TWMU CARDIOLOGY

HIJ-PROPER

Heart Institute of Japan-PRoper level of lipid lOwering with Pitavastatin and Ezetimibe in acute coRonary syndrome

LDL cholesterol targeting with pitavastatin + ezetimibe for patients with acute coronary syndrome and dyslipidemia: the HIJ-PROPER, a randomized trial

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The HIJ-PROPER Investigators

Conflict of Interests

The HIJ-PROPER study group received research support to perform clinical trials through **the Japan Research Promotion Society for Cardiovascular Diseases**. Sponsored by Mochida Pharmaceutical Co., Ltd., Pfizer Japan Inc., AstraZeneca K.K., Daiichi Sankyo Company, Limited, Novartis Pharma K.K., Bristol-Myers K.K., Kowa Pharmaceutical Co.Ltd., MSD K.K., Nippon Boehringer Ingelheim Co., Ltd., Bayer Yakuhin, Ltd., Sanofi K.K., Takeda Pharmaceutical Company Limited, Boston Scientific Corporation, and Abbott Vascular Japan Co., Ltd.

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Hypothesis

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HIJ-PROPER is

- a prospective, randomized, open-label, blinded endpoint multicenter trial
- to determine whether standard statin dose + ezetimibe, targeting LDL-C of < 70 mg/dL would reduce cardiovascular events more than statin monotherapy, targeting LDL-C of 90 to 100 mg/dL
- in patients with acute coronary syndrome (ACS) and dyslipidemia

Study Design

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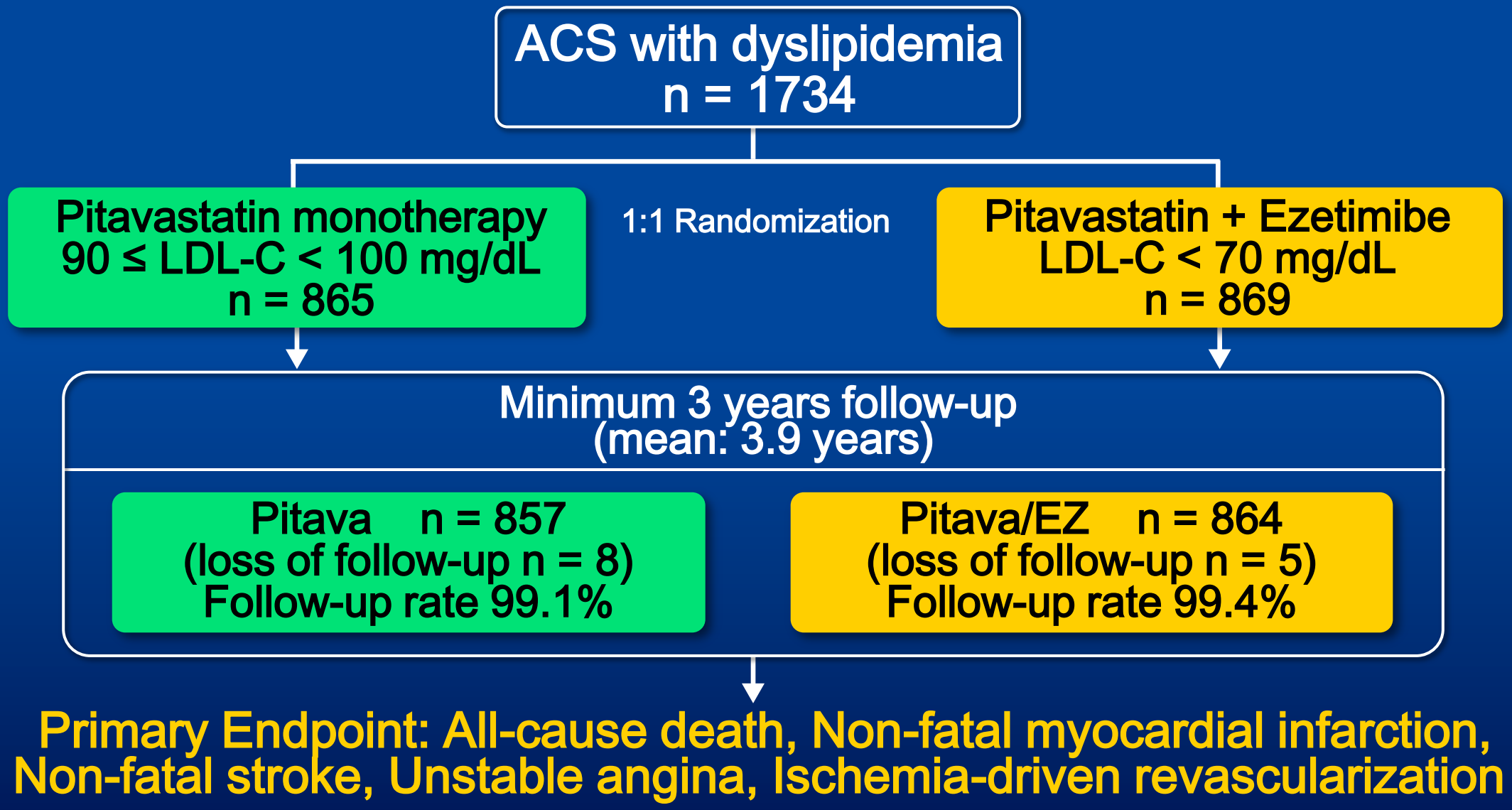

