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Catabasis Pharmaceuticals Reports First Quarter 2016 Financial Results and Recent Corporate Highlights

-- Edasalonexent (CAT-1004) as a Potential Treatment for Duchenne Muscular Dystrophy (DMD): MoveDMD[SM] Part B (Phase 2) Trial Initiated Following Positive Safety, Tolerability, Pharmacokinetic and NF-kB Biomarker Data from Part A --

-- CAT-2054 as a Potential Treatment for Nonalcoholic Steatohepatitis (NASH) and Hypercholesterolemia: Promising Pre-Clinical Data in NASH; Phase 2a Trial in Hypercholesterolemia Fully Enrolled --

CAMBRIDGE, MA, May 12, 2016 – Catabasis Pharmaceuticals, Inc. (NASDAQ:CATB), a clinical-stage biopharmaceutical company, today announced financial results for the first quarter ended March 31, 2016 and corporate highlights.

"During the first quarter, Catabasis made substantial progress with edasalonexent, formerly known as CAT-1004, and CAT-2054, our two programs in the clinic," said Jill C. Milne, Chief Executive Officer of Catabasis. "We believe we are approaching drug development for DMD in a very different way with edasalonexent as a potential disease-modifying therapy that may be effective regardless of the underlying mutation. Part B, the Phase 2 portion of the MoveDMD trial of edasalonexent, is underway and is supported by positive results from Part A, which demonstrated safety, tolerability, pharmacokinetics and importantly, proof of concept for inhibition of NF-kB activity with target engagement demonstrated in a dose-dependent manner."

Dr. Milne continued, "We believe CAT-2054 is well positioned to be effective in both NASH and hypercholesterolemia based on the new data we've generated. We completed pre-clinical studies with the CAT-2000 series that provide scientific support for the potential of this Phase 2 asset in NASH. Furthermore, the Phase 2a trial of CAT-2054 in hypercholesterolemia has completed enrollment and is progressing ahead of schedule. Looking forward, we expect to be on target to reach meaningful milestones for Catabasis in the remainder of 2016 as we anticipate reporting top-line results around mid-year from the Phase 2a trial of CAT-2054 and in late 2016 from the MoveDMD trial of edasalonexent."

Recent and Upcoming Corporate Highlights

Edasalonexent (CAT-1004): Initiation of Part B of the MoveDMD trial and Positive Safety, Tolerability, Pharmacokinetic and NF-kB Biomarker Results from Part A

- Announced dosing of the first patient in Part B of the MoveDMD trial of edasalonexent and receipt of a grant from the Muscular Dystrophy Association to support travel for trial participants. Part B of MoveDMD is a Phase 2 trial of edasalonexent for boys aged 4-7

with DMD, regardless of the underlying mutation.

- Catabasis also announced positive Part A results for safety, tolerability, pharmacokinetics and NF-kB target engagement via statistically significant reduction in NF-kB controlled gene expression in a dose-dependent manner.
- Top-line results from Part B of the MoveDMD trial are anticipated in late 2016.

CAT-2054: Promising Pre-Clinical Data in NASH; Phase 2a Trial in Hypercholesterolemia Fully Enrolled

- Results from pre-clinical studies of the CAT-2000 series in NASH showed positive effects on liver inflammation, fibrosis and steatosis.
- Catabasis anticipates presenting these pre-clinical results in NASH at an upcoming medical meeting later this quarter.
- The Phase 2a trial of CAT-2054 in hypercholesterolemia has completed enrollment.
- Top-line results from the CAT-2054 Phase 2a trial in hypercholesterolemia are expected around mid-year 2016.

Advancement of the Catabasis Pre-Clinical Pipeline

- In 2016, we plan to continue pre-clinical evaluation of CAT-4001 in animal models of Friedreich's ataxia and Amyotrophic Lateral Sclerosis (ALS) and to conduct IND-enabling activities. If we are successful in these activities, we intend to advance CAT-4001 into a Phase 1 clinical trial in 2017.
- The Friedreich's Ataxia Research Alliance awarded us the Kyle Bryant Translational Research Award to evaluate CAT-4001 as a potential treatment for Friedreich's ataxia.
- We are developing a pipeline of pre-clinical assets using our SMART linker drug discovery platform to potentially treat rare diseases including ALS, Friedreich's ataxia and cystic fibrosis.

