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): November 11, 2024

Lexeo Therapeutics, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware	**001-41855**	**85-4012572**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**
345 Park Avenue South, Floor 6 New York, New York		**10010**
(Address of Principal Executive Offices)		**(Zip Code)**

Registrant's Telephone Number, Including Area Code: 212 547-9879

N/A
(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	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.0001 par value per share	LXEO	Nasdaq Global 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 November 13, 2024, Lexeo Therapeutics, Inc. (the "**Company**") issued a press release announcing business highlights and its financial results for the three and nine months ended September 30, 2024. A copy of this press release is furnished herewith as Exhibit 99.1 to this Current Report and is incorporated herein by reference.

The information in this Item 2.02 and Exhibit 99.1 hereto shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any of the Company's filings under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof, except as expressly set forth by specific reference in such a filing.

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(d) Appointment of New Director

On November 11, 2024 (the "**Appointment Date**"), Tolga Tanguler was appointed to the board of directors of the Company (the "**Board**"). Mr. Tanguler will serve as a director with a term of office expiring at the Company's 2027 Annual Meeting of Stockholders.

Mr. Tanguler, age 52, has served as the Executive Vice President and Chief Commercial Officer of Alnylam Pharmaceuticals, Inc., a biopharmaceutical company, since January 2021. Mr. Tanguler also served as the Head of U.S. Organization of Alexion Pharmaceuticals, Inc., a biopharmaceutical company, from November 2018 to December 2020. Mr. Tanguler has over 25 years of experience in the global biopharmaceutical industry, including as the President of the North America rare disease unit at Pfizer Inc., a global pharmaceutical company, from October 2014 to October 2018. Mr. Tanguler holds a B.S. in Finance and Economics from Istanbul University and an MBA from the Michigan State University.

In accordance with the Company's Non-Employee Director Compensation Policy (the "**Director Compensation Policy**"), Mr. Tanguler is eligible to participate in the Company's standard compensation arrangements for non-employee directors which consists of cash and equity compensation for service on the Board. Pursuant to the Director Compensation Policy, Mr. Tanguler is entitled to $40,000 in annual cash compensation for service on the Board with additional cash compensation payable for committee service. In addition, pursuant to the Director Compensation Policy, Mr. Tanguler was granted an initial stock option award for 36,000 shares on the Appointment Date and is expected to be granted additional equity awards consistent with the terms of the Director Compensation Policy, including an annual option to purchase 18,000 shares, effective on the date of each annual meeting of the stockholders.

There are no arrangements or understandings between Mr. Tanguler and any other persons pursuant to which Mr. Tanguler was appointed a director of the Company, and there are no family relationships between Mr. Tanguler and any director or executive officer of the Company.

The Company has entered into fits standard form of indemnification agreement with Mr. Tanguler, a copy of which is filed as Exhibit 10.4 to the Company's Registration Statement on Form S-1 (File No. 333-274777) on September 29, 2023. Other than the indemnification agreement, Mr. Tanguler has no direct or indirect material interest in any transaction required to be disclosed pursuant to Item 404(a) of Regulation S-K promulgated under the Securities Exchange Act of 1934, as amended, nor are any such transactions currently proposed.

A copy of the press release announcing Mr. Tanguler's appointment to the Board is furnished herewith as Exhibit 99.1 to this Current Report and is incorporated by reference herein.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit Number	Description
99.1	Press Release
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

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.

Lexeo Therapeutics, Inc.

