



Full Year 2021 Financial Results

March 8, 2022



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For additional information in relation to such factors, risks and uncertainties, 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, Amendment No. 1 to the Annual Report on Form 20-F for the year ended December 31, 2020 filed with the Securities and Exchange Commission on March 24, 2021, as well as the half-year financial report for the six months ended June 30, 2021 as well as our other documents or reports that we may file with or furnish to the SEC from time to time, available at www.sec.gov. New risk factors emerge from time to time and it is not possible for our management to predict all risk factors, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in, or implied by, any forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this presentation.

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Today's speakers



Frédéric Cren, MA/MBA, Chairman, CEO and Co-Founder



Pierre Broqua, Ph.D., CSO and Co-Founder



Michael Cooreman, MD, CMO



Jean Volatier, MA, CFO

Summary

- ▶ **Full year 2021 highlights**
- ▶ **Clinical pipeline update**
- ▶ **Financials**
- ▶ **Near-term catalysts**



Full Year 2021 Highlights

Full Year 2021 Highlights

Lanifibranor program in non-alcoholic steatohepatitis (NASH)

- ▶ **Initiation of NATiv3 Phase III clinical trial** evaluating lanifibranor in NASH
- ▶ **Design of LEGEND, a Phase IIa combination trial with lanifibranor and SGLT2 inhibitor empagliflozin** in patients with NASH and type 2 diabetes
- ▶ **IND application** for the Phase II combination trial with lanifibranor and empagliflozin in patients with NASH and T2D accepted by the FDA
- ▶ Decision by the Food and Drug Administration (FDA) that the **Fast Track designation previously granted to lanifibranor in NASH encompasses the treatment of NASH patients with compensated cirrhosis**
- ▶ Confirmation by the FDA that the **non-clinical toxicology package is considered as complete and acceptable to support NDA filing** for the treatment of NASH and improvement of liver fibrosis
- ▶ **Positive results** of a clinical thorough **QT/QTc study** demonstrating the safety of lanifibranor on cardiac electrical activity
- ▶ **Publication** of the results from the **NATIVE Phase IIb clinical trial** evaluating lanifibranor for the treatment of NASH in the prestigious, peer-reviewed medical journal *The New England Journal of Medicine*

Collaboration with AbbVie in auto-immune diseases

- ▶ **Completion of Phase Ib** clinical trial by AbbVie with cediogant, an oral ROR γ inverse agonist jointly discovered by Inventiva and AbbVie for the treatment of autoimmune diseases
- ▶ Decision to start a Phase IIb to evaluate the safety and efficacy of cediogant in adult subjects with moderate to severe psoriasis
- ▶ Payment of a **€4 million milestone payment by AbbVie** for the inclusion of the first patient with psoriasis in the Phase IIb clinical trial

Full Year 2021 Highlights

Odiparcil program in mucopolysaccharidoses (MPS)

- ▶ **Preparation of a meeting with FDA** to validate the design of a pivotal trial in children with MPS VI

Other

- ▶ Opening of **Inventiva Inc.** in the United States
- ▶ **Several recruitments** with solid track records and complementary profiles **to reinforce Inventiva's clinical expertise, medical team and corporate functions**
- ▶ Appointment of **Martine Zimmermann as Independent Director to Inventiva's Board of Directors**

Financials

- ▶ Implementation of an **At-The-Market ("ATM") program** providing the Company with important financial flexibility and additional funding possibility of up to \$100 million: **approx. \$30 million of reverse inquiry received and accepted**
- ▶ Extension of **cash runway through Q1 2023**

Clinical pipeline update

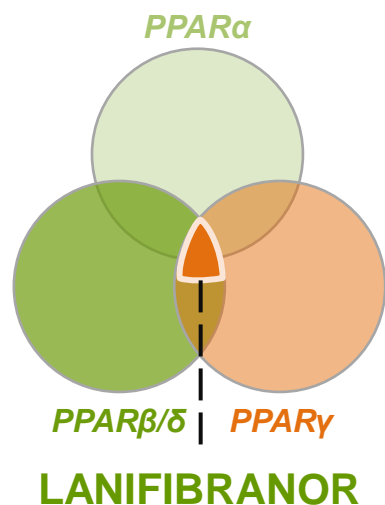
Lanifibranor

A new generation pan-PPAR agonist potentially active across the entire spectrum of NASH disease biology

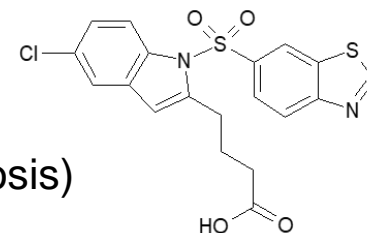
Lanifibranor: a pan-PPAR agonist in phase III development in NASH

LANIFIBRANOR

Moderate and balanced pan-PPAR agonist activity



- ▶ Small molecule that activates all three PPAR isoforms in humans
- ▶ Differentiated chemical structure: not a fibrate or a TZD
- ▶ Once daily oral administration
- ▶ **Positive Phase IIb trial** topline results in NASH
- ▶ **FAST Track** (including in NASH patients with compensated cirrhosis) and **Breakthrough Therapy** designations granted by FDA
- ▶ Composition of matter patent delivered in 55 countries and method of use patent granted in the U.S., China and in the EU: **limit of exclusivity in the U.S. is 2035**

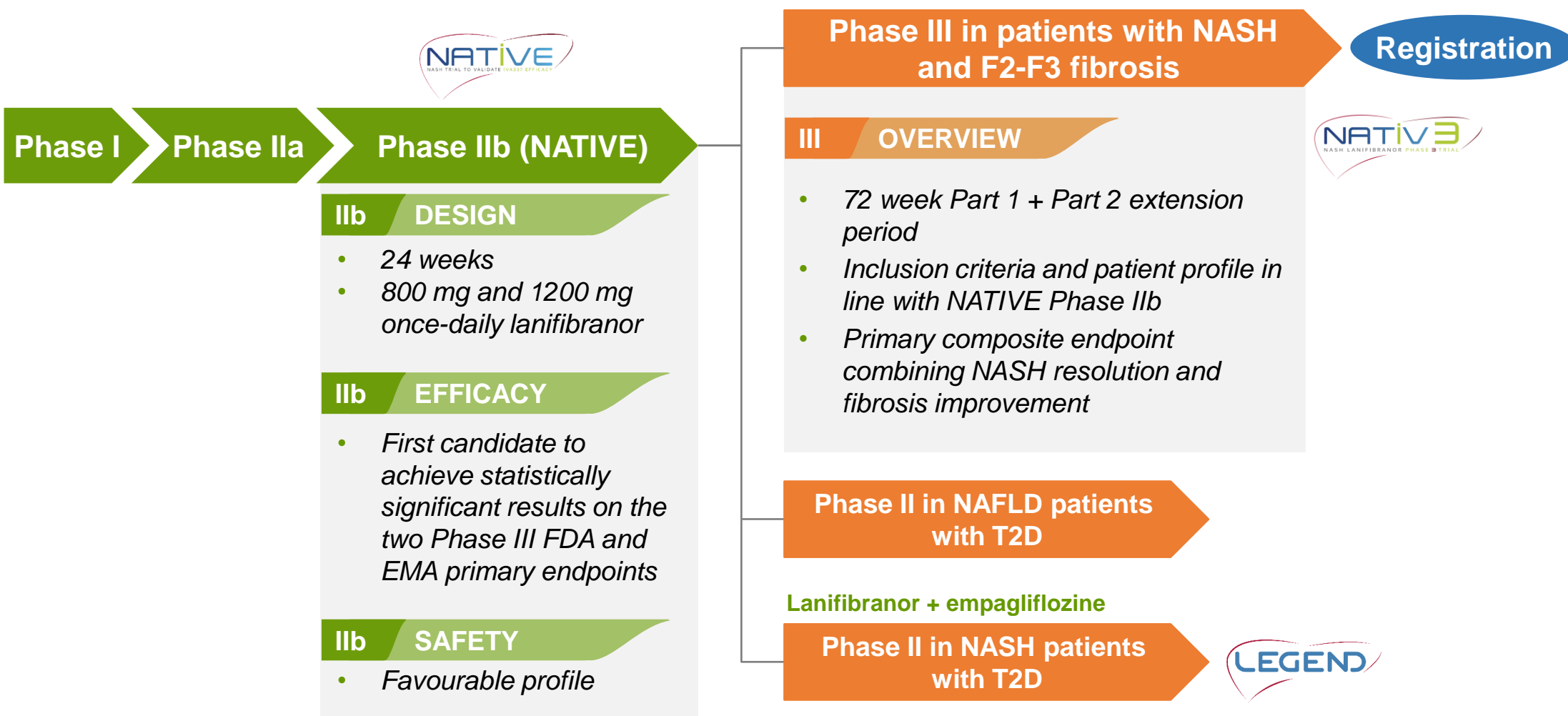


Favorable tolerability profile

- ▶ Phase I trials with more than **200** healthy volunteers and Phase IIa trial with **47** T2D patients
- ▶ Approximately **250** patients treated for 24 or 48 weeks in Inventiva's completed Phase IIb clinical trials
- ▶ **Thorough QT/QTc study** demonstrates no impact of the drug on QT intervals
- ▶ FDA confirmation that the **non-clinical toxicology package is complete and acceptable for NDA filing**

