

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

**FORM S-3**

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

**RenovoRx, Inc.**

(Exact name of Registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

27-1448452  
(I.R.S. Employer  
Identification Number)

4546 El Camino Real, Suite B1  
Los Altos, CA 94022  
(650)-284-4433

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Shaun R. Bagai  
Chief Executive Officer  
RenovoRx, Inc.

4546 El Camino Real, Suite B1  
Los Altos, CA 94022  
(650)-284-4433

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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**APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC:** From time to time after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

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

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

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective on filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

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

**The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.**

PROSPECTUS

Subject to Completion, dated April 19, 2024

# RENOVO | RX

## 6,133,414 Shares of Common Stock 6,645,354 Shares of Common Stock Issuable Upon Exercise of Warrants

This prospectus relates to the resale by the selling stockholders named herein, including their transferees, assigns, pledgees or donees, or their respective successors, of up to (i) 6,133,414 shares (the “Shares”) of our common stock, par value \$0.0001 per share (which we refer to as our common stock), (ii) 6,133,414 shares (the “Warrant Shares”) of our common stock issuable upon the exercise of warrants (the “Warrants”) held by certain of the selling stockholders and (iii) 511,940 shares (the “PA Warrant Shares”) of our common stock issuable upon the exercise of placement agent warrants (the “PA Warrants”) held by certain of the selling stockholders. The Shares, Warrants, and PA Warrants were issued by us in a private placement which closed on January 26, 2024 (the “January 2024 Private Placement”). The selling stockholders listed (which includes certain of our officers and directors) herein were the investors in the January 2024 Private Placement or are persons associated with the placement agent for the January 2024 Private Placement. For information about the selling stockholders, see “Selling Stockholders.”

We are not selling any securities under this prospectus and will not receive any of the proceeds from the sale of common stock by the selling stockholder, although we may receive funds upon the future the exercise of Warrants and PA Warrants held by certain of the selling stockholders, if and when exercised for cash. The selling stockholders may sell Shares, Warrant Shares and PA Warrant Shares (which we sometimes refer to herein collectively as the Selling Stockholder Shares) from time to time in the principal markets on which the common stock is quoted at the prevailing market price, at prices related to prevailing market prices or in negotiated transactions. The selling stockholders may sell the Selling Stockholder Shares 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 Selling Stockholder Shares, or both. We are registering the offer and sale of the Selling Stockholder Shares pursuant to certain registration rights granted to the selling stockholders. The timing and amount of any sale of Selling Stockholder Shares is within the sole discretion of the selling stockholders. We do not know when or in what amount of Selling Stockholder Shares the selling stockholders may offer for sale. We will pay the expenses of registering the Selling Stockholder Shares, including legal and accounting fees. All selling and other expenses incurred by the selling stockholders will be borne by the selling stockholders. See “Plan of Distribution” for additional information.

Our common stock is listed on The Nasdaq Capital Market under the symbol “RNXT.” On April 18, 2024, the last reported sale price of our common stock on The Nasdaq Capital Market was \$1.22 per share.

**The purchase of the common stock offered through this prospectus is speculative and involves a high degree of risk. You should carefully consider the risk factors beginning on page 4 of this prospectus before purchasing any of the securities offered by this prospectus.**

**We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus and any amendments or supplements carefully before you make your investment decision.**

**Neither the Securities and Exchange Commission (“SEC”) nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.**

The date of this prospectus is , 2024.

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## ABOUT THIS PROSPECTUS

The information contained in this prospectus is not complete and may be changed. You should rely only on the information provided in or incorporated by reference in this prospectus, in any prospectus supplement or in a related free writing prospectus, or documents to which we otherwise refer you. We have not authorized anyone else to provide you with different information.

We have not authorized any dealer, agent or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and any accompanying prospectus supplement or any related free writing prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or an accompanying prospectus supplement or any related free writing prospectus. This prospectus and any accompanying prospectus supplement and any related free writing prospectus, if any, do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and any accompanying prospectus supplement and any related free writing prospectus, if any, 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. You

should not assume that the information contained in this prospectus and any accompanying prospectus supplement and any related free writing prospectus, if any, is accurate on any date subsequent to the date set forth on the front of such document 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 and any accompanying prospectus supplement and any related free writing prospectus is delivered or securities are sold on a later date.

We have not done anything that would permit this offering or possession or distribution of this prospectus or any free writing prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourself about and to observe any restrictions relating as to this offering and the distribution of this prospectus and any such free writing prospectus outside the United States.

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.

We own or have rights to use a number of registered and common law trademarks, service marks and/or trade names in connection with our business in the United States and/or in certain foreign jurisdictions. Solely for convenience, the trademarks, service marks, logos and trade names referred to in this prospectus are without the ® and ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensors to these trademarks, service marks and trade names. This prospectus contains additional trademarks, service marks and trade names of others, which are the property of their respective owners. All trademarks, service marks and trade names appearing in this prospectus are, to our knowledge, the property of their respective owners. We do not intend our use or display of other companies' trademarks, service marks, copyrights or trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies. We have trademarks for the names RENOVORX, RENOVOGEM, RENOVOCATH, RENOVOTAMP and DELIVERING THERAPY WHERE IT MATTERS. We have trademarks pending for TAMP and RENOVOGEM.

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### CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any accompanying prospectus supplement and the information incorporated by reference herein contain forward-looking statements. All statements other than statements of historical facts contained in this prospectus and the information incorporated by reference herein, including statements regarding our future results of operations and financial position, business strategy, product candidates, planned preclinical studies and clinical trials, results of clinical trials, research and development costs, regulatory approvals, timing and likelihood of success, as well as plans and objectives of management for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that are in some cases beyond our control and may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “would,” “expect,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “believe,” “estimate,” “predict,” “potential,” or “continue” or the negative of these terms or other similar expressions. Forward-looking statements contained in this prospectus and the documents incorporated by reference herein include, but are not limited to, statements about:

- our ongoing need for capital, and the sufficiency of our existing cash, cash equivalents, and investments to fund our future operating expenses and capital expenditure requirements;
- our estimates regarding expenses, future potential revenue, anticipated capital requirements to fund our future operating expenses, and our need for additional financing;
- our financial performance and other results of operations;
- our anticipated use of our existing cash, cash equivalents, and investments;
- our estimates of the number of patients in the United States who suffer from the diseases we target and our estimates regarding the size of other potential market opportunities and our ability to successfully realize these opportunities;
- the ability of our clinical trials to demonstrate safety and efficacy of our product candidates, and to otherwise meet their primary and secondary endpoints;
- the enrollment timing and projections for our clinical trials and focus on our current and future clinical trials, and the timing of reporting of interim or final data from those trials;
- our expectations relating to the timing of the provision of updates on, data readouts for, and completion of our clinical trials
- our continued reliance on third parties to conduct clinical trials of our product candidates, and for the manufacture of our product candidates;
- the beneficial characteristics, safety, efficacy, and therapeutic effects of our product candidates;
- our ability to advance product candidates into and successfully complete clinical trials;
- our ability to further develop and expand our therapy delivery platform, both to use different chemotherapeutic agents and to include new indications;
- our ability to obtain and maintain regulatory approval of our product candidates and the timing or likelihood of regulatory filings and approvals, including our expectation to seek special designations, such as orphan drug designation, for our product candidates for various diseases;
- existing regulations and regulatory developments in the United States and other jurisdictions;

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- our plans relating to commercializing our product candidates, if approved, including the geographic areas of focus and our potential and ability to successfully commercialize our product candidates and generate revenue;
  - the development, negotiation, documentation and implementation of actual or potential strategic plans for our business and product candidates, including licenses, joint ventures and other commercial collaborations;
  - the expected potential benefits of strategic collaborations with third parties and our ability to attract collaborators with relevant and complementary expertise;
  - the pre-clinical and clinical development, and commercialization, of competing therapies that are or may become available;

- future developments related to our industry, including developments by our competitors;
- our plans relating to the further development and manufacturing of our product candidates, including for additional indications which we may pursue;
- our plans and ability to obtain or protect intellectual property rights, including extensions of existing patent terms where available;
- the scope of protection we are able to establish and maintain for intellectual property rights, including our therapy platform and product candidates;
- our potential and ability to successfully manufacture and supply our product candidates for clinical trials and for commercial use, if approved;
- our ability to retain the continued service of our key personnel and to identify, hire, and then retain additional qualified personnel; and
- our expectations regarding the impact of geopolitical events on our business, including pandemics, wars, and political, economic or capital market instability.