Additions to the Catabasis Board of Directors and the Formation of a Science and Technology Committee

- Announced appointment of two highly qualified industry experts, Burt Adelman, M.D. and Michael Kishbauch, to the Catabasis Board of Directors. Michael Kishbauch was appointed as a member of the Audit Committee.
- Formation of a Science and Technology Committee, with Dr. Adelman as the chair and Michael Ross, Ph.D., as a committee member.

First Quarter 2016 Financial Results

Cash Position: At March 31, 2016, Catabasis had cash, cash equivalents and marketable securities of $52.6 million, compared to $62.8 million as of December 31, 2015. We expect that our cash, cash equivalents and marketable securities at March 31, 2016 will enable us to fund our operating expenses and capital expenditure requirements through at least June 30, 2017. Net cash used in operating activities for the three months ended March 31, 2016 was $9.1 million, compared to $7.2 million for the three months ended March 31, 2015.

R&D Expenses: Research and development expenses were $6.4 million for the three months ended March 31, 2016, compared to $4.6 million for the three months ended March 31, 2015. The increase in research and development expenses for the 2016 period relative to the 2015 period was primarily attributable to increased direct program costs related to the edasalonexent MoveDMD trial and the CAT-2054 Phase 2a trial.

G&A Expenses: General and administrative expenses were $2.8 million for the three months ended March 31, 2016, compared to $1.7 million for the three months ended March 31, 2015. The increase in general and administrative expenses for the 2016 period relative to the 2015 period was primarily attributable to increased employee compensation costs and increased consulting and professional expenses to support our more advanced R&D pipeline and overall growth.

Operating Loss: Loss from operations was $9.2 million for the three months ended March 31, 2016, compared to $6.4 million for the three months ended March 31, 2015.

Net Loss: Net loss was $9.4 million, or $0.61 per share, for the three months ended March 31, 2016, compared to a net loss of $6.5 million for the three months ended March 31, 2015.

Conference Call and Webcast

Catabasis will host a conference call and webcast at 4:30pm ET today to provide an update on corporate developments and to discuss first quarter 2016 financial results.

Participant Toll-Free Dial-In Number:	(877) 388-2733
Participant International Dial-In Number:	(541) 797-2984
Pass Code:	93873397

Please specify to the operator that you would like to join the “Catabasis First Quarter 2016 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 oral small molecule that has the potential to be a disease-modifying therapy for all patients affected by Duchenne muscular dystrophy (DMD or Duchenne), regardless of the underlying mutation. Edasalonexent inhibits NF-kB, a protein that is activated in Duchenne and drives inflammation and fibrosis, muscle degeneration and suppresses muscle regeneration. In animal models of DMD, edasalonexent inhibited NF-kB, reduced muscle degeneration and improved muscle regeneration and function, and beneficial effects were

observed in skeletal, diaphragm and cardiac muscle. 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-kB activity in Phase 1 trials in adults. We are currently conducting the MoveDMD^{SM} trial of edasalonexent in 4-7 year-old boys affected by Duchenne. From Part A of the MoveDMD trial, we have reported that edasalonexent was generally well tolerated with no safety signals observed and successful NF-kB target engagement. Pharmacokinetic results demonstrated edasalonexent plasma exposure levels consistent with those previously observed in adults at which inhibition of NF-kB was observed.

About CAT-2054

CAT-2054 is an oral small molecule with a novel mechanism of action being developed as a potential treatment of nonalcoholic steatohepatitis (NASH) and hypercholesterolemia. By inhibiting Sterol Regulatory Element-Binding Protein (SREBP), a master regulator of lipid metabolism in the body, CAT-2054 has the potential to significantly reduce LDL-C and liver fat; it may also have beneficial effects on other metabolic parameters such as triglycerides and glucose. This profile may differentiate CAT-2054 from currently approved therapies and others in development. We have shown in pre-clinical models of NASH that the CAT-2000 series significantly improves liver inflammation, fibrosis and steatosis. We have previously reported positive top-line Phase 1 data, including reductions in LDL-C. We are currently conducting a Phase 2a trial of CAT-2054 in addition to high intensity statin therapy in patients with hypercholesterolemia, which may help guide future clinical trials in NASH and hypercholesterolemia.

