

## Inventiva announces the publication of the results from the investigator-initiated proof-of-concept clinical trial evaluating lanifibranor in patients with T2D and MASLD in the *Journal of Hepatology*

- ▶ As previously reported<sup>1</sup>, the study met the primary efficacy endpoint for the treatment with lanifibranor 800mg demonstrating a 44% reduction of hepatic fat measured by proton magnetic resonance spectroscopy (<sup>1</sup>H-MRS) following 24 weeks of treatment in patients with MASLD and T2D
- ▶ A significantly higher proportion of patients achieved a greater than 30% liver triglyceride reduction as well as MASLD resolution with lanifibranor compared to placebo
- ▶ Lanifibranor treatment significantly improved both hepatic and peripheral insulin sensitivity (i.e. fasting plasma insulin, fasting hepatic glucose production, hepatic insulin resistance index, insulin-stimulated muscle glucose disposal), which translated into better glycemic control (i.e. HbA1c)
- ▶ The study met multiple secondary metabolic endpoints confirming the cardiometabolic benefit of lanifibranor in patients with MASLD, and ability to improve adipose tissue function
- ▶ The study confirmed the favorable safety and tolerability profile of lanifibranor

**Daix (France), New York City (New York, United States), January 29, 2025** – Inventiva (Euronext Paris and Nasdaq: IVA) (“Inventiva” or the “Company”), a clinical-stage biopharmaceutical company focused on the development of oral small molecule therapies for the treatment of metabolic dysfunction-associated steatohepatitis (“MASH”) and other diseases with significant unmet medical needs, today announced the publication in *Journal of Hepatology*, a peer-reviewed scientific journal, of the results from the investigator-initiated clinical study led by Dr. Kenneth Cusi evaluating lanifibranor in patients with type 2 diabetes (“T2D”) and Metabolic dysfunction-Associated Liver Disease (“MASLD”)<sup>1</sup>. The clinical trial demonstrated significant improvement of hepatic, muscle and adipose tissue insulin resistance in patients with MASLD and T2D treated with lanifibranor.

The proof-of-concept trial evaluating lanifibranor (800mg/day for 24 weeks) in 38 patients with MASLD and T2D achieved its primary efficacy endpoint. Patients that received treatment with lanifibranor achieved a 44% reduction in intrahepatic triglycerides (IHTG) measured using proton magnetic resonance spectroscopy (<sup>1</sup>H-MRS), significantly outperforming the placebo group (12%). The treatment with lanifibranor also resulted in a higher proportion of patients achieving over 30% liver triglyceride reduction (65% vs. 22%) and MASLD resolution (25% vs. 0%). Secondary endpoints showed improvements in glycemic control, lipid profiles, hepatic insulin sensitivity, muscle glucose disposal, and adipose tissue function. Lanifibranor was well tolerated with no safety concerns reported.

---

<sup>1</sup> [Press release juin 13 2023](#)

These findings are consistent with those reported in previous trials with lanifibranor and highlight lanifibranor's potential for managing MASLD, T2D, and related metabolic conditions.

**Dr. Kenneth Cusi, Professor of Medicine at the Division of Endocrinology, Diabetes and Metabolism in the Department of Medicine, University of Florida and Principal Investigator of the study, stated:** *"This study highlights the promising potential with lanifibranor, an insulin-sensitizer that has already shown positive effects in patients with MASH. Within just 24 weeks of treatment, we observed significant improvements in hepatic fat, liver and muscle insulin sensitivity, and fat metabolism, reinforcing the strength of lanifibranor's mechanism of action. These results not only offer hope for managing patients with MASH but also bring crucial insights for patients with T2D and MASH—which we know is a patient population at higher risk of faster progression to advanced fibrotic stages."*

**Dr. Michael Cooreman, Chief Medical Officer of Inventiva:** *"We are very happy to see the results of this important clinical study published in the renowned Journal of Hepatology. By demonstrating the effect of lanifibranor on intrahepatic triglycerides reduction and MASLD resolution in patients with type-2 diabetes, this study complements the robust dataset from our Phase IIb NATIVE and Proof-of-Concept LEGEND studies, confirming the potential of lanifibranor as an effective candidate to address the needs of patients suffering from MASH and MASLD. We take this opportunity to express our gratitude and thanks to all patients and investigators, and to Dr. Cusi for successfully leading this study."*

#### Publication details

- Publication title:** *"Pan-PPAR agonist lanifibranor improves insulin resistance and hepatic steatosis in patients with type 2 diabetes and MASLD."*
- Authors:** Diana Barb, Srilaxmi Kalavalapalli, Eddison Godinez Leiva, Fernando Bril, Philippe Huot-Marchand, Lucile Dzen, Jens T Rosenberg, Jean-Louis Junien, Pierre Broqua, Andrea Ortiz Rocha, Romina Lomonaco, Jean Louis Abitbol, Michael P Cooreman, Kenneth Cusi.
- Online version:** doi: 10.1016/j.jhep.2024.12.045. Epub ahead of print. PMID: 39824443.

