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Registration No. 333-275671

PROSPECTUS

CNS Pharmaceuticals, Inc.

3,756,000 Shares of Common Stock

This prospectus covers the offer and resale by the selling stockholder identified in this prospectus of up to an aggregate of 3,756,000 shares of our common stock issuable upon exercise of inducement warrants to purchase 3,756,000 shares of our common stock (the "Inducement Warrants"). We issued the Inducement Warrants to the selling stockholder in exchange for their exercise of then existing warrants to purchase our common stock on October 16, 2023. We are registering these shares issuable upon exercise of the Inducement Warrants on behalf of the selling stockholder, to be offered and sold by it from time to time.

We are not selling any shares of common stock under this prospectus and will not receive any proceeds from the sale by the selling stockholder of such shares.

Sales of the shares by the selling stockholder may occur at fixed prices, at market prices prevailing at the time of sale, at prices related to prevailing market prices, at negotiated prices and/or at varying prices determined at the time of sale. The selling stockholder may sell shares directly or to or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions from the selling stockholders, the purchasers of the shares, or both. The selling stockholder may sell any, all or none of the securities offered by this prospectus and we do not know when or in what amount the selling stockholder may sell its shares of common stock hereunder following the effective date of the registration statement of which this prospectus forms a part. We provide more information about how the selling stockholder may sell or otherwise dispose of its shares of common stock in the section titled "Plan of Distribution" on page 10.

We are paying the cost of registering the shares of common stock covered by this prospectus as well as various related expenses. The selling stockholder is responsible for all selling commissions, transfer taxes and other costs related to the offer and sale of its shares.

Our common stock is listed on The Nasdaq Capital Market under the symbol "CNSP." On November 30, 2023, the last reported sale price for our common stock was $2.08 per share.

Investing in our securities involves risks. See "Risk Factors" beginning on page 6 and "Item 1A—Risk Factors" of our most recent report on Form 10-K or 10-Q which is incorporated by reference in this prospectus before you invest in our securities.

Neither the SEC nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense. The securities are not being offered in any jurisdiction where the offer is not permitted.

The date of this prospectus is November 30, 2023.

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ABOUT THIS PROSPECTUS

This prospectus is part of the registration statement that we filed with the Securities and Exchange Commission (the "SEC") pursuant to which the selling stockholder named

herein may, from time to time, offer and sell or otherwise dispose of the shares of our common stock covered by this prospectus. As permitted by the rules and regulations of the SEC, the registration statement filed by us includes additional information not contained in this prospectus.

This prospectus and the documents incorporated by reference into this prospectus include important information about us, the securities being offered and other information you should know before investing in our securities. You should not assume that the information contained in this prospectus is accurate on any date subsequent to the date set forth on the front cover of this prospectus or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus is delivered or shares of common stock are sold or otherwise disposed of on a later date. It is important for you to read and consider all information contained in this prospectus, including the documents incorporated by reference therein, in making your investment decision. You should also read and consider the information in the documents to which we have referred you under "Where You Can Find More Information" and "Incorporation of Certain Information by Reference" in this prospectus.

You should rely only on this prospectus and the information incorporated or deemed to be incorporated by reference in this prospectus. We have not, and the selling stockholder has not, authorized anyone to give any information or to make any representation to you other than those contained or incorporated by reference in this prospectus. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

Unless otherwise indicated, information contained or incorporated by reference in this prospectus concerning our industry, including our general expectations and market opportunity, is based on information from our own management estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. Management estimates are derived from publicly available information, our knowledge of our industry and assumptions based on such information and knowledge, which we believe to be reasonable. In addition, assumptions and estimates of our and our industry's future performance are necessarily uncertain due to a variety of factors, including those described in "Risk Factors" beginning on page 6 of this prospectus. These and other factors could cause our future performance to differ materially from our assumptions and estimates.

PROSPECTUS SUMMARY

This summary highlights selected information from this prospectus and the documents incorporated herein by reference and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus, including the risks of investing in our securities discussed under "Risk Factors" section of this prospectus, the information incorporated herein by reference, including our financial statements, and the exhibits to the registration statement of which this prospectus is a part. All references in this prospectus to "we," "us," "our," "CNS," the "Company" and similar designations refer to CNS Pharmaceuticals, Inc., unless otherwise indicated or as the context otherwise requires.

