

TOURMALINE

Corporate Overview

September 2024

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Our mission

We are driven by our mission to develop transformative medicines that dramatically improve the lives of patients with life-altering immune and inflammatory diseases



Experienced leadership team

Management Team



Sandeep Kulkarni, MD
*Co-founder and
Chief Executive Officer*



Yung Chyung, MD
Chief Medical Officer



Ryan Robinson, CPA
Chief Financial Officer



Brad Middlekauff, JD
*Chief Business Officer and
General Counsel*



Susan Dana Jones, PhD
Chief Technology Officer



Kevin Johnson, PhD
Chief Regulatory Officer



Emil deGoma, MD
*Senior Vice President,
Medical Research*



Gerhard Hagn
*Senior Vice President,
Head of Commercial & BD*



Don Fitch
*Senior Vice President,
Product Development*



Dora Rau
*Senior Vice President,
Head of Quality*

Board of Directors

Clay Siegall, PhD
Chairman

Caley Castelein, MD

Aaron Kantoff

Mark McDade

Sapna Srivastava, PhD

Parvinder Thiara

Sandeep Kulkarni, MD

Key highlights



An IL-6 renaissance is underway: new insights emerging about a broad range of indications where IL-6 may be clinically validated



Pacibekitug (also referred to as TOUR006) has demonstrated best-in class potential: long-acting, low immunogenicity, and low-volume subcutaneous administration observed in clinical trials to date



Two strategic paths to significant value creation: (1) FcRn+ and (2) cardiovascular inflammation



A late-stage clinical company: pivotal Phase 2b spiriTED TED trial and Phase 2 TRANQUILITY CV trial ongoing, pivotal Phase 3 TED trial also expected to commence in 2H 2024



Accomplished leadership team: extensive experience developing and commercializing antibodies for immune and inflammatory diseases



Well-financed: cash expected to fund operations into 2027, enabling the delivery of key anticipated milestones for both strategic paths

We are in an IL-6 renaissance

First wave of IL-6 inhibition: focus on rheumatology

2010 – 2023

RA	GCA
sJIA	CRS
pJIA	NMOSD
MCD	SSc-ILD
COVID19	PMR

Sources of emerging insights:

Sustained academic and investigator enthusiasm for IL-6

Hypothesis-generating success from off-label experimentation

Human translational data: genetic, biomarker, epidemiologic



Second wave of IL-6 Inhibition: driven by emerging insights

2024: Late-stage programs AE AMI ASCVD DMD HFpEF MOGAD TED UME	2024+: Large body of potential indications	
	Cardio:	AAA AM
		Stroke
	Derm:	BP PV
	Endo:	Graves'
	GI:	CD UC
	Hem:	ITP TTP
	Neph:	IgAN MN
	Neuro:	CIDP IBM MG MS
	Ophth:	DME NIU
Resp:	CHP IPF PAP Sarcoid	
Rheum:	AAV IgG4-RD SjS	

Tourmaline-Selected Indications Key

- Cardiovascular Inflammation
- FcRn+

AAA: Abdominal aortic aneurysm; AAV: ANCA-associated vasculitis; AE: Autoimmune encephalitis; AM: Acute myocarditis; AMI: Acute myocardial infarction; ASCVD: Atherosclerotic cardiovascular disease; BP: Bullous pemphigoid; CD: Crohn's disease; CHP: Chronic hypersensitivity pneumonitis; CIDP: Chronic inflammatory demyelinating polyneuropathy; COVID19: Coronavirus disease 2019; CRS: Cytokine release syndrome; DMD: Duchenne muscular dystrophy; DME: Diabetic macular edema; GCA: Giant cell arteritis; FcRn: neonatal Fc receptor; HFpEF: Heart failure with preserved ejection fraction; IBM: Inclusion body myositis; IgAN: IgA nephropathy; IgG4-RD: IgG4 related disease; IPF: Idiopathic pulmonary fibrosis; ITP: Idiopathic thrombocytopenic purpura; MCD: Multicentric castelman's disease; MG: Myasthenia gravis; MN: Membranous nephropathy; MOGAD: Myelin oligodendrocyte glycoprotein antibody-associated disease; MS: Multiple sclerosis; NIU: Non-infectious uveitis; NMOSD: Neuromyelitis optica spectrum disorder; PAP: Pulmonary alveolar proteinosis; pJIA: Polyarticular juvenile idiopathic arthritis; PMR: Polymyalgia rheumatica; PV: Pemphigus vulgaris; RA: Rheumatoid arthritis; Sarcoid: Sarcoidosis; sJIA: Systemic juvenile idiopathic arthritis; SjS: Sjögren's syndrome; SSc-ILD: Systemic sclerosis interstitial lung disease; TED: Thyroid eye disease; TTP: Thrombotic thrombocytopenic purpura; UC: Ulcerative colitis; UME: Uveitic macular edema

Pacibekitug: an anti-IL-6 antibody with the potential to deliver significant value to patients

Pacibekitug attributes observed to date

Long-acting with terminal half-life of ~7 weeks¹

>90% pathway inhibition after single 10mg dose²

Fully human with ADAs in only 0.5% of pt³

High affinity to IL-6⁴

Existing data from 448 study participants¹

Potential value to patients

Dosing every 8 weeks⁵ or quarterly⁶

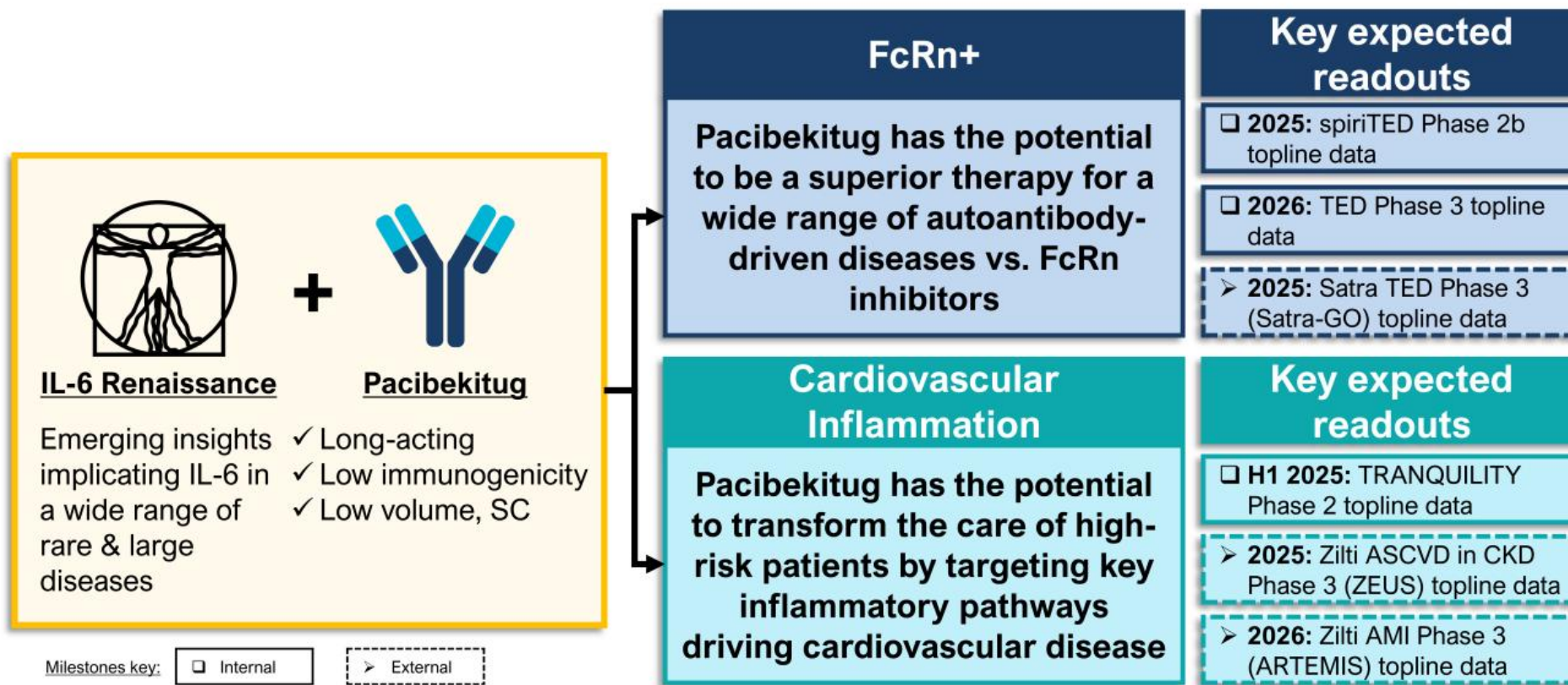
Fast, deep, and durable impact across diseases

Durable benefit without need to increase dose

Volume of ≤ 1 ml for SC injection⁵

Generally well-tolerated safety profile observed to date

Two strategic paths to unlock major value creation



The timing of regulatory and clinical trial milestones are subject to change and additional discussion with the FDA
 AMI: acute myocardial infarction; ASCVD: atherosclerotic cardiovascular disease; CKD: chronic kidney disease; Satra: satralizumab; Zilti: ziltivekimab

Clinical development plan for pacibekitug

Strategy	Indication	Preclinical	Phase 1	Phase 2	Phase 3	Expected key milestones
FcRn+	Thyroid Eye Disease (TED)	spirITED				Phase 2b topline data expected in 2025
		[Hatched bar]				Phase 3 expected to begin in H2 2024
Cardiovascular Inflammation	Atherosclerotic Cardiovascular Disease (ASCVD)	TRANQUILITY				Phase 2 topline data expected in H1 2025

Expect to announce at least one additional indication in 2024

Note: Hatched bars represent trials that have not yet commenced.
The timing of regulatory submissions and clinical trial milestones are subject to change and additional discussion with the FDA

FcRn+

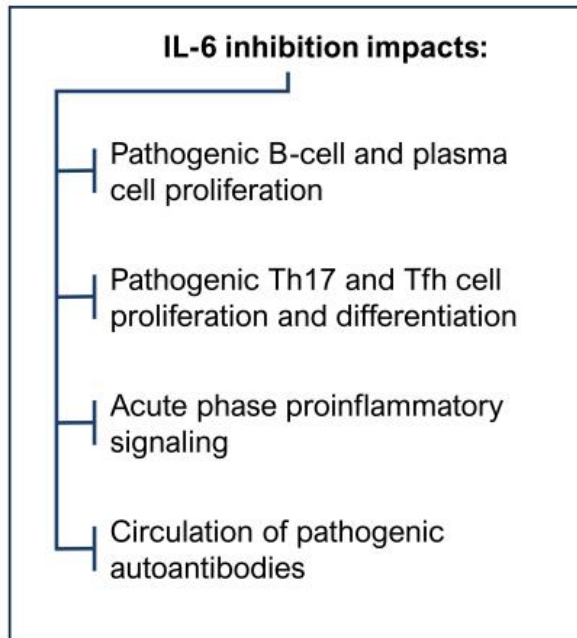
FcRn inhibition has garnered substantial attention to date, however significant unmet need persists

<u>What is FcRn?¹</u>	<u>FcRn market adoption</u>	<u>Key limitations of FcRn inhibition⁷</u>
<ul style="list-style-type: none">• Neonatal Fc receptor (FcRn) inhibition observed to lower IgG antibodies• Mechanism relevant in disorders mediated by pathogenic IgG autoantibodies• Two anti-FcRn therapies approved for myasthenia gravis with additional supportive data in CIDP, RA, and TED^{2,3,4}	<ul style="list-style-type: none">• First approved FcRn inhibitor annualizing ~\$1.5B sales in 2nd year of launch in MG⁵• FcRn companies account for >\$30B in market capitalization⁶	<ul style="list-style-type: none">• Efficacy limitations: incomplete clinical response observed• Lack of durable efficacy: clinical worsening occurs soon after cessation of therapy• High burden dosing profile: burdensome weekly or biweekly IV or high-volume SC infusions/injections• Unknown long-term safety profile: uncertain rate of infectious or other complications from sustained non-specific reduction of total IgG

Pacibekitug has broad potential beyond autoantibody reduction

An FcRn+ opportunity

Modes of action for IL-6 inhibition^{1,2}



Potential benefits of IL-6 inhibition versus FcRn inhibition

	IL-6 inhibition ^{1,2,3}	FcRn inhibition ^{4,5,6}
Autoantibody reductions	✓	✓
Inhibition of autoantibody production	✓	✗
Anti-inflammatory effects beyond autoantibody reduction	✓	✗
Durability of effect	✓	✗
Low administration burden	✓	✗
Favorable long-term safety profile observed to date	✓	?