We have based these forward-looking statements largely on our current expectations and projections about our business, the industry in which we operate and financial trends that we believe may affect our business, financial condition, results of operations and prospects, and these forward-looking statements are not guarantees of future performance or development. These forward-looking statements speak only as of the date of this prospectus and are subject to a number of risks, uncertainties and assumptions described in the section titled “Risk Factors” and elsewhere in this prospectus, each accompanying prospectus supplement, and the information incorporated by reference herein and therein. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein until after we distribute this prospectus, whether as a result of any new information, future events or otherwise.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain, and you are cautioned not to unduly rely upon these statements.

## PROSPECTUS SUMMARY

*The following summary highlights information contained elsewhere in this prospectus. It does not contain all of the information you need to consider in making your investment decision. Before making an investment decision, you should read this entire prospectus carefully and you should consider, among other things, the matters set forth under “Risk Factors” and our financial statements and related notes thereto appearing elsewhere in this prospectus.*

*In this prospectus, except as otherwise indicated, “RenovoRx,” the “Company,” “we,” “our,” and “us” refer to RenovoRx, Inc., a Delaware corporation.*

### Company Overview

We are a clinical-stage biopharmaceutical company developing proprietary targeted combination therapies for high unmet medical need with a goal to improve therapeutic outcomes for cancer patients undergoing treatment. Our proprietary **Trans-Arterial Micro-Perfusion (TAMP™)** therapy platform is designed to ensure precise therapeutic delivery to directly target the tumor while potentially minimizing a therapy’s toxicities versus systemic (intravenous (known as IV) therapy). Our novel approach to targeted treatment offers the potential for increased safety, tolerance, and improved efficacy.

Our novel and patented approach to targeted treatment offers the potential for increased safety, tolerance, and improved efficacy. Phase III lead product candidate, **RenovoGem™**, an oncology drug-device combination product, is being investigated under a U.S. Investigational New Drug Application (IND) that is regulated by U.S. Food and Drug Administration (or FDA) under the 21 CFR 312 pathway. RenovoGem is currently being evaluated for the treatment of locally advanced pancreatic cancer (LAPC) by the Center for Drug Evaluation and Research (the drug division of FDA.) We also plan to evaluate RenovoGem as a potential therapy in bile duct cancer with other potential pipeline indication opportunities to follow including non-small cell lung cancer, uterine tumors, glioblastoma, and sarcoma. RenovoGem received Orphan Drug Designation for pancreatic cancer and bile duct cancer which provides 7 years of market exclusivity upon NDA approval.

We have completed our RR1 Phase I/II and RR2 observational registry studies, with 20 and 25 patients respectively, in LAPC. These studies demonstrated a median Overall Survival (OS) of 27.9 months in LAPC patients pre-treated with radiation followed by treatment with RenovoGem. Based on previous large randomized clinical trials, the expected survival of LAPC patients is 12 to 15 months in patients receiving only IV systemic chemotherapy or IV chemotherapy plus radiation (which are both considered standard of care). Unlike the randomized trials that established these standard of care results, our RR1 and RR2 clinical trials did not prospectively control the standard of care therapy received prior to administration of RenovoGem. Based on an FDA safety review of our Phase I/II study, the FDA allowed us to proceed to evaluate RenovoGem within our Phase III registrational clinical trial.

Our Phase III clinical trial of RenovoGem for the treatment of LAPC is called **TIGeR-PaC**. This trial is an ongoing randomized multi-center study using TAMP to evaluate RenovoGem. The study is evaluating trans-arterial delivery, a form of intra-arterial (IA) administration, of an FDA-approved chemotherapy, gemcitabine, to treat LAPC following stereotactic body radiation therapy (SBRT). The study is comparing treatment of an FDA-approved cancer drug, gemcitabine, with TAMP versus systemic IV administration of gemcitabine and nab-paclitaxel.

Our protocol for TIGeR-PaC involves systemic chemotherapy and only SBRT during the induction phase of the study (prior to randomization). Patients receiving SBRT during the induction phase are required to complete 5 treatments, over 5 consecutive days, and do not receive oral chemotherapy vs. previously utilized intensity-modulated radiation therapy (IMRT) where patients must complete 25 radiation treatments in combination with oral chemotherapy during the induction phase of the study, which takes between 35 and 56 days to complete. In December 2021, we amended our protocol and statistical analysis plan for TIGeR-PaC (the “Modified SAP”) to (i) analyze only patients receiving SBRT during the induction phase, (ii) include a second interim analysis, (iii) change the total number of patients randomized in the study to 114 with a total of 86 deaths from SBRT patients, and (iv) repower the study from 90% to 80%, which is commonly used in clinical trials. We believe this design will shorten the timeframe needed to complete the study and also significantly decrease our costs. We have not discussed the protocol amendment or the Modified SAP with the FDA, and we cannot provide any assurance that the FDA will agree with these modifications, but these modifications have been submitted to the FDA

Committee recommending a continuation of the study. The TIGER-PaC study's primary endpoint is a 6-month OS (Overall Survival) benefit with secondary endpoints including reduced side effects versus standard of care. The data was first presented at the 2023 American Association for Cancer Research Annual Meeting in April 2023 and then as a Late Breaker Oral Presentation with additional secondary endpoint data at the 2023 European Society of Medical Oncology World Congress on Gastrointestinal Cancer in June 2023. The second interim analysis for this study will be triggered by the 52nd event, which is estimated to occur in late 2024. The second interim data read out would follow thereafter, with the timing for such read out depending on customary factors such as time needed for analysis.

Our TAMP therapy platform is focused on optimizing drug concentration in solid tumors using approved small molecule chemotherapeutics. Our platform enables physicians to isolate segments of the vascular anatomy closest to tumors and force chemotherapy across the blood vessel wall to bathe these difficult-to-reach solid tumors in chemotherapy. Specifically, our patented approach allows physicians to combine, on the one hand, pre-treatment of the local blood vessels and tissue with standard-of-care radiation therapy to decrease chemotherapy washout and, on the other hand, local delivery via our patented **RenovoCath** delivery system which utilizes pressure to force small molecule chemotherapy into the tumor tissue. We believe there are many advantages to our TAMP therapy platform, including:

- *Application of Approved Small Molecule Chemotherapeutic Agents:* We use approved small molecule chemotherapeutic agents, such as gemcitabine, with well-known safety and efficacy profiles.
- *Targeted Approach:* In a preclinical study using our therapy platform, we demonstrated up to 100 times higher local drug concentration compared to systemic chemotherapy. We believe our TAMP therapy platform allows for a targeted approach that can decrease systemic exposure and improve patient outcomes.
- *Delivery Method Independent of Tumor Vascularity:* Our therapy platform is designed to deliver small molecule chemotherapeutic agents to solid tumors resistant to systemic chemotherapy due to lack of tumor feeder blood vessels. If approved, our product candidates have the potential to treat tumors that are not directly supported by blood vessels.
- *Broad Application for Solid Tumor Indications:* Our therapy platform is not restricted to a single small molecule chemotherapeutic agent or solid tumor type. As such, it may be applied for use in additional solid tumor indications, including in solid tumors without identifiable tumor feeder blood vessels.

In a further validation of our TAMP platform, in July 2023, we announced a collaboration with Imugene(ASX: IMU) to explore expansion of our TAMP product pipeline with Imugene's CF33 oncolytic virus therapy for the treatment of difficult-to-access tumors. We are constantly in discussions regarding similar collaborations and potentially out-licenses of RenovoGem as we gear up for the New Drug Application filing (assuming we meet our study endpoints) and commercialization of RenovoGem (if approved by FDA) as well as other collaborations with our TAMP platform.

#### Corporate Information

We were incorporated in the State of Delaware on December 17, 2012. Our principal executive offices are located at 4546 El Camino Real, Suite B1, Los Altos, CA 94022. Our telephone number is (650) 284-4433. Our website address is <https://renovorx.com>. Information contained in our website does not constitute any part of, and is not incorporated into, this prospectus.