#### About lanifibranor

Lanifibranor, Inventiva's lead product candidate, is an orally-available small molecule that acts to induce antifibrotic, 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 PPAR $\alpha$  and PPAR $\delta$ , and a partial activation of PPAR $\gamma$ . 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 for the treatment of MASH. 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 MASH.

#### 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 MASH and other diseases with significant unmet medical

need. The Company benefits from a strong expertise and experience in the field 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 MASH, a common and progressive chronic liver disease.

Inventiva's pipeline also includes odiparil, 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 odiparil and is reviewing available options with respect to its potential further development. Inventiva is also in the process of selecting a 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). [www.inventivapharma.com](http://www.inventivapharma.com)

## Contacts

### Inventiva

Pascaline Clerc, PhD  
EVP, Strategy and Corporate Affairs  
[media@inventivapharma.com](mailto:media@inventivapharma.com)  
+1 202 499 8937

### Brunswick Group

Tristan Roquet Montegon /  
Aude Lepreux /  
Julia Cailleteau  
Media relations  
[inventiva@brunswickgroup.com](mailto:inventiva@brunswickgroup.com)  
+33 1 53 96 83 83

### Westwicke, an ICR Company

Patricia L. Bank  
Investor relations  
[patti.bank@icrhealthcare.com](mailto:patti.bank@icrhealthcare.com)  
+1 415 513-1284

## Important notice

*This press release contains certain "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, expectations with respect to Inventiva's pre-clinical programs and clinical trials, including clinical trial data releases and publications, the information, insights and impacts that may be gathered from clinical trials, the potential therapeutic benefits of lanifibranor, including reduction of IHTG, improvement in glycemic control, lipid profiles, hepatic insulin sensitivity, muscle glucose disposal, and adipose tissue function, of Inventiva's product candidates, potential regulatory submissions, approvals and commercialization, Inventiva's pipeline and preclinical and clinical development plans, the potential development of and regulatory pathway for odiparil, and future activities, expectations, plans, growth and prospects of Inventiva and its partners. 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", "designed", "hopefully", "target", "potential", "opportunity", "possible", "aim", 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, 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. Future 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 interim data or data from any interim analysis of ongoing clinical trials may not be predictive of future trial results, the recommendation of the DMC may not be indicative of a potential marketing approval, Inventiva cannot provide assurance on the impacts of the Suspected Unexpected Serious Adverse Reaction on enrollment or the ultimate impact on the results or timing of the NATIV3 trial or regulatory matters with respect thereto, 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 ability to obtain financing and to enter into potential transactions, Inventiva's ability to satisfy in part or full the closing conditions for the second tranche of the financing announced on October 14, 2024 (the "Multi-Tranche Financing"), and whether and to what extent the prefunded warrants issued in connection with the Multi-Tranche Financing may be exercised and by which holders, 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 and its partners' clinical trials may not support Inventiva's and its partners' product candidate claims, Inventiva's expectations with respect to its clinical trials may prove to be wrong and regulatory authorities may require holds and/or amendments to Inventiva's clinical trials, Inventiva's expectations with respect to the clinical development plan for lanifibranor for the treatment of MASH may not be realized and may not support the approval of a New Drug Application, Inventiva and its partners may encounter substantial delays beyond expectations in their clinical trials or fail to demonstrate safety and efficacy to the satisfaction of applicable regulatory authorities, the ability of Inventiva and its partners to recruit and retain patients in clinical studies, 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 and its partners' 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 and its partners' business, and preclinical studies and clinical development programs and timelines, its financial condition and results of operations could be materially and adversely affected by geopolitical events, such as the conflict between Russia and Ukraine and related sanctions, impacts and potential impacts on the initiation, enrollment and completion of Inventiva's and its partners' clinical trials on anticipated timelines and the conflict in the Middle East and the related risk of a larger conflict, health epidemics, and macroeconomic conditions, including global inflation, fluctuations in interest rates, 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, 2023 filed with the Autorité des Marchés Financiers on April 3, 2024 as amended on October 14, 2024 and the Annual Report on Form 20-F for the year ended December 31, 2023 filed with the Securities and Exchange Commission (the "SEC") on April 3, 2024 and the Half-Year Report for the six months ended June 30, 2024 on Form 6-K filed with the SEC on October 15, 2024 for other risks and uncertainties affecting Inventiva, including those described under the caption "Risk Factors", and in future filings with the SEC. Other risks and uncertainties of which Inventiva is not currently aware may also affect its forward-looking statements and may cause actual results and the timing of events to differ materially from those anticipated. 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.*

*Please note that this press release does not pertain to conditions precedent relating to the €348 million Multi-Tranche Financing announced on October 14, 2024. Important information relating to the second tranche of the financing will be the subject of a press release from the Company at the applicable time.*