Transcript Details
This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: https://reachmd.com/clinical-practice/cardiology/real-world-impact-of-evolocumab-on-mace-reduction-in-ascvd/39991/

ReachMD
www.reachmd.com
info@reachmd.com
(866) 423-7849

Real-World Impact of Evolocumab on MACE Reduction in ASCVD

Announcer:
Welcome to DataPulse from AHA 2025 on ReachMD. This activity, titled "Real-World Impact of Evolocumab on MACE Reduction in ASCVD" is provided by Medcon International.

Dr. Desai:
Hello from the American Heart Association Annual Scientific Sessions 2025 here in New Orleans. I'm Dr. Nihar Desai, associate professor of medicine and vice chief for the section of cardiovascular medicine at the Yale School of Medicine in New Haven, Connecticut.

I'm here to discuss important new real-world evidence examining evolocumab and its impact on major adverse cardiovascular events—or MACE—in patients with atherosclerotic cardiovascular disease.

By way of background, we all know that ASCVD is the leading cause of morbidity and mortality in the US and around the world. Multiple randomized trials have established the efficacy of evolocumab to lower LDL cholesterol and reduce the risk of MACE in patients with ASCVD. We then sought to evaluate the real-world effectiveness of evolocumab in reducing MACE outcomes in patients with ASCVD.

The study used the Komodo Healthcare Map and applied a target trial emulation framework and established comparative effectiveness framework. We included over 110,000 patients with ASCVD who were prescribed evolocumab, and then at day 75 after that initial prescription, divided the cohort based upon whether the patient continued evolocumab treatment—referred to as the treated cohort—or whether evolocumab treatment was discontinued—the non-treated cohort.

We then applied statistical modeling with inverse probability of treatment weighting to make the treated and non-treated groups as similar as possible along baseline characteristics. The groups were then followed forward, and we assessed the occurrence of composite MACE—myocardial infarction, stroke, or coronary revasc—the primary outcome, and cardiovascular death, myocardial infarction, and stroke as the secondary outcome, again both assessed at 4 years.

We found a 4.1% absolute risk reduction and a 20% relative reduction in the primary outcome, and a 4.2% absolute and 29% relative reduction in the secondary endpoint for those patients that were treated with evolocumab as compared to those that were non-treated.

I think the key conclusion from this real-world study of more than 110,000 patients, using a comparative effectiveness framework, demonstrated a significant clinical benefit with reduction in MACE events for patients treated with evolocumab as compared to those that were non-treated. Importantly, these data provide complementary evidence to those from traditional randomized trials and highlight the effectiveness of evolocumab in the real-world setting.

I think my take-home message from these data is that reducing LDL cholesterol remains the cornerstone for reducing adverse cardiovascular events among patients with atherosclerotic cardiovascular disease. These real-world data now show what we had seen and learned from prior randomized trials and really holds true in the real-world setting and again demonstrates the effectiveness of evolocumab in reducing cardiovascular risk in patients with atherosclerotic cardiovascular disease.

© 2026 ReachMD

From the AHA Scientific Sessions in New Orleans, 2025, I'm Dr. Nihar Desai. Thank you so much for watching.

Announcer:
Thank you for listening to this DataPulse from AHA 2025 on ReachMD. This activity is provided by Medcon International. Thank you for listening.

© 2026 ReachMD