#### THE OFFERING

<b>Common Stock to be offered:</b>	6,133,414 Shares, 6,133,414 Warrant Shares and 511,940 PA Warrant Shares held or acquirable by the selling stockholders.
<b>Terms of the Offering:</b>	The selling stockholders will determine when and how to sell the Selling Stockholder Shares offered in this prospectus, as described in "Plan of Distribution."
<b>Use of Proceeds:</b>	We will not receive any proceeds from the sale of Selling Stockholder Shares in this offering. However, we may receive proceeds from the exercise of the Warrants and PA Warrants by the selling stockholders to the extent they are exercised for cash. In the event we receive proceeds from the cash exercise of the Warrants and the PA Warrants, we intend to use the aggregate net proceeds from the exercise of the Warrants and PA Warrants for general corporate purposes, including working capital. See the sections titled "Use of Proceeds" and "Selling Stockholders" for additional information.
<b>Listing and Symbols:</b>	Our common stock is listed on The Nasdaq Capital Market under the symbol "RNXT".
<b>Risk Factors:</b>	<i>Investing in our securities is speculative and involves substantial risks.</i> You should read the "Risk Factors" section of this prospectus and in the documents incorporated by reference in this prospectus for a discussion of factors to consider before deciding to purchase our securities.

Shares of our common stock that may be offered under this prospectus will be fully paid and non-assessable. Throughout this prospectus, when we refer to the shares of our common stock being registered on behalf of the selling stockholders for offer and resale, we are referring to the Shares that have been issued to the selling stockholders and the Warrant Shares and PA Warrant Shares issuable upon exercise of Warrants and PA Warrants issued in the January 2024 Private Placement. When we refer to the selling stockholders in this prospectus, we are referring to the selling stockholders identified in this prospectus and, as applicable, their permitted transferees or 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.

#### RISK FACTORS

*Investing in our securities is speculative and involves a high degree of risk.* Before making a decision to invest in our securities, in addition to carefully considering the Risk Factors noted below and the other information contained in this prospectus and incorporated by reference herein, you should carefully consider the risks described under the caption "Risk Factors" contained in our Annual Report on Form 10-K for our fiscal year ended December 31, 2023 and in our other filings with the Securities and Exchange Commission, as well as any amendments thereto, which are incorporated by reference into this prospectus in their entirety. See "Where You Can Find More Information" and "Incorporation of Certain Information by Reference."

#### Risks Relating to this Offering

*If you purchase the common stock being offered in this offering, you may experience immediate dilution as a result of this offering.*

Since the price per share of our common stock being offered may be substantially higher than the net tangible book value per share of our common stock, you may suffer immediate and substantial dilution in the net tangible book value of the common stock you purchase in this offering.

***You may experience future dilution as a result of future equity offerings.***

In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock that could result in further dilution to the investor purchasing our common stock in this offering or result in downward pressure on the price of our common stock. We may sell shares of our common stock or other securities in any other offering at prices that are higher or lower than the prices paid by the investor in this offering, and the investor purchasing shares or other securities in the future could have rights superior to existing stockholders. Moreover, to the extent that we issue options or warrants to purchase, or securities convertible into or exchangeable for, shares of our common stock in the future and those options, warrants or other securities are exercised, converted or exchanged, stockholders may experience further dilution.

***The trading price of our common stock has been, and is likely to continue to be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control.***

Our stock price is volatile. During the period from April 15, 2023 to April 15, 2024, the closing price of our common stock ranged from a high of \$3.21 per share to a low of \$0.60 per share. The stock market in general and the market for smaller pharmaceutical and biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may not be able to sell your common stock at or above the public offering price and you may lose some or all of your investment.

***We issued a large number of shares of common stock and warrants to purchase common stock in connection with our 2024 financing activities. Substantial future sales of such shares of our common stock could cause the market price of our common stock to decline or have other adverse effects on our Company.***

In connection with our private placement financing activities in the first few months of 2024, we issued a large number of shares and warrants to purchase common stock. We are obligated to register such shares and shares underlying warrants (totaling an aggregate of approximately 13 million shares of common stock and approximately 20 million shares of common stock underlying warrants) for public resale. While registered, these shares will be freely tradable. Sales of a substantial number of these shares in the public market, or the perception that these sales might occur, could depress the market price of our common stock or cause such market price to decline significantly. Such sales or the perception that such sales might occur could also impair our ability to raise capital through the sale of additional equity securities. We are unable to predict with any certainty the effect that such sales, or the perception that such sales may occur, may have on the prevailing market price of our shares or other adverse impacts this situation could have on our company.

#### **Risks Relating to Our Business**

***We will need to raise substantial additional capital to develop and commercialize RenovoGem, and our failure to obtain funding when needed may force us to delay, reduce or eliminate our product development programs or collaboration efforts. If we do not obtain adequate and timely funding, we may not be able to continue as a going concern.***

We had cash, cash equivalents and short-term marketable securities of \$1.2 million as of December 31, 2023. Due to our recurring operating losses and the expectation that we will continue to incur net losses in the future, we have recently raised, and will be required in the future to raise, additional capital to complete the development and commercialization of our product candidates. We have historically financed our operations primarily through private sales of our equity, debt financing and the sale of common stock and warrants in our initial public offering, or IPO. To raise additional capital, we may seek to sell additional equity and/or debt securities, obtain a credit facility or other loan or enter into collaborations, licenses or other similar arrangements, which we may not be able to do on favorable terms, or at all. For example, we have filed an omnibus shelf registration statement on Form S-3 that provides for aggregate offerings of up to \$50.0 million of our securities subject to various limitations, including limited sales in any twelve-month period while we are subject to the “baby-shelf” rules. Our ability to obtain additional financing will be subject to a number of factors, including market conditions, fluctuations in interest rates, our operating performance and investor sentiment. If we are unable to raise additional capital when required or on acceptable terms, we may have to significantly delay, scale back or discontinue the development and/or commercialization of our product candidates, restrict or cease our operations or obtain funds by entering into agreements on unfavorable terms. Failure to obtain additional capital on acceptable terms, or at all, would result in a material and adverse impact on our operations. As a result, there is substantial doubt about our ability to continue as a going concern.

Our financial statements as of December 31, 2023 have been prepared on a going concern basis and do not include any adjustments that may result from the outcome of this uncertainty. If we fail to raise additional working capital, or do so on commercially unfavorable terms, it would materially and adversely affect our business, prospects, financial condition and results of operations, and we may be unable to continue as a going concern. As a result, there is substantial doubt about our ability to continue as a going concern. If we seek additional financing to fund our business activities in the future and there remains substantial doubt about our ability to continue as a going concern, investors or other financing sources may be unwilling to provide additional funding to us on commercially reasonable terms, if at all. If we are unable to continue as a going concern, we might have to liquidate our assets and the value we receive for our assets in liquidation or dissolution could be significantly lower than the values reflected in our financial statements, and our shareholders may lose their entire investment in our common stock.

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#### **USE OF PROCEEDS**

We will not receive any proceeds from the sale of the Selling Stockholder Shares by the selling stockholders. However, we may receive proceeds from the exercise of the Warrants and PA Warrants by the selling stockholders to the extent they are exercised for cash. We estimate that the maximum proceeds that we may receive from the exercise of the Warrants and PA Warrants, assuming all the Warrants are exercised for cash at their applicable exercise prices of either \$1.22 or \$0.99, will be approximately \$6.6 million. We do not know, however, whether any of the Warrants or PA Warrants will be exercised or, if any of the Warrants or PA Warrants are exercised, when they will be exercised. It is possible that the Warrants and PA Warrants will expire and never be exercised. There are circumstances under which the Warrants and the PA Warrants may be exercised on a cashless basis. In these circumstances, even if the Warrants and the PA Warrants are exercised, we may not receive any proceeds, or the proceeds that we do receive may be significantly less than what we might expect.