Lanifibranor overall development plan in NASH

CLINICAL DEVELOPMENT

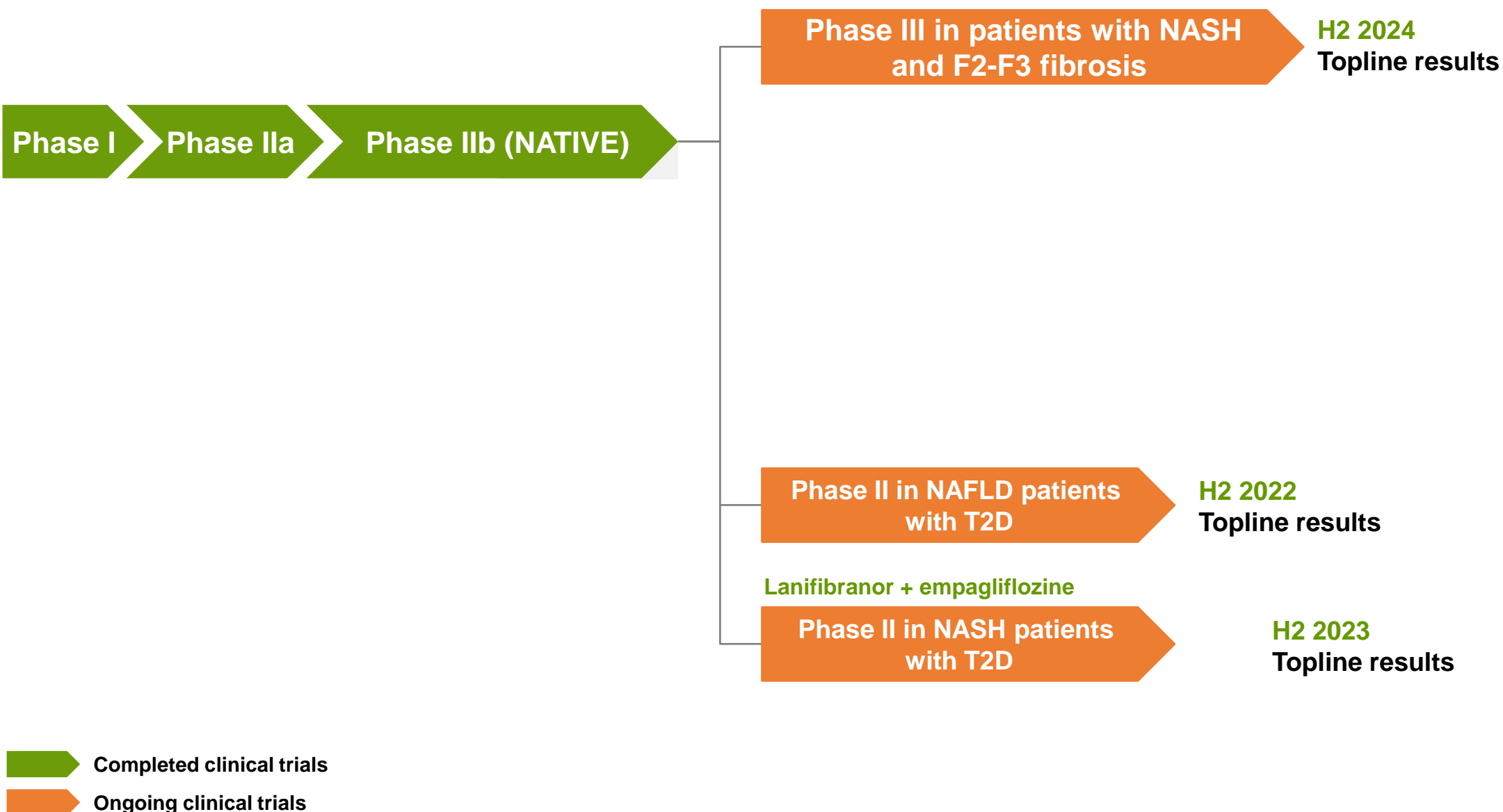


Completed clinical trials

Ongoing clinical trials

Lanifibranor overall development plan in NASH

CLINICAL DEVELOPMENT



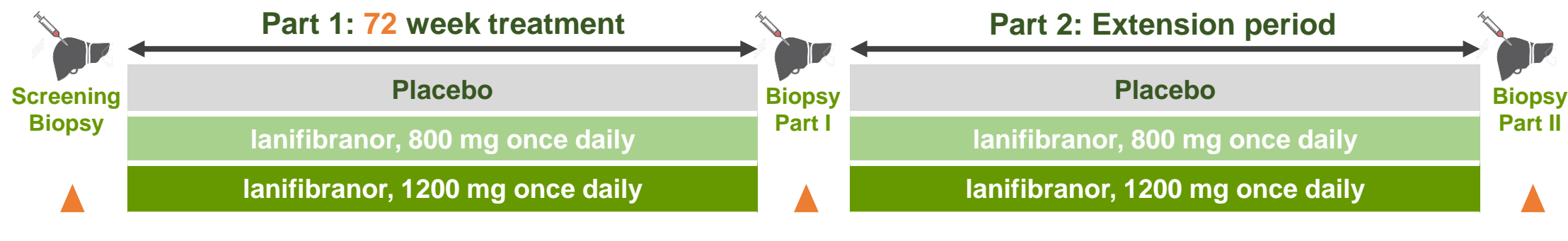
Phase III NATiV3 clinical trial: design overview



PHASE III

OVERVIEW

A randomized, double-blind, placebo-controlled, multicenter, Phase III study evaluating long-term efficacy and safety of lanifibranor in adult patients with NASH with liver fibrosis



PRINCIPAL INVESTIGATORS: Pr. Sven Francque and Pr. Arun Sanyal

MAIN INCLUSION CRITERIA aligned to Phase IIb trial:

- ▶ Adults ≥ 18 years of age diagnosed with NASH using SAF scoring (steatosis ≥ 1 , activity ≥ 3 and fibrosis score of F2-F3)

RANDOMISATION AND STRATIFICATION

- ▶ Randomisation 1:1:1
- ▶ Stratification on T2DM and F2/F3 patients
- ▶ At least 30% of patients from the U.S.

STATISTICAL POWERING: 90% considered for sample size calculations

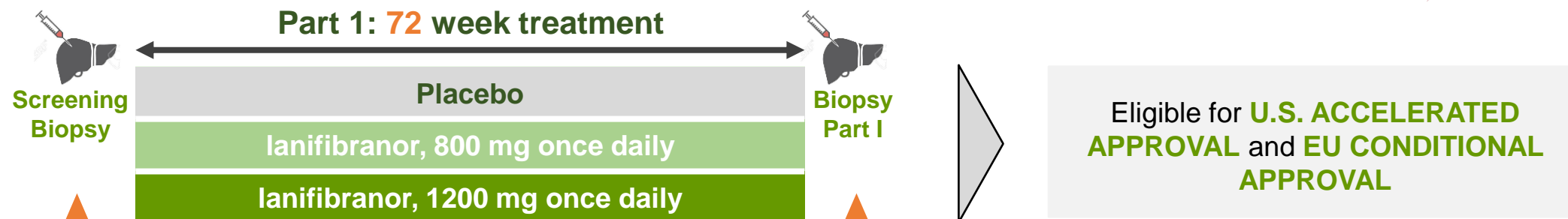
CENTRAL BIOPSY review done by three pathologists

Phase III NATiV3 Part 1 interim histology analysis will enable to seek U.S. accelerated approval and E.U. conditional approval

PHASE III

OVERVIEW

Part 1 F2-F3 Phase III



PRIMARY ENDPOINT at week 72 on c.900 patients

- Composite endpoint of patients having both NASH resolution and fibrosis improvement of at least one stage

KEY SECONDARY ENDPOINTS

- NASH resolution and no worsening of fibrosis
- Improvement of fibrosis and no worsening of NASH

OTHER SECONDARY ENDPOINTS AND HIGH-LEVEL KEY EXPLORATORY ENDPOINTS (*non-exhaustive*)

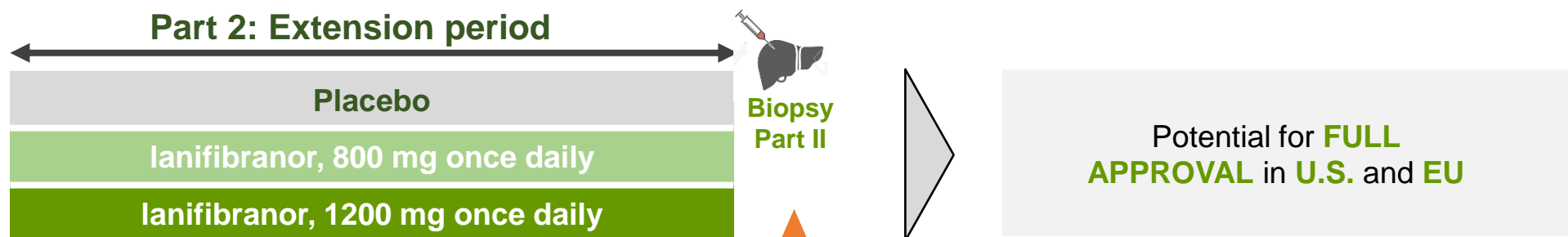
- Glycaemic parameters at week 12 and week 24 in patients with T2DM not well controlled: proportion of patients with HbA1c back to normal
- Composite endpoint of diabetic patients having both NASH resolution and fibrosis improvement
- Improvement in renal function
- Reduction of cardiovascular risk (including major adverse cardiovascular events 'MACE'; non-fatal myocardial infarction, non-fatal stroke, cardiovascular death, hospitalisation for unstable angina)
- Quality of life (NASH-CLDQ) and PRO (PROMIS)

