

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**POST-EFFECTIVE AMENDMENT NO. 1**

to

**FORM S-1  
REGISTRATION STATEMENT**

*UNDER  
THE SECURITIES ACT OF 1933*

**NRX Pharmaceuticals, Inc.**

(Exact name of registrant as specified in its charter)

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

**2836**  
(Primary Standard Industrial  
Classification Code Number)

**82-2844431**  
(I.R.S. Employer  
Identification No.)

**1201 Orange Street, Suite 600  
Wilmington, DE 19801  
(484) 254-6134**

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

**Alessandra Daigneault**  
Chief Corporate Officer, General Counsel & Secretary  
1201 Orange Street, Suite 600  
Wilmington, Delaware 19801  
(484) 254-6134

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

*Copies to:*  
**David S. Huntington, Esq.**  
**David A. Curtiss, Esq.**  
**Paul, Weiss, Rifkind, Wharton & Garrison LLP**  
1285 Avenue of the Americas  
New York, NY 10019  
Tel: (212) 373-3000

**Approximate date of commencement of proposed sale to public: From time to time after this registration statement becomes effective**

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

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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

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

This post-effective registration statement amends registration statement number 333-257438.

Indicate by checkmark 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.

## ADDITION OF EXHIBIT

This Post-Effective Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-257438) is being filed to include as an exhibit KPMG LLP's consent to the use of its report dated March 31, 2022, with respect to the consolidated financial statements of NRX Pharmaceuticals, Inc. and its subsidiaries (the "Company") included in the Prospectus Supplement No. 13 dated March 31, 2022 filed pursuant to Rule 424(b)(3).

### Item 16. Exhibits and Financial Statement Schedules.

(a) The following exhibits are filed as part of this registration statement or incorporated by reference herein:

Exhibit		Incorporated by Reference Exhibit		
		Form	Exhibit	Filing Date
2.1	<a href="#">Agreement and Plan of Merger, dated as of December 13, 2020</a>	S-4	2.1	05/21/2021
2.2	<a href="#">First Amendment to Agreement and Plan of Merger, dated as of January 27, 2021</a>	S-4	2.2	05/21/2021
2.3	<a href="#">Second Amendment to Agreement and Plan of Merger, dated as of March 19, 2021</a>	S-4	2.3	05/21/2021
3.1	<a href="#">Second Amended and Restated Certificate of Incorporation</a>	8-K	3.1	05/28/2021
3.2	<a href="#">Second Amended and Restated By-Laws</a>	8-K	3.2	05/28/2021
4.1	<a href="#">Warrant Agreement, dated as of November 20, 2017, by and between BRPA and Continental Stock Transfer &amp; Trust Company</a>	8-K	4.2	11/22/2017
4.2	<a href="#">Form of Unit Purchase Option, dated November 20, 2017, with EarlyBirdCapital, Inc. and its designees</a>	8-K	4.3	11/22/2017
5.1	<a href="#">Opinion of Paul, Weiss, Rifkind, Wharton &amp; Garrison LLP</a>		**	
10.1	<a href="#">Stock Escrow Agreement, dated November 20, 2017, between BRPA, Big Rock Partners Sponsor, LLC and Continental Stock Transfer &amp; Trust Company</a>	8-K	10.2	11/22/2017
10.2	<a href="#">Registration Rights Agreement among BRPA and Big Rock Partners Sponsor, LLC</a>	8-K	10.3	11/22/2017
10.3	<a href="#">Agreement, dated November 17, 2018, among BRPA, Big Rock Partners Sponsor, LLC and BRAC Lending Group LLC</a>	8-K	10.1	11/20/2018
10.4	<a href="#">Stock Escrow Agent Letter, dated November 17, 2018</a>	8-K	10.2	11/20/2018
10.5	<a href="#">Registration Rights Assignment Agreement, dated November 17, 2018</a>	8-K	10.3	11/20/2018
10.6	<a href="#">Amendment to the Stock Escrow Agreement, dated May 24, 2021, among BRPA, Continental Stock Transfer &amp; Trust Company, and the stockholder parties thereto</a>	8-K	10.6	05/28/2021
10.7	<a href="#">Lock-up Agreement, dated May 24, 2021, by and between BRPA and the stockholder parties identified therein</a>	8-K	10.7	05/28/21
10.8	<a href="#">Registration Rights Agreement, dated May 24, 2021, by and among NRx Pharmaceuticals, Inc., certain equityholders of the Registrant named therein and certain equityholders of NeuroRx named therein</a>	8-K	10.8	05/28/21
10.9	<a href="#">Sponsor Agreement, dated May 24, 2021, by and among BRPA, the Big Rock Partners Sponsor, LLC, and BRAC Lending Group LLC</a>	8-K	10.9	05/28/21
10.10	<a href="#">NRx Pharmaceuticals, Inc. 2021 Omnibus Incentive Plan</a>	S-4	10.22	05/21/21
10.11	<a href="#">Form of Subscription Agreement</a>	8-K	10.1	03/15/21
10.12	<a href="#">Development and License Agreement, dated as of May 2, 2016, between Glytech LLC and NeuroRx</a>	S-4	10.24	05/21/21
10.13	<a href="#">Amendment to Development and License Agreement, dated as of October 19, 2016, between Glytech LLC and NeuroRx</a>	S-4	10.25	05/21/21

