

Commercial execution / Innovation and therapeutic focus



# Cardiovascular disease

**CMD22**  
CAPITAL MARKETS DAY

3 MARCH



Martin Holst Lange  
EVP Development



Camilla Sylvest  
EVP Commercial Strategy and Corporate Affairs



# Forward-looking statements

Novo Nordisk's reports filed with or furnished to the US Securities and Exchange Commission (SEC), including the statutory Annual Report 2021 and Form 20-F, which both were filed with the SEC in February 2022 in continuation of the publication of this Annual Report 2021, this presentation, and written information released, or oral statements made, to the public in the future by or on behalf of Novo Nordisk, may contain forward-looking statements. Words such as 'believe', 'expect', 'may', 'will', 'plan', 'strategy', 'prospect', 'foresee', 'estimate', 'project', 'anticipate', 'can', 'intend', 'target' and other words and terms of similar meaning in connection with any discussion of future operating or financial performance identify forward-looking statements. Examples of such forward-looking statements include, but are not limited to:

- Statements of targets, plans, objectives or goals for future operations, including those related to Novo Nordisk's products, product research, product development, product introductions and product approvals as well as cooperation in relation thereto,
- Statements containing projections of or targets for revenues, costs, income (or loss), earnings per share, capital expenditures, dividends, capital structure, net financials and other financial measures,
- Statements regarding future economic performance, future actions and outcome of contingencies such as legal proceedings, and
- Statements regarding the assumptions underlying or relating to such statements.

These statements are based on current plans, estimates and projections. By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific. Novo Nordisk cautions that a number of important factors, including those described in this presentation, could cause actual results to differ materially from those contemplated in any forward-looking statements.

Factors that may affect future results include, but are not limited to, global as well as local political and economic conditions, including interest rate and currency exchange rate fluctuations, delay or failure of projects related to research and/or development, unplanned loss of patents, interruptions of supplies and production, including as a result of interruptions or delays affecting supply chains on which Novo Nordisk relies, product recalls, unexpected contract breaches or terminations, government- mandated or market-driven price decreases for Novo Nordisk's products, introduction of competing products, reliance on information technology including the risk of cybersecurity breaches, Novo Nordisk's ability to successfully market current and new products, exposure to product liability and legal proceedings and investigations, changes in governmental laws and related interpretation thereof, including on reimbursement, intellectual property protection and regulatory controls on testing, approval, manufacturing and marketing, perceived or actual failure to adhere to ethical marketing practices, investments in and divestitures of domestic and foreign companies, unexpected growth in costs and expenses, failure to recruit and retain the right employees, failure to maintain a culture of compliance, epidemics, pandemics or other public health crises, and factors related to the foregoing matters and other factors not specifically identified herein.

For an overview of some, but not all, of the risks that could adversely affect Novo Nordisk's results or the accuracy of forward-looking statements in this Annual Report 2021, reference is made to the overview of risk factors in 'Risk management' of this Annual Report 2021.

Unless required by law, Novo Nordisk is under no duty and undertakes no obligation to update or revise any forward-looking statement after the distribution of this Annual Report 2021, whether as a result of new information, future events, or otherwise.

## Important drug information

Victoza® and Ozempic® are approved for the management of type 2 diabetes only  
Saxenda® and Wegovy® are approved in the USA and the EU for the treatment of obesity only

# Strategic aspirations 2025




Purpose and sustainability (ESG)

- Progress towards zero environmental impact
- Being respected for adding value to society
- Being recognised as a sustainable employer




Commercial execution

- Strengthen Diabetes leadership - aim at global value market share of more than 1/3
- More than 25 billion DKK in Obesity sales by 2025
- Secure a sustained growth outlook for Rare disease



Innovation and therapeutic focus

- Further raise the innovation-bar for diabetes treatment
- Develop a leading portfolio of superior treatment solutions for obesity
- Strengthen and progress the Rare disease pipeline
- **Establish presence in Other serious chronic diseases focusing on CVD, NASH and CKD**