Our Company

We are a clinical pharmaceutical company organized as a Nevada corporation in 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 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 efficacy of Berubicin in patients with Glioblastoma Multiforme who have failed primary treatment for their disease, and results will be compared to the efficacy of Lomustine, a current standard of care in this setting, with a 2 to 1 randomization of the estimated 243 patients to Berubicin or Lomustine. Patients receiving Berubicin will be administered a 2-hour IV infusion of 7.5 mg/m2 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 will include a pre-planned, non-binding interim futility analysis which will be conducted by an independent Data Safety Monitoring Board (DSMB) to recommend whether this study should continue as planned based on Berubicin showing statistically significant value as a second-line treatment for patients with glioblastoma compared with Lomustine. We will conduct this analysis after at least 50% of the patients in the interim analysis population (30-50% of total expected patients for the trial) can be evaluated as having failed the primary efficacy endpoint (death). This recommendation will review the number of deaths on each arm to ensure that the overall survival of patients receiving Berubicin shows a statistically significant comparability to or is even higher than those receiving Lomustine. The median survival of patients receiving second-line treatment for glioblastoma has historically been shown to be approximately 6 months. We have historically used 6 months as an estimate for the median time to a 50% mortality rate. Taking into account the recent rate of enrollment and the number of patients that can be adequately assessed for their follow-up outcomes, we are anticipating that the DSMB will be able to perform this interim analysis and we can release the data during the fourth quarter of 2023. Additional analyses that will be provided based on this data will be comparisons of secondary endpoints, including progression-free survival (PFS), response rates, and safety assessments. 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, our founder. 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) 6,667 shares of our common stock. The patents we licensed from HPI expired in March 2020.

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.

With the Reata Agreement and the HPI License, 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 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 UTMDACC. Pursuant to the WP1244 Agreement, we obtained a royalty-bearing, worldwide, exclusive license to certain intellectual property rights, including patent rights, related to our portfolio of WP1244 drug technology. In consideration, we must make payments to UTMDACC including an up-front license fee, annual maintenance fee, milestone payments and royalty payments (including minimum annual royalties) for sales of licensed products developed under the WP1244 Agreement. The term of the WP1244 Agreement expires on the last to occur of: (a) the expiration of all patents subject to the WP1244 Agreement, or (b) fifteen years after execution; provided that UTMDACC has the right to terminate the WP1244 Agreement in the event that we fail to meet certain commercial diligence milestones. We have not met the commercial diligence milestones required as of the date hereof. As such, UTMDACC has the right to terminate the WP1244 Agreement upon notice to us. As of November 14, 2023, UTMDACC has not notified us of its intention to terminate the WP1244 Agreement.

On May 7, 2020, pursuant to the WP1244 portfolio license agreement described above, the Company entered into a Sponsored Research Agreement with UTMDACC 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 our development efforts of the WP1244 portfolio. This agreement was extended and expired on March 31, 2023.

Warrant Exercise Inducement Transaction

On October 16, 2023, we entered into a warrant exercise inducement offer letter (the "Inducement Letter") with the selling stockholder, which held certain existing warrants ("Existing Warrants") to receive 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 to purchase shares of common stock, pursuant to which the selling stockholder agreed to exercise for cash its Existing Warrants to purchase up to 1,878,000 shares of the Company's common stock, at $1.28 per share, in exchange for the Company's agreement to issue the Inducement Warrants to purchase up to 3,756,000 shares of the Company's common stock (the "Inducement Warrant Shares").

Each Inducement Warrant has an exercise price equal to $1.28. The Inducement Warrants will be exercisable on the six-month anniversary of the date of issuance and may be exercised for a period of five years therefrom. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate proportional adjustment in the event of share dividends, share splits, reorganizations or similar events affecting the Company's common stock and the exercise price.

A holder may not exercise any portion of the Inducement Warrant to the extent that the holder, together with its affiliates and any other persons acting as a group together with any such persons, would own more than 4.99% (or, at the election of the purchaser, 9.99%) of the number of shares of common stock outstanding immediately after exercise (the "Beneficial Ownership Limitation"); provided that a holder with a Beneficial Ownership Limitation of 4.99%, upon notice to the Company and effectivesixty-one (61) days after the date such notice is delivered to us, may increase the Beneficial Ownership Limitation so long as it in no event exceeds 9.99% of the number of shares of common stock outstanding immediately after exercise.

