BIOTECHNOLOGY EQUITY RESEARCH

NRX Pharmaceuticals Inc (NRXP, Buy, $12 PT)

November 17, 2026

3Q26 Update. The KETAFREE Rollout Begins. Thoughts on Valuation for this Franchise With Many Moving Parts. NRX-100 NDA By YE26 - Acceptance Should Be a Nice Stock Catalyst.

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WHAT YOU SHOULD KNOW: Preservative-free ketamine is dominating the conversation, (KETAFREE is the name we use but this Tradename may be under review) although we still see NRX-100 as the key reason to own the stock. The call included updates on the KETAFREE rollout but not true guidance beyond the idea that capturing 30% of the market would be positive - representing revenue of $120M of the $400M opportunity. We agree, and any hints that sales are headed toward those levels would be very positive. The value of this market to NRXP depends strongly on some filed IP covering the manufacturing of KETAFREE in the sterile, single use vials. This IP could protect the formulation until 2045 and might be broad enough to make it difficult for other single-use forms of the drug to gain approval. This long-term exclusivity seems dependent on how big a surprise the stability of KETAFREE is considered at the PTO - does it rise to the level of an invention? If this 2045 patent is not granted, the drug would expect to receive the standard 180-days of exclusivity of a first generic. This result might still give NRXP a nice window to get their form of ketamine in front of users before competition appears. In addition, the call detailed that for a competing preservative-free form of ketamine to be filed for an ANDA, the drug would likely need to show two years of stability data as well as employ a manufacturing approach that is not covered by NRXP's patents. As a result, we see KETAFREE as more than a generic drug with standard protection. **What does KETAFREE contribute to NRXP value - we think about 30% of our current PT.** Generic drug companies typically are valued at 1x - 3x of the prior year's sales (Exhibit 1). We see the case for KETAFREE as much better as the drug is an improved formulation lacking a preservative (often a positive for many patients) and with an easier to use formulation (no storage of partially used drug required). As a result, our valuation rests on KETAFREE acquiring 25% to 35% of the US IV ketamine market in the future. This leap of faith seems very reasonable at the current stock price, and we should know by 1Q27 if the sales ramp supports this type of peak sales. In addition, management believes KETAFREE might open the door to additional opportunities. This idea seems very TBD, but still adds some support to the idea of considering KETAFREE as more than just a conventional generic drug. NRX-100 is most of our value. **The NRX-100 NDA remains the biggest value driver** and the company indicated that the rolling NDA should be complete by YE26. This filing was predicted as early as late 2024, but the current filing is likely much stronger than originally sketched out and now includes 70,000 patients of real world data. In addition, the FDA partially reviewed the clinical data supporting this NDA package during the granting of fast track designation (FTD). This "pre-review" was at the level that the FDA requested more data on the meaning of one of the endpoints used in the included trials. We see this request for specific details as a good sign as the NRX-100 NDA is somewhat noncanonical and based on trials run by others and assembled by NRXP. In other words, we see the FDA going through the package and asking for fine details, rather than dismissing the package, as a good sign.

- **The NRX-100 market - thoughts on first adopters.** The path to regulatory approval of NRX-100 has been discussed with the FDA and NRXP management has reported positively on those meetings - including comments that the approval might encompass severe depression. The FDA's term "severe ...**Continued on P3.**
- **Valuation:** We value NRXP using a DCF (20% discount rate and a 1.5% TG rate).

