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

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): March 17, 2021

PRAXIS PRECISION MEDICINES, INC.
(Exact name of registrant as specified in its charter)

Delaware	**001-39620**	**47-5195942**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(I.R.S. Employer Identification No.)**

Praxis Precision Medicines, Inc.
One Broadway, 16th Floor
Cambridge, Massachusetts 02142
(Address of principal executive offices, including zip code)

(617) 300-8460
(Registrant's telephone number, including area code)

Not Applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trade Symbol(s)	Name of each exchange on which registered
Common Stock, $0.0001 par value per share	**PRAX**	**The Nasdaq Global Select Market**

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company ☒

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 13(a) of the Exchange Act. ☐

Item 2.02. Results of Operations and Financial Condition.

On March 17, 2021, Praxis Precision Medicines, Inc. (the "Company") announced its financial results for the quarter and full year ended December 31, 2020. A copy of the press release is being furnished as Exhibit 99.1 and a copy of the presentation slides to be used during the Company's conference call on March 17, 2021 to provide a business update is being furnished as Exhibit 99.2.

The information in this Current Report on Form 8-K, including Exhibits 99.1 and 99.2 attached hereto, are intended to be furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Press Release, dated March 17, 2021 (furnished herewith)
99.2	Copy of Praxis Precision Medicines, Inc. presentation slides dated March 17, 2021 (furnished herewith)

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

PRAXIS PRECISION MEDICINES, INC.

Date: March 17, 2021

By: /s/ Marcio Souza
Marcio Souza
Chief Executive Officer

Praxis Precision Medicines Provides Corporate Update and Reports Fourth Quarter and Full Year 2020 Financial Results

PRAX-114 Phase 2/3 clinical trial for treatment of MDD to initiate in March 2021 following IND clearance

PRAX-944 Phase 2a high dose cohort topline data expected in mid-year 2021

Innovative collaboration with The Florey Institute expands pipeline via addition of 3 ASOs targeting rare epilepsies

Cash Balance of $296.6M as of December 31, 2020 supports cash runway into 4Q22

Conference call and webcast today at 8:00 a.m. ET

CAMBRIDGE, Mass., March 17, 2021 (GLOBE NEWSWIRE) — Praxis Precision Medicines, Inc. (NASDAQ: PRAX), a clinical-stage biopharmaceutical company translating genetic insights into the development of therapies for central nervous system (CNS) disorders characterized by neuronal imbalance, today provided a corporate update and reported financial results for the fourth quarter and full year 2020.

“Following interactions with the FDA and agreement on a path forward for our Phase 2/3 clinical trial for PRAX-114, we are eagerly anticipating the initiation of the first of two registrational monotherapy MDD trials later this month. Increasing rates of depression worldwide highlight the urgent need to develop new, differentiated treatments for MDD like PRAX-114,” said Marcio Souza, president and chief executive officer of Praxis. “Since our IPO last October, we have made considerable progress across our broad CNS pipeline, both in our programs targeting prevalent disorders and in our rare disease portfolio. We are relentlessly focused on continuing to advance our pipeline to positively impact the lives of people living with CNS disorders and we look forward to keeping you apprised of our progress throughout the year.”

Recent Business Highlights and Upcoming Milestones:

Mood Disorders

- In March 2021, the U.S. Food and Drug Administration (FDA) cleared Praxis’ Investigational New Drug (IND) application for PRAX-114, a GABAA positive allosteric modulator in development for the treatment of major depressive disorder (MDD). In November 2020, the FDA placed the IND on full clinical hold pending the resolution of certain non-clinical pharmacology and toxicology matters. Praxis subsequently interacted with the FDA to gain agreement on a path to initiate the clinical study. A proposal was submitted to the FDA to provide available non-clinical data and to initiate the clinical trial while other standard GLP reproductive toxicology studies were being completed. Based on this submission, the FDA removed the clinical hold and the Phase 2/3 clinical trial was cleared to proceed.
- Praxis expects to initiate the PRAX-114 Phase 2/3 monotherapy MDD trial in the United States and Australia by the end of March 2021, with topline data expected in the first half of 2022. If positive, the Phase 2/3 trial is intended to serve as one of two registrational trials required by the FDA to support clinical efficacy of PRAX-114 for monotherapy treatment of MDD.
- Praxis plans to initiate a PRAX-114 Phase 2 dose range finding trial for adjunctive treatment of MDD in the third quarter of 2021. This clinical trial will provide controlled data to support advancing a Phase 3 adjunctive MDD trial and will further inform dose selection for the future Phase 3 monotherapy trial.
- Praxis has completed Part C of the PRAX-114 Phase 2a clinical trial for patients with MDD, which was intended to evaluate the safety of four-week outpatient dosing and the efficacy profile from Day 15 to Day 28 to inform the Phase 2/3 clinical trial. A total of thirteen participants were enrolled and PRAX-114 was generally well-tolerated, without a change in safety profile, after four-weeks of 60mg once nightly outpatient dosing. No new patterns of Adverse Events (AEs) were observed in the Day-15 to Day-28 treatment period or after discontinuation. Dosing with PRAX-114 led to a rapid and marked improvement in the HAM-D score, with LS Mean improvement of 11 points at Day 15 that remained stable through the end of the active treatment period.
- In the second half of 2021, Praxis expects to announce topline data from Part B of the PRAX-114 Phase 2a clinical trial for patients with perimenopausal depression (PMD).

Movement Disorders

- Praxis is currently conducting a two-cohort, Phase 2a, open-label trial of PRAX-944 in essential tremor (ET). Site data from six participants in the low dose cohort showed tremor amplitude reduction of >40% in the upper limb, which compares favorably to standard of care agents and historical placebo response. Based on the observed safety profile in a healthy volunteer titration study and the safety and preliminary activity in ET participants up to 40 mg daily in the first cohort, we have initiated a second cohort in which participants will be titrated to a dose of up to 120 mg/day of PRAX-944. The high dose cohort will include a randomized, double-blind, placebo-controlled withdrawal phase, where study participants will either be maintained on their final open-label dose or switched to placebo. Preliminary topline open-label safety, tolerability and efficacy data for the high dose cohort is expected in mid-year 2021.
- Praxis plans to initiate a Phase 2b randomized, double-blind, placebo-controlled clinical trial of PRAX-944 in ET in the fourth quarter of 2021. In addition, we plan to initiate a Phase 1 study to explore faster titration schemes in mid-year 2021.

Rare Disease

- Praxis has completed the single ascending dose (SAD) portion in its Phase 1 clinical trial of PRAX-562 in healthy volunteers and the study has advanced to multiple ascending dose (MAD) cohorts. The SAD study was completed up to the maximum planned dose with no dose limiting toxicities. We are currently at the highest preplanned dose in our MAD trial and intend to escalate further if the drug continues to be generally well tolerated.
- Praxis expects to initiate the initial proof-of-concept trial of PRAX-562 in the second half of 2021 in patients with rare adult cephalgias. The scope of the study has been expanded to include Trigeminal Neuralgia (TN) in addition to Short-lasting Unilateral Neuralgiform headache attacks with Conjunctival injection and Tearing (SUNCT) and Short-lasting Unilateral Neuralgiform headache with Autonomic symptoms (SUNA).
- Praxis plans to complete IND-enabling toxicology studies for its lead antisense oligonucleotide (ASO) candidate, PRAX-222, by the end of 2021. PRAX-222 is a precision medicine candidate designed to down-regulate SCN2A expression in SCN2A gain-of-function mutations.
- In January 2021, the FDA granted rare pediatric disease (RPD) designation to PRAX-562 for the treatment of SCN2A developmental epileptic encephalopathy (DEE) and for the treatment of SCN8A-DEE. The FDA also granted both RPD and orphan drug designation to PRAX-222 for the treatment of SCN2A-DEE.
- In March 2021, Praxis entered into an innovative research collaboration with The Florey Institute of Neuroscience and Mental Health to develop three novel ASOs, including a lead program for the treatment of SCN2A loss-of-function mutations, the leading cause of genetically associated autism, and two additional rare epilepsy targets.
    - The Florey Institute partnership positions Praxis as a leader in rare epilepsy drug development. The Company now has six distinct programs for the treatment of at least six different rare epilepsies, including four ASOs for the treatment of epilepsies with genetically validated targets well suited for a precision medicine approach.
    - Praxis now has programs in development for both SCN2A gain-of-function and loss-of-function mutations, demonstrating commitment to the SCN2A community and leadership in sodium channel research.