Phase III NATiV3 Part 2 extension study will allow for a broader “full approval”

PHASE III OVERVIEW



Part 2 F2-F3 Phase III



KEY ENDPOINTS IN PART 2 (*non-exhaustive*)

- ▶ Based on time to first clinical event on c.2,000 patients
 - histological progression to cirrhosis
 - all cause mortality
 - hepatic decompensation events
 - hepatic encephalopathy
 - variceal bleeding
 - new onset ascites requiring treatment
 - spontaneous bacterial peritonitis
 - MELD score ≥ 15
 - liver transplant

TRIAL END DATE

- ▶ Defined by first occurrence of following events (whichever comes first):
 - pre-defined number of clinical events registered

TIMING OF FINAL BIOPSY

- ▶ On per-patient basis, defined by:
 - Suggested progression to cirrhosis based on non-invasive testing, or
 - trial has ended

The Phase III patients will be randomised across 350 to 400 sites worldwide

PHASE III

DESIGN

SITE SELECTION



■ NATiV3 countries



- ▶ Study conducted with our global partner ICON



- ▶ Addition of two clinical research networks in the US and Europe with recruitment objectives additive to those of ICON ones

Recent highlights

- ▶ ~350 sites qualified
- ▶ 121 sites activated (77 in the U.S. and 44 in Europe) in 11 countries
- ▶ Activities paused in Ukraine and Russia where ten and twelve sites respectively were considered for Nativ3

Pharmaceutical development: towards a successful commercial supply

Supply chain strategy

Drug Substance

Supply chain strategy under development

- ▶ Two CDMOs to be involved
- ▶ Both FDA approved
- ▶ Industrial capacities ensuring the supply in US & EU/ROW (over Tons/Y), whatever the dose(s) selected upon NATiV3 results

Pharmaceutical development plan defined up to NDA/MAA submission & supporting the commercial supply strategy

- ▶ Process optimization, Upscaling
- ▶ Production of the registration batches
- ▶ Bridging strategy
- ▶ Production of the validation/commercial batches

Drug product

Characteristics of the « to be marketed » product defined for the US and EU/ROW market

Supply chain strategy under development

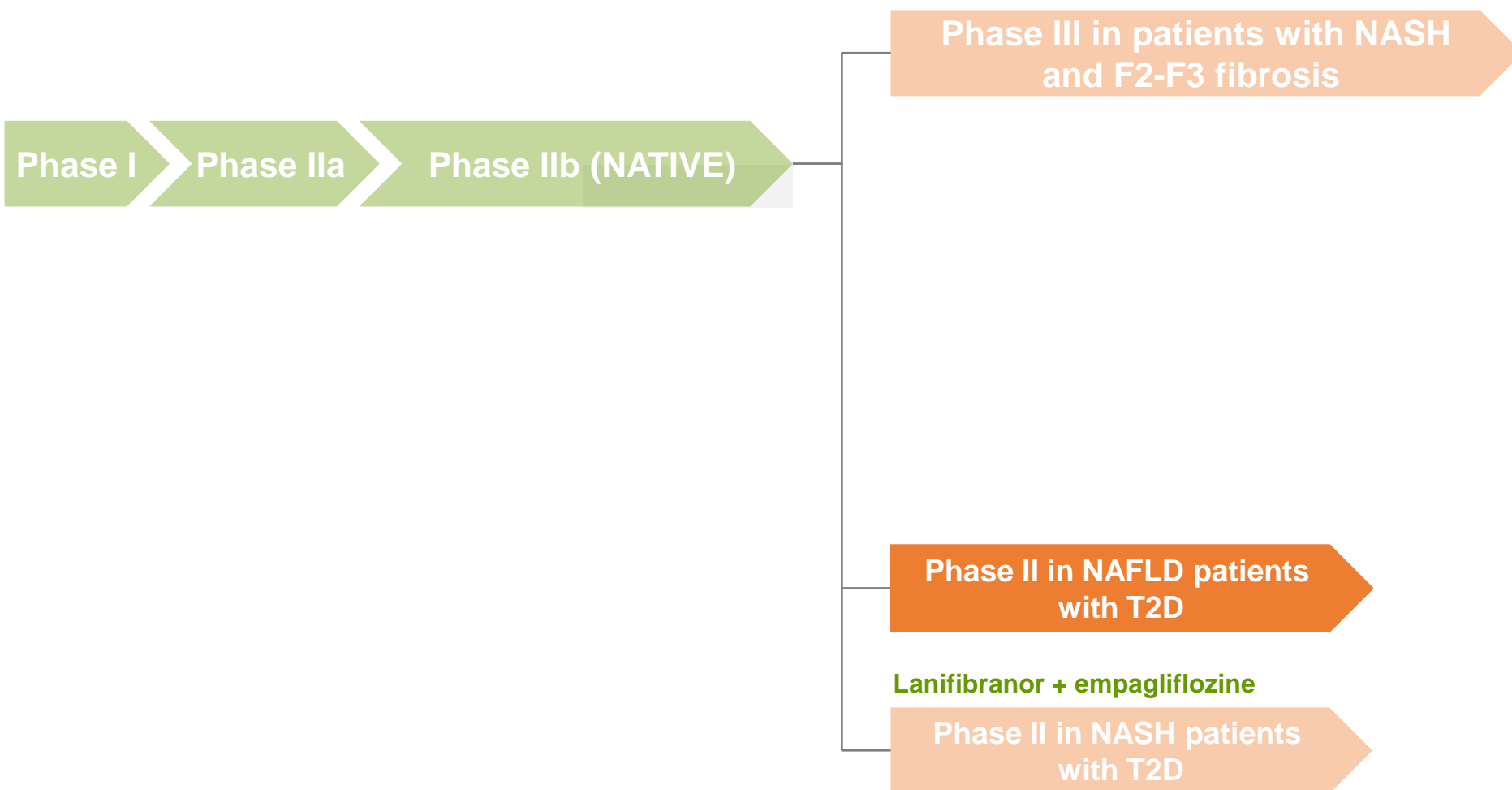
- ▶ Two CDMOs to be involved
 - One dedicated to the US market
 - One dedicated to EU/ROW
- ▶ Industrial capacities ensuring the supply over 100M tablets/Y, whatever the dose(s) selected upon NATiV3 results



Pharmaceutical development plan defined up to NDA/MAA submission & supporting the commercial supply strategy

- ▶ Process transfer, Upscaling
- ▶ Production of the registration batches
 - Bridging strategy
 - Production of the validation/commercial batches

Lanifibranor overall development plan in NASH: Phase II in NAFLD patients with type 2 diabetes

CLINICAL DEVELOPMENT



 Completed clinical trials
 Ongoing clinical trials

NASH and Type 2 Diabetes

Study aim: investigate the mechanism(s) of action of lanifibranor to reduce intrahepatic triglyceride accumulation (IHTG) in relation to changes in adipose tissue, hepatic and muscle insulin resistance, as well as improvement in the cardiometabolic risk profile of patients with T2D and NAFLD

► **Nonalcoholic fatty liver disease (NAFLD) develops in ~70% of patients with type 2 diabetes mellitus (T2D):**

- Diabetes becomes more difficult to control and often needs more medication
- About 35-40% develop the more severe form of the disease with hepatocyte necrosis (ballooning) and liver inflammation (steatohepatitis or NASH)
- About 15-20% develop moderate to severe fibrosis (Lomonaco/Cusi et al, Diabetes Care February , 2021)

► **Coexistence of T2D and NAFLD leads to worse insulin resistance at multiple levels:**

- In adipose tissue, insulin resistance increases the flux of fatty acids to the liver with hepatocyte « lipotoxicity » and development of NASH
- Hepatic insulin resistance is associated with a failure to suppress hepatic VLDL secretion, increased de novo lipogenesis (DNL) and more severe atherogenic dyslipidemia characterized by
 - Elevated plasma triglyceride levels
 - Low plasma HDL-cholesterol concentration
 - Smaller and denser LDL particles

Lanifibranor Phase II study in Patients with Type 2 Diabetes and NAFLD

Main inclusion criteria

- ▶ A total of 34 patients with type 2 diabetes (T2D) with a fasting plasma glucose (FPG) \leq 250 mg/dL and HbA1c \leq 9.5% (not on insulin or pioglitazone) with NAFLD.
- ▶ Hepatic steatosis (intrahepatic triglycerides or IHTG) $>$ 10 % determined by ^1H -MRS.
- ▶ Stable weight