TED: our beachhead indication designed to validate pacibekitug's FcRn+ potential in autoantibody-driven diseases

- 1 High unmet medical need with significant market opportunity**
 - TED patients experience significant disease burden driven by inflammation, proptosis, double-vision, and pain
 - ~30k new patients each year in the U.S. (average age at diagnosis is ~45)^{1,2}
 - ~80%³ of moderate-to-severe TED patients not receiving an FDA-approved treatment, which we believe may be related to significant limitations such as risk of permanent hearing impairment / loss:
 - Vast majority of US treaters report unmet need across all aspects of treatment (efficacy, safety, administration)⁴
- 2 Extensive third-party clinical support that IL-6 inhibition may address key unmet needs**
 - 50+ publications with 350+ patients demonstrate the therapeutic potential of IL-6 pathway inhibition in TED
 - IL-6 may play a more central and upstream role in TED pathogenesis than IGF-1R or FcRn
 - Many TED treaters already routinely utilize IL-6 inhibition in their practice⁴
- 3 Pacibekitug has best-in-disease potential in TED**
 - Deep inhibition of IL-6 pathway observed to date offers potential for durable efficacy across many endpoints
 - Existing clinical database supports the potential for a well-tolerated profile at selected doses
 - Q8W dosing would allow for a patient-friendly, low burden treatment course

IGF-1R class limitations present a significant opportunity for novel therapeutic approaches in TED

TEPEZZA U.S. revenues have been stagnating since 2021...

Sales (\$M)¹



...believed to be due to real-world experience

1. **Safety issues:** Risk of potentially permanent hearing loss²

-----**WARNINGS AND PRECAUTIONS**-----

- **Hearing Impairment Including Hearing Loss:** TEPEZZA may cause severe hearing impairment including hearing loss, which in some cases may be permanent. Assess patients' hearing before, during, and after treatment with TEPEZZA and consider the benefit-risk of treatment with patients

2. **Limited durability:** Growing real-world effectiveness data reveals larger than anticipated number of non-responders / high relapse rate^{3,4}

3. **High level of inconvenience & complexity:**

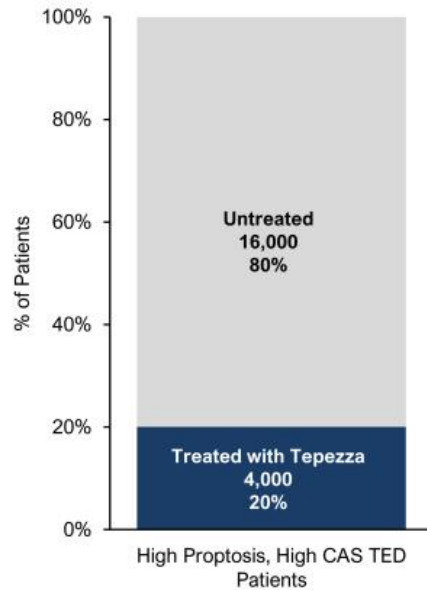
- IV Q3W (n=8)² but limited access to infusion centers⁵
- Numerous visits and high time commitment (HCPs and patients)⁵
- Need for serial audiograms, as per label^{2,6}
- Burdensome reimbursement approval process⁷

Despite an FDA-approved medicine, the vast majority of moderate-to-severe TED patients remain untreated

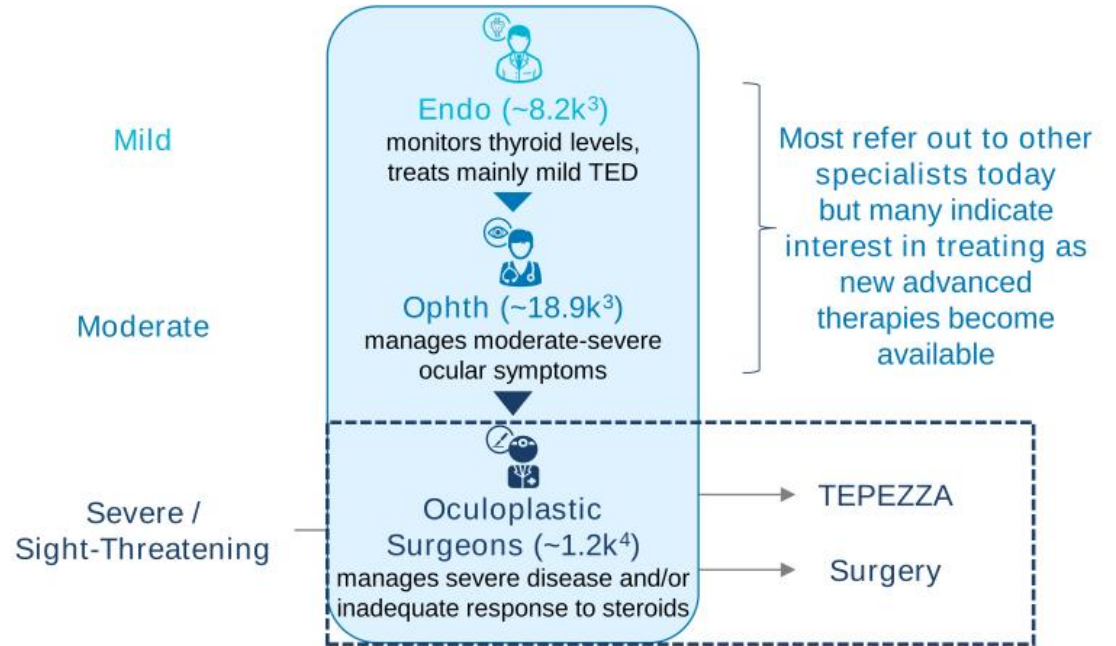
Most TED patients are not receiving TEPEZZA...

...or only get it relatively late in the treatment journey²

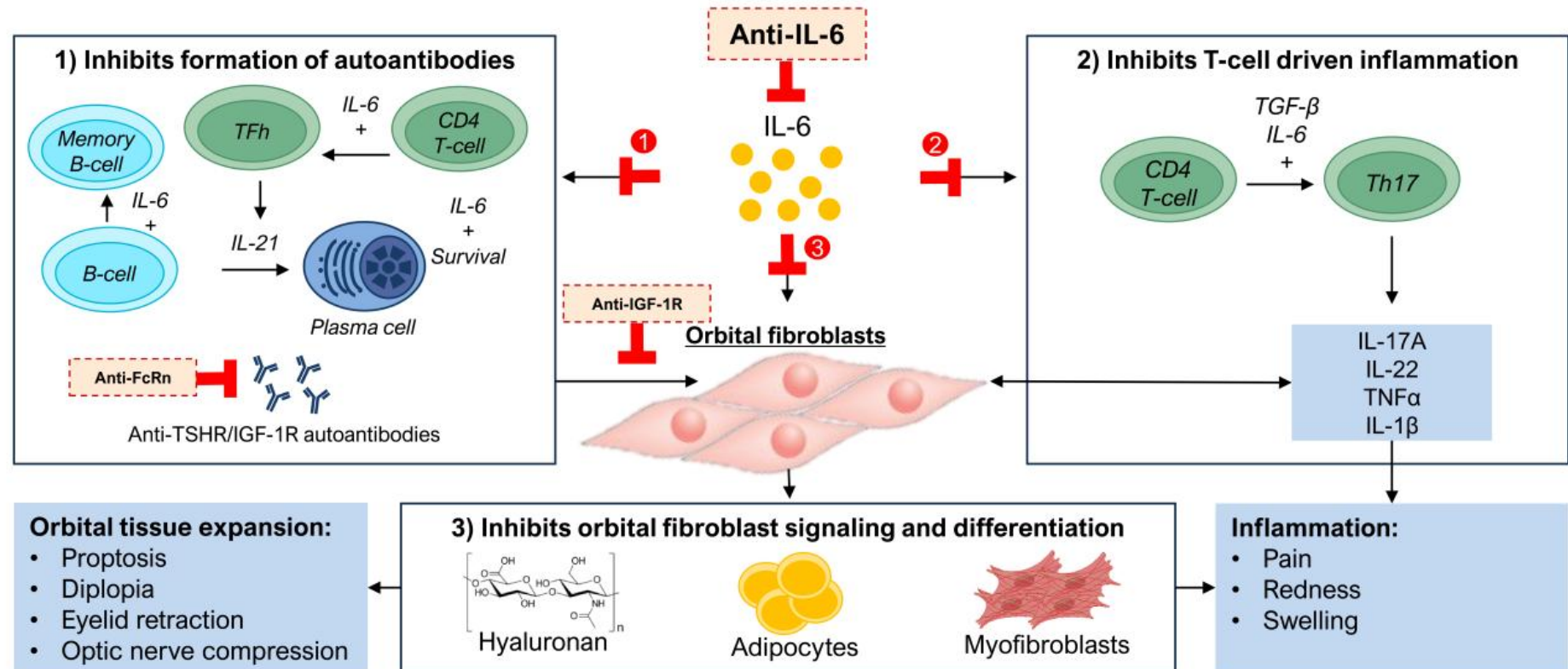
TEPEZZA US LTM penetration¹



Simplified Treatment Journey²



IL-6 inhibition has the potential to address a central and upstream driver of TED



Adapted from Huang et al., Eye (2018); Hodgson and Rajaii, Ophthalmol Ther (2020); Fang et al, Front Endocrinol (2021); Smith et al., Eye (2019); and Cabezas et al., Front. Immunol. (2022)

Over 50 publications support the therapeutic potential of IL-6 pathway inhibition in TED

Study Details				Key Endpoints		
First author	Year	Study type	N treated	Proptosis response rate	CAS response rate	% autoantibody reduction
Pérez-Moreiras	2021	Retro	54	78	89	75
Sánchez-Bilbao	2020	Obs	48	NR	NR	NR
Atienza-Mateo	2018	Retro	29	NR	NR	NR
Lee	2024	Prosp	19	11	47	56
Pérez-Moreiras	2014	Prosp	18	72	100	76
Pérez-Moreiras	2018	RCT	15	93	60	NS
de la Fuente Bursón	2020	Retro	15	NR	NR	NR
Pereira	2023	Retro	14	NR	NR	NR
Habroosh	2024	Prosp	13	100	31	68
Boutzios	2023	Obs	12	NR	NR	84
Pampín-Sánchez	2022	Retro	11	75	73	NR
Moi	2022	Retro	10	CI	80	75
Cortez	2022	Prosp	10	10	100	81
Silkiss	2020	CS	9	CI	56	74
Smith	2021	Retro	9	78	100	54
Bielefeld	2019	Obs	8	NR	NR	NR
Ceballos-Marcias Jose	2020	CS	8	NR	75	41
Bennedjai	2020	Retro	7	NR	NR	73
Moás	2022	Obs	7	NR	NR	92
Toro-Tobon	2023	Retro	6	50	NR	NR
de Pablo Gomez	2018	CS	5	NR	60	NR
Navarrete	2022	Retro	5	NR	NR	NR
Ribi	2017	CS	3	33	67	NR
Maldiney	2020	CS	3	67	NR	NR
Stevens	2022	Retro	3	100	67	NR
Russell	2017	CS	2	NR	0	NR
Sy	2017	CS	2	CI	50	69