LDL-C and Lipid Changes

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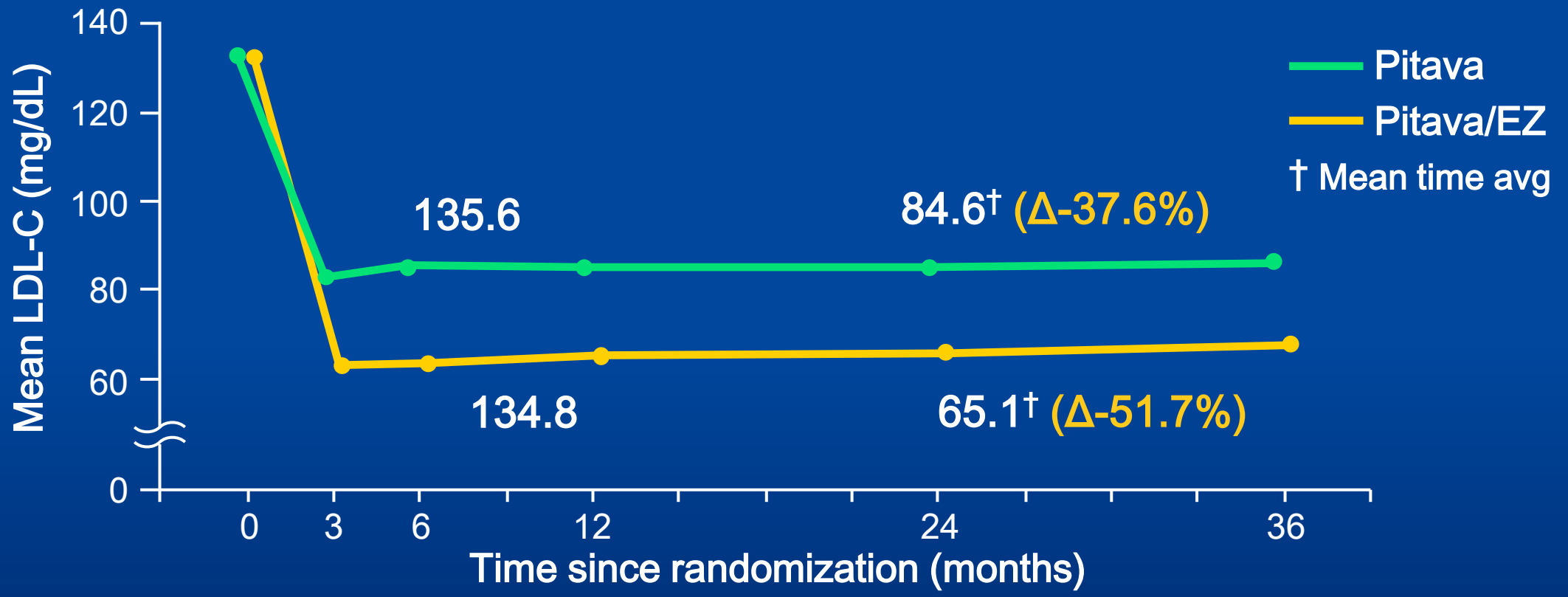

1yr mean	LDL-C	TC	TG	HDL-C
Pitava, mg/dL	87.2	165.3	144.2	50.3
Pitava/EZ, mg/dL	67.5	142.7	125.2	50.9
Δ in mg/dL	-19.7*	-22.6*	-19.0*	+0.6

*P<0.001

Pitava mean dose (mg/day)
2.02
2.36

Primary Endpoint (composite)

