
**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): **January 30, 2017**

Catabasis Pharmaceuticals, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-37467
(Commission
File Number)

26-3687168
(IRS Employer
Identification No.)

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

02139
(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))
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Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On January 30, 2017, Rick Modi, the Chief Business Officer of Catabasis Pharmaceuticals, Inc. (the “Company”), informed the Company that he will be departing the Company effective February 10, 2017.

Item 7.01. Regulation FD Disclosure.

On January 31, 2017, the Company will be posting on its corporate website (www.catabasis.com) a slide presentation disclosing top-line results from Part B of the Company’s MoveDMD® clinical trial. A copy of the slide presentation is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information in this Item 7.01 and Exhibit 99.1 to this Current Report on Form 8-K is intended to be furnished and 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 filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 8.01. Other Events.

On January 31, 2017, the Company issued a press release announcing top-line results from Part B of the Company’s MoveDMD clinical trial. The full text of the press release is filed as Exhibit 99.2 to this Current Report on Form 8-K, and the information contained therein is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

- (d) Exhibits

The Exhibits to this Current Report on Form 8-K are listed in the Exhibit Index attached hereto.

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: January 31, 2017

By: /s/ Jill C. Milne
Jill C. Milne
President and Chief Executive Officer

EXHIBIT INDEX

Exhibit Number	Description of Exhibit
99.1	Slide presentation disclosing top-line results from Part B of the Company's MoveDMD® clinical trial
99.2	Press release issued by the Company on January 31, 2017



Edasalonexent: Top-Line Results for Part B of the MoveDMD[®] Trial

January 31, 2017

Forward Looking Statements

This presentation contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995, including statements regarding our expectations and beliefs about our business, future financial and operating performance, clinical trial plans, product development plans and prospects. The words "believe", "anticipate", "plans," "expect", "could", "should", "will", "would", "may", "intend" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

The forward-looking statements contained in this presentation and in remarks made during this presentation and the following Q&A session are subject to important risks and uncertainties that may cause actual events or results to differ materially from our current expectations and beliefs, including: uncertainties inherent in the initiation and completion of preclinical studies and clinical trials and clinical development of our product candidates; availability and timing of results from preclinical studies and clinical trials; whether interim results from a clinical trial will be predictive of the final results of the trial or the results of future trials; expectations for regulatory approvals to conduct trials or to market products; availability of funding sufficient for our foreseeable and unforeseeable operating expenses and capital expenditure requirements; other matters that could affect the availability or commercial potential of our product candidates; and general economic and market conditions. These and other risks are described under the caption "Risk Factors" in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, which is on file with the Securities and Exchange Commission, and in other filings that we may make with the Securities and Exchange Commission in the future.

In addition, the forward-looking statements included in this presentation represent our views as of the date of this presentation. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we specifically disclaim any obligation to do so. These forward-looking statements should not be relied upon as representing our views as of any date subsequent to the date of this presentation.

Rationale for MoveDMD Trial Design



Background

- Chronic activation of NF- κ B is a key driver of the muscle degeneration and inhibition of muscle regeneration that occurs in DMD

- Initiation of corticosteroids is associated with:
 - Significant decrease in MRI T2 in leg muscles at 3 months
 - Better performance on the timed function tests (10-meter walk/run, 4-stair climb and time to stand) at time periods of > 6 months

Product Development Strategy

- Develop edasalonexent as an oral inhibitor of NF- κ B with potential that may be effective in all patients with DMD

- Design a Phase 1 / 2 trial in 4 – 7 year old boys to evaluate initial safety and efficacy using observations from corticosteroids:
 - Assess MRI T2 as an early, innovative biomarker at 12 weeks
 - Assess functional measures over a longer time period

Summary of Top-Line Results for Part B of the MoveDMD Trial



- › **MoveDMD is a 3-part trial in 4 – 7 year old boys with DMD who are steroid naïve or off steroids for ≥6 months**
 - Part A previously showed PK and PD proof of technology, safety and tolerability
 - Part B was a 12-week placebo-controlled trial using MRI as an early biomarker end point
 - Part C is an open-label extension to assess effects over a longer time