Company Data	
Closing Price	$2.15
Price Target	$12.00
Market Cap (M)	95.31
Shares Out (M)	44.33
Avg Daily Vol-3 Months (M)	1.03

Revisions	Previous	Current
Rating	Buy	Buy
Price Target	$12.00	$12.00
FY26E EPS	(0.82)	(0.73)
FY27E EPS	(0.32)	(0.36)
FY26E NI	(29.74)	(28.61)
FY27E NI	(12.46)	(16.76)

EPS (GAAP)			
FY Dec	2025A	2026E	2027E
Q1	(0.23)	(0.04)**A**	(0.11)
Q2	(0.98)	(0.44)**A**	(0.11)
Q3	(0.26)	(0.05)**A**	(0.13)
Q4	(0.04)	(0.20)	(0.02)
FY EPS	**(1.34)**	**(0.73)**	**(0.36)**
FY P/E	-	-	-

Net Income			
FY Dec	2025A	2026E	2027E
Q1	(3.85)	(1.43)**A**	(4.66)
Q2	(17.58)	(16.52)**A**	(4.87)
Q3	(5.89)	(2.18)**A**	(6.25)
Q4	(1.30)	(8.49)	(0.98)
FY NI	**(28.62)**	**(28.61)**	**(16.76)**

Source: FactSet, BTIG Estimates and Company Documents reported as $ currency.
FY = Fiscal Year **CY** = Calendar Year

Investment Thesis

We consider the value proposition for NRXP to be based on the combination of developing novel therapeutics for deeply depressed and often suicidal patients (ASIB) and the integration of these therapeutics into the HOPE Therapeutics network. The drug development component of NRXP looks relatively de-risked as both NRX-100 and NRX-101 are known molecules and significant data already exist supporting both their efficacy and safety. On the broader integration front, The HOPE Therapeutics network is currently being assembled as NRx's treatment arm with an eye toward eventually spinning the effort out as an independent company. The hope for HOPE is to maximize the patient experience with ketamine and include proper monitoring in order to reduce the chances of bad "highly dissociative" experiences as well as to employ a better (preservative-free) branded version of ketamine (NRX-100). In addition, HOPE will offer other state-of-the-art treatments such as modern TMS (based on the new coil technologies). The overall aim is to maximize the remission rates for ASIB patients based on the clinical data suggesting that TMS and ketamine each deliver ~50% remission rates and combination remission rates have been shown to eclipse 80%. Upcoming catalysts include NRXP's progress in completing the FDA submission for NRX-100 and NRX-101 and resulting FDA feedback leading to additional FDA approvals (beyond KETAFREE) starting in 2027.

Upcoming Catalysts

- NRX-100 (IV Ketamine) for Suicidal Depression - Completion of NDA filing - late 2026 or 2027
- NRX-101 (NMDA and 5-HT_{2A}) - NDA submission for the potential accelerated approval - 2027

Base Case Assumptions: **$12 Price Target**

- **NRX-100** Branded ketamine for suicidal depression - 60% POS, 2027 market entry, 10% peak penetration for Bipolar patients with suicidality, 8% peak penetration for TRD patients with suicidality, $4K price.
- **KETAFREE** Generic ketamine market - 2027 market entry, 25% peak penetration for total generic injected ketamine market
- **Hope** therapeutics - Average yearly revenue per clinic = $4M, 30% profit margin.

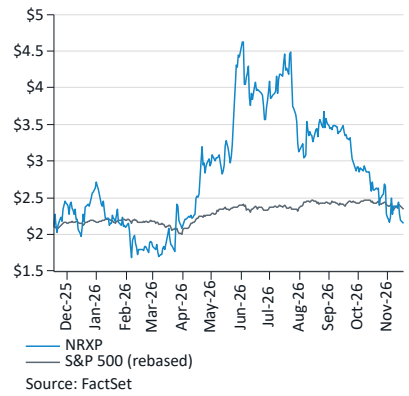
Upside Scenario

- Accelerated approval granted by the FDA for NRX-101
- Rapid uptake of KETAFREE by the ketamine treatment industry
- Faster rate of acquisitions of new clinics into the Hope Therapeutics network

Downside Scenario

- FDA asks for additional trials for NRX-100 and NRX-101
- Slower rate of acquisitions of new clinics into the Hope Therapeutics network

Price Performance



Source: FactSet

Company Description

NRx is developing NRX-100 (IV Ketamine) and NRX-101 (DCS and Lurasidone) for suicidal depression and bipolar depression with akathisia, respectively. Both compounds are backed by robust clinical data demonstrating the efficacy and safety.