Study Details				Key Endpoints		
First author	Year	Study type	N treated	Proptosis response rate	CAS response rate	% autoantibody reduction
Copperman	2019	CS	2	100	0	NR
Coy	2019	CS	2	NR	50	NR
Sierra Osorio	2020	CS	2	100	100	NR
Park	2021	CS	2	100	100	NR
Abeillon-du Payrat	2022	CS	2	100	50	NR
Butnaru	2013	CR	1	NR	100	NR
Gómez Rodriguez	2014	CR	1	NR	100	NR
Bielefeld	2017	CR	1	CI	NR	NR
Canas	2018	CR	1	100	NR	NR
Pascual-Camps	2018	CR	1	NR	NR	NR
Garreta Fontelles	2019	CR	1	NR	NR	93
Mehmet	2020	CR	1	0	NR	NR
Kaplan	2020	CR	1	NR	0	85
Cayon-Blanco	2020	CR	1	NR	100	NR
Tran	2020	CS	1	NR	NR	NR
Ruiz	2021	CR	1	NR	NR	NR
Albrashdi	2022	CR	1	100	NR	NR
Cezara	2022	CR	1	NR	0	NR
Mohamed	2022	CS	1	0	0	NR
Moleiro	2022	CR	1	100	NR	86
Almazrouei	2023	CR	1	NR	NR	NR
Cuculescu	2023	CR	1	CI	0	NR
Nirmalan	2023	CS	1	NR	NR	NR
Pramono	2023	CR	1	NR	NR	NR
Rymuza	2024	CR	1	100	0	8
Weighted Mean				68%	72%	71%
Smith 2017 (tepro Phase 2)				71%	69%	N/A
Douglas 2020 (tepro Phase 3)				83%	59%	N/A

We believe many of these reports may underestimate the true efficacy of IL-6 inhibition

- 350+ mostly steroid-refractory patients
- Late IL-6 inhibition (>9 months post symptom onset) when disease may have exited active phase
- Exposure to IL-6 inhibition may have been suboptimal (<6 months)
- Tourmaline market research with over 100 TED treaters suggests many HCPs already routinely utilize IL-6 inhibition in their practice

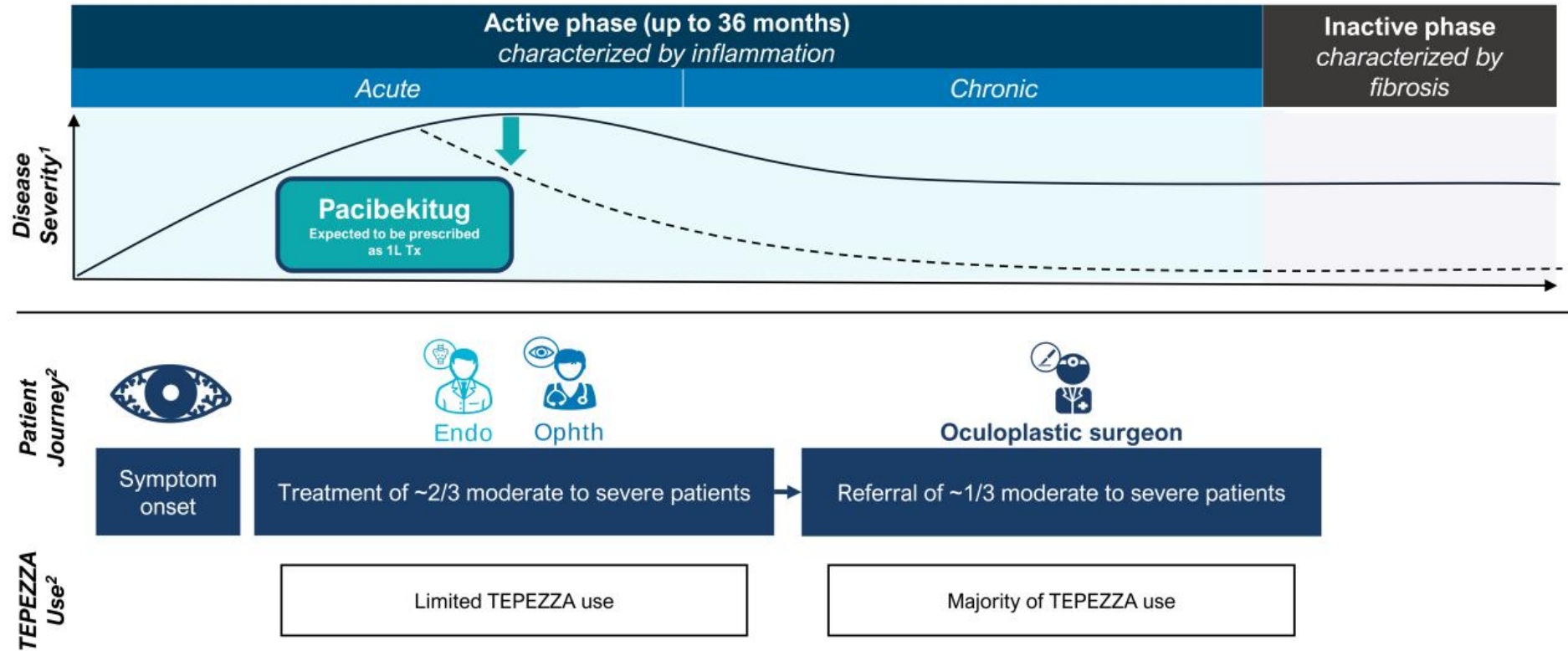
Market research indicates pacibekitug's potential to become an optimal first-line therapy and market leader in TED

Potential target profile of pacibekitug

Deep & broad efficacy	<ul style="list-style-type: none">• Meaningful reduction of proptosis• Important improvement of CAS and diplopia
Durable	<ul style="list-style-type: none">• Inhibition of production of anti-TSHR auto-antibodies• Durable response, in part due to low immunogenicity
Well-tolerated	<ul style="list-style-type: none">• Well-tolerated safety profile, manageable with routine monitoring• Lack of permanent or irreversible side effects
Patient-friendly	<ul style="list-style-type: none">• SC, ≤ 1ml injections, every 8 weeks• Finite treatment for most of patients with flexibility where needed

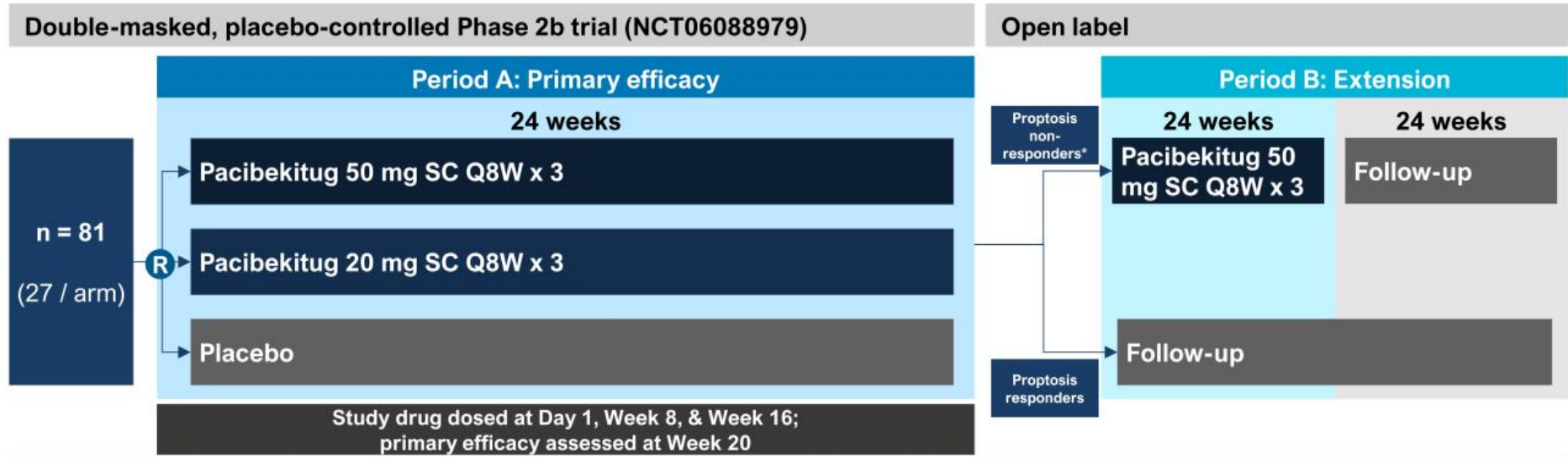
The characteristics presented reflect outcomes that may not be representative of pacibekitug. The results of past clinical trials may not be indicative of future results, and the results of future or ongoing clinical trials may not demonstrate some or any of the characteristics presented.

Pacibekitug offers the potential to stop disease progression in the inflammatory active phase





spiriTED pivotal trial in first-line TED



Study population:

- Moderate-to-severe TED, with proptosis ≥ 3 mm above normal (based on race and gender)
- Active phase, with symptom onset ≤ 15 months, CAS ≥ 4 and positive TSI
- First-line setting, with cap on prior corticosteroid use (< 1 g methylprednisolone or equivalent)

Primary efficacy endpoint:

- Proptosis response rate at week 20

Additional endpoints:

- CAS
- Diplopia
- QoL, safety, PK/PD/ADA

*Any patient who receives rescue therapy/intervention in Period A will not receive pacibekitug in Period B and will instead undergo follow-up only

Cardiovascular Inflammation

Pacibekitug could address a critical but poorly-addressed risk factor in cardiovascular diseases



IL-6 driven inflammation has increasingly been validated as a critical modifiable risk factor driving residual cardiovascular risk



The potential of IL-6 inhibition spans a broad range of cardiovascular indications, affecting tens of millions of patients globally



Converging lines of human evidence across multiple settings support the transformative potential of IL-6 inhibition

