

PROSPECTUS

**CNS Pharmaceuticals, Inc.**  
**24,815,791 Shares of Common Stock**

Pursuant to this prospectus, the selling stockholders identified herein (the “Selling Stockholders”) are offering on a resale basis an aggregate of 24,815,791 shares of our common stock.

Of the foregoing, 24,210,528 shares of common stock offered for resale hereby were acquired by certain Selling Stockholders in a private placement transaction pursuant to a securities purchase agreement by and among us and the Selling Stockholders, dated January 5, 2022 (the “Purchase Agreement”), of which (i) 9,489,474 shares are outstanding and held by the Selling Stockholders, (ii) 2,615,790 shares are issuable upon the exercise of pre-funded warrants held by the Selling Stockholders, and (iii) 12,105,264 shares are issuable upon the exercise of additional warrants. In addition, 605,263 shares of common stock are issuable upon the exercise of warrants issued to our placement agent in the private placement, H.C. Wainwright & Co., LLC, in connection with the Purchase Agreement.

We will not receive any of the proceeds from the sale by the Selling Stockholders of the common stock. Upon any exercise of the warrants by payment of cash, however, we will receive the exercise price of the warrants. We intend to use those proceeds, if any, for general corporate purposes.

The Selling Stockholders may sell or otherwise dispose of the common stock covered by this prospectus in a number of different ways and at varying prices. We provide more information about how the Selling Stockholders may sell or otherwise dispose of the common stock covered by this prospectus in the section entitled “Plan of Distribution” on page 13. Discounts, concessions, commissions and similar selling expenses attributable to the sale of common stock covered by this prospectus will be borne by the Selling Stockholders. We will pay all expenses (other than discounts, concessions, commissions and similar selling expenses) relating to the registration of the common stock with the Securities and Exchange Commission, or SEC.

Our common stock is listed on The Nasdaq Capital Market under the symbol “CNSP.” On January 31, 2022, the last reported sale price for our common stock was \$0.601 per share.

Investing in our securities involves risks. See “[Risk Factors](#)” beginning on page 5 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 January 31, 2022.

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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 stockholders 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 stockholders have 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 5 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](#)” beginning on page 5 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, if approved by the FDA, may be a significant discovery in the treatment of glioblastoma. Glioblastoma 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 chemotherapy drugs known. Based on limited clinical data, we believe Berubicin is the first anthracycline that appears to have crossed the blood brain barrier and target brain cancer cells. While our current focus is solely on the development of Berubicin, we are also in the process of attempting to secure intellectual property rights in additional compounds that may be developed into drugs to treat cancers.

Berubicin was discovered by our founder, Dr. Waldemar Priebe, Professor of Medicinal Chemistry at The University of Texas MD Anderson Cancer Center. Through a series of transactions, Berubicin was initially licensed to Reata. Reata conducted a Phase I clinical trial on Berubicin 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 our trial during the third quarter of 2021 to investigate the efficacy of Berubicin in adults with Glioblastoma Multiforme who have failed first-line therapy. Recent correspondence between us and the FDA resulted in modifications to our previously disclosed 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 Phase II trial currently being conducted, which was open for enrollment during the second quarter of 2021 and treated the first patient during the third quarter of 2021, 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 current standard of care, with 2 to 1 randomization of the 243 patients to Berubicin or Lomustine. Subjects receiving Berubicin will be 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 (21-day cycle). Lomustine is administered orally. The trial will include an interim analysis that will evaluate the comparative effectiveness of these treatments. 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.

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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, which we refer to as the Reata Data.

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 and largest shareholder. 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) 200,000 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 "1244 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 1244 Agreement, we obtained a royalty-bearing, worldwide, exclusive license to certain intellectual property rights, including patent rights, related to our 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 1244 Agreement. The term of the 1244 Agreement expires on the last to occur of: (a) the expiration of all patents subject to the 1244 Agreement, or (b) fifteen years after execution; provided that UTMDACC has the right to terminate the 1244 Agreement in the event that we fail to meet certain commercial diligence milestones.

On May 7, 2020, pursuant to the WP1244 Portfolio license agreement described above, we entered into a Sponsored Research Agreement with UTMDACC to perform research relating to novel anticancer agents targeting CNS malignancies. We agreed to fund approximately \$1,134,000 over a two-year period. The principal investigator for this agreement is Dr. Priebe.