General Corporate Updates

- In October 2020, Praxis completed an initial public offering of 11.5 million shares of common stock, including the exercise in full by the underwriters of their option to purchase up to 1.5 million additional shares of common stock, at $19.00 per share, raising net proceeds of approximately $200.3 million after deducting underwriting discounts and commissions and other estimated offering expenses payable by Praxis.
- In December 2020, Praxis expanded its management team with the appointment of Kelly McCue to the role of chief people officer. In addition, Lauren Mastrocola, the Company's vice president of finance and principal accounting officer, assumed the responsibilities of principal financial officer on an interim basis. A search for a full-time chief financial officer is ongoing.

Fourth Quarter and Full Year 2020 Financial Results:

As of December 31, 2020, Praxis had $296.6 million in cash and cash equivalents, compared to $44.8 million in cash and cash equivalents as of December 31, 2019. This increase of $251.8 million primarily reflects net proceeds of $200.3 million from the company's initial public offering and net proceeds of $110.1 million from the company's Series C-1 redeemable convertible preferred stock financing in July 2020, primarily offset by cash used in operations. The company's cash and cash equivalents as of December 31, 2020 are expected to fund operations into the fourth quarter of 2022.

Research and development expenses were $16.3 million for the fourth quarter of 2020, compared to $5.7 million for the fourth quarter of 2019. Research and development expenses were $45.0 million for the year ended December 31, 2020, compared to $29.6 million for the year ended December 31, 2019. The increase in R&D expenses for full year 2020 of $15.4 million was primarily attributable to $8.1 million in increased personnel-related costs due to increased headcount, $5.9 million in increased expenses related to our PRAX-114 program, a $0.9 million increase in other indirect research and development expenses and $0.3 million in increased expenses related to our PRAX-562 program.

General and administrative expenses were $9.4 million for the fourth quarter of 2020, compared to $1.8 million for the fourth quarter of 2019. General and administrative expenses were $17.0 million for the year ended December 31, 2020, compared to $6.2 million for the year ended December 31, 2019. The increase in general and administrative expenses of $10.8 million for the full year 2020 was primarily attributable to $7.0 million in increased personnel-related costs due to increased headcount, $2.5 million in increased professional fees including legal and consulting services and a $1.3 million increase in other general and administrative expenses, including $1.1 million in increased insurance and other costs related to becoming a public company.

Praxis reported net loss of $25.7 million for the fourth quarter of 2020, including $3.8 million of stock-based compensation expense, compared to $7.4 million for the fourth quarter of 2019, including $0.2 million of stock-based compensation expense. Praxis reported net loss of $61.8 million for the year ended December 31, 2020, including $5.2 million of stock-based compensation expense, compared to a net loss of $35.5 million for the year ended December 31, 2019, including $0.7 million of stock-based compensation expense.

As of December 31, 2020, Praxis had 38.3 million shares of common stock outstanding.

Conference Call and Webcast

Praxis will host a conference call and webcast to discuss its fourth quarter and full year 2020 financial results and recent business and pipeline progress today, March 17, 2021, at 8:00 a.m. ET. To access the conference call, please dial (833) 398-1037 (local) or (914) 987-7735 (international) at least 10 minutes prior to the start time and refer to conference ID 7654828. A live audio webcast of the event and accompanying slides may also be accessed through the Events & Presentations page of the Investors + Media section of the company's website at https://investors.praxismedicines.com/events-and-presentations. A replay of the webcast will be available on Praxis' website approximately two hours after the completion of the event and will be archived for 30 days following the event.

