

Pharnext Announces Encouraging Data from Open-Label Phase 3 Extension Study of PXT3003 in Charcot-Marie-Tooth Disease Type 1A (CMT1A)

- Results suggest sustained safety and efficacy of PXT3003 in CMT1A patients after 25 months of total trial time (Phase 3 trial + open-label extension study)
- CMT1A patients showed improvement or stabilization of disease as measured by the Overall Neuropathy Limitations Scale during the open-label Phase 3 extension study

Conference call in English today at 10:30 p.m. CET (4:30 p.m. ET)

Conference call in French on Tuesday January 7 at 10:00 a.m. CET (4:00 a.m. ET)

PARIS, France, 07:00 p.m., January 6, 2020 (CET) – Pharnext SA (FR0011191287 - ALPHA), a biopharmaceutical company pioneering a new approach to developing innovative drug combinations based on big genomics data and artificial intelligence, today announced encouraging data from the open-label Phase 3 extension study of PXT3003 in patients with Charcot-Marie-Tooth Disease Type 1A (CMT1A).

Data from 185 patients in the 9-month PLEO-CMT open-label extension study (PLEO-CMT-FU) were consistent with prior positive safety and tolerability results in the 15-month, double-blind Phase 3 study (PLEO-CMT). Highlights from a preliminary efficacy analysis¹ of the open-label PLEO-CMT-FU study include:

- Patients improved on the Overall Neuropathy Limitation Scale (ONLS) across all dose cohorts during the extension study as compared to the ONLS decline seen in the placebo group.
- Patients treated with PXT3003 since the start of the Phase 3 program showed ONLS improvement or remained stable at the end of the PLEO-CMT-FU extension study as compared to the ONLS at the beginning of the PLEO-CMT study.
- Patients with a decline in ONLS during their treatment interruption improved upon resuming treatment.

“These data further reinforce our confidence in the safety and efficacy signals from the previous clinical studies,” said Daniel Cohen, M.D., Ph.D., co-founder and Chief Executive Officer of Pharnext. *“We look forward to continuing our discussions with the U.S. Food and Drug Administration (FDA) and expect to align on the design of an additional pivotal Phase 3 trial in the first half of 2020, with the goal of initiating the study as soon as possible.”*

“Patients with CMT1A have no pharmacological treatment options for their chronic, progressive hereditary disease,” said Prof. Dr. med. Maggie C. Walter, M.A., Associate Professor of Neurology, Friedrich-Baur-Institute, Dept. of Neurology, Ludwig-Maximilians-University of Munich, Germany. *“Although these data were generated from an open-label study, the data seem to support the efficacy signal observed in the primary Phase 3 trial and suggest potential sustained efficacy over the course of two years.”*

Prof. Florian P. Thomas, M.D., M.A., Ph.D., M.S., Founding Chair & Professor, Department of Neurology, Hackensack Meridian School of Medicine, Hackensack, NJ, USA, said: *“These results provide further argument that PXT3003 could potentially stabilize and even improve neurological function in patients with CMT1A. I am*

¹ Post-hoc analysis

excited by these results and the potential for PXT3003 to serve as a novel and safe therapeutic approach for CMT1A patients.”

PLEO-CMT-FU Study Design

PLEO-CMT-FU is a 9-month, open-label², extension study designed to assess the long-term safety and tolerability of PXT3003 in patients who completed the PLEO-CMT study, a 15-month, double-blind Phase 3 study that assessed the efficacy and safety of PXT3003 in 323 CMT1A patients aged 16 to 65 years. In October 2018, Pharnext announced that PXT3003 met the primary endpoint of ONLS in PLEO-CMT, with a statistically significant difference between the high dose arm and the placebo group ($p=0.008$).

Patients in the low dose (D1) or high dose (D2) arm in PLEO-CMT who opted into the PLEO-CMT-FU study continued at the same respective dose level (D1-D1 or D2-D2), while patients in the placebo arm in PLEO-CMT who chose to participate were randomized 1:1 into the D1 or D2 cohorts (P-D1 or P-D2, respectively). An unexpected intercurrent D2 formulation event in September 2017 led to a discontinuation of the high dose (D2) arm and an interruption in treatment for some subjects either during the Phase 3 PLEO-CMT study, during the PLEO-CMT-FU study, or between the two studies. Following this event, high dose (D2) patients in the extension study received twice the volume of the low dose (D1) formulation in order to deliver the high dose (this unblinding converted the extension study into an open-label study) and all placebo patients were only assigned to the low dose (D1) arm.

Out of the 323 patients enrolled in PLEO-CMT, 187 patients entered the extension study, PLEO-CMT-FU, of which 185³ were analyzed, with 62 in the D1-D1 group, 69 in the D2-D2 group, 46 in the P-D1 group and 8 in the P-D2 group.

