

Inventiva announces five scientific presentations at the EASL International Liver Congress[™] 2023

Five poster presentations showing :

- the correlation between the improvement of hepatic steatosis and a robust increase in adiponectin levels, improvement in lipid profile and glycemic control in patients with non-cirrhotic NASH treated with lanifibranor.
- the Early improvement in ALT or AST being predictive of response pattern of liver histology as well as non-invasive hepatic and cardiometabolic biomarkers observed after 24-week treatment with lanifibranor in patients with non-cirrhotic NASH.
- the improvement of portal hypertension and splanchnic circulation independently of fibrosis reduction and metabolic improvement following lanifibranor treatment in a mouse model of prehepatic portal hypertension.
- the reduction of the increased portal pressure and improvement of steatosis in a rat model of early NAFLD following a 4-week lanifibranor treatment.
- \circ the greater reduction of the increased portal pressure associated with early NAFLD following lanifibranor treatment compared to the PPAR agonists α, δ or y individually.

Daix (France), Long Island City (New York, United States), June 7, 2023 – 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) and other diseases with significant unmet medical needs, today announced that five abstracts have been selected for poster presentation at the upcoming International Liver Congress[™] 2023 hosted by the European Association for the Study of the Liver (EASL) on June 21-24, 2023 in Vienna, Austria.

The first abstract evaluates the correlation between severity and improvement of hepatic steatosis, adiponectin response, and improvement of markers of cardiometabolic health following a 24 weeks treatment with lanifibranor. Based on the results of Inventiva's NATIVE Phase IIb clinical trial evaluating lanifibranor in NASH, the authors analysed the correlation between the biomarkers of cardiometabolic health and hepatic steatosis, which is a marker of cardiovascular risk, in patients who were randomized to lanifibranor or placebo. The hepatic steatosis was measured by histological grading and by imaging using Controlled Attenuation Parameter ("CAPTM") Fibroscan[®]. As previously shown, treatment with lanifibranor improved the hepatic steatosis and the biomarkers of cardiometabolic health, including adiponectin, insulin resistance and markers of lipid and glucose metabolism. In this analysis, these beneficial cardiometabolic effects were shown to be correlated with an improvement in steatosis both measured histologically and using CAP.

The second abstract focuses on the identification of non-invasive tests as potential predictor tools of histological response or non-response to lanifibranor. Based on the data of the NATIVE trial, the authors evaluated the ability early improvements in aminotransferase levels measured after a 4-week treatment with lanifibranor to predict the histological non-responses to treatment evaluated at 24 weeks. The results



demonstrated that in patients with NASH treated with lanifibranor, the absence of a 15% reduction in alanine aminotransferase ("ALT") levels after 4 weeks of treatment was an effective tool to predict non-response on histological NASH resolution. In addition, the early decrease in ALT and aspartate aminotransferase ("AST") after 4 weeks of treatment with lanifibranor, correlated with an improvement of non-invasive hepatic biomarkers and markers of cardiometabolic health observed after 24 weeks of treatment with lanifibranor.

The third abstract evaluates the effect of lanifibranor on the portal pressure in models of hepatic and prehapetic portal hypertension. Given that portal hypertension ("PHT") can cause severe complications in patients with advanced chronic liver disease ("ACLD"), the authors evaluated the effect of a daily treatment with lanifibranor on portal hypertension in two mice models of portal hypertension. They demonstrated that lanifibranor reduced the portal pressure independently of fibrosis reduction or of an effect on metabolism, but through the reduction of the venous mesenteric vascular expansion and splanchnic angiogenesis, and an amelioration of the liver sinusoidal endothelial cells.