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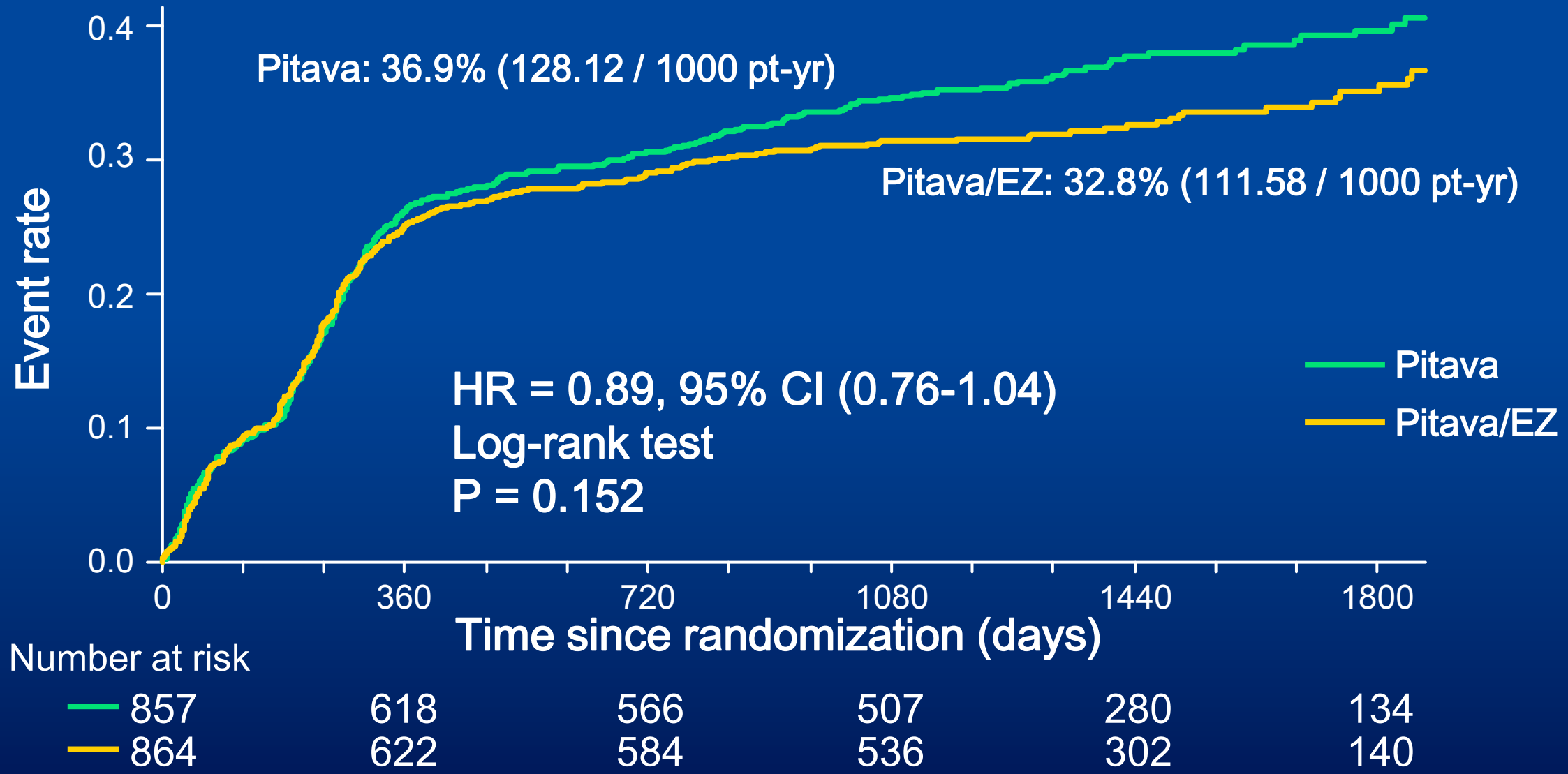

Subgroup Analysis: Sitosterol
Primary Endpoint (composite)