If, at the time a holder exercises its Inducement Warrants, a registration statement registering the issuance of the shares of common stock underlying the Inducement Warrants under the Securities Act is not then effective or available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the aggregate exercise price, the holder may only exercise its Inducement Warrants (either in whole or in part), at such time by means of a cashless exercise in which the holder shall be entitled to receive upon such exercise the net number of shares of common stock determined according to a formula set forth in the Inducement Warrants, which generally provides for a number of shares of common stock equal to (A) (1) the volume weighted average price on (x) the trading day preceding the notice of exercise, if the notice of exercise is executed and delivered on a day that is not a trading day or prior to the opening of "regular trading hours" on a trading day or (y) the trading day of the notice of exercise, if the notice of exercise is executed and delivered after the close of "regular trading hours" on such trading day, or (2) the bid price on the day of the notice of exercise, if the notice of exercise is executed during "regular trading hours" on a trading day and is delivered within two hours thereafter, less (B) the exercise price, multiplied by (C) the number of shares of common stock the Inducement Warrant was exercisable into, with such product then divided by the number determined under clause (A) in this sentence.

No fractional shares of common stock will be issued upon the exercise of the Inducement Warrants. Rather, the Company will, at its election, and in lieu of the issuance of such fractional share, either (i) pay cash in an amount equal to such fraction multiplied by the exercise price or (ii) round up to the next whole share issuable upon exercise of the Inducement Warrant.

Subject to applicable laws, a Inducement Warrant may be transferred at the option of the holder upon surrender of the Inducement Warrant to the Company together with the appropriate instruments of transfer and funds sufficient to pay any transfer taxes payable upon such transfer.

There is no trading market available for the Inducement Warrants on any securities exchange or nationally recognized trading system. The Company does not intend to list the Inducement Warrants on any securities exchange or nationally recognized trading system.

Except as otherwise provided in the Inducement Warrants or by virtue of such holder's ownership of shares of common stock, the holders of the Inducement Warrants do not have the rights or privileges of holders of the Company's common stock, including any voting rights, until they exercise their Inducement Warrants.

In the event of a fundamental transaction, as described in the Inducement Warrants and generally including any reorganization, recapitalization or reclassification of the Company's common stock, the sale, transfer or other disposition of all or substantially all of the Company's properties or assets, the Company's consolidation or merger with or into another person, the acquisition of more than 50% of the Company's outstanding shares of common stock, the holders of the Inducement Warrants will be entitled to receive upon exercise of the Inducement Warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Inducement Warrants immediately prior to such fundamental transaction. Additionally, in the event of a fundamental transaction, the Company or any successor entity will, at the option of the holder of a Inducement Warrant exercisable at any time concurrently with or within 30 days after the consummation of the fundamental transaction (or, if later, the date of the public announcement thereof), purchase the Inducement Warrant from the holder by paying to the holder an amount of consideration equal to the value of the remaining unexercised portion of such Inducement Warrant on the date of consummation of the fundamental transaction based on the Black-Scholes option pricing model, determined pursuant to a formula set forth in the Inducement Warrants. The consideration paid to the holder will be the same type or form of consideration that was offered and paid to the holders of shares of common stock in connection with the fundamental transaction; provided that if no such consideration was offered or paid, the holders of common stock will be deemed to have received common stock of the successor entity in such fundamental transaction for purposes of this provision of the Inducement Warrants.

Corporate Information

Our principal executive office is located at 2100 West Loop South, Suite 900, Houston, Texas 77027 and our telephone number is (800) 946-9185. Our website address is www.cnspharma.com. Information contained in, or accessible through, our website does not constitute part of this prospectus and inclusions of our website address in this prospectus are inactive textual references only.

RISK FACTORS

Before making an investment decision, in addition to the risks set forth below, you should consider the "Risk Factors" included under Item 1A. of our most recent Annual Report on Form 10-K and in our updates to those Risk Factors in our Quarterly Reports on Form 10-Q, all of which are incorporated by reference in this prospectus, as updated by our future filings with the SEC. The market or trading price of our common stock could decline due to any of these risks. In addition, please read "Forward-Looking Statements" in this prospectus, where we describe additional uncertainties associated with our business and the forward-looking statements included or incorporated by reference in this prospectus. Please note that additional risks not currently known to us or that we currently deem immaterial may also impair our business and operations.

