

What is a statin?

Statins are drugs that reduce cholesterol and have been proven to reduce the risk of having a heart attack or a stroke. As such, patients who have had an “event” or have risk factors that may lead to cardiovascular disease benefit from taking these drugs.

How do statins work?

Cholesterol is essential for the normal functioning of your body. Some cholesterol comes from your diet, but most is produced by your liver. Some patients can reduce their cholesterol by changing their diet or lifestyle (taking more exercise, reducing alcohol or losing weight). But many patients require lipid-lowering medicines to bring their cholesterol down to normal levels. They work by having an effect on an enzyme in the liver.

How should they be taken for best effect?

Take your medicine with a glass of water. Some statins are best taken a night when cholesterol production is most active.

Your statin is: _____

It should be taken _____

Which patients should take statins?

Three groups of patients benefit from taking these drugs:

- Patients who have certain “risk factors”, some which cannot be changed (like increasing age) and some which can be changed (risk factors related to lifestyle). Taking a statin in these circumstances is known as primary prevention
- Patients who have certain conditions (such as diabetes, high blood pressure or chronic kidney disease) that put them at risk of developing cardiovascular disease (this is also known as primary prevention)
- Patients who have had a heart attack, stroke or other evidence of cardiovascular disease (this is known as secondary prevention)

Caution

- ★ Women who are pregnant (or are planning a pregnancy) should not take statins.
- ★ Patients with liver damage - this is detected by a blood test.

Are there any problems from taking statins?

There is little evidence of any long-term problems with these drugs.

Myalgia (muscle pain)

Some patients can develop muscle pain when taking statins. This is caused by an inflammation of the muscles and is not common. If you experience severe muscle aches or weakness please report this to your doctor.

Liver damage

This is rare, depends on the strength of the drug and is reversible. Some patients have mild and stable changes on their liver tests and there is no reason why they cannot take a statin. A routine blood test after 3 mth on the statin is recommended; often a small change in this test is found but does not require the drug to be stopped.

Do other medications or supplements affect statins?

Yes, some drugs may affect your statins. Also alternative remedies, such as St John’s wort, can affect the way your statin works.

Some fruit juices affect the way that statins work - ask your doctor what to avoid.

How long should I stay on treatment?

Statins only work if they are taken continuously. As such they should be thought of as a life-long medicine, working everyday to reduce the risk of developing cardiovascular disease or of your disease process deteriorating.

This information should be read in conjunction with the manufacturers leaflet which is supplied with your medication.

Checklist for clinicians - STATINS

Check?

- If female of child-bearing age, are they pregnant or planning a pregnancy? - NOT SUITABLE
- Do they suffer from generalised aches and pains? - exclude myopathy

Before therapy:

- Lipid profile (non-fasting)
- LFTs - to check if pre-existing liver problems or evidence of excessive alcohol intake
- TFTs - to exclude hypothyroidism as a secondary cause
- U&E - to check for CKD; a dose reduction is required if eGFR <60; advice from a renal consultant is recommended if eGFR <30
- HbA1c - to exclude diabetes as a secondary cause

Advise:

- Use of other drugs that inhibit cytochrome P450 CYP3A4
 - Macrolide antibiotics (erythromycin, clarithromycin)
 - Azole antifungals
 - Warfarin
 - Ciclosporin
 - Calcium channel blockers
 - Nicotinic acid
- Use of grapefruit juice (simvastatin, atorvastatin)
- Use of cranberry juice (fluvastatin)
- Advise potential adverse effect on liver

Follow-up arrangements:

- LFTs at 3mth and at 12 mth
- Lipid profile (optional - to demonstrate response and aid concordance)