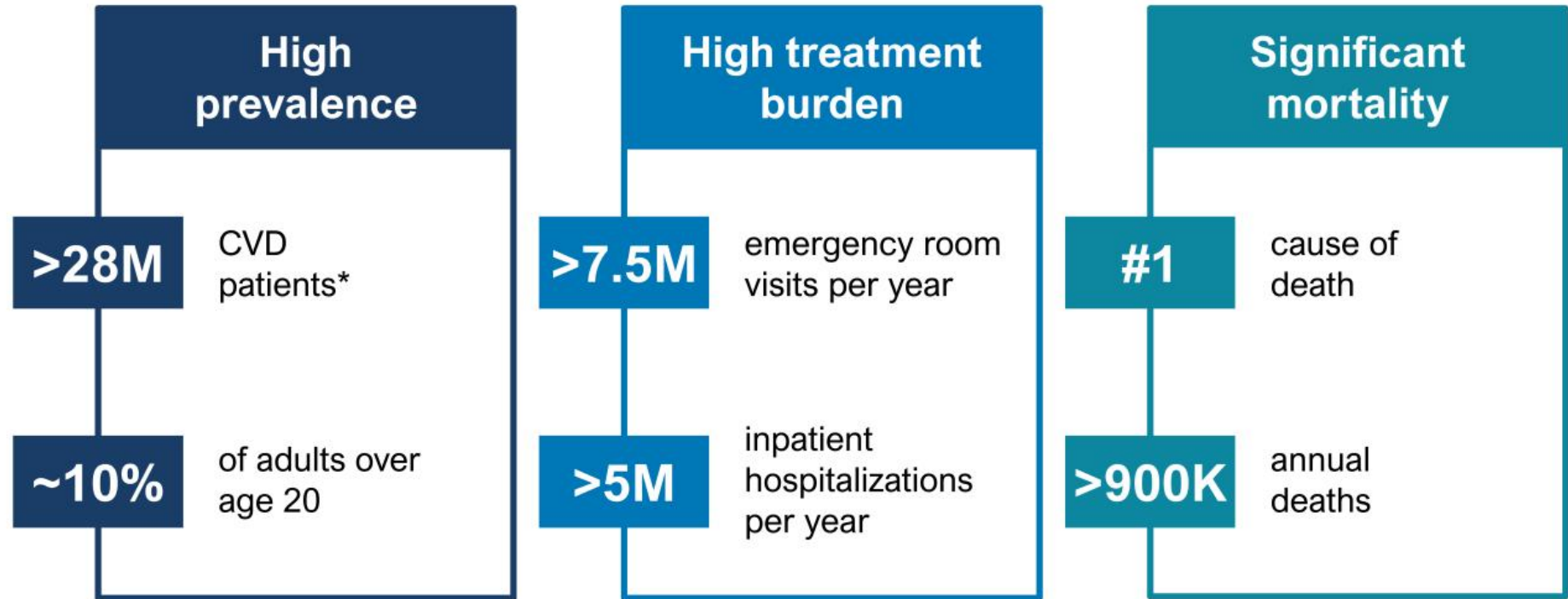


IL-6 inhibition is being evaluated in multiple cardiovascular outcomes trials, and Tourmaline is well-positioned to capitalize on emerging clinical enthusiasm



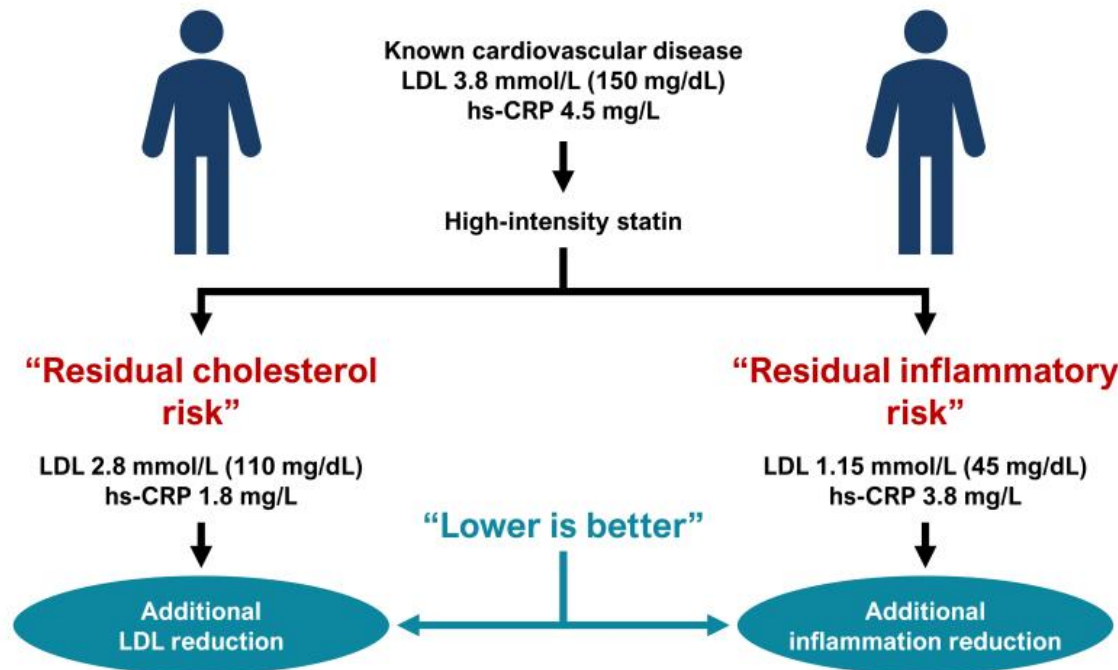
Pacibekitug's potentially best-in-class profile, including quarterly subcutaneous administration, is being evaluated in the Phase 2 TRANQUILITY study and is anticipated to be Phase 3-ready in 2025

Cardiovascular disease continues to be the largest area of unmet medical need in the US¹



Many patients suffering from cardiovascular diseases continue to experience residual inflammatory risk

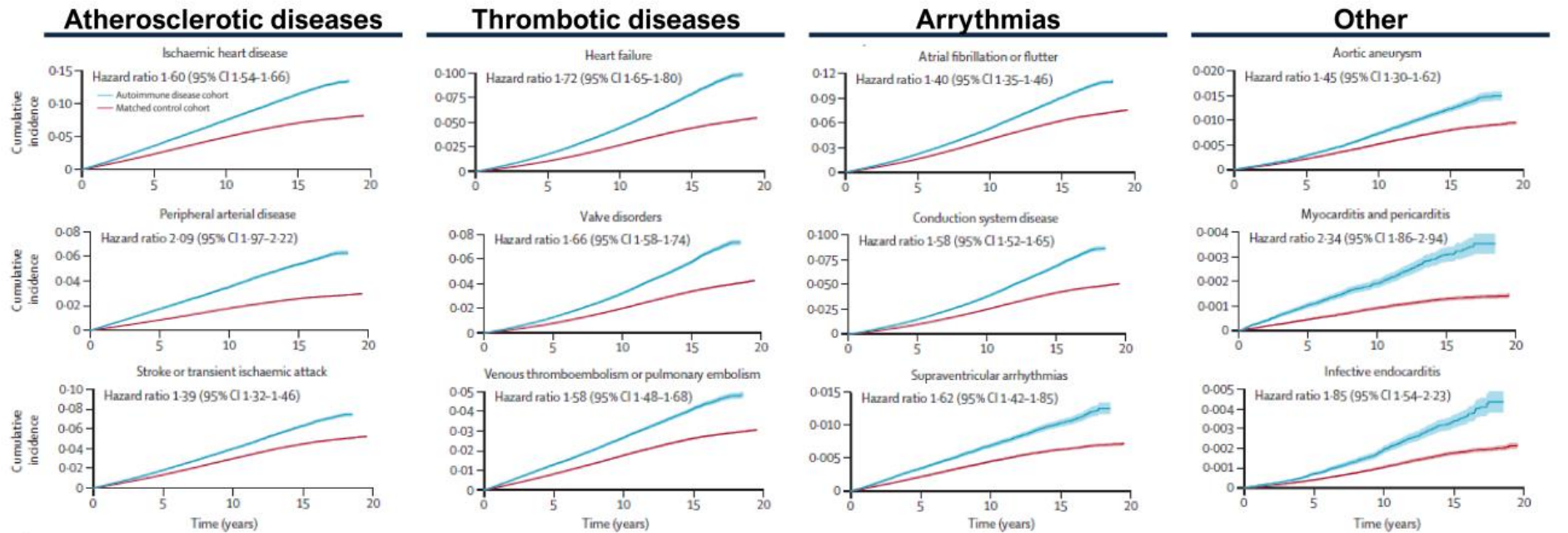
Differential secondary prevention treatment options for statin-treated patients¹



- A growing body of evidence supports addressing **residual inflammatory risk** in cardiovascular disease patients whose inflammation is not well-controlled on existing therapies, such as statins.
- As of August 2024, the European Society of Cardiology guidelines **recommend hs-CRP screening** for patients with suspected chronic coronary syndrome²

Inflammation is a strong predictor of risk across several cardiovascular indications

- Landmark study of >440,000 patients with chronic inflammatory disorders
- Each of the 19 most common autoimmune diseases showed increased CV risk
- Excess risk reflected in a wide range of cardiovascular diseases beyond ASCVD
- Risk elevation was not explained by traditional risk factors such as cholesterol, body-mass index, and diabetes



Significant unmet need for targeted anti-inflammatory therapies for cardiovascular diseases

Atherothrombotic Pathways	Thrombosis	Hypertension	Atherogenic lipoproteins	Diabetes, Insulin resistance, Obesity	Inflammation
Biomarkers	None readily available	Blood pressure	ApoB, Non-HDL-C, LDL-C, Triglycerides, Lipoprotein(a)	HbA1c, Fasting glucose, Weight	C-reactive protein
Approved Therapies	Aspirin P2Y12R inhibitors Factor Xa inhibitor PAR-1 antagonist	ACEI/ARB Calcium channel blocker Thiazide diuretic Renin inhibitor Beta-blocker Mineralocorticoid antagonist	Statins PCSK9 inhibitors Icosapent ethyl NPC1L1 inhibitor ACL inhibitor Bile acid sequestrants MTP inhibitor ANGPTL3 inhibitor Apheresis	SGLT2 inhibitors GLP-1 agonists GIP/GLP-1 agonist	Colchicine
Therapies in Development	Factor XI/XIa inhibitors	Angiotensinogen inhibitor Aldosterone synthase inhibitors Endothelin antagonist Renal denervation Baroreceptor activation	CEPT inhibitor Lipoprotein(a) inhibitors ApoC3 inhibitor Fibrates CRISPR PCSK9 base editing	GIP/GLP-1/glucagon agonists Amylin agonists GIP-1/amylin agonists	IL-6 inhibitors NLRP3 inhibitors

Research increasingly highlights inflammation as a driver of CV risk and supports therapeutic potential of IL-6 inhibition



RESEARCH LETTER

Genetically Downregulated Interleukin-6 Signaling Is Associated With a Favorable Cardiometabolic Profile

A Phenome-Wide Association Study

Association of Interleukin 6 Receptor Variant With Cardiovascular Disease Effects of Interleukin 6 Receptor Blocking Therapy A Phenome-Wide Association Study

Tianxi Cai, ScD, Yichi Zhang, PhD, Yuk-Lam Ho, MPH, Nicholas Link, BA, Jehuan Sun, PhD, Jie Huang, MS, Tarrun A. Cal, MD, Scott Damrauer, MD, Yuri Ahuja, BS, Jacqueline Honerlaw, RN, BSN, MPH, Jie Huang, PhD, Lauren Costa, MPH, Petra Schubert, MPH, Chuan Hong, PhD, David Gagnon, MD, MPH, PhD, Yan V. Sun, PhD, J. Michael Gaziano, MD, MPH, Peter Wilson, MD, Kelly Cho, PhD, MPH, Philip Tsao, PhD, Christopher J. O'Donnell, MD, MPH, Katherine P. Liao, MD, MPH, for the VA Million Veteran Program

RESEARCH LETTER

A Missense Variant in the IL-6 Receptor and Protection From Peripheral Artery Disease

Michael G. Levin, Derek Klarin, Marios K. Georgakis, Julie Lynch, Katherine P. Liao, Benjamin F. Voight, Christopher J. O'Donnell, Kyong-Mi Chang, Themistocles L. Assimes, Philip S. Tsao, Scott M. Damrauer, on behalf of the VA Million Veteran Program

