PLACE 2026
PLATFORM OF LABORATORIES FOR ADVANCES IN CARDIAC EXPERIENCE

CONGRESSO
ROMA, 25 - 27 Giugno 2026

Session. Focus on dislipidemie e prevenzione cardiovascolare

Efficacia e sicurezza dell'acido bempedoico: risultati del programma CLEAR

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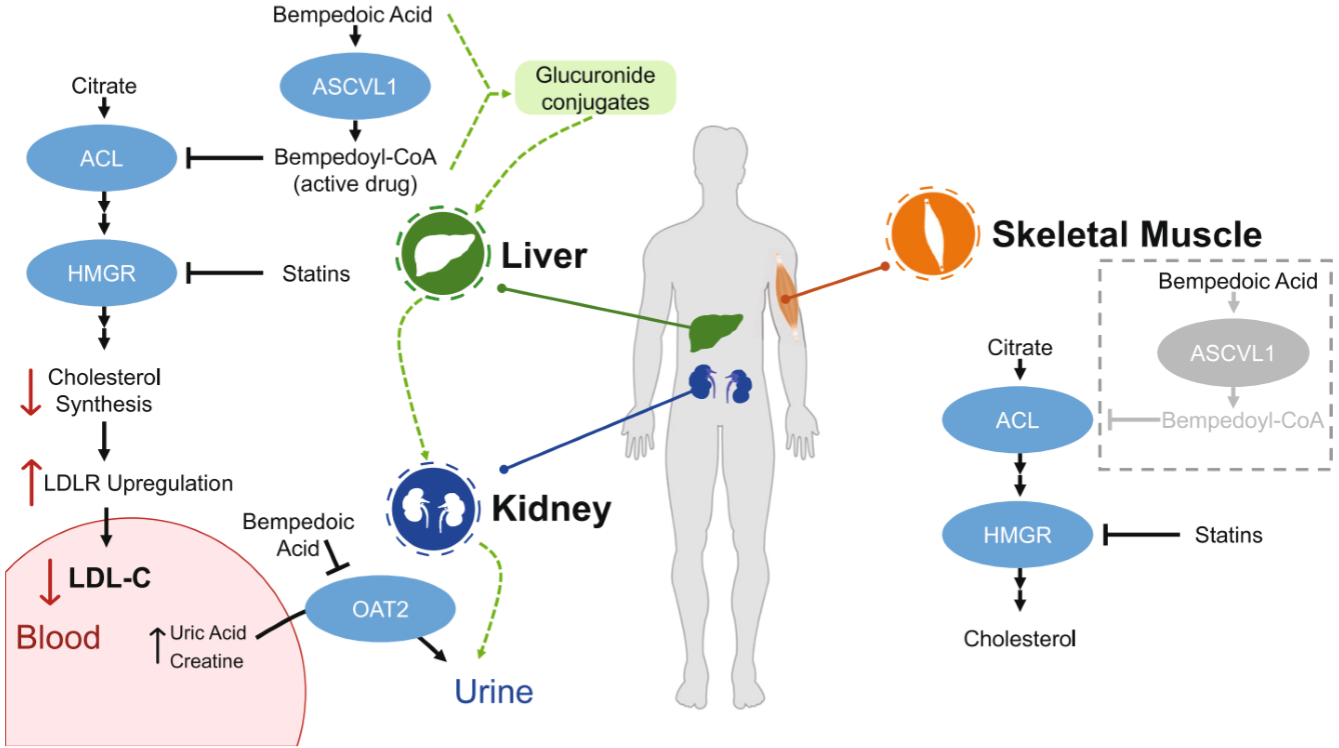
ESC Working Group Thrombosis e nome

Disclosures

Lecture fees from and/or consulting for Daiichi Sankyo

Mechanism of action



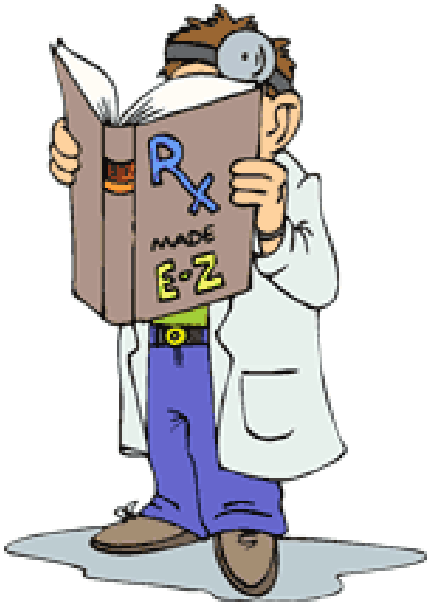
Ballantyne CM et al. Cardiovascular Drugs Therapy 2021;35:853-64

