PRESS RELEASE

Inventiva announces the initiation of its pivotal Phase III clinical trial evaluating lanifibranor in NASH

- Activation of first clinical sites and start of patient screening
- The two-part NATiV3 Phase III clinical trial will evaluate the long-term efficacy and safety of lanifibranor in adult patients with non-cirrhotic NASH and F2/F3 stage of liver fibrosis
- The primary endpoint of the trial's part 1 will evaluate the response to the treatment defined by both resolution of NASH and fibrosis improvement of at least one stage
- Publication of topline results of part 1 of the trial is expected for H2 2024
- Based on the results of part 1 of the NATiV3 trial, Inventiva intends to seek U.S. accelerated approval and EU conditional approval for lanifibranor

Daix (France), September 8, 2021 – Inventiva (Euronext Paris and Nasdaq: IVA), a clinical-stage biopharmaceutical company focused on the development of oral small molecule therapies for the treatment of non-alcoholic steatohepatitis (NASH), mucopolysaccharidoses (MPS) and other diseases with significant unmet medical need, today announced the initiation of its NATiV3 Phase III clinical trial evaluating lanifibranor for the treatment of NASH.[1] The first clinical trial sites have been activated in the United States and first patients have been screened. In addition, more than 330 sites across 25 countries have already been qualified[2] of which more than a third in the United States.

NATiV3 (NASH lanifibranor Phase 3 trial) is a randomized, double-blind, placebo-controlled, Phase III clinical trial evaluating the long-term efficacy and safety of lanifibranor (800mg/daily and 1200mg/daily) in adult patients with biopsy-proven non-cirrhotic NASH and F2/F3 stage of liver fibrosis.

The clinical trial includes two parts: a 72-week treatment of approximately 900 patients to assess the effect of lanifibranor on the primary composite endpoint of NASH resolution and fibrosis improvement of at least one stage and on the key secondary endpoints of NASH resolution with no worsening of fibrosis, and improvement of fibrosis with no worsening of NASH (part 1). Following part 1, the trial will remain blinded and continue in approximately 2,000 patients to evaluate the effect of lanifibranor on delaying NASH disease progression, measured by a composite endpoint that includes progression to cirrhosis, liver-related clinical outcome events, and all-cause death, as compared to the placebo control arm (part 2).

The primary composite endpoint of part 1 of the NATiV3 Phase III clinical trial is identical to the composite efficacy endpoint used in Inventiva's NATIVE Phase IIb clinical trial which was met by both lanifibranor doses with statistical significance, including in NASH patients with F2/F3 fibrosis and NASH patients with type 2 diabetes (T2DM).

[1] For more details, please refer to: clinicaltrial.gov/NCT04849728.
[2] Site qualification is the process by which the study sponsor, in this case Inventiva, and/or clinical research organization determine whether the investigator and the clinical site have the resources and capabilities necessary to conduct the study.

The last visit of the last patient enrolled in part 1 of the NATiV3 Phase III clinical trial is planned for the first half of 2024, with the publication of the topline results of part 1 of the trial expected for the second half of 2024.

If part 1 of the NATiV3 trial is successful, Inventiva intends to seek accelerated approval in the United States and conditional approval in the EU for lanifibranor. The study will also provide a comprehensive safety data set to evaluate, in combination with the therapeutic efficacy data, the benefit/risk ratio of lanifibranor therapy as the basis for full regulatory approval in both the United States and the EU following completion of part 2 of the trial.

Prof. Sven Francque, M.D., Ph.D., Antwerp University Hospital and co-principal investigator of the NATiV3 Phase III clinical trial, said: "*The start of the pivotal Phase III clinical trial with lanifibranor represents a key milestone in its development, as well as for the patient community and the NASH field more generally. During the NATIVE Phase IIb trial, 21% and 31% of patients in the lanifibranor 800mg/day and 1200mg/day dose groups respectively achieved the Phase III primary composite endpoint after only 24 weeks of treatment compared to 7% in the placebo arm. These results give us great confidence in the NATiV3 trial and the potential of lanifibranor.*"

Prof. Arun Sanyal, M.D., Virginia Commonwealth University and co-principal investigator of the NATiV3 Phase III clinical trial, added: *"As an orally-available small molecule and the only pan-PPAR agonist currently in clinical development for the treatment of NASH, lanifibranor has shown a unique and very promising mechanism of action thus far. Based on its favorable safety profile and efficacy results observed in the previous Phase IIb trial, we are very excited about the potential benefits lanifibranor could bring to patients."*

Dr. Michael Cooreman, Chief Medical Officer of Inventiva, commented: "*We are pleased to announce the start of our highly-anticipated NATiV3 Phase III clinical trial in NASH. While NASH patients continue to suffer from this devastating disease without any approved treatment available today, our entire team is fully committed to addressing this critical, unmet medical need. We have decided to replicate several key elements of the previous Phase IIb trial, including using the same patient enrollment screening criteria, and have developed a central biopsy review process in alignment with regulatory authorities. We believe in the therapeutic potential of lanifibranor, which should put us in a strong position to seek accelerated approval in the US and conditional marketing authorization in the EU."*

The initiation of the NATiV3 trial follows the publication of positive results from Inventiva's NATIVE Phase IIb clinical trial with lanifibranor in NASH in June 2020 as well as its designation as Breakthrough Therapy by the U.S. Food and Drug Administration (FDA) in October 2020.

