



# Association Between Achieved LDL-Cholesterol Levels and Long-term Cardiovascular and Safety Outcomes: An Analysis of FOURIER-OLE

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# Disclosures

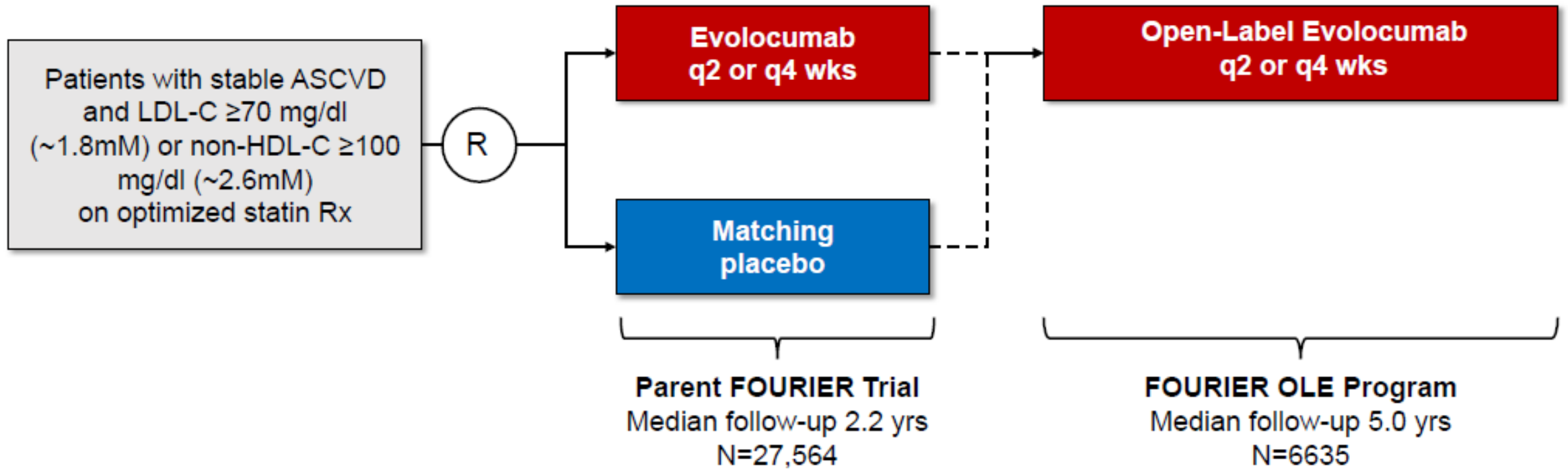
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- FOURIER and FOURIER-OLE were funded by Amgen Inc.