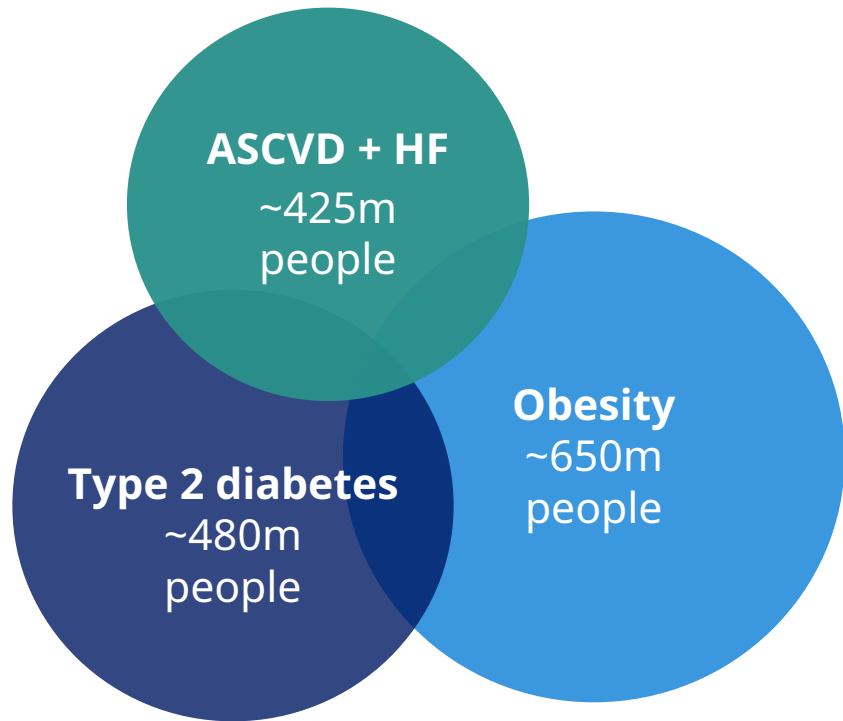
Financials

- Deliver solid sales and operating profit growth
  - Deliver 6-10% sales growth in IO
  - Transform 70% of sales in the US<sup>1</sup>
- Drive operational efficiencies across the value chain to enable investments in future growth assets
- Deliver free cash flow to enable attractive capital allocation to shareholders



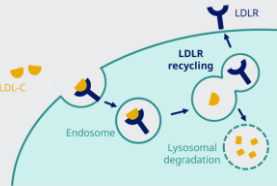
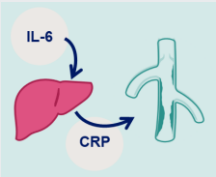

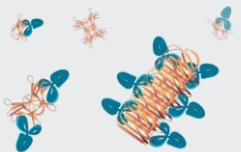
<sup>1</sup> From 2015 to 2022, 70% of sales to come from products launched from 2015. IO: International Operations; CVD: Cardiovascular disease; NASH: Non-alcoholic steatohepatitis; CKD: Chronic kidney disease.  
Note: The strategic aspirations are not a projection of Novo Nordisk's financial outlook or expected growth.

# Large patient overlaps between diabetes, obesity and CVD have guided our focused approach in CVD

Population overlap between T2D, obesity and CVD



Focused approach in CVD

Atherosclerosis 		Heart failure 	
<p><b>High cholesterol</b></p>  <p>Lowering LDL-C to reduce ASCVD</p>	<p><b>Inflammation-driven pathogenesis</b></p>  <p>hsCRP as surrogate endpoint</p>	<p><b>Heart failure with preserved ejection fraction (HFpEF)</b></p>  <p>Improve outcomes</p>	<p><b>Transthyretin amyloid cardiomyopathy (ATTR-CM)</b></p>  <p>Amyloid-depletion through antibody-mediated phagocytosis</p>