Data was then grouped for three distinct time periods (see graph in annex):

- 1) PLEO-CMT: double-blind Phase 3 study (two doses of PXT3003 *versus* placebo)
- 2) Interruption
- 3) PLEO-CMT-FU: analysis only includes the longest uninterrupted treatment period during the extension study

PLEO-CMT-FU Results

A preliminary efficacy analysis of ONLS, a disability scale which is the primary endpoint of PLEO-CMT, showed an improvement in all groups in PLEO-CMT-FU when compared to placebo patients (pooled P-D1 + P-D2) during the PLEO-CMT study (estimate/year⁴: -0.30, 95% CI [-0.48; -0.12], $p = 0.001$). Patients on the placebo arm (pooled P-D1 + P-D2) during the Phase 3 PLEO-CMT study, after switching to dose D1 or D2 during PLEO-CMT-FU, demonstrated an ONLS improvement when compared to their ONLS decline in the PLEO-CMT study (estimate/year⁴: -0.24, 95% CI [-0.47; -0.01], $p= 0.038$).

Results of both studies: PLEO-CMT and PLEO-CMT-FU including interruption period

Patients on D1 or D2 during both PLEO-CMT and PLEO-CMT-FU on average remained stable or improved in ONLS at the end of the PLEO-CMT-FU study as compared to the beginning of the PLEO-CMT study. This ONLS change was observed over approximately 25 months of trial despite a mean of 5 months of interruption (see graph in annex). Highlights include:

² Open-label clinical trial means that study participants and investigators both know which treatment the patient is receiving. Open-label trials can be used to compare treatments or gather additional information about the long-term effects in the intended patient population. Patients who completed the Phase 3 PLEO-CMT clinical trial were eligible to continue in the PLEO-CMT-FU open-label study where all participants are eligible to receive active treatment for an extended period of time.

³ 187 patients were enrolled; however, 2 patients were excluded as outliers due to extraordinary circumstances considered unrelated to treatment.

⁴ A negative estimated change to the ONLS score means clinical improvement.

- Patients in D2-D2 (n=69), on average, had lower duration of treatment (9.5 months) during PLEO-CMT due to the D2 arm discontinuation following the D2 formulation intercurrent event. These patients in D2-D2 then seemed to remain stable on the ONLS disability scale during an 8-month mean interruption. A trend to improvement was observed upon resuming treatment during a mean of 8 months (see graph in annex). The cumulative change over 25 months of total trial time showed a -0.26 point ONLS improvement.
- Patients in D1-D1 (n=62) experienced a decline of +0.14 point ONLS (SE = 0.06) during a 2-month mean interruption while improving -0.12 point ONLS (SE = 0.08) upon resuming treatment.

This extension study was open-label and therefore should be cautiously interpreted, but these preliminary results would further support the potential long-term benefit of PXT3003 for CMT1A patients.

Pharnext expects to keep patients currently enrolled in the Phase 3 extension study on treatment until PXT3003 is commercially available.

Pharnext plans to provide a more detailed analysis during the first half of 2020.

Regulatory Update

In August 2019, the FDA asked that Pharnext conduct an additional Phase 3 study to evaluate PXT3003 in CMT1A due to the large amount of missing data caused by the intercurrent event in the Phase 3 PLEO-CMT study. The Company expects to align with the FDA on the protocol for this second Phase 3 study in the first half of 2020. Pharnext also plans to use the additional Phase 3 study to support a Marketing Authorization Application in Europe and thus align the European and U.S. regulatory plans.

Conference Call

Pharnext will host a live conference call and webcast at 10:30 p.m. CET (4:30 p.m. ET) today to discuss the data. The conference call may be accessed by dialing 0170807153 (France), 866-417-2001 (USA), or 409-217-8230 (International) and referring to conference ID 9786868. A live webcast and accompanying slides will be available on the Pharnext website at www.pharnext.com/en/investors/presentation. An archived webcast will be available on Pharnext's website approximately two hours after the conference call.

Pharnext will also host a live conference call in French at 10:00 a.m. CET (4:00 a.m. ET) on Tuesday January 7. The conference call may be accessed by dialing 0176772819 (France), 800-497-0398 (USA) and referring to conference ID 9069392.

About Pharnext

Pharnext is an advanced clinical-stage biopharmaceutical company developing novel therapeutics for orphan and common neurodegenerative diseases that currently lack curative and/or disease-modifying treatments. Pharnext has two lead products in clinical development. PXT3003 completed an international Phase 3 trial with positive topline results for the treatment of Charcot-Marie-Tooth disease type 1A and benefits from orphan drug status in Europe and the United States. PXT864 has generated encouraging Phase 2 results in Alzheimer's disease. Pharnext has developed a new drug discovery paradigm based on big genomics data and artificial intelligence: PLEOTHERAPY™. Pharnext identifies and develops synergic combinations of drugs called PLEODRUG™. The Company was founded by renowned scientists and entrepreneurs including Professor Daniel Cohen, a pioneer in modern genomics, and is supported by a world-class scientific team. More information at www.pharnext.com.

Pharnext is listed on the Euronext Growth Stock Exchange in Paris (ISIN code: FR0011191287).