The fourth abstract evaluates the effect of lanifibranor on portal pressure, endothelial dysfunction and liver histology in a rat model of early NAFLD. The authors demonstrated that in an early NAFLD-induced rat model without inflammation or fibrosis, lanifibranor treatment completely normalized the portal pressure and the transhepatic pressure gradient. In addition lanifibranor improved the hyperreactivity to the vasoconstrictor methoxamine and the hyporeactivity to the vasodilator acetylcholine in the NAFLD-induced rat model. In parallel, the authors also demonstrated the reduction of steatosis evaluated histologically, although not sufficient to explain the observed vascular effects.

The fifth abstract compares the effect of each individual PPAR isotopes α , δ and γ to the pan-PPAR lanifibranor on the improvements of the vascular alterations and histology in a NAFLD-induced rat model. The authors demonstrated that in a rat model of early NAFLD with steatosis but no inflammation or fibrosis, treatment with Fenofibrate (PPAR-alpha agonist), GW501516 (PPAR-delta agonist) and Rosiglitazone (PPAR-gamma) decreased the portal pressure and the transhepatic pressure gradient with a limited effect on the hepatic steatosis. The improvements on the vascular function were more pronounced with lanifibranor than with each individual PPAR agonist. These data suggest that there is an additive effect of combined PPAR agonists compared to mono-agonist leading to an greater improvement of the vascular alterations in early NAFLD.

The details of the various presentations are as follows:

<u>Abstract #1</u> : Abstract title:	"Correlation between severity of hepatic steatosis and markers of cardiometabolic health, and effect of lanifibranor therapy in patients with non-cirrhotic NASH"
Abstract identifier:	FRI-517
Presentation type:	Poster presentation
Authors:	Michael P Cooreman, Sven Francque, Philippe Huot-Marchant, Lucile Dzen, Martine Baudin, Jean-Louis Junien, Pierre Broqua, Manal F Abdelmalek
Date:	June 23, 2023 – 9:00-18:00 (CEST)
Abstract #2:	
Abstract title:	"Early aminotransferase improvement in the phase 2b NATIVE study is predictive of response pattern of liver histology as well as hepatic and cardiometabolic health markers at the end of treatment in patients with non-cirrhotic NASH"
Abstract identifier: Presentation type:	SAT-393 Poster presentation



Authors:	Quentin M Anstee, Philippe Huot-Marchand, Lucile Dzen, Jean-Louis Junien, Pierre Broqua, Sven Francque, Manal F Abdelmalek, Michael P Cooreman, Stephen A Harrison
Date:	June 24, 2023 – 9:00-17:00 (CEST)
Abstract #3:	
Abstract title:	"The pan-PPAR agonist lanifibranor decreases portal pressure in models of both hepatic and prehepatic portal hypertension"
Abstract identifier:	THU-361
Presentation type:	Poster presentation
Authors:	Anneleen Heldens, Christophe Casteleyn, Louis Onghena, Milton Baoheng Antwi, Benedicte Descamps, Christian Vanhove, Xavier Verhelst, Hans Van Vlierberghe, Lindsey Devisscher, Jean-Louis Junien, Anja Geerts, Guillaume Wettstein, Sander Lefere
Date:	June 22, 2023 – 9:00-18:30 (CEST)
<u>Abstract #4:</u> Abstract title:	"The pan-PPAR agonist Lanifibranor improves increased portal pressure, endothelial
	dysfunction and liver histology in a rat model of early NAFLD"
Abstract identifier:	WED-466
Presentation type:	Poster presentation
Authors:	Shivani Chotkoe, Yao Liu, Guillaume Wettstein, Jean-Louis Junien, Luisa Vonghia, Hannah Ceuleers, Joris De Man, Benedicte De Winter, Wilhelmus J. Kwanten, Sven Francque
Date:	June 21, 2023 – 9:00-18:00 (CEST)
Abstract #5:	
Abstract title:	"Unraveling the individual contributions of the PPAR isotypes to the pan-PPAR agonist Lanifibranorinduced improvements of the vascular alterations and liver histology in a
	rat model of early NAFLD"
Abstract identifier:	WED-523
Presentation type:	Poster presentation
Authors:	Hannah Ceuleers, Joris De Man, Benedicte De Winter, Wilhelmus J. Kwanten, Sven Francque
Date:	June 21, 2023 – 9:00-18:00 (CEST)

Inventiva will also be present with a booth and we are inviting you to visit us from Wednesday, June 21st until Saturday, June 24th at **booth #19** located in the exhibition hall of the conference center.