About MoveDMD^{SM}

MoveDMD is a Phase 1 / 2 clinical trial of edasalonexent (CAT-1004) in boys ages 4-7 affected with DMD (any confirmed mutation). The MoveDMD trial is a two-part clinical trial investigating the safety and efficacy of edasalonexent in DMD. Part A of the MoveDMD trial evaluated the safety, tolerability and pharmacokinetics of, and NF-kB target engagement with, edasalonexent and showed positive results. The boys in Part A of the trial are asked to participate, if eligible, in Part B of the trial. Part B of the trial is a Phase 2 trial to evaluate the safety and efficacy of edasalonexent in DMD over a 12-week treatment period and will enroll approximately 30 boys. The primary end point is changes in MRI of the leg muscles, and the secondary end points are age-appropriate timed function tests: 10 meter walk/run, 4-stair climb and time to stand. Additional assessments include muscle strength, the North Star Ambulatory Assessment and the pediatric outcomes data collection tool (PODCI).

About MRI

Magnetic resonance imaging (MRI) is a non-invasive imaging technique that can visualize muscle structure and composition and measure disease status in children with DMD. Two MRI measures used in Duchenne to indicate muscle degeneration are T2 and fat fraction. MRI is sensitive to changes in muscle structure and composition induced by disease processes such as the inflammation, edema, muscle damage and fat infiltration that occur in Duchenne. Changes in T2 may be seen in less than 12 weeks while changes in fat fraction may take longer. Changes in these MRI measures have been correlated with longer-term changes in clinically meaningful

measures of functional activity. Changes in MRI can show the effects of an investigational therapy on disease progression in Duchenne in an objective and quantifiable manner.

About Catabasis

At Catabasis Pharmaceuticals, our mission is to bring hope and life-changing therapies to patients and their families. We have product candidates in both rare diseases and serious lipid disorders. 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 March 31, 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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Catabasis Pharmaceuticals, Inc.

Condensed Consolidated Statements of Operations

(In thousands, except share and per share data)

(Unaudited)

	Three Months Ended March 31,	
	2016	**2015**
Operating expenses:		
Research and development	$ 6,436	$ 4,616
General and administrative	2,770	1,744
Total operating expenses	9,206	6,360
Loss from operations	(9,206)	(6,360)
Other (expense) income:		
Interest expense	(243)	(149)
Interest and investment income	53	-
Other(expense) income, net	(22)	9
Total other expense	(212)	(140)
Net loss	$ (9,418)	$ (6,500)
Net loss per share - basic and diluted	$ (0.61)	$ (13.14)
Weighted-average common shares outstanding used in net loss per share - basic and diluted	15,335,516	494,590

Catabasis Pharmaceuticals, Inc.

Condensed Consolidated Balance Sheets

(In thousands)

(Unaudited)

	March 31,	December 31,
	2016	**2015**
Assets		
Cash and cash equivalents	$ 23,818	$ 62,780
Available-for-sale securities	28,758	-
Total assets	54,269	64,169
Liabilities and stockholders' equity		
Current portion of notes payable, net of discount	3,190	3,173
Notes payable, net of current portion and discount	4,917	5,720
Total liabilities	12,545	13,676
Total stockholders' equity	$ 41,724	$ 50,493

Catabasis Pharmaceuticals, Inc.

Condensed Consolidated Statements of Cash Flows

(In thousands)

(Unaudited)

	Three Months Ended March 31,	
	2016	**2015**
Net cash used in operating activities	$ (9,147)	$ (7,228)
Net cash used in investing activities	(29,069)	(25)
Net cash (used in) provided by financing activities	(746)	16,888
Net (decrease) increase in cash and cash equivalents	$ (38,962)	$ 9,635