Question

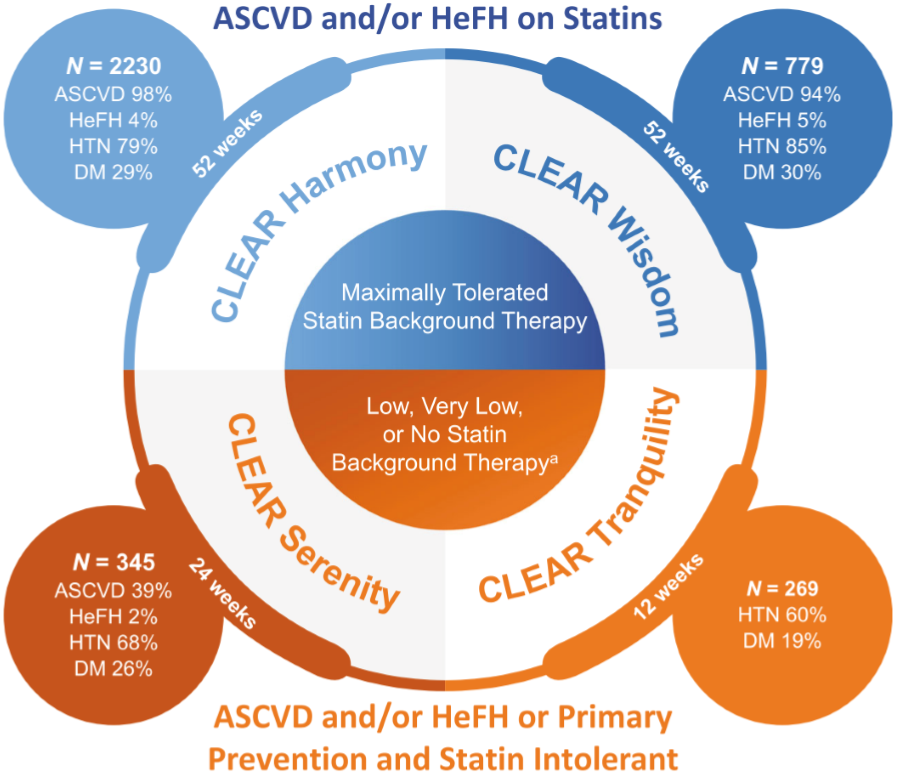
Thus, is bempedoic acid

effective and safe in

reducing LDL-C?



