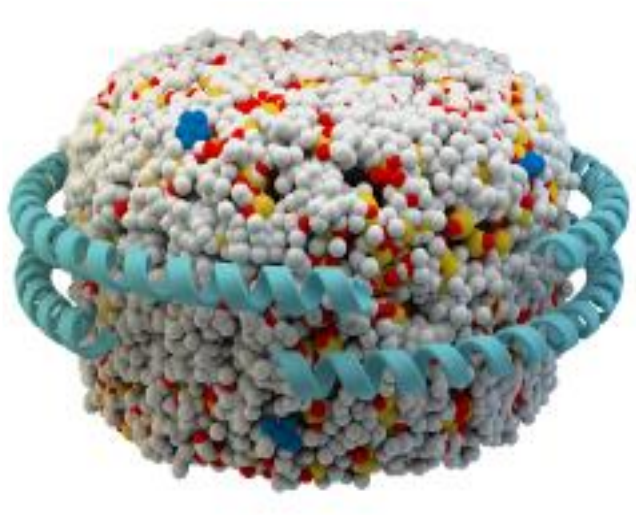
ABIONYX

A company selected as a France 2030 laureate

From a rare-disease clinical validation to blockbuster market authorization



INVESTOR WEBINAR – 3 JUNE 2026

Cyrille Tupin – CEO
Dr Rob Scott MD – CMO, head of R&D

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Terms of the Offering (1/2)

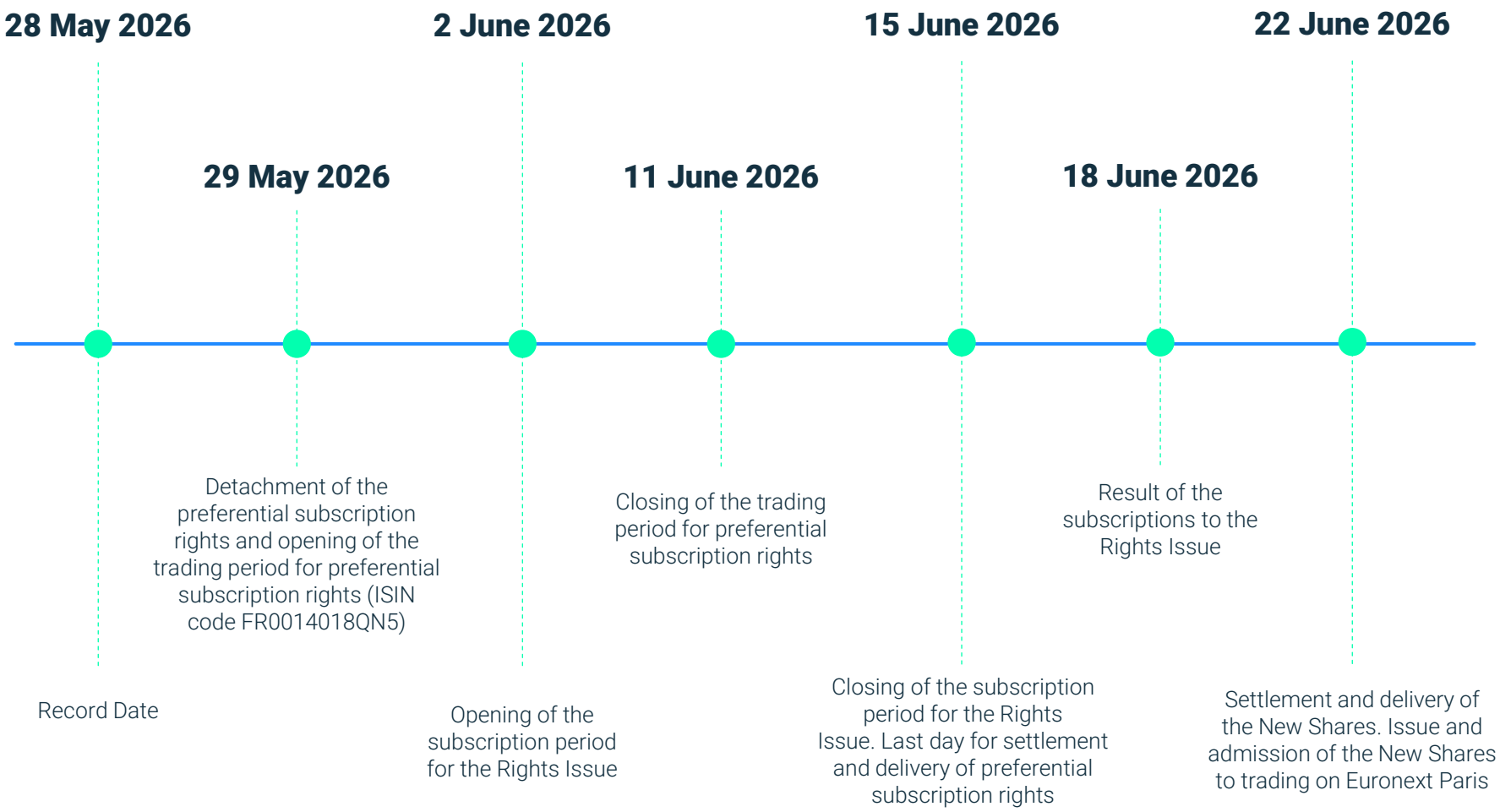
Company / Ticker / ISIN / Exchange	• Abionyx Pharma ("the Company", "Abionyx") / ABNX / FR0012616852 / Euronext Paris
Offer Type	• EUR 18.7m Equity raise via fully secured Rights Offering
Shares offered	• 7,056,416 Offer Shares
Subscription Ratio	• 1 New Share for 5 Existing Shares (1 Right per 1 Existing Share)
Subscription Price	• EUR 2.65 per share
Reference price	• EUR 3.475 (closing price as of 26 May 2026)
TERP	• EUR 3.34 per share (based on closing price as of 26 May 2026)
Discount to TERP	• 20.6%
Guarantor commitments	• EUR 18.7m or 100% of the Offer
Lock-up agreement	• In connection with the Transaction, the Company's board members and executive officers are subject to a contractual lock-up for a period of 90 days, subject to customary exceptions • The Company has also agreed to be bound by a contractual lock-up for a period of 90 days, subject to customary exceptions. The Guarantors who are not directors or corporate officers are not subject to any specific lock-up undertaking

