

Repatha® (evolocumab)  
clinical trials:

# CLINICAL EVIDENCE FOR INITIATING REPATHA® DURING HOSPITALIZATION FOR ACS<sup>1,2</sup>

Learn more about clinical studies that examine targeting  
LDL-C in the acute setting for ACS patients<sup>1,2</sup>

## INDICATIONS

**Prevention of Cardiovascular Events:** In adults with established cardiovascular disease, Repatha® is indicated to reduce the risk of myocardial infarction, stroke, and coronary revascularization.

**Primary Hyperlipidemia (including Heterozygous Familial Hypercholesterolemia):** Repatha® is indicated as an adjunct to diet, alone or in combination with other lipid-lowering therapies (e.g., statins, ezetimibe), for the treatment of adults with primary hyperlipidemia to reduce low-density lipoprotein cholesterol (LDL-C).

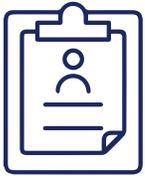
## IMPORTANT SAFETY INFORMATION

**Contraindication:** Repatha® is contraindicated in patients with a history of a serious hypersensitivity reaction to Repatha®. Serious hypersensitivity reactions including angioedema have occurred in patients treated with Repatha®.

ACS = acute coronary syndrome; LDL-C = low-density lipoprotein cholesterol.

Please see additional Important Safety Information throughout.

 **Repatha**<sup>®</sup>  
(evolocumab) injection  
140 mg/mL



# FOURIER TRIAL

Further Cardiovascular **O**utcomes **R**esearch With  
PCSK9 **I**nhibition in Subjects With **E**levated **R**isk

The objective of FOURIER was to evaluate the effectiveness of Repatha® (evolocumab) to reduce CV events in patients with established CVD who remained at risk despite high- or moderate-intensity statin therapy.<sup>3</sup> 81% of patients had previously experienced  $\geq 1$  MI.<sup>4</sup> The FOURIER trial included MI patients with a median time of approximately 3.4 years since their most recent previous MI.<sup>3</sup>  
**The impact of initiating Repatha® in the acute phase of ACS on LDL-C lowering was not studied.**<sup>3</sup>



# EVACS TRIAL

Evolocumab in **A**cute **C**oronary **S**yndrome

In EVACS, an investigator-sponsored study conducted in the US, Repatha® was administered in-hospital early postinfarction. The study assessed the mean percent change in LDL-C from baseline, comparing placebo and Repatha® groups at day 30.<sup>1</sup>



# EVOPACS TRIAL

Evolocumab for Early Reduction of LDL-Cholesterol Levels  
in **P**atients With **A**cute **C**oronary **S**yndromes

In EVOPACS, an investigator-sponsored study conducted in Switzerland, Repatha® was administered in-hospital in the acute phase of ACS. The percent change in LDL-C from baseline to week 8 was assessed.<sup>2</sup>

**Adding Repatha® to statin therapy during hospitalization after ACS may help patients achieve the guideline-recommended LDL-C level<sup>1,2</sup>**

## Important Safety Information (continued)

**Allergic Reactions:** Hypersensitivity reactions (e.g. angioedema, rash, urticaria) have been reported in patients treated with Repatha®, including some that led to discontinuation of therapy. If signs or symptoms of serious allergic reactions occur, discontinue treatment with Repatha®, treat according to the standard of care, and monitor until signs and symptoms resolve.

# FOURIER TRIAL

Further Cardiovascular Outcomes Research With PCSK9 Inhibition in Subjects With Elevated Risk

## IN FOURIER, REPATHA® ADDED TO A STATIN WAS STUDIED IN ESTABLISHED CVD PATIENTS WHO REMAINED AT RISK OF ANOTHER CV EVENT<sup>4</sup>

27,564 patients with established CVD and LDL-C ≥70 mg/dL and/or non-HDL-C ≥100 mg/dL despite high- or moderate-intensity statin therapy<sup>4</sup>



Patients were aged ≥40 to ≤85 years with prior MI, stroke, or symptomatic PAD<sup>3,\*</sup>