# Study Schema: FOURIER and FOURIER-OLE

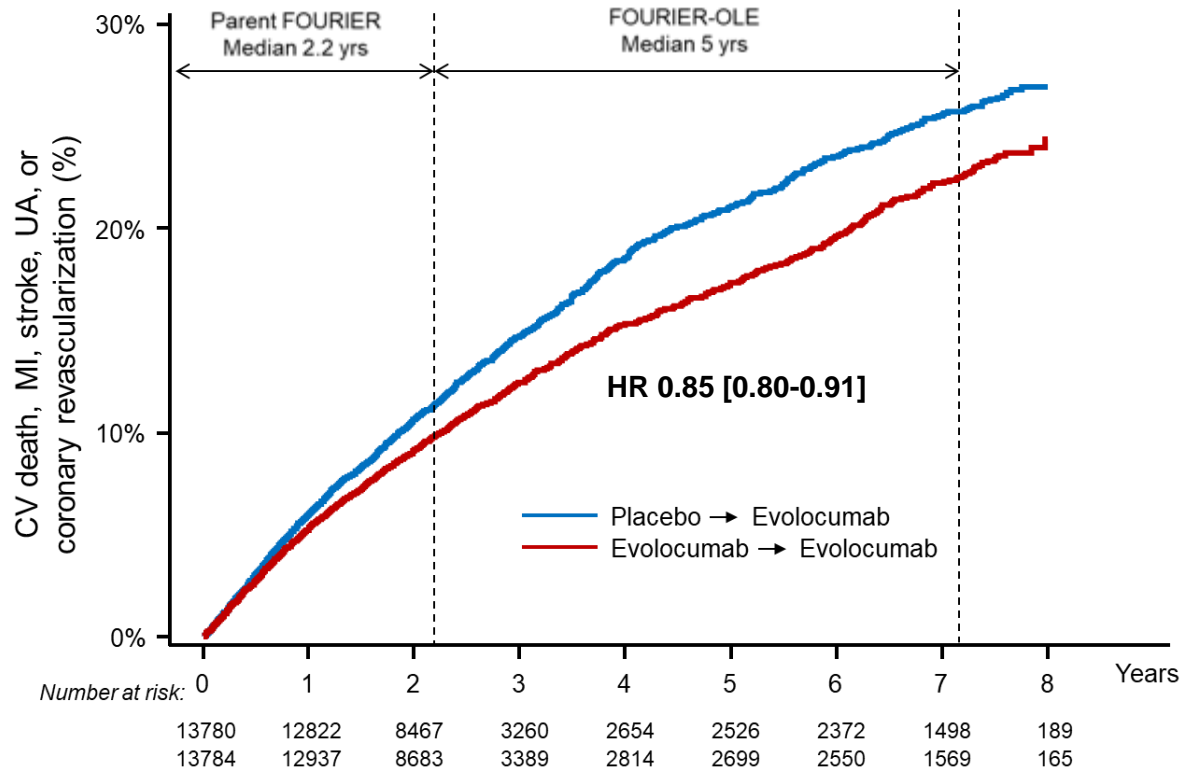




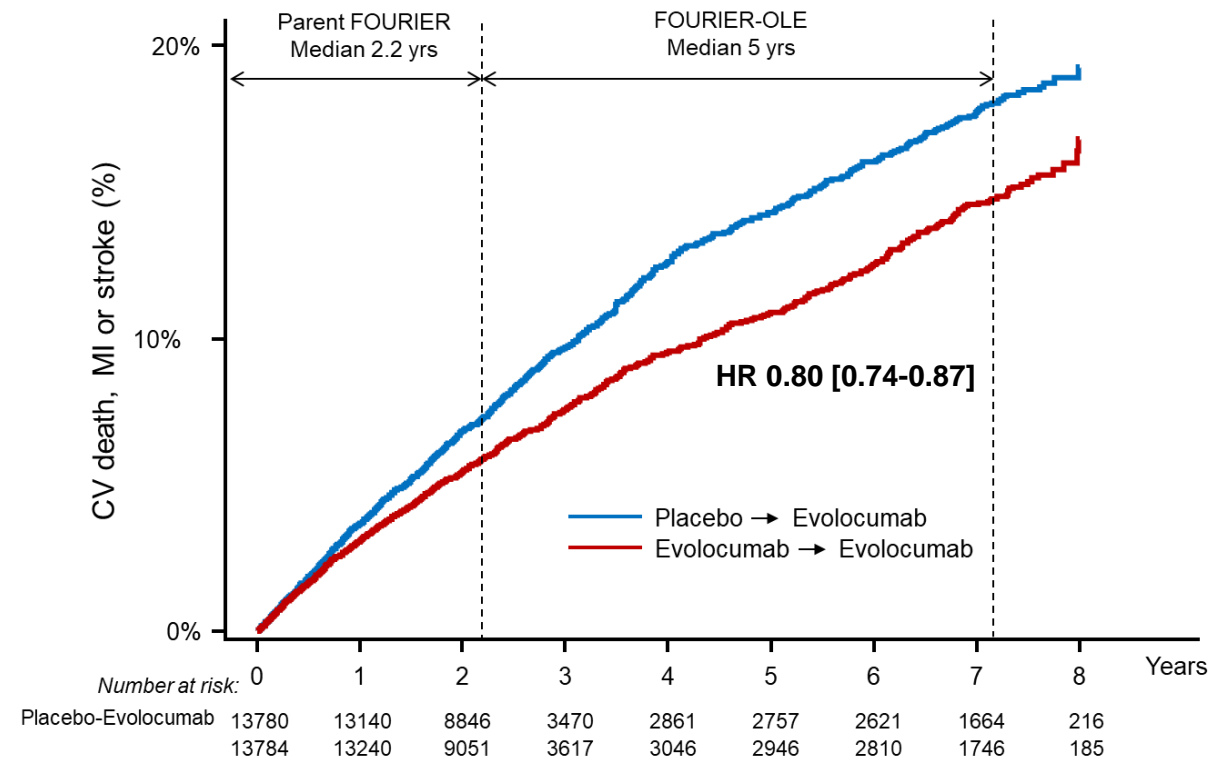
# Results of FOURIER and FOURIER-OLE – CV Outcomes