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#### **Private Placement of Common Shares and Warrants**

On January 5, 2022, we entered into a Securities Purchase Agreement (the "Purchase Agreement") with several institutional investors for the sale of (i) 9,489,474 shares common stock, (ii) pre-funded warrants (the "Pre-Funded Warrants") to purchase up to an aggregate of 2,615,790 shares of common stock, and (iii) warrants to purchase up to an aggregate of 12,105,264 shares of common stock (the "Common Warrants" and, collectively with the Pre-Funded Warrants, the "Warrants"), 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 \$0.95.

Subject to certain ownership limitations, the Warrants are exercisable upon issuance. Each Pre-Funded Warrant is exercisable into one share of common stock at a price per share of \$0.001 (as adjusted from time to time in accordance with the terms thereof). Each Common Warrant is exercisable into one share of common stock at a price per share of \$0.82 (as adjusted from time to time in accordance with the terms thereof) and will expire on the fifth anniversary of the date of issuance.

In connection with the Purchase Agreement, we entered in a Registration Rights Agreement and agreed to file by January 20, 2022 a resale registration statement (the "Resale Registration Statement") with the SEC covering all shares of common stock sold to investors and the shares of common stock issuable upon exercise of the Warrants, and to cause the Resale Registration Statement to become effective by March 21, 2022, assuming "full review" of the Resale Registration Statement by the Commission.

Pursuant to an engagement letter dated as of January 5, 2022, between us and H.C. Wainwright & Co., LLC ("Wainwright"), we agreed to pay Wainwright an aggregate fee equal to 7.0% of the gross proceeds received by us from the sale of the securities in the transaction. Pursuant to the engagement letter, we also issued to Wainwright,

or its designees, warrants to purchase up to 5.0% of the aggregate number of shares of common stock sold in the transactions (the "Placement Agent Warrants"), or 605,263 Placement Agent Warrants. The Placement Agent Warrants have substantially the same terms as the Common Warrants, except that the Placement Agent Warrants have an exercise price equal to 125% of the offering price, or \$1.1875 per share, subject to adjustments. We also paid Wainwright \$50,000 for non-accountable expenses and \$10,000 for legal fees and expenses.

#### Corporate Information

Our principal executive office is located at 2100 West Loop South, Suite 900, Houston, Texas 77027. Our website address is [www.cnspharma.com](http://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, 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.

### 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:

- the economic and market uncertainty caused by the COVID-19 outbreak;
- 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

All shares of our common stock offered by this prospectus are being registered for the accounts of the Selling Stockholders, and we will not receive any proceeds from the sale of these shares. However, we will receive proceeds from the exercise of the warrants, if such warrants are exercised for cash. We intend to use those proceeds, if any, for general corporate purposes.

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#### SELLING STOCKHOLDERS

The common stock being offered by the Selling Stockholders are those previously issued to the Selling Stockholders, and those issuable to the Selling Stockholders upon exercise of the Warrants. For additional information regarding the issuances of those shares of common stock and warrants, see “[Prospectus Summary](#) – Private Placement of Common Shares and Warrants” above. We are registering the shares of common stock in order to permit the Selling Stockholders to offer the shares for resale from time to time. Except for the ownership of the shares of common stock and the Warrants, the Selling Shareholders have not had any material relationship with us within the past three years other than as a result of the ownership of our shares or other securities; *provided, however*, each of Michael Vasinkevich, Noam Rubinstein, Michael Mirsky, Craig Schwabe and Charles Worthman are associated persons of Wainwright, which served as our placement agent for the private placement offering.

The table below lists the Selling Stockholders and other information regarding the beneficial ownership of the shares of common stock by each of the Selling Shareholders. The second column lists the number of shares of common stock beneficially owned by each Selling Shareholder, based on its ownership of the shares of common stock and Warrants, as of January 10, 2022, assuming exercise of the Warrants held by the selling shareholders on that date, without regard to any limitations on exercises.

The third column lists the shares of common stock being offered by this prospectus by the Selling Shareholders.

In accordance with the terms of a registration rights agreement with the selling shareholders, this prospectus generally covers the resale of the sum of (i) the number of shares of common stock issued to the Selling Shareholders in the “Private Placement of Common Shares and Warrants” described above and (ii) the maximum number of shares of common stock issuable upon exercise of the related Warrants, determined as if the outstanding Warrants were exercised in full as of the trading day immediately preceding the date this registration statement was initially filed with the SEC, each as of the trading day immediately preceding the applicable date of determination and all subject to adjustment as provided in the registration right agreement, without regard to any limitations on the exercise of the Warrants. The fourth column assumes the sale of all of the shares offered by the Selling Shareholders pursuant to this prospectus.