81% of patients already experienced ≥1 MI<sup>5</sup>



Median baseline LDL-C for enrolled patients was 92 mg/dL<sup>3</sup>



99% of patients were receiving high- or moderate-intensity statin therapy<sup>3</sup>



70% of patients in the Repatha® arm were on high-intensity statins<sup>3</sup>

**Study Design:** FOURIER was a double-blind, randomized, placebo-controlled, event-driven trial in 27,564 adult patients with established cardiovascular disease and with LDL-C ≥70 mg/dL and/or non-HDL-C ≥100 mg/dL despite high- or moderate-intensity statin therapy. Patients received either subcutaneous injections of Repatha® (140 mg every 2 weeks or 420 mg once monthly) or placebo. On stable background lipid-lowering therapy, median LDL-C at baseline was 92 mg/dL.<sup>4</sup>

## THE ADDITION OF REPATHA® RESULTED IN A SUSTAINED AND CONSISTENT LDL-C REDUCTION<sup>4</sup>

- **63% mean reduction** in LDL-C from baseline at week 12 in the statin + Repatha® group compared to statin alone<sup>4</sup>
- **87% of patients achieved LDL-C ≤70 mg/dL** with Repatha® added to a statin at 48 weeks<sup>3</sup>
- Adding Repatha® to a statin can **lower LDL-C in just 4 weeks**<sup>3</sup>

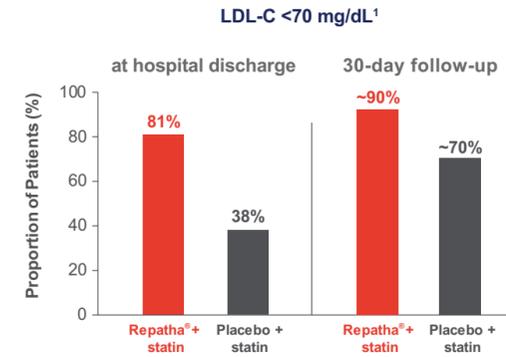
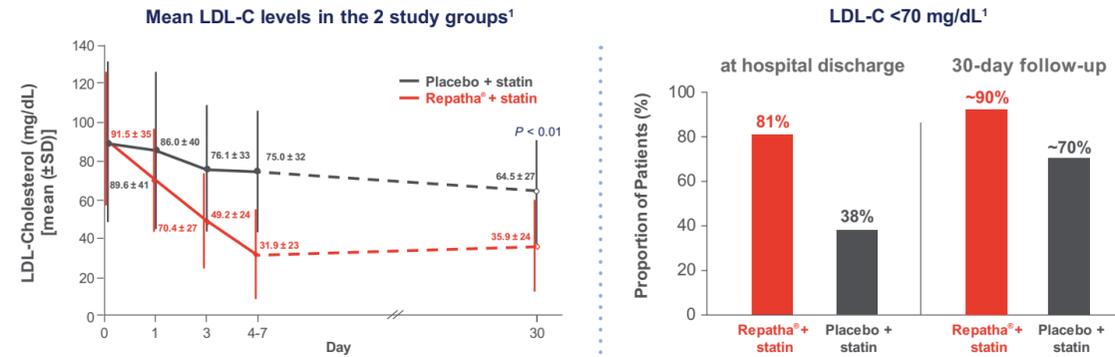
\*Symptomatic peripheral arterial disease (history of claudication with ABI <0.85 or previous revascularization or amputation).<sup>5</sup>

# EVACS TRIAL

Evolocumab in Acute Coronary Syndrome

## IN EVACS, REPATHA® ADDED TO A STATIN WAS ADMINISTERED IN-HOSPITAL DURING THE EARLY POSTINFARCTION PERIOD, WITHIN 24 HOURS OF HOSPITALIZATION<sup>1</sup>

Repatha® added to statin therapy reduced LDL-C levels throughout hospitalization and at 30-day follow-up more than a statin alone<sup>1</sup>



The number of Repatha® and placebo patients with any adverse event was 10 and 12, respectively, and with a serious adverse event, 2 and 6, respectively<sup>1</sup>