- › **Top-line results for Part B of the trial:**
 - No significant change in primary end point of change from baseline in MRI T2 of the composite of lower leg muscles for pooled edasalonexent doses vs. placebo
 - The edasalonexent 100 mg/kg/day treatment group consistently showed numerical improvement vs. placebo across multiple measures although the changes were not statistically significant. The 67 mg/kg/day group had mixed results compared with both the 100 mg/kg/day treatment group and placebo, which in each case was not statistically significant
 - No safety signals were seen and edasalonexent was well tolerated with an adverse event profile consistent with prior findings. There were no dose reductions or discontinuations

- › **Continue to assess effects in patients on edasalonexent over a longer time in the ongoing OLE (Part C)**
 - MRI, timed function tests, North Star Ambulatory Assessment (NSAA), muscle strength, pediatric outcomes data collection instrument (PODCI)

MoveDMD Trial Design



Study Population: All DMD mutations, ages 4 – 7, steroid naïve or off steroids for ≥6 months

Part A 7-day, open-label dose-ranging trial N ~ 6 per arm	Part B 12-week, randomized, double-blind placebo-controlled trial N ~ 10 per arm	Part C 36-week, open-label treatment period N ~ 10 per arm
100 mg/kg/day	Edasalonexent 67 mg/kg/day	Edasalonexent 67 mg/kg/day
67 mg/kg/day	Edasalonexent 100 mg/kg/day	Edasalonexent 100 mg/kg/day
33 mg/kg/day	Placebo	Edasalonexent 100 mg/kg/day or 67 mg/kg/day

- Assess the safety and PK of edasalonexent in ~18 boys with Duchenne ages 4-7
- Showed positive PK, NF-κB biomarker effects, safety and tolerability

- Assess the safety and efficacy of edasalonexent versus placebo using MRI as an early biomarker; trial was powered only for the primary end point of change from baseline in MRI T2 of composite of lower leg muscles
- Other measures: timed function tests (10-meter walk/run, 4-stair climb, time to stand), NSAA, muscle strength, PODCI

- Measure the same safety and efficacy parameters as in Part B of the trial to assess treatment effects over a longer time

Part B Key Study Metrics and Efficacy End Points

<p>Key Study Metrics</p> 	<ul style="list-style-type: none"> › Enrolled total of 31 boys at 5 sites for Part B of the trial, 16 of whom also participated in Part A. In Part B, patients were randomized to: <ul style="list-style-type: none"> - Edasalonexent 67 mg/kg/day given as twice per day dosing - Edasalonexent 100 mg/kg/day given as three times per day dosing - Placebo - All 31 patients who enrolled completed the trial
<p>Primary Efficacy End Point</p> 	<ul style="list-style-type: none"> › Average change from baseline to week 12 in MRI T2 relaxation time (milliseconds) for the composite of lower leg muscles: <ul style="list-style-type: none"> - Soleus (Sol) - Medial gastrocnemius (MG) - Tibialis posterior (TP) - Tibialis anterior (TA) - Peroneals (Per)
<p>Additional Efficacy End Points</p> 	<ul style="list-style-type: none"> › Speeds and times for timed function tests (TFTs): <ul style="list-style-type: none"> - Completing the 10-meter walk/run (10MWR) - Climbing 4 stairs (4SC) - Standing from supine (time to stand: TTS) › North Star Ambulatory Assessment (NSAA) › Other MRI/MRS measures in lower and upper leg muscles › Muscle strength testing <ul style="list-style-type: none"> - Knee extension - Plantar flexion › Pediatric outcomes data collection instrument (PODCI)

Baseline Demographics and Values



Treatment Group	Placebo	Edasalonexent 67 mg/kg/day	Edasalonexent 100 mg/kg/day	Overall Edasalonexent
	(n =11)	(n =10)	(n =10)	(n =20)
Age at Week 0 (years) ¹	6.3	6.0	6.0	6.0
Age at Symptom Onset (years) ²	3.7	3.0	2.0	2.5
Age at Diagnosis (years) ²	4.6	3.5	3.0	3.3
Weight at randomization (kg)	21.4	22.1	22.0	22.1
10-meter walk/run (10MWR in seconds) ¹	6.9	6.3	6.8	6.6
4-stair climb (4SC in seconds) ²	5.0	4.5	6.3	5.4
Time to stand (TTS in seconds) ²	6.5	7.0	12.0	9.4

Values shown are means

Patients were all male and steroid-naive and predominantly Caucasian

For context, mean times for timed function tests in normal boys of similar age as those in the MoveDMD trial are 10MWR: 3.4 seconds; 4-stair climb: 1.4 seconds; and TTS: 2.1 seconds (ImagingDMD data presented at Catabasis Investor Day Nov 2016)