Exhibit		Incorporated by Reference Exhibit		
		Form	Exhibit	Filing Date
10.14	<a href="#">Second Amendment to Amended and Restated Development and License Agreement, dated as of June 13, 2018, between Glytech LLC and NeuroRx</a>	S-4	10.26	05/21/21
10.15	<a href="#">Third Amendment to Amended and Restated Development and License Agreement, dated as of April 16, 2019, between Glytech LLC and NeuroRx</a>	S-4	10.27	05/21/21
10.16	<a href="#">Fourth Amendment to Amended and Restated Development and License Agreement, dated as of December 31, 2020, between Glytech LLC and NeuroRx</a>	S-4	10.28	05/21/21
10.17	<a href="#">Exclusive License Agreement, dated as of April 16, 2019, by and between NeuroRx and Sarah Herzog Memorial Hospital Ezrat Nashim</a>	S-4	10.29	05/21/21
10.18	<a href="#">License and Option Agreement, dated as of September 1, 2020, between The Research Foundation For The State University of New York and NeuroRx</a>	S-4	10.30	05/21/21
10.19	<a href="#">Binding Collaboration Agreement, dated as of September 18, 2020, between Relief Therapeutics Holding Aktiengesellschaft and its wholly owned subsidiary Therametrics Discovery Aktiengesellschaft and NeuroRx</a>	S-4	10.31	05/21/21
10.20	<a href="#">Exclusive Distribution Agreement, dated as of September 25, 2020, between NeuroRx and Cardinal Health 105, Inc.</a>	S-4	10.32	05/21/21
10.21	<a href="#">Executive Employment Agreement, dated May 20, 2015, between NeuroRx and Jonathan C. Javitt</a>	S-4	10.33	05/21/21
10.22	<a href="#">"Work for Hire" Agreement, dated as of March 1, 2016, between NeuroRx and REBes Consulting LLC—Robert Besthof</a>	S-4	10.34	05/21/21
10.23	<a href="#">Amendment to "Work for Hire" Agreement, dated as of October 23, 2016, between NeuroRx and 20REBes Consulting LLC—Robert Besthof</a>	S-4	10.35	05/21/21
10.24	<a href="#">Consulting Agreement, dated as of January 1, 2021, between NeuroRx and Del Buono Legal, PLLC</a>	S-4	10.36	05/21/21
10.25	<a href="#">Feasibility Study and Material Transfer Agreement, dated as of January 6, 2021, by and between NeuroRx and TFF Pharmaceuticals, Inc.</a>	S-4	10.37	05/21/21
10.26	<a href="#">Manufacturing Supply Agreement, dated as of August 25, 2020, by and among NeuroRx, Nephron SC, Inc. and Nephron Pharmaceutical Corporation</a>	S-4	10.38	05/21/21