**Study Design:** The EVACS trial (Evolocumab in Acute Coronary Syndrome) enrolled patients with non-ST-segment-elevation myocardial infarction and troponin I of ≥5 ng/mL and randomly assigned them in a 1:1 ratio to a single dose of evolocumab SQ 420 mg or matching placebo within 24 hours of presentation. There were 57 patients enrolled in the study (30 Repatha® arm; 27 placebo arm). The primary endpoint was the change in LDL-C at 30 days. Other atherogenic lipid outcomes were also measured. All patients received high-intensity statins unless contraindicated and were treated in accordance with current ACS guidelines.<sup>1</sup>

The EVACS trial was not designed to assess a correlation between LDL-C reduction and CV events.<sup>1</sup>

### IMPORTANT SAFETY INFORMATION (continued)

**Adverse Reactions in Primary Hyperlipidemia (including HeFH):** The most common adverse reactions (>5% of patients treated with Repatha® and occurring more frequently than placebo) were: nasopharyngitis, upper respiratory tract infection, influenza, back pain, and injection site reactions.

From a pool of the 52-week trial and seven 12-week trials: Local injection site reactions occurred in 3.2% and 3.0% of Repatha®-treated and placebo-treated patients, respectively. The most common injection site reactions were erythema, pain, and bruising.

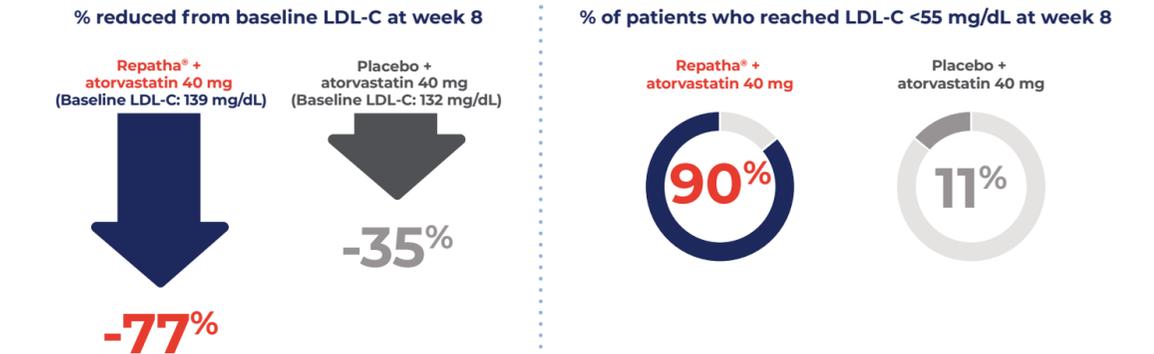
Allergic reactions occurred in 5.1% and 4.7% of Repatha®-treated and placebo-treated patients, respectively. The most common allergic reactions were rash (1.0% versus 0.5% for Repatha® and placebo, respectively), eczema (0.4% versus 0.2%), erythema (0.4% versus 0.2%), and urticaria (0.4% versus 0.1%).

# EVOPACS TRIAL

Evolocumab for Early Reduction of LDL-Cholesterol Levels in Patients With Acute Coronary Syndromes

## IN THE EVOPACS TRIAL, WHEN INITIATED IN-HOSPITAL AT THE ACUTE PHASE OF ACS, REPATHA® ADDED TO A STATIN REDUCED LDL-C AT 8 WEEKS<sup>2</sup>

95% of patients on Repatha® added to a statin achieved the AHA/ACC Guideline-recommended threshold of below 70 mg/dL vs 37% of patients on placebo + statin<sup>2,5</sup>



**Study Design:** EVOPACS was a randomized, double-blind, placebo-controlled, multicenter, investigator-sponsored study conducted in Switzerland evaluating the safety and efficacy of Repatha® when administered in the acute phase of ACS (NSTEMI/UA <72 hours, STEMI <24 hours) typically within 72 hours of symptom onset. There were 308 patients enrolled in the study (155 Repatha® arm; 153 placebo arm). Patients presenting with ACS were included if their LDL-C levels were either ≥70 mg/dL despite high-intensity statin therapy, or ≥90 mg/dL despite low- or moderate-intensity statin, or ≥125 mg/dL in statin-naïve patients or patients not on stable statin therapy.<sup>2</sup>