Date: November 13, 2024

By: /s/ R. Nolan Townsend
R. Nolan Townsend, Chief Executive Officer

Exhibit 99.1

Lexeo Therapeutics Provides Update on Cardiac Portfolio and Reports Third Quarter 2024 Financial Results

Reached alignment with FDA on key elements of registrational development plan for LX2006, including accelerated approval pathway with left-ventricular mass index (LVMI) and frataxin protein expression as co-primary registrational endpoints

Received RMAT designation for LX2006 for the treatment of Friedreich ataxia (FA) cardiomyopathy, potentially enabling expedited development and increased interaction with the FDA

Completed enrollment of LX2006 SUNRISE-FA Phase 1/2 trial, with four participants treated in cohort 3; total of 16 participants dosed with LX2006 to date across SUNRISE-FA and Weill Cornell trials

Completed enrollment of cohort 1 of LX2020 HEROIC-PKP2 Phase 1/2 trial; initial clinical data including safety and biodistribution on track for late Q1 / early Q2 2025

Appointed Tolga Tanguler to Board of Directors, an accomplished biopharmaceutical executive with over 25 years of senior leadership experience

Cash and cash equivalents of $157.0 million expected to provide operational runway into 2027

NEW YORK – November 13, 2024 (GLOBE NEWSWIRE) – Lexeo Therapeutics, Inc. (Nasdaq: LXEO), a clinical stage genetic medicine company dedicated to pioneering treatments for genetically defined cardiovascular diseases and APOE4-associated Alzheimer's disease, today provided business updates across its portfolio of programs and reported third quarter 2024 financial results.

"We have made significant progress over the last few months across all our clinical stage programs, including reaching alignment with the FDA on registrational endpoints to support an accelerated approval pathway for LX2006. We believe this highly constructive feedback, along with RMAT designation, positions us to rapidly advance this promising potential treatment in a pivotal clinical study," said R. Nolan Townsend, Chief Executive Officer of Lexeo Therapeutics. "With enrollment completed in the LX2006 SUNRISE-FA Phase 1/2 trial in Friedreich ataxia cardiomyopathy and in the first cohort of the LX2020 HEROIC-PKP2 Phase 1/2 trial in PKP2-ACM, we look forward to sharing meaningful updates across our cardiac gene therapy programs in 2025. In addition, we were pleased to present highly encouraging interim data from our Phase 1/2 study of LX1001 for the treatment of APOE4-associated Alzheimer's disease at the CTAD conference."

Business and Program Updates

- **LX2006 for the Treatment of FA Cardiomyopathy:**
  - **Regulatory Update:** Alignment on key elements of accelerated development pathway following a Type C meeting with the U.S. Food and Drug Administration (FDA):
    - Increase in frataxin expression and reduction in left ventricular mass index (LVMI) as co-primary registrational endpoints to support accelerated approval
    - Target levels including 10% reduction in LVMI and 40% frataxin positive area as measured by immunohistochemistry (IHC)
    - Histology-based measurement of frataxin and cardiac MRI as acceptable measurement tools
    - Use of secondary endpoints including left ventricular wall thickness and troponin as supportive measures of efficacy
    - Enrollment of participants with elevated LVMI in pivotal trial
    - Final dose selection and size of registrational trial alignment expected in 2025 guided by cohort 3 cardiac biopsy results
  - **RMAT Designation:** In October 2024, the FDA granted Regenerative Medicine Advanced Therapy (RMAT) designation for LX2006 for the treatment of FA cardiomyopathy based on interim clinical data announced in July 2024.
    - RMAT designation is granted for regenerative medicines that are intended to treat, modify, reverse, or cure a serious or life-threatening disease or condition with preliminary clinical evidence that indicates the therapy has the potential to address unmet medical needs. This designation permits sponsor companies to have early and frequent interactions with the FDA through BLA filing.
  - **Completion of Enrollment of SUNRISE-FA:** Completion of enrollment of SUNRISE-FA Phase 1/2 trial, with four participants administered LX2006 in cohort 3.