# Novo Nordisk will leverage experiences within diabetes and obesity with the aim to build a presence within CVD

## Current indications

Type 2 diabetes	
<b>LEADER</b> <small>Liraglutide Effect and Action in Diabetes: Evaluation of cardiovascular outcome Results</small>	13%*
<b>SUSTAIN 6</b> <small>SEMAGLUTIDE UNABATED SUSTAINABILITY IN TREATMENT OF TYPE 2 DIABETES</small>	26%*
<b>PIONEER 6</b> <small>Peptide Innovation for Early diabetes treatment</small>	21%*

## Near-term indications

Broader indications (towards 2025)	
<b>SELECT</b> <small>semaglutide   effects on cardiovascular outcomes in people with overweight or obesity</small>	Semaglutide 2.4 mg in people with overweight or obesity <sup>1</sup>
<b>SOUL</b> <small>semaglutide   cardiovascular outcomes trial</small>	Oral semaglutide 14 mg in people with T2D (CVOT)
<b>FLOW</b> <small>semaglutide   renal outcomes trial</small>	Sema 1.0 mg on renal outcomes in people with T2D and CKD
<b>STEP HFpEF</b>	Sema 2.4 mg on HF in people with obesity and chronic HFpEF <sup>1</sup>
<b>STRIDE</b> <small>Effects of semaglutide on functional capacity in patients with type 2 diabetes and peripheral arterial disease</small>	Sema 1.0 mg tested on PAD in people with T2D and PAD

## Future indications

Stand-alone CVD (beyond 2025)	
<b>ZEUS</b> <small>ziltivekimab   cardiovascular outcomes trial</small>	CVOT for ziltivekimab
<b>Oral PCSK-9i</b>	Dose-finding trial with oral PCSK-9i to treat dyslipidaemia and reduce the risk of ASCVD
<b>ATTR CM</b>	Proof-of-principle trial of NNC6019-0001 <sup>2</sup> in patients with ATTR-CM (HF)

\* indicates statistically significant risk reduction of 3-point major adverse cardiovascular events (MACE) defined as a composite of non-fatal stroke, non-fatal myocardial infarction (MI), and cardiovascular death  
<sup>1</sup> Incomplete inclusion criteria as e.g. established CVD is also a requirement; <sup>2</sup> Formerly noted as PRX004; CVD: Cardiovascular disease; CKD: Chronic kidney disease; T2D: Type 2 diabetes; Sema: semaglutide; PAD: peripheral arterial disease; ATTR-CM: Transthyretin amyloid cardiomyopathy, CVOT: Cardiovascular outcome trial; ASCVD: Atherosclerotic cardiovascular disease; HFpEF: Heart failure with preserved ejection fraction; HF: Heart failure

# Broad pipeline leveraging internal and external innovation

## Establishing a presence in CVD

### Ambition:

**At least one product launched between 2024-2028 targeting ASCVD or heart failure**

### Priorities:

- Be first-to-market addressing a significant unmet need
- Pursue highly innovative MoAs
- Combine internal and external innovation