Patients were randomized to receive Repatha® 420 mg once monthly subcutaneously plus high-intensity statin therapy or placebo plus high-intensity statin therapy; 78.2% of patients were not on background statin therapy prior to randomization.<sup>2</sup>

## THE SAFETY AND TOLERABILITY OF REPATHA® WERE CONSISTENT WITH PREVIOUS TRIALS<sup>2</sup>

The EVOPACS trial was not designed to assess a correlation between LDL-C reduction and CV events<sup>2</sup>

AHA/ACC = American Heart Association/American College of Cardiology; ESC = European Society of Cardiology; NSTEMI = non-ST-segment-elevation myocardial infarction; STEMI = ST-elevation myocardial infarction; SQ = subcutaneous; UA = unstable angina.

# IMPORTANT SAFETY INFORMATION

**Contraindication:** Repatha® is contraindicated in patients with a history of a serious hypersensitivity reaction to Repatha®. Serious hypersensitivity reactions including angioedema have occurred in patients treated with Repatha®.

**Allergic Reactions:** Hypersensitivity reactions (e.g. angioedema, rash, urticaria) have been reported in patients treated with Repatha®, including some that led to discontinuation of therapy. If signs or symptoms of serious allergic reactions occur, discontinue treatment with Repatha®, treat according to the standard of care, and monitor until signs and symptoms resolve.

**Adverse Reactions in Primary Hyperlipidemia (including HeFH):** The most common adverse reactions (>5% of patients treated with Repatha® and occurring more frequently than placebo) were: nasopharyngitis, upper respiratory tract infection, influenza, back pain, and injection site reactions.

From a pool of the 52-week trial and seven 12-week trials: Local injection site reactions occurred in 3.2% and 3.0% of Repatha®-treated and placebo-treated patients, respectively. The most common injection site reactions were erythema, pain, and bruising.

Allergic reactions occurred in 5.1% and 4.7% of Repatha®-treated and placebo-treated patients, respectively. The most common allergic reactions were rash (1.0% versus 0.5% for Repatha® and placebo, respectively), eczema (0.4% versus 0.2%), erythema (0.4% versus 0.2%), and urticaria (0.4% versus 0.1%).

**Adverse Reactions in the Cardiovascular Outcomes Trial:** The most common adverse reactions (>5% of patients treated with Repatha® and occurring more frequently than placebo) were: diabetes mellitus (8.8% Repatha®, 8.2% placebo), nasopharyngitis (7.8% Repatha®, 7.4% placebo), and upper respiratory tract infection (5.1% Repatha®, 4.8% placebo).

Among the 16,676 patients without diabetes mellitus at baseline, the incidence of new-onset diabetes mellitus during the trial was 8.1% in patients assigned to Repatha® compared with 7.7% in those assigned to placebo.

**Immunogenicity:** Repatha® is a human monoclonal antibody. As with all therapeutic proteins, there is potential for immunogenicity with Repatha®.

**Please see full Prescribing Information.**

**Learn more about Repatha® clinical trials at [RepathaHCP.com](https://www.RepathaHCP.com)**

**References:** **1.** Leucker TM, Blaha MJ, Jones SR, et al. Effect of evolocumab on atherogenic lipoproteins during the peri- and early postinfarction period: a placebo-controlled, randomized trial. *Circulation*. 2020;142:419-421. **2.** Koskinas KC, Windecker S, Pedrazzini G, et al. Evolocumab for early reduction of LDL cholesterol levels in patients with acute coronary syndromes (EVOPACS). *J Am Coll Cardiol*. 2019;74:2452-2462. **3.** Sabatine MS, Giugliano RP, Keech AC, et al; FOURIER Steering Committee and Investigators. Evolocumab and clinical outcomes in patients with cardiovascular disease. *N Engl J Med*. 2017;376:1713-1722. **4.** Repatha® (evolocumab) prescribing information, Amgen. **5.** Grundy SM, Stone NJ, Bailey AL, et al. 2018 AHA/ACC/AACVPR/AAPA/ABC/ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA guideline on the management of blood cholesterol: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *J Am Coll Cardiol*. 2019;73:e285-e350.