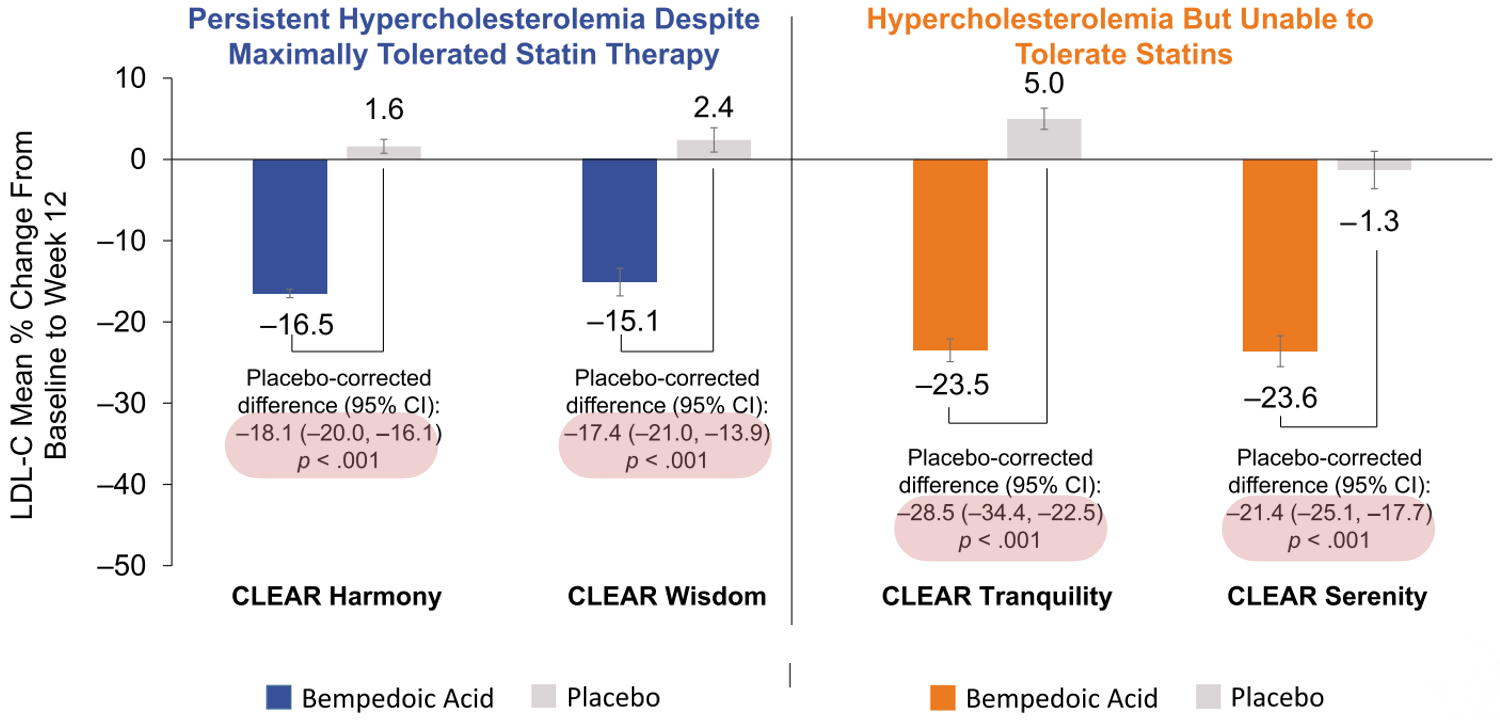
The CLEAR program



a *Low-dose statin therapy* = average daily dose of rosuvastatin 5 mg or atorvastatin 10 mg, simvastatin 10 mg, lovastatin 20 mg, pravastatin 40 mg, fluvastatin 40 mg, pitavastatin 40 mg. *Very low-dose statin therapy* = average daily doses less than above

