UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 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): **April 13, 2018**

Catabasis Pharmaceuticals, Inc.
(Exact Name of Registrant as Specified in Charter)

Delaware	**001-37467**	**26-3687168**
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(IRS Employer Identification No.)

One Kendall Square Bldg. 1400E, Suite B14202 Cambridge, Massachusetts	**02139**
(Address of Principal Executive Offices)	(Zip Code)

Registrant's telephone number, including area code: **(617) 349-1971**

(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 (*see* General Instruction A.2. below):

☐ 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))

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 2.05 Costs Associated with Exit or Disposal Activities.

On April 13, 2018, the Board of Directors of Catabasis Pharmaceuticals, Inc. (the "Company") committed to reduce the Company's workforce by approximately 42%, to a total of approximately 21 employees, as part of a corporate restructuring to focus resources on the Company's lead program, edasalonexent for the treatment of Duchenne muscular dystrophy. The Company expects the restructuring to result in approximately $3.3 million in reduced annualized workforce expenses once the plan is fully implemented. The Company currently estimates that it will incur charges for one-time termination benefits in connection with this corporate restructuring of approximately $1.0 million for employee severance, benefits and related costs in the second quarter of 2018, all of which are expected to result in cash expenditures. The Company expects to complete the reduction in workforce by the end of the second quarter of 2018.

Item 8.01 Other Events.

On April 17, 2018, the Company issued a press release announcing its commitment to a corporate restructuring. A copy of the press release is filed as Exhibit 99.1 to this Current Report on Form 8-K, and the information contained therein is incorporated herein by reference.

On April 17, 2018, the Company is making publicly available on its website a corporate slide presentation with an updated slide regarding the Company's development pipeline. The updated slide is filed as Exhibit 99.2 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

EXHIBIT INDEX

Exhibit Number	Description of Exhibit
99.1	Press release issued by the Company on April 17, 2018
99.2	Development pipeline summary

Cautionary Note on Forward-Looking Statements

Any statements in this Current Report on Form 8-K about future expectations, plans and prospects for the Company, including statements about the expected cost of the Company's strategic restructuring, the Company's expected future savings from the restructuring, the timing and completion of the restructuring and other statements containing the words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue," and similar expressions, constitute forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including: uncertainties regarding whether the Company will be able to implement the restructuring in a timely fashion and at the level of expense projected, whether the Company will be able to effectively manage the organizational changes brought about by the restructuring and have sufficient capital resources to fund its continuing operations in future periods to realize its anticipated cost savings, and other factors discussed in the "Risk Factors" section of the Company's annual report on Form 10-K for the year ended December 31, 2017 as filed with the Securities and Exchange Commission and other reports on file with the Securities and Exchange Commission. In addition, the forward-looking statements included in this Current Report on Form 8-K represent the Company's views as of the date hereof. The Company anticipates that subsequent events and developments will cause the Company's views to change. However, while the Company may elect to update these forward-looking statements at some point in the future, the Company specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date hereof.

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.

CATABASIS PHARMACEUTICALS, INC.

Date: April 17, 2018

By: /s/ Deirdre A. Cunnane
Deirdre A. Cunnane
Chief Legal Officer

Exhibit 99.1

Catabasis Pharmaceuticals Aligns Resources to Focus on Lead Program Edasalonexent for the Treatment of Duchenne Muscular Dystrophy

— Strategic Corporate Restructuring Supports Goal of Advancing Edasalonexent Towards Potential Registration —

CAMBRIDGE, Mass., April 17, 2018 — Catabasis Pharmaceuticals, Inc. (NASDAQ:CATB), a clinical-stage biopharmaceutical company, today announced a restructuring of the organization to focus resources on the Company's late-stage lead program, edasalonexent for the treatment of Duchenne muscular dystrophy (DMD). Catabasis is prioritizing this program to deliver against its goal of bringing a life changing therapy to those affected by Duchenne.

"This decision best positions us to achieve success with our most advanced program to help Duchenne patients and to support the long-term growth of Catabasis. However, on a personal level, this decision was difficult and I want to thank the talented and dedicated colleagues who are affected for their hard work and commitment to our mission," said Jill C. Milne, Ph.D., Chief Executive Officer of Catabasis. "Based on disease-slowing data from our MoveDMD trial, we believe edasalonexent can make a significant difference in the lives of boys affected by Duchenne. These important corporate changes will allow us to focus our resources on continuing to advance edasalonexent and improving the lives of boys affected by this devastating disease."