Interleukin-6 in Patients With Heart Failure and Preserved Ejection Fraction

Alessio Alogna, MD, PhD, Katlyn E. Koepf, PhD, Michael Sabbah, MD, Jair M. Espindola Netto, PhD, Michael D. Jensen, MD, James L. Kirkland, MD, PhD, Carolyn S.P. Lam, MBBS, Masaru Obokata, MD, PhD, Mark C. Petrie, MD, Paul M. Ridker, MD, MPH, Hidemi Sorimachi, MD, PhD, Tamara Tchokola, PhD, Adriaan Voors, MD, PhD, Margaret M. Redfield, MD, Barry A. Borlaug, MD

Research Letter

Genetically Proxied IL-6 Receptor Inhibition and Coronary Artery Disease Risk in a Japanese Population

Sizheng Steven Zhao^{1,*}, Dipender Gill²

¹Centre for Musculoskeletal Research, Division of Musculoskeletal and Dermatological Science, School of Biological Sciences, Faculty of Biological Medicine and Health, The University of Manchester, Manchester Academic Health Science Centre, Manchester, UK
²Department of Epidemiology and Biostatistics, Imperial College London, London, UK

RESEARCH ARTICLE

Circulating Interleukin-6 Levels and Incident Ischemic Stroke

A Systematic Review and Meta-analysis of Prospective Studies

Andreas Pappasopoulos, MD, Konstantinos Paliatopoulos, MD, Harry Björkbacka, PhD, Annette Peters, PhD, James A. de Lencastre, MD, Sudha Seshadri, MD, Martin Dichgans, MD, and Marios K. Georgakis, MD, PhD
November 2022; 96(11):e10112. doi:10.1212/WNL.00000000000013274

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Quantifying inflammation using interleukin-6 for improved phenotyping and risk stratification in acute heart failure

Eleni Michou¹, Desiree Wussler^{1,2}, Maria Belkin¹, Cornelia Simmen¹, Ivo Strebel¹, Albina Nowak^{3,4}, Nikola Kozuharov¹, Samyut Shrestha¹, Pedro Lopez-Ayala¹, Zaid Sabti¹, Constantin Mork¹, Matthias Diebold¹, Tiffany Péquignot¹, Katharina Rentsch⁴, Arnold von Eckardstein⁴, Danielle M. Gualandro¹, Tobias Breidhardt^{1,2}, and Christian Mueller^{1*}

ORIGINAL RESEARCH

Elevated Interleukin-6 Levels Are Associated With an Increased Risk of QTc Interval Prolongation in a Large Cohort of US Veterans

Pietro Errea Lazzarini, MD, Michael Czapik, PhD, Alessandra Ciarrocca, MD, Isacco Bertokozzi, MD, Viola Salani, MD, Riccardo Accardi, MD, Fabio Sakamoto, MD, Tommaso Mazzotti, MD, Giacomo Valentini, MD, Gabriele Covatta, MD, Stefania Biagini, MD, Maurizio Bocchi, MD, Giovanni Corbelli, MD, Scilla Bernardini, MD, Franco Leghi Pissani, MD, Maurizio Acampa, MD, Pier Leopoldo Caporali, MD, PhD, Nestá O'Quinn, MD, Mohamed Bougga, PhD

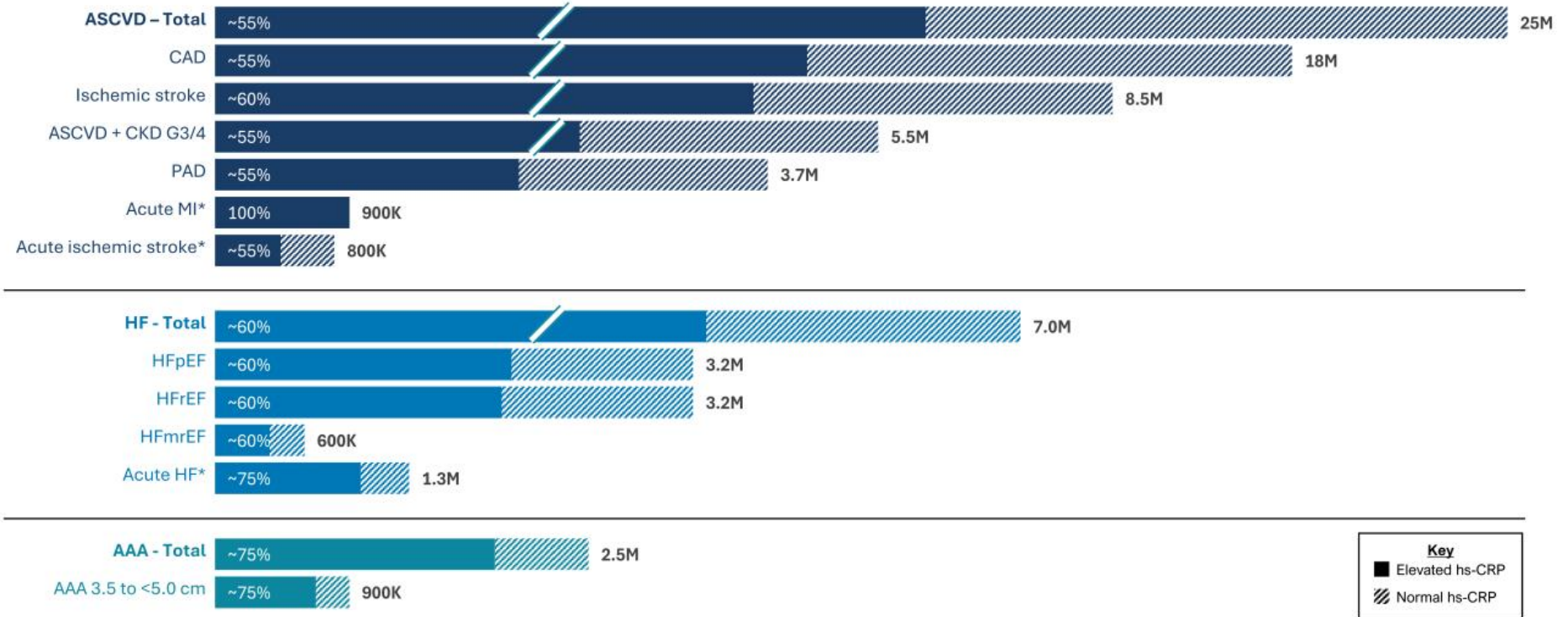
Associations of genetically predicted IL-6 signaling with cardiovascular disease risk across population subgroups

Marios K. Georgakis^{1,2*}, Rainer Malik³, Tom G. Richardson¹, Joanna M. M. Howson⁴, Christopher D. Anderson^{1,2}, Stephen Burgess^{5,6}, G. Kees Hovingh^{6,7}, Martin Dichgans^{1,10,11} and Dipender Gill^{10,12}

IL-6 inhibition has the potential to address millions of patients across a wide range of inflammation mediated CV conditions

Estimated US prevalence (2024)¹

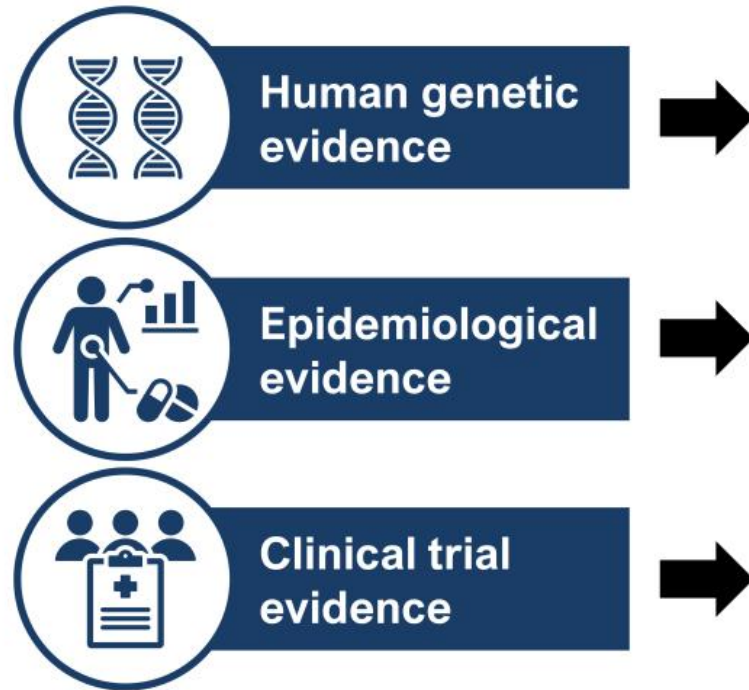
Populations are not mutually exclusive



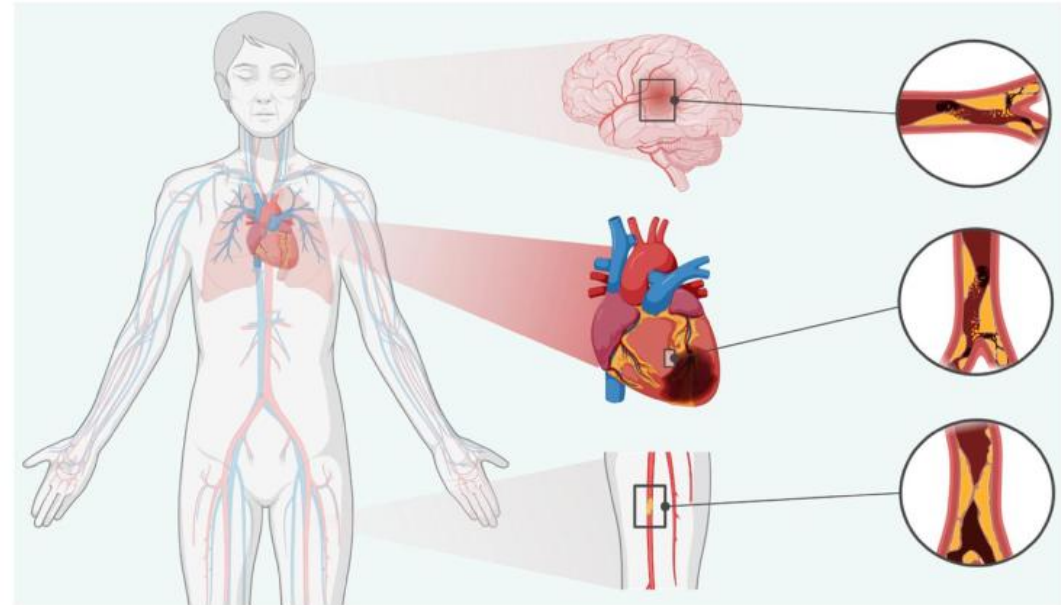
¹Publications available upon request. *Annual incidence

AAA: abdominal aortic aneurysm. ASCVD: atherosclerotic cardiovascular disease. CAD: coronary artery disease. CKD: chronic kidney disease. HF: heart failure. HFmrEF: Heart Failure with Mid-Range Ejection Fraction. HFpEF: heart failure with preserved ejection fraction. HFrfEF: heart failure with reduced ejection fraction. MI: myocardial infarction. PAD: peripheral artery disease.