Adapted from Ballantyne CM et al. Cardiovasc Drugs Ther 2021;35:853-64

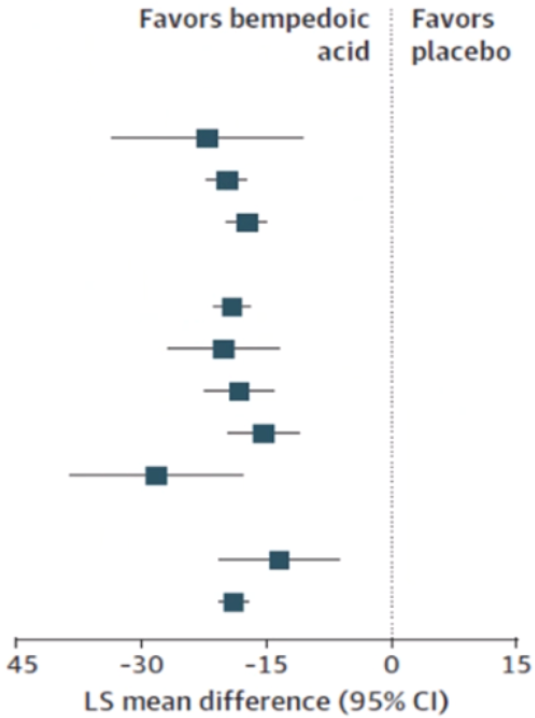
LDL-C reduction



Adapted from Ballantyne CM et al. Cardiovasc Drugs Ther 2021;35:853-64

Independent of …

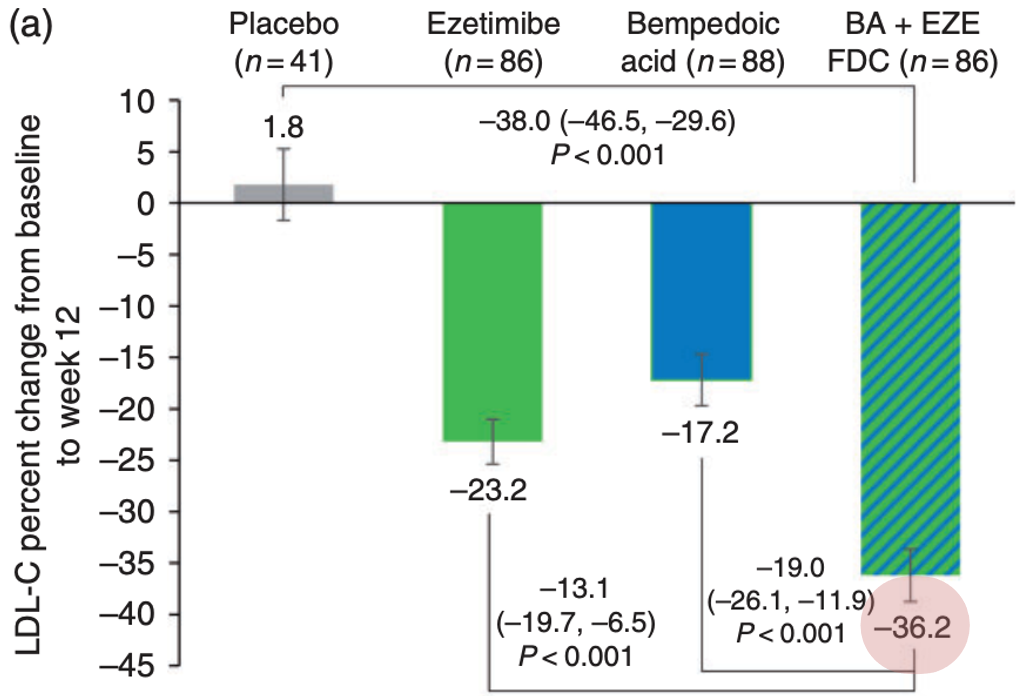
Subgroup	Bempedoic acid, No.	Placebo, No.	Placebo-corrected difference (95% CI)*	*P* Value for heterogeneity
Baseline statin regimen intensity				.37
No	51	29	-22.0 (-33.5 to -10.5)	
Low/moderate	882	451	-19.7 (-22.2 to -17.3)	
High	989	498	-17.3 (-19.7 to -14.9)	
Baseline statin medication				.29
Atorvastatin	1080	528	-19.1 (-21.3 to -16.8)	
Pravastatin	106	63	-20.1 (-26.8 to -13.4)	
Simvastatin	255	132	-18.2 (-22.4 to -14.1)	
Rosuvastatin	376	209	-15.2 (-19.4 to -11.0)	
Other	54	17	-28.2 (-38.6 to -17.8)	
Baseline ezetimibe use				.15
Yes	144	73	-13.4 (-20.5 to -6.2)	
No	1778	905	-18.8 (-20.6 to -17.1)	



Banach M et al. JAMA Cardiol 2020;5:1124-35

Fixed-dose combination with ezetimibe

- *Phase 3, double-blind clinical trial enrolling pts. at high CV risk*
- *Randomization (2:2:2:1) to fixed-dose combination vs. bempedoic acid 180 mg vs. ezetimibe 10 mg vs. placebo in addition to stable background statin therapy*