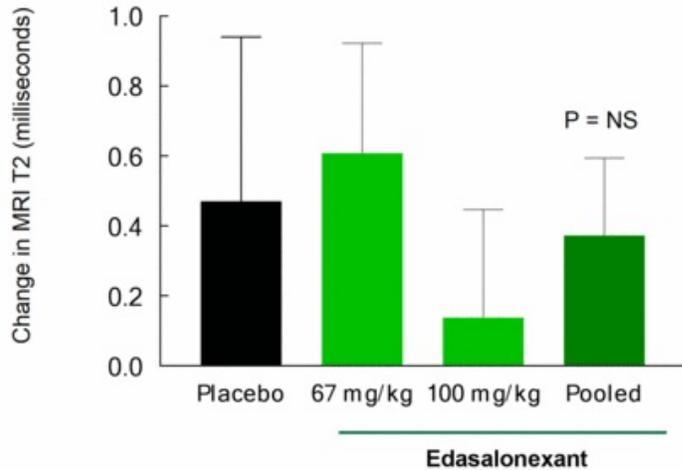
¹Patient randomization was stratified for baseline age and 10-meter walk/run

²Patients in the edasalonexent 100 mg/kg/day group were symptomatic at a younger age and did not perform as well on the 4-stair climb and the time to stand function tests at baseline; characteristics consistent with more advanced disease

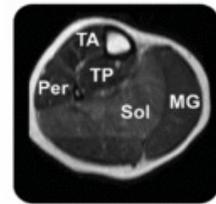
MoveDMD Trial Part B Results Primary Efficacy End Point



Change in MRI T2 from Baseline to Week 12 in Composite of 5 Lower Leg Muscles

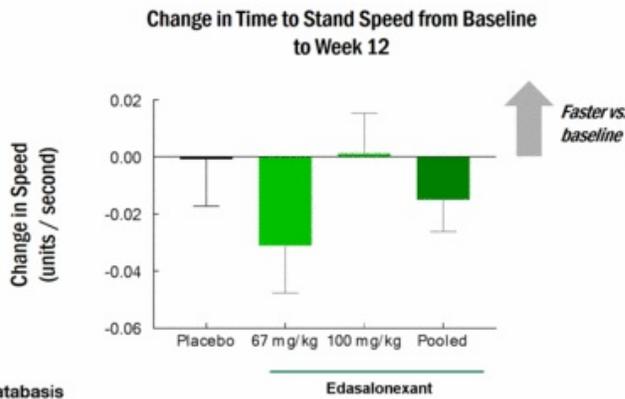
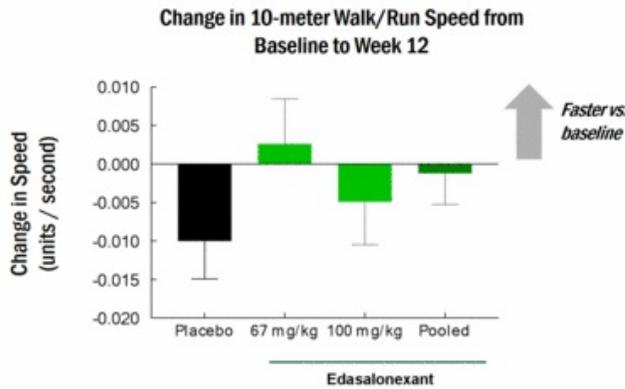


Smaller increase in MRI T2 correlates with less muscle inflammation



- ▶ No significant change in the primary end point, average change from baseline to Week 12 in the MRI T2 measure for a composite of lower leg muscles for the pooled edasalonexant treatment groups vs. placebo.
- ▶ Primary end point numerically better for edasalonexant 100 mg/kg/day vs. placebo