We will retain broad discretion over the use of the net proceeds to us from the exercise of the Warrants and the PA Warrants. Unless otherwise provided in the applicable prospectus supplement, we currently expect to use the aggregate net proceeds from the exercise of the Warrants and PA Warrants for general corporate purposes, including working capital. We may also use a portion of the net proceeds to acquire, license or invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction. The expected use of net proceeds from the exercise of the Warrants and the PA Warrants represents our current intentions based on our present plans and business conditions. We cannot specify with certainty all of the particular uses for the net proceeds to be received from the exercise of the Warrants and PA Warrants. Pending these uses, we plan to invest the net proceeds of this offering in short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government. The actual allocation of proceeds realized from the exercise of the Warrants and the PA Warrants will depend upon the amount and timing of such exercises, our operating revenues and cash position at such time and our working capital requirements.

The selling stockholders will pay any expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of their shares of common stock. We will bear all other costs, fees and expenses incurred in effecting the registration of the Selling Stockholder Shares covered by this prospectus, including, without limitation, all registration fees and fees and expenses of our counsel and our accountants.

## SELLING STOCKHOLDERS

The shares of common stock being offered by the selling stockholders listed below were issued in, or are underlying the Warrants and PA Warrants issued in connection with, the January 2024 Private Placement. Other than the relationships as purchasers under the Subscription Agreements (as defined below) and as otherwise described herein, to our knowledge, no material relationships exist between any of the selling stockholders and us nor have any such material relationships existed within the past three years.

As used herein, the term “selling stockholders” means the selling stockholders listed below and such holders’ donees, pledgees, transferees, or other successors-in-interest selling shares of common stock or warrant shares received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer.

### *Summary of January 2024 Private Placement*

On January 26, 2024, we entered into a series of subscription agreements (the “Subscription Agreements”), in connection with the January 2024 Private Placement to 92 accredited investors (who are among the selling stockholders hereunder), which private placement was also closed on January 26, 2024. In connection with the January 2024 Private Placement, we raised aggregate gross proceeds of \$6,111,695.

In connection with the January 2024 Private Placement, we sold to the selling stockholder who were investors in the placement an aggregate of 6,133,414 shares of our common stock (the “Shares”) and common stock purchase warrants (the “Investor Warrants”) to purchase an aggregate of up to 6,133,414 shares of common stock (the “Investor Warrant Shares”) and collectively with the Shares and the Investor Warrants, the “Investor Securities”).

Investors paid a purchase price of \$0.99 for each Share and related Investor Warrant. The exercise price of the Investor Warrants is also \$0.99 per share. The five investors who are either officers, directors, employees or consultants to our company paid a purchase price of \$1.22 for each Share and related Investor Warrant. The exercise price of these Investor Warrants is also \$1.22 per share.

Pursuant to the Subscription Agreements, we agreed to use our commercially reasonable efforts to file a registration statement for the resale of the Shares and the Investor Warrant Shares, within 30 days after the closing of the January 2024 Private Placement and to cause the SEC to declare such registration statement effective as promptly as possible thereafter. We have filed the registration statement of which this prospectus is a part to satisfy this obligation.

In connection with the January 2024 Private Placement, on November 14, 2023, we entered into a placement agent agreement (the “Placement Agent Agreement”) with Paulson Investment Company, LLC (the “Placement Agent”), pursuant to which the Placement Agent agreed to act as our placement agent in connection with the January 2024 Private Placement. Under the terms of the Placement Agent Agreement, we paid selling commissions of 12% of gross offering proceeds from the sale of the Shares and Investor Warrants in the January 2024 Private Placement; *provided, however*, that selling commissions of 3% of gross offering proceeds were paid with respect to all subscriptions received from Investors who were introduced by us. Total selling commissions paid by us to the Placement Agent were \$508,043. We also paid the Placement Agent \$25,000 as a non-accountable expense fee. In addition, as additional compensation, we issued PA Warrants to the Placement Agent and its designees to purchase an aggregate of up to 511,940 PA Warrant Shares at an exercise price of \$0.99 per share and also agreed to include the PA Warrant Shares for resale in the registration statement of which this prospectus forms a part, along with the Shares and the Investor Warrant Shares.

### *Selling Stockholders Table*

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 stockholders. The table below sets forth information as of the date of this prospectus, to our knowledge, about the beneficial ownership of our common stock by the selling stockholders both before and immediately after this offering. Because the selling stockholders may sell, transfer, or otherwise dispose of all, some, or none of their shares of common stock, we cannot determine the number of such shares that will be sold, transferred or otherwise disposed of by the selling stockholders, or the amount or percentage of shares of our common stock that will be held by the selling stockholders upon termination of any particular offering. See “Plan of Distribution.” For purposes of the table below, we assume that the selling stockholders will sell all of their shares of common stock.

Name	Shares of Common Stock Beneficially Owned Before Completion of the Offering (1)		Sum of Number of Shares of Common Stock Offered Hereby (2)	Shares of Common Stock Beneficially Owned After Completion of the Offering (3)	
	Sum of Number	Percentage		Sum of Number	Percentage
Ramtin Agah (4)	323,564	1.4%	81,966	241,598	1.0%
Shaun Bagai (5)	769,562	3.2%	81,966	687,596	2.9%
Robert J. Spiegel (6)	114,235	*	81,966	32,269	*
Laurence Marton (7)	151,877	*	16,392	135,485	*
K Angenla Macfarlane (8)	171,533	*	81,966	89,567	*
Cooper Pulliam (9)	707,070	3.0%	707,070	0	*
Geoffrey Keller (9)	101,010	*	101,010	0	*
David Martin Jr. (9)	1,195,987	5.0%	909,090	285,997	1.2%
Peter Suhmann (9)	20,202	*	20,202	0	*
Davide Occhetti (9)	202,020	*	202,020	0	*
H Thomas and Chery T Bell (9)	52,504	*	50,504	2,000	*
David Staneck (9)	50,904	*	50,504	400	*
David Johnston (9)	101,010	*	101,010	0	*
Richard Davila (9)	50,504	*	50,504	0	*
Robert G and Gail E Smith (9)	202,020	*	202,020	0	*
Charles Ritter (9)	113,130	*	113,130	0	*
Bradford G Williams (9)	50,504	*	50,504	0	*
Steven R Purvis (9)	202,020	*	202,020	0	*
Jeremy Getson (9)	50,504	*	50,504	0	*
Per Gustafsson (9)	147,474	*	147,474	0	*
C James and Karen Prieur (9)	202,020	*	202,020	0	*
Paul G and Dawn L Darr (9)	90,908	*	90,908	0	*

William M Stocker III (9)	50,504	*	50,504	0	*
Meganne Houghton-Berry (9)	59,758	*	50,504	9,254	*
Michael S Snook (9)	50,504	*	50,504	0	*
Jaime Wong and Faye Routledge (9)	101,010	*	101,010	0	*
Francis M Lymburner (9)	50,504	*	50,504	0	*
David Slager (9)	519,095	2.2%	505,050	14,045	*
Nicholas Snook (9)	202,020	*	202,020	0	*
John Benson (9)	101,010	*	101,010	0	*
Pinto Valter (9)	50,504	*	50,504	0	*
Clayton A Struve (9)	202,020	*	202,020	0	*
Victoria Pettibone (9)	60,606	*	60,606	0	*
Kevin Neilson (9)	101,010	*	101,010	0	*
David Coyne (9)	202,020	*	202,020	0	*
Jonathan Irwin (9)	30,302	*	30,302	0	*
Willaim N and Reese S Anderson (9)	101,010	*	101,010	0	*
Tanner A Nitcher (9)	40,404	*	40,404	0	*
John V Wagner (9)	50,504	*	50,504	0	*
Jay D Van Biber (9)	101,010	*	101,010	0	*
Michael J Cooney (9)	80,808	*	80,808	0	*
Vijayan Nair (9)	20,020	*	20,020	0	*
David Alexander (9)	161,010	*	101,010	60,000	*
Anand Patel and Sureja Yesha (9)	101,010	*	101,010	0	*
Felix Frayman (9)	202,020	*	202,020	0	*
Gregg Goldenberg (9)	505,050	2.1%	505,050	0	*
Gerald P McBride (9)	70,706	*	70,706	0	*

