## **EDITORIAL**

## Statins: Benefits and Risks in Treatment of Cardiovascular Disease

Cardiovascular disease (CVD) remains the leading cause of morbidity and mortality worldwide. Improved prevention in people without existing disease (primary prevention) is an important strategy for managing the overall problem of CVD. Other means of reducing the risk of CVD include control of smoking, hypertension and hyperlipidemia. In addition, avoidance of a high intake of dietary salt, obesity and sedentary life style are necessary, as is adequate management of glucose levels in people with diabetes.

According to the Cochrane Review, <sup>2</sup> effectiveness of statins for the primary prevention of CVD was studied in more than a dozen randomized controlled trials, but a number of questions remain. First, only limited evidence suggests that primary prevention with these drugs is cost-effective. Adverse reactions to statins are generally underreported, and were not reported at all in eight of fourteen trials. Only one trial was publicly funded, while nine others were sponsored either fully or partially by pharmaceutical companies.<sup>3</sup>

The NICE guidance<sup>4</sup> suggests, with good reason, that use of statins for primary prevention of CVD is recommended as part of the management strategy and should be limited to adults with a 20% or greater 10-year risk of developing CVD; preference is given to interventions aimed at reducing risk factors. The decision to initiate statin therapy should be made only after an informed discussion between the responsible clinician and the patient about the risks and benefits of statin treatment; this decision should take into account additional factors, such as co-morbidities and life expectancy.

Finally, it seems obvious that if statins were used for primary CVD prevention in developing countries, scarce healthcare resources would be wasted, and patients would be subjected unnecessarily to adverse effects.

As Professor Tomislav Kažić concludes in his excellent review,<sup>5</sup> statins are effective drugs for secondary prevention in patients at high risk for CVD. Nevertheless, vigilance during statin therapy must be maintained. Although statins are safe medications for the majority of patients, intolerance to these drugs is frequently seen in clinical practice<sup>6,7</sup>. Muscular pain (myalgia with or without increase of plasma creatinin kinase) and/or elevation of hepatic aminotrasferases constitute approximately two-thirds of reported adverse events during statin therapy. Because these side effects are likely to reduce patient acceptance and adherence to a therapeutic regimen and consequently the cardiovascular benefits, clinicians should be aware of them and explore alternative ways to manage patients with statin intolerance.

Rajko Igić

## References

- Murray CJ, Lopez AD. Mortality by cause for eight regions of the world: Global Burden of Disease Study. Lancet 1997;349(9061):1269-76.
- Taylor F, Ward K, Moore THM, et al. Statins for the primary prevention of cardiovascular disease. Cochrane Database of Systematic Reviews 2011, Issue 1. Art. No.: CD004816. DOI: 10.1002/14651858.CD004816.pub3.
- Heneghan C. Considerable uncertainty remains in the evidence for primary prevention of cardiovascular disease [editorial]. The Cochrane Library 2011 (19 Jan). www.thecochranelibrary.com/ details/editorial/983199/ Considerable-uncertainty-remains-inthe-evidence-for-primary-prevention-of-cardi.html (accessed August 24, 2011).
- National Institute for Health and Clinical Excellence. Statins for the prevention of cardiovascular events. NICE Technology Appraisal TA94. London: NICE 2006. http://www.nice.org.uk/ TA094 (accessed August 24, 2011).
- Kažić T. Statini—neželjena dejstva i interakcije. [Statins—side effects and drug interactions.] Scr Med 2011;42:84-91.
- Lazarević A. Atorvastatin-associated myalgia triggered by grapefruit. Scr Med 2011;42:108.
- Ljubojević G, Tomić N, Stojaković N. Statin-induced leg pain at night. Scr Med 2011;42:109.