Terms of the Offering (2/2)

Debt Component	• In addition to the Transaction, the Company has entered into a Subscription Agreement with Fenja Capital Partners A/S for unsecured, straight bonds of up to EUR 14 million, divided into two tranches.
	• The term sheet includes the following features:
	  • Tranche 1 Bonds:
	  ○ Principal Amount: EUR 10 million
	  ○ Key Condition Precedent: Minimum EUR 14 million Rights Issue
	  ○ Arrangement Fee: 2% of the Principal Amount at Tranche 1 Bonds issuance
	  ○ Term: 24 months maturity from signing of the Subscription Agreement, extendable up to 30 months by mutual consent
	  ○ Interest: EURIBOR 3M (with a floor of 2%) plus 3% margin
	  ○ Minimum Return: Cash top-up payment to 1.25x upon repayment of the loan
	  ○ Warrants: Corresponding to a total dilution of 5% based on the total number of ordinary shares of the Company after the Rights Issue, with a strike price equal to 140% of the placement price in the Rights Issue. The warrants are subject to anti-dilution adjustments in the event of certain corporate actions with exclusions for employee incentive programs and equity raises at a pre-money valuation of at least EUR 200 million
	  ○ Pre-payment: The loan may be pre-paid at any time without penalty
	  ○ Amortization: If the total outstanding amount of the Loan exceeds 10% of the Company's market capitalization by the time of an Interest payment, the Company shall make an amortization payment equal to the amount that the loan exceeds 10% of the market capitalization, up to a maximum of (a) EUR 1.75 million per payment on the first two quarterly interest payment dates and (b) EUR 2 million per payment thereafter. The Company may elect to pay solely in cash, or, in shares subject to certain conditions
	  • Tranche 2 Bonds:
	  ○ Loan Amount: EUR 4 million
	  ○ Arrangement Fee: 2% of the Principal Amount upon the earlier of Tranche 2 Bonds issuance and December 15, 2026
	  ○ Condition: Available for drawdown during the fourth quarter of 2026, conditional upon the outstanding portion of the Loan (including Tranche 2) being at most 10 percent of the Company's market capitalization, measured as an average 10 days prior to drawdown, and the trading liquidity in the Company's shares must be minimum EUR 250,000 per day measured as an average 10 days prior to drawdown. Furthermore, the amount available for drawdown is reduced by any amount allotted to the Lender in the Rights Issue as a result of an underwriting commitment that the Lender has not divested as of the time of drawdown
	  ○ Financial conditions of Tranche 2 will be the same as Tranche 1

Syndicate	• Sole Global Coordinator & Joint Bookrunner: Stifel Europe • Joint Bookrunners: CIC CIB & TP ICAP