Convergence of human evidence supports therapeutic potential of IL-6 inhibition for ASCVD



Evidence suggests IL-6 may drive ASCVD risk





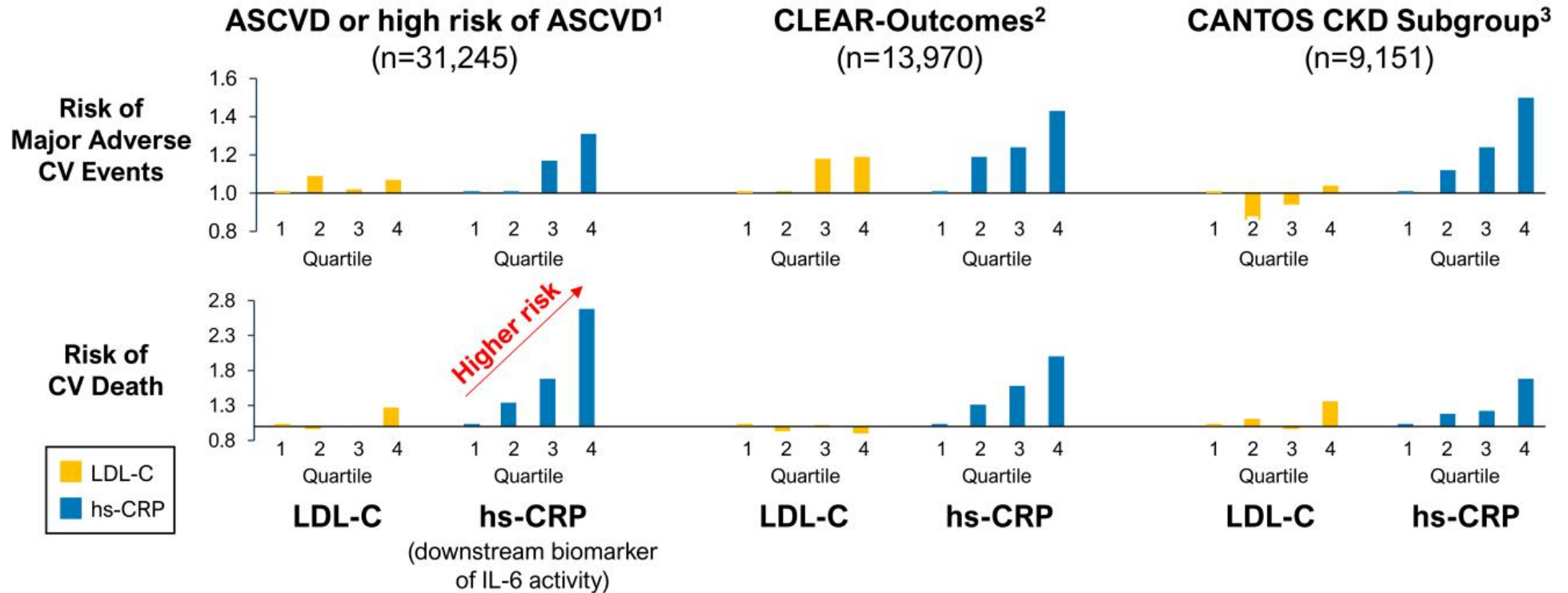
Human genetic studies provide initial support for IL-6 pathway inhibition to lower ASCVD risk

Concordance between results of human genetic studies and randomized clinical trials

Therapeutic target	Genetic Result	RCT Result
Lowering LDL-C to lower ASCVD risk ^{1,2}	Positive	Positive
Inhibiting IL-6 to treat polymyalgia rheumatica ^{3,4}	Positive	Positive
Lowering blood pressure to lower ASCVD risk ^{5,6}	Positive	Positive
Raising HDL-C to lower ASCVD risk ^{7,8}	Negative	Negative
Inhibiting LpPLA2 to lower ASCVD risk ^{9,10}	Negative	Negative
Inhibiting TNF α to treat multiple sclerosis ^{11,12}	Negative (harm)	Negative (harm)
Inhibiting IL-6 to lower ASCVD risk ¹³	Positive	Trials Ongoing

“Probability of success for drug mechanisms with genetic support is 2.6 times greater than those without.”¹⁴

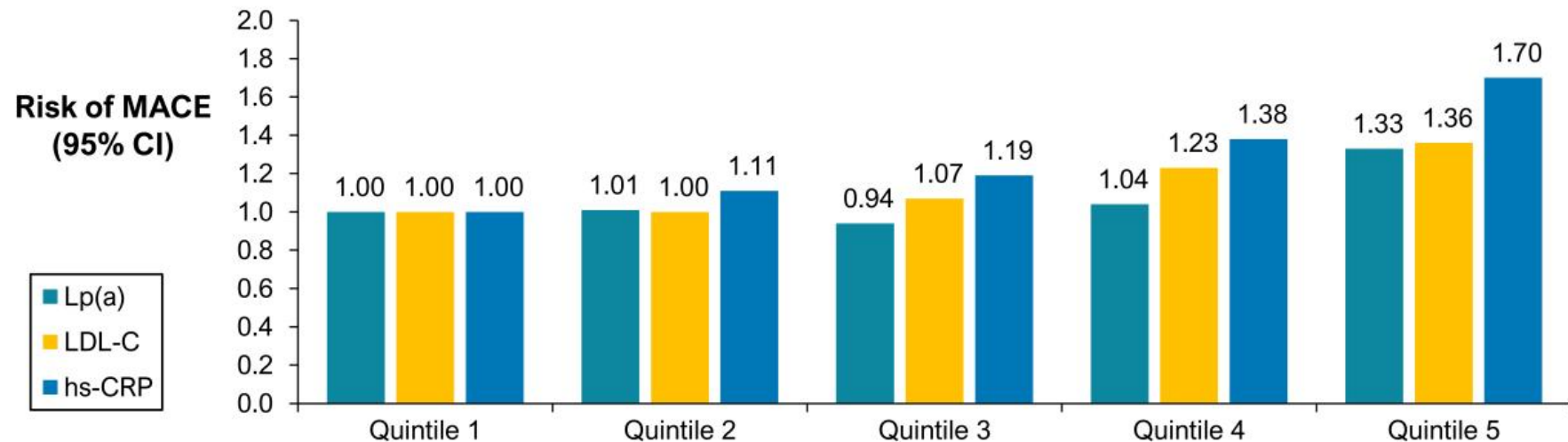
Multiple observational studies show inflammation predicts future MACE even better than cholesterol in high-risk populations



Emerging evidence suggests that hs-CRP is more strongly associated with MACE than both LDL and Lp(a)

Late breaking data presented at European Society of Cardiology 2024 Congress and simultaneously published in the New England Journal of Medicine

30-year longitudinal data from the Women's Health Study¹
(n=27,929)



Analysis of CANTOS implicates IL-6 as a key ASCVD risk factor

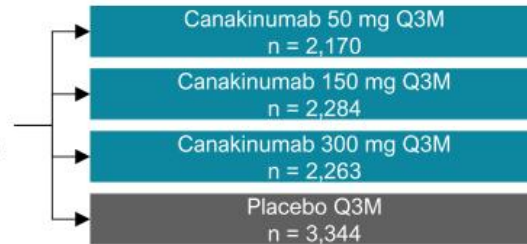


Greater IL-6 pathway inhibition associated with greater CV benefit

Canakinumab Anti-inflammatory Thrombosis Outcomes Study (CANTOS) Trial Design¹

10,061 patients

- Stable CAD (post MI)
- On Statin, ACE/ARB, BB, ASA
- hs-CRP ≥ 2 mg/L



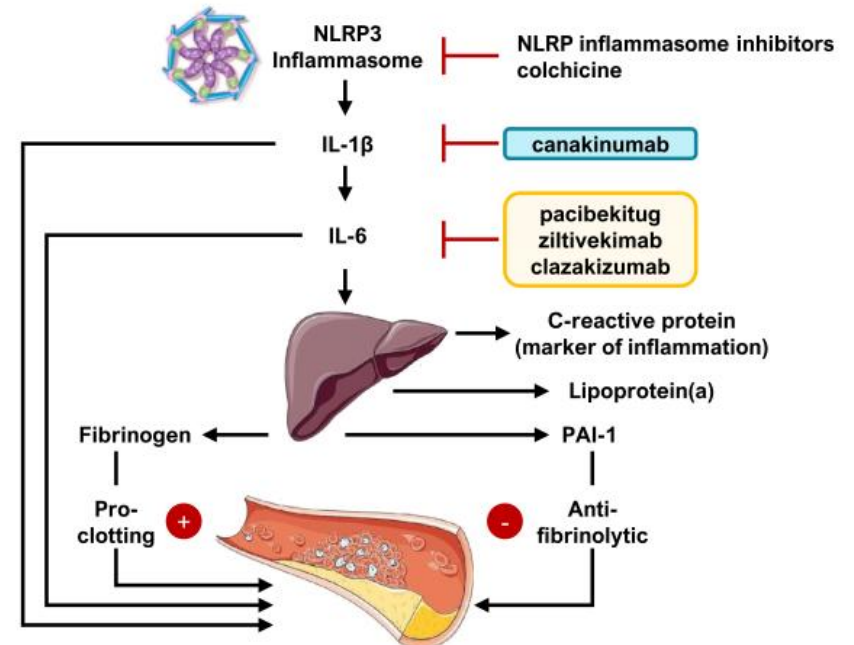
Primary endpoint:

Time to the first occurrence of MACE (CV death, non-fatal MI, or non-fatal stroke)

On-treatment analysis:

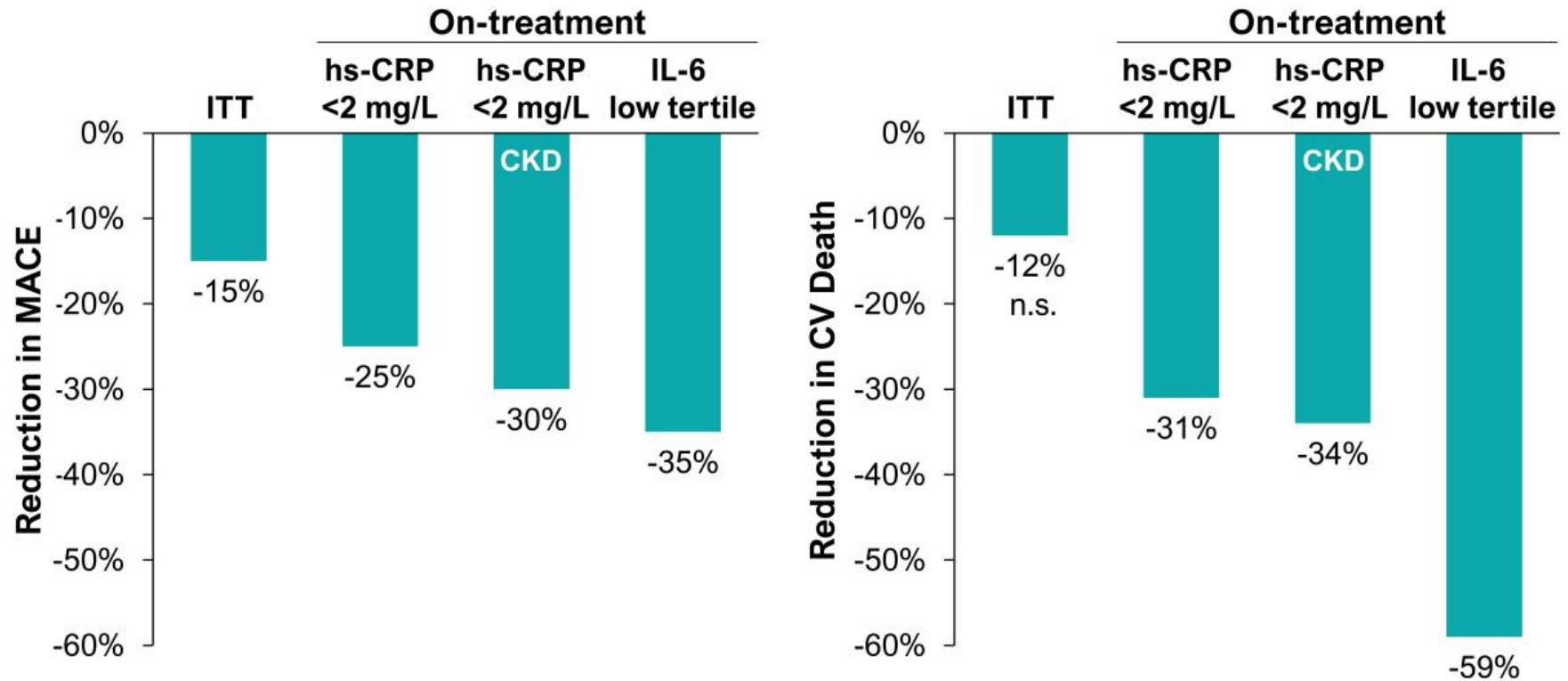
- Reduction in MACE & CV death stratified by on treatment hs-CRP reduction (pre-specified)
- Reduction in MACE & CV death stratified by on treatment IL-6 reduction