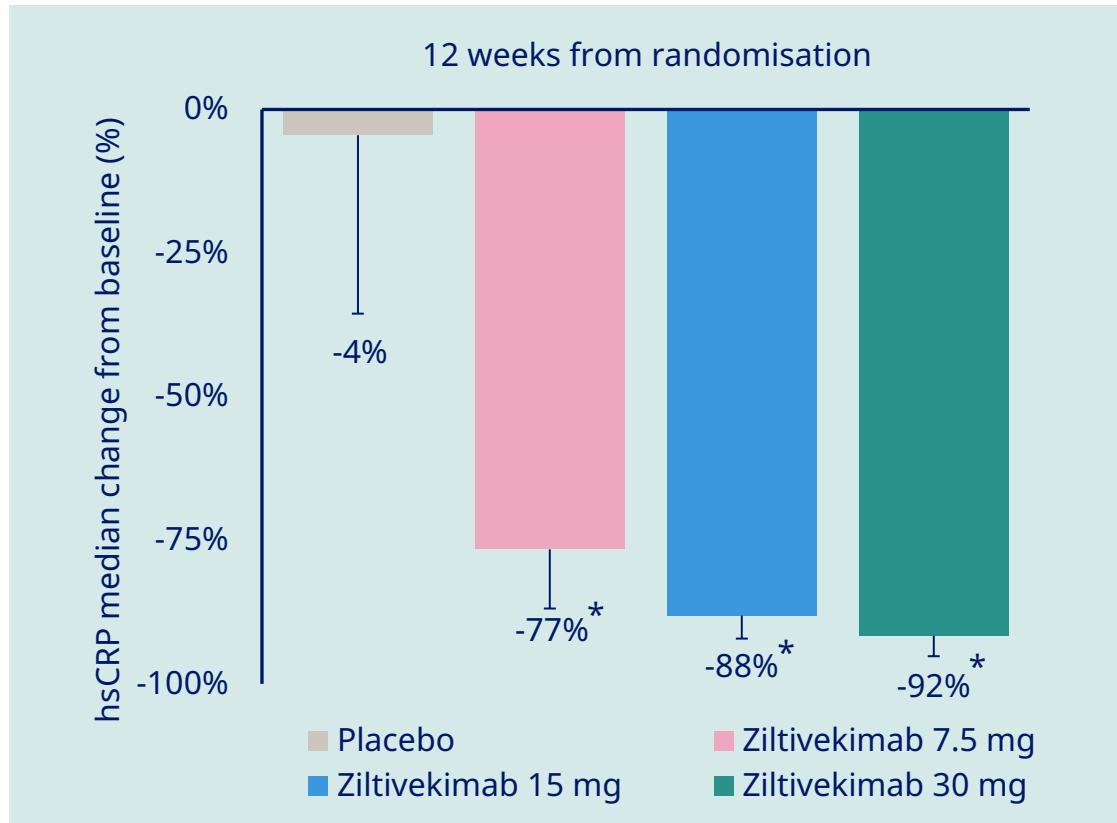
## Cardiovascular disease pipeline overview

		2022	2023	2024	2025
ASCVD	<b>Ziltivekimab</b> in inflammatory pathogenesis	Phase 3			
	<b>Oral PCSK9i</b> in high cholesterol	Phase 2			
Heart failure	<b>Semaglutide 1.0 mg (STRIDE)</b> in PAD	Phase 3			
	<b>Semaglutide 2.4 mg (STEP)</b> in HFpEF	Phase 3a			
	<b>HS-001 (Heartseed/stem cells)</b> in HFrEF	Phase 1			
	<b>PRX004 (NN6019)</b> in ATTR-CM	Phase 2			