Indicative Timeline of the Offering



1 New Abionyx Share

At EUR 2.65

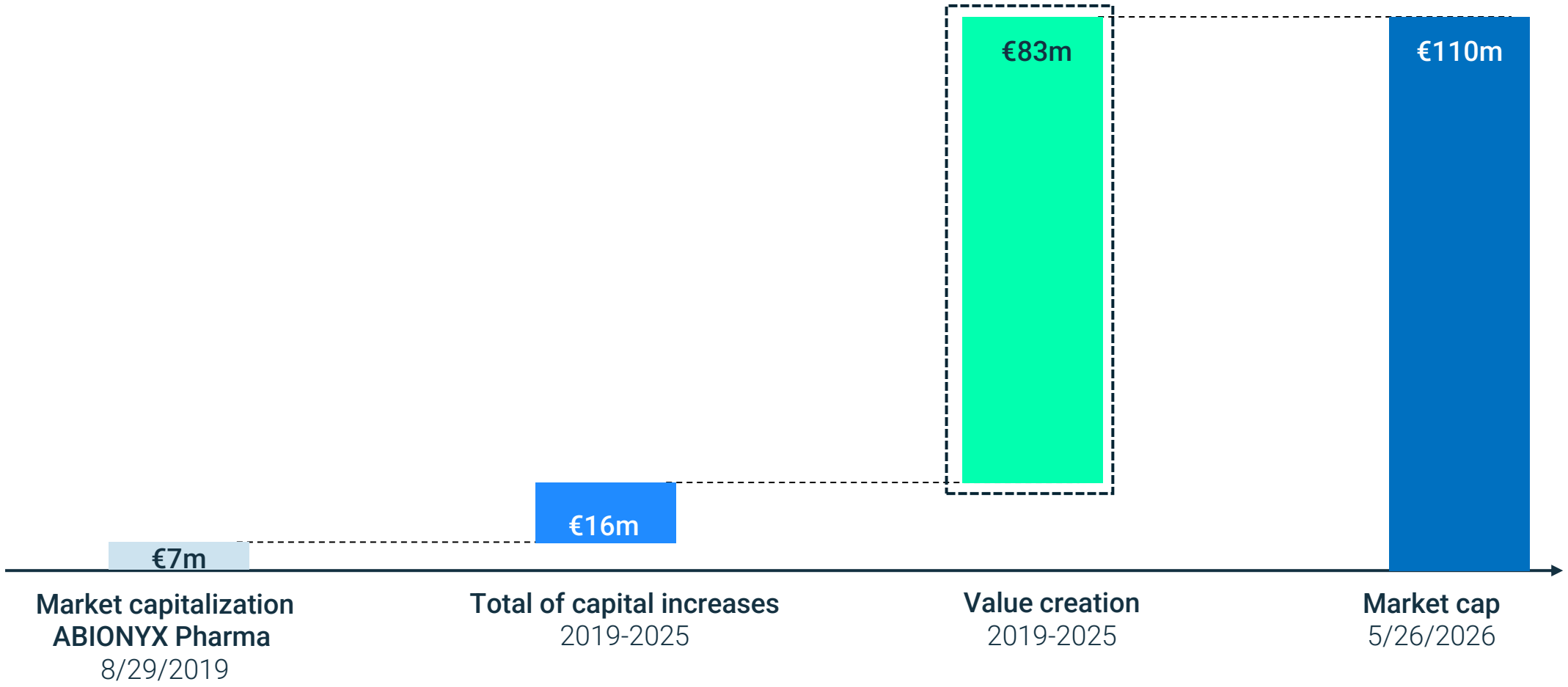
for 5 Subscription Rights exercised

Financing the 2 value inflexion points : CER-001 to market in LCAT Deficiency and phase 2b in Sepsis

In addition to its existing cash resources, the Company intends to use the net proceeds from the Transaction estimated at approximately at EUR 25.2 million as follows:

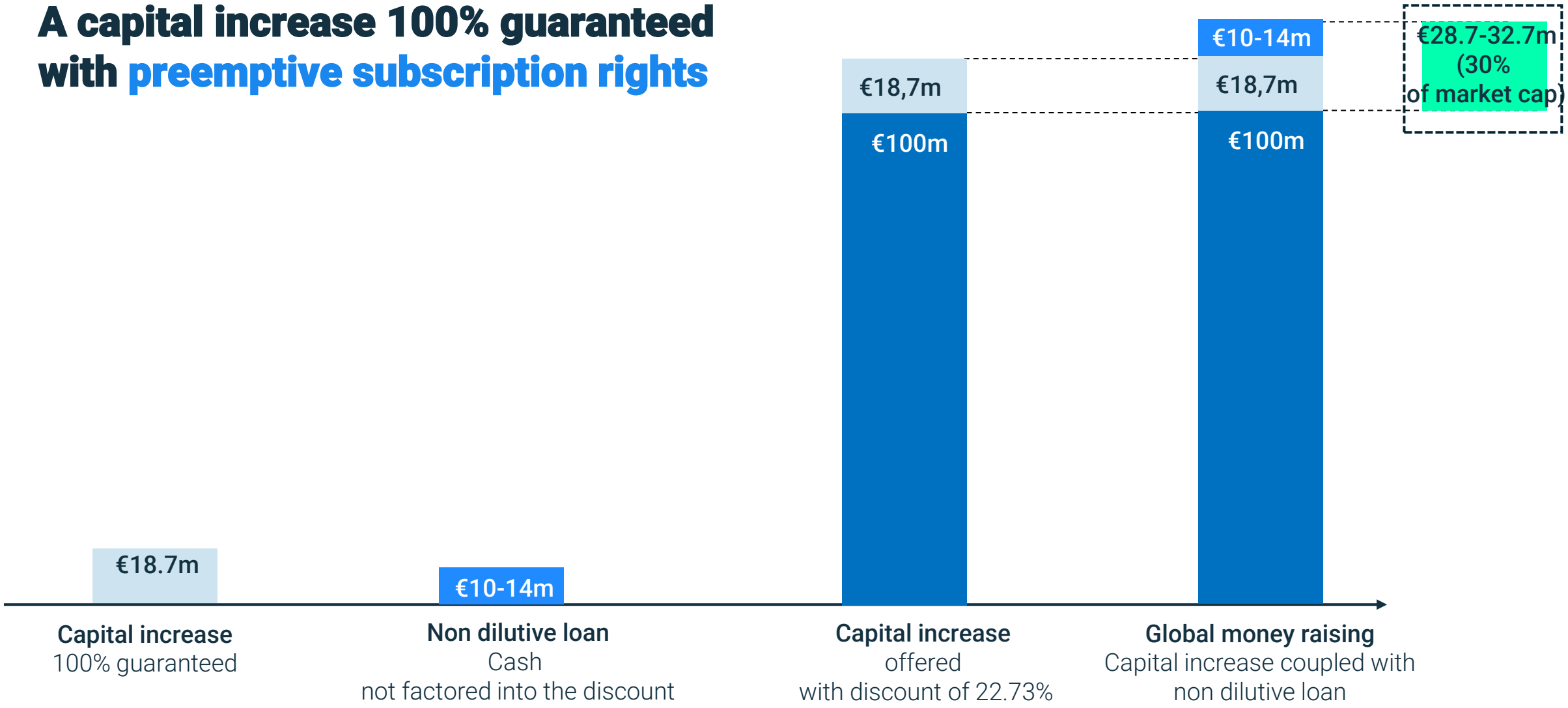
- EUR 10 million to fund Phase 2b clinical trial in sepsis, including manufacturing, with study initiation planned for 2026 and topline readout expected by the end of the first half of 2028;
- EUR 9 million to advance the LCAT deficiency indication through submission of Marketing Authorization Application (MAA) to the EMA in early 2028, including associated CMC activities (Chemistry, Manufacturing, and Controls) focusing on two validation batches to be completed by the end of 2027, regulatory costs, and potential commercial supply; The Company targets an EMA submission in early 2028 and Marketing Authorization in 2028, followed by FDA submission in 2029;
- the remainder for general corporate purposes and working capital, including, as the case may be, the repayment of the debt incurred under the Bonds Financing, extending the Company's cash runway into the end of 2028.