10.27	<a href="#">Amendment #1 to Manufacturing Supply Agreement, dated as of September 2, 2020, by and among NeuroRx, Nephron SC, Inc. and Nephron Pharmaceutical Corporation</a>	S-4	10.39	05/21/21
10.28	<a href="#">Amendment #2 to Manufacturing Supply Agreement, dated as of November 5, 2020, by and among NeuroRx, Nephron SC, Inc. and Nephron Pharmaceutical Corporation</a>	S-4	10.40	05/21/21
10.29	<a href="#">Amendment #3 to Manufacturing Supply Agreement, dated as of February 5, 2021, by and among NeuroRx, Nephron SC, Inc. and Nephron Pharmaceutical Corporation</a>	S-4	10.41	05/21/21
10.30	<a href="#">Share Subscription Facility Agreement, dated as of October 18, 2019, among NeuroRx, GEM Global Yield LLC SCS and GEM Yield Bahamas Limited</a>	S-4	10.42	05/21/21
10.31	<a href="#">Common Stock Purchase Warrant dated March 28, 2021</a>	S-4	10.43	05/21/21
10.32	<a href="#">Clinical Trial Participation Agreement, dated as of December 17, 2020, by and between Quantum Leap Health Care Collaborative and NeuroRx</a>	S-4	10.44	05/21/21
10.33	<a href="#">Consulting Agreement with Randolph Guggenheimer III</a>	8-K	10.33	05/28/21

Exhibit		Incorporated by Reference Exhibit		
		Form	Exhibit	Filing Date
10.34	<a href="#">Voting Agreement by and between Jonathan Javitt and Daniel Javitt</a>	8-K	10.34	05/28/21
23.1	<a href="#">Consent of Marcum LLP</a>		**	
23.2	<a href="#">Consent of KPMG LLP</a>		*	
23.3	<a href="#">Consent of Paul, Weiss, Rifkind, Wharton &amp; Garrison LLP (included in Exhibit 5.1)</a>		**	
24.1	<a href="#">Power of Attorney (included on signature page of this Form S-1)</a>		*	
101.INS	XBRL Instance Document		**	
101.SCH	XBRL Taxonomy Extension Schema Document		**	
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document		**	
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document		**	
101.LAB	XBRL Taxonomy Extension Label Linkbase Document		**	
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document		**	

\* Filed herewith.

\*\* Previously filed.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Post-Effective Amendment No. 1 to the Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Wilmington, State of Delaware, on April 8, 2022.

### NRX PHARMACEUTICALS, INC.

By: /s/ Robert Besthof

Name: Robert Besthof

Title: Interim Chief Executive Officer

Each person whose signature appears below constitutes and appoints each of Robert Besthof and Ira Strassberg, acting alone or together with another attorney-in-fact, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for such person and in his or her name, place and stead, in any and all capacities, to sign any or all further amendments (including post-effective amendments) to this registration statement (and any additional registration statement related hereto permitted by Rule 462(b) promulgated under the Securities Act of 1933 (and all further amendments, including post-effective amendments, thereto)), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or 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, this Post-Effective Amendment No. 1 to the Registration Statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Robert Besthof</u> Robert Besthof	Interim Chief Executive Officer (Principal Executive Officer)	April 8, 2022
<u>/s/ Ira Strassberg</u> Ira Strassberg	Chief Financial Officer (Principal Financial and Accounting Officer)	April 8, 2022
<u>/s/ Patrick J. Flynn</u> Patrick J. Flynn	Director	April 8, 2022
<u>/s/ Sherry A. Glied</u> Sherry A. Glied	Director	April 8, 2022
<u>/s/ Aaron Gorovitz</u> Aaron Gorovitz	Director	April 8, 2022

/s/ Chaim Hurvitz

Chaim Hurvitz

Director

April 8, 2022

/s/ Jonathan C. Javitt

Jonathan C. Javitt

Director

April 8, 2022

/s/ H.R. McMaster

H.R. McMaster

Director

April 8, 2022

/s/ Daniel Troy

Daniel Troy

Director

April 8, 2022

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**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the registration statement (No. 333-257438) on Form S-1 of our report dated March 31, 2022, with respect to the consolidated financial statements of NRX Pharmaceuticals, Inc.

/s/ KPMG LLP

Short Hills, NJ  
April 8, 2022

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