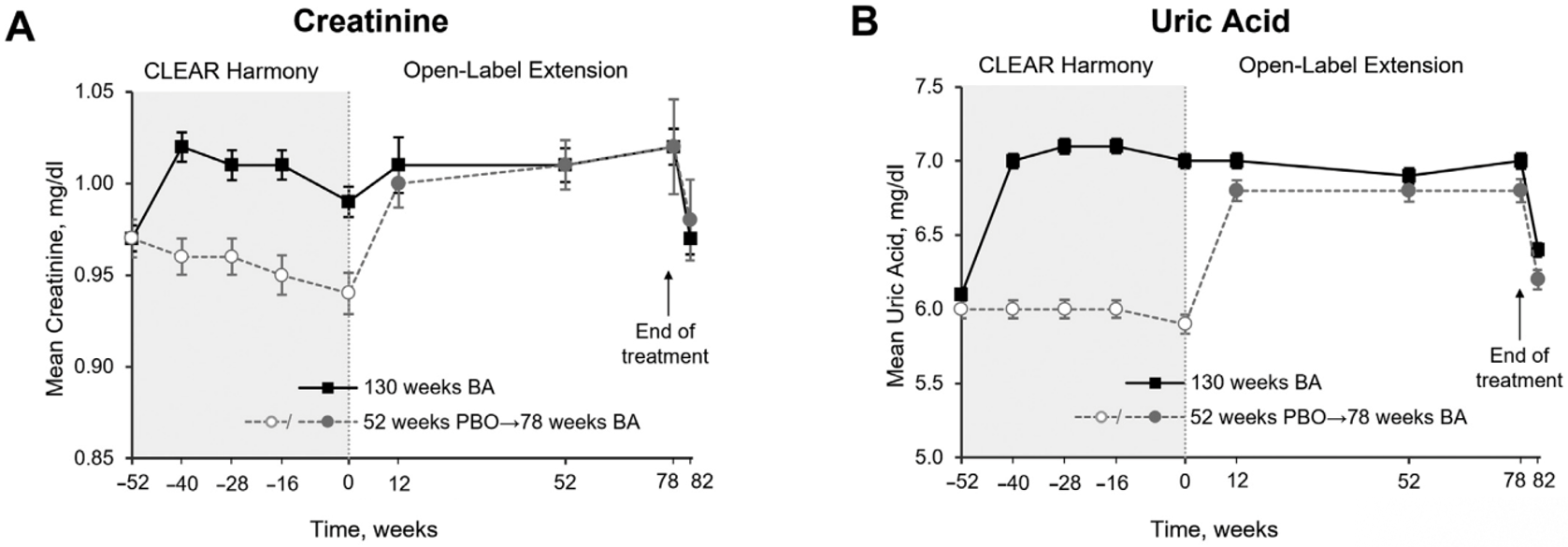


Ballantyne CM et al. Eur J Prev Cardiol 2020;27:593-603

Tolerability

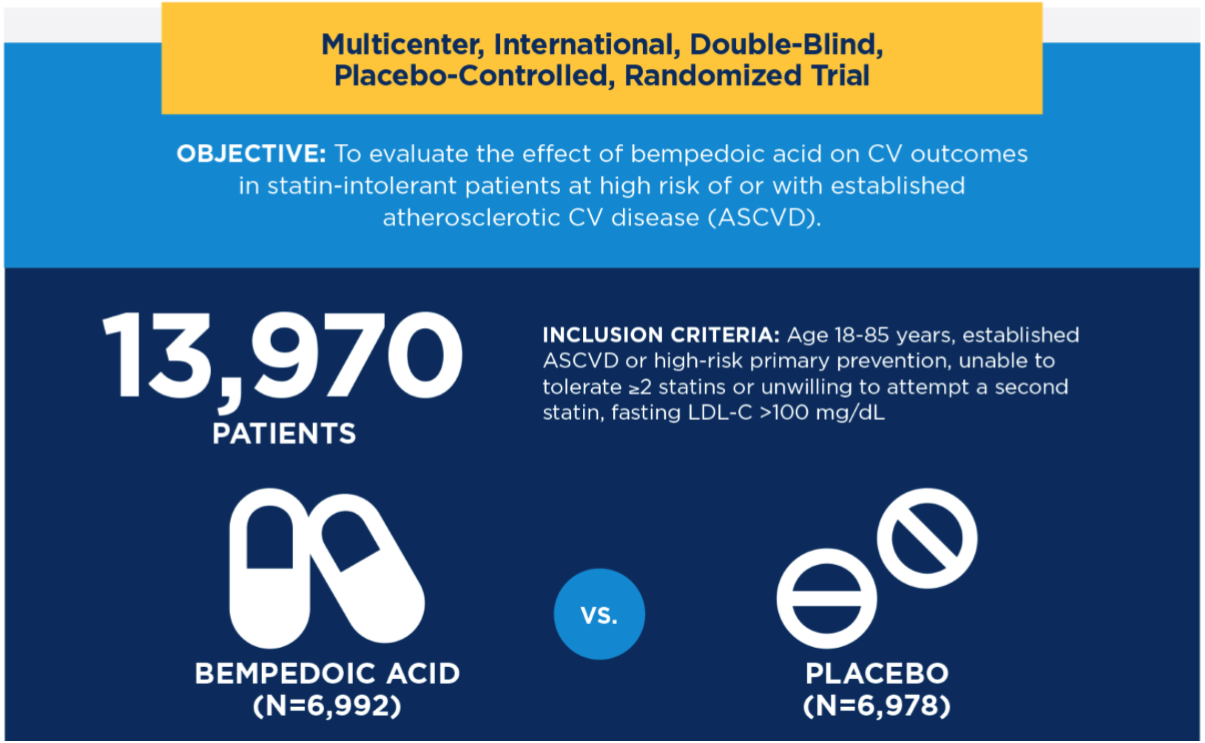
Phase 3, open-label extension study following the CLEAR Harmony