About Praxis

Praxis Precision Medicines is a clinical-stage biopharmaceutical company translating genetic insights into the development of therapies for central nervous system disorders (CNS) characterized by neuronal imbalance. Praxis is applying insights from genetic epilepsies to broader neurological and psychiatric disorders, using our understanding of shared biological targets and circuits in the brain. Praxis has established a broad portfolio, including multiple disclosed programs across CNS disorders including depression, epilepsy, movement disorders and pain syndromes, with three clinical-stage product candidates. For more information, please visit https://praxismedicines.com/ and follow us on LinkedIn and Twitter.

Forward-Looking Statements

This press release may contain forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995 and other federal securities laws, including express or implied statements regarding Praxis' future expectations, plans and prospects, including, without limitation, statements regarding expectations and plans for presenting pre-clinical and clinical data, projections regarding future revenues and financing performance, our long-term growth, cash, cash equivalents and marketable securities, the anticipated timing of our clinical trials and regulatory filings, the development of our product candidates and advancement of our preclinical programs, the timing, progress and success of our collaborations, as well as other statements containing the words "anticipate," "believe," "continue," "could," "endeavor," "estimate," "expect," "anticipate," "intend," "may," "might," "plan," "potential," "predict," "project," "seek," "should," "target," "will" or "would" and similar expressions that constitute forward-looking statements under the Private Securities Litigation Reform Act of 1995.

The express or implied forward-looking statements included in this press release are only predictions and are subject to a number of risks, uncertainties and assumptions, including, without limitation: uncertainties inherent in clinical trials and in the availability and timing of data from ongoing clinical trials; whether interim results from a clinical trial will be predictive of the final results of the trial; whether results from preclinical studies or earlier clinical studies will be predictive of the results of future trials; the expected timing of submissions for regulatory approval or review by governmental authorities; regulatory approvals to conduct trials or to market products; whether Praxis' cash resources will be sufficient to fund Praxis' foreseeable and unforeseeable operating expenses and capital expenditure requirements; risks, uncertainties and assumptions regarding the impact of the continuing COVID-19 pandemic on Praxis' business, operations, strategy, goals and anticipated timelines, Praxis' ongoing and planned preclinical activities, Praxis' ability to initiate, enroll, conduct or complete ongoing and planned clinical trials, Praxis' timelines for regulatory submissions and Praxis' financial position; and other risks concerning Praxis' programs and operations are described in additional detail in its Annual Report on Form 10-K expected to be filed on or about March 17, 2021 and its other filings made with the Securities and Exchange Commission from time to time. Although Praxis' forward-looking statements reflect the good faith judgment of its management, these statements are based only on facts and factors currently known by Praxis. As a result, you are cautioned not to rely on these forward-looking statements. Any forward-looking statement made in this press release speaks only as of the date on which it is made. Praxis undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future developments or otherwise.

PRAXIS PRECISION MEDICINES, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Amounts in thousands)
(Unaudited)

	December 31,	
	2020	**2019**
Assets		
Cash and cash equivalents	$ 296,608	$ 44,815
Prepaid expenses and other current assets	5,718	681
Property and equipment, net	82	128
Operating lease right-of-use assets	754	1,450
Other non-current assets	15	620
Total assets	$ 303,177	$ 47,694
Liabilities, redeemable convertible preferred stock and stockholders' (deficit) equity		
Accounts payable	$ 4,088	$ 2,667
Accrued expenses	10,869	3,455
Operating lease liabilities	763	1,459
Redeemable convertible preferred stock	—	121,121
Common stock	4	1
Additional paid-in capital	437,007	—
Accumulated deficit	(149,554)	(81,009)
Total liabilities, redeemable convertible preferred stock and stockholders' (deficit) equity	$ 303,177	$ 47,694