Main procedures performed in the study

- ▶ Imaging: VCTE/Fibroscan, ^1H -MRS/MR-PDFF, MRE, iron-corrected T1 MRI (cT₁ MRI) mapping
- ▶ Determination of adipose tissue/hepatic/muscle insulin sensitivity and de-novo lipogenesis (DNL)
- ▶ Glycemic control (HbA1c), biomarkers of adipose tissue metabolism (i.e., plasma adiponectin and adipokine panels measured by the gold-standard Millipore multiplex platform).
- ▶ Plasma biomarkers of liver fibrosis

Main imaging and metabolic results

- ▶ Intrahepatic triglycerides (IHTG), liver fibrosis (MRE), liver cT1 (fibroinflammatory activity)
- ▶ Adipose tissue/hepatic/muscle insulin sensitivity, DNL
- ▶ Cardiometabolic profile/advanced lipid testing and, biomarkers of liver fibrosis

Lanifibranor clinical trial in patients with T2D and NAFLD

Objective: Establish the efficacy/safety and mechanism of action of lanifibranor in patients with T2D and NAFLD. Specifically determine if lanifibranor decreases IHTG, improves adipose tissue, hepatic and muscle insulin sensitivity, endogenous (hepatic) glucose production, and cardiometabolic health

Principal investigator

- ▶ Prof. Kenneth Cusi (University of Florida)

Randomization

- ▶ Randomized (1:1), double-blind, placebo-controlled
- ▶ N=34 and 10 healthy non-obese as “normal” controls for all the metabolic and imaging tests
- ▶ Sample calculated assuming a >35% relative reduction of IHGT

Primary endpoint

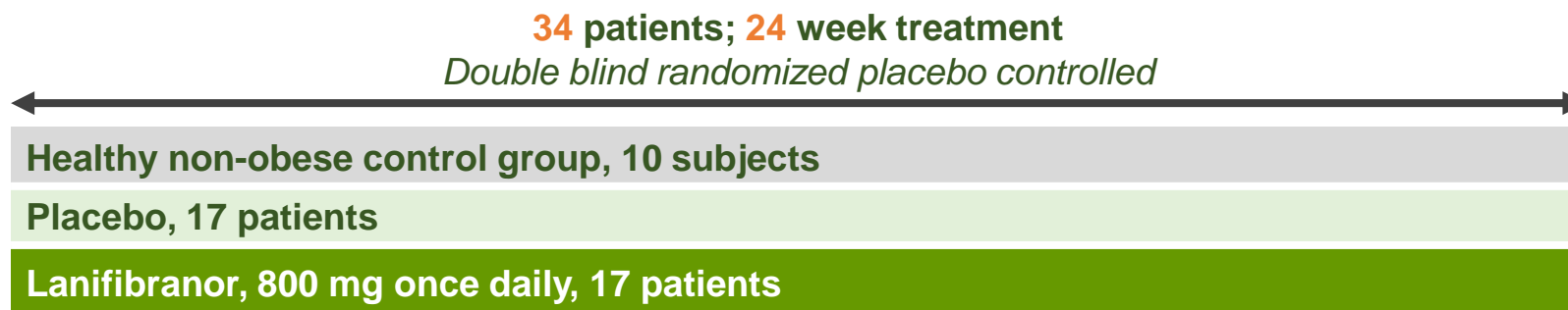
- ▶ Change in IHTG quantified by 1H-MRS from baseline to week 24

Key secondary endpoints

- ▶ Change in the key metabolic defects of patients with NAFLD: Insulin resistance in adipose tissue, liver and muscle
- ▶ Proportion of responders (patients with a IHTG decrease $\geq 30\%$)
- ▶ NAFLD resolution (patients with IHTG $\leq 5\%$)
- ▶ Change in hepatic fibrosis (MRE⁽⁴⁾, fibroscan, biomarkers)
- ▶ Safety

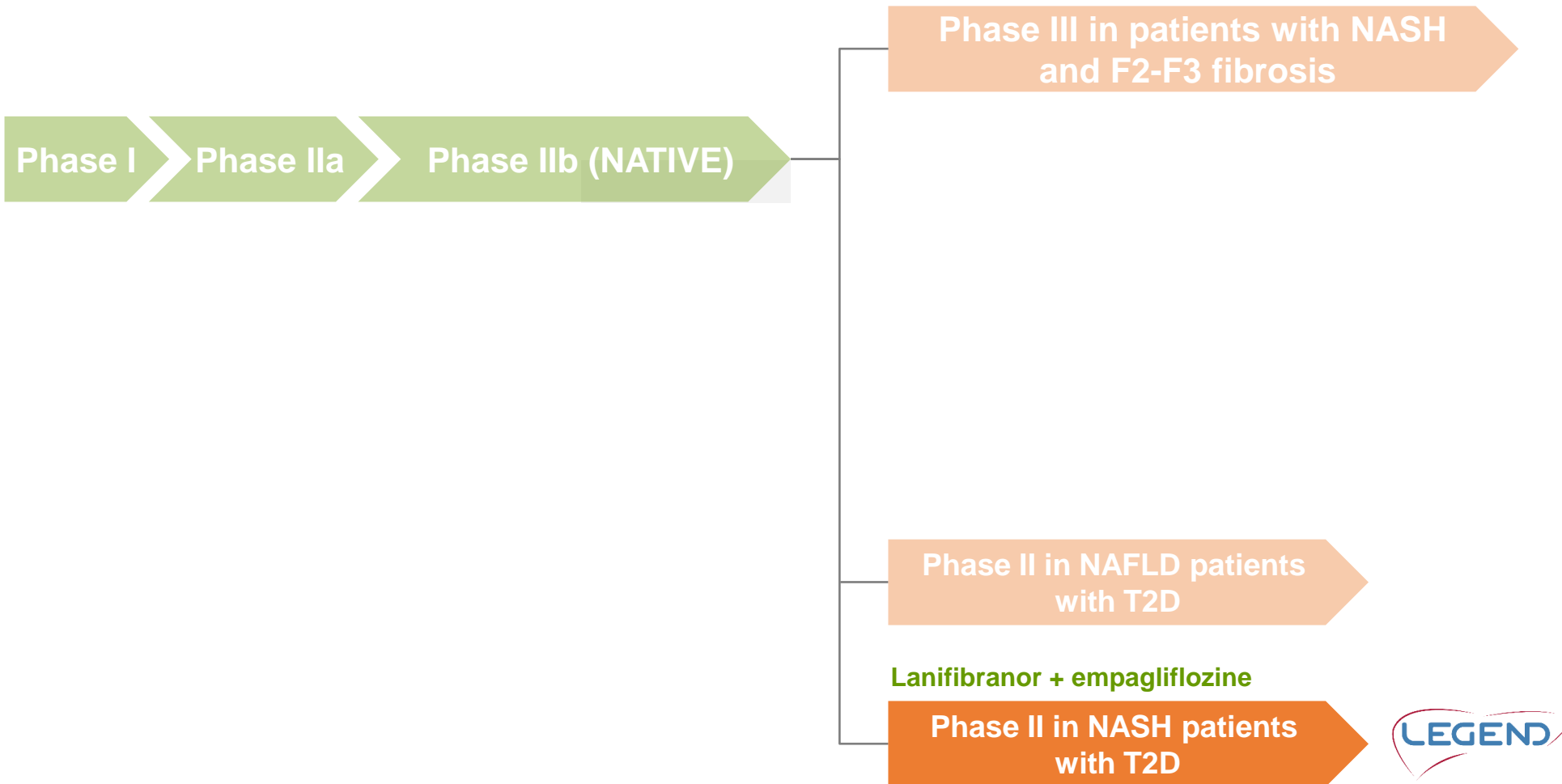
Status

- ▶ Results expected for H2 2022



Lanifibranor overall development plan in NASH: combination study of lanifibranor and empagliflozine