1,462 pts.



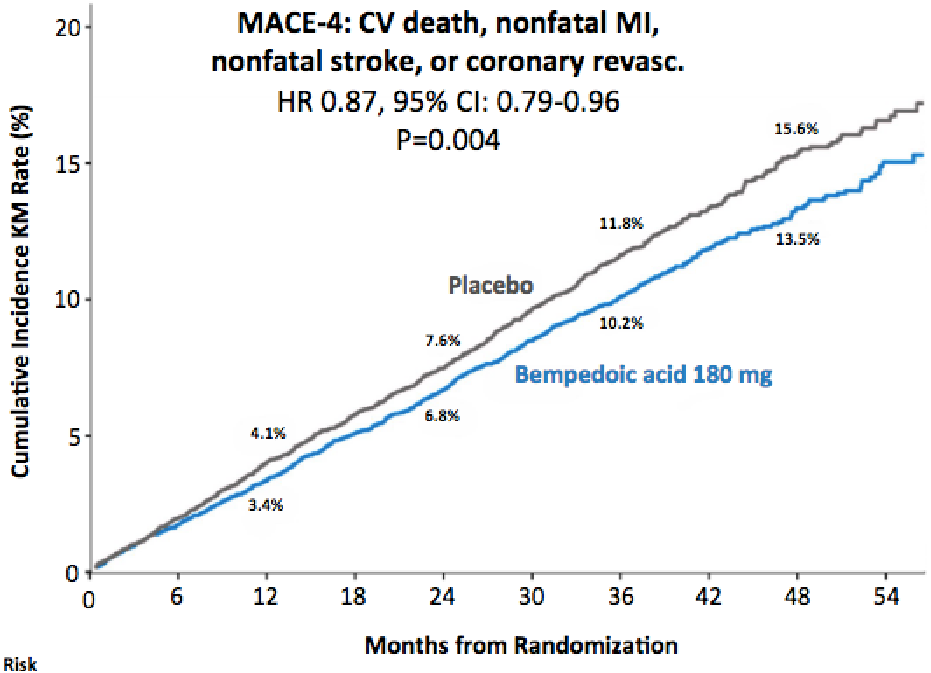
Ballantyne CM et al. Am J Cardiol 2022;174:1-11