About Inventiva

Inventiva is a clinical-stage biopharmaceutical company focused on the research and development of oral small molecule therapies for the treatment of patients with NASH, mucopolysaccharidoses ("MPS") and other diseases with significant unmet medical need. The Company benefits from a strong expertise and experience in the domain of compounds targeting nuclear receptors, transcription factors and epigenetic modulation. Inventiva is currently



advancing one clinical candidate, has a pipeline of two preclinical programs and continues to explore other development opportunities to add to its pipeline.

Inventiva's lead product candidate, lanifibranor, is currently in a pivotal Phase III clinical trial, NATiV3, for the treatment of adult patients with NASH, a common and progressive chronic liver disease for which there are currently no approved therapies.

Inventiva's pipeline also includes odiparcil, a drug candidate for the treatment of adult MPS VI patients. As part of Inventiva's decision to focus clinical efforts on the development of lanifibranor, it suspended its clinical efforts relating to odiparcil and is reviewing available options with respect to its potential further development. Inventiva is also in the process of selecting an oncology development candidate for its Hippo signaling pathway program.

The Company has a scientific team of approximately 90 people with deep expertise in the fields of biology, medicinal and computational chemistry, pharmacokinetics and pharmacology, and clinical development. It 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 B of the regulated market of Euronext Paris (ticker: IVA, ISIN: FR0013233012) and on the Nasdaq Global Market in the United States (ticker: IVA). <u>www.inventivapharma.com</u>

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Important Notice

This press release contains "forward-looking statements" within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, included in this press release are forward-looking statements. These statements include, but are not limited to, forecasts and estimates with respect to Inventiva's pre-clinical programs and clinical trials, including design, duration, timing, recruitment costs, screening and enrolment for those trials, including the ongoing NATiV3 Phase III clinical trial with lanifibranor in NASH and the LEGEND Phase IIa combination trial with lanifibranor and empagliflozin in patients with NASH and type 2 diabetes, potential development of and regulatory pathway for odiparcil, clinical trial data releases and publications, the information, insights and impacts that may be gathered from clinical trials, the potential therapeutic benefits of Inventiva's product candidates, including lanifibranor, potential regulatory submissions and approvals, and Inventiva's pipeline and preclinical and clinical development plans, future activities, expectations, plans, growth and prospects. 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", "would", "could", "might", "should", and "continue" and similar expressions. Such statements are not historical facts but rather are statements of future expectations and other forwardlooking 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.

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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, that product candidates will receive the necessary regulatory approvals, or that any of the anticipated milestones by Inventiva or its partners will be reached on their expected timeline, or at all. 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, in the absence of which, Inventiva may be required to significantly curtail, delay or discontinue one or more of its research or development programs or be unable to expand its operations or otherwise capitalize on its business opportunities and may be unable to continue as a going concern, 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's expectations with respect to the changes to the clinical development plan for lanifibranor for the treatment of NASH may not be realized and may not support the approval of a New Drug Application, 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, the ability of Inventiva to recruit and retain patients in clinical studies, enrolment 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 and geopolitical events, such as the conflict between Russia and Ukraine, related sanctions and related impacts and potential impacts on the initiation, enrolment and completion of Inventiva's clinical trials on anticipated timelines, and macroeconomic conditions, including global inflation, uncertain financial markets and disruptions in banking systems. 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, 2022 filed with the Autorité des Marchés Financiers on March 30, 2023, and the Annual Report on Form 20-F for the year ended December 31, 2022 filed with the Securities and Exchange Commission on March 30, 2023.

All information in this press release is as of the date of the release. 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.