IL-1 β is upstream of IL-6²



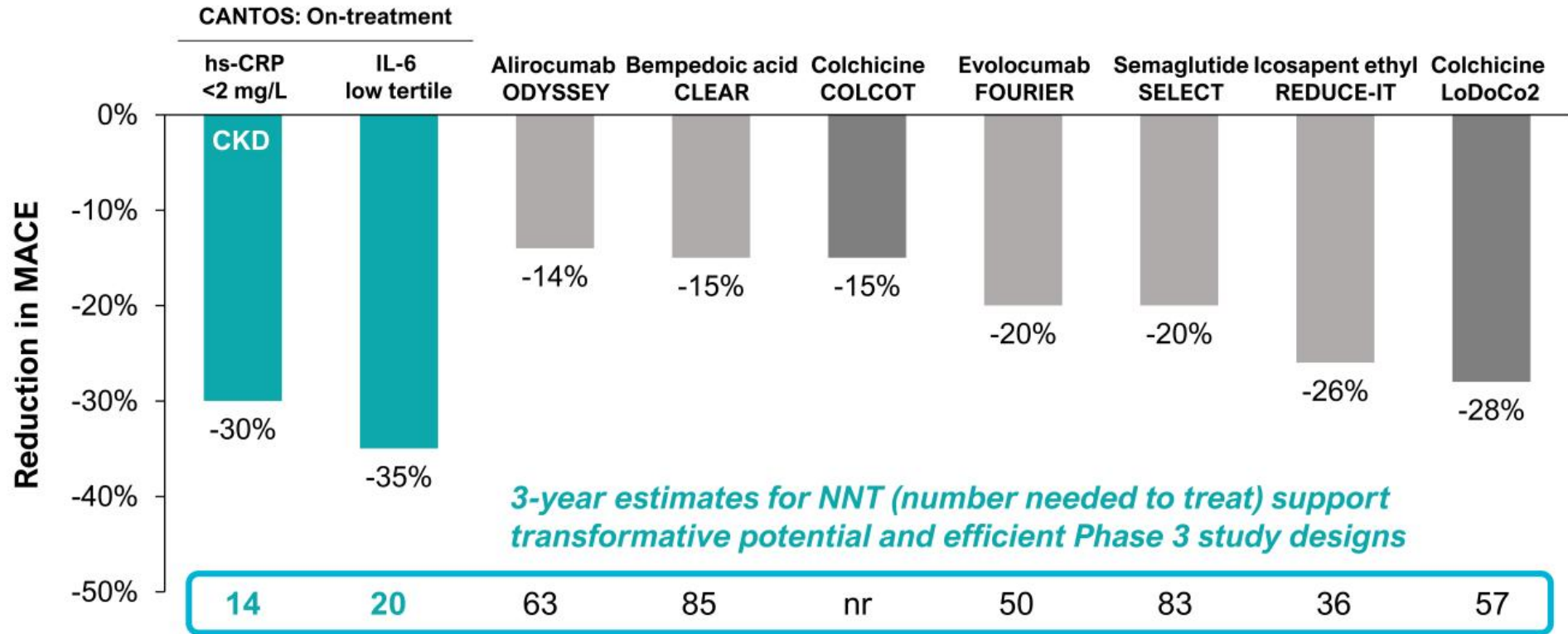


Lessons from canakinumab (anti-IL-1 β mAb): “Lower is better” for downstream biomarkers of IL-6 activity

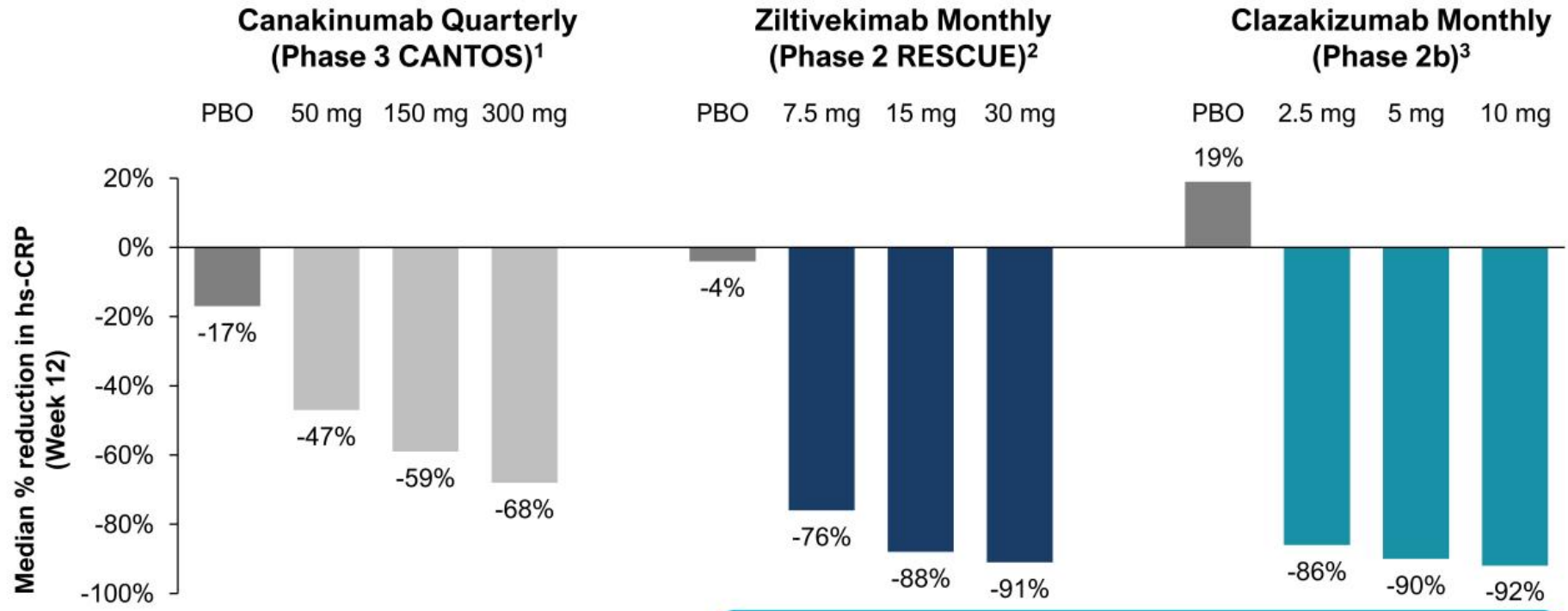




Lessons from canakinumab (anti-IL-1 β mAb): Robust inhibition of IL-6 pathway has transformative potential in ASCVD

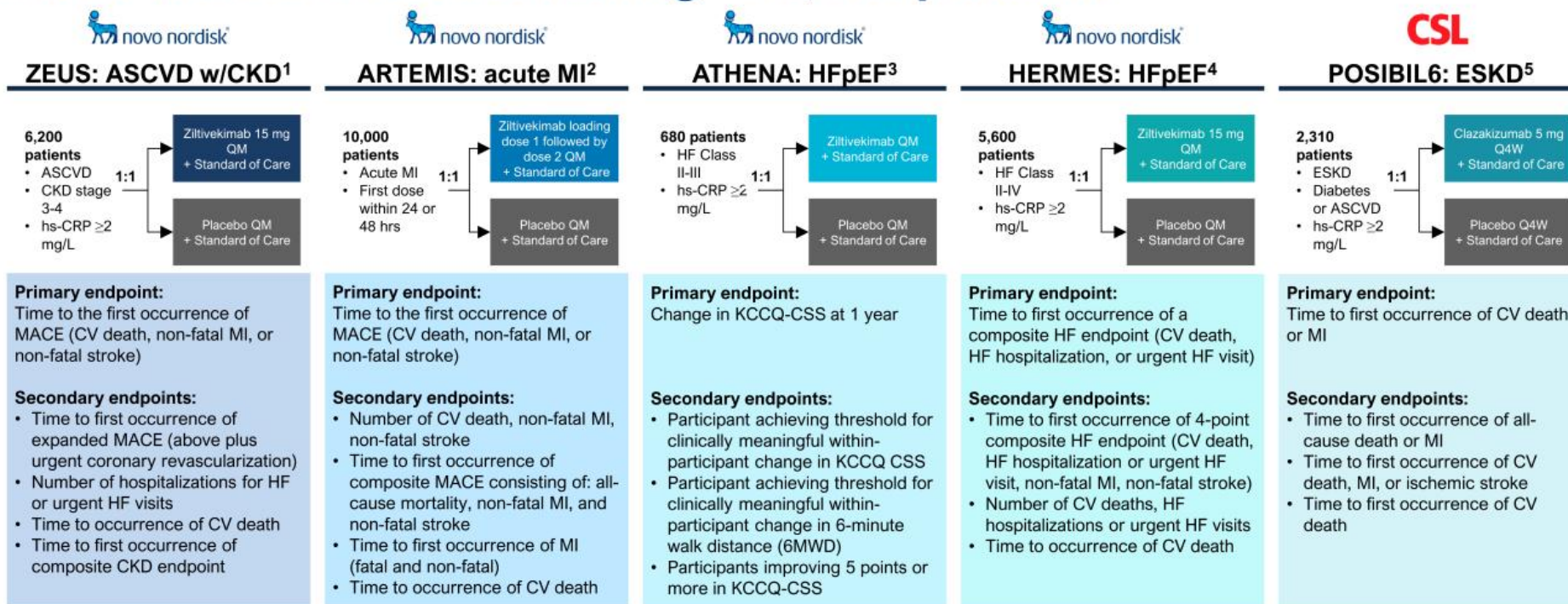


In independent studies, direct IL-6 inhibition lowered hs-CRP more than upstream IL-1 β blockade



Direct IL-6 inhibition achieved ~2x placebo-adjusted reductions in hs-CRP compared to upstream IL-1 β

Five Phase 3 CVOTs enrolling >24,000 patients



Topline data readouts expected

2025

2026

2026

2027

2028


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The timing of clinical trial milestones are subject to change.

ASCVD: atherosclerotic cardiovascular disease. CKD: chronic kidney disease. CVOT: cardiovascular outcome trial. ESKD: End Stage Kidney Disease. HFpEF: heart failure with preserved ejection fraction. MACE: major adverse cardiovascular event. MI: myocardial infarction.