A clear ambition : strong and sustainable value creation



A culture of financial frugality and the pursuit of financing options that are least dilutive for all shareholders

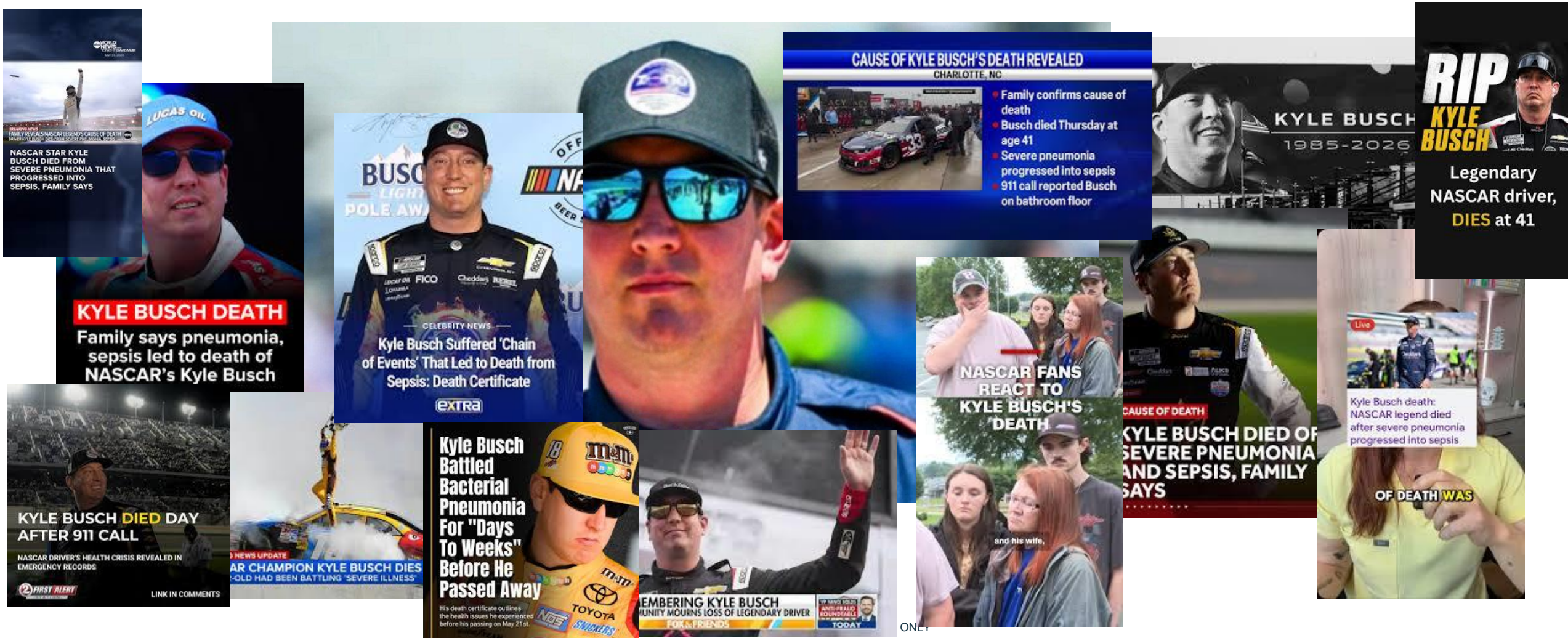
A capital increase 100% guaranteed with preemptive subscription rights



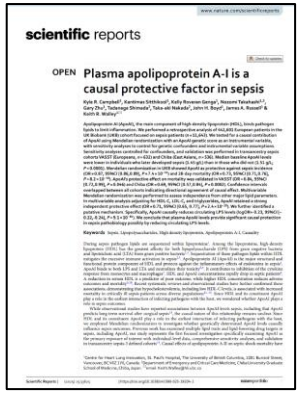
An opportunity for shareholders: non-dilutive debt not factored into the discount on the capital increase

Sepsis is the 3rd cause of death in the world

The death certificate of Kyle Busch, a two-time NASCAR champion and iconic figure in the sport in the United States, reveals that he died of bacterial pneumonia that progressed to **sepsis**



The causal role of HDL/apoA-1 in improving sepsis outcomes has been comprehensively validated


scientific reports

OPEN Plasma apolipoprotein A-I is a causal protective factor in sepsis

Trinder et al : Causal Inference for Genetically Determined Levels of High-Density Lipoprotein Cholesterol and Risk of Infectious Disease

