

Rosuvastatin

A Viewpoint by Anders C. Olsson

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The development of rosuvastatin suggests that this drug may be useful in the treatment and prevention of cardiovascular disease. Rosuvastatin is an appealing statin to the clinician in several ways. It has a marked inhibitory effect on hydroxymethylglutaryl coenzyme A (HMG-CoA) reductase and shows an effective hepatic selectivity, unlike other HMG-CoA reductase inhibitors, which might be of importance with regard to the risk of adverse effects. In addition, it has a low propensity for pharmacokinetic drug interactions and is metabolised very slowly by hepatocytes.

Of great interest, is the impressive effect of rosuvastatin on blood lipids and lipoproteins. The lipid lowering potential of rosuvastatin has been established in a series of randomised, double-blind, multicentre trials, which included comparisons of the drug with atorvastatin, pravastatin, and simvastatin. Rosuvastatin showed superior low-density lipoprotein (LDL)-cholesterol lowering ability than the comparator statins; rosuvastatin 40 mg/day decreased LDL-cholesterol by approxi-

mately 60% which is more than has been achieved by any other drug in monotherapy at corresponding doses. It also increased high-density lipoprotein-cholesterol more than atorvastatin, the most potent statin to date with regard to effects on LDL-cholesterol. This finding could be regarded as an advantage for rosuvastatin. Rosuvastatin also has marked effects on serum triglyceride levels, particularly in patients with diabetes mellitus, which is also regarded as a potentially beneficial effect.

Adverse effects have been limited and do not at present seem to be more prevalent than with any other statin available on the market. However, it should be borne in mind that the experience with the drug with regard to patient years treated is limited. More data, particularly with the 80mg dose, would be welcome particularly with regard to frequency of adverse effects, mainly myopathy. No data are available on the effect of rosuvastatin on hard endpoints such as cardiovascular disease and death. This, of course, is an important issue both with regard to the demonstration of clinical effects on cardiovascular disease and to adverse events. ▲