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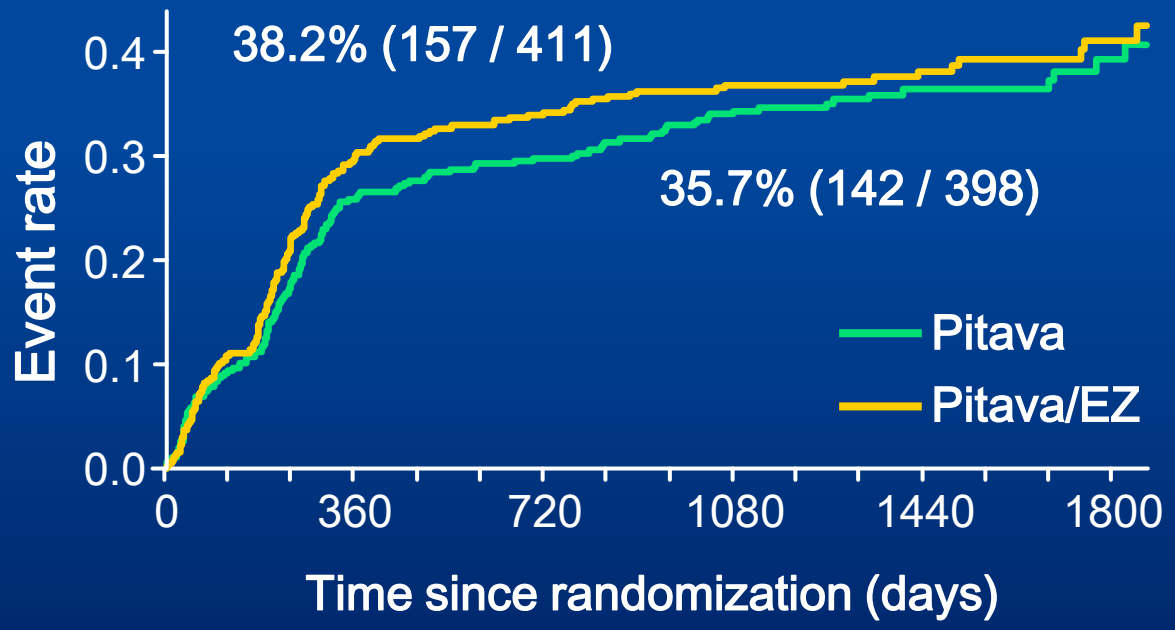
Sitosterol (cholesterol absorption marker)

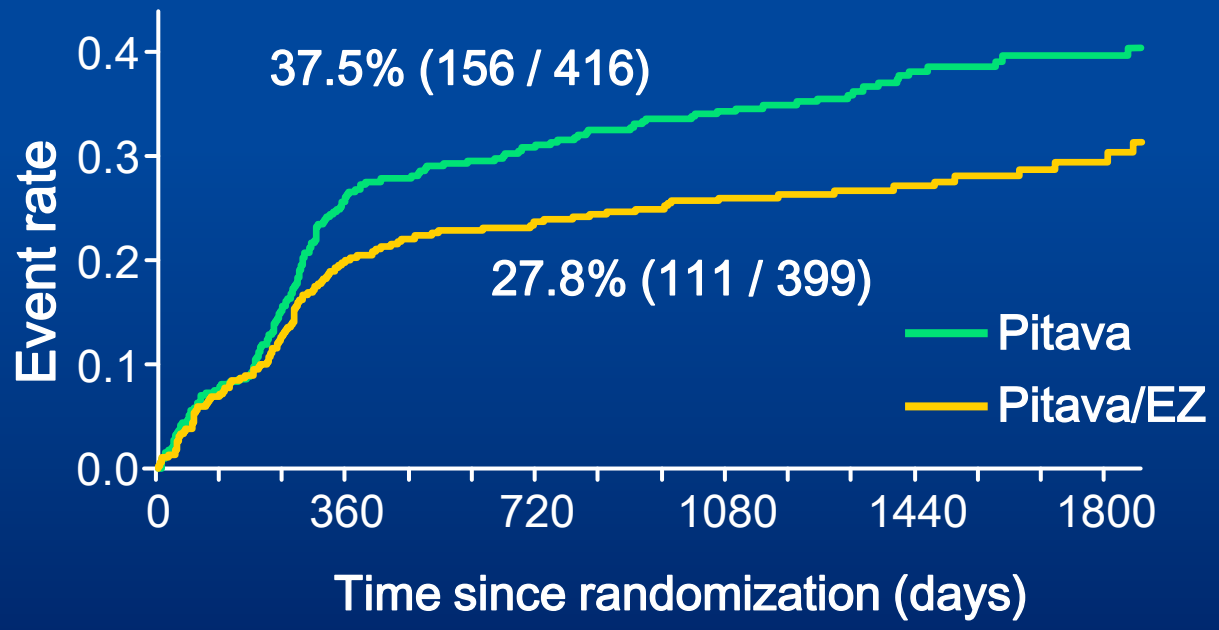
< 2.2 μg/mL (median)

HR = 1.11 (0.88-1.39) P = 0.388



≥ 2.2 μg/mL (median)

HR = 0.71 (0.56-0.91) P = 0.006



P-value for interaction = 0.010

Conclusions

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- Intensive LDL-C lowering with statin (standard dose) + ezetimibe did not significantly reduce CV events more than statin alone in patients with ACS and dyslipidemia.
- Statin + ezetimibe did reduce CV events more than statin alone in patients with higher baseline levels of sitosterol, a cholesterol absorption marker.
- This intestinal cholesterol absorption marker may offer a potential therapeutic target for the treatment of dyslipidemia in patients with ACS.