The CLEAR Outcomes trial



Nichols SJ et al. Am Heart J 2021:235:104-12

Primary outcome

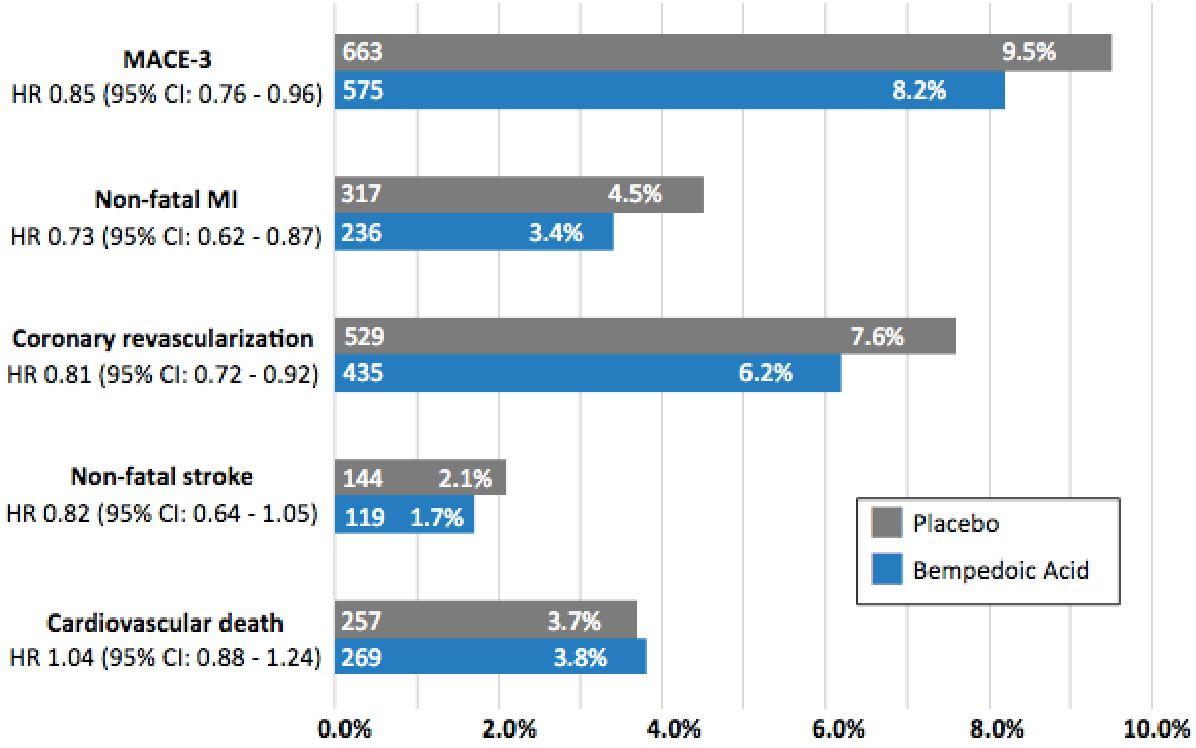


Number at Risk										
Bempedoic Acid	6992	6816	6652	6472	6291	6105	5239	2594	1236	553
Placebo	6978	6779	6573	6401	6205	5993	5087	2513	1204	513

Note: This Kaplan Meier (KM) Curve presents the time to first occurrence for each of the components of MACE-4.