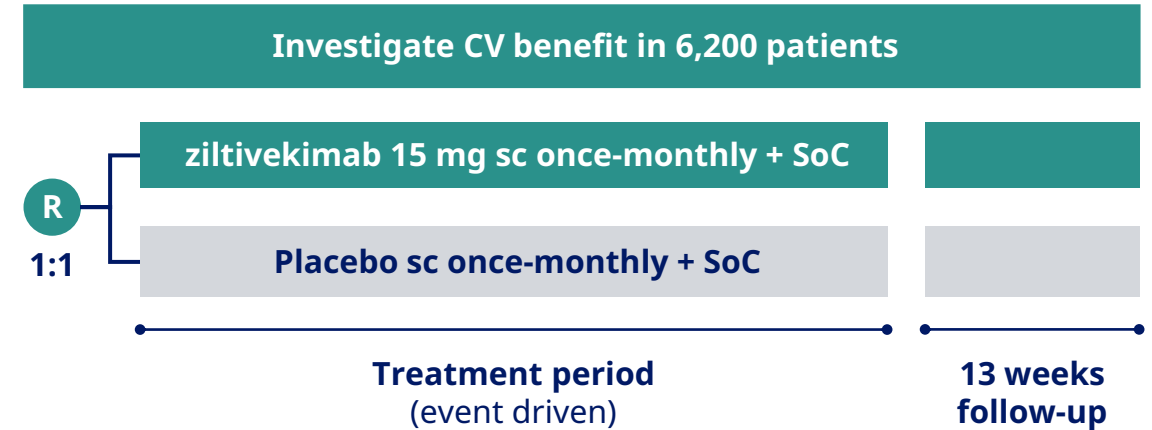
□ Internal asset    ■ External asset

# ZEUS trial with ziltivekimab aims to validate the link between hsCRP and major adverse cardiovascular events

## Results from the phase 2 trial RESCUE with ziltivekimab



## Phase 3 CVOT trial ZEUS with ziltivekimab



### Primary endpoint

- Time to the first occurrence of 3-point MACE<sup>1</sup>

### Secondary endpoints

- Time to first occurrence of expanded MACE<sup>1</sup>
- Number of hospitalisations for HF or urgent HF visit
- Time to occurrence of all-cause mortality
- Time to first occurrence of a composite CKD endpoint

\* Statistically significant; <sup>1</sup> Inclusion criteria: Age ≥18 years, History of ASCVD, eGFR ≥15 and <60 mL/min/1.73 m<sup>2</sup>, Serum hsCRP ≥2 mg/L

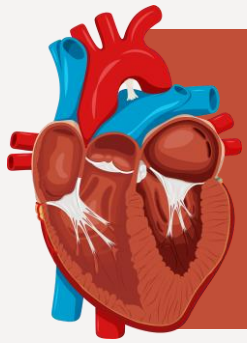
<sup>1</sup> MACE includes CV death, non-fatal MI or non-fatal stroke, Expanded MACE includes: (CV death, non-fatal MI, non-fatal stroke or hospitalisation for unstable angina pectoris requiring urgent coronary revascularisation)

hsCRP: High-sensitivity C-reactive protein; CVOT: Cardiovascular outcome trial; CV: Cardiovascular; sc: Subcutaneous; SoC: Standard of care; HF: Heart failure; CKD: Chronic kidney disease

Source: Ridker PM, et al., IL-6 inhibition with ziltivekimab in patients at high atherosclerotic risk (RESCUE): a double-blind, randomised, placebo-controlled, phase 2 trial, 17 May 2021

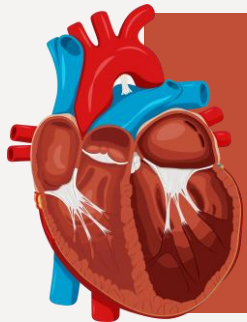
# For patients with heart failure, the goal is to bring disease modifying and curative treatments to the market

## Heart failure at a glance



### Diastolic dysfunction (HFpEF)

- Impaired filling capacity
- Stiff and thick ventricle



### Systolic dysfunction (HFrEF)

- Impaired contractility
- Stretched and thin ventricle

## Pipeline includes potential disease modifying and curative treatments

### Symptom relief

### Disease modifying

### Curative

**Today's marketed treatments**

### Prothena (PRX004)

A monoclonal antibody designed to deplete the amyloid plaques associated with ATTR-CM in a niche population