Risks Related to this Offering

The number of shares being registered for resale is significant in relation to the number of our outstanding shares of common stock.

We have filed a registration statement of which this prospectus is a part to register the shares offered hereunder for sale into the public market by the selling stockholder. These shares represent a large number of shares of our common stock, and if sold in the market all at once or at about the same time, could depress the market price of our common stock during the period the registration statement remains effective and could also affect our ability to raise equity capital.

FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated herein by reference contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are based on our management's current beliefs, expectations and assumptions about future events, conditions and results and on information currently available to us. Discussions containing these forward-looking statements may be found, among other places, in the Sections entitled "Business," "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" incorporated by reference from our most recent Annual Report on Form 10-K and in our Quarterly Reports on Form 10-Q, as well as any amendments thereto, filed with the SEC. This prospectus and the documents incorporated by reference herein also contain estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

All statements, other than statements of historical fact, included or incorporated herein regarding our strategy, future operations, financial position, future revenues, projected

costs, plans, prospects and objectives are forward-looking statements. Words such as "expect," "anticipate," "intend," "plan," "believe," "seek," "estimate," "think," "may," "could," "will," "would," "should," "continue," "potential," "likely," "opportunity" and similar expressions or variations of such words are intended to identify forward-looking statements, but are not the exclusive means of identifying forward-looking statements. These forward-looking statements include, but are not limited to, 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.

Such statements are based on currently available operating, financial and competitive information and are subject to various risks, uncertainties and assumptions that could cause actual results to differ materially from those anticipated or implied in our forward-looking statements due to a number of factors including, but not limited to, those set forth above under the section entitled "Risk Factors" in this prospectus and any accompanying prospectus supplement. Given these risks, uncertainties and other factors, many of which are beyond our control, you should not place undue reliance on these forward-looking statements. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to revise any forward-looking statements to reflect events or developments occurring after the date of this prospectus, even if new information becomes available in the future.

USE OF PROCEEDS

We are not selling any securities in this offering and we will not receive any of the proceeds from the sale of shares of our common stock by the selling stockholder. The selling stockholder will receive all of the proceeds from any sales of the shares of our common stock offered hereby.

We will receive the exercise price upon any exercise of the Inducement Warrants, to the extent exercised on a cash basis. Per the terms of the Inducement Warrants, if, at the time of exercise of an Inducement Warrant, there is no effective registration statement registering, or the prospectus contained therein is not available for the resale of the shares of common stock underlying the Inducement Warrant, then the Inducement Warrant may also be exercised, in whole or in part, by means of a "cashless exercise". We currently intend to use such proceeds, if any, for general corporate and working capital purposes. The holders of the Inducement Warrants are not obligated to exercise the Inducement Warrants, and we cannot predict whether or when, if ever, the holders of the Inducement Warrants will choose to exercise the Inducement Warrants, in whole or in part.

We will bear the out-of-pocket costs, expenses and fees incurred in connection with the registration of shares of our common stock to be sold by the selling stockholder pursuant to this prospectus, including, without limitation, all registration and filing fees, Nasdaq Capital Market listing fees and fees and expenses of our counsel and our accountants. The selling stockholder will bear underwriting discounts, commissions, placement agent fees or other similar expenses payable with respect to its sales of shares of our common stock.

SELLING STOCKHOLDERS

We are registering the resale of 3,756,000 shares of common stock issuable upon exercise of the Inducement Warrants held by the selling stockholder identified below, to permit its, or its transferees, pledgees, distributes, and other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part, to resell or otherwise dispose of such shares of common stock in the manner contemplated under the section entitled "Plan of Distribution" in this prospectus (as may be supplemented and amended).