        - To date, eight participants have received LX2006 in SUNRISE-FA and eight participants have received LX2006 in an ongoing Weill Cornell-sponsored investigator-initiated trial.
    - **International Congress for Ataxia Research (ICAR) Presentation:** Lexeo will share new cardiac biopsy data from one participant in cohort 2 and functional scales from three participants in the Lexeo-sponsored SUNRISE-FA trial at ICAR on November 15, 2024.
        - **One Newly Reported Cardiac Biopsy Result from Cohort 2:** Observed a 35% increase in frataxin protein expression from baseline as measured by liquid chromatography mass spectrometry (LCMS), and a 279% increase from baseline in frataxin positive area from 7% pre-treatment to 26% post-treatment from baseline as measured by IHC. The post-treatment average across cohort 1 and cohort 2 biopsy samples is 44% frataxin positive area as measured by IHC.
        - **Newly Reported Functional Results from July 2024 Interim Data Set:** All three participants had more than a 5-point improvement in the Kansas City Cardiomyopathy Questionnare-12 (KCCQ-12) and at least a 1-point improvement in the modified Friedreich Ataxia Rating Scale (mFARS) as of their latest visit (2 participants at 12-months, and 1 participant at 6-months).
    - **LX2006 Continues to be Generally Well Tolerated:** LX2006 has been generally well tolerated across both SUNRISE-FA and Weill Cornell investigator-initiated trials to date. One possibly treatment-related Grade 2 event of asymptomatic myocarditis was observed one year after dosing in a participant with multiple comorbidities and history of flu-like symptoms prior to diagnosis, which may have been a contributing factor. A biopsy was performed six weeks after initial diagnosis and results were negative for myocarditis; participant remains asymptomatic.
- **LX2020 for the Treatment of PKP2-ACM:** Completed enrollment of cohort 1 (n=3) of HEROIC-PKP2 Phase 1/2 trial.
    - LX2020 has been generally well tolerated to date, with no evidence of complement activation and no unexpected safety events or toxicities associated with study drug observed.
    - Anticipate proceeding to cohort 2 following data review by independent data safety and monitoring board.
    - Initial data from cohort 1 with a focus on safety and biodistribution as assessed via cardiac biopsy expected in late Q1 / early Q2 2025.
- **LX1001 for the Treatment of APOE4-associated Alzheimer's Disease:** Announced positive interim Phase 1/2 results for LX1001 at the CTAD conference. LX1001 was generally well tolerated to date across all dose cohorts with no reports of amyloid-related imaging abnormalities (ARIA). A dose and time-dependent increase in neuroprotective APOE2 expression was observed in all participants with ongoing durability at 12 months, and reductions in CSF tau biomarkers and tau PET were seen in a majority of participants.
- **Appointment of Tolga Tanguler to Board of Directors:** In November 2024, Lexeo appointed Tolga Tanguler to its Board of Directors. Mr. Tanguler currently serves as Executive Vice President and Chief Commercial Officer at Alnylam Pharmaceuticals, Inc., a global leader in RNA interference therapeutics. In his role, he has led Alnylam's transformation into a fully integrated biotech company, expanding its commercial presence both in the U.S. and internationally, and is leading the launch of Amvuttra (vutrisiran), an RNAi treatment for TTR amyloid cardiomyopathy. Mr. Tanguler brings over 25 years of senior leadership experience across notable organizations including Alnylam, Alexion Pharmaceuticals, Inc., and Pfizer Inc.

Lexeo expects to provide an overview of upcoming program milestones at the JP Morgan Healthcare Conference in January 2025. Additional information on program updates is available in the latest corporate presentation on Lexeo's website.

Upcoming Investor Conferences
- Stifel 2024 Healthcare Conference: November 19, 2024
- Jefferies London Healthcare Conference: November 20-21, 2024

Third Quarter Financial Results
- **Cash Position:** As of September 30, 2024, cash and cash equivalents were $157.0 million, which Lexeo believes will be sufficient to fund operations into 2027.
- **R&D Expenses:** R&D expenses were $23.4 million for the three months ended September 30, 2024, compared to $17.2 million for the three months ended September 30, 2023.
- **G&A Expenses:** G&A expenses were $8.1 million for the three months ended September 30, 2024, compared to $3.0 million for the three months ended September 30, 2023.
- **Net Loss:** Net loss was $29.5 million or $0.89 per share (basic and diluted) for the three months ended September 30, 2024, compared to $20.1 million or $12.36 per share (basic and diluted) for the three months ended September 30, 2023.