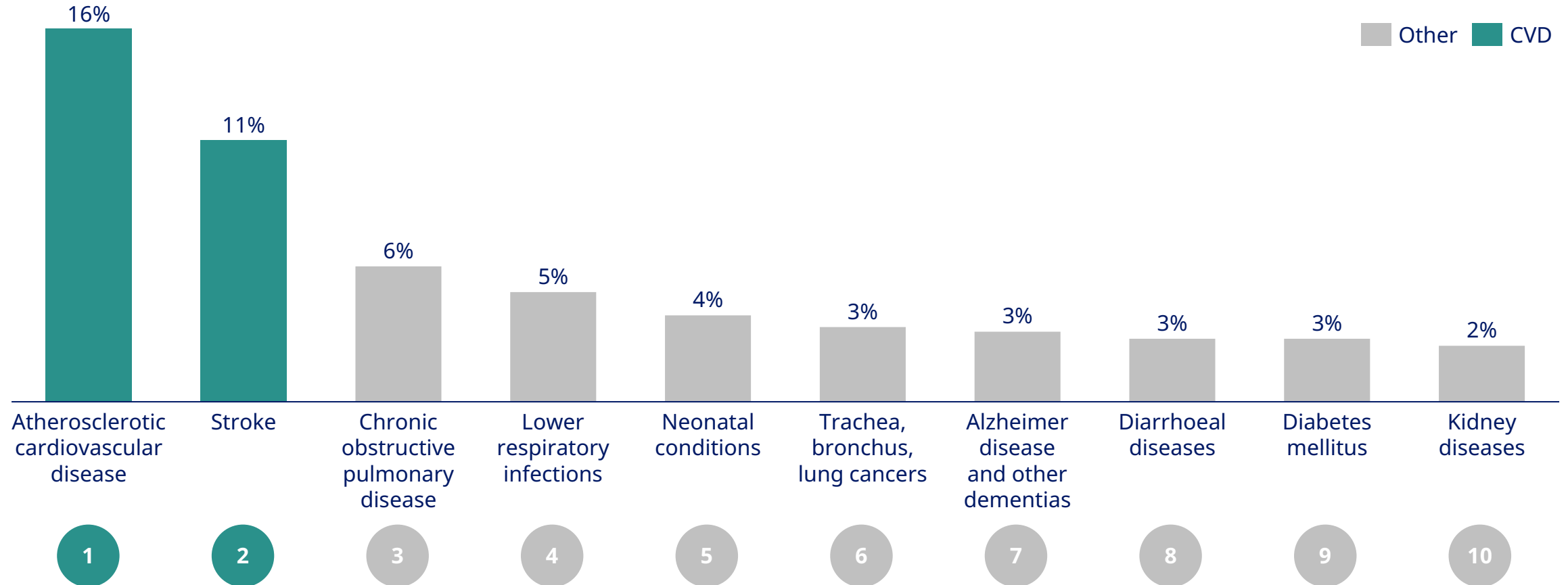
### Heartseed (HS-001)

- HS-001 use iPSC-derived cardiomyocytes to treat HF
- The cells are treated in a solution to enhance survival and/or engraftment



# There is still room for innovation with a high unmet need in CVD

Percentage of total deaths in 2019



CVD: Cardiovascular disease

Source: "The top 10 causes of death", WHO, 9 December 2020 (ASCVD denoted as ischaemic heart disease)

# An innovative late-stage CVD pipeline provides opportunities to make a difference for many patients

## Focus areas

Near-term
Leverage broader CV indications to establish presence with Cardiologists and build an adequate PCP footprint for entry of stand-alone CVD product
Medium-term
Utilise leading scientific and commercial capabilities to launch first CVD stand-alone product
Long-term
Expand pipeline with differentiated MoAs through leading discovery and translational capabilities