Edasalonexent is being developed as a potential disease-modifying therapy for all patients affected by DMD, regardless of their underlying mutation. In the Phase 2 MoveDMD trial and open-label extension, edasalonexent has demonstrated consistent and sustained slowing of disease progression in boys with DMD through more than a year of treatment compared to the off-treatment control period. No evidence of side effects or safety issues common with the current DMD standard of care have been observed after more than 37 patient-years of exposure to edasalonexent. Catabasis is preparing for a single global Phase 3 trial to evaluate the efficacy and safety of edasalonexent for registration purposes, dependent on raising capital.

The restructuring will reduce the Company's workforce by approximately 42%. As a result of the program focusing and corresponding workforce restructuring, which is anticipated to be completed in the second quarter of 2018, Catabasis estimates annualized savings of approximately $3.3 million in personnel-related costs, with estimated one-time severance and related costs of approximately $1.0 million in the second quarter of 2018.

About Edasalonexent (CAT-1004)

Edasalonexent (CAT-1004) is an investigational oral small molecule that is being developed as a potential disease-modifying therapy for all patients affected by DMD, regardless of their underlying mutation. Edasalonexent inhibits NF-kB, a protein that is activated in DMD and drives inflammation and fibrosis, muscle degeneration and suppresses muscle regeneration. Edasalonexent continues to be dosed in the open-label extension of the MoveDMD Phase 2 clinical trial and Catabasis is preparing for a single global Phase 3 trial to evaluate the efficacy and safety of edasalonexent for registration purposes, dependent on raising capital. The FDA has granted orphan drug, fast track and rare pediatric disease designations and the European Commission has granted orphan medicinal product designation to edasalonexent for the treatment of DMD. For a summary of clinical results reported to-date, please visit www.catabasis.com.

About Catabasis

At Catabasis Pharmaceuticals, our mission is to bring hope and life-changing therapies to patients and their families. Our SMART (Safely Metabolized And Rationally Targeted) Linker drug discovery platform enables us to engineer molecules that simultaneously modulate multiple targets in a disease. Our lead program in development is edasalonexent for the treatment of Duchenne muscular dystrophy. For more information on edasalonexent and our pipeline of drug candidates, please visit www.catabasis.com.

Forward Looking Statements

Any statements in this press release about future expectations, plans and prospects for the Company, including statements about the expected cost of the Company's strategic restructuring, the Company's expected future savings from the restructuring, the timing and completion of the restructuring, future clinical trial plans, and other statements containing the words "believes," "anticipates," "plans," "expects," "may" and similar expressions, constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including: uncertainties regarding whether the Company will be able to implement the restructuring in a timely fashion and at the level of expense projected, whether the Company will be able to effectively manage the organizational changes brought about by the restructuring and have sufficient capital resources to fund its continuing operations in future periods to realize its anticipated cost savings; uncertainties inherent in the initiation and completion of clinical trials and clinical development of the Company's product candidates; the Company's ability to obtain financing on acceptable terms and in a timely manner to fund the Company's planned Phase 3 trial of edasalonexent in DMD for registration purposes; availability of funding sufficient for the Company's foreseeable and unforeseeable operating expenses and capital expenditure requirements; other matters that could affect the availability or commercial potential of the Company's product candidates; and general economic and market conditions and other factors discussed in the "Risk Factors" section of the Company's Annual Report on Form 10-K for the year ended December 31, 2017, which is on file with the Securities and Exchange Commission, and in other filings that the Company may make with the Securities and Exchange Commission in the future. In addition, the forward-looking statements included in this press release represent the Company's views as of the date of this press release. The Company

anticipates that subsequent events and developments will cause the Company's views to change. However, while the Company may elect to update these forward-looking statements at some point in the future, the Company specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date of this release.

