



PILA PHARMA AB

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PILA PHARMA ANNOUNCES PRECLINICAL PROOF-OF-CONCEPT ACHIEVED IN CARDIOVASCULAR DISEASE STUDY

PILA PHARMA AB (publ) (“PILA PHARMA” or the “Company”) today announces the completion of the study of the Research Group of Professor [Dick Wågsäter](#), Uppsala University, Sweden (the “Research Group”). The preliminary results showed that PILA PHARMA’s lead candidate, the TRPV1 antagonist, XEN-D0501, significantly reduced Abdominal Aorta Aneurysm growth in mice, establishing preclinical proof-of-concept.

The hypothesis is that PILA PHARMA’s TRPV1 antagonist XEN-D0501 can reduce the chronic inflammation that leads to cardiovascular disease including aorta dilatation. Thus, XEN-D0501 could potentially prevent the lethal end-stage development of Abdominal Aorta Aneurysm (AAA).

The aim of the preclinical study was to establish a pre-clinical proof-of-concept of that the TRPV1 antagonist XEN-D0501 could decrease Abdominal Aorta Aneurysm growth in mice.

The headline study results show that XEN-D0501 had a robust decrease in aorta dilatation of more than 50% compared to placebo, which was the goal. It almost completely inhibited aneurysm development in this pre-clinical model, thus, establishing proof-of-concept. Pending a confirmatory study, the data will be published and presented in a scientific outlet.

Professor Dick Wågsäter comments: *“I’m very impressed with the results of PILA PHARMA’s TRPV1 antagonist and these preliminary data are really beyond my expectations. The XEN-D0501 preliminary data are promising and we will be validating them in the coming period. In addition we want to analyze and understand the mechanisms behind these effects.”*

CSO Dorte X. Gram comments: *“I’m really pleased to see the data supports my hypothesis that inflammation is a very central element of cardiometabolic diseases and that an anti-inflammatory TRPV1 antagonist could thus be an effective treatment. The extent of the XEN-D0501 effect seen in this mouse study were really profound, and they support further studies to demonstrate to what extend XEN-D0501 can effectively prevent aneurysms in humans with AAA.*

CEO Gustav H. Gram comments: *“It’s really pleasing to see results as good as these, further strengthening the case of treating diseases with an inflammatory background with our lead candidate XEN-D0501’s and its great profile. As we try to establish PILA PHARMA and develop its pipeline of projects around TRPV1 as a target, exploring XEN-D0501’s effect in different metabolic indications is of great importance. Whilst we await a date for scientific advice regarding the safety study in people living with obesity and diabetes, it’s great to prove that we can progress and generate data for a new cardiovascular disease, further supporting the hypothesis of inflammation being the key factor. Our ambition is to continue generating data in metabolic diseases and pain, specifically the rare disease Erythromelalgia.*

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This information is such information that PILA PHARMA AB is obliged to publish in accordance with the EU Market Abuse Regulation. The information was submitted for publication on 18 December 2024 at 15:00 CET.



PILA PHARMA's share ticker PILA is subject to trade on Nasdaq First North Growth Market, Sweden with Aqurat Fondkommission AB as Certified Adviser. Contact: M: ca@aquarat.se, T: +46 (0)8 684 05 800

About PILA PHARMA AB (Publ)

PILA PHARMA is a Swedish biotech company based in Malmö, Sweden. The aim of the company is to develop TRPV1 antagonists as a novel treatment of type 2 diabetes and potentially of other diseases with an inflammatory background. The Company owns a TRPV1 asset with data and chemical entities including the development candidate XEN-D0501. Further, the Company owns use-patents covering the use of TRPV1-antagonists as treatment of obesity and diabetes and intends to submit further patents regarding the synthesis, formulation, or use of XEN-D0501 or back-up compounds. In July 2022, the Company was awarded orphan drug designation ("Orphan drug designation") for XEN-D0501 as a treatment for erythromelalgia. PILA PHARMA currently focuses on 3 projects within Type-2 Diabetes, Erythromelalgia, and Abdominal Aorta Aneurysm.