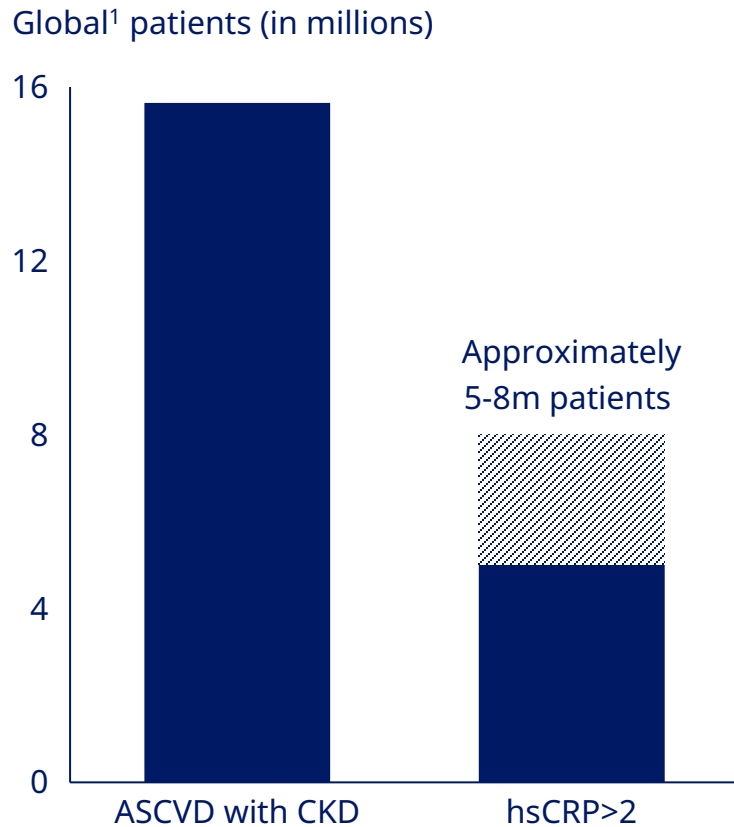
## Examples of unmet needs in CVD pipeline

Category	Broader indications		Stand-alone CVD
<b>Study</b> Current phase	<b>HFpEF</b> Phase 3 Sema 2.4mg	<b>PAD</b> Phase 3 Sema 1.0mg	<b>ATTR-CM</b> Phase 2 to be initiated in 2022 PRX004 (NN6019)
<b>Global unmet need</b> (people)	~13m	~200m	No consensus (estimated 0.1-2.8 cases per 10,000 in EU)
<b>Potential differentiators</b>	1 <sup>st</sup> in class indication <sup>1</sup>	First and only for T2D	Reverse disease pathology
<b>Potential launch year</b>	2023/24	2023/24	2028

<sup>1</sup> Specifically for a functional outcomes trial in an obese patient population  
 PCP: Primary Care Physician; CV(D): Cardiovascular Disease; MoA: Mode of Action; HFpEF: Heart failure with preserved ejection fraction; PAD: Peripheral arterial disease; ATTR-CM: Transthyretin Amyloid Cardiomyopathy; T2D: Type 2 Diabetes  
 Sources: HFpEF: Savarese G, Lund LH. Global Public Health Burden of Heart Failure, 3 April 2017; PAD: Shu J, Santulli G. Update on peripheral artery disease: Epidemiology and evidence-based facts, 22 May 2018; ATTR-CM: Orphan Maintenance Assessment Report for tafamidis, EMA, 17 February 2020

# Ziltivekimab aspires to address an unmet need in more than 5 million people

Ziltivekimab aspires to reduce MACE in people with ASCVD and CKD



## Critical success factors to commercialise ziltivekimab

### Market building

**Targeted HCP outreach and relationship building**

**Successful payer engagement**

**Integrated evidence generation**

### Focus areas

- Increase presence with key prescriber base being cardiologists and PCPs
- Enhance awareness of inflammatory burden in CVD with KOLs and HCP associations
- Utilise ZEUS read-out to quantify anti-inflammatory clinical benefit in ASCVD patients with CKD vs Standard of Care
- Understand hsCRP and inflammation, epidemiology of disease and socio-economic burden of disease

### Investment levels



○ Low ● High

<sup>1</sup> Includes US, EU5 (Germany, France, Spain, Italy, United Kingdom) and Japan  
MACE or major adverse cardiovascular events includes CV death, non-fatal MI or non-fatal stroke; ASCVD: Atherosclerotic cardiovascular disease; CKD: Chronic kidney disease; HCP: Healthcare professional; PCP: Primary care physician  
KOL: Key opinion leader; hsCRP: High-sensitivity C-reactive protein

# Closing remarks

Entering a growing market with a clear strategy and focus to build a presence in CVD

High unmet needs and new innovations are required to help improve treatment outcomes

Pre-launch activities are initiated and ongoing to ensure successful commercialisation of CVD pipeline