Under the terms of the warrants, a Selling Shareholders may not exercise the Warrants to the extent such exercise would cause such Selling Shareholders, together with its affiliates and attribution parties, to beneficially own a number of shares of common stock which would exceed 4.99% or 9.99%, as applicable, of our then outstanding common stock following such exercise, excluding for purposes of such determination shares of common stock issuable upon exercise of such Warrants which have not been exercised. The number of shares in the second and fourth columns do not reflect this limitation. The selling shareholders may sell all, some or none of their shares in this offering. See “[Plan of Distribution](#).”

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<b>Name of Selling Shareholder</b>	<b>Number of Shares Beneficially Owned Prior to this Offering</b>	<b>Maximum Number of Shares to be Sold Pursuant in this Offering</b>	<b>Number of Shares Beneficially Owned After Offering *</b>
Armistice Capital Master Fund Ltd. (1)	12,631,580	12,631,580	–
Cavalry Fund I LP(2)	1,107,632	1,052,632	55,000
Cavalry Special Ops Fund LLC (3)	1,107,632	1,052,632	55,000
Empery Asset Master, LTD (4)	1,253,250	1,253,250	–
Empery Tax Efficient, LP (5)	460,840	460,840	–
Empery Tax Efficient III, LP (6)	391,174	391,174	–
Hudson Bay Master Fund Ltd. (7)	2,105,264	2,105,264	–
Iroquois Capital Investment Group LLC (8)	221,052	221,052	–
Iroquois Master Fund Ltd (9)	515,788	515,788	–
Intracoastal Capital LLC (10)	2,180,264	2,105,264	75,000
Lind Global Fund II LP (11)	1,210,526	1,210,526	–
Lind Global Macro Fund LP (12)	1,460,526	1,210,526	250,000
Michael Vasinkevich (13)	388,125	388,125	–
Noam Rubinstein (13)	75,658	75,658	–
Craig Schwabe (13)	20,428	20,428	–
Charles Worthman (13)	6,052	6,052	–
Michael Mirsky (13)	115,000	115,000	–

\* After the offering, none of the Selling Shareholders will have beneficial ownership of greater than one percent of our common stock.

- (1) The shares are directly held by Armistice Capital Master Fund Ltd., a Cayman Islands exempted company (the "Master Fund"), and may be deemed to be indirectly 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. Armistice Capital and Steven Boyd disclaim beneficial ownership of the securities except to the extent of their respective pecuniary interests therein.

The number of shares beneficially owned prior to this offering includes: (i) 2,615,790 shares of common stock issuable upon exercise of the Pre-Funded Warrants held by the Master Fund, which are subject to beneficial ownership limitations that prohibit the Master Fund from exercising any portion of a warrant if such exercise would result in the Master Fund owning a percentage of our outstanding common stock exceeding the 9.99% ownership limitation after giving effect to the issuance of common stock in connection with the Master Fund's exercise of the Pre-Funded warrant; (ii) 6,315,790 shares of common stock issuable upon the exercise of Common Warrants, which are subject to beneficial ownership limitations that prohibit the Master Fund from exercising any portion of a warrant if such exercise would result in the Master Fund owning a percentage of our outstanding common stock exceeding the 4.99% ownership limitation after giving effect to the issuance of common stock in connection with the Master Fund's exercise of the Common Warrants. The percentage of shares owned after offering assumes the exercise of all warrants held by the Master Fund, notwithstanding the existence of beneficial ownership limitations described above.

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- (2) Cavalry Fund I Management LLC is the general partner of Cavalry Fund I LP and Cavalry Special Ops Fund LLC. As such, Cavalry Fund I Management LLC may be deemed to beneficially own (as that term is defined in Rule 13d-3 under the Securities Exchange Act of 1934) the shares of common stock set forth in the table held by Cavalry Fund I LP and Cavalry Special Ops Fund LLC. Thomas Walsh is the Manager of Cavalry Fund I Management LLC. Each of Mr. Walsh, Cavalry Fund I LP and Cavalry Special Ops Fund LLC disclaim beneficial ownership of these securities.