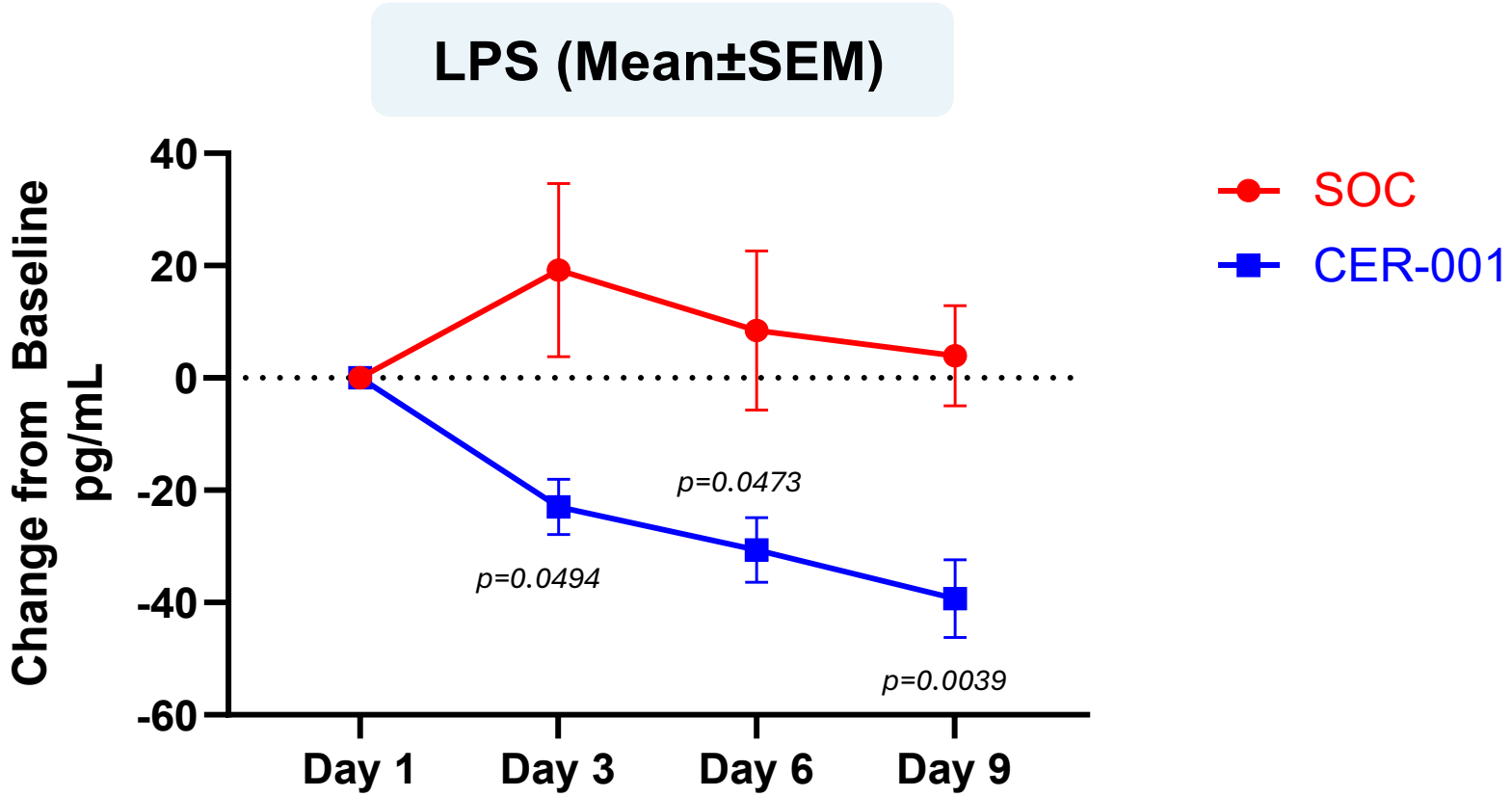
- Lower outpatient use of antibiotics
- Lower admissions for infection related illness and sepsis
- Lower 28 day mortality in patients who do develop sepsis

Campbell et al : Plasma apolipoprotein A-I is a causal protective factor in sepsis

- Adds to Trinder publication by establishing higher apoA-1 levels in HDL as the causal factor
- Confirms lower incidence of sepsis and lower mortality in patients with sepsis
- Extends benefit to Gram +ve sepsis
- Establishes LPS clearance as the mechanism by which apoA-1 protects
- Validates results obtained in UK Biobank with VASST (Europe) and Chiba (Japan) databases

The effect size reported in both studies is substantial, indicating a strong and biologically meaningful impact

