Inventiva announces that FDA lifts target class clinical hold which allows long-term clinical studies with lanifibranor in NASH

- FDA decision based on the results of carcinogenicity studies
- Lanifibranor does not show any carcinogenic effect relevant to humans, contrasting with other single PPARγ and dual PPARα/γ agonists
- Achievement of this milestone clears key obstacle to Phase III clinical development of lanifibranor in NASH

Daix (France), May 23, 2019 – Inventiva (Euronext: IVA), a clinical-stage biopharmaceutical company developing oral small molecule therapies for the treatment of diseases in the areas of fibrosis, lysosomal storage disorders and oncology, today announced that the U.S. Food and Drug Administration (FDA) has lifted for lanifibranor the clinical hold in place on the peroxisome proliferator-activated receptor (PPAR) target class. This decision enables Inventiva to conduct clinical trials equal to or longer than six months evaluating lanifibranor for the treatment of NASH. This authorization follows the review of the drug candidate's two-year carcinogenicity studies by the FDA's Executive Carcinogenicity Assessment Committee (ECAC).

The FDA decision, which confirms lanifibranor's benign safety profile, represents a key milestone for Inventiva as it removes a key obstacle preventing the Company from initiating the long-term Phase III clinical trials necessary to obtain marketing approval for the drug candidate for the treatment of NASH.

Some single PPARγ and dual PPARα/γ agonists have been associated with toxicity and adverse effects on the heart, kidney, skeletal muscle and bladder, as well as on body weight, water retention and bone mineral density. As a result, FDA regulations regarding the PPAR class of compounds require two-year carcinogenicity and one-year in vivo toxicity studies to be performed prior to a product candidate entering clinical trials longer than six months. In accordance with these requirements, Inventiva launched three long-term toxicological studies of lanifibranor in 2015. Inventiva first evaluated lanifibranor in a 12-month primate toxicological study, in which the administration of the drug candidate was not associated, at any dose-level tested, with the toxicity and adverse effects linked to single and dual PPAR agonists. In parallel, lanifibranor was evaluated in two 2-year carcinogenicity studies in rats and mice designed to identify any potential carcinogenic risk. In these two studies, lanifibranor was not associated with any carcinogenic effect relevant to humans, up to the highest dose tested.

Pierre Broqua, Chief Scientific Officer and cofounder of Inventiva, said: *"The FDA's positive decision is consistent with the favorable and differentiating safety profile of our lead product candidate as already observed in pre-clinical and clinical trials to date confirming lanifibranor's differentiation from other PPAR agonists. This decision is key as it removes a significant barrier to moving ahead with our planned Phase III pivotal trials in NASH."*

About lanifibranor

Lanifibranor, Inventiva's lead product candidate, is an orally-available small molecule that acts to induce anti-fibrotic, anti-inflammatory and beneficial 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 safety and tolerability profile that has been observed in clinical trials and pre-clinical studies to date.

Inventiva is currently evaluating lanifibranor in a Phase IIb clinical trial for the treatment of non-alcoholic steatohepatitis ("NASH"), a common and progressive chronic liver disease, for which there is currently no approved therapy.

About Inventiva

Inventiva is a clinical-stage biopharmaceutical company focused on the development of oral small molecule therapies for the treatment of diseases with significant unmet medical needs in the areas of fibrosis, lysosomal storage disorders and oncology.

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 – lanifibranor and odiparcil – in non-alcoholic steatohepatitis ("NASH") and mucopolysaccharidosis ("MPS"), respectively, 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. Inventiva is currently evaluating lanifibranor in a Phase IIb clinical trial for the treatment of this disease for which there are currently no approved therapies.

Inventiva is also developing odiparcil, a second clinical-stage asset, for the treatment of patients with MPS, a group of rare genetic disorders. The Company is currently investigating odiparcil in a Phase IIa clinical trial for the treatment of adult patients with the MPS VI subtype.

In parallel, Inventiva is in the process of selecting an oncology development candidate for its Hippo signaling pathway program and is advancing pre-clinical programs for the treatment of autoimmune diseases and idiopathic pulmonary fibrosis ("IPF") in collaboration with AbbVie and Boehringer Ingelheim respectively. AbbVie is investigating ABBV-157, a clinical development candidate resulting from its collaboration with Inventiva, in a Phase I clinical trial for the treatment of moderate to severe psoriasis. Both collaborations entitle 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 partnerships.

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. It also owns an extensive library of approximately 240,000 pharmacologically relevant molecules, 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 (Euronext: IVA – ISIN: FR0013233012). www.inventivapharma.com

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This press release contains forward-looking statements, forecasts and estimates with respect to the clinical development plans, business and regulatory strategy, and anticipated future performance of Inventiva and of the market in which it operates. 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 candidates will receive the necessary regulatory approvals or that they will prove to be commercially successful. Therefore, 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. Given these 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 "Document de référence" filed with the Autorité des Marchés Financiers on April 12, 2019 under n° R.19-006 for additional information in relation to such factors, risks and uncertainties.

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.