CLINICAL DEVELOPMENT



Completed clinical trials

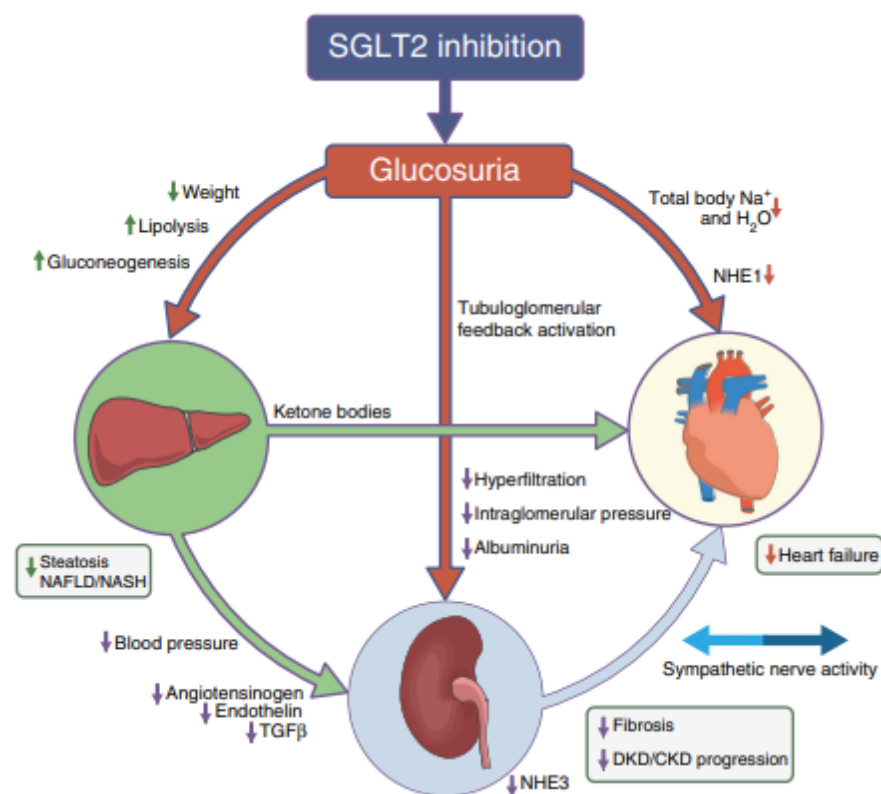
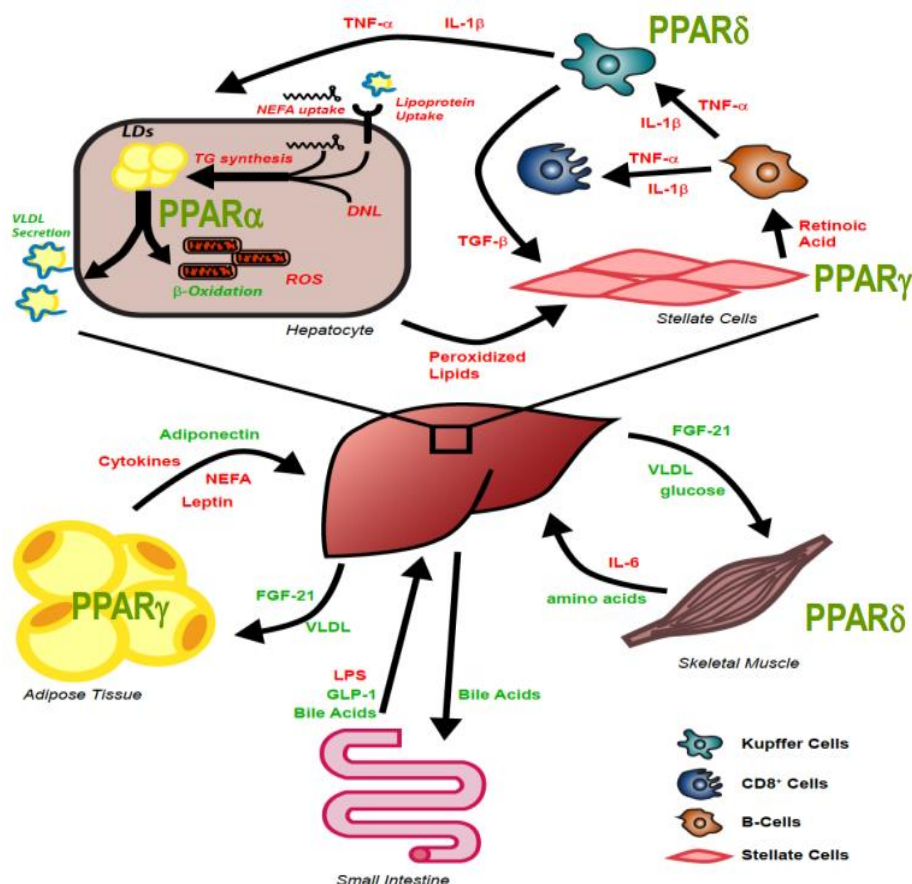
Ongoing clinical trials

- ▶ A large portion of patients with T2D and NASH display typical features of Metabolic Syndrome including abdominal obesity, dyslipidemia, hypertension and insulin resistance.¹
- ▶ T2D accounts for 90 to 95% of all cases of diabetes and is an increasingly prevalent disease with an estimated 462 million affected people worldwide.²
- ▶ The prevalence of liver biopsy diagnosed NASH among patients with T2D has been observed to be 37.3%.³
- ▶ Insulin resistance is the key pathophysiological event leading to the clinical manifestations of the metabolic syndrome leading to both NASH and T2D.¹
- ▶ Therapeutic compounds that address the upstream metabolic and immune mediated pathways of NASH are also expected to be beneficial for T2D.⁴
- ▶ There is a rationale to assess combination therapy with drugs that have a complementary mechanism of action in the complex disease pathophysiology of patients with NASH who also have T2D.

Lanifibranor and a SGLT2 inhibitor (SGLT2i) : rationale

Lanifibranor: balanced pan-PPAR agonist (PPAR α , PPAR γ and PPAR δ)¹

Empagliflozin: SGLT2i reduces proximal tubule reabsorption of sodium and glucose²



Lanifibranor shown to improve insulin sensitivity, macrophage activation, liver fibrosis and inflammation

Empagliflozin shown to improve glycaemia, body weight and fat mass, insulin sensitivity, fluid overload

Target biology

- ▶ Utilizing drug combinations targeting multiple aspects of the metabolic syndrome has the potential to address the clinical outcomes in *both* T2D and NASH
- ▶ Complex NASH pathophysiology requires targeting multiple mechanisms
- ▶ Potential for additive effects

Body composition assessment

- ▶ Data to support lanifibranor related fat re-distribution toward a more 'metabolically healthy' fat profile¹
- ▶ Combination (with a SGLT2i) may help mitigate lanifibranor related body weight increase

Evaluation of combination on metabolism & liver parameters

- ▶ Study can assess potential additive effects on metabolic and non invasive liver parameters
- ▶ Liver Steatosis, inflammation and fibrosis assessed via LiverMultiScan²
- ▶ HbA1c the gold standard biomarker for glycaemic control also predicts severity of ballooning hepatocytes and hepatic fibrosis³

1. Goossens G Obes Facts 2017
2. Pavlides et al Journal of Hepatology 2016
3. Alexopoulos et al Hepatology 2021

Lanifibranor in Combination with the SGLT2 Inhibitor empagliflozin in patients with NASH and Type 2 Diabetes LEGEND Study

Principal investigator

- ▶ Prof. M. Lai, gastroenterologist-hepatologist, associate professor of medicine; Beth Israel Deaconess Medical Center (USA)
- ▶ Prof. O. Holleboom, academic medical specialist (diabetes and metabolism) at the Amsterdam University Medical Center (NL)

Status

- ▶ Study to be conducted in 5 countries (US and four western European countries) in approx. 40 sites
- ▶ **First site activated:** H1 2022
- ▶ **Headline results:** H2 2023

Inclusion criteria

- ▶ Adult patients with diabetes and NASH

Design

- ▶ Double-blind comparison of lanifibranor vs. placebo will allow controlled assessment of body composition changes (MRI)
- ▶ Open-label arm of lanifibranor+empagliflozin will allow 'Proof of Concept' data to be developed on the use of this combination

Primary outcome measures

- ▶ HbA1c change

Secondary outcome measures

- ▶ MRI-based imaging to collect non-invasive data on hepatic fat, inflammation and fibrosis
- ▶ Glycaemic/lipid parameters, inflammatory markers
- ▶ Changes in body fat composition

Other outcome measures (safety/exploratory)

- ▶ AEs, body weight, PK, IHTG, cT1, biomarkers



- ▶ Lanifibranor and empagliflozin is an attractive combination to study in patients with NASH and T2D
- ▶ LEGEND trial will develop important '*Proof of Concept*' data on the combination :
 - Metabolic function :
 - Lanifibranor addresses disease pathways across the spectrum, from lipid and glucose metabolism to fibrosis
 - Empagliflozin acts upstream on metabolic pathways which may work synergistically with lanifibranor
 - HbA1c, in addition to being the gold standard biomarker for glycaemic control also predicts severity of ballooning hepatocytes and hepatic fibrosis
 - Body composition :
 - Based on the MOA, and available data from pioglitazone in combination with several SGLT2i's^{1,2}, the weight reducing effect of empagliflozin may balance out the weight gain observed with lanifibranor
 - Data to support that lanifibranor induces a fat re-distribution favoring subcutaneous fat that is more 'metabolically healthy'
 - Liver parameters:
 - Impact of combination on non-invasive markers of NASH/fibrosis
 - Liver Steatosis, inflammation and fibrosis assessed via LiverMultiScan
 - Characterise safety profile of combination (lanifibranor + empagliflozin)