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Leonard E. Samuels & Leah Kaplan Samuels (9)	202,020	*	202,020	0	*
Mark John Lewis (9)	107,740	*%	96,968	10,772	*%
Samuel Archer (9)	50,504	*	50,504	0	*
Mark Gaynor (9)	61,212	*	61,212	0	*
Allan Gabriel (9)	50,504	*	50,504	0	*
Donald Crowley (9)	66,666	*	66,666	0	*
Stuart Sherman (9)	101,010	*	101,010	0	*
Mark Neuhaus (9)	50,504	*	50,504	0	*
Ashok Amarshi (9)	151,312	*	131,312	20,000	*
Ankita Kothari (9)	201,010	*	101,010	100,000	*
Matthew Beidron (9)	50,504	*	50,504	0	*
Matthew DeSilva (9)	20,202	*	20,202	0	*
Mark Engebretson (9)	20,202	*	20,202	0	*
Craig Bordon (9)	101,010	*	101,010	0	*
Dean Dewitt Bekken II (9)	50,504	*	50,504	0	*
Anthony Eleftheriades (9)	101,010	*	101,010	0	*
Raj Maheshwari (9)	416,160	1.7%	416,160	0	*
Ronald and Amy Hellwig (9)	101,010	*	101,010	0	*
Chandrakant Patel (9)	654,040	2.7%	404,040	250,000	1.0%
Strata Trust Company FBO Michael Weiby IRA (9) (10)	50,504	*	50,504	0	*
Charles Robinson Revocable Trust (9) (11)	50,504	*	50,504	0	*
Cohen Family Trust (9) (12)	60,606	*	60,606	0	*
Chess Family Trust (9) (13)	101,010	*	101,010	0	*
Gerald A Tomsic 1995 Trust (9) (14)	202,020	*	202,020	0	*
SeedFolio Fund 2 (9) (15)	606,060	2.5%	606,060	0	*
Blaine 2000 Revocable Trust (9) (16)	50,504	*	50,504	0	*
Strata Trust Company FBO James Elman IRA (9) (17)	60,606	*	60,606	0	*
Harriet G August Irrevocable Trust (9) (18)	70,706	*	70,706	0	*
Strata Trust FBO Mark Renelt Traditional IRA (9) (19)	101,010	*	101,010	0	*
A&M Trust (9) (20)	60,606	*	60,606	0	*
Jack Cavin Holland 1979 Trust (9) (21)	80,808	*	80,808	0	*
The Andrew Harwood Revocable Trust (9) (22)	20,202	*	20,202	0	*
Paul B and Sheri L Robbins Trust (9) (23)	141,846	*	101,010	40,836	*
Drexler Family Trust (9) (24)	27,436	*	20,202	7,234	*
The Robert L Bahr Revocable Trust 1995 (9) (25)	50,504	*	50,504	0	*
Flying S Ranch Trust (9) (26)	202,020	*	202,020	0	*
Daniel R Edelson Revocable Trust (9) (27)	21,000	*	21,000	0	*
Regals Fund LP (9) (28)	505,050	2.1%	505,050	0	*
Oak Family Investments LLC (9) (29)	202,020	*	202,020	0	*
DFS Investments LLC (9) (30)	303,030	1.3%	303,030	0	*
Your ConduWitt LLC (9) (31)	50,504	*	50,504	0	*
Sattva Group (9) (32)	430,661	1.8%	303,030	127,631	*
Amal Amin (33)	4,097	*	4,097	0	*
Elizabeth Burk (33)	5,000	*	5,000	0	*
John Cassels (33)	253	*	253	0	*
Christopher Clark (33)	49,159	*	49,159	0	*
Timothy Dabulis (33)	1,768	*	1,768	0	*
Trent Davis (33)	8,194	*	8,194	0	*
Brandon Firby (33)	1,011	*	1,011	0	*
Peter Fogarty (33)	12,889	*	12,889	0	*

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Joshua Kaikov (33)	304	*	304	0	*
Alan Lamb (33)	947	*	947	0	*
John Linder (34)	64,394	*	64,394	0	*
Terrence Lynch (33)	18,687	*	18,687	0	*
Dan Mancuso (33)	1,516	*	1,516	0	*
Michael Nadler (33)	1,314	*	1,314	0	*
Dylan Nix (33)	506	*	506	0	*
John Nole (33)	2,526	*	2,526	0	*
Thomas Parigian (33)	49,159	*	49,159	0	*
Brandon Paulino (33)	304	*	304	0	*
Gary Saccaro (33)	88,687	*	88,687	0	*
Robert Setteducati (33)	49,159	*	49,159	0	*
Ali Shahosseini (33)	105	*	105	0	*
Hercules Dorn Stewart (33)	12,440	*	12,440	0	*
Harry Striplin (33)	2,458	*	2,458	0	*
Damon Thomas (33)	3,107	*	3,107	0	*
Eugene Webb (33)	758	*	758	0	*
Malcolm Alexander Winks (33)	8,194	*	8,194	0	*
Marta Wypych (35)	143,992	*	143,992	0	*
Stefan Zdravkovic (33)	708	*	708	0	*
Vivek and Reena Awasty (33)	301	*	301	0	*
Dax Bernhart (33)	151	*	151	0	*
Roger Barnhart(33)	151	*	151	0	*
Wade Carrigan (33)	377	*	377	0	*
Owen Carter (33)	754	*	754	0	*
Igor Cherdak (33)	754	*	754	0	*
Kyle Fry (33)	377	*	377	0	*
Jeff Preece (33)	151	*	151	0	*
Matthew Richter (33)	754	*	754	0	*
Kenneth Shell (33)	151	*	151	0	*
Keith Wright (33)	188	*	188	0	*
Hamar Living Trust (33) (36)	301	*	301	0	*
Langeliers Family Trust (33) (37)	151	*	151	0	*
Nancy Cowgill Trust (33) (38)	301	*	301	0	*
Strata Trust Company FBO Jeffrey Weiner Roth IRA (33) (39)	754	*	754	0	*
Strata Trust Company EBO Paul Hydok IRA (33) (40)	226	*	226	0	*
Beacon Investments LLC (33) (41)	452	*	452	0	*
Bravo Papa LLC (33) (42)	1,884	*	1,884	0	*
Paulson Investment Company, LLC (33) (43)	62,196	*	62,196	0	*
<b>Total Selling Stockholders</b>			<b>12,778,768</b>		

\* Less than 1%.

- (1) Applicable percentages based on 23,949,830 shares of common stock outstanding as of the date of this prospectus. Beneficial Ownership prior to this offering includes any share options either vested or which will vest within 60 days of the filing of this registration statement, and any common stock warrants exercisable within 60 days of the filing of this registration statement.
- (2) Consists of Shares and Investor Warrant Shares or PA Warrant Shares (as the case may be), with respect to each selling stockholder, in connection with the 2024 Private Placement.
- (3) Assumes full exercise of all Investor Warrants or PA Warrants (as the case may be) by each selling stockholder and the resale or other disposition of all Shares and all Investor Warrant Shares or PA Warrant Shares (as the case may be) by each such selling stockholder.