Reduces LPS exposure in patients with Sepsis

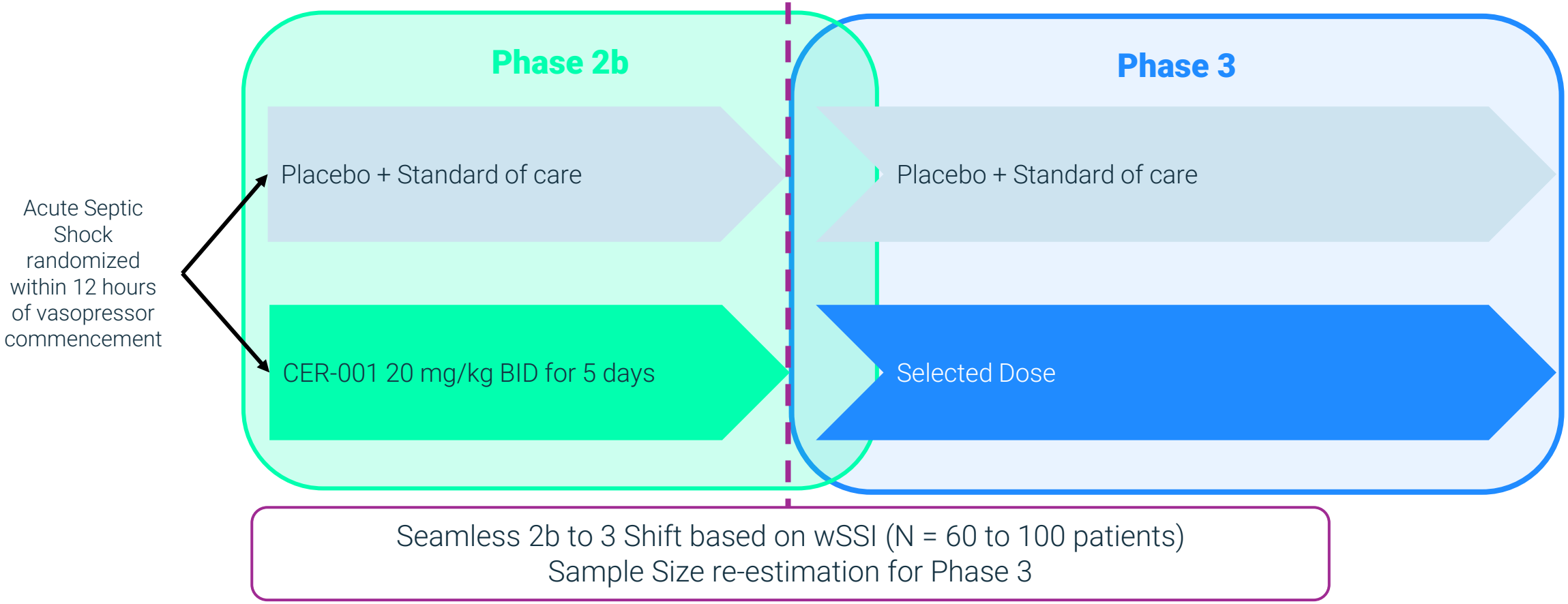


Summary of RACERS clinical data: Phase 2a study of patients with Septic Shock

In the Phase 2a study in patients with septic shock, CER-001:

- significantly restores apoA-1 to normal compared to reduced levels in control group
- significantly lowers endotoxin levels compared to control
- significantly reduces major inflammatory mediators such as Il-6, Il-8, TNF-α, Il-6, and MCP-1
- significantly reduces markers of endothelial inflammation such as ICAM-1 and VCAM-1
- significantly lowered sTREM-1 a biomarker for increased mortality
- improves Albumin levels, an established marker of survival and liver function
- improves the KDIGO score, a marker of acute kidney injury, over the first six days versus no change in the control group

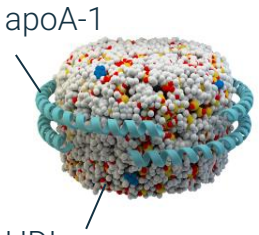
Design of the Phase 2b and Phase 3 studies

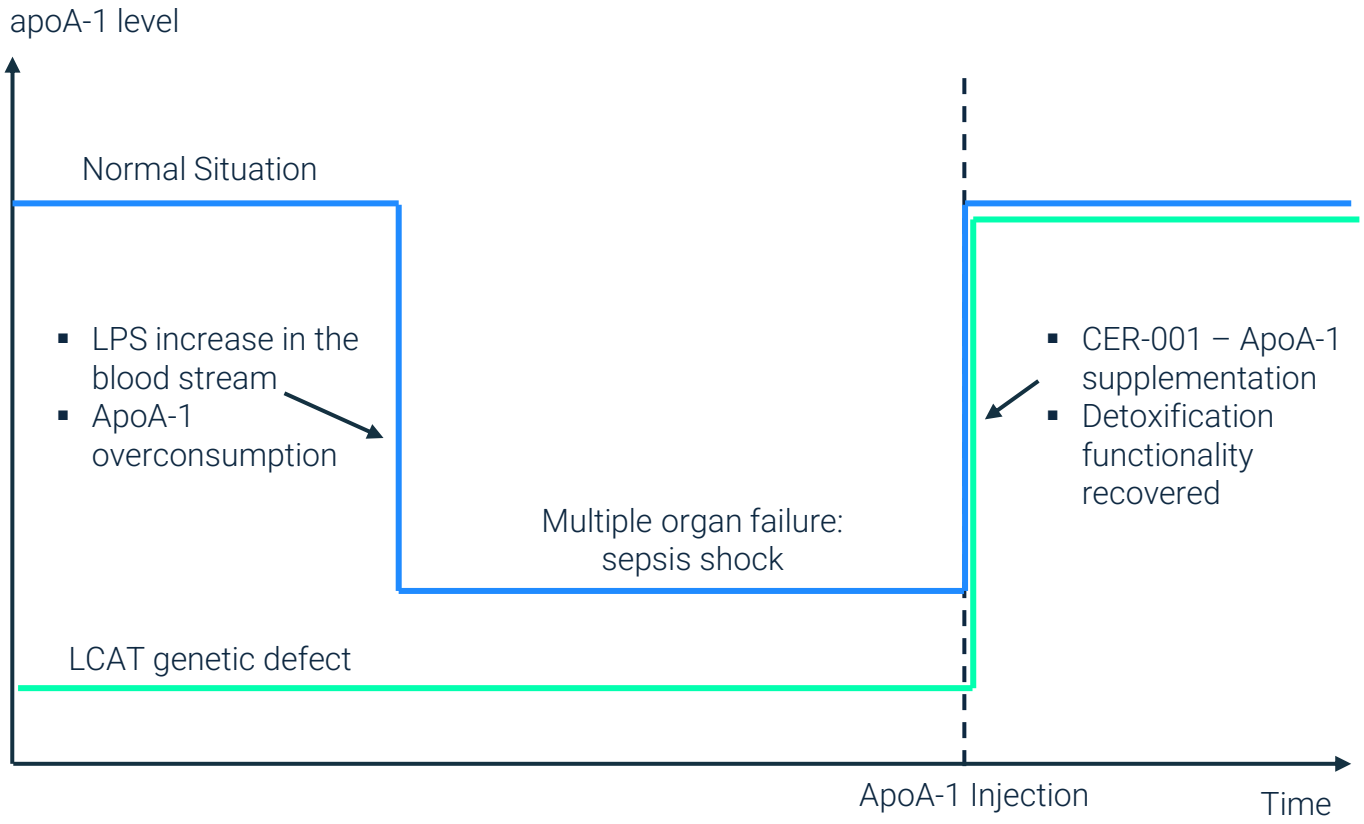


- Weighted SSI – daily score based on mortality (3 points), vasopressor use (1 pt), dialysis (1 pt) and mechanical ventilation (1 pt)
- Patient numbers are nominal
- P3 Sample size will be endpoint driven - patient numbers are for planning only
- P3 recruitment will continue until required number of endpoints are expected to be met

CER-001 biotherapy targets the root cause shared by two diseases

Both **LCAT deficiency** (genetic, chronic) and **Sepsis** (acute) lead to a loss of apoA-I, the key complex that clears toxic lipids and controls inflammation. Abionyx is advancing therapies addressing these two indications.



