with Berubicin for CNS malignancies, one of which was for malignant gliomas, but subsequently allowed their IND with the FDA to lapse for strategic reasons. This required us to obtain a new IND for Berubicin before beginning further clinical trials. On December 17, 2020, we announced that our IND application with the FDA for Berubicin for the treatment of Glioblastoma Multiforme was in effect. We initiated this trial for patient enrollment during the second quarter of 2021 with the first patient dosed during the third quarter of 2021 to investigate the safety and efficacy of Berubicin in adults with Glioblastoma Multiforme who have failed first-line therapy. The first patient on the trial was treated during the third quarter of 2021. Correspondence between the Company and the FDA resulted in modifications to our initial trial design, including designating overall survival (OS) as the primary endpoint of the study. OS is a rigorous endpoint that the FDA has recognized as a basis for approval of oncology drugs when a statistically significant improvement can be shown relative to a randomized control arm.

The current trial being conducted will evaluate the safety and efficacy of Berubicin in patients with Glioblastoma Multiforme who have failed primary treatment for their disease, and results will be compared to the safety and efficacy of Lomustine, a current standard of care in this setting, with a 2 to 1 randomization of the 252 patients to Berubicin or Lomustine. Patients receiving Berubicin are administered a 2-hour IV infusion of 7.5 mg/m<sup>2</sup> berubicin hydrochloride daily for three consecutive days followed by 18 days off (a 21-day cycle). Lomustine is administered orally once every six weeks. The trial design included a pre-planned, non-binding interim futility analysis. We reached the criteria required by the study protocol to conduct this interim futility analysis, which an independent Data Safety Monitoring Board ("DSMB") is responsible for conducting. The DSMB's charter mandated that they review the primary endpoint, Overall Survival, as well as secondary endpoints and safety data to determine whether the efficacy data for the risk-benefit profile warrants modification or discontinuation of the study. On December 18, 2023, we released the DSMB's recommendation which was to continue the study without modification. Management remains blinded to the data underlying the recommendation of the DSMB. Even if Berubicin is approved, there is no assurance that patients will choose an infusion treatment, as compared to the current standard of care, which requires oral administration.

We do not have manufacturing facilities and all manufacturing activities are contracted out to third parties. Additionally, we do not have a sales organization.

On November 21, 2017, we entered into a Collaboration and Asset Purchase Agreement with Reata (the "Reata Agreement"). Pursuant to the Reata Agreement we purchased all of Reata's intellectual property and development data regarding Berubicin, including all trade secrets, knowhow, confidential information and other intellectual property rights.

On December 28, 2017, we obtained the rights to a worldwide, exclusive royalty-bearing, license to the chemical compound commonly known as Berubicin from HPI in an agreement we refer to as the HPI License. HPI is affiliated with Dr. Priebe, who controls a majority of our shares. Under the HPI License we obtained the exclusive right to develop certain chemical compounds for use in the treatment of cancer anywhere in the world. In the HPI License we agreed to pay HPI: (i) development fees of \$750,000 over a three-year period beginning November 2019; (ii) a 2% royalty on net sales; (iii) a \$50,000 per year license fee; (iv) milestone payments of \$100,000 upon the commencement of a Phase II trial and \$1.0 million upon the approval of a New Drug Application ("NDA") for Berubicin; and (v) 134 shares of our common stock. The patents we licensed from HPI expired in March 2020. On May 14, 2024, the Company provided notice to HPI of its intent to terminate the HPI License effective on or about July 14, 2024.

On June 10, 2020, the FDA granted Orphan Drug Designation ("ODD") for Berubicin for the treatment of malignant gliomas. ODD from the FDA is available for drugs targeting diseases with less than 200,000 cases per year. ODD may enable market exclusivity of 7 years from the date of approval of a NDA in the United States. During that period the FDA generally could not approve another product containing the same drug for the same

designated indication. Orphan drug exclusivity will not bar approval of another product under certain circumstances, including if a subsequent product with the same active ingredient for the same indication is shown to be clinically superior to the approved product on the basis of greater efficacy or safety, or providing a major contribution to patient care, or if the company with orphan drug exclusivity is not able to meet market demand. The ODD now constitutes our primary intellectual property protections although the Company is exploring if there are other patents that could be filed related to Berubicin to extend additional protections.

We believe we have obtained all rights and intellectual property necessary to develop Berubicin. As stated earlier, it is our plan to obtain additional intellectual property covering other compounds which, subject to the receipt of additional financing, may be developed into drugs for brain and other cancers.

On May 7, 2020, pursuant to the WP1244 portfolio license agreement described below, the Company entered into a Sponsored Research Agreement with UTMADACC to perform research relating to novel anticancer agents targeting CNS malignancies. The Company agreed to fund approximately \$1,134,000 over a two-year period. The Company paid and recorded \$334,000 in 2020 related to this agreement in research and development expenses in the Company's statements of operations. The remaining \$800,000 was paid in 2021. The principal investigator for this agreement is Dr. Priebe. The work conducted under this Sponsored Research Agreement has produced a new mesylate salt of WP1244 termed WP1874. We believe the enhanced solubility of this salt may increase its ability to be formulated for use in an IV infusion, while maintaining similar potency and toxicity characteristics. As such, WP1874 will be the primary focus in any development efforts of the WP1244 portfolio. This agreement was extended and expired on March 31, 2023.

## Recent Developments

On January 10, 2020, we entered into a Patent and Technology License Agreement (the "WP1244 Agreement") with The Board of Regents of The University of Texas System, an agency of the State of Texas, on behalf of the UTMADACC. Pursuant to the WP1244 Agreement, we obtained a royalty-bearing, worldwide, exclusive license to certain intellectual property rights. On April 25, 2024, UTMADACC provided notice to us of its intent to terminate the WP1244 Agreement for failure to pay the annual maintenance fee and certain expenses, and on May 25, 2024 the WP1244 Agreement was terminated.

At our 2024 annual meeting, our stockholders approved an amendment to our amended and restated articles of incorporation (the "Amendment") to effect a reverse stock split of the outstanding shares of our common stock, at a split ratio of between 1-for-2 and 1-for-50 as determined by our board of directors in their sole discretion, prior to the one-year anniversary of the annual meeting. Pursuant to such authority granted by our stockholders, our board of directors approved a one-for-fifty reverse stock split of our common stock and the filing of the Amendment to effectuate the reverse stock split. The Amendment was filed with the Secretary of State of the State of Nevada and the reverse stock split became effective in accordance with the terms of the Amendment at 4:01 p.m. Eastern Time on June 4, 2025 (the "Effective Time"). The Amendment provided that, at the Effective Time, every fifty shares of our issued and outstanding common stock was automatically be combined into one issued and outstanding share of common stock, without any change in par value per share, which will remain \$0.001.

Unless the context expressly dictates otherwise, all reference to share and per share amounts referred to herein reflect the one-for-fifty reverse stock split.

### *June 14, 2024, Offering*

On June 14, 2024, we entered into Securities Purchase Agreements (the "June 14 Purchase Agreements") with institutional investors (collectively, the "June 14 Investors") for the sale of 336,000 shares of our common stock and pre-funded warrants to purchase up to an aggregate of 30,000 shares of common stock in lieu thereof (the "June 14 Pre-Funded Warrants") in a registered direct offering (the "June 14 Offering"). In a concurrent private placement (the "June 14 Private Placement"), we also sold to the June 14 Investors unregistered warrants to purchase up to an aggregate of 366,000 shares of common stock (the "Series C Common Warrants"). The combined purchase price of one share of common stock (or June 14 Pre-Funded Warrant in lieu thereof) and accompanying Series C Common Warrant was \$3.75. The closing of the June 14 Offering and June 14 Private Placement occurred on June 17, 2024 (the "June 14 Offering Closing Date").

Subject to certain ownership limitations, each of the Series C Common Warrants was immediately exercisable, has an exercise price of \$3.62 per share, and will expire five years from the date of issuance (issued June 17, 2024). The Series C Common Warrants may only be exercised on a cashless basis if there is no registration statement registering, or a prospectus contained therein is not available for, the resale of the shares of common stock underlying the Series C Common Warrants. The holder of a Series C Common Warrant is prohibited from exercising of any such warrants to the extent that such exercise would result in the number of shares of common stock beneficially owned by such holder and its affiliates exceeding 4.99% or 9.99% (at the election of the Investor) of the total number of shares of common stock outstanding immediately after giving effect to the exercise. In the event of certain fundamental transactions, the holder of the Series C Common Warrants will have the right to receive the Black Scholes Value (as defined in the Series C Common Warrants) of its Series C Common Warrants calculated pursuant to a formula set forth in the Series C Common Warrants, payable either in cash or in the same type or form of consideration that is being offered and being paid to the holders of June 14 Common Stock.