About the NATiV3 Phase III trial

The two-part NATiV3 (NASH lanifibranor Phase 3 trial) clinical trial is a randomized, double-blind, placebo-controlled trial, evaluating the long-term efficacy and safety of lanifibranor in adult patients with non-cirrhotic NASH and F2/F3 stage of liver fibrosis.

Patients will be randomized 1:1:1 in placebo and treatment arms (800mg/daily or 1200mg/daily of lanifibranor) and stratified based on their fibrotic stage (F2 and F3) as well as presence or absence of type 2 diabetes (T2DM).

Part 1 of the trial will assess the effect of lanifibranor (800mg/daily and 1200mg/daily) compared to placebo on the primary composite endpoint of NASH resolution and improvement of fibrosis of at least one stage. The key secondary enpoints include NASH resolution without worsening of fibrosis as well as improvement of fibrosis and no worsening of NASH. Part 1 is expected to recruit approximately 900 patients selected upon liver biopsy and enrolled in approximately 300 sites, with the objective to obtain accelerated approval from the Food and Drug Administration (FDA) in the United States and conditional approval from the European Medicines Agency (EMA) in the EU for lanifibranor based on a pre-specified histology analysis after 72 weeks of treatment. The last visit of

the last patient for part 1 is scheduled for the first half of 2024 and the publication of topline results for the second half of 2024.

Part 2 will follow the 72-week histology analysis and will assess the effect of lanifibranor (800mg/daily and 1200mg/daily) compared to placebo on delaying NASH disease progression measured by a composite endpoint that includes progression to cirrhosis, liver-related clinical outcome events, and all-cause death. In part 2, the trial will remain blinded and continue in a total of approximately 2,000 patients until the occurrence of a pre-specified number of liver-related clinical events. The trial would be completed on a post-marketing basis in the event that accelerated (U.S.) / conditional (EU) approval is received. Based on the results from part 2, Inventiva plans to seek full regulatory approval for lanifibranor in both the United States and the EU.

In addition to the key primary and secondary endpoints, the impact of lanifibranor on biomarkers of metabolic health will be evaluated as part of the trial. The occurrence of Major Adverse Cardiovascular Events (MACE), such as myocardial infarction and stroke, will also be evaluated as an exploratory efficacy endpoint and to establish the safety profile of lanifibranor.

About lanifibranor

Lanifibranor, Inventiva's lead product candidate, is an orally-available small molecule that acts to induce anti-fibrotic, anti-inflammatory and beneficial vascular and metabolic changes in the body by activating all three peroxisome proliferator-activated receptor (PPAR) isoforms, which are well-characterized nuclear receptor proteins that regulate gene expression. Lanifibranor is a PPAR agonist that is designed to target all three PPAR isoforms in a moderately potent manner, with a well-balanced activation of PPARα and PPARδ, and a partial activation of PPARγ. While there are other PPAR agonists that target only one or two PPAR isoforms for activation, lanifibranor is the only pan-PPAR agonist in clinical development. Inventiva believes that lanifibranor's moderate and balanced pan-PPAR binding profile contributes to the favorable tolerability profile that has been observed in clinical trials and pre-clinical studies to date. The FDA has granted Breakthrough Therapy and Fast Track designation to lanifibranor for the treatment of NASH.

About NASH

Non-alcoholic steatohepatitis (NASH) is a serious liver disease characterized by excessive fat accumulation in the liver, chronic inflammation and tissue injury (hepatitis), resulting in progressive fibrosis that can lead to cirrhosis, and subsequently portal hypertension, liver insufficiency and potential liver cancer. The prevalence of NASH is rapidly increasing globally in parallel to the growing epidemics of obesity and type 2 diabetes (T2DM); correspondingly, the proportion and number of liver transplants attributable to NASH has expanded considerably in the past years. To date, there are still no drug therapies approved for the treatment of NASH.

About Inventiva

Inventiva is a clinical-stage biopharmaceutical company focused on the development of oral small molecule therapies for the treatment of NASH, MPS and other diseases with significant unmet medical need.

Leveraging its expertise and experience in the domain of compounds targeting nuclear receptors, transcription factors and epigenetic modulation, Inventiva is currently advancing two clinical candidates, as well as a deep pipeline of earlier stage programs.

Lanifibranor, its lead product candidate, is being developed for the treatment of patients with NASH, a common and progressive chronic liver disease for which there are currently no approved therapies. Inventiva recently announced positive topline data from its Phase IIb clinical trial evaluating lanifibranor for the treatment of patients with NASH and obtained Breakthrough Therapy and Fast Track designation for lanifibranor in the treatment of NASH.

