

NORTH EAST LONDON INTEGRATED CARE BOARD (NEL ICB)

INITIATION OF STATINS FOR PRIMARY PREVENTION OF CARDIOVASCULAR DISEASE IN PATIENTS WITH LIVER DISEASE

POSITION STATEMENT

Position Statement

- Chronic liver disease patients without cirrhosis or with **compensated cirrhosis**, requiring statins as per the National Lipid Management Pathway should **not** be routinely excluded from statin therapy.
- For patients with baseline elevated serum transaminases (2-3xULN) or compensated cirrhosis, closer monitoring is required, within 2-4 weeks after starting or adjusting statin doses.
- Rosuvastatin is the preferred choice of high intensity statin therapy in **compensated cirrhosis for primary prevention of cardiovascular disease**. Consider initiating at a lower dose (such as rosuvastatin 5 mg -10 mg daily) and titrating dose gradually.
- Minor increases in liver enzymes may occur in the first few months; if levels exceed 3xULN, discontinue the statin and reassess. Consider a rechallenge with a lower intensity statin with a lower risk of drug induced liver injury like pravastatin.
- In **decompensated cirrhosis**, statin use should be carefully considered and discussed with a hepatologist.

Title of Position Statement	Initiation of statins for primary prevention of cardiovascular disease in patients with liver disease
Position statement reference number	NEL/MO/DOC/2025-08
Version:	1.0
Agreed By:	North East London Formulary and Pathways Group (FPG)
Authorised/Ratified by	North East London Systems Prescribing and Medicines Optimisation (SyPMO) Board
Date Authorised:	27/05/2025
Date of Last review:	N/A
Review date:	26/05/2028
Key words:	Liver disease, statins, lipid lowering medicines

Location (of publication) Available on:	https://primarycare.northeastlondon.icb.nhs.uk/home/meds/medicines-position-statements-nel/?preview_id=4470
Date added to Intranet:	June 2025

This is an online document. Hard copies and downloaded versions are valid only on the day printed or downloaded. It is the responsibility of staff to verify current status from the intranet

1 BACKGROUND with SPECIFIC DETAILS

Introduction

Statins are a class of medications used to lower cholesterol and indicated for the primary and secondary prevention of cardiovascular disease, hypercholesterolaemia and dyslipidaemia. Concerns regarding hepatotoxicity or drug induced liver injury (DILI), mean that prescribers are often reluctant to prescribe them for patients with a chronic liver disease (CLD).

However, statins are known to benefit CLD patients, particularly those with metabolic dysfunction-associated steatotic liver disease (MASLD), or metabolic-associated steatohepatitis (MASH) [1,2].

Recommendations

This position statement advocates for the prescribing of statins in patients with liver conditions for whom they are indicated, in those **without cirrhosis** and those with **compensated cirrhosis** as per the National Lipid Management Pathway [3].

<https://www.england.nhs.uk/aac/wp-content/uploads/sites/50/2020/04/lipid-management-pathway-v6.pdf>

Those with serum transaminases (ALT/AST) that are raised, but less than 3 times the upper limit of the reference range, should **not** be routinely excluded from statin therapy [4].

Rosuvastatin is the preferred choice of high intensity statin therapy in patients diagnosed with **compensated cirrhosis for primary prevention of cardiovascular disease**. This is because it has a reduced risk of DILI in comparison to atorvastatin [5,6,7]. Consider initiating at a lower dose (such as rosuvastatin 5 mg-10mg daily) and titrating dose gradually [8].

Additional Information

Compensated cirrhosis is normally diagnosed via either a non-invasive assessment of liver fibrosis such as transient elastography or Fibroscan, or through a liver biopsy after referral to Hepatology.

In **decompensated cirrhosis**, the benefits of statins are less clear and must be balanced against the risk of DILI. Please discuss the initiation of statins in a decompensated cirrhosis patient in the community with their hepatologist.