Pursuant to the June 14 Purchase Agreement, we agreed not to issue, enter into any agreement to issue or announce the issuance or proposed issuance of, any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock or file any registration statement or prospectus, or any amendment or supplement thereto for 15 days after the June 14 Offering Closing Date, subject to certain exceptions. The June 14 Investors agreed to waive the foregoing restriction in connection with the June 26 Offering (defined below). In addition, we agreed not to effect or enter into an agreement to effect any issuance of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock involving a Variable Rate Transaction (as defined in the June 14 Purchase Agreement) until 180 days after the June 14 Offering Closing Date, subject to certain exceptions.

On June 14, 2024, we entered into a financial advisory agreement with A.G.P./Alliance Global Partners ("AGP"), pursuant to which we agreed to pay AGP an aggregate fee equal to 6.5% of the aggregate gross proceeds received by us from the sale of the securities in the June 14 Offering and June 14 Private Placement. We also agreed to reimburse AGP for up to \$80,000 in legal fees and expenses.

### *June 26, 2024, Offering*

On June 26, 2024, we entered into Securities Purchase Agreements (the "June 26 Purchase Agreements") with institutional investors (collectively, the "June 26 Investors") for the sale of 568,000 shares of our common stock in a registered direct offering (the "June 26 Offering"). In a

concurrent private placement (the "June 26 Private Placement"), we also sold to the June 26 Investors unregistered warrants to purchase up to an aggregate of 568,000 shares of common stock (the "Series D Common Warrants"). The combined purchase price of one share of common stock and accompanying Series D Common Warrant was \$2.45. The closing of the June 26 Offering and June 26 Private Placement occurred on June 27, 2024 (the "June 26 Offering Closing Date").

Subject to certain ownership limitations, each of the Series D Common Warrants was immediately exercisable, has an exercise price of \$2.32 per share, and will expire five years from the date of issuance (issued June 27, 2024). The Series D Common Warrants may only be exercised on a cashless basis if there is no registration statement registering, or a prospectus contained therein is not available for, the resale of the shares of common stock underlying the Series D Common Warrants. The holder of a Series D Common Warrant is prohibited from exercising of any such warrants to the extent that such exercise would result in the number of shares of common stock beneficially owned by such holder and its affiliates exceeding 4.99% or 9.99% (at the election of the June 26 Investor) of the total number of shares of common stock outstanding immediately after giving effect to the exercise. In the event of certain fundamental transactions, the holder of the Series D Common Warrants will have the right to receive the Black Scholes Value (as defined in the Series D Common Warrants) of its Series D Common Warrants calculated pursuant to a formula set forth in the Series D Common Warrants, payable either in cash or in the same type or form of consideration that is being offered and being paid to the holders of common stock.

Pursuant to the June 26 Purchase Agreements, we agreed not to issue, enter into any agreement to issue or announce the issuance or proposed issuance of, any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock or file any registration statement or prospectus, or any amendment or supplement thereto for 15 days after the June 26 Offering Closing Date, subject to certain exceptions. The June 26 Investors agreed to waive the foregoing restriction connection with the July 2024 Offering (defined below). In addition, we agreed not to effect or enter into an agreement to effect any issuance of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock involving a Variable Rate Transaction (as defined in the June 26 Purchase Agreements) until 180 days after the June 26 Offering Closing Date, subject to certain exceptions.

On June 26, 2024, we entered into a financial advisory agreement with AGP, pursuant to which we paid AGP an aggregate fee equal to 6.5% of the aggregate gross proceeds received by us from the sale of the securities in the June 26 Offering and June 26 Private Placement. We also agreed to reimburse AGP for up to \$80,000 in legal fees and expenses.

#### *July 3, 2024, Offering*

On July 3, 2024, we entered into Securities Purchase Agreements (the "July 2024 Purchase Agreements") with institutional investors (collectively, the "July 2024 Investors") for the sale of 1,425,000 shares (the "July 2024 Shares") of our common stock in a registered direct offering (the "July 2024 Offering"). In a concurrent private placement (the "July 2024 Private Placement"), we also sold to the July 2024 Investors unregistered warrants to purchase up to an aggregate of 1,425,000 shares of common stock (the "Series E Common Warrants," and along with the Series C Common Warrants and Series D Common Warrants, the "Warrants"). The combined purchase price of one share of common stock and accompanying Series E Common Warrant was \$1.39. The closing of the July 2024 Offering and July 2024 Private Placement occurred on July 5, 2024 (the "July 2024 Offering Closing Date").

Subject to certain ownership limitations, each of the Series E Common Warrants is immediately exercisable, will have an exercise price of \$1.26 per share, and expire five years from the date of issuance (issued July 5, 2024). The Series E Common Warrants may only be exercised on a cashless basis if there is no registration statement registering, or a prospectus contained therein is not available for, the resale of the shares of common stock underlying the Series E Common Warrants. The holder of a Series E Common Warrant is prohibited from exercising of any such warrants to the extent that such exercise would result in the number of shares of common stock beneficially owned by such holder and its affiliates exceeding 4.99% or 9.99% (at the election of the July 2024 Investor) of the total number of shares of common stock outstanding immediately after giving effect to the exercise. In the event of certain fundamental transactions, the holder of the Warrants will have the right to receive the Black Scholes Value (as defined in the Series E Common Warrants) of its Series E Common Warrants calculated pursuant to a formula set forth in the Series E Common Warrants, payable either in cash or in the same type or form of consideration that is being offered and being paid to the holders of July 2024 Common Stock.

We agreed not to issue, enter into any agreement to issue or announce the issuance or proposed issuance of, any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock or file any registration statement or prospectus, or any amendment or supplement thereto for 15 days after the July 2024 Offering Closing Date, subject to certain exceptions. In addition, we agreed not to effect or enter into an agreement to effect any issuance of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock involving a Variable Rate Transaction (as defined in the July 2024 Purchase Agreement) until 180 days after the July 2024 Offering Closing Date, subject to certain exceptions.

On July 3, 2024, we entered into a financial advisory agreement with AGP, pursuant to which we paid AGP an aggregate fee equal to 6.5% of the aggregate gross proceeds received by us from the sale of the securities in the June 2024 Offering and June 2024 Private Placement. We also agreed to reimburse AGP for up to \$65,000 in legal fees and expenses.

#### **Company Information**

Our principal executive offices are located at 2100 West Loop South, Suite 900, Houston, TX 77027 and our telephone number is (800) 946-9185. Our website address is [www.cnspharma.com](http://www.cnspharma.com). The information on or accessible through our website is not part of this prospectus.

#### **Implications of Being an Emerging Growth Company**

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act, or the JOBS Act, enacted in April 2012, and we may remain an emerging company for up to five years from the closing of our initial public offering in April 2021. For so long as we remain an emerging growth company, we are permitted and intend to rely on certain exemptions from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm pursuant to Section 404(b) of the Sarbanes-Oxley Act of 2002, as amended, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved.

#### **Risks Affecting Our Company**

In evaluating an investment in our securities, you should carefully read this prospectus and especially consider the factors incorporated by reference in the sections titled "[Risk Factors](#)" commencing on page 8 of this prospectus and our Annual Report on Form 10-K for the year ended December 31, 2023, incorporated by reference herein.

### The Offering

|   |  |
|---|--|
| <b>Shares of common stock offered by the selling shareholders</b>           | Up to 2,359,000 shares of our common stock issuable upon exercise of the Warrants.   |
| <b>Shares of common stock outstanding before this offering</b>              | 2,868,274 shares of common stock   |
| <b>Shares of common stock outstanding after completion of this offering</b> | 5,227,274 shares of common stock, assuming full exercise of the Warrants   |
| <b>Use of proceeds</b>  | We will receive proceeds only upon any cash exercises of the Warrants, if any. See the caption " <a href="#">Use of Proceeds</a> " in this prospectus.   |
| <b>Terms of this offering</b>   | The selling shareholders, including their transferees, donees, pledgees, assignees and successors-in-interest, may sell, transfer or otherwise dispose of any or all of the shares of common stock offered by this prospectus from time to time on The NASDAQ Capital Market or any other stock exchange, market or trading facility on which the shares are traded or in private transactions. The shares of common stock may be sold at fixed prices, at market prices prevailing at the time of sale, at prices related to prevailing market price or at negotiated prices. |
| <b>NASDAQ symbol</b>  | Our common stock is listed on the NASDAQ Capital Market under the symbol "CNSP". There is no established public trading market for the Warrants, and a market will likely never develop. The Warrants are not and will not be listed for trading on the NASDAQ Capital Market, any other national securities exchange or other nationally recognized trading system.   |
| <b>Risk Factors</b>   | Investing in our securities involves a high degree of risk and purchasers of our securities may lose their entire investment. See " <a href="#">Risk Factors</a> " and other information incorporated by reference into this prospectus for a discussion of factors you should carefully consider before deciding whether to invest in our common stock.   |

### RISK FACTORS

Investing in shares of our common stock involves a high degree of risk. Before making an investment decision, you should carefully consider and evaluate the risks described in the "Risk Factors" section in our most recent Annual Report on Form 10-K, as well as any updates to those risk factors in our subsequent Quarterly Reports on Form 10-Q, together with all of the other information appearing in or incorporated by reference into this prospectus, before deciding whether to purchase any of the common stock being offered. The risks described in these documents are not the only ones we face, but those that we consider to be material. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our future results. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. The trading price of shares of our common stock could decline due to any of these risks, and you may lose all or part of your investment. Please also read carefully the section entitled "Cautionary Note Regarding Forward-Looking Statements."

### INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus the information in other documents that we file with it. This means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information in documents that we file later with the SEC will automatically update and supersede information contained in documents filed earlier with the SEC or contained in this prospectus. We incorporate by reference in this prospectus the documents listed below and any future filings that we may make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act prior to the termination of the offering under this prospectus; provided, however, that we are not incorporating, in each case, any documents or information deemed to have been furnished and not filed in accordance with SEC rules:

- Our Annual Report on [Form 10-K](#) for the year ended December 31, 2023 (filed on April 1, 2024);
- Our Quarterly Report on [Form 10-Q](#) for the quarter ended March 31, 2024 (filed on May 15, 2024);
- Our Current Reports on Form 8-K and any amendments on Form 8-K/A filed on: [January 23, 2024](#), [February 2, 2024](#), [February 21, 2024](#), [February 27, 2024](#), [May 3, 2024](#), [May 7, 2024](#), [June 5, 2024](#), [June 14, 2024](#), [June 20, 2024](#), [June 26, 2024](#), [July 3, 2024](#), and [July 9, 2024](#);
- Our Definitive Proxy Statement on [Schedule 14A](#) filed on April 10, 2024; and
- the description of our common stock contained in our registration statement on [Form 8-A](#) filed with the SEC on November 5, 2019, including any amendments or reports filed for the purposes of updating this description, including any exhibits to our Annual Report on Form 10-K

Additionally, all documents filed by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after (i) the date of the initial registration statement and prior to effectiveness of the registration statement, and (ii) the date of this prospectus and before the termination or completion of any offering hereunder, shall be deemed to be incorporated by reference into this prospectus from the respective dates of filing of such documents, except that we do not incorporate any document or portion of a document that is "furnished" to the SEC, but not deemed "filed."

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference in this prospectus, including exhibits to these documents. You should direct any requests for documents to CNS Pharmaceuticals, Inc., Attn: Corporate Secretary, 2100 West Loop South, Suite 900, Houston, TX 77027.

You also may access these filings on our website at [www.cnspharma.com](http://www.cnspharma.com). We do not incorporate the information on our website into this prospectus or any supplement to this prospectus and you should not consider any information on, or that can be accessed through, our website as part of this prospectus or any supplement to this prospectus (other than those filings with the SEC that we specifically incorporate by reference into this prospectus or any supplement to this prospectus).

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed modified, superseded or replaced for purposes of this prospectus to the extent that a statement contained in this prospectus modifies, supersedes or replaces such statement.

#### CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, and any documents we incorporate by reference, contain certain forward-looking statements that involve substantial risks and uncertainties. All statements contained in this prospectus and any documents we incorporate by reference, other than statements of historical facts, are forward-looking statements including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

The words “anticipate”, “believe”, “estimate”, “expect”, “intend”, “may”, “plan”, “predict”, “project”, “target”, “potential”, “will”, “would”, “could”, “should”, “continue” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward-looking statements include, among other things, statements about:

- our ability to obtain additional funding to develop our product candidates;
- the need to obtain regulatory approval of our product candidates;
- the success of our clinical trials through all phases of clinical development;
- compliance with obligations under intellectual property licenses with third parties;
- any delays in regulatory review and approval of product candidates in clinical development;
- our ability to commercialize our product candidates;
- market acceptance of our product candidates;
- competition from existing products or new products that may emerge;
- potential product liability claims;
- our dependency on third-party manufacturers to supply or manufacture our products;
- our ability to establish or maintain collaborations, licensing or other arrangements;
- our ability and third parties’ abilities to protect intellectual property rights;
- our ability to adequately support future growth; and
- our ability to attract and retain key personnel to manage our business effectively.

These forward-looking statements are only predictions and we may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, so you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our business, financial condition and operating results. We have included important factors in the cautionary statements included in this prospectus that could cause actual future results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

You should read this prospectus with the understanding that our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements whether as a result of new information, future events or otherwise, except as required by applicable law.

#### USE OF PROCEEDS

All shares of our common stock offered by this prospectus are being registered for the account of the selling shareholders identified herein. We will not receive any of the proceeds from the sale of these shares.

We will receive proceeds from any cash exercise of the warrants, which, if exercised in cash with respect to all of the 2,359,000 shares of common stock underlying the Warrants, would result in gross proceeds to us of a maximum of approximately \$4.4 million.

We intend to use any proceeds received by us from the cash exercise of the warrants for working capital purposes. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to us from the cash exercise of the warrants. Accordingly, our management will have broad discretion in the timing and application of these proceeds. The holders of the Warrants may exercise the Warrants at their own discretion and at any time until their expiration subject to and in accordance with the terms of the Warrants. As a result, we cannot predict when or if the Warrants will be exercised, and it is possible that the Warrants may expire and never be exercised. In addition, the Warrants are exercisable on a cashless basis if at the time of exercise there is no effective registration statement registering, or the prospectus contained therein is not available for, the



issuance of shares of common stock for which the Warrants are exercisable. As a result, we may never receive meaningful, or any, cash proceeds from the exercise of the Warrants.

## DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock, and we do not currently intend to pay any cash dividends on our common stock for the foreseeable future. We expect to retain future earnings, if any, to fund the development and growth of our business. Any future determination to pay dividends on our common stock will be at the discretion of our board of directors and will depend upon, among other factors, our results of operations, financial condition, capital requirements and any contractual restrictions.

## SELLING SHAREHOLDERS

This prospectus covers an aggregate of up to 2,359,000 shares of our common stock issuable upon exercise of the Warrants.

The following table sets forth certain information with respect to each selling shareholder, including (i) the shares of our common stock beneficially owned by the selling shareholder prior to this offering, (ii) the number of shares being offered by the selling shareholder pursuant to this prospectus and (iii) the selling shareholder's beneficial ownership after completion of this offering, assuming that all of the shares covered hereby (but none of the other shares, if any, held by the selling shareholders) are sold. The registration of the shares of common stock issuable to the selling shareholders upon the exercise of the Warrants does not necessarily mean that the selling shareholders will sell all or any of such shares.

The table is based on information supplied to us by the selling shareholders, with beneficial ownership and percentage ownership determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to shares of stock. This information does not necessarily indicate beneficial ownership for any other purpose. In computing the number of shares beneficially owned by a selling shareholder and the percentage ownership of that selling shareholder, shares of common stock subject to warrants held by that selling shareholder that are exercisable within 60 days after the date hereof, are deemed outstanding. Such shares, however, are not deemed outstanding for the purposes of computing the percentage ownership of any other person. The percentage of beneficial ownership after this offering is based on 2,868,274 shares outstanding on July 8, 2024.

The registration of these shares of common stock does not mean that the selling shareholders will sell or otherwise dispose of all or any of those securities. The selling shareholders may sell or otherwise dispose of all, a portion or none of such shares from time to time. We do not know the number of shares, if any, that will be offered for sale or other disposition by any of the selling shareholders under this prospectus. Furthermore, the selling shareholders may have sold, transferred or disposed of the shares of common stock covered hereby in transactions exempt from the registration requirements of the Securities Act since the date on which we filed this prospectus.

To our knowledge and except as noted below, none of the selling shareholders has, or within the past three years has had, any position, office or other material relationship with us or any of our predecessors or affiliates.

| Selling Shareholder <sup>(1)</sup>                       | Number of shares of common stock beneficially owned prior to this offering <sup>(2)</sup> | Number of shares of common stock offered <sup>(3)</sup> | Shares of common stock beneficially owned after sale of all shares of common stock offered pursuant to this prospectus <sup>(4)</sup> |                     |
|--|---|---|---|---------------------|
|  |   |   | Number of Shares  | Percent of Class    |
| Anson Investments Master Fund LP <sup>(5)</sup>          | 520,500   | 520,500   | —   | —                   |
| Armistice Capital, LLC <sup>(6)</sup>                    | 1,062,286   | 520,500   | 541,786   | 4.9% <sup>(6)</sup> |
| Bigger Capital Fund, LP <sup>(7)</sup>                   | 474,365   | 429,000   | 45,365  | 1.4%                |
| Connective Capital Emerging Energy QP, LP <sup>(8)</sup> | 298,995   | 298,995   | —   | —                   |
| Connective Capital I QP, LP <sup>(8)</sup>               | 77,505  | 77,505  | —   | —                   |
| Robert Forster   | 512,500   | 512,500   | —   | —                   |

\* Less than one percent.