PRAXIS PRECISION MEDICINES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(Amounts in thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended December 31,		Year Ended December 31,	
	2020	2019	2020	2019
Operating expenses:				
Research and development	$ 16,272	$ 5,699	$ 44,976	$ 29,557
General and administrative	9,440	1,795	16,992	6,232
Total operating expenses	25,712	7,494	61,968	35,789
Loss from operations	(25,712)	(7,494)	(61,968)	(35,789)
Total other income:				
Interest income	6	22	140	193
Total other income	6	22	140	193
Loss before benefit from income taxes	(25,706)	(7,472)	(61,828)	(35,596)
Benefit from income taxes	—	(84)	(8)	(84)
Net loss and comprehensive loss	($ 25,706)	($ 7,388)	($ 61,820)	($ 35,512)
Accretion and cumulative dividends on redeemable convertible preferred stock	(950)	(1,720)	(8,996)	(5,170)
Gain on repurchase of redeemable convertible preferred stock	—	—	493	—
Net loss attributable to common stockholders	($ 26,656)	($ 9,108)	($ 70,323)	($ 40,682)
Net loss per share attributable to common stockholders, basic and diluted	($ 0.87)	($ 5.65)	($ 7.86)	($ 26.60)
Weighted average common shares outstanding, basic and diluted	30,703,886	1,611,885	8,950,152	1,529,629

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Exhibit 99.2

4Q/FY 2020

CORPORATE UPDATE

MARCH 2021

Forward-looking statements

This presentation has been prepared by Praxis Precision Medicines, Inc. ("we," "us," "our," "Praxis" or the "Company") and is made for informational purposes only and does not constitute an offer to sell or a solicitation of an offer to buy securities, nor shall there be any sale of any securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction. The information set forth herein does not purport to be complete or to contain all of the information you may desire. Statements contained herein are made as of the date of this presentation unless stated otherwise, and neither this presentation, nor any sale of securities, shall under any circumstances create an implication that the information contained herein is correct as of any time after such date or that information will be updated or revised to reflect information that subsequently becomes available or changes occurring after the date hereof.

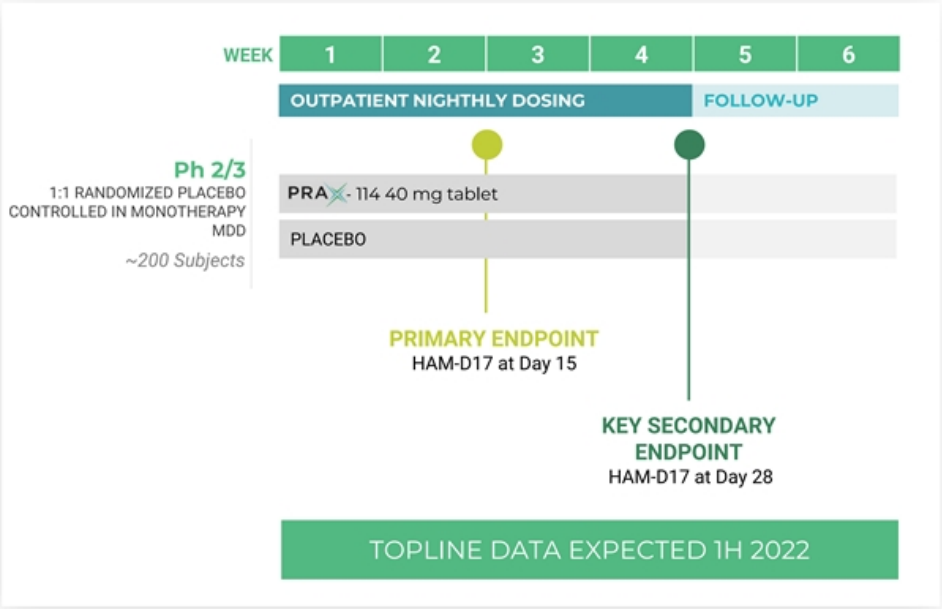
This presentation may contain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 relating to our business, operations, and financial conditions, including but not limited to express or implied statements regarding the current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, our development plans, our preclinical and clinical results and other future conditions. Words such as, but not limited to, "look forward to," "believe," "expect," "anticipate," "estimate," "intend," "plan," "would," "should" and "could," and similar expressions or words, identify forward-looking statements. New risks and uncertainties may emerge from time to time, and it is not possible to predict all risks and uncertainties. Any forward-looking statements in this presentation are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this presentation, including, without limitation, risks relating to: (i) the success and timing of our ongoing clinical trials, (ii) the success and timing of our product development activities and initiating clinical trials, (iii) the success and timing of our collaboration partners' ongoing and planned clinical trials, (iv) our ability to obtain and maintain regulatory approval of any of our product candidates, (v) our plans to research, discover and develop additional product candidates, (vi) our ability to enter into collaborations for the development of new product candidates, (vii) our ability to establish manufacturing capabilities, and our and our collaboration partners' abilities to manufacture our product candidates and scale production, (viii) our ability to meet any specific milestones set forth herein, and (ix) uncertainties and assumptions regarding the impact of the COVID-19 pandemic on Praxis' business, operations, clinical trials, supply chain, strategy, goals and anticipated timelines.

Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise. Although we believe the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. Accordingly, readers are cautioned not to place undue reliance on these forward-looking statements.

For further information regarding the risks, uncertainties and other factors that may cause differences between Praxis' expectations and actual results, you should review the "Risk Factors" section of our filings with the Securities and Exchange Commission, which are available at www.sec.gov.

Certain information contained in this presentation relates to or is based on studies, publications, surveys and other data obtained from third-party sources and our own internal estimates and research. While Praxis believes these third-party sources to be reliable as of the date of this presentation, we have not independently verified, and make no representation as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. In addition, all of the market data included in this presentation involves a number of assumptions and limitations, and there can be no guarantee as to the accuracy or reliability of such assumptions. Finally, while we believe our own internal research is reliable, such research has not been verified by any independent source.

PRAX-114 Phase 2/3 monotherapy MDD trial to start March 2021



PHASE 2/3

First of two registrational trials for monotherapy MDD

KEY INCLUSION CRITERIA

Ages 18-65
HAM-D17 ≥ 23
At least one prior episode of MDD

KEY EXCLUSION CRITERIA

Treatment-resistant depression
Current antidepressant treatment

PRAX-114 clinical program leverages best practices in conduct of MDD trials

Key Operational Controls

RIGOROUS PATIENT SELECTION

- Enrollment of patients with at least one prior episode of MDD (associated with a lower placebo response rate) [1]
- Two-level subject & data quality procedure using the SAFER independent clinical interview to confirm eligibility [2]

HIGH QUALITY SITE SELECTION

- Enrollment of sites with a known track-record of high-quality data generation
- Experienced raters, adequate resources, low frequency of operational issues and proven performance in running studies successfully during the pandemic

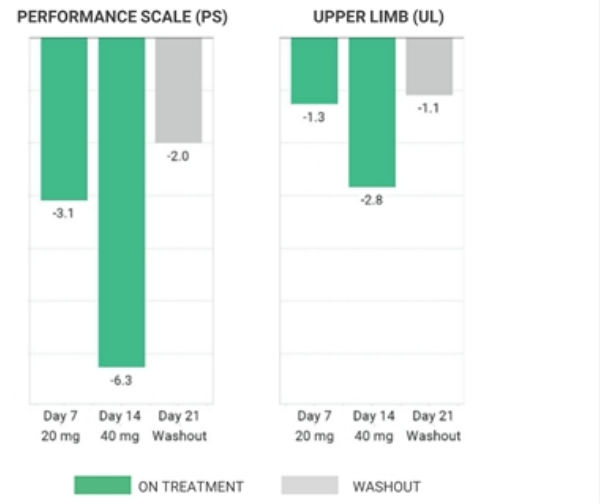
OPTIMIZED TRIAL DESIGN & EXECUTION

- Integration of a placebo control reminder script for patients at every visit
- Inclusion of the AiCure smartphone-based adherence monitoring system with structured site intervention [3]