- (4) Ramtin Agah is our founder, Chairman of the Board and Chief Medical Officer. His beneficial ownership prior to and after this offering includes 233,826 shares issuable to Mr. Agah upon the exercise of options awarded under the Company's 2021 Omnibus Equity Incentive Plan, 1,295 shares issuable upon exercise warrants held by Mr. Agah unrelated to the January 2024 Private Placement, and 47,460 shares of company common stock. Beneficial Ownership prior to this offering also includes 40,983 Investor Warrant Shares issuable upon exercise of Investor Warrants, which is immediately exercisable at an exercise price of \$1.22 per share and which Investor Warrant Shares are included in the shares being offered by Mr. Agah hereby.
- (5) Shaun Bagai is our Chief Executive Officer. His beneficial ownership prior to and after this offering includes 436,039 shares issuable to Mr. Bagai upon the exercise of options awarded under the Company's 2021 Omnibus Equity Incentive Plan, and 292,540 shares of company common stock. Beneficial Ownership prior to this offering includes 40,983 Investor Warrant Shares issuable upon exercise of Investor Warrants, which is immediately exercisable at an exercise price of \$1.22 per share and which Investor Warrant Shares are included in the shares being offered by Mr. Bagai hereby.
- (6) Robert J. Spiegel is a director of our company. His beneficial ownership prior to and after this offering includes 32,269 shares issuable to Mr. Spiegel upon the exercise of options awarded under the Company's 2021 Omnibus Equity Incentive Plan, and 40,983 shares of company common stock. Beneficial Ownership prior to this offering includes 40,983 Investor Warrant Shares issuable upon exercise of Investor Warrants, which is immediately exercisable at an exercise price of \$1.22 per share and which Investor Warrant Shares are included in the shares being offered by Mr. Spiegel hereby.
- (7) Laurence Marton is a director of our company. His beneficial ownership prior to and after the offering includes 110,047 shares issuable to Mr. Marton upon the exercise of options awarded under the Company's 2021 Omnibus Equity Incentive Plan, and 33,634 shares of company common stock. Beneficial Ownership prior to this offering includes 8,196 Investor Warrant Shares issuable upon exercise of an Investor Warrant, which is immediately exercisable at an exercise price of \$1.22 per share and which Investor Warrant Shares are included in the shares being offered by Mr. Marton hereby.
- (8) K Angenla Macfarlane is a director of our company. Her beneficial ownership prior to and after the offering includes 89,567 shares issuable to Ms. Macfarlane upon the exercise of options awarded under the Company's 2021 Omnibus Equity Incentive Plan, and 40,983 shares of Company common stock. Beneficial Ownership prior to this offering includes 40,983 Investor Warrant Shares issuable upon exercise of an Investor Warrant, which is immediately exercisable at an exercise price of \$1.22 per share and which Investor Warrant Shares are included in the shares being offered by Ms. Macfarlane hereby.
- (9) One-half of the shares of common stock being offered for sale by such selling stockholder are issuable pursuant to an Investor Warrant, which is immediately exercisable at an exercise price of \$0.99 per share.
- (10) Michael Weiby has voting and dispositive power over the securities held by this selling stockholder.
- (11) Charles Robinson has voting and dispositive power over the securities held by this selling stockholder.
- (12) Eran Cohen has voting and dispositive power over the securities held by this selling stockholder.
- (13) Taylor Chess has voting and dispositive power over the securities held by this selling stockholder.
- (14) Gerald A Tomsic has voting and dispositive power over the securities held by this selling stockholder.

- (15) Joseph Gatto has voting and dispositive power over the securities held by this selling stockholder.
- (16) Gregory H Blaine has voting and dispositive power over the securities held by this selling stockholder.
- (17) James Grant Elman has voting and dispositive power over the securities held by this selling stockholder.
- (18) Steven Ganz has voting and dispositive power over the securities held by this selling stockholder.
- (19) Mark Renelt has voting and dispositive power over the securities held by this selling stockholder.
- (20) Mary Amorozo has voting and dispositive power over the securities held by this selling stockholder.
- (21) Jack Cavin Holland has voting and dispositive power over the securities held by this selling stockholder.
- (22) Andrew Harwood has voting and dispositive power over the securities held by this selling stockholder.
- (23) Paul B Robinson has voting and dispositive power over the securities held by this selling stockholder. Mr. Robinson holds an additional 10,000 shares of Company common stock through the Paul B Robinson IRA.
- (24) Karen Drexler has voting and dispositive power over the securities held by this selling stockholder.
- (25) Robert L Bahr has voting and dispositive power over the securities held by this selling stockholder.
- (26) Ryan Shay has voting and dispositive power over the securities held by this selling stockholder.
- (27) Daniel R Edelson has voting and dispositive power over the securities held by this selling stockholder.
- (28) David Slager has voting and dispositive power over the securities held by this selling stockholder.
- (29) Tony Chou has voting and dispositive power over the securities held by this selling stockholder.
- (30) Anthony DeLuca has voting and dispositive power over the securities held by this selling stockholder.
- (31) Heather Witt has voting and dispositive power over the securities held by this selling stockholder.
- (32) Samir Vig has voting and dispositive power over the securities held by this selling stockholder.
- (33) The shares of common stock being offered for sale by such selling stockholder are issuable pursuant to a PA Warrant, which is immediately exercisable at an exercise price of \$0.99 per share
- (34) The shares of common stock being offered for sale by Mr. Linder include (i) 25,000 shares issuable upon exercise of an Investor Warrant and (ii) 14,394 shares exercisable upon exercise of a PA Warrant, both of which are immediately exercisable at an exercise price of \$0.99 per share.
- (35) The shares of common stock being offered for sale by Ms. Wypych include (i) 20,000 shares issuable upon exercise of an Investor Warrant and (ii) 103,992 shares exercisable upon exercise of a PA Warrant, both of which are immediately exercisable at an exercise price of \$0.99 per share.
- (36) Douglas Harnar has voting and dispositive power over the securities held by this selling stockholder.
- (37) Roger Langeliers has voting and dispositive power over the securities held by this selling stockholder.
- (38) Nancy Cowgill has voting and dispositive power over the securities held by this selling stockholder.
- (39) Jeffrey Weiner has voting and dispositive power over the securities held by this selling stockholder.
- (40) Paul Hydok has voting and dispositive power over the securities held by this selling stockholder.
- (41) Russell Lieblick has voting and dispositive power over the securities held by this selling stockholder.
- (42) Bryce Patterson has voting and dispositive power over the securities held by this selling stockholder.
- (43) The Executive Committee of Paulson Investment Company, LLC, which consists of Christopher Clark, Thomas Parigian, and Robert Setteducati has voting and dispositive power over the securities held by this selling stockholder.

## PLAN OF DISTRIBUTION

We are registering the Selling Stockholder Shares on behalf of the selling stockholders to permit the resale of such shares by the selling stockholders from time to time after the date of this prospectus. The Selling Stockholder Shares were purchased or are acquirable by the selling stockholders, who participated in the January 2024 Private Placement. We will not receive any of the proceeds from the sale by the selling stockholders of the shares of common stock. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

The selling stockholders, which may include donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholders as a gift, pledge, partnership distribution or other transfer, may sell all or a portion of the shares of common stock beneficially owned by them and offered hereby from time to time on any stock exchange, market or trading facility on which the shares are traded or in private transactions.

A selling stockholder may use any one or more of the following methods when disposing of shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its own account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- through agreements between broker-dealers and the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted by applicable law.

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

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

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

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. The selling stockholders reserve the right to accept and, together with its agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be “underwriters” within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. If the selling stockholders is an “underwriter” within the meaning of Section 2(11) of the Securities Act, it will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the name of the selling stockholder, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

If underwriters are used in the sale, the shares of common stock will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. In connection with any such underwritten sale of shares of common stock, underwriters may receive compensation from the selling stockholder, for whom they may act as agents, in the form of discounts, concessions or commissions. If the selling stockholder uses an underwriter or underwriters to effectuate the sale of shares of common stock, we and/or it will execute an underwriting agreement with those underwriters at the time of sale of those shares of common stock.

To the extent required by law, the names of the underwriters will be set forth in a prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes the prospectus supplement and the accompanying prospectus used by the underwriters to sell those securities. The obligations of the underwriters to purchase those shares of common stock will be subject to certain conditions precedent, and unless otherwise specified in a prospectus supplement, the underwriters will be obligated to purchase all the shares of common stock offered by such prospectus supplement if any of such shares of common stock are purchased. Any public offering price and any discounts or concessions allowed or re-allowed or paid to dealers may be changed from time to time.

The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

#### ***Listing***

Our common stock is listed on The Nasdaq Capital Market under the trading symbol “RNXT.”

### **LEGAL MATTERS**

The validity of the issuance of the securities offered hereby will be passed upon for us by Ellenoff Grossman & Schole LLP, New York, New York.

### **EXPERTS**

The financial statements of RenovoRx, Inc. as of and for the year ended December 31, 2023 and 2022 incorporated by reference in this registration statement, have been audited by Baker Tilly US, LLP, an independent registered public accounting firm, as set forth in their report thereon incorporated by reference in this registration statement, in reliance upon such report and upon the authority of said firm as experts in accounting and auditing. The above referenced report on the financial statements contains an explanatory paragraph regarding the Company’s ability to continue as a going concern.