(1) The information in this table and the related notes is based upon information supplied by the selling shareholders.

(2) Represents the total number of shares of our common stock issued or issuable to each selling shareholders as of the date of this prospectus, without regard to ownership limitations described in footnote (3) below, including (i) all of the shares offered hereby, and (ii) to our knowledge, all other securities held by each of the selling shareholders as of the date hereof. All of the shares in this column are underlying outstanding warrants to purchase common stock.

(3) Assumes that none of the Warrants that are exercisable for the shares of our common stock offered hereby have been sold or otherwise transferred prior to the date of this prospectus in transactions exempt from the registration requirements of the Securities Act of 1933. The Warrants contain beneficial ownership limitations, which provide that a holder of the Warrants will not have the right to exercise any portion of its Warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% (or, upon election by a holder prior to the issuance of the Warrants, 9.99%) of the number of shares of our common stock outstanding immediately after giving effect to such conversion or exercise, provided that upon at least 61 days prior notice to us, a holder of Warrants may increase or decrease such limitation up to a maximum of 9.99% of the number of shares of common stock outstanding.

(4) Assumes that, after the date of this prospectus and prior to completion of this offering, none of the selling shareholders (i) acquires additional shares of our common stock or other securities or (ii) sells or otherwise disposes of shares of our common stock or other securities held by such selling shareholders as of the date hereof and not offered hereby.

(5) Anson Advisors Inc and Anson Funds Management LP, the Co-Investment Advisers of Anson Investments Master Fund LP ("Anson"), hold voting and dispositive power over the Company common stock held by Anson. Tony Moore is the managing member of Anson Management GP LLC, which is the general partner of Anson Funds Management LP. Moez Kassam and Amin Nathoo are directors of Anson Advisors Inc. Mr. Moore, Mr. Kassam and Mr. Nathoo each disclaim beneficial ownership of these Company common stock except to the extent of their pecuniary interest therein. The principal business address of Anson is Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands.

(6) The securities are directly held by Armistice Capital Master Fund Ltd., a Cayman Islands exempted company (the "Master Fund"), and may be deemed to be beneficially owned by: (i) Armistice Capital, LLC ("Armistice Capital"), as the investment manager of the Master Fund; and (ii) Steven Boyd, as the Managing Member of Armistice Capital. The warrants are subject to a beneficial ownership limitation of 4.99%, which such limitation restricts the Selling Stockholder from exercising that portion of the warrants that would result in the Selling Stockholder and its affiliates owning, after exercise, a number of shares of common stock in excess of the beneficial ownership limitation. The address of Armistice Capital Master Fund Ltd. is c/o Armistice Capital, LLC, 510 Madison Avenue, 7th Floor, New York, NY 10022.

(7) Michael Bigger has voting and dispositive power over the shares of common stock held by Bigger Capital Fund, LP.

(8) Robert Romero has voting and dispositive power over the shares of common stock held by Connective Capital Emerging Energy QP, LP and Connective Capital I QP, LP.



## PLAN OF DISTRIBUTION

We are registering the shares of common stock issuable to the selling shareholders to permit the resale of these shares of common stock by the holders of the shares of common stock from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling shareholders of the shares of common stock. We will bear all fees and expenses incident to the registration of the shares of common stock.

The selling shareholders may sell all or a portion of the shares of common stock beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of common stock are sold through underwriters or broker-dealers, the selling shareholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of common stock may be sold on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale, in the over-the-counter market or in transactions otherwise than on these exchanges or systems or in the over-the-counter market and in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions. The selling shareholders may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- broker-dealers may agree with the selling shareholders to sell a specified number of such shares at a stipulated price per share;
- through the writing or settlement of options or other hedging transactions, whether such options are listed on an options exchange or otherwise;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling shareholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, as permitted by that rule, or Section 4(a)(1) under the Securities Act, if available, rather than under this prospectus, provided that they meet the criteria and conform to the requirements of those provisions.

Broker-dealers engaged by the selling shareholders may arrange for other broker-dealers to participate in sales. If the selling shareholders effect such transactions by selling shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling shareholders or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal. Such commissions will be in amounts to be negotiated, but, except as set forth in a supplement to this registration statement, in the case of an agency transaction will not be in excess of a customary brokerage commission in compliance with applicable rules of the Financial Industry Regulatory Authority, or FINRA.

In connection with sales of the shares of common stock or otherwise, and unless limited by any contractual arrangements with us, the selling shareholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the shares of common stock in the course of hedging in positions they assume and the selling shareholders may also sell shares of common stock short and if such short sale shall take place after the date that this registration statement is declared effective by the SEC, the selling shareholders may deliver shares of common stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling shareholders may also loan or pledge shares of common stock to broker-dealers that in turn may sell such shares, to the extent permitted by applicable law. The selling shareholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction). Notwithstanding the foregoing, the selling shareholders have been advised that they may not use shares registered pursuant to this registration statement to cover short sales of our common stock made prior to the date the registration statement is declared effective by the SEC.

The selling shareholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time pursuant to this registration statement or any amendment to this registration statement under Rule 424(b)(3) or other applicable provision of the Securities Act, amending, if necessary, the list of selling shareholders to include the pledgee, transferee or other successors in interest as selling shareholders under this registration statement. The selling shareholders also may transfer and donate the shares of common stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this registration statement.

The selling shareholders and any broker-dealer or agents participating in the distribution of the shares of common stock offered hereby may be deemed to be "underwriters" within the meaning of Section 2(a)(11) of the Securities Act in connection with such sales. In such event, any commissions paid, or any discounts or concessions allowed to, any such broker-dealer or agent and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Selling shareholders who are "underwriters" within the meaning of Section 2(a)(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act and may be subject to certain statutory liabilities of, including without limitation, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Exchange Act.

Each selling shareholder has informed us that it is not a registered broker-dealer. Upon being notified in writing by a selling shareholder that any material arrangement has been entered into with a broker-dealer for the sale of common stock through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, a supplement to this prospectus will be filed, if required, pursuant to Rule 424(b) under the Securities Act, disclosing (i) the name of each such selling shareholder and of the participating broker-dealer(s), (ii) the number of shares involved, (iii) the price at which such the shares of common stock were sold, (iv) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable, (v) that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and (vi) other facts material to the transaction.

Under the securities laws of some states, the shares of common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with in all respects.

Each selling shareholder and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act, and the rules and regulations thereunder, including, without limitation, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of common stock by the selling shareholder and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market-making activities with respect to the shares of common stock. All of the foregoing may affect the marketability of the shares of common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of common stock.

We will pay all expenses of the registration of the shares of common stock, including, without limitation, SEC filing fees and expenses of compliance with state securities or "blue sky" laws; provided, however, that each selling shareholder will pay all underwriting discounts and selling commissions, if any, and any legal expenses incurred by it. We may indemnify the selling shareholders against certain liabilities, including some liabilities under the Securities Act, in accordance with the agreements with the selling shareholders, or the selling shareholders may be entitled to contribution.

## DESCRIPTION OF SECURITIES

*The following summary is a description of the material terms of our securities. This summary is not complete and is qualified by reference to our amended and restated articles of incorporation and our amended and restated bylaws, which are filed as exhibits to this registration statement of which this prospectus forms a part, and the applicable provisions of the Nevada Revised Statutes.*

Our amended and restated articles of incorporation authorize us to issue up to 300,000,000 shares of common stock and 5,000,000 shares of preferred stock.

### Common Stock

Shares of our common stock have the following rights, preferences and privileges:

#### *Voting*

Each holder of common stock is entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders. Any action at a meeting at which a quorum is present will be decided by a majority of the voting power present in person or represented by proxy, except in the case of any election of directors, which will be decided by a plurality of votes cast. There is no cumulative voting.

#### *Dividends*

Holders of our common stock are entitled to receive dividends when, as and if declared by our board of directors out of funds legally available for payment, subject to the rights of holders, if any, of any class of stock having preference over the common stock. Any decision to pay dividends on our common stock will be at the discretion of our board of directors. Our board of directors may or may not determine to declare dividends in the future. See "Dividend Policy." The board's determination to issue dividends will depend upon our profitability and financial condition any contractual restrictions, restrictions imposed by applicable law and the SEC, and other factors that our board of directors deems relevant.

#### *Liquidation Rights*

In the event of a voluntary or involuntary liquidation, dissolution or winding up of the Company, the holders of our common stock will be entitled to share ratably on the basis of the number of shares held in any of the assets available for distribution after we have paid in full, or provided for payment of, all of our debts and after the holders of all outstanding series of any class of stock have preference over the common stock, if any, have received their liquidation preferences in full.

