

NICE publishes guidance on CV risk assessment and lipid modification

The NICE clinical guideline on [cardiovascular \(CV\) risk assessment and lipid modification](#) was published in May 2008.¹ This is a lengthy and complex piece of guidance, which should be read carefully by everyone involved in the care of patients at risk of cardiovascular disease (CVD) to avoid misinterpretation. [The MeReC Stop Press](#) blog, which is summarised here, focuses on the lipid management aspects of this guideline.

The identification of people at high risk of CVD is discussed in more detail in a recently published [MeReC Bulletin \(Vol 19, No. 1 – July 2008\)](#). Patients should be given information about their absolute risk of CVD and the likely absolute benefits and harms of treatment in ways which they understand. NICE refers people to NPCi (www.npci.org.uk) for further information in this area. The [NPCi patient decision aid](#) to assist in communicating the risks and benefits of statins is a key resource.

Lipid modification therapy

NICE recommends using simvastatin 40 mg/day as the first-choice statin for **primary prevention** in people at 20% or greater 10-year risk of CVD. In primary prevention, **no specific lipid targets** are given.

Simvastatin 40 mg/day is also recommended as the first-choice statin for **secondary prevention**. According to the [full guideline](#) (page 190),² economic modelling suggests that titration to simvastatin 80 mg/day could be **considered** for secondary prevention patients whose total cholesterol does not decrease to less than 4 mmol/L as long as titration stops at simvastatin 80 mg. More than half of patients will not attain these levels, and it is not cost-effective to try to take more patients to a 4 mmol/L target using higher cost statins, such as atorvastatin.

NICE recommends that patients with acute coronary syndrome (ACS) should be treated with a higher intensity statin, that is a statin used in doses that produce greater cholesterol lowering than simvastatin 40 mg, for example simvastatin 80 mg. However, lipid targets in ACS are not specifically stated, nor is guidance given on the duration of higher intensity statin treatment if it is used.

References

1. National Institute for Health and Clinical Excellence. Lipid modification: cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease. NICE Clinical Guideline 67. May 2008
2. Cooper A, et al. Clinical guidelines and evidence review for lipid modification: cardiovascular risk assessment and the primary and secondary prevention of cardiovascular disease. London: National Collaborating Centre for Primary Care and Royal College of General Practitioners. May 2008

Updated guidance on management of type 2 diabetes from NICE

In May 2008, [NICE](#) updated its guidance on the [management of type 2 diabetes](#).¹ Again, this guidance is complex and requires careful reading. Key points and changes from earlier guidance include:

- Involve the person in decisions about their individual HbA_{1c} target level, which may be higher than the 6.5% set for people with type 2 diabetes in general.
- Only offer self-monitoring of blood glucose to a patient newly diagnosed with type 2 diabetes as an integral part of his/her self-management education. Its purpose should be discussed, and how it should be interpreted and acted upon agreed.
- Use aspirin 75 mg/day in higher-risk patients and those aged 50 and older, whose blood pressure is below 145/90 mmHg.

- Metformin is the first-choice oral hypoglycaemic agent in overweight or obese patients and should also be considered in the non-overweight. Consider sulphonylureas in the non-overweight, if metformin is contraindicated or not tolerated, or as an add-on to metformin. Glitazones are third-line.
- A once-daily ACE-inhibitor is the first-choice antihypertensive drug (plus a diuretic or calcium channel blocker in people of African-Caribbean descent or in people whose blood pressure is not controlled to target on monotherapy), with other drugs added as needed.
- Initiate simvastatin 40 mg/day for people aged 40 or older (unless their CV risk is low), and younger people if their CV risk factor profile seems particularly poor. Increase the

This publication was correct at the time of preparation: August 2008

dose to 80 mg/day if a total cholesterol of less than 4 mmol/L or LDL-cholesterol of less than 2 mmol/L is not attained. If there is new or existing CVD or increased albumin excretion, consider intensifying therapy by changing statin or adding ezetimibe to

achieve these targets (*but see the above article on the new NICE lipid guidance*).

References

1. National Institute for Health and Clinical Excellence. Type 2 diabetes: the management of type 2 diabetes. NICE Clinical Guideline 66. May 2008

Putting blood glucose control in type 2 diabetes into perspective

Intensive strategies to achieve tighter blood glucose control do not improve cardiovascular outcomes in type 2 diabetes and can be harmful.

