NEWS RELEASE

Aptinyx Reports First Quarter 2022 Financial Results and Highlights Recent Clinical Progress

5/12/2022

Current cash position of > $100 million expected to fund operations into 2024 and enable readouts from all three ongoing Phase 2 studies

Data readout from Phase 2b study of NYX-2925 in fibromyalgia expected in early to mid 3Q 2022

Data readout from exploratory Phase 2 study of NYX-458 in cognitive impairment expected in late 2022 or 1Q 2023

Data readout from Phase 2b study of NYX-783 50 mg in PTSD expected in 2H 2023

Conference call today at 5:00 p.m. ET

EVANSTON, Ill.--(BUSINESS WIRE)-- Aptinyx Inc. (Nasdaq: APTX), a clinical-stage biopharmaceutical company developing transformative therapies for the treatment of nervous system disorders, today reported financial results for the first quarter of 2022 and highlighted recent progress across the company's pipeline of novel, clinical-stage, NMDA receptor modulators.

"During the first quarter of 2022, we focused on advancing our portfolio and preparing for multiple readouts from our ongoing Phase 2 studies," said Andy Kidd, M.D., president and chief executive officer of Aptinyx. "While we were disappointed by the results of our study of NYX-2925 in painful DPN, we remain optimistic about our study in fibromyalgia. Fibromyalgia has different underlying biology, in which pain processing abnormalities in the brain play a primary role, and we are on track to report data from this study in late-July or August. To extend our cash runway, we have temporarily paused initiation of our study of 150mg QD of NYX-783 in PTSD, and for now will concentrate our PTSD development resources on the ongoing Phase 2b study of 50mg QD of NYX-783. We now expect our current cash position to support operations into 2024 and enable data catalysts from all of our in-process Phase 2

studies in fibromyalgia, cognitive impairment, and PTSD over the next eighteen months."

Recent Business Highlights and Upcoming Milestones

- Readout of Phase 2b study of NYX-2925 in fibromyalgia expected in early to mid 3Q 2022.
  - Enrollment in Aptinyx's Phase 2b study of NYX-295 in fibromyalgia was completed in late February 2022. Patients are completing the 12-week treatment period and 30-day safety follow-up period and the company expects to report data in early to mid 3Q 2022.
  - The Phase 2b study is a randomized, double-blind, parallel-design, placebo-controlled study to evaluate the efficacy and safety of 12 weeks of daily dosing of NYX-2925 in 305 patients with fibromyalgia.
  - The primary endpoint is the change from baseline in the average daily pain score, as reported on the 10-point Numeric Rating Scale.
  - Key secondary endpoints evaluate fatigue, cognitive performance, and the overall impact of fibromyalgia symptoms on patient function.
- Temporarily paused initiation of Phase 2b study of 150 mg dose in PTSD.
  - Aptinyx temporarily paused initiation of its study of the 150 mg dose of NYX-783 in order to concentrate its PTSD development resources on the Phase 2b study of the 50 mg dose and extend cash runway.
  - Some sites originally slated for the 150 mg study will support the ongoing 50 mg study.
- Enrollment in Phase 2b study of 50 mg dose of NYX-783 in PTSD is progressing.
  - The company's Phase 2b study of the 50 mg dose of NYX-783 in PTSD patients initiated in December 2021 and is enrolling patients.
  - The Phase 2b study is a randomized, double-blind, parallel-design, placebo-controlled study to evaluate the efficacy and safety of 10 weeks of daily dosing of NYX-783 50 mg in approximately 300 patients with PTSD.
  - The primary endpoint is the change from baseline in the CAPS-5 Total score.
  - Aptinyx expects to report data in 2H 2023.
- Data from preclinical PTSD studies of NYX-783 published.Data from preclinical studies evaluating NYX-783 in models of PTSD were **published** in the April 2022 edition of the journal, Molecular Psychiatry.
- Readout of Phase 2 study of NYX-458 in cognitive impairment expected in late 2022 or 1Q 2023.
  - Enrollment in Aptinyx's exploratory Phase 2 study of NYX-458 in patients with cognitive impairment associated with Parkinson's disease or dementia with Lewy bodies is progressing. The study remains on track to report data in late 2022 or 1Q 2023.
  - The exploratory Phase 2 study is a randomized, double-blind, parallel-design, placebo-controlled study to evaluate 12 weeks of daily dosing of 30 mg NYX-458 in approximately 100 patients with mild cognitive

impairment or mild dementia associated with Parkinson's disease or dementia with Lewy bodies.
    - The study evaluates the safety and tolerability of NYX-458 as well as its potential cognitive benefits as measured by multiple neurocognitive endpoints focused on attention, memory, and executive function.

Pipeline Updates

- NYX-2925 Phase 2b painful diabetic peripheral neuropathy (DPN) study results reported.
    - In April 2022, Aptinyx announced that the primary endpoint was not achieved in its Phase 2b study of NYX-2925 in patients with advanced painful DPN.
    - NYX-2925 was well tolerated in the study, with no concerning safety issues observed.
    - The company does not intend to dedicate additional resources to the development of NYX-2925 for painful DPN.

First Quarter 2022 Financial Results

Cash Position: Cash and cash equivalents were $100.2 million at March 31, 2022, compared to $106.1 million at December 31, 2021. Aptinyx expects its current cash balance to support anticipated operations into 2024.