10-meter Walk/Run Speed and Time to Stand Speed

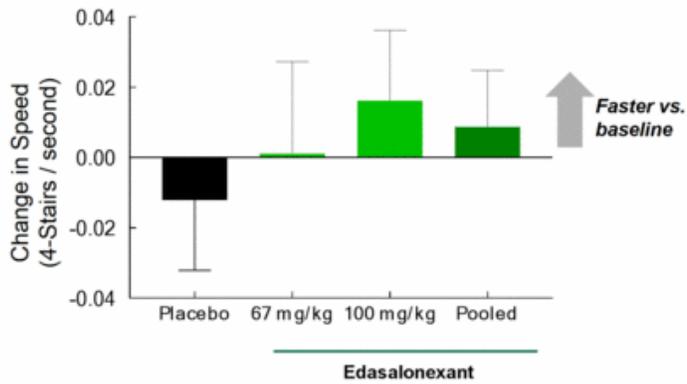


- Change in timed function test Speeds at Week 12 were pre-defined end points
- Speed is the reciprocal of the time to perform the function test. In contrast to Time, Speed allows for accounting for boys who are unable to perform tests
- Change in 10-meter walk/run Speed and change in time to stand Speed numerically better for edasalonexent 100 mg/kg/day vs. placebo although neither was statistically significant

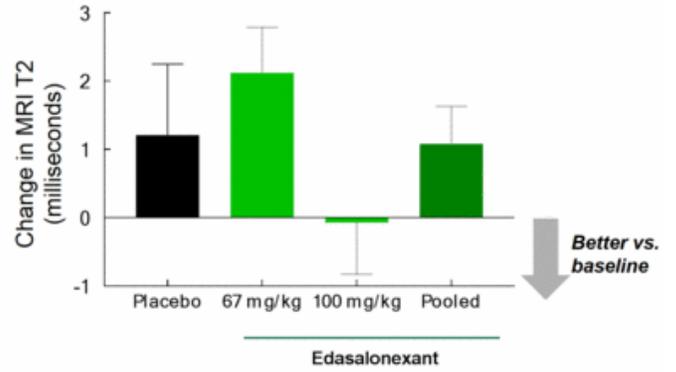
4-Stair Climb Speed and Change in MRI T2 of Vastus Lateralis (Upper Leg Muscle Enlisted in 4-Stair Climb)



Change in 4-Stair Climb Speed from Baseline to Week 12

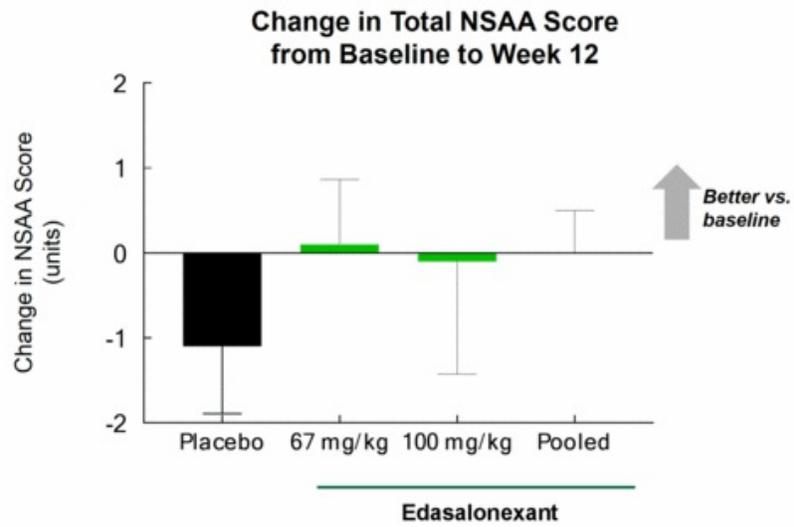


Change in MRI T2 of Vastus Lateralis from Baseline to Week 12



- Change in 4-stair climb Speed and change in MRI T2 of vastus lateralis numerically better for edasalonexent 100 mg/kg/day vs. placebo, although not statistically significant

North Star Ambulatory Assessment (NSAA)



- Change in NSAA was numerically better for edasalonexant 100 mg/kg/day vs. placebo although not statistically significant

Adverse Events: No Safety Signals and Well Tolerated



Overview of Treatment-Emergent Adverse Events

	Placebo n = 11 n (%)	Edasalonexent 67 mg/kg n = 10 n (%)	Edasalonexent 100 mg/kg n = 10 n (%)	Edasalonexent Overall n = 20 n (%)
Any TEAE	10 (91)	9 (90)	8 (80)	17 (85)
Severe TEAE	1 (9)	0 (0)	0 (0)	0 (0)
Serious Adverse Events	1 (9)	0 (0)	0 (0)	0 (0)
Any drug related TEAE	0 (0)	4 (40)	7 (70)	11 (55)
Discontinuation due to TEAE	0 (0)	0 (0)	0 (0)	0 (0)
Deaths	0 (0)	0 (0)	0 (0)	0 (0)