¹Clinicaltrials.gov: NCT05021835. ²Clinicaltrials.gov: NCT06118281. ³Clinicaltrials.gov: NCT06200207. ⁴Clinicaltrials.gov: NCT05636176. ⁵Clinicaltrials.gov: NCT05485961 (Phase 3 portion only)

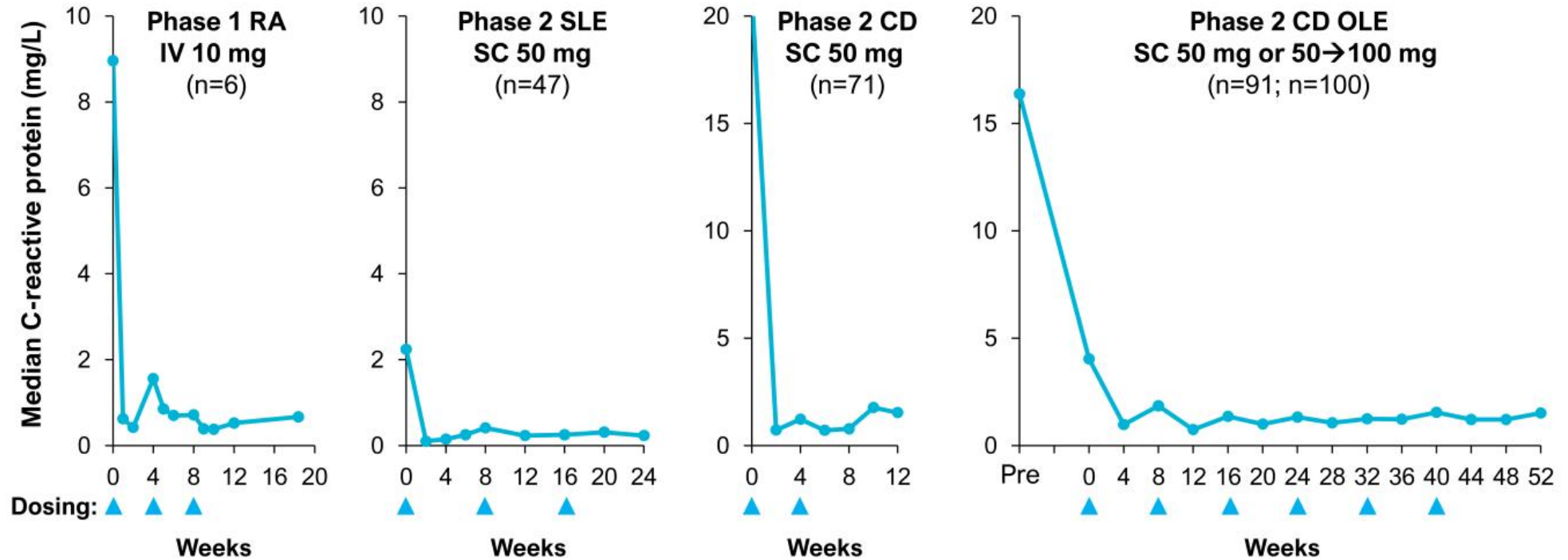
Pacibekitug designed to offer best-in-class potential profile in cardiovascular diseases

	Pacibekitug	Ziltivekimab	Clazakizumab
Company	TOURMALINE	 novo nordisk®	CSL
Monoclonal antibody	fully human (IgG2) Medarex UltiMAb platform	fully human (IgG1k, YTE mutation)	humanized rabbit (IgG1k)
Anti-drug antibodies ¹	0-1%	6-13% ^{3,4}	0-10% ⁷⁻⁹
Route of administration ²	SC 0.6 mL	SC ^{5,6} 1.0 mL	IV ¹⁰
Longest dosing intervals in completed studies	Q8W (SLE, CD)	Q4W (NDD-CKD) ^{5,6}	Q4W ¹⁰ (HD-CKD)
Targeted dosing intervals	Quarterly	Monthly	Monthly

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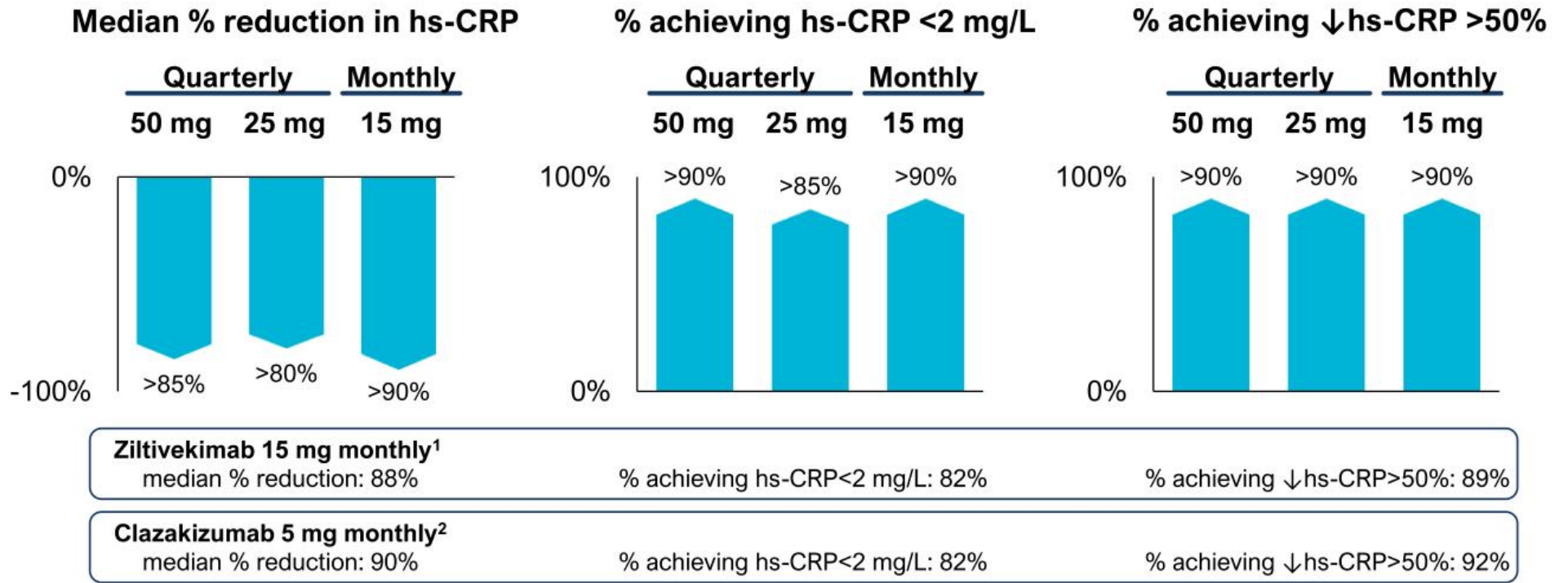
CD: Crohn's disease, CKD: chronic kidney disease, HD: hemodialysis, NDD: non-dialysis dependent, SLE: systemic lupus erythematosus. ¹Incidence of ADAs in repeat-dose studies calculated as reported per dosing arm. ²Route of administration in planned or ongoing studies in patients with or at high-risk of ASCVD. ³Clinicaltrials.gov NCT03926117. ⁴Pergola et al., JASN (2021). ⁵Ridker et al., Lancet (2021). ⁶Wada et al., J Cardiol (2023). ⁷Clinicaltrials.gov NCT01490450. ⁸Clinicaltrials.gov NCT01545050. ⁹Weinblatt et al., Arthritis Rheum (2015). ¹⁰Clinicaltrials.gov NCT05485961.
Data reported in publications or on clinicaltrials.gov as detailed above. No head-to-head studies have been conducted between the mabs shown here, which have each been evaluated in different populations.

Pacibekitug achieved robust and durable suppression of CRP in patients with high-grade inflammatory autoimmune disorders



PK/PD modeling supports potential for quarterly dosing of pacibekitug SC in ASCVD

Results of PK/PD model developed from five studies in patients with RA, SLE, CD and healthy volunteers



TRANQUILITY[®] Phase 2 trial supporting development in ASCVD

Double-blinded, placebo-controlled Phase 2 trial (NCT06362759)



Study population:

- CKD stage G3-4 (eGFR 15-59 ml/min/1.73m²)
- hs-CRP ≥ 2 mg/L and < 15 mg/L
- Exclude patients at higher risk for safety complications (e.g., immunocompromised patients)

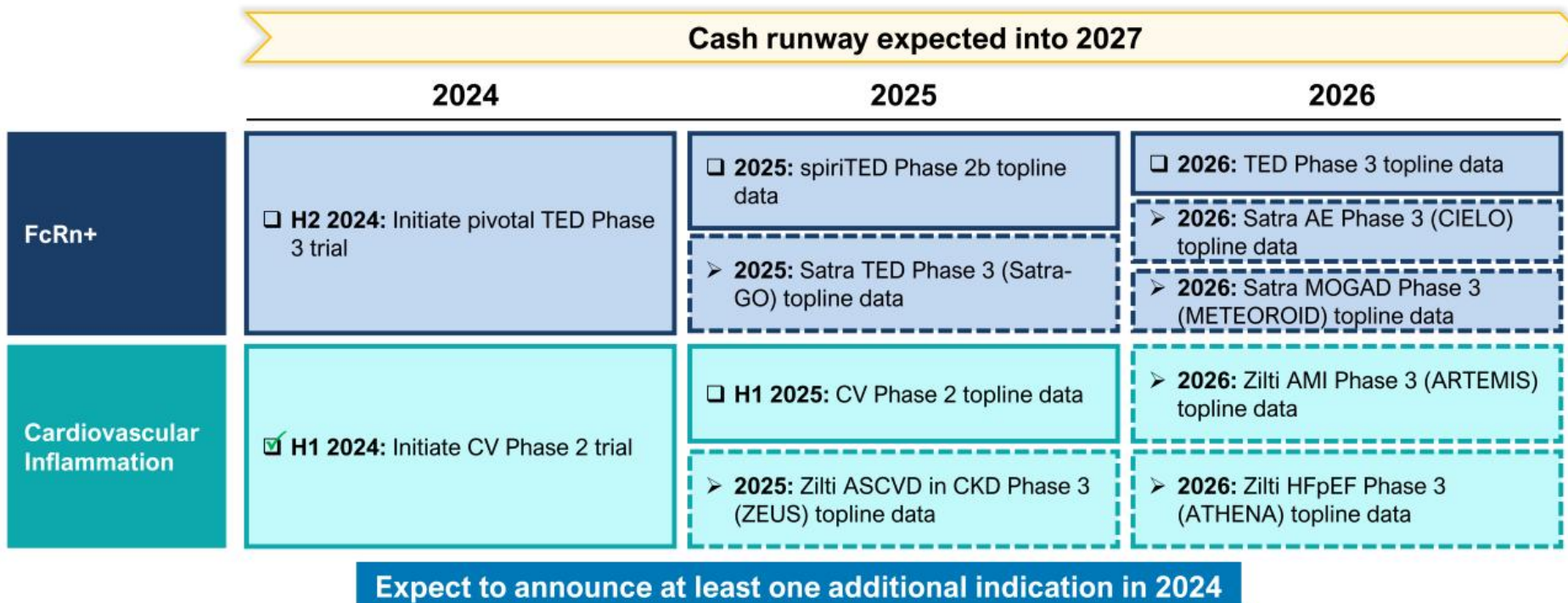
Primary efficacy endpoint:

- Change from baseline in hs-CRP

Additional endpoints:

- Other pharmacodynamic markers: serum amyloid A, fibrinogen, lipoprotein(a), and other biomarkers
- Safety and tolerability

Key milestones expected through 2026



Milestones key:

□ Internal

➤ External

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