1. Rosenstock et al Diabetes Care 2021,

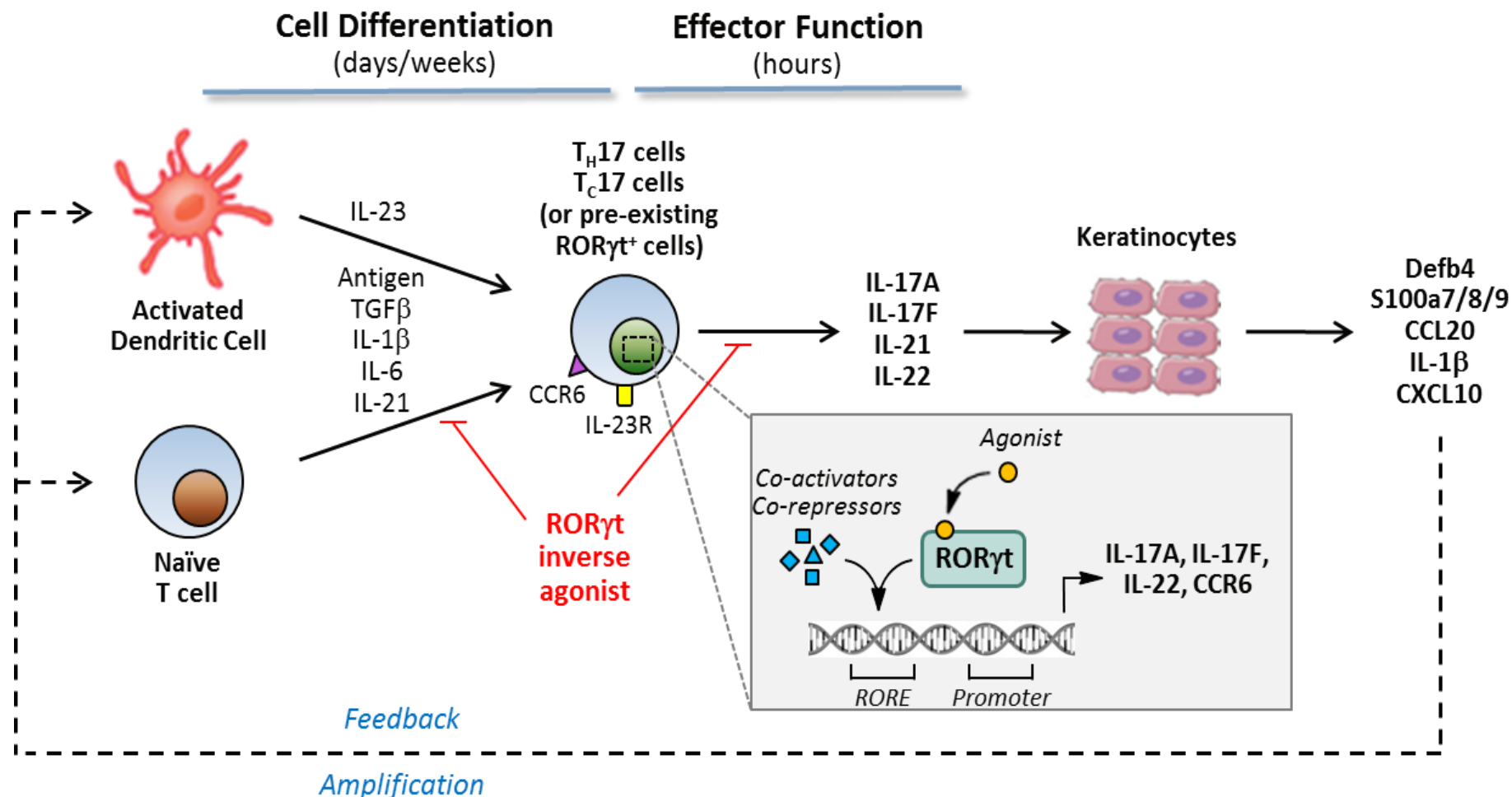
2. Kovacs et al Clinical Therapeutics 2015

Cedirogant (ABBV-157)

Highlights

- ▶ ROR γ is believed to be a master regulator of Th17 differentiation and IL-17 expression, an approach validated by several successful biologics
- ▶ Potential to more effectively inhibit IL-17 production than antagonist approaches
- ▶ ROR γ mechanism of action could prove efficacious in psoriasis and other auto-immune diseases
- ▶ Substantial commercial opportunity exists in psoriasis for an oral and efficacious treatment
- ▶ In patients with chronic plaque psoriasis, cedirogant showed promising activity as an oral psoriasis agent
- ▶ A Phase IIb in 200 adult subjects with moderate to severe psoriasis was initiated by AbbVie in November 2021 and is expected to end Q1 2023. Trial fully funded by AbbVie
- ▶ Inventiva eligible to receive development, regulatory, commercial milestones and tiered royalties from the mid-single to low-double digits
- ▶ Cedirogant royalties have the potential to be an important source of revenues for Inventiva as cedirogant is targeting indications where competitors have reached block-buster status

ROR γ controls Th17 cell differentiation and effector function



- The success of anti-IL17 or anti-IL23 biologics in the treatment of psoriasis validates the IL23-IL17 pathway as an important target for therapy

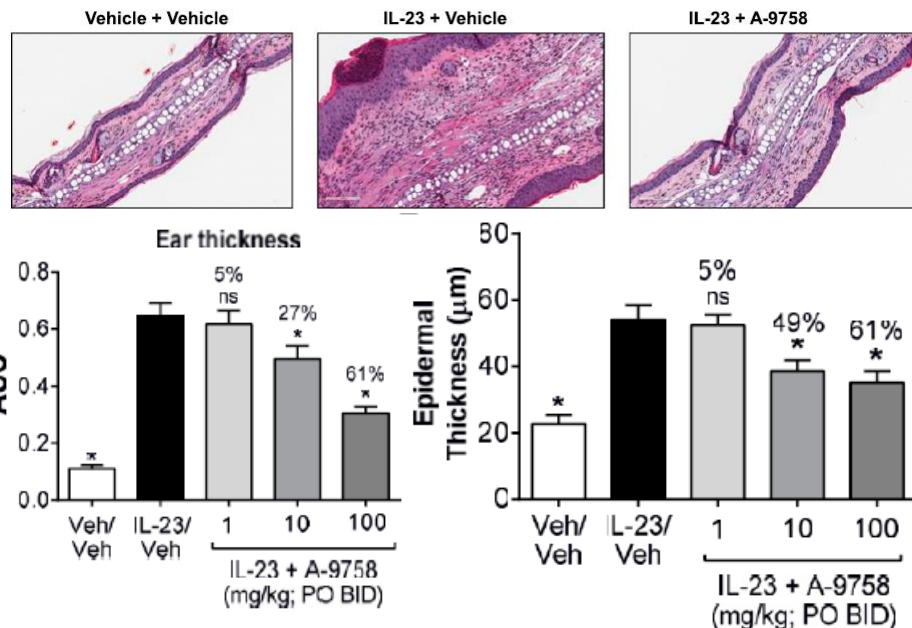
Cediogant: a clinical stage ROR γ inverse agonist with potential in several auto-immune diseases

ROR γ is believed to be a master regulator of Th17 differentiation and IL-17 expression, an approach validated by several successful biologics

- ▶ Pharmacological inhibition of ROR γ by small molecules has been observed **to suppress Th17 production, block cutaneous inflammation in animal models of psoriasis and inhibit TH17 signature gene expression** by cells isolated from psoriatic patient samples
- ▶ Potential to more effectively inhibit IL-17 production than antagonist approaches
- ▶ ROR γ : a **validated drug target** for the treatment of psoriasis and other auto-immune diseases

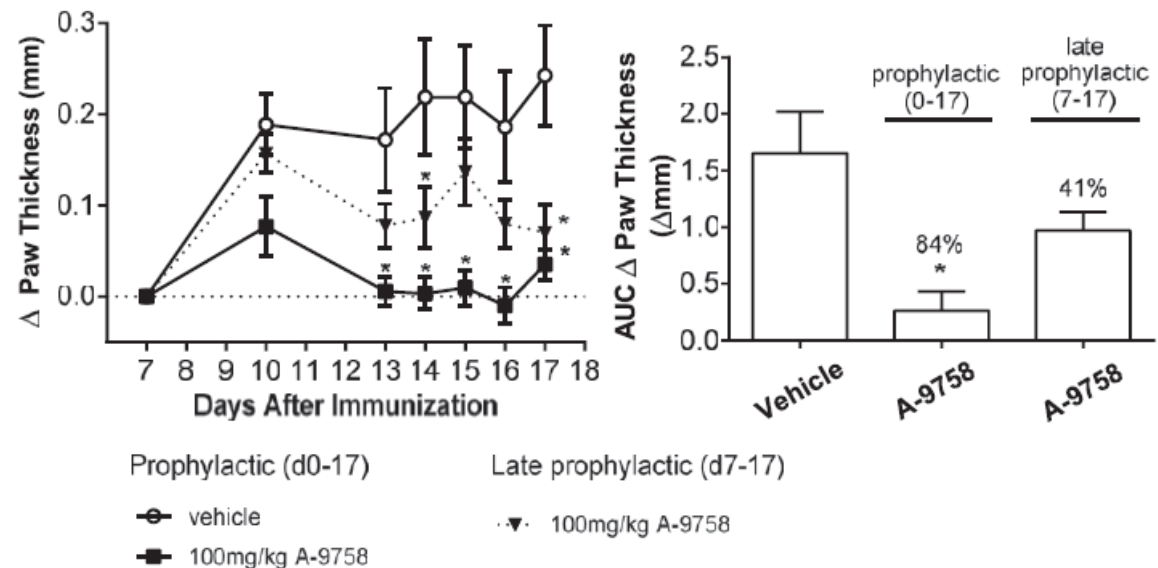
A-9758⁽¹⁾ attenuates IL-23 mediated skin inflammation