Values shown are treatment emergent adverse event (TEAE), defined as any adverse event (AE) that starts during or after the first dose of investigational product through the end of the safety follow-up period

- › **No safety signals**
- › **Well tolerated with majority of adverse events being mild in nature**
 - Most common treatment-related adverse events were mild diarrhea and vomiting
- › **No serious treatment-related adverse events**
- › **No dose reductions**
- › **No discontinuations**

Ongoing OLE (Part C) is Anticipated to Yield Additional Data for Edasalonexent Treatment Over a Longer Time



✓ Planned assessments in trial
 Top-line data analyses shown today
 Pending full data analyses, expect to present in 2017

	Measure	Part B Baseline	Part B Week 12	Part C Week 24	Part C Week 36	Part C Week 48
MRI measures of lower leg muscles	T2	✓	✓	✓	✓	✓
	Fat Fraction	✓	✓	✓	✓	✓
MRI measures of upper leg muscles	T2	✓	✓	✓	✓	✓
	Fat Fraction	✓	✓	✓	✓	✓
Timed function tests	10-meter walk/run	✓	✓	✓	✓	✓
	4-stair climb	✓	✓	✓	✓	✓
	Time to stand	✓	✓	✓	✓	✓
NSAA and PODCI	NSAA	✓	✓	✓	✓	✓
	PODCI	✓	✓	✓	✓	✓
Muscle strength	Knee extension	✓	✓	✓	✓	✓
	Plantar flexion	✓	✓	✓	✓	✓

- › Assess treatment effect once full dataset is available, including data from OLE (Part C)
- › Study was powered for statistically significant changes in the primary end point for Part B, change in MRI T2 from baseline to Week 12 in composite of lower leg muscles, but is not powered to see statistically significant changes for any other measures in Part B or Part C

MoveDMD Trial Thank You



- › Thank you to the boys and parents involved in the MoveDMD trial, the trial site staff, patient groups, the ImagingDMD consortium, and members of the Duchenne community for their support

Summary of Edasalonexent Program and Anticipated Next Steps



▸ What we have shown prior to Part B of the MoveDMD trial

- Positive proof of technology in *in vitro* studies (*J Med Chem* Jan 2016)
- Functional benefit in preclinical models of DMD with 6 – 9 months of treatment (*JCI Insight* Dec 2016)
- Positive PK and PD proof of technology, safety and tolerability in adults (*J Clin Pharmacol* Jan 2017)

▸ Top-line results for Part B of the trial

- No significant change in primary end point of change from baseline in MRI T2 of the composite of lower leg muscles for pooled edasalonexent doses vs. placebo
- The edasalonexent 100 mg/kg/day treatment group consistently showed numerical improvement vs. placebo across multiple measures although the changes were not statistically significant. The 67 mg/kg/day group had mixed results compared with both the 100 mg/kg/day treatment group and placebo, which in each case was not statistically significant
- No safety signals were seen and edasalonexent was well tolerated with an adverse event profile consistent with prior findings. There were no dose reductions or discontinuations

▸ Anticipated next steps

- Complete full analyses of data from Part B of the trial
- Present data at upcoming scientific conferences in 2017
- Continue the OLE (Part C) to assess effects in patients on edasalonexent over a longer time
- Report analyses from OLE (Part C) in 2017 with an interim update in Q2



Catabasis Pharmaceuticals Announces Top-Line Results for Part B of the MoveDMD® Trial for Edasalonexent (CAT-1004) in Duchenne Muscular Dystrophy