Nissen SE et al. N Engl J Med 2023;388:1353-64

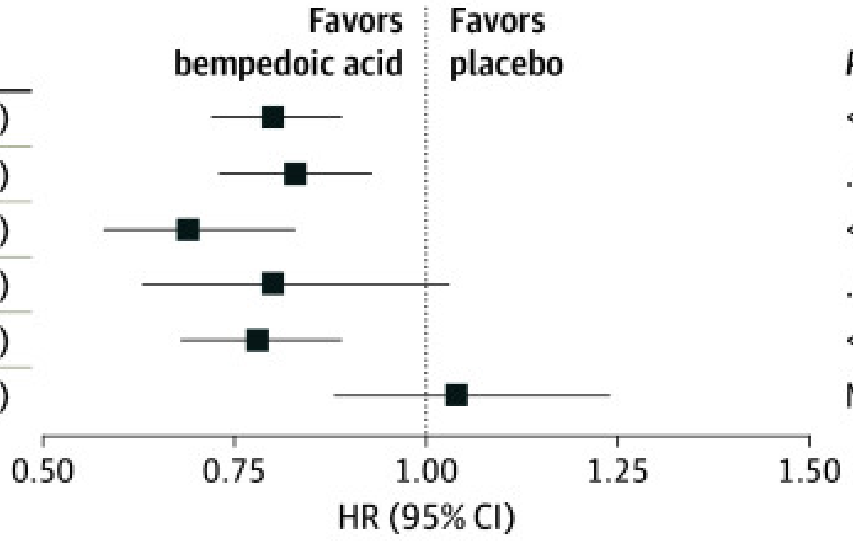
Key secondary outcomes



Nissen SE et al. N Engl J Med 2023;388:1353-64

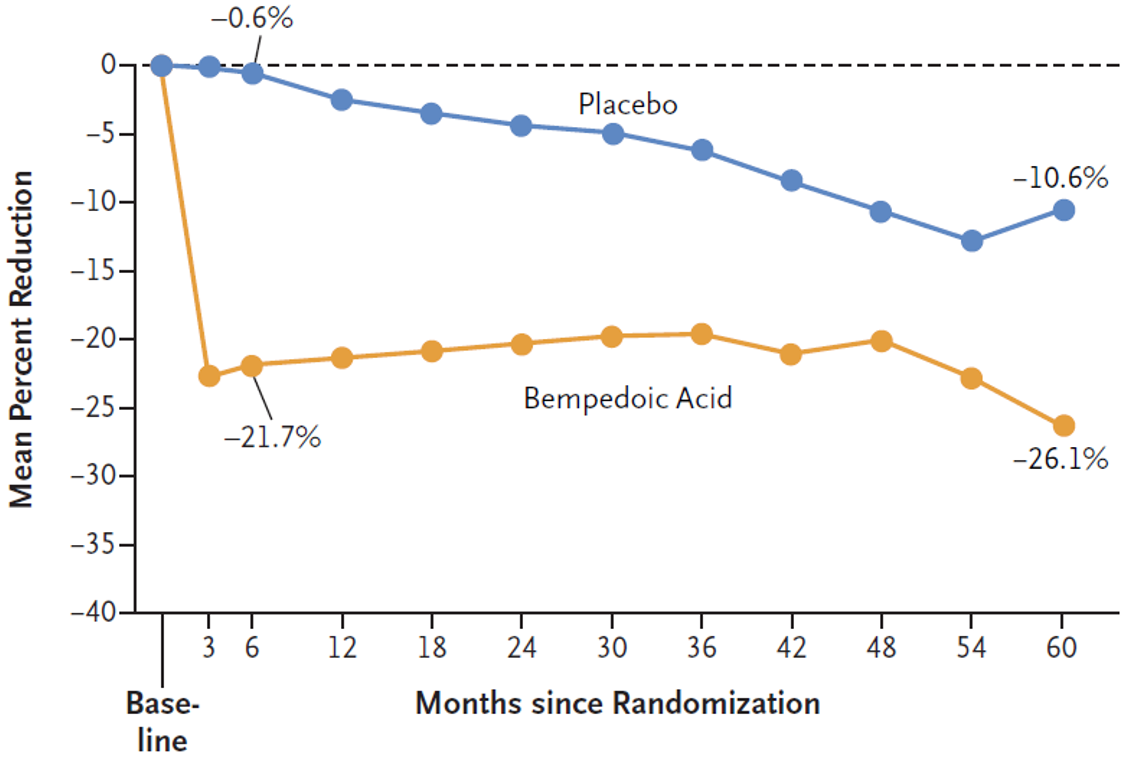
Effect on total events

Event type	HR (95% CI)	P value
CV death, MI, stroke, revascularization	0.80 (0.72-0.89)	<.001
CV death, MI, stroke	0.83 (0.73-0.93)	.002
Nonfatal MI	0.69 (0.58-0.83)	<.001
Nonfatal stroke	0.80 (0.63-1.03)	.09
Coronary revascularization	0.78 (0.68-0.89)	<.001
CV death	1.04 (0.88-1.24)	NA



Nicholls SJ et al. JAMA Cardiol 2024;9:245-53

LDL-C levels



Nissen SE et al. N Engl J Med 2023;388:1353-64

Adverse events

Event	Bempedoic acid	Placebo
Any adverse event that started or worsened after the first dose of a trial agent (%)	86.3	85.0
Adverse event leading to discontinuation of the trial regimen (%)	10.8	10.4
Renal impairment (%)	11.5	8.6
Myalgia (%)	5.6	6.8
Discontinuation of the trial regimen because of myalgia (%)	1.8	1.9
Hyperuricemia (%)	10.9	5.6
Gout (%)	3.1	2.1

Adapted from Nissen SE et al. N Engl J Med 2023;388:1353-64

2025 Focused update of the 2019 ESC/EAS guidelines

Recommendations	Class	Level
Bempedoic acid is recommended in patients ***who are unable to take statin therapy*** to achieve the LDL-C goal	I	B
The addition of bempedoic acid to the maximally tolerated dose of statin with or without ezetimibe should be considered ***in patients at high or very high risk*** in order to achieve the LDL-C goal	IIa	C

Mach F et al. Eur Heart J 2025;46:4359-78

Conclusioni

Nel programma CLEAR, l'acido bempedoico è risultato:

- efficace nel ridurre in modo rilevante e protratto i valori di LDL-C
- efficace nel ridurre significativamente gli eventi cardiovascolari avversi (nel pz. intollerante a statine)
- ben tollerato relativamente a effetti collaterali