Inventiva is also developing odiparcil, a second clinical stage asset, for the treatment of patients with subtypes of MPS, a group of rare genetic disorders. Inventiva announced positive topline data from its Phase IIa clinical trial evaluating odiparcil for the treatment of adult MPS VI patients at the end of 2019 and received FDA Fast Track designation in MPS VI for odiparcil in October 2020.

In parallel, Inventiva is in the process of selecting an oncology development candidate for its Hippo signalling pathway program. Furthermore, the Company has established a strategic collaboration with AbbVie in the area of autoimmune diseases. AbbVie has started the clinical development of ABBV-157, a drug candidate for the treatment of moderate to severe psoriasis resulting from its collaboration with Inventiva. This collaboration enables Inventiva to receive milestone payments upon the achievement of pre-clinical, clinical, regulatory and commercial milestones, in addition to royalties on any approved products resulting from the collaboration.

The Company has a scientific team of approximately 70 people with deep expertise in the fields of biology, medicinal and computational chemistry, pharmacokinetics and pharmacology, as well as in clinical development. It also owns an extensive library of approximately 240,000 pharmacologically relevant molecules, approximately 60% of which are proprietary, as well as a wholly-owned research and development facility.

Inventiva is a public company listed on compartment C of the regulated market of Euronext Paris (ticker: IVA - ISIN: FR0013233012) and on the Nasdaq Global Market in the United States (ticker: IVA). www.inventivapharma.com

Contacts

Inventiva
Pascaline Clerc
VP of Global External Affairs
media@inventivapharma.com
+1 240 620 9175

Brunswick Group
Yannick Tetzlaff /
Tristan Roquet Montegon /
Aude Lepreux
Media relations
inventiva@brunswickgroup.com
+33 1 53 96 83 83

Westwicke, an ICR Company
Patricia L. Bank
Investor relations
Patti.bank@westwicke.com
+1 415 513 1284

Important Notice

This press release contains forward-looking statements, forecasts and estimates with respect to Inventiva's clinical trials, clinical trial data releases, clinical development plans and anticipated future activities of Inventiva. Certain of these statements, forecasts and estimates can be recognized by the use of words such as, without limitation, "believes", "anticipates", "expects", "intends", "plans", "seeks", "estimates", "may", "will" and "continue" and similar expressions. Such statements are not historical facts but rather are statements of future expectations and other forward-looking statements that are based on management's beliefs. These statements reflect such views and assumptions prevailing as of the date of the statements and involve known and unknown risks and uncertainties that could cause future results, performance or future events to differ materially from those expressed or implied in such statements. Actual events are difficult to predict and may depend upon factors that are beyond Inventiva's control. There can be no guarantees with respect to pipeline product candidates that the clinical trial results will be available on their anticipated timeline, that future clinical trials will be initiated as anticipated, or that candidates will receive the necessary regulatory approvals. Actual results may turn out to be materially different from the anticipated future results, performance or achievements expressed or implied by such statements, forecasts and estimates, due to a number of factors, including that Inventiva is a clinical-stage company with no approved products and no historical product revenues, Inventiva has incurred significant losses since inception, Inventiva has a limited operating history and has never generated any revenue from product sales, Inventiva will require additional capital to finance its operations, Inventiva's future success is dependent on the successful clinical development, regulatory approval and subsequent commercialization of current and any future

product candidates, preclinical studies or earlier clinical trials are not necessarily predictive of future results and the results of Inventiva's clinical trials may not support Inventiva's product candidate claims, Inventiva may encounter substantial delays in its clinical trials or Inventiva may fail to demonstrate safety and efficacy to the satisfaction of applicable regulatory authorities, enrollment and retention of patients in clinical trials is an expensive and time-consuming process and could be made more difficult or rendered impossible by multiple factors outside Inventiva's control, Inventiva's product candidates may cause adverse drug reactions or have other properties that could delay or prevent their regulatory approval, or limit their commercial potential, Inventiva faces substantial competition and Inventiva's business, and preclinical studies and clinical development programs and timelines, its financial condition and results of operations could be materially and adversely affected by the current COVID-19 pandemic. Given these risks and uncertainties, no representations are made as to the accuracy or fairness of such forward-looking statements, forecasts and estimates. Furthermore, forward-looking statements, forecasts and estimates only speak as of the date of this press release. Readers are cautioned not to place undue reliance on any of these forward-looking statements.

Please refer to the Universal Registration Document for the year ended December 31, 2020 filed with the Autorité des Marchés Financiers on March 15, 2021, the Annual Report on Form 20-F for the year ended December 31, 2020 filed with the Securities and Exchange Commission on March 15, 2021 as well as the full-year financial report for the year ended December 31, 2020 for additional information in relation to such factors, risks and uncertainties.

Except as required by law, Inventiva has no intention and is under no obligation to update or review the forward-looking statements referred to above. Consequently, Inventiva accepts no liability for any consequences arising from the use of any of the above statements.