## Primary Efficacy Endpoint



## Key Secondary Efficacy Endpoint





# Objective



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**To explore the relationship between achieved LDL-C levels and the occurrence of long-term adverse cardiovascular and safety outcomes, down to very low (<20 mg/dL) achieved LDL-C levels, in FOURIER-OLE.**





# Methods



- **Patients divided into 5 categories based on achieved LDL-C**
  - Used an average of the first 2 LDL-C levels (when available), measured at 12, 24, or 48 weeks after enrollment in FOURIER-OLE
- **CV and safety outcomes**
- **Multivariable models were adjusted for baseline characteristics associated with achieved LDL-C**
  - Age, BMI, sex, race, current smoker, prior MI, prior non-hemorrhagic stroke, history of diabetes, history of peripheral arterial disease, high-intensity statin use, ezetimibe use, lipoprotein(a) levels at 12 weeks, and baseline HgbA1c (only for new-onset DM)

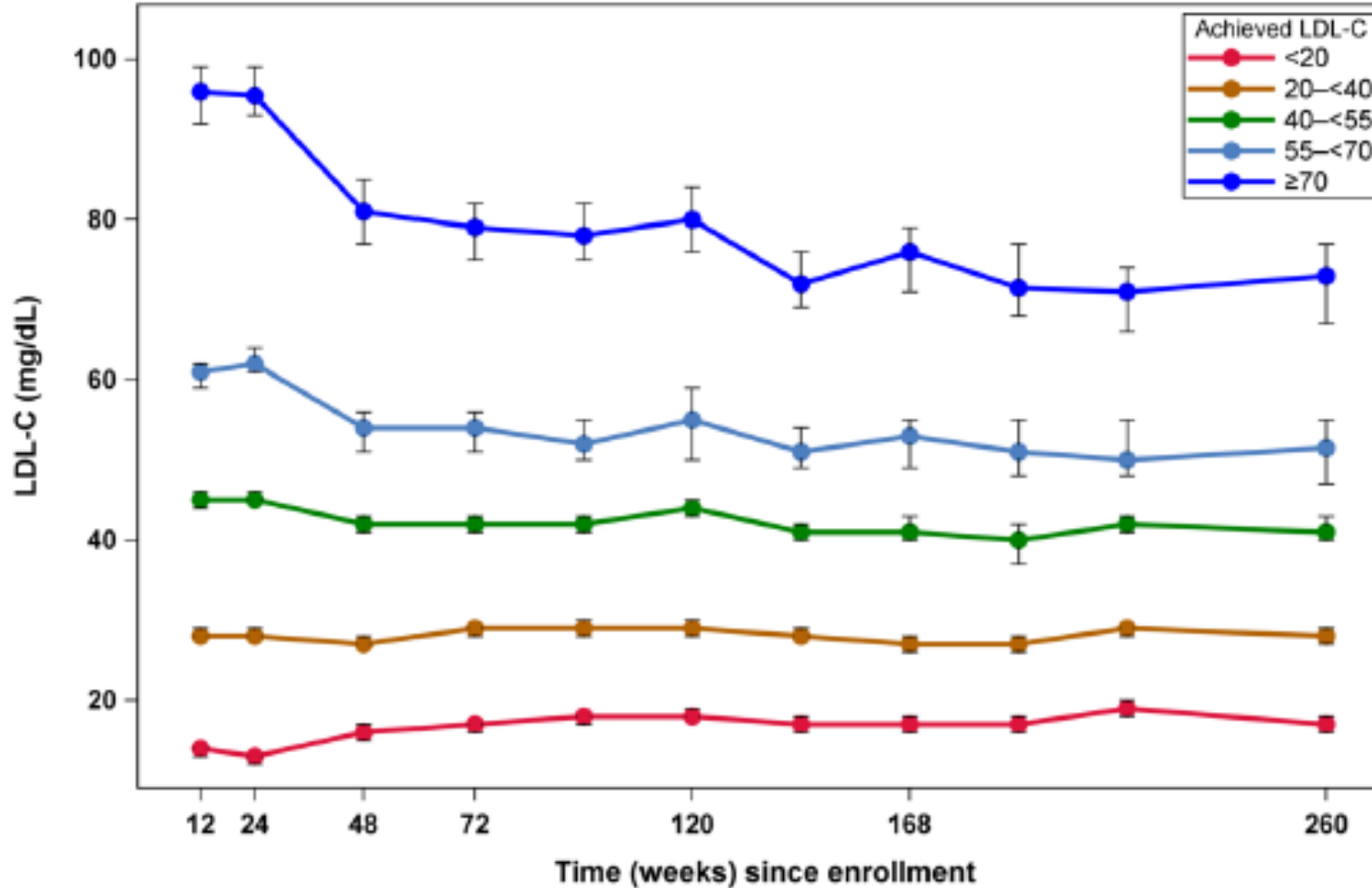




# Achieved LDL-C Over Time



6559 patients with achieved LDL-C levels in FOURIER-OLE



1604 (24%) of pts achieved LDL-C levels <20mg/dL

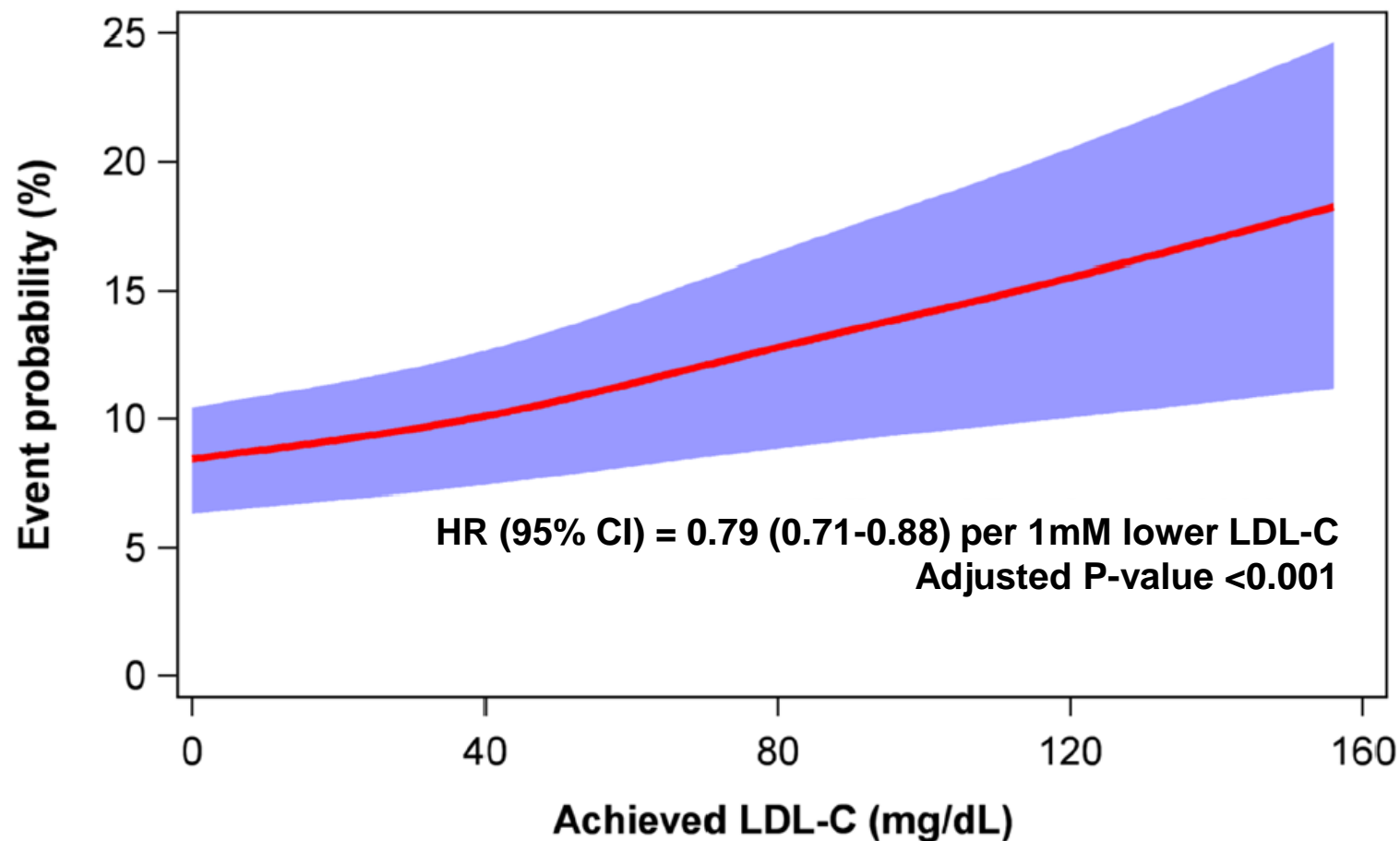