#### *Other*

Our issued and outstanding shares of common stock are fully paid and nonassessable. Holders of shares of our common stock are not entitled to preemptive rights. Shares of our common stock are not convertible into shares of any other class of capital stock, nor are they subject to any redemption or sinking fund provisions

### Preferred Stock

We are authorized to issue up to 5,000,000 shares of preferred stock. Our articles of incorporation authorizes the board to issue these shares in one or more series, to determine the designations and the powers, preferences and relative, participating, optional or other special rights and the qualifications, limitations and restrictions thereof, including the dividend rights, conversion or exchange rights, voting rights (including the number of votes per share), redemption rights and terms, liquidation preferences, sinking fund provisions and the number of shares constituting the series. Our board of directors could, without stockholder approval, issue preferred stock with voting and other rights that could adversely affect the voting power and other rights of the holders of common stock and which could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from attempting to acquire, a majority of our outstanding voting stock.

### Warrants

In October 2023, we entered into a warrant exercise inducement offer letter with a holder of certain existing warrants to purchase common stock

(the “Existing Warrants”) to receive new warrants (the “Inducement Warrants”) to purchase up to a number of shares of common stock equal to 200% of the number of warrant shares issued pursuant to the exercise of such Existing Warrants, pursuant to which the warrant holder agreed to exercise for cash its Existing Warrants to purchase up to 37,560 shares of our common stock, at \$64.00 per share, in exchange for our agreement to issue Inducement Warrants to purchase up to 75,120 shares of our common stock. On January 29, 2024, we entered into a warrant amendment agreement pursuant to which we agreed, subject to stockholder approval, to amend the Inducement Warrants to purchase up to an aggregate of 75,120 shares of common stock at an exercise price of \$64.00 per share and a termination date of October 16, 2028, so that the amended warrants will have a reduced exercise price of \$15.00 per share and a new termination date of February 1, 2029. The requisite stockholder approval for the amendments was obtained at the Registrant’s 2024 Annual Meeting of Stockholders held on April 30, 2024.

On February 1, 2024, we issued to investors in a public offering, ( i) registered Series A Warrants to purchase up to an aggregate of 266,667 shares of common stock (the “Series A Warrants”); and (ii) registered Series B Warrants to purchase up to an aggregate of 266,667 shares of common stock (the “Series B Warrants”). Subject to certain ownership limitations, each of the Series A Warrants and Series B Warrants was immediately exercisable and has an exercise price of \$15.00 per share. The Series A Warrants will expire five years from the date of issuance (issued February 1, 2024), and the Series B Warrants will expire 18 months from the date of issuance (issued February 1, 2024).

In our June 14 Offering we issued to the June 14 Investors unregistered warrants to purchase up to an aggregate of 366,000 shares of common stock (the Series C Common Warrants). Subject to certain ownership limitations, each of the Series C Common Warrants was immediately exercisable, has an exercise price of \$3.62 per share, and will expire five years from the date of issuance (issued June 17, 2024).

In our June 26 Offering we issued to the June 26 Investors unregistered warrants to purchase up to an aggregate of 568,000 shares of common stock (the Series D Common Warrants). Subject to certain ownership limitations, each of the Series D Common Warrants was immediately exercisable, has an exercise price of \$2.45 per share, and will expire five years from the date of issuance (issued June 27, 2024).

In our July 2024 Offering we issued to the July 2024 Investors unregistered warrants to purchase up to an aggregate of 1,425,000 shares of common stock (the Series E Common Warrants). Subject to certain ownership limitations, each of the Series E Common Warrants was immediately exercisable, has an exercise price of \$1.26 per share, and will expire five years from the date of issuance (issued July 5, 2024).

The Series E Common Warrants, the Series C Common Warrants, and the Series D Common Warrants are collectively referred to as the “Warrants.” The Warrants may only be exercised on a cashless basis if there is no registration statement registering, or a prospectus contained therein is not available for, the resale of the shares of common stock underlying the Warrants. The holder of a Warrant is prohibited from exercising of any such warrants to the extent that such exercise would result in the number of shares of common stock beneficially owned by such holder and its affiliates exceeding 4.99% or 9.99% (at the election of the investor) of the total number of shares of common stock outstanding immediately after giving effect to the exercise. In the event of certain fundamental transactions, the holder of the Warrants will have the right to receive the Black Scholes Value (as defined in the Warrants) of its Warrants calculated pursuant to a formula set forth in the Warrants, payable either in cash or in the same type or form of consideration that is being offered and being paid to the holders of our common stock.

#### **Articles of Incorporation and Bylaw Provisions**

Our articles of incorporation and bylaws include a number of anti-takeover provisions that may have the effect of encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include:

*Advance Notice Requirements.* Our bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of stockholders. These procedures provide that notice of stockholder proposals must be timely and given in writing to our corporate Secretary. Generally, to be timely, notice must be received at our principal executive offices not fewer than 120 calendar days prior to the first anniversary date on which our notice of meeting and related proxy statement were mailed to stockholders in connection with the previous year’s annual meeting of stockholders. The notice must contain the information required by the bylaws, including information regarding the proposal and the proponent.

*Special Meetings of Stockholders.* Our bylaws provide that special meetings of stockholders may be called at any time by only the Chairman of the Board, the Chief Executive Officer, the President or the board of directors, or in their absence or disability, by any vice president.

*No Written Consent of Stockholders.* Our articles of incorporation and bylaws provide that any action required or permitted to be taken by stockholders must be effected at a duly called annual or special meeting of stockholders and may not be effected by any consent in writing by such stockholders.

*Amendment of Bylaws.* Our stockholders may amend any provisions of our bylaws by obtaining the affirmative vote of the holders of a majority of each class of issued and outstanding shares of our voting securities, at a meeting called for the purpose of amending and/or restating our bylaws.

*Preferred Stock.* Our articles of incorporation authorizes our board of directors to create and issue rights entitling our stockholders to purchase shares of our stock or other securities. The ability of our board to establish the rights and issue substantial amounts of preferred stock without the need for stockholder approval may delay or deter a change in control of us. See “Preferred Stock” above.

#### **Nevada Takeover Statute**

The Nevada Revised Statutes contain provisions governing the acquisition of a controlling interest in certain Nevada corporations. Nevada’s “acquisition of controlling interest” statutes (NRS 78.378 through 78.3793, inclusive) contain provisions governing the acquisition of a controlling interest in certain Nevada corporations. These “control share” laws provide generally that any person that acquires a “controlling interest” in certain Nevada corporations may be denied voting rights, unless a majority of the disinterested stockholders of the corporation elects to restore such voting rights. These laws will apply to us if we were to have 200 or more stockholders of record (at least 100 of whom have addresses in Nevada appearing on our stock ledger) and do business in the State of Nevada directly or through an affiliated corporation, unless our articles of incorporation or bylaws in effect on the tenth day after the acquisition of a controlling interest provide otherwise. These laws provide that a person acquires a “controlling interest” whenever a person acquires shares of a subject corporation that, but for the application of these provisions of the NRS, would enable that person to exercise (1) one-fifth or more, but less than one-third, (2) one-third or more, but less than a majority or (3) a majority or more, of all of the voting power of the corporation in the election of directors. Once an acquirer crosses one of these thresholds, shares which it acquired in the transaction taking it over the threshold and within the 90 days immediately preceding the date when the acquiring person acquired or offered to acquire a controlling interest become “control shares” to which the voting restrictions described above apply. These laws may have a chilling effect on certain transactions if our articles of incorporation or amended and restated bylaws are not amended to provide that these provisions do not apply to us or to an acquisition of a controlling interest, or if our disinterested stockholders do not confer voting rights in the control shares.

Nevada's "combinations with interested stockholders" statutes (NRS 78.411 through 78.444, inclusive) provide that specified types of business "combinations" between certain Nevada corporations and any person deemed to be an "interested stockholder" of the corporation are prohibited for two years after such person first becomes an "interested stockholder" unless the corporation's board of directors approves the combination (or the transaction by which such person becomes an "interested stockholder") in advance, or unless the combination is approved by the board of directors and 60% of the corporation's voting power not beneficially owned by the interested stockholder, its affiliates and associates. Furthermore, in the absence of prior approval certain restrictions may apply even after such two-year period. For purposes of these statutes, an "interested stockholder" is any person who is (1) the beneficial owner, directly or indirectly, of 10% or more of the voting power of the outstanding voting shares of the corporation, or (2) an affiliate or associate of the corporation and at any time within the two previous years was the beneficial owner, directly or indirectly, of 10% or more of the voting power of the then-outstanding shares of the corporation. The definition of the term "combination" is sufficiently broad to cover most significant transactions between a corporation and an "interested stockholder". These laws generally apply to Nevada corporations with 200 or more stockholders of record. However, a Nevada corporation may elect in its articles of incorporation not to be governed by these particular laws, but if such election is not made in the corporation's original articles of incorporation, the amendment (1) must be approved by the affirmative vote of the holders of stock representing a majority of the outstanding voting power of the corporation not beneficially owned by interested stockholders or their affiliates and associates, and (2) is not effective until 18 months after the vote approving the amendment and does not apply to any combination with a person who first became an interested stockholder on or before the effective date of the amendment. We have not made such an election in our original articles of incorporation or in our articles of incorporation.