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

We have filed with the SEC a registration statement on Form S-3, of which this prospectus is a part, under the Securities Act, to register the shares of common stock offered by this prospectus. However, this prospectus does not contain all of the information contained in the Registration Statement. We have omitted from this prospectus some parts of the Registration Statement as permitted by the rules and regulations of the SEC. Statements in this prospectus concerning any document we have filed as an exhibit to the Registration Statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified in their entirety by reference to these filings. In addition, we file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC’s website at [www.sec.gov](http://www.sec.gov). Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge through the Internet. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act, can also be accessed free of charge from our website at <http://www.adnas.com>. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Information contained on our website is not part of this prospectus.

### **INCORPORATION OF CERTAIN INFORMATION BY REFERENCE**

The SEC’s rules allow us to “incorporate by reference” information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, and subsequent information that we file with the SEC will automatically update and supersede that information. Any statement contained in a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus modifies or replaces that statement.

This prospectus and any accompanying prospectus supplement incorporate by reference the documents set forth below that have previously been filed with the SEC:

- our Annual Report on [Form 10-K](#) for the year ended December 31, 2023, filed with the SEC on April 1, 2024;
- our Current Reports on Form 8-K, which were filed with the SEC on [January 2, 2024](#), [January 29, 2024](#), [February 9, 2024](#), [February 23, 2024](#), [March 14, 2024](#), [April 9, 2024](#), [April 15, 2024](#) and [April 16, 2024](#); and

- the description of our common stock set forth in our registration statement on [Form 8-A](#), filed with the SEC on August 11, 2021, including any amendments thereto or reports filed for the purposes of updating this description.

Any documents we file with the SEC pursuant to Section 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 and prior to effectiveness of the registration statement, as well as subsequent to the effectiveness of the registration statement and prior to the termination of the offering of our securities to which this prospectus relates, will automatically be deemed to be incorporated by reference into this prospectus and to be part hereof from the date of filing those documents. We are not, however, incorporating by reference any documents or portions thereof that are not deemed “filed” with the SEC, including any information furnished pursuant to Item 2.02 or Item 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

You can request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

RenovoRx, Inc.  
Attn: Investor Relations  
4546 El Camino Real, Suite B1  
Los Altos, California 94022  
650-284-4433

The information accessible through any website referred to in this prospectus or any document incorporated herein is not, and should not be deemed to be, a part of this prospectus.

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## RENOVO | RX

**6,133,414 Shares of Common Stock and  
6,645,354 Shares of Common Stock Issuable Upon Exercise of Warrants**

**Offered by the Selling Stockholders**

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**PROSPECTUS**

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, 2024

### PART II

#### INFORMATION NOT REQUIRED IN PROSPECTUS

##### Item 14. Other Expenses of Issuance and Distribution

The following is an estimate (other than the SEC registration fee) of the expenses (all of which are to be paid by the registrant) that we may incur in connection with the securities being registered hereby.

	<b>Amount to be Paid</b>
SEC registration fee	\$ 2,169
Legal fees and expenses (including Blue Sky fees)	50,000
Accounting fees and expenses	28,000
Transfer agent fees and expenses	5,000
Miscellaneous	5,000
<b>Total</b>	<b>\$ 90,169</b>

##### Item 15. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law authorizes a corporation’s board of directors to grant, and authorizes a court to award, indemnity to officers, directors, and other corporate agents, provided that the person acted in good faith and in a manner the person reasonably believed to be in the corporation’s best interests, and, with respect to any criminal action, had no reasonable cause to believe the person’s actions were unlawful. A similar standard is applicable in the case of derivative actions, except that indemnification extends only to expenses, including attorneys’ fees, incurred in connection with the defense or settlement of such action and the statute requires court approval before there can be any indemnification where the person seeking indemnification has been found liable to the corporation. The Delaware General Corporation Law further provides that the indemnification permitted thereunder shall not be deemed exclusive of any other rights to which the directors and officers may be entitled under the corporation’s bylaws, any agreement, a vote of stockholders or otherwise.

The registrant’s Sixth Amended and Restated Certificate of Incorporation (the “Certificate of Incorporation”) and Amended and Restated Bylaws (the “Bylaws”) provide for indemnification of directors and officers to the fullest extent permitted by law, including payment of expenses in advance of resolution of any such matter.

Section 102(b)(7) of the Delaware General Corporation Law permits a corporation to provide in its certificate of incorporation that a director or officer of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director or officer, except (1) for any breach of the director’s or officer’s duty of loyalty to the corporation or its stockholders, (2) for acts or omissions by a director or officer not in good faith or which involve intentional misconduct or a knowing violation of law, (3) for payments of unlawful dividends or unlawful stock repurchases or redemptions made to a director, (4) for any

transaction from which the director or officer derived an improper personal benefit or (5) an officer in any action by or in the right of the corporation. The Amended and Restated Certificate of Incorporation of the registrant provides that the registrant's directors shall not be personally liable to it or its stockholders for monetary damages for breach of fiduciary duty as a director and that if the Delaware General Corporation Law is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of the registrant's directors shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

Section 174 of the Delaware General Corporation Law provides, among other things, that a director who willfully or negligently approves of an unlawful payment of dividends or an unlawful stock purchase or redemption may be held liable for such actions. A director who was either absent when the unlawful actions were approved, or dissented at the time, may avoid liability by causing his or her dissent to such actions to be entered in the books containing minutes of the meetings of the board of directors at the time such action occurred or immediately after such absent director receives notice of the unlawful acts.

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Further, as permitted by the Delaware General Corporation Law, the registrant has entered into separate indemnification agreements with each of its directors and officers that may be broader than the specific indemnification provisions contained in the Delaware General Corporation Law. Each indemnification agreement provides, among other things, for indemnification to the fullest extent permitted by law and the Certificate of Incorporation and Bylaws against any and all expenses, judgments, fines, penalties and amounts paid in settlement of any claim. The indemnification agreements provide for the advancement or payment of all expenses to the indemnitee and for reimbursement to the registrant if it is found that such indemnitee is not entitled to such indemnification under applicable law and the Certificate of Incorporation and Bylaws.

The registrant has obtained and maintains standard policies of insurance under which coverage is provided (a) to its directors and officers against loss(es) rising from claims made by reason of breach of duty or other wrongful act, and (b) to it with respect to payments that it may make to such officers and directors pursuant to the above indemnification provision or otherwise as a matter of law. The coverage provided by these policies may apply whether or not the registrant would have the power to indemnify such person against such liability under the provisions of the Delaware General Corporation Law.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the registrant under the foregoing provisions, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

See also the undertakings set out in response to Item 17 herein.

**Item 16. Exhibits**

(a) Exhibits

A list of exhibits filed with this registration statement on Form S-3 is set forth on the Exhibit Index and is incorporated herein by reference.

**Item 17. Undertakings**

The undersigned registrant hereby undertakes:

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

a. To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended;

b. To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent not more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

c. To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

Provided, however, that paragraphs (1)(a), (b) and (c) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the Registration Statement.

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

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

4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

a. each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

b. (each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

*Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

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

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

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## EXHIBIT INDEX

Exhibit Number	Exhibit Description	Form	Incorporation by Reference		Filed Herewith
			File No.	Exhibit Number	
3.1	<a href="#">Sixth Amended and Restated Certificate of Incorporation of RenovoRx, Inc.</a>	8-K	001-40738	3.1	August 31, 2021
3.2	<a href="#">Amended and Restated Bylaws of RenovoRx, Inc.</a>	8-K	001-40738	3.1	September 11, 2023
4.1	<a href="#">Form of Warrant to Purchase Common Stock of RenovoRx, Inc.</a>	8-K	001-40738	10.3	January 29, 2024
4.2	<a href="#">Form of Placement Agent Warrant to Purchase Common Stock of RenovoRx, Inc.</a>	8-K	001-40738	10.5	January 29, 2024
4.3	<a href="#">Specimen Stock Certificate evidencing the Shares of Common Stock</a>	S-1/A	333-258071	4.4	August 5, 2021
5.1	<a href="#">Opinion of Ellenoff Grossman &amp; Schole LLP.</a>				X
10.1	<a href="#">Form of Subscription Agreement</a>	8-K	001-40738	10.1	January 29, 2024
10.2	<a href="#">Offering Extension</a>	8-K	001-40738	10.2	January 29, 2024
10.3	<a href="#">Placement Agent Agreement with Paulson Investment Company LLC</a>	8-K	001-40738	10.4	January 24, 2024
23.1	<a href="#">Consent of Independent Registered Public Accounting Firm – Baker Tilly US, LLP</a>				X
23.2	<a href="#">Consent of Ellenoff Grossman &amp; Schole LLP (included in the opinion filed as Exhibit 5.1 to this Registration Statement).</a>				X
24.1	<a href="#">Powers of Attorney (incorporated by reference to the signature page hereto)</a>				X
107	<a href="#">Filing Fee Table</a>				X

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## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, RenovoRx, Inc., a Delaware corporation, certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement on Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Los Altos, State of California, on April 19, 2024.