The number of shares beneficially owned prior to this offering for Cavalry Fund I LP includes 526,316 shares of common stock issuable upon exercise of Common Warrants, which are subject to beneficial ownership limitations that prohibit the holder from exercising any portion of a warrant if such exercise would result in the holder owning a percentage of our outstanding common stock exceeding the 4.99% ownership limitation after giving effect to the issuance of common stock in connection with the holder's exercise of the Common Warrants. The percentage of shares owned after offering assumes the exercise of all warrants held by the holder, notwithstanding the existence of beneficial ownership limitations described above.

- (3) Cavalry Fund I Management LLC is the general partner of Cavalry Fund I LP and Cavalry Special Ops Fund LLC. As such, Cavalry Fund I Management LLC may be deemed to beneficially own (as that term is defined in Rule 13d-3 under the Securities Exchange Act of 1934) the shares of common stock set forth in the table held by Cavalry Fund I LP and Cavalry Special Ops Fund LLC. Thomas Walsh is the Manager of Cavalry Fund I Management LLC. Each of Mr. Walsh, Cavalry Fund I LP and Cavalry Special Ops Fund LLC disclaim beneficial ownership of these securities.

The number of shares beneficially owned prior to this offering for Cavalry Special Ops Fund LLC includes 526,316 shares of common stock issuable upon exercise of Common Warrants, which are subject to beneficial ownership limitations that prohibit the holder from exercising any portion of a warrant if such exercise would result in the holder owning a percentage of our outstanding common stock exceeding the 4.99% ownership limitation after giving effect to the issuance of common stock in connection with the holder's exercise of the Common Warrants. The percentage of shares owned after offering assumes the exercise of all warrants held by the holder, notwithstanding the existence of beneficial ownership limitations described above.

- (4) Empery Asset Management LP, the authorized agent of Empery Asset Master Ltd ("EAM"), has discretionary authority to vote and dispose of the shares held by EAM and may be deemed to be the beneficial owner of these shares. Martin Hoe and Ryan Lane, in their capacity as investment managers of Empery Asset Management LP, may also be deemed to have investment discretion and voting power over the shares held by EAM. EAM, Mr. Hoe and Mr. Lane each disclaim any beneficial ownership of these shares.

The number of shares beneficially owned prior to this offering for EAM includes 626,625 shares of common stock issuable upon exercise of Common Warrants, which are subject to beneficial ownership limitations that prohibit the holder from exercising any portion of a warrant if such exercise would result in the holder owning a percentage of our outstanding common stock exceeding the 4.99% ownership limitation after giving effect to the issuance of common stock in connection with the holder's exercise of the Common Warrants. The percentage of shares owned after offering assumes the exercise of all warrants held by the holder, notwithstanding the existence of beneficial ownership limitations described above.

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- (5) Empery Asset Management LP, the authorized agent of Empery Tax Efficient, LP ("ETE"), has discretionary authority to vote and dispose of the shares held by ETE and may be deemed to be the beneficial owner of these shares. Martin Hoe and Ryan Lane, in their capacity as investment managers of Empery Asset Management LP, may also be deemed to have investment discretion and voting power over the shares held by ETE. ETE, Mr. Hoe and Mr. Lane each disclaim any beneficial ownership of these shares.

The number of shares beneficially owned prior to this offering for ETE includes 230,420 shares of common stock issuable upon exercise of Common Warrants, which are subject to beneficial ownership limitations that prohibit the holder from exercising any portion of a warrant if such exercise would result in the holder owning a percentage of our outstanding common stock exceeding the 4.99% ownership limitation after giving effect to the issuance of common stock in connection with the holder's exercise of the Common Warrants. The percentage of shares owned after offering assumes the exercise of all warrants held by the holder, notwithstanding the existence of beneficial ownership limitations described above.

- (6) Empery Asset Management LP, the authorized agent of Empery Tax Efficient III, LP ("ETE III"), has discretionary authority to vote and dispose of the shares held by ETE III and may be deemed to be the beneficial owner of these shares. Martin Hoe and Ryan Lane, in their capacity as investment managers of Empery Asset Management LP, may also be deemed to have investment discretion and voting power over the shares held by ETE III. ETE III, Mr. Hoe and Mr. Lane each disclaim any beneficial ownership of these shares.