#### **Limitations on Liability and Indemnification of Officers and Directors**

Our articles of incorporation and bylaws limit the liability of our officers and directors and provide that we will indemnify our officers and directors, in each case, to the fullest extent permitted by the Nevada Revised Statutes.

#### **Listing**

Our common stock is listed on the NASDAQ Capital Market under the symbol "CNSP."

#### **Transfer Agent**

The transfer agent for our common stock is Continental Stock Transfer and Trust Company located at 1 State Street, 30th Floor, New York, NY 10004.

### **LEGAL MATTERS**

The validity of the securities offered hereby will be passed upon for us by ArentFox Schiff LLP, Washington, DC.

#### **EXPERTS**

The financial statements of the Company as of December 31, 2023 and 2022, and for the years then ended, have been incorporated by reference herein and in the registration statement in reliance upon the report of MaloneBailey, LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

#### **WHERE YOU CAN FIND MORE INFORMATION**

We have filed with the SEC a registration statement on Form S-1 under the Securities Act for the securities being offered by this prospectus. This prospectus, which is part of the registration statement, does not contain all of the information included in the registration statement and the exhibits. For further information about us and the securities offered by this prospectus, you should refer to the registration statement and its exhibits. References in this prospectus to any of our contracts or other documents are not necessarily complete, and you should refer to the exhibits attached to the registration statement for copies of the actual contract or document. SEC filings are also available to the public at the SEC's website at [www.sec.gov](http://www.sec.gov).

We are subject to the reporting and information requirements of the Exchange Act and, as a result, will file periodic and current reports, proxy statements and other information with the SEC. We make our periodic reports and other information filed with or furnished to the SEC, available, free of charge, through our website as soon as reasonably practicable after those reports and other information are filed with or furnished to the SEC. Additionally, these periodic reports, proxy statements and other information will be available for inspection and copying at the public reference room and SEC's website at [www.sec.gov](http://www.sec.gov). You may read and copy any document that we file at the SEC's public reference room located at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. SEC filings are also available to the public at the SEC's website referred to above.

## **CNS Pharmaceuticals, Inc.**

**2,359,000 Shares of Common Stock  
Issuable upon Exercise of Outstanding Warrants**

#### **PROSPECTUS**

\_\_\_\_\_, 2024

We have not authorized any dealer, salesperson or other person to give any information or to make any representations not contained in this prospectus. You must not rely on any unauthorized information. This prospectus is not an offer to sell these securities in any jurisdiction where an offer or sale is not permitted.

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## PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

#### Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the estimated costs and expenses to be incurred in connection with the issuance and distribution of the securities of CNS Pharmaceuticals, Inc. (the "Registrant") which are registered under this Registration Statement on Form S-1 (this "Registration Statement"), other than placement agent fees. All amounts are estimates except the Securities and Exchange Commission registration fee and the Financial Industry Regulatory Authority, Inc. filing fee.

The following expenses will be borne solely by the Registrant:

|                                 | Amount to be Paid |
|---------------------------------|-------------------|
| SEC Registration fee            | \$ 375            |
| Legal fees and expenses         | 10,000            |
| Accounting fees and expenses    | 10,000            |
| Miscellaneous fees and expenses | 5,000             |
| Total                           | <u>\$ 25,374</u>  |

#### Item 14. Indemnification of Directors and Officers.

Section 78.138 of the Nevada Revised Statute provides that a director or officer is not individually liable to the corporation or its stockholders or creditors for any damages as a result of any act or failure to act in his capacity as a director or officer unless it is proven that (1) his act or failure to act constituted a breach of his fiduciary duties as a director or officer and (2) his breach of those duties involved intentional misconduct, fraud or a knowing violation of law.

This provision is intended to afford directors and officers protection against and to limit their potential liability for monetary damages resulting from suits alleging a breach of the duty of care by a director or officer. As a consequence of this provision, stockholders of our company will be unable to recover monetary damages against directors or officers for action taken by them that may constitute negligence or gross negligence in performance of their duties unless such conduct falls within one of the foregoing exceptions. The provision, however, does not alter the applicable standards governing a director's or officer's fiduciary duty and does not eliminate or limit the right of our company or any stockholder to obtain an injunction or any other type of non-monetary relief in the event of a breach of fiduciary duty.

The Registrant's Articles of Incorporation, as amended and restated, and amended and restated bylaws provide for indemnification of directors, officers, employees or agents of the Registrant to the fullest extent permitted by Nevada law (as amended from time to time). Section 78.7502 of the Nevada Revised Statute provides that such indemnification may only be provided if the person acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interest of the Registrant and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful.

#### Item 15. Recent Sales of Unregistered Securities.

Except as set forth below, in the three years preceding the filing of this Registration Statement, the Registrant has not issued any securities that were not registered under the Securities Act (all share and per share numbers are reflected on a post-split basis for all periods presented):

In September 2020, the Registrant entered into a Purchase Agreement with Lincoln Park Capital Fund, LLC, or Lincoln Park, which provides that, upon the terms and subject to the conditions and limitations set forth in the agreement, Lincoln Park is committed to purchase up to an aggregate of \$15.0 million shares of the Registrant's common stock over the 36-month term of the agreement. The Registrant issued 135 shares of its common stock to Lincoln Park in consideration for entering into the agreement.

In January 2021, the Registrant entered into a twelve-month agreement with an investor relations firm that included the issuance of 17 restricted shares of common stock. Upon signing the agreement, 5 shares vested immediately, and the remaining 13 shares vested quarterly over the remainder of the agreement. In May 2021, the Registrant entered into a four-month agreement with an investor relations firm that included the issuance of 50 shares of common stock.

In January 2022, the Registrant entered into a Securities Purchase Agreement with several institutional investors for the sale by the Company of (i) 6,327 shares of the Registrant's common stock, (ii) pre-funded warrants to purchase up to an aggregate of 1,744 shares of common stock and (iii) warrants to purchase up to an aggregate of 8,071 shares of common stock, in a private placement offering. The combined purchase price of one share of common stock (or one pre-funded warrant) and accompanying common warrant was \$1,425. H.C. Wainwright & Co., LLC acted as the exclusive placement agent for the offering, pursuant to an engagement letter with the Registrant dated January 5, 2022.

In October 2023, the Registrant entered into a warrant exercise inducement offer letter with a holder of certain existing warrants to purchase

common stock (the “Existing Warrants”) to receive new warrants (the “Inducement Warrants”) to purchase up to a number of shares of common stock equal to 200% of the number of warrant shares issued pursuant to the exercise of such Existing Warrants, pursuant to which the warrant holder agreed to exercise for cash its Existing Warrants to purchase up to 37,560 shares of the Registrant’s common stock, at \$64 per share, in exchange for the Registrant’s agreement to issue Inducement Warrants to purchase up to 75,120 shares of the Registrant’s common stock.

On January 29, 2024, the Registrant entered into a warrant amendment agreement pursuant to which it agreed, subject to stockholder approval, to amend the Inducement Warrants to purchase up to an aggregate of 75,120 shares of common stock at an exercise price of \$64.00 per share and a termination date of October 16, 2028, so that the amended warrants will have a reduced exercise price of \$15.00 per share and a new termination date of February 1, 2029. The requisite stockholder approval for the amendments was obtained at the Registrant’s 2024 Annual Meeting of Stockholders held on April 30, 2024.

On June 14, 2024, the Registrant issued to investors unregistered warrants to purchase up to an aggregate of 366,000 shares of common stock (the Series C Common Warrants). Subject to certain ownership limitations, each of the Series C Common Warrants was immediately exercisable, has an exercise price of \$3.62 per share, and will expire five years from the date of issuance (issued June 17, 2024).

On June 26, 2024, the Registrant issued to investors unregistered warrants to purchase up to an aggregate of 568,000 shares of common stock (the Series D Common Warrants). Subject to certain ownership limitations, each of the Series D Common Warrants was immediately exercisable, has an exercise price of \$2.45 per share, and will expire five years from the date of issuance (issued June 27, 2024).

On July 5, 2024, the Registrant issued to investors unregistered warrants to purchase up to an aggregate of 1,425,000 shares of common stock (the Series E Common Warrants). Subject to certain ownership limitations, each of the Series E Common Warrants was immediately exercisable, has an exercise price of \$1.26 per share, and will expire five years from the date of issuance (issued July 5, 2024).