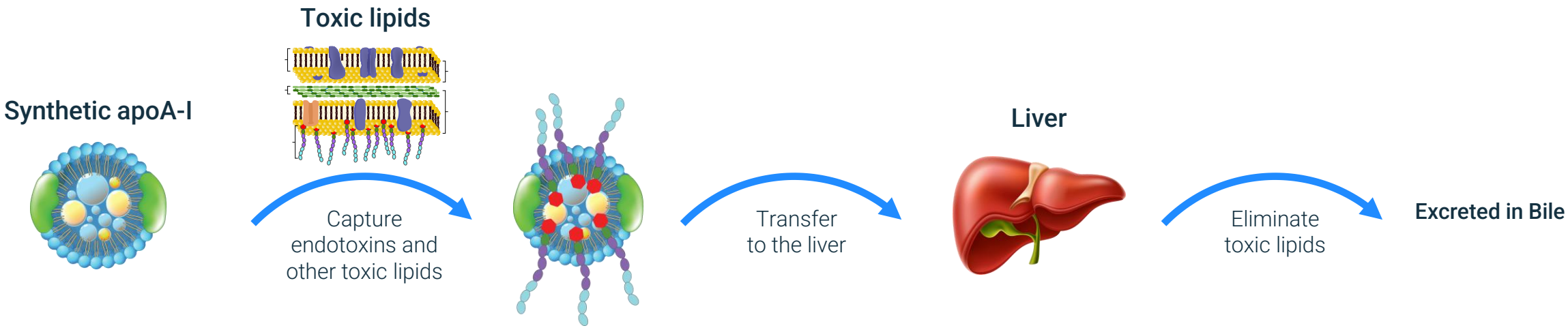


Sepsis: Low level of apoA-1 due to over consumption
ApoA-1 depleted acutely

LCAT: Non-functional HDL/apoA-1 due to inherited genetic defect
HDL-apoA-1 depleted chronically

We developed the first bioengineered apoA-I, a breakthrough innovation in toxic lipid regulation

Abionyx is producing **CER-001**, a human HDL/apoA-I, one of the most abundant protein in human blood, identical in structure and function, overcoming challenges of stability, purity, and large-scale manufacturing.



Why is it a breakthrough?

- A multi-benefit action — addressing tissue damages, decreasing inflammation, leading to fast recovery
- Works across many diseases
- No known risk of drug resistance

Proven GMP manufacturing process ready to commercial roll-out

Since its first successful production in 2015, Abionyx has completed more than **35 batches** of CER-001 — the latest in early 2025 — leveraging a France-based **network of leading CDMOs**.

olon Sustainable technologies delivering science

UPSTREAM PROCESS

v

Cell culture
Crude apoA-I

axplora

DOWNSTREAM PROCESS

v

Purification
98% Pure apoA-I

olon Sustainable technologies delivering science

COMPLEXATION

v

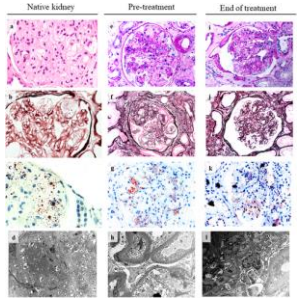
Complexation and Fill & Finish
Homogeneous HDL population 100% yield

This vertical integration strengthens Abionyx's control over **manufacturing quality**, **regulatory alignment**, and **supply reliability**

FRANCE 2030

Biological properties	**Full-length protein apoA-I**	More stable	**Stability up to 8 years with French authorities**	Molecule crossing the Blood Brain Barrier	**10 nm**
Cold storable at positive temperature	**2 to 8°C**	Ultra-pure	**>99%**	Optimized structure	**Pure Synthetic SphingoMyelin**

Clinical development completed for LCAT deficiency, a severe disease with no existing treatment



Rare genetic disease leading to loss of functional HDL/apoA-I and progressive organ failure: kidney, eye, anemia

0 approved treatment

1 K+ estimated patients worldwide

€200 M market opportunity

4 ODD from EMA & FDA

Outstanding positive clinical results where all 8 patients were responsive to treatment - Sept 2024.

Clinical Development	>	Biomanufacturing (CMC)	>	Market Authorization
✓		Only **2 validation batches** needed to file for approval **To be filed by 2027**		expected filing in 2027 for a **market authorization in 2028**

IHU SEPSIS is the World's Leading Center Dedicated to Sepsis to create the first fully integrated global platform dedicated to the treatment of sepsis

ABIONYX Pharma entered into advanced strategic discussions with IHU SEPSIS to partner on sepsis treatments on November 11, 2025

A **world-class hub** to integrated research, education, and patient care for innovation across pediatric and adult sepsis

60 research teams (275 researchers and 94 clinical physicians), patient associations and world-class hospitals through organizations such as the Global Sepsis Alliance and Sepsis Canada

Extensive international network to deploy multi-country clinical protocols and studies with leading hospitals in the United States, Canada, Europe, and emerging regions

