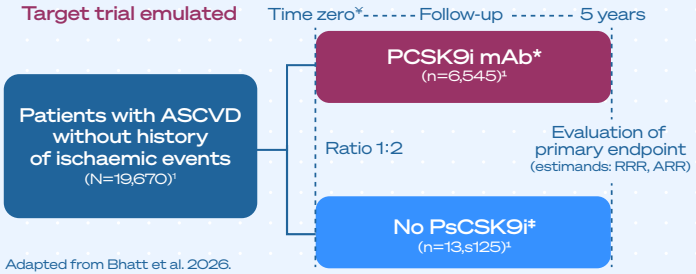
This material is intended for healthcare professionals only.

OPTIMUS-CLASS real-world study: PCSK9i mAb (alirocumab, evolocumab) therapy in ASCVD patients **without prior ischaemic events**[1]

Study Population Design

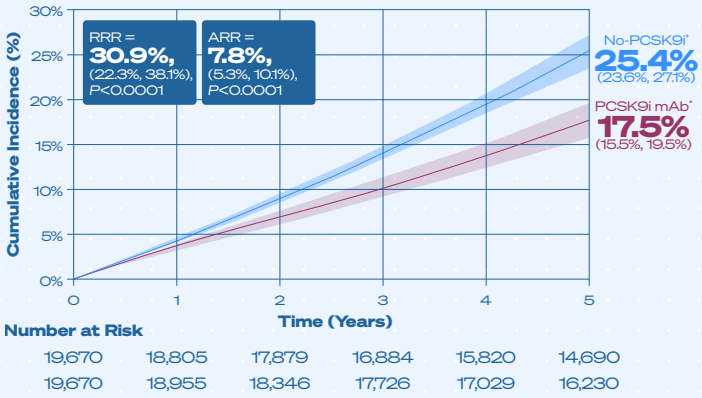
- Patients with **ASCVD without a history of ischaemic events** identified through the Optum Research database[1†]
- Patients on PCSK9i mAb* treatment matched 1:2 to patients who didn't receive PCSK9i[‡]



Adapted from Bhatt et al. 2026.

Results

Estimated event rates over time for the primary endpoint with parametric G-formula (ITT)[1]



Adapted from Bhatt et al. 2026.

Primary Endpoint

Composite representing **first occurrence of nonfatal MI, nonfatal IS or all-cause mortality.**[1]

Statistical Methods

G-computation, a statistical approach used to reduce bias in observational analyses, was applied to estimate the incidence of the primary endpoint over time.[1]

Individual endpoint RRR and ARR with PCSK9i mAb* vs. no PCSK9i[‡] (ITT)[2]

Endpoint	RRR% (95% CI)	ARR% (95% CI)	Significance
Nonfatal MI	28.3 (12.0, 40.6)	2.1 (0.8, 3.1)	P<0.0001
Nonfatal IS	26.4 (6.5, 45.7)	1.5 (0.3, 2.7)	P=0.02
All-cause Mortality	28.5 (16.6, 39.1)	3.5 (2.0, 4.9)	P<0.0001

Adapted from Bhatt et al. 2026.

This study provides **real-world data** to support the use of PCSK9i mAb* treatment **to help reduce cardiovascular events in ASCVD patients without a prior ischaemic event.**[1]

Scan the QR code to read the full study in the European Heart Journal

*PCSK9i mAb represents alirocumab or evolocumab.[1]

†A claims database, representing an insured population in the US.[1]

‡No PCSK9i represents no PCSK9 monoclonal antibodies (alirocumab or evolocumab) or PCSK9 small interfering RNA (inclisiran).[1]

¥Any point after record of ASCVD and before a potential ischaemic event was eligible to be assigned as index (time zero). This index represents a point where the patient met all the inclusion criteria in a hypothetical trial enrolling this population who would qualify for therapy.[1]

ACS = acute coronary syndrome; **ARR =** absolute risk reduction; **ASCVD =** atherosclerotic cardiovascular disease; **CI =** confidence interval; **IS =** ischaemic stroke; **ITT =** intention-to-treat; **mAb =** monoclonal antibody; **MI =** myocardial infarction; **PCSK9 =** proprotein convertase subtilisin/kexin type 9; **PCSK9i =** proprotein convertase subtilisin/kexin type 9 inhibitor; **RNA =** ribonucleic acid; **RRR =** relative risk reduction; **US =** United States.

References:
1. Bhatt DL, Filardi PP, Khan I, et al. PCSK9 inhibitor treatment and outcomes in patients with atherosclerotic cardiovascular disease but without prior ischaemic events: an observational study. Eur Heart J. 2026;ehag176.
2. Bhatt DL, Filardi PP, Khan I, et al. PCSK9 inhibitor treatment and outcomes in patients with atherosclerotic cardiovascular disease but without prior ischaemic events: an observational study. Eur Heart J. Suppl 1. 2026;ehag176.

MAT-GLB-2603741 - 1.0 - 08/2026 © Sanofi 2026.

Prevent The Event