**RenovoRx, Inc.**

By: /s/ Shaun R. Bagai  
 Name: Shaun R. Bagai  
 Title: Chief Executive Officer

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Shaun R. Bagai and Ramtin Agah, and each of them, as his or her true and lawful attorney-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities (including his or her capacity as a director and/or officer of RenovoRx, Inc.) to sign any or all amendments (including post-effective amendments) to this registration statement and any and all additional registration statements filed pursuant to Rule 462(b) of the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith and about the premises, as fully to all intents and purposes as they, he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or any of them, or their, his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

Signature	Title	Date
<u>/s/ Shaun R. Bagai</u> Shaun R. Bagai	Chief Executive Officer and Director (Principal Executive Officer)	April 19, 2024

<hr/> <i>/s/ Ronald B. Kocak</i> Ronald B. Kocak	Vice President, Controller and Principal Accounting Officer <i>(Principal Financial and Accounting Officer)</i>	April 19, 2024
<hr/> <i>/s/ Ramtin Agah</i> Ramtin Agah	Director	April 19, 2024
<hr/> <i>/s/ Kirsten Angela Macfarlane</i> Kirsten Angela Macfarlane	Director	April 19, 2024
<hr/> <i>/s/ Laurence J. Marton</i> Laurence J. Marton	Director	April 19, 2024
<hr/> <i>/s/ Una S. Ryan</i> Una S. Ryan	Director	April 19, 2024
<hr/> <i>/s/Robert J. Spiegel</i> Robert J. Spiegel	Director	April 19, 2024

ELLENOFF GROSSMAN & SCHOLE LLP  
1345 AVENUE OF THE AMERICAS  
NEW YORK, NEW YORK 10105  
TELEPHONE: (212) 370-1300  
FACSIMILE: (212) 370-7889  
www.egslp.com

April 19, 2024

RenovoRx, Inc.  
4546 El Camino Real, Suite B1  
Los Altos, California 94022

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to RenovoRx, Inc., a Delaware corporation (the “**Company**”), in connection with the preparation of a registration statement on Form S-3 (the “**Registration Statement**”) filed by the Company with the Securities and Exchange Commission (the “**Commission**”) pursuant to the Securities Act of 1933, as amended (the “**Securities Act**”). The Registration Statement relates to the resale by the selling stockholders listed in the prospectus included as a part of the Registration Statement (the “**Selling Stockholders**”) of up to an aggregate of 12,778,768 shares of common stock, par value \$0.0001 per share, of the Company (the “**Common Stock**”), which is comprised of: (i) 6,133,414 shares of Common Stock (the “**Shares**”) held by the selling stockholders, (ii) 6,133,414 shares of Common Stock (the “**Warrant Shares**”) issuable upon the exercise of warrants (the “**Warrants**”) held by certain of the selling stockholders and (iii) 511,940 shares of Common Stock (the “**PA Warrant Shares**”) issuable upon the exercise of placement agent warrants (the “**PA Warrants**”) held by certain of the selling stockholders.

This opinion letter is furnished to you at your request to enable you to fulfill the requirements, in connection with the Registration Statement, of Item 601(b)(5) of Regulation S-K promulgated by the Commission.

We have examined such documents and considered such legal matters as we have deemed necessary and relevant as the basis for the opinion set forth below including, without limitation: (i) the Registration Statement; (ii) the Certificate of Incorporation and Bylaws of the Company, each as amended to date; (iii) the Warrants and the PA Warrants; and (iv) records of meetings and consents of the Board of Directors of the Company provided to us by the Company. With respect to such examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as reproduced or certified copies, and the authenticity of the originals of those latter documents. As to questions of fact material to this opinion, we have, to the extent deemed appropriate, relied upon certain representations of certain officers of the Company.

Based upon and subject to the foregoing, we are of the opinion that:

1. The Shares are duly and validly issued, fully paid and non-assessable shares of Common Stock.
2. Upon due exercise of the Warrants and payment to the Company of the applicable aggregate exercise price in accordance with the terms of the Warrants, and when certificates or book-entry evidence of ownership for the Warrant Shares have been duly executed and countersigned and delivered in accordance with and pursuant to the terms of the Warrants, the Warrant Shares issuable upon such exercise will be duly and validly issued, fully paid and non-assessable shares of Common Stock.
3. Upon due exercise of the PA Warrants and payment to the Company of the applicable aggregate exercise price in accordance with the terms of the PA Warrants, and when certificates or book-entry evidence of ownership for the PA Warrant Shares have been duly executed and countersigned and delivered in accordance with and pursuant to the terms of the PA Warrants, the PA Warrant Shares issuable upon such exercise will be duly and validly issued, fully paid and non-assessable shares of Common Stock.

The opinions expressed herein are limited solely to the General Corporation Law of the State of Delaware, including the applicable provisions of the Delaware Constitution and the reported judicial decisions interpreting such law, as currently in effect. We express no opinion as to the effect of any other law of the State of Delaware or the laws, rules or regulations of any other jurisdiction.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement and to the reference to our firm under the caption “Legal Matters” in the prospectus constituting a part of the Registration Statement. In giving such consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

We assume no obligation to update or supplement any of the opinion set forth herein to reflect any changes of law or fact that may occur following the date hereof.

Yours truly,

/s/ Ellenoff Grossman & Schole LLP

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**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in this Registration Statement on Form S-3 and related Prospectus of RenovoRx, Inc. of our report dated April 1, 2024, relating to the financial statements of RenovoRx, Inc. (which report expresses an unqualified opinion on the financial statements for the year ended December 31, 2023 and includes an explanatory paragraph relating to substantial doubt about RenovoRx, Inc.'s ability to continue as a going concern as described in Note 2 to the financial statements), appearing in the Annual Report on Form 10-K of RenovoRx, Inc. for the year ended December 31, 2023.

We also consent to the reference to our firm under the heading "Experts" in such Registration Statement.

/s/ Baker Tilly US, LLP

Irvine, California  
April 19, 2024

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## Calculation of Filing Fee Table

S-3  
(Form Type)

**RenovoRx, Inc.**  
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

	<b>Security Type</b>	<b>Security Class Title</b>	<b>Fee Calculation Rule</b>	<b>Amount Registered<sup>(1)</sup></b>	<b>Proposed Maximum Offering Price Per Unit</b>	<b>Maximum Aggregate Offering Price</b>	<b>Fee Rate</b>	<b>Amount of Registration Fee</b>
Fees to Be Paid	Equity	Common Stock	457(c)	12,778,768	\$ 1.15 <sup>(2)</sup>	\$ 14,695,583.20	0.00014760	\$ 2,169.07
<b>Total Offering Amounts</b>						\$ 14,695,583.20		
<b>Total Fees Previously Paid</b>						—	—	—
<b>Total Fee Offsets</b>						—	—	—
<b>Net Fee Due</b>								\$ 2,169.07

(1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of the Registrant's common stock, par value \$0.0001 per share ("Common Stock"), in connection with any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of outstanding shares of Common Stock.

(2) With respect to the shares of Common Stock offered by the selling stockholders, estimated at \$1.15 per share, the average of the high and low prices as reported on The Nasdaq Capital Market on April 17, 2024, for the purposes of calculating the registration fee in accordance with Rule 457(c) under the Securities Act.