All of the securities above were issued in reliance on the exemption from registration provided by Section 4(a)(2) of the Securities Act or Regulation D promulgated thereunder. The issuance of the Inducement Warrants was made in reliance on the exemption provided by Section 3(a)(9) of the Securities Act.

## Item 16. Exhibits and Financial Statement Schedules.

### (a) Exhibits:

| Exhibit Number | Description of Document   |
|----------------|---|
| 3.1            | <a href="#">Amended and Restated Articles of Incorporation of CNS Pharmaceuticals, Inc.</a> (incorporated by reference to Exhibit 2.1 to the Company’s Form 1-A file no. 024-10855)   |
| 3.2            | <a href="#">Certificate of Amendment to the Amended and Restated Articles of Incorporation of CNS Pharmaceuticals, Inc., filed with the Secretary of State of the State of Nevada</a> (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed with the Commission on November 28, 2022) |
| 3.3            | <a href="#">Amended and Restated Bylaws of CNS Pharmaceuticals, Inc.</a> (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed with the Commission on August 15, 2023)  |
| 3.4            | <a href="#">Certificate of Amendment to the Amended and Restated Articles of Incorporation of CNS Pharmaceuticals, Inc., filed with the Secretary of State of the State of Nevada</a> (incorporated by reference to exhibit 3.1 of the Form 8-K filed May 3, 2024)  |
| 3.5            | <a href="#">Certificate of Amendment to the Amended and Restated Articles of Incorporation of CNS Pharmaceuticals, Inc., filed with the Secretary of State of the State of Nevada</a> (incorporated by reference to exhibit 3.1 of the Form 8-K filed June 5, 2024)   |
| 4.1            | <a href="#">Form of warrant issued to convertible debt holders</a> (incorporated by reference to Exhibit 3.2 to the Company’s Form 1-A file no. 024-10855)  |
| 4.2            | <a href="#">Form of Underwriter Warrant</a> (incorporated by reference to Exhibit 3.4 to the Company’s Form 1-A Amendment file no. 024-10855)   |
| 4.3            | <a href="#">Description of Securities of CNS Pharmaceuticals, Inc.</a> (incorporated by reference to Exhibit 4.3 to the Company’s Form 10-K/A filed April 30, 2021)   |
| 4.4            | <a href="#">Form of Warrant issued in January 2022 offering</a> (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed with the Commission on January 6, 2022)   |
| 4.5            | <a href="#">Form of Pre-Funded Warrant issued in January 2022 offering</a> (incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed with the Commission on January 6, 2022)  |
| 4.6            | <a href="#">Form of Pre-Funded Warrant issued in November 2022 offering</a> (incorporated by reference to Exhibit 4.7 to the Company’s Form S-1 Amendment file no. 333-267975)  |
| 4.7            | <a href="#">Form of Common Warrant issued in November 2022 offering</a> (incorporated by reference to exhibit 4.8 to the Company’s Form S-1 Amendment file no. 333-267975)  |
| 4.8            | <a href="#">Form of Placement Agent Warrant issued in November 2022 offering</a> (incorporated by reference to exhibit 4.9 to the Company’s Form S-1 file no. 333-267975)   |
| 4.9            | <a href="#">Form of Inducement Warrant issued in October 2023 offering</a> (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed with the Commission on October 17, 2023)   |

- 4.10 [Form of Pre-Funded Warrant issued in January 2024 offering](#) (incorporated by reference to exhibit 4.3 of the Form 8-K filed February 2, 2024)
- 4.11 [Form of Series A Common Warrant issued in January 2024 offering](#) (incorporated by reference to exhibit 4.1 of the Form 8-K filed February 2, 2024)
- 4.12 [Form of Series B Common Warrant issued in January 2024 offering](#) (incorporated by reference to exhibit 4.2 of the Form 8-K filed February 2, 2024)
- 4.13 [Form of Pre-Funded Warrant issued in June 14, 2024, offering](#) (incorporated by reference to exhibit 4.1 of the Form 8-K filed June 14, 2024)
- 4.14 [Form of Series C Common Warrant issued in June 14, 2024, offering](#) (incorporated by reference to exhibit 4.2 of the Form 8-K filed June 14, 2024)
- 4.15 [Form of Series D Common Warrant issued in June 26, 2024, offering](#) (incorporated by reference to exhibit 4.1 of the Form 8-K filed June 26, 2024)
- 4.16 [Form of Series E Common Warrant issued in July 3, 2024, offering](#) (incorporated by reference to exhibit 4.1 of the Form 8-K filed July 3, 2024)
- 5.1\* [Opinion of ArentFox Schiff, LLP](#)
- 10.1 [Amended And Restated Patent License Agreement effective as of December 28, 2017 between CNS Pharmaceuticals, Inc. and Houston Pharmaceuticals, Inc.](#) (incorporated by reference to Exhibit 6.1 to the Company's Form 1-A file no. 024-10855)
- 10.2 [Collaboration and Asset Purchase Agreement between CNS Pharmaceuticals, Inc. and Reata Pharmaceuticals, Inc. dated November 21, 2017](#) (incorporated by reference to Exhibit 6.2 to the Company's Form 1-A file no. 024-10855)
- 10.3\*\* [2017 Stock Plan of CNS Pharmaceuticals, Inc.](#) (incorporated by reference to Exhibit 6.3 to the Company's Form 1-A file no. 024-10855)
- 10.4\*\* [Employment Agreement between CNS Pharmaceuticals, Inc. and John M. Climaco dated September 1, 2017](#) (incorporated by reference to Exhibit 6.4 to the Company's Form 1-A file no. 024-10855)
- 10.5 [Sublicense Agreement between CNS Pharmaceuticals, Inc. and WPD Pharmaceuticals, Inc. dated August 30, 2018](#) (incorporated by reference to Exhibit 6.6 to the Company's Form 1-A Amendment file no. 024-10855)
- 10.6 [Sublicense Agreement between CNS Pharmaceuticals, Inc. and Animal Life Sciences, LLC. dated August 31, 2018](#) (incorporated by reference to Exhibit 6.7 to the Company's Form 1-A Amendment file no. 024-10855)
- 10.7\*\* [Employment Letter between CNS Pharmaceuticals, Inc. and Donald Picker](#) (incorporated by reference to Exhibit 10.8 to the Company's Form S-1 Amendment file no. 333-232443)
- 10.8\*\* [Employment Letter between CNS Pharmaceuticals, Inc. and Sandra Silberman](#) (incorporated by reference to Exhibit 10.9 to the Company's Form S-1 Amendment file no. 333-232443)
- 10.9\*\* [Employment Agreement between CNS Pharmaceuticals, Inc. and Christopher Downs](#) (incorporated by reference to Exhibit 10.10 to the Company's Form S-1 Amendment file no. 333-232443)

- 10.10 + [Patent and Technology License Agreement with The Board of Regents of The University of Texas System, an agency of the State of Texas, on behalf of The University of Texas M. D. Anderson Cancer Center, dated January 10, 2020](#) (incorporated by reference to Exhibit 10.11 to the Company's Form 10-K filed March 12, 2020)
- 10.11\*\* [Non-Employee Director Compensation Policy effective July 15, 2021](#) (incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q filed with the Commission on August 12, 2022)
- 10.12 [Development Agreement between CNS Pharmaceuticals, Inc. and WPD Pharmaceuticals dated March 20, 2020](#) (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed March 26, 2020)
- 10.13\*\* [CNS Pharmaceuticals, Inc. 2020 Equity Plan](#) (as amended April 30, 2024) (incorporated by reference to exhibit 10.1 of the Form 8-K filed May 3, 2024)
- 10.14\*\* [Amendment to Employment Agreement between CNS Pharmaceuticals, Inc. and John Climaco dated September 1, 2020](#) (incorporated by reference to Exhibit 99.1 to the Company's Form 8-K filed September 4, 2020)
- 10.15 [Form of Registration Rights Agreement to investors entered into in connection with January 2022 offering](#) (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed with the Commission on January 6, 2022)
- 10.16 [Capital on Demand™ Sales Agreement with JonesTrading Institutional Services LLC and Brookline Capital Markets, a division of Arcadia Securities, LLC](#) (incorporated by reference to Exhibit 1.1 to the Current Report on Form 8-K filed with the Commission on February 12, 2021)
- 10.17\*\* [Non-Employee Director Compensation Policy effective July 15, 2021](#) (incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q filed with the Commission on August 12, 2022)
- 10.18 [Form of Placement Agent Agreement entered into in connection with November 2022 offering](#) (incorporated by reference to exhibit 10.21 to the Company's Form S-1 file no. 333-267975)
- 10.19 [Form of Inducement Letter](#) (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed with the Commission on October 17, 2023)