— Conference Call Today at 4:30pm ET —

CAMBRIDGE, MA, January 31, 2017 — Catabasis Pharmaceuticals, Inc. (NASDAQ:CATB), a clinical-stage biopharmaceutical company, today announced top-line safety and efficacy results for Part B of the MoveDMD® trial of edasalonexent (CAT-1004) for the treatment of Duchenne muscular dystrophy (DMD). The objective of Part B of the MoveDMD trial was to evaluate the effects of edasalonexent using magnetic resonance imaging (MRI) T2 as a biomarker at 12 weeks. The primary efficacy end point of average change from baseline to week 12 in the MRI T2 composite measure of lower leg muscles for the pooled edasalonexent treatment groups of 67 mg/kg/day and 100 mg/kg/day compared to placebo was not met (0.37 milliseconds for the pooled edasalonexent treatment groups versus 0.47 milliseconds for placebo, a smaller increase in MRI T2 correlating with less muscle inflammation). The edasalonexent 100 mg/kg/day treatment group consistently showed numerical improvement versus placebo across multiple measures although the changes were not statistically significant. The 67 mg/kg/day treatment group had mixed results compared with both the 100 mg/kg/day treatment group and placebo, which in each case were not statistically significant. Catabasis plans to complete a full analysis of the data from Part B of the MoveDMD trial and to submit the data for presentation at an upcoming scientific conference. The open-label extension portion (Part C) of the MoveDMD trial is ongoing. Catabasis intends to report the results from Part C in 2017, with an interim update in Q2.

Thirty-one boys enrolled in Part B and all completed the trial. Both dose levels of edasalonexent evaluated were well tolerated with no safety signals observed. The majority of adverse events were mild in nature and the most common treatment-related adverse events were gastrointestinal, primarily mild diarrhea and vomiting. There were no treatment-related serious adverse events, no drug discontinuations and no dose reductions. Edasalonexent plasma exposure in Part B of the MoveDMD trial was consistent with that observed in Part A.

Additional efficacy end points included three age-appropriate timed function tests (10-meter walk/run, 4-stair climb and time to stand), the North Star Ambulatory Assessment (NSAA) and additional MRI measures. The trial was not powered to detect statistically significant changes in the timed function tests or NSAA and no significant changes were detected in these measures for those dosed with edasalonexent versus placebo. For all three timed function tests, the change in speed of performance from baseline to week 12 was numerically better for the 100 mg/kg/day treatment group compared to placebo. The change in NSAA was also numerically better for the 100 mg/kg/day treatment group compared to placebo. In addition to the lower leg, MRI T2 was also measured for the upper leg. The results in MRI T2 score for change from

baseline to week 12 for the vastus lateralis (a large component of the quadriceps) were not statistically significant but showed a numerical improvement in the 100 mg/kg/day treatment group compared to placebo. Compared to the placebo group, patients in the edasalonexent 100 mg/kg/day group had characteristics of more advanced disease at baseline. Patients in this treatment group had been diagnosed at a younger age and, at baseline, did not perform as well on function tests.

“Although we did not meet the MRI T2 composite end point, the continued safety, tolerability and plasma exposure data in Part B of the MoveDMD trial are reassuring. We observed potential treatment-associated effects at 12 weeks in the 100 mg/kg/day treatment group, which we believe warrant further evaluation to see if the signals strengthen in the longer-term data from the ongoing open-label extension. Following additional data analysis from the open-label extension, we will determine the next steps for edasalonexent in DMD,” said Jill C. Milne, Chief Executive Officer of Catabasis. “We are enormously grateful to the boys and the families involved in the MoveDMD trial as well as the clinical trial site staff and patient groups who are making this trial possible.”

“The top-line data results from Part B of the MoveDMD trial provide us with an early snapshot of the effects of edasalonexent in boys with DMD over a 12-week period. Continuing the open-label extension of the MoveDMD trial will allow us to further evaluate the potential for edasalonexent to provide benefit in DMD,” said Richard Finkel, M.D., Division Chief, Division of Neurology, Department of Pediatrics at Nemours Children’s Health System and a Principal Investigator for the study. “The unmet medical need in Duchenne is profound and potential therapies that benefit all patients are needed.”

“We in the DMD community continue to learn from each completed clinical trial and appreciate the effort of Catabasis in studying a potential therapy that could be applicable for all of those affected by DMD regardless of the underlying mutation type,” said Pat Furlong, Founding President and Chief Executive Officer of Parent Project Muscular Dystrophy (PPMD).