# CV Outcomes and Achieved LDL-C



## CV death, MI, or stroke



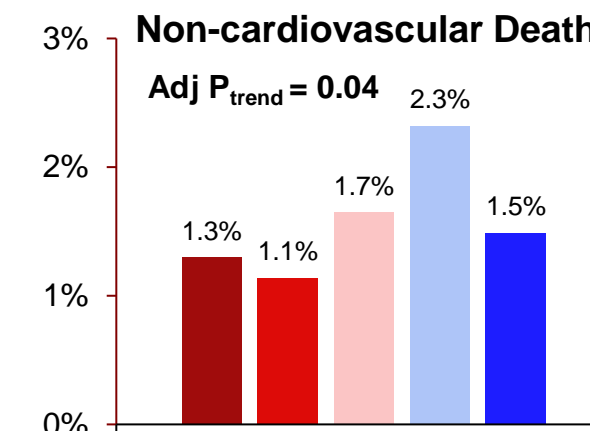
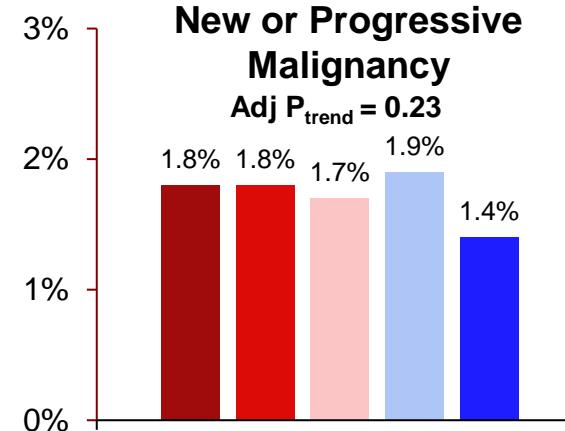
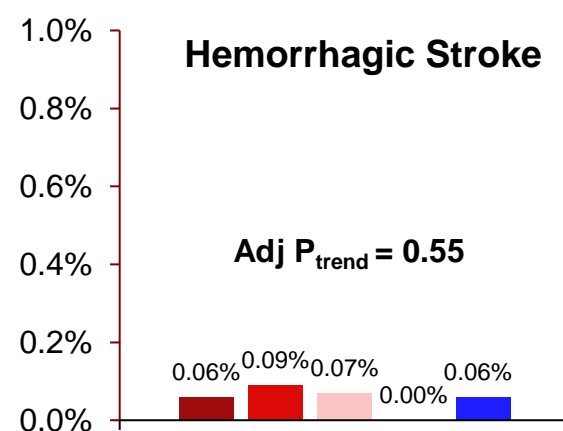
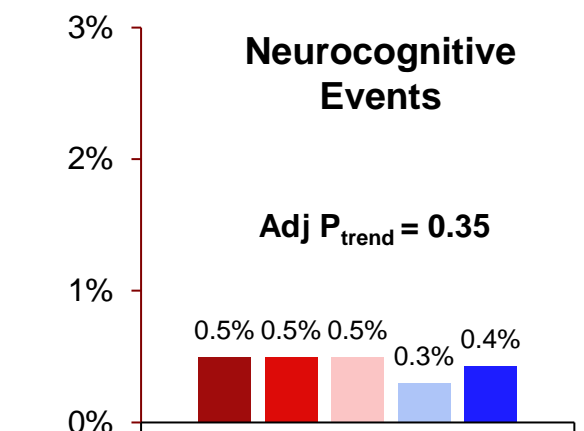
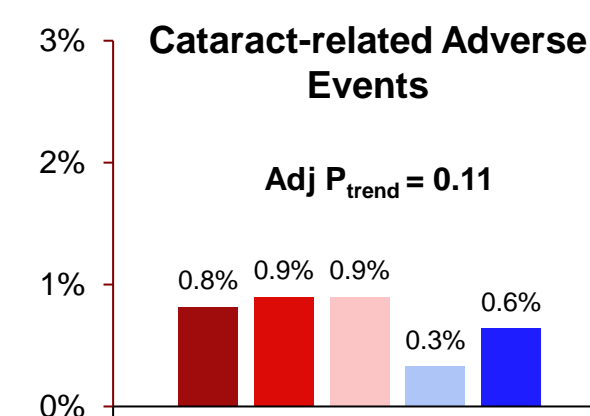
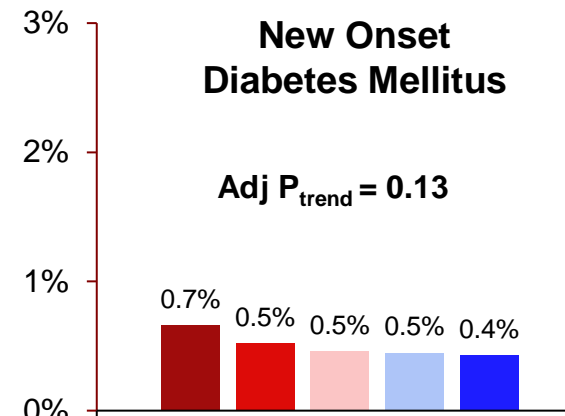
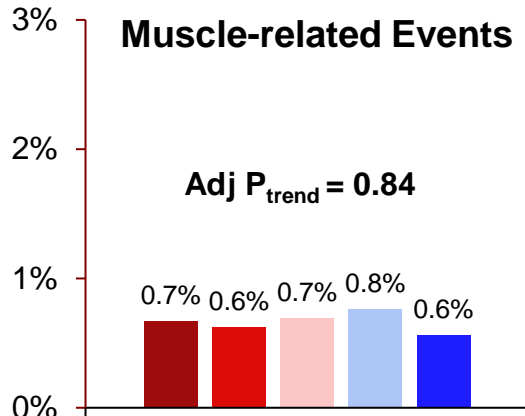
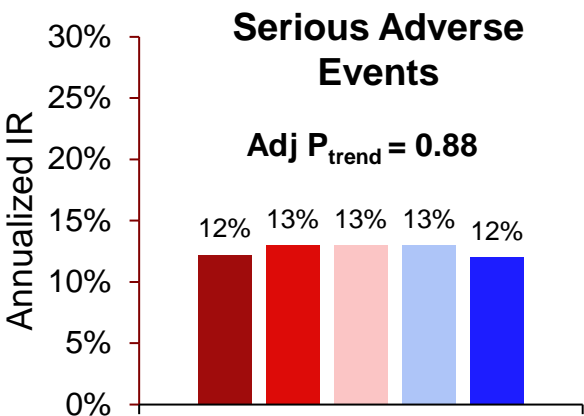




# Safety and Achieved LDL-C



LDL-C Category: ■ <20 ■ 20-<40 ■ 40-<55 ■ 55-<70 ■ ≥70





# Summary & Conclusions



- Monotonic relationship between lower achieved LDL-C levels, down to very low LDL-C levels <20 mg/dL, and a lower risk of cardiovascular events in FOURIER-OLE
- No serious safety concerns with low LDL-C over the additional 5-yr follow-up period (max 8.6 yrs)
- **Altogether, these data suggest that achieving a very low LDL-C level over the long-term is both effective and safe for patients with ASCVD**














## Circulation

### ORIGINAL RESEARCH ARTICLE



# Association Between Achieved Low-Density Lipoprotein Cholesterol Levels and Long-Term Cardiovascular and Safety Outcomes: An Analysis of FOURIER-OLE

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