ROSUVASTATIN – what is its place?

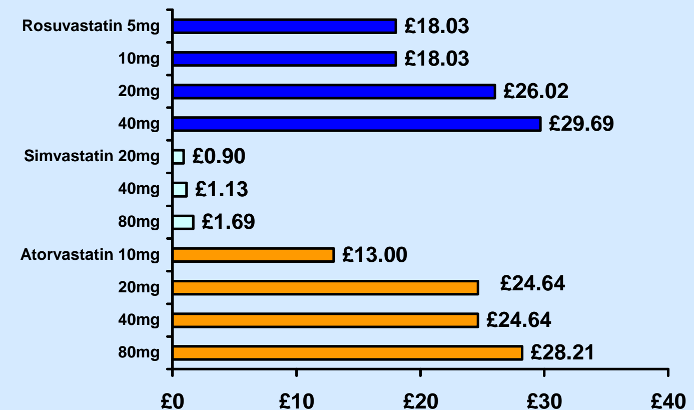
WHAT IS THE PROBLEM?

- In 2010/11 the East Midlands spent over £4.5m on rosuvastatin. More than half of this spend, £2.8m, was on the lower strengths, 5mg and 10mg. If prescribing of the lower doses was reduced by 80% and replaced with cheaper statins, around £2m could be saved to spend on other treatments and procedures.
- ADD LOCAL DATA HERE

WHAT IS THE EVIDENCE?

- Rosuvastatin is more potent than other statins on a mg-for-mg basis and the licensed dose range 5 to 40mg reflects this. However similar cholesterol-lowering can be achieved with other statins at high doses.
  For example in a recent meta-analysis, rosuvastatin 40mg daily lowered total cholesterol (TC) by 50%, compared with 47% with atorvastatin 80mg and 41% with simvastatin 80mg in patients with a baseline TC about 5.5mmol/L.[1]
- Rosuvastatin is licensed for treatment of hypercholesterolaemia, including familial hypercholesterolemia. It is also licensed for prevention of cardiovascular events in patients at high risk of first cardiovascular event.[2] In the JUPITER trial that provided the basis for use in primary prevention, rosuvastatin 20mg daily was compared with placebo in patients with markers for potential heart disease.[3] The risk of cardiovascular event or death (the primary end point) was 1.36 per 100 person-years in those taking placebo and 0.77 in those taking rosuvastatin, giving an absolute reduction in risk of 0.59 per 100 person-years. Numbers Needed to Treat (NNT) to prevent one cardiovascular event or death based on this data is 169 and this would cost £57,322 based on the current price of £26 per month.
- There is no published trial data, nor is the drug licensed for secondary prevention of cardiovascular disease (i.e, those who have had a cardiovascular event).
- NICE guidance does not give a place in therapy for rosuvastatin, though it recommends that higher intensity statins should not be routinely offered for primary prevention of cardiovascular disease.
- Asian patients may be more likely to develop rhabdomyolysis with rosuvastatin so the starting dose should be low (5mg) in such patients and the 40mg dose is contraindicated (see SPC for details).

WHAT ARE THE COSTS?



Costs for 28 days supply, from MIMS/Drug Tariff October 2011. Doses given are a guide and do not imply therapeutic equivalence.

KEY MESSAGES

- **Rosuvastatin is licensed for the treatment of hypercholesterolaemia and for primary prevention in those at high risk of a cardiovascular event, but not for secondary prevention of cardiovascular disease.**
- **Prescribing of rosuvastatin is probably only justified if a patient with raised cholesterol does not respond adequately to maximal doses of other statins. This is likely to mean that the lower doses (5-10mg) should only be used occasionally.**
- **NICE advises that higher-intensity statins should not be used routinely for primary prevention of cardiovascular disease.**

References

1. Nicholls S et al. Am J Cardiol 2010:105:69-76
2. Astra pharmaceuticals. SPC for rosuvastatin, accessed October 2011, via http://www.medicines.org.uk/emc/
3. Ridker P et al. Jupiter study. New Engl J Med 2008; 359:2195-2207

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