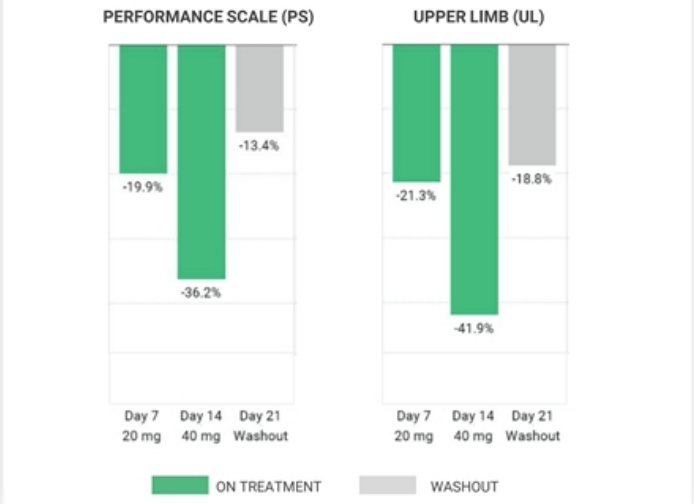
1: Sonawalla SB, Rosenbaum JF. Placebo response in depression. Dialogues Clin Neurosci. Mar 2002;4(1):105-13.
2: Freeman MP, Pooley J, Flynn MJ, et al. Guarding the Gate: Remote Structured Assessments to Enhance Enrollment Precision in Depression Trials. J Clin Psychopharmacol. Apr 2017;37(2):176-181. doi:10.1097/JCP.0000000000000669
3: https://aicure.com/

PRAX-944 Phase 2a low dose cohort tremor reduction data compares favorably with standard-of-care