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Investor and Media Contact
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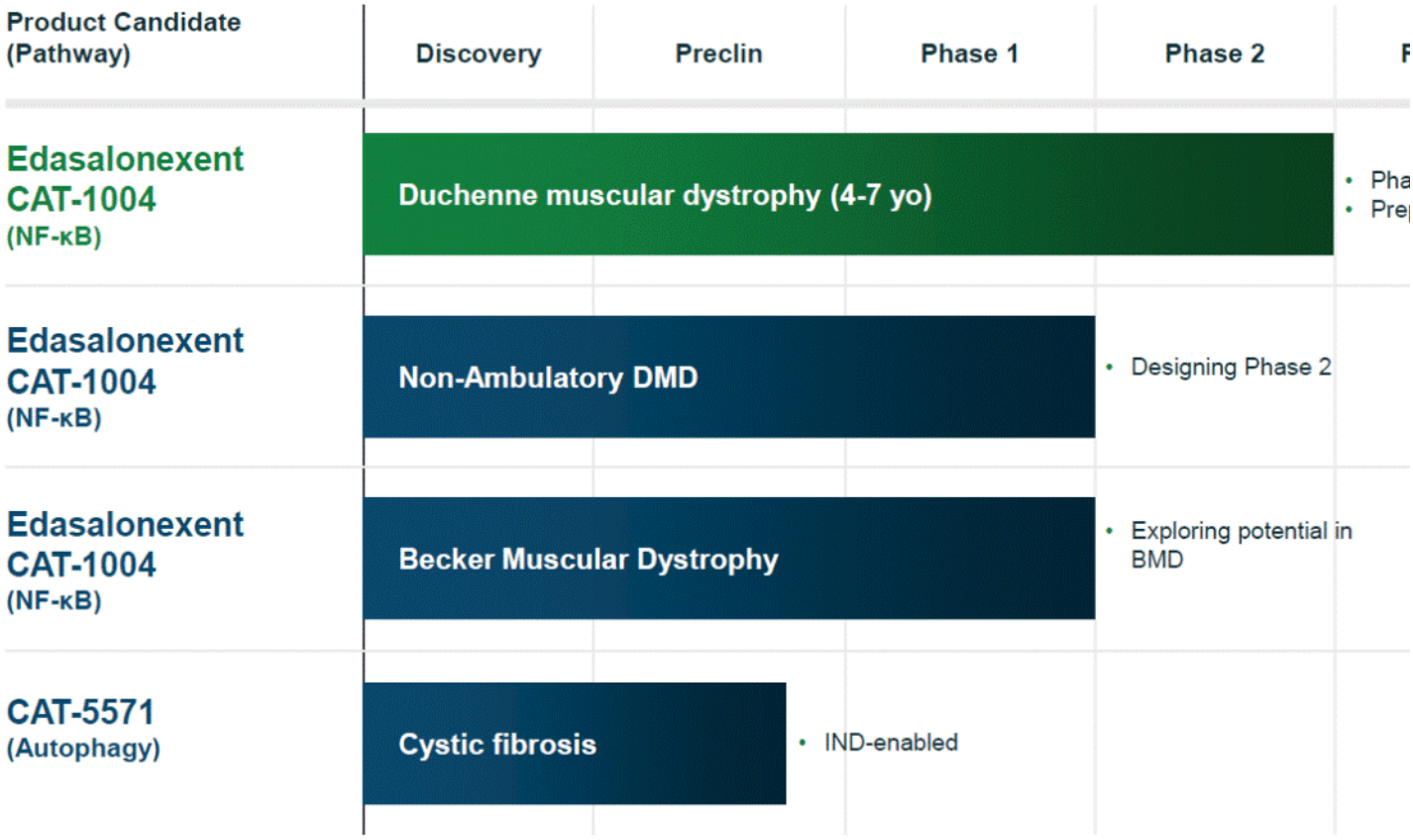
Exhibit 99.2


Product Candidate (Pathway)
Discovery
Preclin
Phase 1
Phase 2
Edasalonexent CAT-1004 (NF-κB)
Duchenne muscular dystrophy (4-7 yo)
Pha
Pre
Edasalonexent CAT-1004 (NF-κB)
Non-Ambulatory DMD
Designing Phase 2
Edasalonexent CAT-1004 (NF-κB)
Becker Muscular Dystrophy
Exploring potential in BMD
CAT-5571 (Autophagy)
Cystic fibrosis
IND-enabled