

Statins – Are they right for me? What are they and how do they work?

Statins are a type of medication which are used to lower cholesterol, specifically the 'LDL' component in blood (often called the 'bad' cholesterol).

Having a high level of LDL cholesterol can lead to hardening and narrowing of arteries. Narrowed arteries can result in cardiovascular disease (such as angina, heart attacks and stroke). As well as coming from the food we eat, mainly saturated fat, cholesterol is produced by the liver. Statins work by lowering the liver's LDL cholesterol production.

Even if your cholesterol is normal, statins can be beneficial as they reduce inflammation in blood vessels which reduces the risk of cardiovascular disease. They also make any existing narrowing of your arteries less likely to progress.

Statins: what are they used for?

Statins are mainly prescribed to prevent cardiovascular disease. We recommend a statin for primary prevention; to reduce the risk of a heart attack or stroke in people who have never had one. Some people are on statins for secondary prevention, reducing the risk of cardiovascular disease when you have already experienced it.

NICE*, the national body that makes recommendations about medical treatments already recommend statins for primary prevention. NICE advise anyone with a 'high' risk of cardiovascular disease (based on a calculation called QRISK3) to take a statin.

Statins and HIV: why for me?

People with HIV have higher rates of heart disease, compared to HIV negative people.

A study called REPRIEVE randomised around 8000 people with HIV aged 40-75 years to a statin or placebo (dummy drug). The study, showed a **35% reduction in the risk of heart and stroke disease in people who took statins compared with those who did not**. Even people with normal cholesterol levels and low cardiovascular disease risk benefitted from a statin.

As a result of this trial, the British HIV Association (BHIVA) recommends that people with HIV aged 40 years and over, are offered a statin for primary prevention of cardiovascular disease. Statin use is part of a conversation about lifestyle modifications to optimise your health. You should expect to be involved in discussing whether to take a statin.

Statins: how do I take them?

Statins come as a single tablet taken once a day. The advice is, usually to take them for life. If you stop taking them your cholesterol will increase. The initial dose will depend on other medication you're taking. The dose may be increased if your cholesterol level does not drop. If you get side effects the dose may be decreased.

Statins: side effects

Like every medication, statins can cause side effects in some people. There are several different types of statin, so if one doesn't work for you, **try another type of statin**. If you don't tolerate different statins there are other types of medication used for primary prevention.



Some common side effects include muscle cramps, nausea, constipation or diarrhoea and headaches. Muscle cramps are common and usually nothing to worry about but if you do get new pain, seek medical advice to assess for rarer complications. In REPRIEVE about 1 in 100 people stopped their statin because of muscle aches. Statin related muscle aches usually affect the shoulders or hips. If you get pain elsewhere, or more than 3 months after starting a statin, it's very unlikely to be related to the statin. If you experience nausea, taking your statin after food may help. In people already at risk of diabetes, statins increase the risk very slightly. Some rarer side effects include **liver and pancreatic inflammation**.

However, most people who take statins do not have any side effects.

If you develop any side effects please discuss them with your Bloomsbury clinician or GP.

Are statins safe long-term?

Yes, statins are well researched and safe for long term use. They are one for the most commonly prescribed medication in the UK. They are not associated with an increased risk of dementia (which you might read about online), If anything they might reduce the risk because some types of dementia are caused by cardiovascular disease. Statins can interact with other medication you take. Please discuss this with your HIV clinic or GP.

Things to avoid

- Grapefruit juice can increase the blood level of statins thus the risk of side effects. Avoid consuming large quantities of grapefruit juice (>1 glass full) when taking statins.
- Statins should be discontinued 3 months before trying to conceive.
- Statins should not be used while breastfeeding

Additional ways to reduce risk of heart disease include:

- Stop smoking: Quit smoking Better Health NHS
- Lose weight if BMI is >30: How to achieve a healthier weight BDA
- Do regular exercise: Exercise NHS
- Have a healthy and balanced diet: Eat well NHS
- If present, ensure high blood pressure and Diabetes are managed well
- If cholesterol is high then reducing saturated fat is advised: Cholesterol BDA

More information

- https://www.nhs.uk/medicines/statins/
- https://www.nice.org.uk/guidance/ng238/resources/patient-decision-aid-on-shouldi-take-a-statin-pdf-243780159
- About the REPRIEVE Study: https://www.reprievetrial.org/

For more information on the use of statins please speak to your Bloomsbury clinician or GP

*NICE: National Institute of Clinical Excellence