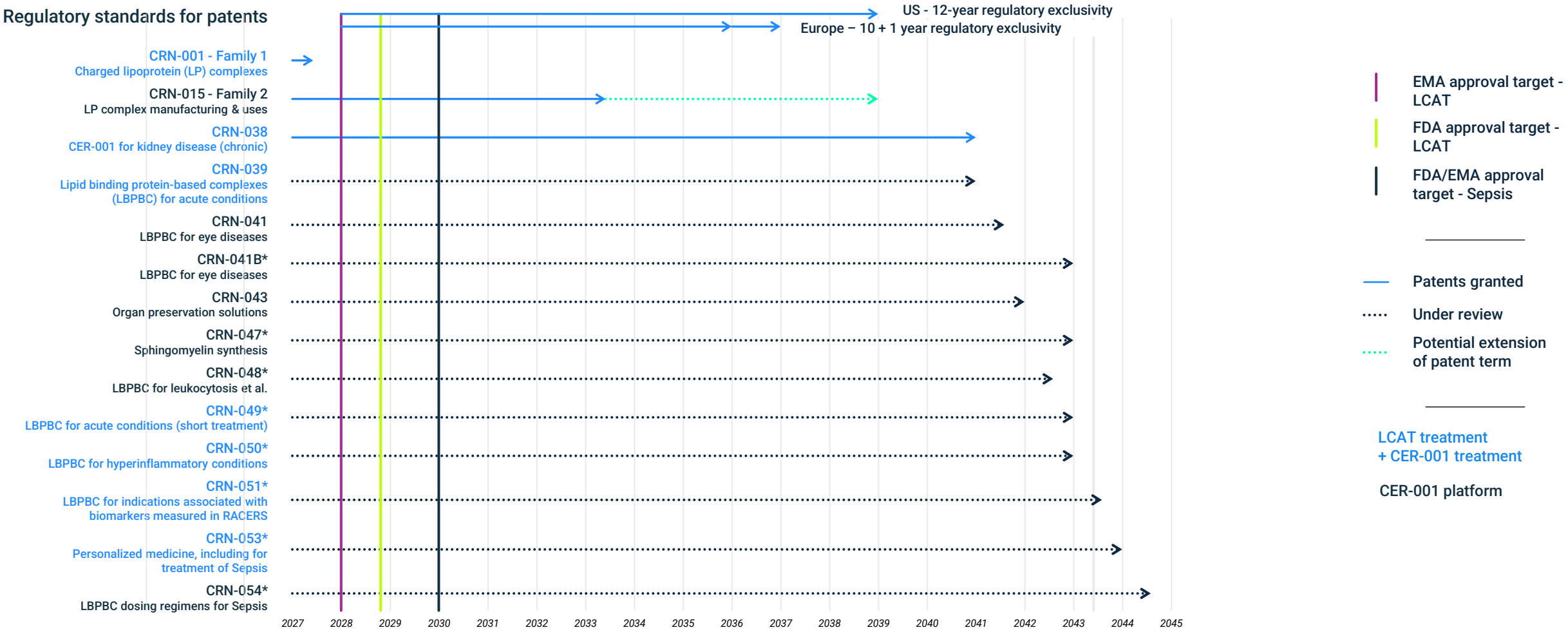
Key advantages and value drivers for ABIONYX Pharma:

- Clinical development speed and cost related to world hospital centers network
- Direct connections with expert centers and access to biobanks to document the natural history of the disease
- Scientific visibility to involve patient associations
- Reinforced corporate and scientific reputation through collaborations with recognized KOLs and reference institutions

While LCAT secures a niche market opportunity, Sepsis unlocks the multi-billion-euro upside

** Total number of addressable patients worldwide*
*** Number of addressable patients per year for US, Canada and Europe market*
Sources: Mehta R. et al., Orphanet J Rare Dis. 2021;16:448 — StatPearls, 2024 — Orphanet (Expert #313, 2023) — MedlinePlus Genetics.

CER-001 is protected until 2042 plus the BLA protection for 10-12 years



A leadership team with strong equity ownership and recognized scientific and business achievements

Cyrille Tupin
CEO
pwc

Dr Rob Scott MD
CMO, head of R&D
abbvie AMGEN

Connie Keyserling Peyrottes
SVP of Clinical Development & Operations
Pfizer ESPERION

Margit Holzer, Ph.D.
SVP of Bio-production
novasep BIONTECH

Ronald Barbaras, Ph.D.
SVP of R&D
Inserm

Laurent Guerci
Chief Digital & Innovation Officer
ACTIA

Jérôme Martinez
Senior Advisor, Ophtalmology
Santen

Emmanuel de Fougeroux
CFO

5 publications
with positive clinical results

France 2030 Laureate,
validating the project's quality through a rigorous national audit and providing an €8.7 M grant

IP protected
Patent portfolio covering therapeutic and manufacturing innovations through 2042

Based in US / EU

Abionyx: Global leader in recombinant apoA-I with transformative clinical efficacy

1. Global leader in **recombinant human apoA-I** therapies, leveraging over 20 years of lipid metabolism expertise to pioneer the first bioengineered therapy for toxic lipids regulation

2. De-risked regulatory pathway for **ultra-rare LCAT deficiency**, having already demonstrated clinical success through compassionate use across four European countries and securing Orphan Drug Designation in both the US and EU

3. Targeting the world's 3rd leading cause of death, the RACERS **Phase 2a study in Sepsis** demonstrated **practice changing clinical results**: 65% reduction in 30-day mortality risk, 71% drop in ICU mortality, and 5-day shorter ICU stay versus control

4. **Proprietary industrialized bio-production** site utilizing a robust and patented bioprocess to ensure high-quality, scalable global supply for upcoming clinical trials and regulatory submissions

5. Following EMA acceptance of a shortened 2-batch validation process, the company is preparing for a **Marketing Authorization Application** (MAA) in LCAT while targeting a 2026 Phase 2 sepsis trial start

Thank you.