Collaboration Revenue: The company had zero revenue for the first quarter of 2022 compared to $1.0 million for same period in 2021. Aptinyx's revenue in 2021 was derived from its research collaboration agreement with Allergan, now a wholly owned subsidiary of AbbVie, which came to its contractual conclusion in February 2021.

Research and Development (R&D) Expenses: R&D expenses were $13.6 million for the first quarter of 2022 as compared to $10.3 million for the same period in 2021. The increase in R&D expenses was primarily driven by a net increase in costs related to enrollment in the company's ongoing Phase 2 clinical studies.

General and Administrative (G&A) Expenses: G&A expenses were $5.8 million for the first quarter of 2022 as compared to $5.0 million for the same period in 2021.

Net Loss: For the first quarter of 2022, net loss was $19.8 million compared to a net loss of $14.2 million for the first quarter 2021.

Conference Call

The Aptinyx management team will host a conference call and webcast today at 5:00 p.m. ET to review its financial results and highlights for the first quarter of 2022 and subsequent period. To access the call, please dial (844) 200-6205 (domestic) or (929) 526-1599 (international) and refer to conference ID 305649. A live webcast of the call will be available on the Investors & Media section of Aptinyx's website at https://ir.aptinyx.com. The archived webcast

will be available approximately two hours after the conference call and for 30 days thereafter.

About Aptinyx

Aptinyx Inc. is a clinical-stage biopharmaceutical company focused on the discovery, development, and commercialization of proprietary synthetic small molecules for the treatment of brain and nervous system disorders. Aptinyx has a platform for discovery of novel compounds that work through a unique mechanism to modulate—rather than block or over-activate—NMDA receptors and enhance synaptic plasticity, the foundation of neural cell communication. The company has three product candidates in clinical development in central nervous system indications, including fibromyalgia, post-traumatic stress disorder, and cognitive impairment. Aptinyx is also advancing additional compounds from its proprietary discovery platform, which continues to generate a rich and diverse pipeline of small-molecule NMDA receptor modulators with the potential to treat an array of neurologic disorders. For more information, visit **www.aptinyx.com** or follow Aptinyx on Twitter **@Aptinyx**.

Forward-Looking Statements

Statements contained in this press release regarding matters that are not historical facts are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Because such statements are subject to risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. Such statements include, but are not limited to, statements regarding the company’s business plans and objectives, including future plans or expectations for NYX-2925, NYX-783, or NYX-458, including therapeutic effects of the company’s product candidates and discovery platform, expectations regarding the design, implementation, timing, and success of its current and planned clinical studies, effects of the COVID-19 pandemic on patient enrollment and the expected timing of study completion, and data reporting, the timing for the company’s receipt and announcement of data from its clinical studies, expectations regarding its preclinical development activities, expectations regarding its uses and sufficiency of capital, including the operational runway of its current cash balance, and the effect of the COVID-19 pandemic on the foregoing. Risks that contribute to the uncertain nature of the forward-looking statements include: the effect of the COVID-19 pandemic on our business and financial results, including with respect to disruptions to our clinical studies, business operations, and ability to raise additional capital; the success, cost, and timing of the company’s product candidate development activities and planned clinical studies; the company’s ability to execute on its strategy; positive results from a clinical study may not necessarily be predictive of the results of future or ongoing clinical studies; regulatory developments in the United States and foreign countries; the company’s estimates regarding expenses, future revenue, and capital requirements; the company’s ability to fund operations into 2024; as well as those risks and uncertainties set forth in the company’s most recent annual report on Form 10-K and subsequent filings with the Securities and Exchange Commission, including our upcoming Quarterly Report on Form 10-Q for the period ended March 31, 2022. All

forward-looking statements contained in this press release speak only as of the date on which they were made. Aptinyx undertakes no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they were made.

APTINYX INC.
CONDENSED BALANCE SHEETS
(in thousands)
(unaudited)

Assets	March 31, 2022	December 31, 2021
Current Assets:		
Cash and cash equivalents	$ 100,160	$ 106,124
Restricted cash	197	197
Prepaid expenses and other current assets	6,169	8,422
Total current assets	106,526	114,743
Property and equipment and other long-term assets	128	185
Total assets	$ 106,654	$ 114,928
Current Liabilities:		
Accounts payable	$ 1,752	$ 622
Accrued expenses and other current liabilities	2,985	5,064
Total current liabilities	4,737	5,686
Other long-term liabilities	24,432	14,486
Total liabilities	29,169	20,172
Stockholders' equity	77,485	94,756
Total liabilities and stockholders' equity	$ 106,654	$ 114,928

APTINYX INC.
CONDENSED STATEMENTS OF OPERATIONS
(in thousands, except per share data)
(unaudited)

	Three Months Ended March 31,	
	2022	2021
Revenues		
Collaboration revenue	$ —	$ 1,000
Operating expenses		
Research and development	13,602	10,314
General and administrative	5,777	4,976
Total operating expenses	19,379	15,290
Loss from operations	(19,379)	(14,290)
Other (income) expense, net	(29)	(64)
Interest expense	477	—
Net loss and comprehensive loss	$ (19,827)	$ (14,226)
Net loss per share - basic and diluted	$ (0.29)	$ (0.22)
Weighted average shares outstanding - basic and diluted	67,716	66,043

Source: Aptinyx Inc.

View source version on businesswire.com: https://www.businesswire.com/news/home/20220512005989/en/

Investor & Media Contact:

Patrick Flavin

Aptinyx Inc.

ir@aptinyx.com or corporate@aptinyx.com

847-871-0377

Source: Aptinyx Inc.