

Rosuvastatin, C-reactive protein, LDL cholesterol, and the JUPITER trial

Jeffrey M Bloom

Although I laud Paul Ridker and colleagues¹ for demonstrating the vascular anti-inflammatory benefits of rosuvastatin, we should consider the less expensive anti-inflammatory option: aspirin. Aspirin was used by only 16.6% of participants in the placebo and rosuvastatin groups, despite their elevated cardiovascular risk and thus indication for aspirin² (42.1% in the placebo group and 38.3% in the rosuvastatin group had metabolic syndrome). Why aspirin use was not enforced is unclear, since its use is indicated (in the absence of specific contraindications) by age, diabetes, and hypertension individually, let alone when in combination. Ironically, a previous article by Ridker³ supports aspirin use to lessen myocardial infarction risk through reduction of high-sensitivity C-reactive protein (hsCRP). Meanwhile we must consider that if we do treat patients on the basis of their hsCRP concentration, most western populations would require statins (which might be excessive without more long-term data).

A perhaps more subtle point that readers should consider is that statins are not only anti-inflammatory and cholesterol-lowering, but also partly antithrombotic themselves⁴ and able to reduce venous thromboembolism.⁵

If the benefits of rosuvastatin in the JUPITER study are corroborated by another similar study in which aspirin is adequately used, then we should consider broadening statin therapy.

I declare that I have no conflicts of interest.

References

- 1 Ridker PM, Danielson E, Fonseca F, et al. Reduction in C-reactive protein and LDL cholesterol and cardiovascular event rates after initiation of rosuvastatin: a prospective study of the JUPITER trial. *Lancet* 2009; 373: 1175-1183. [Summary](#) | [Full Text](#) | [PDF\(212KB\)](#) | [CrossRef](#) | [PubMed](#)
- 2 Hayden M, Pignone M, Phillips C, Mulrow C. Aspirin for the primary prevention of cardiovascular events: a summary of the evidence for the US Preventive Services Task Force. *Ann Intern Med* 2002; 136: 161-172. [PubMed](#)
- 3 Ridker PM, Cushman M, Stampfer MJ, Tracy RP, Hennekens CH. Inflammation, aspirin, and the risk of cardiovascular disease in apparently healthy men. *N Engl J Med* 1997; 336: 973-979. [CrossRef](#) | [PubMed](#)
- 4 Rosenson RS, Tangney CC. Antiatherothrombotic properties of statins: implications for cardiovascular event reduction. *JAMA* 1998; 279: 1643-1650. [CrossRef](#) | [PubMed](#)
- 5 Glynn RJ, Danielson E, Fonseca FA, Genest J, Gotto AM. A randomized trial of rosuvastatin in the prevention of venous thromboembolism. *N Engl J Med* 2009; 360: 1851-1861. [CrossRef](#) | [PubMed](#)