The number of shares beneficially owned prior to this offering for ETE II includes 195,587 shares of common stock issuable upon exercise of Common Warrants, which are subject to beneficial ownership limitations that prohibit the holder from exercising any portion of a warrant if such exercise would result in the holder owning a percentage of our outstanding common stock exceeding the 4.99% ownership limitation after giving effect to the issuance of common stock in connection with the holder's exercise of the Common Warrants. The percentage of shares owned after offering assumes the exercise of all warrants held by the holder, notwithstanding the existence of beneficial ownership limitations described above.

- (7) Hudson Bay Capital Management LP, the investment manager of Hudson Bay Master Fund Ltd., has voting and investment power over these securities. Sander Gerber is the managing member of Hudson Bay Capital GP LLC, which is the general partner of Hudson Bay Capital Management LP. Each of Hudson Bay Master Fund Ltd. and Sander Gerber disclaims beneficial ownership over these securities.

The number of shares beneficially owned prior to this offering includes 1,052,632 shares of common stock issuable upon exercise of Common Warrants, which are subject to beneficial ownership limitations that prohibit the holder from exercising any portion of a warrant if such exercise would result in the holder owning a percentage of our outstanding common stock exceeding the 9.99% ownership limitation after giving effect to the issuance of common stock in connection with the holder's exercise of the Common Warrants. The percentage of shares owned after offering assumes the exercise of all warrants held by the holder, notwithstanding the existence of beneficial ownership limitations described above.

- (8) Richard Abbe is the managing member of Iroquois Capital Investment Group LLC. Mr. Abbe has voting control and investment discretion over securities held by Iroquois Capital Investment Group LLC. As such, Mr. Abbe may be deemed to be the beneficial owner (as determined under Section 13(d) of the Securities Exchange Act of 1934, as amended) of the securities held by Iroquois Capital Investment Group LLC.

The number of shares beneficially owned prior to this offering includes 110,526 shares of common stock issuable upon exercise of Common Warrants, which are subject to beneficial ownership limitations that prohibit the holder from exercising any portion of a warrant if such exercise would result in the holder owning a percentage of our outstanding common stock exceeding the 4.99% ownership limitation after giving effect to the issuance of common stock in connection with the holder's exercise of the Common Warrants. The percentage of shares owned after offering assumes the exercise of all warrants held by the holder, notwithstanding the existence of beneficial ownership limitations described above.

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- (9) Iroquois Capital Management L.L.C. is the investment manager of Iroquois Master Fund, Ltd. Iroquois Capital Management, LLC has voting control and investment discretion over securities held by Iroquois Master Fund. As Managing Members of Iroquois Capital Management, LLC, Richard Abbe and Kimberly Page make voting and investment decisions on behalf of Iroquois Capital Management, LLC in its capacity as investment manager to Iroquois Master Fund Ltd. As a result of the foregoing, Mr. Abbe and Mrs. Page may be deemed to have beneficial ownership (as determined under Section 13(d) of the Securities Exchange Act of 1934, as amended) of the securities held by Iroquois Capital Management and Iroquois Master Fund.

The number of shares beneficially owned prior to this offering includes 257,894 shares of common stock issuable upon exercise of Common Warrants, which are subject to beneficial ownership limitations that prohibit the holder from exercising any portion of a warrant if such exercise would result in the holder owning a percentage of our outstanding common stock exceeding the 4.99% ownership limitation after giving effect to the issuance of common stock in connection with the holder's exercise of the Common Warrants. The percentage of shares owned after offering assumes the exercise of all warrants held by the holder, notwithstanding the existence of beneficial ownership limitations described above.

- (10) Mitchell P. Kopin ("Mr. Kopin") and Daniel B. Asher ("Mr. Asher"), each of whom are managers of Intracoastal Capital LLC ("Intracoastal"), have shared voting control and investment discretion over the securities reported herein that are held by Intracoastal. As a result, each of Mr. Kopin and Mr. Asher may be deemed to have beneficial ownership (as determined under Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) of the securities reported herein that are held by Intracoastal.

The number of shares beneficially owned prior to this offering includes: (i) 1,052,632 shares of common stock issuable upon exercise of Common Warrants, and (ii) 75,000 shares of common stock issuable upon exercise of warrants at an exercise price of \$2.20 per share issued in December 2020. The foregoing warrants are subject to beneficial ownership limitations that prohibit the holder from exercising any portion of a warrant if such exercise would result in the holder owning a percentage of our outstanding common stock exceeding the 4.99% ownership limitation after giving effect to the issuance of common stock in connection with the holder's exercise of such warrants. The percentage of shares owned after offering assumes the exercise of all warrants held by the holder, notwithstanding the existence of beneficial ownership limitations described above.