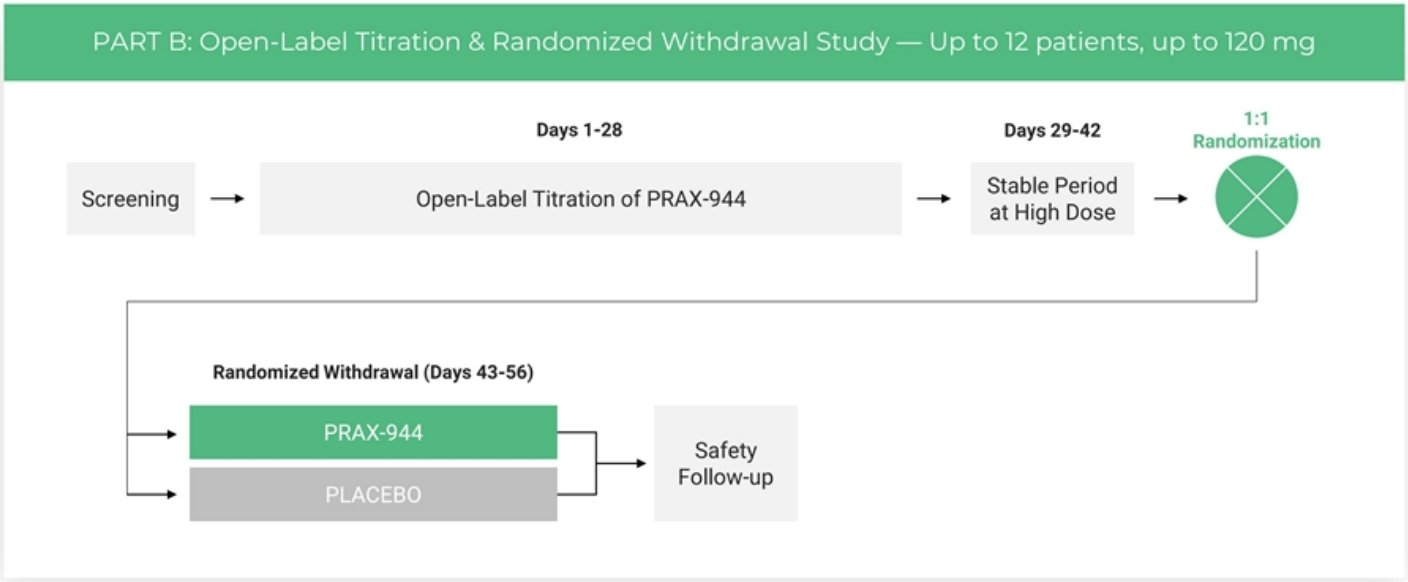
Change from Baseline in TETRAS Score



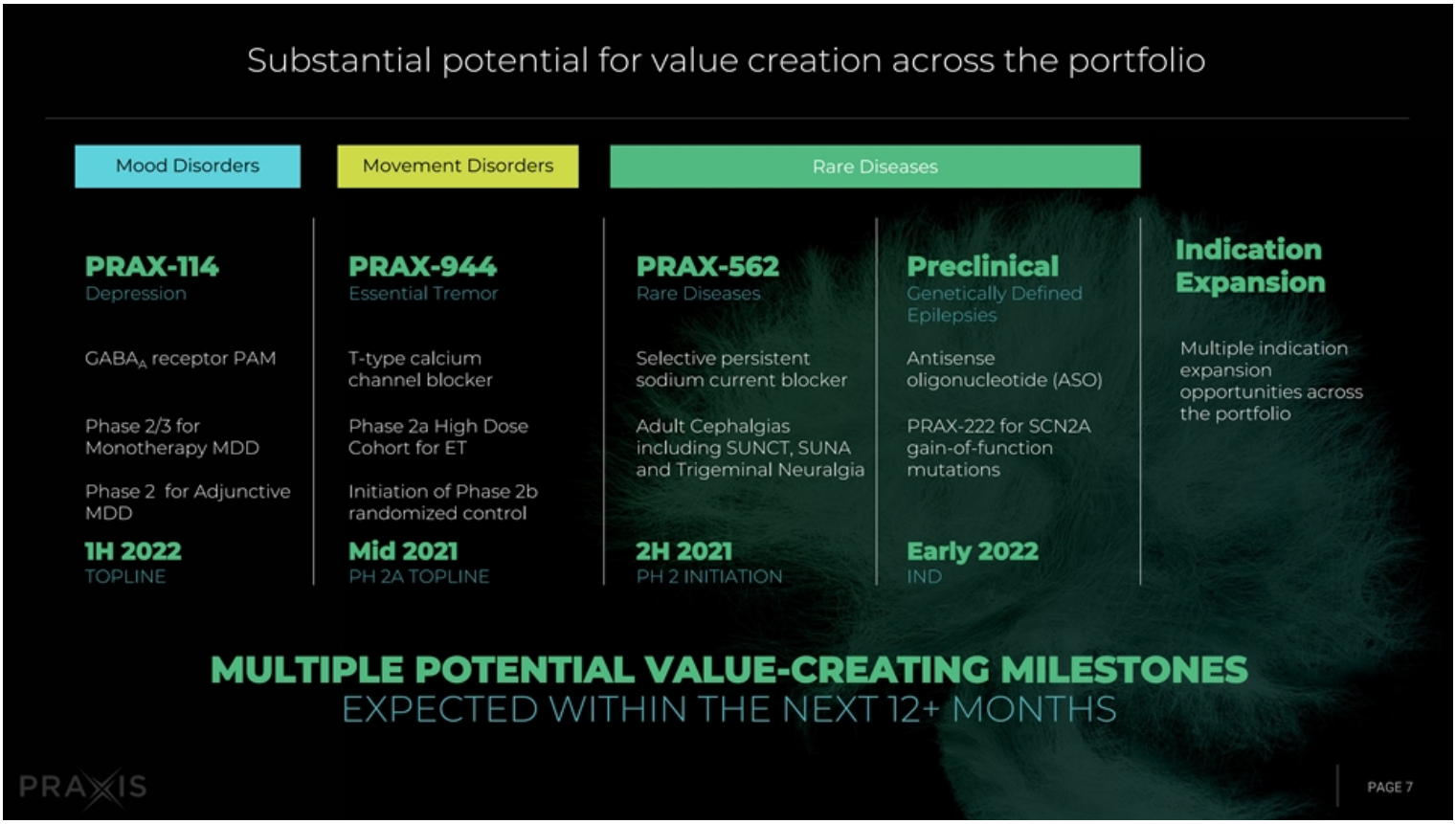
Percent Change in Tremor Amplitude



PRAX-944 Phase 2a high dose cohort clinical trial design



Substantial potential for value creation across the portfolio



MULTIPLE POTENTIAL VALUE-CREATING MILESTONES
EXPECTED WITHIN THE NEXT 12+ MONTHS