- 10.20 [Form of Securities Purchase Agreement entered into in connection with January 2024 offering](#) (incorporated by reference to exhibit 10.1 of the Form 8-K filed February 2, 2024)
- 10.21 [Form of Amendment to Common Stock Purchase Warrants](#) (incorporated by reference to exhibit 10.2 of the Form 8-K filed February 2, 2024)
- 10.22 [Placement Agent Agreement dated January 29, 2024 by and among CNS Pharmaceuticals, Inc., A.G.P./Alliance Global Partners and Maxim Group LLC](#) (incorporated by reference to exhibit 1.1 of the Form 8-K filed February 2, 2024)
- 10.23 [Form of Securities Purchase Agreement entered into in connection with June 14, 2024, offering](#) (incorporated by reference to exhibit 10.1 of the Form 8-K filed June 14, 2024)
- 10.24 [Financial Advisory Agreement between CNS Pharmaceuticals, Inc. and A.G.P./Alliance Global Partners, dated June 14, 2024](#) (incorporated by reference to exhibit 10.2 of the Form 8-K filed June 14, 2024)
- 10.25 [Form of Securities Purchase Agreement entered into in connection with June 26, 2024, offering](#) (incorporated by reference to exhibit 10.1 of the Form 8-K filed June 26, 2024)
- 10.26 [Financial Advisory Agreement between CNS Pharmaceuticals, Inc. and A.G.P./Alliance Global Partners, dated June 26, 2024](#) (incorporated by reference to exhibit 10.2 of the Form 8-K filed June 26, 2024)

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- 10.27 [Form of Securities Purchase Agreement entered into in connection with July 3, 2024, offering](#) (incorporated by reference to exhibit 10.1 of the Form 8-K filed July 3, 2024)
- 10.28 [Financial Advisory Agreement between CNS Pharmaceuticals, Inc. and A.G.P./Alliance Global Partners, dated July 3, 2024](#) (incorporated by reference to exhibit 10.2 of the Form 8-K filed July 3, 2024)
- 23.1\* [Consent of MaloneBailey, LLP](#)
- 23.2\* Consent of ArentFox Schiff LLP (included in [Exhibit 5.1](#))
- 24.1\* [Power of Attorney](#) (included on the signature page hereto)
- 107\* [Filing Fee Table](#)

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\* Filed herewith

\*\* Management contract or compensatory plan, contract or arrangement.

+ Pursuant to Item 601(b)(10)(iv) of Regulation S-K promulgated by the SEC, certain portions of this exhibit have been redacted. The Company hereby agrees to furnish supplementally to the SEC, upon its request, an unredacted copy of this exhibit.

(b) **Consolidated Financial Statement Schedules:** All schedules are omitted because the required information is inapplicable or the information is presented in the consolidated financial statements and the related notes.

## Item 17. Undertakings

The undersigned hereby undertakes:

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, that Paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the registration statement is on Form S-1 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

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(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) Each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions referenced in Item 14 of this Registration Statement, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered hereunder, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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**SIGNATURES**

Pursuant to the requirements of the Securities Act, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Houston, Texas, on July 12, 2024.

CNS PHARMACEUTICALS, INC.  
(Registrant)

By: /s/ John Climaco  
John Climaco  
Chief Executive Officer and Director

KNOW ALL MEN AND WOMEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints either John Climaco or Christopher Downs, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and any subsequent registration statements pursuant to Rule 462 of the Securities Act of 1933 and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that each of said attorney-in-fact or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed below by the following persons in the capacities and on the dates indicated:

| SIGNATURE   | TITLE   | DATE          |
|---|---|---------------|
| <u>/s/ John Climaco</u><br>John Climaco                     | Chief Executive Officer and Director<br>(Principal Executive Officer)                     | July 12, 2024 |
| <u>/s/ Christopher Downs</u><br>Christopher Downs           | Chief Financial Officer<br>(Principal Financial Officer and Principal Accounting Officer) | July 12, 2024 |
| <u>/s/ Faith Charles</u><br>Faith Charles                   | Director and Chair of the Board of Directors  | July 12, 2024 |
| <u>/s/ Jerzy (George) Gumulka</u><br>Jerzy (George) Gumulka | Director  | July 12, 2024 |
| <u>/s/ Jeffry Keyes</u><br>Jeffry Keyes                     | Director  | July 12, 2024 |
| <u>/s/ Bettina Cockroft</u><br>Bettina Cockroft             | Director  | July 12, 2024 |
| <u>/s/ Amy Mahery</u><br>Amy Mahery                         | Director  | July 12, 2024 |





ArentFox Schiff LLP  
1717 K Street NW  
Washington, DC 20006  
202.857.6000 MAIN  
202.857.6395 FAX  
afslaw.com

July 12, 2024

CNS Pharmaceuticals, Inc.  
2100 West Loop South, Suite 900  
Houston, Texas 77027

Ladies and Gentlemen:

We have acted as counsel to CNS Pharmaceuticals, Inc., a Nevada corporation (the "Company"), in connection with the Registration Statement on Form S-1 (the "Registration Statement"), filed by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"). The Registration Statement relates to the registration for resale by the selling stockholders named in the Registration Statement (the "Selling Stockholders") of up to **2,359,000** shares of the Company's common stock, \$0.001 par value per share ("Common Stock") issuable upon the exercise of certain outstanding warrants (the "Warrants") issued by the Company to the Selling Stockholders (the "Warrant Shares").

In connection with our opinion, we have examined the Registration Statement, including the exhibits thereto, the Warrants, and such other documents, corporate records and instruments, and have examined such laws and regulations, as we have deemed necessary for the purposes of this opinion. In making our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity with the originals of all documents submitted to us as copies and the legal capacity of all natural persons. As to matters of fact material to our opinions in this letter, we have relied on certificates and statements from officers and other employees of the Company, public officials and other appropriate persons.

Based on the foregoing and subject to the qualifications set forth below, we are of the opinion that:

1. The Warrant Shares initially issuable upon exercise of the Warrants when issued by the Company against payment therefor (not less than par value) in the circumstances contemplated by the Warrants, will have been duly authorized by all necessary corporate action of the Company, and will be validly issued, fully paid and non-assessable.

The foregoing opinions are limited to Chapter 78 of the Nevada Revised Statutes, and we express no opinion as to the laws of any other jurisdiction.

The opinions expressed in this opinion letter are as of the date of this opinion letter only and as to laws covered hereby only as they are in effect on that date, and we assume no obligation to update or supplement such opinion to reflect any facts or circumstances that may come to our attention after that date or any changes in law that may occur or become effective after that date. The opinions herein are limited to the matters expressly set forth in this opinion letter, and no opinion or representation is given or may be inferred beyond the opinions expressly set forth in this opinion letter.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement and to the use of this firm's name under the caption "Legal Matters" in the Registration Statement. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Sincerely,

/s/ ArentFox Schiff, LLP



**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in this Registration Statement on Form S-1 of our report dated April 1, 2024 with respect to the audited financial statements of CNS Pharmaceuticals, Inc. for the years ended December 31, 2023 and 2022. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

We also consent to the references to us under the heading "Experts" in such Registration Statement.

/s/ MaloneBailey, LLP  
www.malonebailey.com  
Houston, Texas  
July 12, 2024

Calculation of Filing Fee Tables

FORM S-1

(Form Type)

CNS Pharmaceuticals, Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

|                             | Security Type              | Security Class Title   | Fee Calculation or Carry Forward Rule | Amount Registered | Proposed Maximum Offering Price Per Unit (1) | Maximum Aggregate Offering Price | Fee Rate  | Amount of Registration Fee(1) |
|-----------------------------|----------------------------|--|---------------------------------------|-------------------|--|----------------------------------|-----------|-------------------------------|
| Newly Registered Securities |                            |  |                                       |                   |  |                                  |           |                               |
| Fees to Be Paid             | Equity                     | Common Stock, \$0.001 par value per share, underlying warrants (2) | 457(c)                                | 2,359,000         | \$1.0747                                     | \$2,535,217.30                   | 0.0001476 | \$374.20                      |
| Carry Forward Securities    |                            |  |                                       |                   |  |                                  |           |                               |
| Carry Forward Securities    |                            |  |                                       |                   |  |                                  |           | —                             |
|                             | Total Offering Amounts     |  |                                       |                   |  |                                  |           | \$374.20                      |
|                             | Total Fees Previously Paid |  |                                       |                   |  |                                  |           | —                             |
|                             | Total Fee Offsets          |  |                                       |                   |  |                                  |           | —                             |
|                             | Net Fee Due                |  |                                       |                   |  |                                  |           | \$374.20                      |

(1) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) of the Securities Act of 1933, as amended, based upon the average of the high and low prices for a share of the registrant's common stock as reported on The NASDAQ Capital Market on July 9, 2024.

(2) Pursuant to Rule 416 under the Securities Act, the securities being registered hereunder include such indeterminate number of additional shares of common stock as may be issued after the date hereof as a result of stock splits, stock dividends or similar transactions.