- (11) Jeff Easton has voting control and investment discretion over the securities reported herein that are held by Lind Global Fund II LP and Lind Global Macro Fund LP. Mr. Easton disclaims beneficial ownership over the securities listed except to the extent of his pecuniary interest therein. The principal business address of Lind is 444 Madison Ave, 41st Floor, New York, NY 10022.

The number of shares beneficially owned prior to this offering for Lind Global Fund II LP includes 605,263 shares of common stock issuable upon exercise of Common Warrants, which are subject to beneficial ownership limitations that prohibit the holder from exercising any portion of a warrant if such exercise would result in the holder owning a percentage of our outstanding common stock exceeding the 4.99% ownership limitation after giving effect to the issuance of common stock in connection with the holder's exercise of the Common Warrants. The percentage of shares owned after offering assumes the exercise of all warrants held by the holder, notwithstanding the existence of beneficial ownership limitations described above.

- (12) Jeff Easton has voting control and investment discretion over the securities reported herein that are held by Lind Global Fund II LP and Lind Global Macro Fund LP. Mr. Easton disclaims beneficial ownership over the securities listed except to the extent of his pecuniary interest therein. The principal business address of Lind is 444 Madison Ave, 41st Floor, New York, NY 10022.

The number of shares beneficially owned prior to this offering for Lind Global Macro Fund LP includes: (i) 605,263 shares of common stock issuable upon exercise of Common Warrants and (ii) 250,000 shares of common stock issuable upon exercise of warrants at an exercise price of \$2.20 per share issued in December 2020. The foregoing warrants are subject to beneficial ownership limitations that prohibit the holder from exercising any portion of a warrant if such exercise would result in the holder owning a percentage of our outstanding common stock exceeding the 4.99% ownership limitation after giving effect to the issuance of common stock in connection with the holder's exercise of such warrants. The percentage of shares owned after offering assumes the exercise of all warrants held by the holder, notwithstanding the existence of beneficial ownership limitations described above.

- (13) Each of the Selling Stockholders is affiliated with Wainwright, a registered broker dealer and has a registered address of c/o H.C. Wainwright & Co. 430 Park Ave, 3rd Floor, New York, NY 10022, and has sole voting and dispositive power over the securities held. The number of shares beneficially owned prior to this offering consist of shares of common stock issuable upon exercise of Placement Agent Warrants, which were received as compensation for our January 2022 private placement. The Selling Stockholder purchased the Placement Agent Warrants in the ordinary course of business and, at the time the Placement Agent Warrants were acquired, the Selling Stockholder had no agreement or understanding, directly or indirectly, with any person to distribute such securities.

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## PLAN OF DISTRIBUTION

Each Selling Stockholder of the securities and any of their 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. A 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 Stockholders 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 Stockholders 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 Stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholders (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 Stockholders 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 Stockholders 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 Stockholders 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 Stockholders 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. Each 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 Stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the Selling Stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) 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 Stockholders 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 Stockholders 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).

## 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](http://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, 2020 filed on [February 12, 2021](#) (as amended on [February 16, 2021](#) and [April 30, 2021](#));
- Our Quarterly Reports on Form 10-Q for the fiscal quarters ended [March 31, 2021](#) (filed on May 13, 2021), [June 30, 2021](#) (filed on August 13, 2021), and [September 30, 2021](#) (filed on November 12, 2021);
- Our Current Reports on Form 8-K filed on [February 12, 2021](#); [July 1, 2021](#); and [January 6, 2022](#);
- Our [Definitive Proxy Statement on Schedule 14A](#) filed on June 8, 2021; and
- the description of our common stock, par value \$0.001 per share contained in our [Registration Statement on Form 8-A](#), dated and filed with the SEC on November 5, 2019, and any amendment or report filed with the SEC for the purpose of updating the description.

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

## LEGAL MATTERS

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

## EXPERTS

The financial statements as of and for the years ended December 31, 2020 and 2019, included in our Annual Report on Form 10-K for the year ended December 31, 2020, 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.

**CNS Pharmaceuticals, Inc.**

**24,815,791 Shares of Common Stock**

**PROSPECTUS**

**January 31, 2022**

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