Action

Several of the key recommendations in the NICE clinical guideline on type 2 diabetes¹ (discussed above) relate to the management of CV risk factors. Although interventions (e.g. metformin and diet/lifestyle) will often be required to control the symptoms associated with having high blood glucose levels, clinicians should not become over-focussed on intensive strategies to achieve HbA_{1c} targets. These are often unnecessary and can put patients at risk of adverse drug-related events. Clinicians should give priority to reducing the risk of macrovascular events with evidence-based interventions (e.g. smoking cessation, blood pressure control and the use of metformin, aspirin and simvastatin).

What is the background to this?

There is no good evidence from randomised controlled trials (RCTs) that intensive drug

strategies to control blood glucose reduce macrovascular events in patients with type 2 diabetes.² Recently, the large RCTs **ACCORD**³ and **ADVANCE**⁴ were published. These trials were set up to assess whether intensive blood glucose control strategies offered any advantage over standard therapies with regard to major CV events.

In the ACCORD study, intensive treatment was stopped early because recipients showed significantly higher all-cause mortality than those on standard therapy (5.0% vs. 4.0%, P=0.04). The primary endpoint (a composite of myocardial infarction, stroke, and CV death) did not differ significantly between the groups.

In the ADVANCE study, intensive therapy showed no significant effect on macrovascular events or all-cause mortality, although it did reduce nephropathy.

A useful [article](#) published in the New England Journal of Medicine⁵ has considered the implication of these trials alongside other major studies evaluating the benefits of reducing blood lipids, blood pressure and blood glucose in type 2 diabetes.

For more details, see the [MeReC Rapid Review](#) blog.

References

1. National Institute for Health and Clinical Excellence. Type 2 diabetes: the management of type 2 diabetes. NICE Clinical Guideline 66. May 2008
2. Type 2 diabetes (part 1): the management of blood glucose. MeReC Briefing 2004; 25: 1–8
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More data on the safety of salmeterol when added to inhaled corticosteroids in asthma

The safety of long-term salmeterol remains a concern despite a recent meta-analysis suggesting that it does not increase the risk of serious asthma-related adverse events when added to inhaled corticosteroids.

Action

Clinicians should continue to be aware of the possible risks associated with the long-term use of long-acting beta₂ agonists (LABAs, i.e. salmeterol and formoterol). They should be used only in conjunction with inhaled corticosteroids in accordance with the recent [British Guideline on the Management of Asthma](#).¹

A [review of the safety of LABAs](#) is currently being undertaken by the MHRA. To ensure safe use, the [Commission on Human Medicines](#) has advised that for the management of chronic asthma, LABAs should:²

- be added only if regular use of standard-dose inhaled corticosteroids has failed to control asthma adequately;
- not be initiated in patients with rapidly deteriorating asthma;
- be introduced at a low dose and the effect properly monitored before considering dose increase;

- be discontinued in the absence of benefit;
- be reviewed as clinically appropriate: stepping down therapy should be considered when good long-term asthma control has been achieved.

Patients should report any deterioration in symptoms following initiation of treatment with a LABA.

What is the background to this?

The Salmeterol Multicenter Asthma Research Trial (SMART)³ and a subsequent meta-analysis⁴ (see [MeReC Stop Press](#) blog) raised concerns about the safety of LABAs in asthma, in view of the apparent increased incidence of serious asthma-related adverse events. An analysis of data from randomised clinical studies conducted by GlaxoSmithKline (GSK) has recently been

published⁵; this was in order to alleviate concerns regarding the safety of salmeterol when used in the recommended manner i.e. in combination with inhaled corticosteroids. This analysis found that salmeterol combined with inhaled corticosteroids did not result in an increased risk of asthma-related hospitalisation compared with inhaled corticosteroids alone. However, the analysis had many limitations and the results should be interpreted cautiously. See the related [MeReC Rapid Review](#) blog for more details.

References

1. Scottish Intercollegiate Guidelines Network/British Thoracic Society: British Guideline on the Management of Asthma. A national clinical guideline. May 2008.
2. MHRA. Asthma: long-acting β_2 agonists. Accessed from [www.mhra.gov.uk/Safetyinformation/General safetyinformationandadvice/Product-specificinformationandadvice/Asthma/CON2025447](http://www.mhra.gov.uk/Safetyinformation/General%20safetyinformationandadvice/Product-specificinformationandadvice/Asthma/CON2025447) on 06/08/08
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