- ...depression" probably equates to MDD in a strict medical sense (persistent depression affecting daily life) a population of 16M Americans. However, an IV drug is probably a more reasonable choice for patients with a diagnosis of TRD (MDD patients that have failed two conventional drugs) - a market of about 4M Americans. Public estimates of suicidal behavior in TRD patients suggest about 40% of patients might be a reasonable subset or 1.6M patients. This cut to the data might be premature, but the three trials NRXP is submitting to support NRX-100 are focused on suicidal patients - so the subset seems a decent estimate of the lower-hanging market. Penetration into this market represents the majority of our value and capturing 8% of this group by 2036 is the major chunk of our valuation. We use a price of $4000 per year which is significantly lower than the current price of SPRAVATO. This discount might be too conservative, but the availability of KETAFREE as a generic may complicate pricing leverage and using this price still yields nearly 5x upside.
- **KETAFREE off to the races.** In the weeks following approval, the company has assembled a 17-person sales force designed to cover 80% of the ketamine market and detail the KETAFREE option. This seems about as positive a step as could be imagined and feels in-line with significant interest in the product from salespeople that know the field. This rapid assembly follows the KETAFREE approval that was also ahead of schedule. The hiring of a high quality sales force is probably important as the ANDA approval is not for an exact copy of existing ketamine but for a preservative-free formulation of ketamine that has the potential to be viewed more favorably by users much the way that compounding pharmacies often generate significant sales by offering preservative-free formulations of branded therapeutics. The financial impact should be known relatively soon - but any chunk of the $400M IV ketamine market with at least a 50% margin (management's recent estimate) could help pay for the very broad collection of assets assembled by the company (see the SPARC-TMS franchise below). Going forward, there remains the possibility that KETAFREE will become the sole formulation of ketamine available in the US as a Citizen's petition remains under review at the FDA that urges the FDA to ban and remove all existing ketamine products that contain the preservative benzethonium chloride (BZT) from the U.S. market.
- **3Q26 Numbers:** 3Q26 net patient service revenue was 1.2M (vs. $0.2M in 3Q25), reflecting growth at the HOPE Therapeutics clinics. This number is far below the $100M estimate when the Hope clinic estimate was first announced. Management spent some time on this change on the call and called it a change in thinking based on the failure of other attempts to roll up ketamine clinics. We are not surprised as we have commented since our initiation that the rollup up effort would be much easier after the approval of NRX-100 (and possibly NRX-101) as the HOPE network would have clear advantages relative to what stand-alone clinics could offer. Loss from operations was $8.1M (vs. $4.0M). SG&A rose to $6.6M (vs. $2.8M), primarily on preparation for the preservative-free ketamine commercial launch. R&D was $1.8M (vs. $1.4M). Net loss was $2.2M, or (0.05) per share (vs. 5.9M, or(0.27)). Cash and equivalents were $19.8M at 9/30/26 (vs. $7.8M at 12/31/25). The increase primarily reflects the June 2026 underwritten offering (~$22.3M gross). The company reports no convertible debt.
- **Recent contract to develop NRX-101.** This program seems a clever way to generate data that NRXP will work in combination with TMS. These data sets might support FDA approval down the road, but for now it is somewhat of a sideline though management commented it might lead to modest revenue the company would use for other things. Specifically, NRXP recently announced an $11.2M DARPA prime contract awarded to the newly formed NRx Defense Systems subsidiary for the SPARC-TMS (Synaptic Plasticity Augmented Rapid Circuit Stimulation) trial — is the clearest expression yet of that thesis: a single-day outpatient protocol combining robotic neuronavigated TMS with NRX-101 (D-cycloserine + lurasidone), no anesthesia, no psychedelic experience, and 1mm-precision robotic targeting originally developed for neurosurgery. For background, NRX-101 has already demonstrated a greater-than-two-fold improvement in treatment response and an eight-fold increase in remission versus TMS alone in a randomized trial, subsequently confirmed by ONE-D real-world data showing 87% response and 72% remission at six weeks. The SPARC-TMS trial builds directly on this foundation and, if successful, has the potential to serve as an FDA registration study for NRX-101 in conjunction with TMS for TRD.