About Part B of the MoveDMD Trial

Part B of the MoveDMD trial was a randomized, double-blind, placebo-controlled trial with 31 ambulatory boys between ages 4 and 7 with a genetically confirmed diagnosis of DMD across a range of dystrophin mutations. The boys were steroid naive. This portion of the trial was conducted at five sites in the U.S., and assessed the safety and efficacy of edasalonexent in patients at two dosing levels (67 mg/kg/day and 100 mg/kg/day) or placebo before and after 12 weeks of dosing. The 67 mg/kg/day treatment group was dosed 33 mg/kg twice per day and the 100 mg/kg/day treatment group was dosed 33 mg/kg three times per day. Sixteen of the 17 boys who participated in the first part of the MoveDMD trial (Part A) participated in Part B. The primary efficacy end point in Part B for which the trial was powered was average change from baseline to week 12 in MRI T2 measure for a composite of five lower leg muscles for the pooled edasalonexent treatment groups, 67 mg/kg/day and 100 mg/kg/day, compared to placebo. MRI T2 is a measure of the composition of muscle and an indicator of muscle inflammation. Safety and tolerability were also evaluated. Additional assessments were measured; however, the trial was not powered for statistical significance for these assessments. The additional assessments

include timed function tests (10-meter walk/run, 4-stair climb and time to stand), the North Star Ambulatory Assessment (NSAA), muscle strength measures and the pediatric outcomes data collection instrument (PODCI).

The open-label extension (Part C) was initiated in July and includes dosing with edasalonexent for 36 weeks beyond Part B and will evaluate longer term safety and efficacy with the same clinical end points as in Part B. PPM and the Muscular Dystrophy Association have provided funding to support participant travel for the MoveDMD trial.

More information about the MoveDMD trial can be found on the clinical trials page of the Catabasis website and on ClinicalTrials.gov under trial identifier NCT02439216.

Catabasis today also announced that Rick Modi, Chief Business Officer, has submitted his resignation to pursue a new opportunity.

Conference Call Dial-In Information:

Catabasis will host a conference call and webcast today, January 31, 2017, at 4:30pm ET to discuss the top-line results for Part B of the MoveDMD trial.

Participant Toll-Free Dial-In Number: (877) 388-2733

Participant International Dial-In Number: (541) 797-2984

Pass Code: 62428972

Please specify to the operator that you would like to join the “Catabasis MoveDMD Part B Results Call.”

Interested parties may access a live audio webcast of the conference call via the investor section of the Catabasis website, www.catabasis.com. Please connect to the Catabasis website several minutes prior to the start of the broadcast to ensure adequate time for any software download that may be necessary. The webcast will be archived for 90 days.

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 Duchenne muscular dystrophy (DMD or Duchenne), regardless of their underlying mutation. Edasalonexent inhibits NF- κ B, a protein that is activated in Duchenne and drives inflammation and fibrosis, muscle degeneration and suppresses muscle regeneration. In animal models of DMD, edasalonexent produced beneficial effects in skeletal, diaphragm and cardiac muscle and improved function. 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. We have previously reported safety, tolerability and reduction in NF- κ B activity in Phase 1 trials in adults. We are currently conducting the MoveDMD[®] trial, a three-part clinical trial investigating the safety and efficacy of edasalonexent in boys ages 4 — 7 affected with DMD (any confirmed mutation). Part A of the trial evaluated the safety, tolerability and pharmacokinetics of, and NF- κ B target engagement with, edasalonexent in 17 boys with DMD. Part B of the trial was a double-blind, placebo-controlled evaluation of the safety and efficacy of

edasalonexent over a 12-week period in 31 boys. The primary efficacy end point for Part B was average change from baseline to week 12 in MRI T2 measures in boys given edasalonexent compared to placebo. Additional efficacy end points included age-appropriate timed function tests (10-meter walk/run, 4-stair climb and time to stand), North Star Ambulatory Assessment (NSAA), muscle strength and the pediatric outcomes data collection instrument (PODCI). Part C is an open-label extension with edasalonexent for 36 weeks beyond Part B and will evaluate longer term safety and efficacy with the same clinical end points as Part B. From the MoveDMD trial, we have reported that edasalonexent was well tolerated with no safety signals. We reported top-line data for Part B that the primary efficacy end point was not met. The full analyses of data from Part B of the trial and from the ongoing open-label extension are pending.

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. We are applying our SMART linker platform to build an internal pipeline of product candidates for rare diseases and plan to pursue partnerships to develop additional product candidates. For more information on the Company's drug discovery platform and 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 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 inherent in the initiation and completion of preclinical studies and clinical trials and clinical development of the Company's product candidates; availability and timing of results from preclinical studies and clinical trials; whether interim results from a clinical trial will be predictive of the final results of the trial or the results of future trials; expectations for regulatory approvals to conduct trials or to market products; 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 Quarterly Report on Form 10-Q for the period ended September 30, 2016, 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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Corporate and Media Contact
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