Disclaimer:

This press release contains certain forward-looking statements concerning Pharnext and its business. Such forward-looking statements are based on assumptions that Pharnext considers to be reasonable. However, there can be no assurance that the estimates contained in such forward-looking statements will be verified, which estimates are subject to numerous risks including the risks set forth in Pharnext's document de base filed with the AMF on June 2, 2016 under number I.016-0050 as well as in its annual periodic management

reports and press releases (copies of which are available on www.pharnext.com) and to the development of economic conditions, financial markets and the markets in which Pharnext operates. The forward-looking statements contained in this press release are also subject to risks not yet known to Pharnext or not currently considered material by Pharnext. The occurrence of all or part of such risks could cause actual results, financial conditions, performance or achievements of Pharnext to be materially different from such forward-looking statements. Pharnext disclaims any intention or obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

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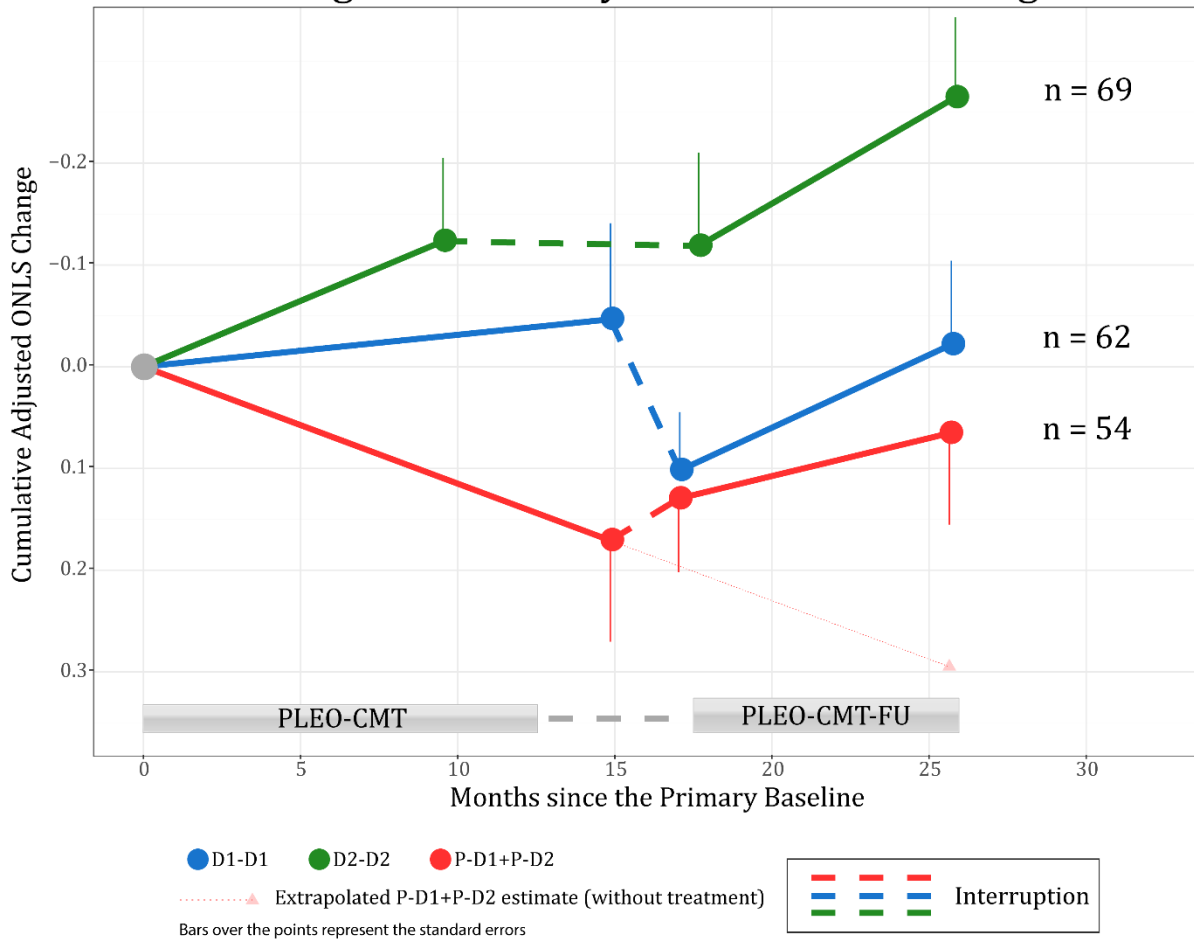
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Annex:

Longitudinal Analysis of the ONLS Change



Legend

PLEO-CMT

- with medication or Placebo
- on average, shorter treatment period for D2 with 9.5 months versus 12-15 months for D1 or Placebo

Interruption:

- partial interruption time: P-D1+P-D2 \approx 40%, D1 \approx 30%, D2 \approx 60% of total interruption
- occurred for 100% of D2 cohort, 42% of D1 cohort and 50% of P-D1 + P-D2 cohorts

PLEO-CMT-FU:

- with uninterrupted medication.
- average treatment duration of 8 months