Exhibit 1: Generic drug companies

Ticker	Company	Share Price	Market Cap	Trailing P/E	Forward P/E	Enterprise Value	EV / Revenue	EV / EBITDA
AMRX	Amneal Pharmaceuticals	~$19.45–$21.38	$7.45B	53.4x	18.3x	$10.68B	3.34x	16.7x
ANIP	ANI Pharmaceuticals	~$71.09–$71.54	$1.62B	14.2x	7.0x	$1.79B	1.72x	7.0x
AMPH	Amphastar Pharmaceuticals	~$29.37	$1.25B	13.5x	~8.2x	$1.71B	2.30x	8.0x
ELTP	Elite Pharmaceuticals (OTCQB)	~$0.22–$0.24	$262M–$350M	4.6x–8.1x	N/A	$229M–$317M	1.62x–2.25x	4.7x–6.0x
CPIX	Cumberland Pharmaceuticals	~$5.85–$6.27	$88M–$99M	N/A	N/A	$12M–$23M	0.25x–1.40x	~6.0x*
PRGO	Perrigo Company	~$15.82 – $16.36	$2.25B	N/A	7.06x	$5.11B	1.25x	9.43x

All companies Not Rated

Source: BTIG research

INCOME STATEMENT

Thomas Shrader 212.527.3551

NRX PHARMACEUTICALS, INC. (NRXP) Income Statement

Period Ending $USD ('000s)	Dec-21 2021A	Dec-22 2022A	Dec-23 2023A	Dec-24 2024A	Dec-25 2025A	Mar-26 1Q26A	Jun-26 2Q26A	Sep-26 3Q26A	Dec-26 4Q26E	Dec-26 2026E	Dec-27 2027E
Revenue											
Branded Ketamine (60% risk adjusted)				-	-					-	4,363
Generic Ketamine (N/A% risk adjusted)					-						5,513
HOPE Therapeutics (N/A% risk adjusted)	-		-	-	1,225	1,068	1,101	1,159	1,217	4,545	6,620
Collaboration revenue	-	-	-	-	-					-	
Total Revenue	**-**	**-**	**-**	**-**	**1,225**	**1,068**	**1,101**	**1,159**	**1,217**	**4,545**	**16,495**
Operating Expenses											
COGS	-	-	-	-	505	631	675	874	1,024	3,204	3,364
R&D	20,257	17,027	13,371	6,199	3,777	1,309	2,116	1,808	1,898	7,131	7,000
SG&A	74,944	27,308	14,216	13,505	13,061	3,813	4,745	6,560	6,760	21,878	22,972
Other	20,595	-	250	(1,202)	106	57	70	62		189	-
Total Operating Expenses	**115,796**	**44,335**	**27,837**	**18,502**	**17,449**	**5,810**	**7,606**	**9,304**	**9,682**	**32,402**	**33,336**
Operating Income	**(115,796)**	**(44,335)**	**(27,837)**	**(18,502)**	**(16,224)**	**(4,742)**	**(6,505)**	**(8,145)**	**(8,465)**	**(27,857)**	**(16,841)**
Interest expense	(18)	-	(120)	(230)	(671)	(233)	(240)	(239)	(82)	(794)	
Convertible note default penalty	-	-	-	(849)	-	-	-	-	-	-	-
Loss of convertible note redemptions	-	-	-	(1,278)	(6,201)					-	
Change in fair value of convertible notes payable / warrant liabilities	22,751	(4,332)	(2,687)	(4,311)	(8,865)	3,538	(9,784)	6,204		(42)	
Interest income	-	(249)	494	44	12	5	6	4	59	74	84
Other					3,327	2	3	1		6	
Income (Loss) Before Taxes	**(138,529)**	**(39,754)**	**(30,150)**	**(25,126)**	**(28,622)**	**(1,430)**	**(16,520)**	**(2,175)**	**(8,488)**	**(28,613)**	**(16,757)**
Provision for income taxes	-	-	-	-	-	-	-	-	-	-	-
Net Income (Loss)	**(138,529)**	**(39,754)**	**(30,150)**	**(25,126)**	**(28,622)**	**(1,430)**	**(16,520)**	**(2,175)**	**(8,488)**	**(28,613)**	**(16,757)**
Basic EPS, GAAP	**(29.53)**	**(6.04)**	**(3.98)**	**(2.36)**	**(1.34)**	**(0.04)**	**(0.44)**	**(0.05)**	**(0.20)**	**(0.73)**	**(0.36)**
Diluted EPS, GAAP	**(29.53)**	**(6.04)**	**(3.98)**	**(2.36)**	**(1.34)**	**(0.04)**	**(0.44)**	**(0.05)**	**(0.20)**	**(0.73)**	**(0.36)**
Weighted average shares outstanding, basic	4,692	6,577	7,576	10,644	21,402	32,325	37,649	43,171	43,221	39,092	46,184
Weighted average shares outstanding, diluted	4,692	6,577	7,576	10,644	21,402	32,325	37,649	43,171	43,221	39,092	46,184