Effect of ROR γ inhibition on IL-23 mediated psoriasiform dermatitis



A-9758⁽¹⁾ blocks GPI-mediated arthritis

Effect of ROR γ inhibition on paw swelling both on prophylactic and late prophylactic treatment



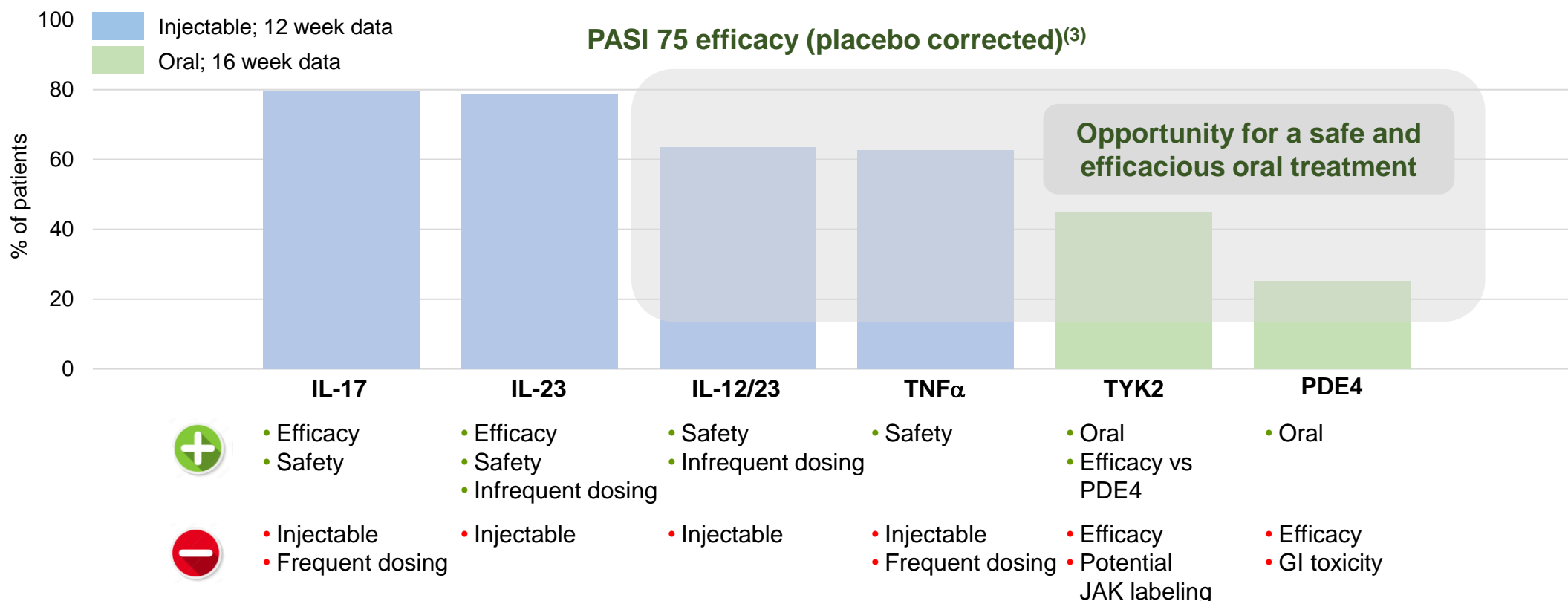
(1) A-9758 is first generation compound developed within the collaboration with AbbVie previously to identifying cediogant

Source: Inhibition of interleukin-32 mediated inflammation with a novel small molecule inverse agonist ROR γ ; The Journal of Pharmacology and Experimental Therapeutics 371:208-218, October 2019

Psoriasis: a \$20b global market dominated by injectables

- ▶ Psoriasis is a common skin condition that affects 2-4% of the population in western countries with global sales in 2020 of approx. \$20b⁽¹⁾
- ▶ The market is dominated by IL-12/23, IL-17 and TNF α which, despite being injectables, account for more than 80% of the market⁽¹⁾
- ▶ Despite an inferior efficacy and safety profile to approved injectables, Otezla (PDE4, oral) generated \$2,2b⁽²⁾ of sales and was acquired by Amgen for \$13,4b in 2019

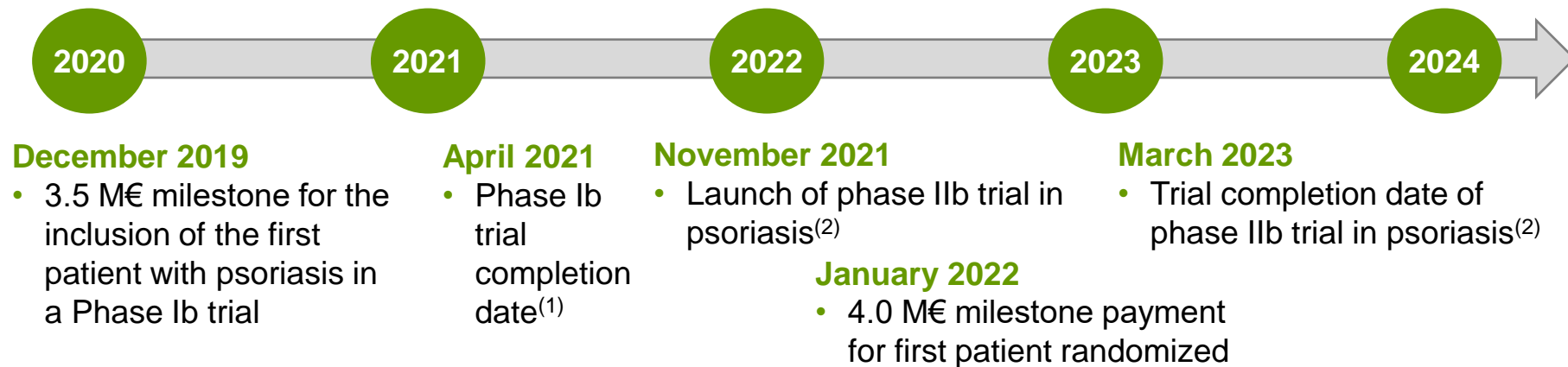
There is space for more efficacious oral drugs in psoriasis



(1) Evaluate Pharma ; (2) 2020 company annual report; (3) Efficacy represents average of PASI-75 in 2 Phase III trials; IL17 trials : FIXTURE and UNDERCOVER 2; IL23 trials ULTIMMa-1 & ULTIMMa-2; TNF α : REVEAL and CHAMPION; IL-12/23 trials: PHOENIX 1 and PHOENIX 2; TYK2 trials: POETYK PSO 1 and POETYK PSO 2; PDE4 trials: ESTEEM 1 and ESTEEM 2

Cedirogant (ABBV-157) is currently evaluated in a Phase IIb trial in adults with moderate to severe psoriasis

- ▶ Single ascending dose and multiple ascending dose trials in healthy volunteers completed
- ▶ Phase Ib: A Randomized, Double-Blind, Placebo-Controlled, Multiple-Dose Study to Evaluate the Pharmacokinetics, Safety and Tolerability of ABBV-157 in Healthy Volunteers and in Subjects With Chronic Plaque Psoriasis
 - 4 week, 65 participants (patients and healthy volunteers)
 - In patients with chronic plaque psoriasis, cedirogant showed promising activity as an oral psoriasis agent
- ▶ Phase IIb initiated in November 2021



“In our Phase Ib study, 157 showed promising activity as an oral psoriasis agent and we plan to move the asset forward to a larger Phase IIb dose-ranging study in the second half of this year ... with respect to oral psoriasis agents, we would want to come in from an efficacy perspective with something that clearly exceeded the threshold that existed in the past with Otezla ... we'd be looking for that Humira-like efficacy or greater as something that we would like to use to enter the space within oral, obviously, coupled with a strong safety profile.”