About XEN-D0501 and TRPV1 antagonists

XEN-D0501 is a selective, synthetic potent small molecule TRPV1 antagonist that was in-licensed in 2016. TRPV1 antagonists that down-regulate neurogenic inflammation, has demonstrated applications across pain and inflammatory diseases and potentially plays a role in diabetes and potentially other metabolic disorders like obesity. Prior to in-licensing, XEN-D0501 had been found to have a good safety profile in other (non-diabetic) patient groups. PILA PHARMA has to date completed two phase 2a clinical trials (PP-CT01 and PP-CT02), that both demonstrated that XEN-D0501 is well tolerated by in people living with obesity and type 2 diabetes. Further, PP-CT02, demonstrated that XEN-D0501 (administered as 4 mg bi-daily for 28 days) - with statistical significance versus placebo - enhanced the endogenous insulin response to oral glucose. Furthermore, ANP, a cardiovascular biomarker for heart failure, was highly statistically significantly reduced. During 2023 the Company could report very good tolerability of XEN-D0501 following 13 weeks administration of very high doses in 2 animal species, and XEN-D0501 can thus progress into longer clinical trials. Currently, a scientific advice regarding the study design of the next clinical phase 2a trial, PP-CT03, is being prepared and will be followed by a clinical trial submission in the UK. The objective of the study is to identify the maximal tolerable dose of XEN-D0501 in people living with obesity and type 2 diabetes and to evaluate the safety profile following 3 months chronic treatment. In addition to the safety assessment, PP-CT03 will also include sufficient participants that should allow for efficacy readouts on reduction of body weight.

About Diabetes and Obesity

Diabetes is a globally spanning pandemic with a staggering estimated prevalence of more than 537 million people living with diabetes corresponding to approximately 8-10% of the global adult population. Among these, its estimated that more than approximately 90 % of all diabetics suffer from type-2 diabetes, whilst approximately less than 10% suffers from type-1 diabetes. Despite recent therapeutic advances, large and growing unmet needs exist both from efficacy, safety, and accessibility standpoints.

Obesity is an even larger pandemic with estimates of more than 1 billion people suffering from it in 2025. It is most often preceding the development of type 2 diabetes and is a serious risk-factor for not only developing type 2 diabetes but also co-morbidities resulting in "whole body dysfunction" and subsequent development of several diseases. The accumulated effect is a year-long reduction in quality of life for obese people with or without diabetes. Obesity leads to an increased risk of developing cardiovascular disease that eventually results in premature death and shortening of life duration. Recent advances by "Big Pharma" in the development of effective anti-obesity drugs, has proven that pharmacological weight management is possible and leads to obvious quality-of-life and longevity benefits for people living with obesity. Even long-term, public health costs are expected to be reduced if the clinically negative effects of the obesity pandemic are limited. This has sparked a general interest in future potential oral treatments that can meet the accessibility criteria needed to stimulate growing demand, and several acquisitions have been done in the obesity segment recently.

About Erythromelalgia

Erythromelalgia is a rare disease where neurogenic inflammation plays a role in the development of symptoms. The disease can cause near-constant or episodic pain (ranging from mild tingling to severe burning sensations), and redness to extremities. It most commonly affects the feet but may also occur in the hands, face, or other parts of the body with both nerves and blood vessels involved. Symptoms are frequently managed through avoidance of pain triggers. The disorder can be extremely debilitating, with a



significant negative impact on quality of life and with potential to impact mortality rates among young people and the suicide rates among adults. Pila Pharma aims to conduct a small proof of concept study in persons with erythromelalgia to demonstrate an effect of XEN-D0501 on reducing perceived pain during "flare ups". There are no current treatments available to patients. PILA PHARMA has made a development plan for this project.

About Abdominal Aorta Aneurysm

Abdominal Aorta Aneurysm is a cardiovascular disease with 'ballooning' of the lower part of the main artery of the body, aorta. The cause is unknown, but risk factors are atherosclerosis, high blood pressure, cardiovascular inflammation and infection as well as trauma. It affects millions of people globally and accounts for the death of 1% of men over the age of 65. It develops gradually over several years up to a dilatation of more than 3mm in diameter when surgery to insert a stent to prevent rupture is then the only treatment option, which is both expensive and with possibility for complications. Currently no preventive treatment is available. In November 2023 a research collaboration was entered with Professor Dick Wågsäter from Uppsala University. In December 2024, PILA PHARMA's TRPV1 antagonist, XEN-D0501, was shown to largely decrease Abdominal Aorta Aneurysm growth in mice, thus establishing preclinical proof-of-concept. A validation process is now ongoing in anticipation of creating a development plan.