The selling stockholder may sell some, all or none of its shares in this offering, and these shares of common stock may be offered only after exercise of all, or a portion of the Inducement Warrants held by the selling stockholder. We cannot predict when or if the selling stockholder will exercise its Inducement Warrants, and following any such

exercise, we do not know how long the selling stockholder will hold the shares before selling them. We currently have no agreements, arrangements or understandings with the selling stockholder regarding the sale or other disposition of any of the shares. The shares covered hereby may be offered from time to time by the selling stockholder. As a result, we cannot estimate the number of shares of common stock the selling stockholder will beneficially own after termination of sales under this prospectus. In addition, the selling stockholder may have sold, transferred or otherwise disposed of all or a portion of its shares of common stock since the date on which it provided information for this table.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to our common stock. Generally, a person "beneficially owns" shares of our common stock as of a date if the person has or shares with others the right to vote those shares or to dispose of them on that date, or if the person has the right to acquire voting or disposition rights within 60 days of that date.

The information in the table below and the footnotes thereto regarding shares of common stock to be beneficially owned after the offering assumes the sale of all shares being offered by the selling stockholder under this prospectus.

Name of Selling Shareholder	Number of Shares Beneficially Owned Prior to this Offering	Maximum Number of Shares to be Sold Pursuant in this Offering	Number of Shares Beneficially Owned After Offering
Armistice Capital, LLC	3,756,000	3,756,000	–

(1) 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.

PLAN OF DISTRIBUTION

The selling stockholder of the securities and any of its pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the Nasdaq Capital Market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities 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;
- in transactions through broker-dealers that agree with the selling stockholder to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The selling stockholder may also sell securities under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholder may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholder (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA 2121.

In connection with the sale of the securities or interests therein, the selling stockholder may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The selling stockholder may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The selling stockholder may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholder and any broker-dealers or agents that are involved in selling the securities may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. The selling stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has agreed to indemnify the selling stockholder against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We agreed to keep this prospectus effective until the all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholder will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the common stock by the selling stockholder or any other person. We will make copies of this prospectus available to the Selling Stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

EXPERTS

The financial statements as of and for the years ended December 31, 2022 and 2021, included in our Annual Report on Form 10-K for the year ended December 31, 2022, have been audited by MaloneBailey, LLP, independent registered public accounting firm, as set forth in their report, and have been incorporated herein by reference in reliance on the report of MaloneBailey, LLP, given on the authority of such firm as experts in auditing and accounting.

LEGAL MATTERS

ArentFox Schiff LLP, Washington, D.C., will pass for us upon the validity of the securities being offered by this prospectus.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities offered in this offering. We file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy the registration statement and any other documents we have filed at the Securities and Exchange Commission's Public Reference Room 100 F Street, N.E., Washington, D.C. 20549. Please call the Securities and Exchange Commission at 1-800-SEC-0330 for further information on the Public Reference Room. Our Securities and Exchange Commission filings are also available to the public at the Securities and Exchange Commission's Internet site at www.sec.gov.

This prospectus is part of the registration statement and does not contain all of the information included in the registration statement. Whenever a reference is made in this prospectus to any of our contracts or other documents, the reference may not be complete and, for a copy of the contract or document, you should refer to the exhibits that are a part of the registration statement.

INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus the information we file with it, which means that we can disclose important information to you by referring you to those documents. Later information filed with the SEC will update and supersede this information.

We incorporate by reference the documents listed below, all filings filed by us pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the initial registration statement of which this prospectus forms a part prior to effectiveness of such registration statement, and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the time that all securities covered by this prospectus have been sold or the offering is otherwise terminated; provided, however, that we are not incorporating any information furnished under either Item 2.02 or Item 7.01 of any current report on Form 8-K:

- Our Annual Report on Form 10-K for the year ended December 31, 2022, filed on March 31, 2023 (as amended on May 1, 2023);
- Our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2023, filed on May 15, 2023; June 30, 2023, filed on August 14, 2023; and September 30, 2023, filed on November 14, 2023;
- Our Current Reports on Form 8-K filed on January 3, 2023, May 8, 2023, August 15, 2023, August 18, 2023, September 19, 2023, and October 17, 2023; and
- Our Definitive Proxy Statement on Schedule 14A filed on August 14, 2023.

We will provide to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request, at no cost to the requester, a copy of any and all of the information that is incorporated by reference in this prospectus. You may request a copy of these filings, at no cost, by contacting us at:

CNS Pharmaceuticals, Inc.
Attn: Corporate Secretary
2100 West Loop South, Suite 900
Houston, TX 77027
Phone: (800) 946-9185