

## Patient information

### **Starting a Statin: Information for People Living with HIV**

#### Sexual Health Department

#### **What Are Statins?**

Statins are a group of medications that help to lower levels of "bad" cholesterol, a fatty substance, in your blood. Cholesterol can build up in your arteries over time, causing them to narrow — a condition known as atherosclerosis.

Statins work to:

- Reduce production of "bad" cholesterol in your liver, which is one of the key drivers of heart disease.
- Stabilise existing "bad" cholesterol build up (also known as plaque) in your arteries.
- Have an anti-inflammatory effect on blood vessels.

This means statins protect against cardiovascular disease (CVD) by improving blood flow and reducing your risk of heart attacks and strokes, especially if you're at higher risk.

#### **Why Have I Been Offered a Statin?**

Living with HIV is associated with ongoing inflammation and immune activation, which contribute to narrowing in the blood vessels over time. Also, some antiretroviral therapy (ART) have been linked with a higher risk of CVD \* (for example abacavir, darunavir)

\* Speak to your doctor if you are concerned, never stop your treatment without medical advice.

This means that even if your HIV is well-managed and your cholesterol isn't particularly high, living with HIV may still increase your risk of CVD.

The REPRIEVE trial (2023), a major international study, looked at people living with HIV who were given a statin. It showed initiating a statin in people with HIV aged 40-75 years old with a low-to-moderate risk of CVD reduced the risk of heart attacks, strokes, and other major cardiovascular events by 35% over five years of follow-up.

Guideline Recommendations:

- BHIVA (British HIV Association) and EACS (European AIDS Clinical Society) recommend initiating statin therapy to help prevent CVD in people with HIV, especially if over the age of 40 or with additional risk factors (for example smoking, high blood pressure).
- NICE (National Institute of Clinical Excellence) also supports statin use in people living with HIV.

We have recommended statins for people with a 10-year risk of CVD of greater than 10% for a long time. We have started to recommend statins for people with a risk of 5% to 10%. For people with a low risk of less than 5%, the overall benefit for is relatively small on an individual level. For this group, we recommend an individual case-by-case discussion with your doctor.

### **Are Statins Safe to Take with my HIV Medication?**

Some statins can interact with certain ART, but your healthcare provider will choose one that is safe and compatible with your HIV treatment. Commonly used statins in people with HIV include atorvastatin, rosuvastatin, and pravastatin depending on your specific ART regimen. We usually avoid simvastatin as it's more prone to drug-drug interactions.

Your doctor or pharmacist will always carefully review your medication list before starting a statin.

### **Are There Any Possible Side Effects? How Will I Be Monitored?**

Most people tolerate statins well and the benefits usually outweigh the risks. However, like all medications, side effects can occur.

Common side effects ( $\geq 1/100$  to  $< 1/10$ ) include:

- Mild stomach upset.
- Muscle aches or cramps.

Less common but more serious side effects:

- Liver inflammation (detected by blood tests).
- Muscle inflammation or breakdown (myositis or rhabdomyolysis — very rare ( $\geq 1/10,000$  to  $< 1/1,000$ )).

Monitoring:

- You'll have blood tests before starting the statin and periodically afterward to check your cholesterol, liver function and muscle enzymes (creatinine kinase, CK).

Always tell your healthcare provider if you notice:

- Unexplained muscle pain or weakness that doesn't go away
- Dark urine
- Yellowing of the skin or eyes
- Unusual tiredness

### **Statins and Diabetes**

For some people, especially those who already have risk factors for diabetes (like being overweight, having high blood sugar, or a family history), we believe statins may slightly increase the chance of developing type 2 diabetes over time.

However, the risk is small, and studies show that the benefits of statins — in preventing heart attacks and strokes — are greater than the risk of developing diabetes, especially if you're living with HIV.

We will frequently monitor your blood tests to check there are no signs of diabetes.

### **How Do I Take a Statin?**

- One tablet daily, usually in the evening.
- Can be taken with or without food.
- Needs to be taken long-term and regularly — it only works when taken consistently.

### **Lifestyle and Social Factors: Statins Are Just One Part of the Picture**

Statins are an important tool in reducing your risk of CVD — but they work best alongside healthy lifestyle choices.

Here's what else you can do...

- Quit smoking
  - Quitting smoking is one of the best things you can do for your heart and overall health — but it's not easy. The good news is that people who get support are up to 3 times more likely to quit successfully than those who try to go it alone
  - There's no "one right way" — but with the right tools and support, your chances of quitting for good are much higher
  - Support can include:
    - Talking to your doctor, nurse, or pharmacist.
    - Joining a stop-smoking service or group.
    - Using nicotine replacement (like patches or gum).
    - Taking medications that reduce cravings.
- Maintain a healthy weight – Even small weight changes can improve blood pressure and cholesterol
- Get active – Aim for at least 150 minutes of moderate-intensity exercise per week (such as brisk walking, cycling, or swimming). Regular movement improves heart health and mental wellbeing
- Eat 'heart-healthy' – Choose a diet rich in:
  - Fruits, vegetables, and whole grains.
  - Lean protein (especially fish or legumes).
  - Healthy fats (for example olive oil, nuts, and seeds).
  - Limit salt, processed foods, and sugary drinks.
- If you drink alcohol, keep within recommended limits (no more than 14 units per week). Excess alcohol can raise blood pressure and affect liver function.
- Reduce stress – Long-term stress may affect your heart. Consider relaxation techniques, mindfulness, or speaking to someone if you're feeling overwhelmed.

- Manage other health conditions – Keeping blood pressure and blood sugar under control is key in lowering cardiovascular risk.

You don't have to do it alone — your HIV doctor, nurse, and pharmacy team, your GP, and your local health services can all support you in making these changes.

## **Final Thoughts**

Taking a statin is a proactive step in maximizing your cardiovascular health while living with HIV. Combined with lifestyle changes, this medication can help reduce your risk of heart disease, stroke, and other serious events for years to come.

If you have any concerns or questions — reach out to your HIV team. We're here to support you every step of the way.

## **References / Useful resources for further reading**

- <https://i-base.info/htb/45288> - Statins reduce heart disease by 35% in the international HIV REPRIEVE study.
- <https://i-base.info/qa/23108> - Q&A regarding statin use in people living with HIV.
- <https://i-base.info/guides/side> - HIV and your quality of life  
REPRIEVE Investigators. Pitavastatin to Prevent Cardiovascular Disease in HIV Infection. N Engl J Med. 2023 Aug 24;389(8):687-699.

## **Feedback**

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

## **Further information**

**ID secretaries: Extension 3835**

**Email: [idsecretaries@liverpoolft.nhs.uk](mailto:idsecretaries@liverpoolft.nhs.uk)**

**BBV admin team: 3474**

**Email: [bbvadmin@liverpoolft.nhs.uk](mailto:bbvadmin@liverpoolft.nhs.uk)**

**Text phone number 1800101517063835; 180010157063774**

**Axess website: <https://www.axess.clinic/>**

**George House Trust: <https://ght.org.uk/>**

**Sahir House: <https://www.sahir.org.uk/>**

**iBASE: <https://i-base.info/>**

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