

Lipid modification: cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease NICE CG 181 July 2014

Update following clarification with NICE

1. Background

NICE published CG 181 in July 2014 to update and replace NICE CG 67 and NICE TA 94 (statins for the prevention of cardiovascular events). Cardiovascular disease (CVD) describes disease of the heart and blood vessels caused by the process of atherosclerosis. It is the leading cause of death in England and Wales, accounting for almost one-third of deaths (NICE CG181).

The previous briefing for PCN presented in September stated:

“rosuvastatin (patent expiry not till 2016): the guidelines do not mention the use of rosuvastatin for either primary / secondary prevention and as such rosuvastatin is not supported.”

“Do not routinely offer fibrates”

As such a draft Policy statement was produced suggesting rosuvastatin and fibrates should have a BLACK status in Surrey. BLACK status for rosuvastatin and fibrates would mean they became non-formulary in Surrey Acute Trusts. This would prevent their use for specific groups of patients who may be suitable for treatment with these medicines based on NICE guidelines.

2. Clarification of role of rosuvastatin

NICE guidance states that when a decision is made to prescribe a statin, use a statin of high intensity and low acquisition cost. NICE defines high intensity statins as:

- Atorvastatin 20mg to 80mg
- Simvastatin 80mg
- Rosuvastatin 10mg to 40mg.

However only atorvastatin and simvastatin would be considered low acquisition cost statins. The usefulness of 80mg simvastatin is limited by being more expensive than atorvastatin and has an increased risk of myopathy at the 80mg dose.

The NICE Guideline Development Group (GDG) stated that “Given the considerably higher cost of using rosuvastatin, it would need to be considerably more effective than atorvastatin for there to be a possibility that its use could be cost effective. In the absence of trial evidence of greater effectiveness the GDG are therefore unable to recommend the use of rosuvastatin.”

Annual cost (Drug Tariff) August 2014 (equivalent average LDL-C lowering dose):

| Atorvastatin | | Rosuvastatin | |
|-----------------|--------|--------------|---------|
| 20mg/day | £17.03 | 10mg/day | £234.39 |
| 40mg/day | £19.89 | 20mg/day | £338.26 |
| 80mg/day | £32.50 | 40mg/day | £385.06 |

What about patients who can't tolerate atorvastatin but still want a high intensity statin?

NICE recommends that if a person is not able to tolerate a high-intensity statin aim to treat with the maximum tolerated dose. Any statin at any dose reduces CVD risk. Statins have a relatively flat dose response curve, so even a reduced dose of a statin confers considerable benefit.

NICE advises that if someone reports adverse effects when taking high-intensity statins discuss the following possible strategies with them:

- stopping the statin and trying again when the symptoms have resolved to check if the symptoms are related to the statin
- reducing the dose within the same intensity group
- changing the statin to a lower intensity group.

They have given further advice that there may be a small number of high risk patients where the above strategies do not work or are not acceptable to the patient (for example alternatives are not tolerated or are contraindicated), when a high intensity statin is required. In these circumstances rosuvastatin would be option.

3. Clarification of the role of fibrates

NICE guidance recommends that fibrates should not routinely be offered for the prevention of CVD to any of the following:

- people who are being treated for primary prevention
- people who are being treated for secondary prevention
- people with CKD
- people with type 1 diabetes
- people with type 2 diabetes

The NICE GDG comments "The GDG recognised that fibrates are not generally used for primary or secondary prevention in the UK. The GDG noted that fibrates are used clinically in the treatment of patients with severe hypertriglyceridaemia based on subgroups from the fibrate trials, though the evidence base for CVD outcomes for this indication was poor. "

What about patients with hypertriglyceridaemia?

NICE guideline recommendations about management of hypertriglyceridaemia:

1.3.9 Refer for urgent specialist review if a person has a triglyceride concentration of more than 20 mmol/litre that is not a result of excess alcohol or poor glycaemic control.

- 1.3.10 In people with a triglyceride concentration between 10 and 20 mmol/litre:
- repeat the triglyceride measurement with a fasting test (after an interval of 5 days, but within 2 weeks) **and**
 - review for potential secondary causes of hyperlipidaemia **and**
 - seek specialist advice if the triglyceride concentration remains above 10 mmol/litre.

- 1.3.11 In people with a triglyceride concentration between 4.5 and 9.9 mmol/litre:
- be aware that the CVD risk may be underestimated by risk assessment tools **and**
 - optimise the management of other CVD risk factors present **and**
 - seek specialist advice if non-HDL cholesterol concentration is more than 7.5 mmol/litre.

So, for patients with triglycerides of 4.5 – 9.9 mmol/l statins would be part of the optimal management of CVD risk factors. Atorvastatin for example reduces triglyceride levels, with higher doses achieving larger reductions in triglycerides. Specialist advice would need to be sought for the groups of patients identified by NICE in their recommendations. It is for this group of patients that fibrates may potentially be used, particularly in patients with isolated severe hypertriglyceridaemia.