2 SCOPE

This position statement applies to all healthcare professionals responsible for prescribing statins across NEL ICB.

3 ROLES AND RESPONSIBILITIES

Healthcare professionals should continue to prescribe statins in CLD patients **without cirrhosis** and those with **compensated cirrhosis** as per the National Lipid Management Pathway [4].

Monitoring

For the majority of patients monitoring requirements should be in line with the national and local guidance. Please see the Specialist Pharmacy Service (SPS) guidance below for an example. <https://www.sps.nhs.uk/monitorings/statins-monitoring/> [8,9].

For those with **compensated cirrhosis** and/or for hepatology patients without cirrhosis but with elevated transaminases 2-3 times the upper limit of normal, closer monitoring is required, with transaminases checked 2-4 weeks after initiation or dose increases and then as per the guidance above.

Liver Enzyme Abnormalities

Minor increases in liver enzymes (<2x ULN) may be seen within the first three months of statin therapy; temporary discontinuation and further assessment is warranted if levels exceed 3x ULN [10]. Rechallenge with another agent in class should be considered, but switching therapy to another statin after DILI can lead to recurrence and should be done with careful monitoring. Consider using a lower intensity statin such as pravastatin, which appears to be less likely to cause DILI than atorvastatin, simvastatin and rosuvastatin [5].

4 INTERNAL AND EXTERNAL REFERENCES

- 1) Chalasani N, Gorski JC, Ghabril M, et al. Optimizing medication management for patients with cirrhosis: evidence-based strategies and their outcome. *Pharmacotherapy*. 2018 Dec;38(12):1126-1135. Available from: <https://pubmed.ncbi.nlm.nih.gov/articles/PMC6202194/>. Accessed Nov 2024.
- 2) Singh S, Garg S, Arora A, et al. Statin prescriptions and progression of advanced fibrosis risk in primary care patients with MASLD. *BMJ Open Gastroenterol*. 2021 Jan;11(1):e001404. Available from: <https://bmjopengastro.bmj.com/content/11/1/e001404>. Accessed Nov 2024.
- 3) National Institute for Health and Care Excellence (NHS). National Lipid Management Pathway. NHS UK. 2024. Available from: <https://www.nhs.uk/>. Accessed Nov 2024.
- 4) British National Formulary (BNF). The British National Formulary. 2024. Available from: <https://bnf.nice.org.uk/>. Accessed Nov 2024.
- 5) LiverTox. Statins. National Institute of Diabetes and Digestive and Kidney Diseases. 2024. Available from: <https://www.livertox.nih.gov/>. Accessed Nov 2024.
- 6) Xie W, Wang L, Wu W, et al. Comparative effectiveness and safety of atorvastatin versus rosuvastatin: A multi-database cohort study. *Ann Intern Med*. 2024 Mar

- 5;170(5):336-346. Available from: <https://www.acpjournals.org/doi/10.7326/M24-0178> . Accessed Nov 2024.
- 7) European Association for the Study of the Liver (EASL), EASL Clinical Practice Guidelines: Drug-induced liver injury. 2019. <https://easl.eu/wp-content/uploads/2019/04/EASL-CPG-Drug-induced-liver-injury-2019-04.pdf>, Accessed March 2025
 - 8) Using statins in liver impairment, SPS – Specialist Pharmacy Service. 2024. Available from: <https://www.sps.nhs.uk/articles/using-statins-in-liver-impairment/> . Accessed Nov 2024.
 - 9) Statins monitoring, SPS – Specialist Pharmacy Service. 2024. Available from: <https://www.sps.nhs.uk/monitorings/statins-monitoring/>, Accessed Nov 2024.
 - 10) NHS England (NHSE). Statin intolerance pathway. 2023. Available from: <https://www.england.nhs.uk/aac/wp-content/uploads/sites/50/2020/04/statin-intolerance-pathway-v2.pdf>. Accessed March 2025.