About Lexeo Therapeutics
Lexeo Therapeutics is a New York City-based, clinical stage genetic medicine company dedicated to transforming healthcare by applying pioneering science to fundamentally change how genetically defined cardiovascular diseases and APOE4-associated Alzheimer's disease are treated. Using a stepwise development approach, Lexeo is leveraging early proof-of-concept functional and biomarker data to advance a pipeline of cardiovascular and APOE4-associated Alzheimer's disease programs.

Cautionary Note Regarding Forward-Looking Statements

Certain statements in this press release may constitute "forward-looking statements" within the meaning of the federal securities laws, including, but not limited to, Lexeo's expectations and plans regarding its current product candidates and programs and the timing for receipt and announcement of data from its clinical trials, the timing and likelihood of potential regulatory approval, and expectations regarding the time period over which Lexeo's capital resources will be sufficient to fund its anticipated operations and estimates regarding Lexeo's financial condition. Words such as "may," "might," "will," "objective," "intend," "should," "could," "can," "would," "expect," "believe," "design," "estimate," "predict," "potential," "develop," "plan" or the negative of these terms, and similar expressions, or statements regarding intent, belief, or current expectations, are forward-looking statements. While Lexeo believes these forward-looking statements are reasonable, undue reliance should not be placed on any such forward-looking statements. These forward-looking statements are based upon current information available to the company as well as certain estimates and assumptions and are subject to various risks and uncertainties (including, without limitation, those set forth in Lexeo's filings with the U.S. Securities and Exchange Commission (SEC)), many of which are beyond the company's control and subject to change. Actual results could be materially different from those indicated by such forward-looking statements as a result of many factors, including but not limited to: risks and uncertainties related to global macroeconomic conditions and related volatility; expectations regarding the initiation, progress, and expected results of Lexeo's preclinical studies, clinical trials and research and development programs; the unpredictable relationship between preclinical study results and clinical study results; delays in submission of regulatory filings or failure to receive regulatory approval; liquidity and capital resources; and other risks and uncertainties identified in Lexeo's Annual Report on Form 10-K for the annual period ended December 31, 2023, filed with the SEC on March 11, 2024, Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2024, filed with the SEC on August 12, 2024, and subsequent future filings Lexeo may make with the SEC. New risks and uncertainties may emerge from time to time, and it is not possible to predict all risks and uncertainties. Lexeo claims the protection of the Safe Harbor contained in the Private Securities Litigation Reform Act of 1995 for forward-looking statements. Lexeo expressly disclaims any obligation to update or alter any statements whether as a result of new information, future events or otherwise, except as required by law.

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Lexeo Therapeutics, Inc.
Selected Condensed Financial Information
(unaudited, in thousands, except share and per share amounts)

Condensed Statements of Operations and Comprehensive Loss

	Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2024	2023	2024	2023
Operating expenses				
Research and development	$ 23,423	$ 17,246	$ 55,725	$ 44,920
General and administrative	8,120	3,027	22,659	8,619
Total operating expenses	31,543	20,273	78,384	53,539
Operating loss	(31,543)	(20,273)	(78,384)	(53,539)
Other income and expense				
Loss on fair value adjustment to convertible SAFE Note	-	(272)	-	(272)
Other income (expense), net	(3)	1	(9)	(6)
Interest expense	(35)	(52)	(107)	(155)
Interest income	2,092	488	6,091	1,765
Total other income and expense	2,054	165	5,975	1,332
Loss from operations before income taxes	(29,489)	(20,108)	(72,409)	(52,207)
Income taxes	-	-	-	-
Net loss and comprehensive loss	$ (29,489)	$ (20,108)	$ (72,409)	$ (52,207)
Net loss per common share, basic and diluted	$ (0.89)	$ (12.36)	$ (2.31)	$ (32.24)
Weighted average number of shares outstanding used in computation of net loss per common share, basic and diluted	33,063,153	1,626,734	31,354,821	1,619,152

Condensed Balance Sheet Data

	September 30, 2024	December 31, 2023
Cash and cash equivalents	$ 157,020	$ 121,466
Total assets	173,865	139,807
Total liabilities	34,539	26,272
Total stockholders' equity	139,326	113,535