Dr. Michael Severino AbbVie Vice Chairman and President⁽³⁾

Cedirogant Phase IIb in adults with moderate to severe psoriasis

A Phase IIb, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Dose-Ranging Study to Evaluate the Safety and Efficacy of Cedirogant (ABBV-157) in Adult Subjects With Moderate to Severe Psoriasis

Status

- ▶ Sponsor: **AbbVie**
- ▶ ClinicalTrials.gov Identifier: NCT05044234
- ▶ Approx. 200 adult participants with moderate to severe plaque psoriasis will be enrolled at approx. 45 sites
- ▶ Estimated study start date: **November, 2021**
- ▶ Estimated study completion date: **March, 2023**

Inclusion criteria

- ▶ Participants with stable moderate to severe plaque psoriasis of at least 6 months duration and who are candidates for systemic therapy or phototherapy

Primary outcome measures

- ▶ Percentage of participants achieving $\geq 75\%$ reduction from baseline in Psoriasis Area Severity Index⁽¹⁾ (PASI) score (PASI 75)

Secondary outcome measures

- ▶ Percentage of participants achieving a Static Physician Global Assessment⁽²⁾ (sPGA) score of clear or almost clear
- ▶ Percentage of participants achieving $\geq 50\%$ / $\geq 90\%$ / 100% reduction from baseline in PASI Score (PASI 50; PASI 90; PASI 100)
- ▶ Percentage of participants achieving Psoriasis Symptoms Scale⁽³⁾ (PSS) total score of 0 for participants with PSS >0 at baseline
- ▶ Percentage of participants achieving an Itch Numerical Rating Scale⁽⁴⁾ (NRS) ≥ 4 point improvement from baseline for participants with Itch NRS ≥ 4 at baseline

200 patients / 16 week treatment / ~45 sites






Double blind randomized placebo controlled



(1) The PASI is a tool that provides a numeric scoring for participants' overall psoriasis disease state, ranging from 0 to 72, with a higher score indicating more severe disease; (2) The sPGA is a 5-point score ranging from 0 to 4, based on the physician's assessment of the average thickness, erythema, and scaling of all psoriatic lesions. A lower score indicates less body coverage, with 0 being clear and 1 being almost clear; (3) The PSS is a 4-item patient-reported outcome instrument that assesses the severity of psoriasis symptoms in patients with moderate to severe psoriasis. Current symptom severity is assessed using a 5-point Likert-type scale ranging from 0 (none) to 4 (very severe); (4) The Itch NRS is an 11-point scale that participants complete daily to describe the intensity of their itch using a 24-hour recall period. Scores vary between 0, representing "no itching" and 10, representing "worst itch imaginable"







Source: clinicaltrials.gov

ROR_γ competitive landscape

Product name	Company	Development Phase	Comments
Cedirogant		Phase 2	Oral once daily
Bevurogant		Phase 2	Program not mentioned anymore in BI annual report
AUR-101		Phase 2	Twice daily
JTE-451		Phase 1	Results posted on clinicaltrials.gov do not meet target product profile
IMU-935		Phase 1	Once daily and twice daily in MAD phase I Early

Cedirogant royalties have the potential to be an important source of revenues

- ▶ Cedirogant potential profile: **Humira (TNF α) in a pill + better safety**
- ▶ Inventiva eligible to receive development, regulatory, commercial milestones and **tiered royalties from the mid-single to low-double digits**
- ▶ **Composition of matter patent** filed in June 2016 and approved in October 2018
- ▶ Cedirogant is targeting indications where competitors have reached block-buster status

Brand	Company	Target	Posology	2021 sales ⁽¹⁾
 HUMIRA® adalimumab	AbbVie	Anti-TNF α	Injectable	\$20,7b
 Stelara® (ustekinumab)	J&J	IL-12/23	Injectable	\$9,1b
 Cosentyx® (secukinumab)	Novartis	IL-17A	Injectable	\$4,7b
 Skyrizi® (risankizumab) injection	AbbVie / BI	IL-23	Injectable	\$2,9b
 Otezla® (apremilast) tablets	Celgene / Amgen	PDE4	Oral	\$2,2b
 taltz® (ixekizumab) injection	Eli Lilly	IL-17A	Injectable	\$2,2b

(1) Company Q1 2022 and full year 2021 press releases; Note : sales include other indications such as psoriatic arthritis, ankylosing spondylitis, rheumatic arthritis,...

Financials

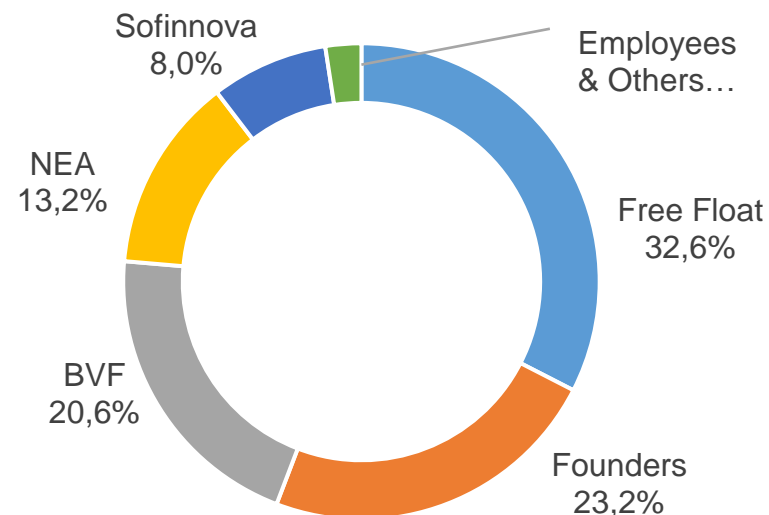
Key financials and shareholder base

Key financials



ISIN code	FR0013233012 / US46124U1079
Market	Euronext Paris / Nasdaq GM
Shares outstanding	40 873 551
Market cap (March 7, 2022)	Euronext Paris: €413m / Nasdaq Global Market: \$448m
Cash position (as of December 31, 2021)	€95.4m (vs €113.0m as of December 31, 2020) Current expected cash runway through Q1 2023
2021 revenues	€4.2m compared to €0.4m in 2020
R&D expenditures in 2021	€48.4m compared to €23.7m in 2020

Shareholder base⁽¹⁾



Analyst coverage

Jefferies	L. Codrington / M. J. Yee	 
Guggenheim	S. Fernandez	
HC Wainwright	E. Arce	
Roth Capital	Z. Jallah	
KBC	J. Van den Bossche	
Société Générale	D. Le Louët	
Bryan Garnier	JJ. Lefur	
Portzamparc	M. Kaabouni	

Full year 2021: Key figures

Income Statement

Key figures (in thousands of euros)	2021	2020
Revenues	4 194	372
Other income	4 307	4 891
Research and development expenses	(48 452)	(23 717)
Marketing — Business development expenses	(364)	(563)
General and administrative expenses	(11 156)	(8 499)
Other operating income (expenses)	(644)	(2 202)
Net operating loss	(52 114)	(29 718)
Net financial income (loss)	2 843	(3 902)
Income tax	(364)	-
Net loss for the period	(49 635)	(33 619)

Cash Cash Position

Key figures (in thousands of euros)	December 31, 2021	December 31, 2020
Cash & cash equivalents(1)	95,353	113,022

(1) The cash position includes cash and cash equivalents as well as short-term deposits which are included in the category "other current assets" in the IFRS statement of financial position as of December 31, 2021 and 2020.

Highlights

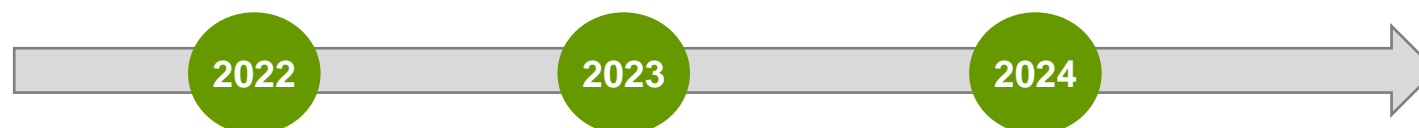
- **Revenues of €4.2 m, compared to €0.4 m in 2020**
 - Inventiva has received early 2022 a milestone payment of €4.0 m upon the initiation in Nov. 2021 by AbbVie of the Ph2b clinical trial (cedirogant collaboration)
- **X2 increase in R&D investment, €48.4 m vs €23.7 m in 2020**
 - Accelerated efforts dedicated to the development of lanifibranor (NASH) to prepare and initiate the NATiv3 Phase III clinical trial
- **31% increase in G&A, €11.2 m vs €8.5 m in 2020**
 - As expected, due to Inventiva's dual listing status and related higher compliance costs for the first full year in 2021 (*Nasdaq listing July 2020*)
- **Cash position allowing to operate through Q1 2023, at €95.4 m vs €113.0⁽¹⁾ m as of December 31, 2021**
 - Net operating cash flow at (€47.6) m vs (€30.6) m reflecting the increase in R&D and G&A; Monthly operating burn rate acceleration at €4.0 m in 2021 vs €2.6 m in 2020, as expected and in line with the ongoing Phase III study

Financial Calendar

- **May 16, 2021: Publication of Q1 2022 financial results (revenues and cash) (after market closing)**

Near-term catalysts

Anticipated key milestones



Lanifibranor

H1 2022

- Activation of first clinical sites for the phase II trial combining lanifibranor with SGLT2i empagliflozin

H2 2022

- **Topline results of Phase II in patients with NAFLD and T2D**
- Last Patient First Visit of the phase III trial in NASH (Part I)

H2 2023

- **Topline results of Phase II of lanifibranor in combination with SGLT2i empagliflozine in patients with NASH and T2D**

H2 2024

- **Topline results of the phase III trial in patients with NASH (Part I)**

Cedirogant

abbvie

H1 2023

- **Study completion of phase IIb trial in psoriasis**

Odiparcil

2022

- Strategy update on odiparcil development

Q&A

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