Source: BTIG research estimates, Company reports

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NRX Pharmaceuticals Inc (NRXP, Buy, $12 PT; Closing Price: $2.15)

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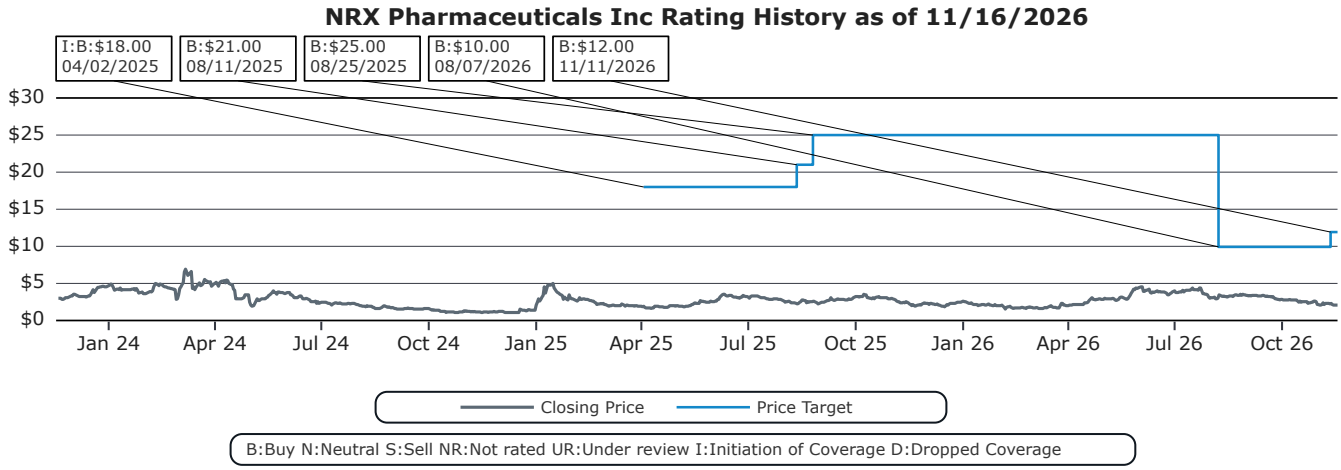
NRX Pharmaceuticals Inc (NRXP, Buy, $12 PT)

Valuation:

- We value NRXP using a DCF (20% discount rate and a 1.5% TG rate).

Risks:

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