Version 5
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Lipid Management Tool

Frimley Health and Care

Baseline Measurements (see page 2 for when to refer to a specialist)

Full lipid, renal, thyroid and liver profiles, HbA1c to exclude secondary causes and co-morbidities

Measure baseline ALT before starting a statin

Measure CK if unexplained muscle pain before starting a statin or if patient is at risk of muscle pain e.g. vitamin D deficiency, fibromyalgia, multiple tablet intolerance.

CK should not be measured routinely especially if a patient is asymptomatic

Primary prevention

Identify and address all modifiable risk factors - smoking, diet, obesity, alcohol intake, physical activity, blood pressure and HbA1c

If QRISK >10% over next 10 years* or CKD (eGFR<60ml/min/1.73m2) or T1DM plus over 40 years old, diabetes for >10yrs, nephropathy or CV risk factor

1st line: Atorvastatin 20mg once daily

2nd line: Rosuvastatin 10mg once daily

Consider ezetimibe if statin intolerant or contra-indicated. For further info on managing statin intolerance see pathway here.

Measure liver ALT within 2-3 months of starting treatment and then within 2-3 months of every additional up titration and then again at 12 months, but not again unless clinically indicated

Measure LDL-C at 2-3 months

If a 50% reduction in LDL-C is not achieved at 2-3 months or next review then increase dose of statin +/ or consider adding ezetimbe 10mg once daily

*QRISK may underestimate risk in people who have additional risk because of underlying medical conditions or treatments. These include the following groups of people:

Severe obesity (BMI>40kg/m2), treated for HIV, serious mental health problems, taking medicines that can cause dyslipidaemia such as antipsychotic medication, corticosteroids or immunosuppressant drugs, autoimmune disorders such as SLE, non-diabetic hyperglycaemia, significant hypertriglyceridaemia (fasting triglycerides 4.5-9.9mmol/L), recent risk factor changes e.g. quit smoking, BP or lipid treatment.

Do not use QRISK if a familial disorder is suspected.

Consider socio-economic status as an additional factor contributing to CVD risk.

For more detailed guidance please see: NHS Accelerated Access Collaborative » Summary of national guidance for lipid management

Secondary prevention

1st line: Atorvastatin 80mg one daily

Start with 20mg if eGFR<60ml/min/1.73m2 and titrate dose. If eGFR<30ml/min, seek advice of renal specialist before titrating dose.

If not tolerated: Reduce dose and re-titrate or try

2nd line: Rosuvastatin 10mg once daily

Identify and address all modifiable risk factors: smoking, diet, obesity, alcohol intake, physical activity, blood pressure and HbA1c

Consider ezetimibe if statin intolerant or contra-indicated. For further info on managing statin intolerance see pathway here .

Measure ALT within 2-3 months of starting treatment and then within 2-3 months of every additional up titration and then again at 12 months, but not again unless clinically indicated

Measure LDL-C at 2-3 months

If 50% reduction not achieved or if LDL-C baseline value is not available, consider target LDL-C < 1.4mmol/L

Add ezetimibe 10mg once daily

Reassess after three months.

If LDL-C remains high on max. tolerated statin/ezetimibe/ bempedoic acid, then carry out fasting lipid profile and assess eligibility for injectable therapy against NICE criteria.

Alirocumab or Evolocumab (prescribed by lipid specialist)

May be preferred due to availability of CV outcome data. Refer if criteria in table below are met, definitions of "High and "Very high risk" can be found on NICE TAs:

NICE TA393 Alirocumab NICE TA394 Evolocumab	Without CVD	With CVD	
		High risk [1]	Very high risk [2]
Primary non-FH or mixed dyslipidaemia	Not recommended	LDL C > 4.0 mmoL/L	LDL C > 3.5 mmoL/L
Primary heterozygous-FH	LDL C > 5.0 mmoL/L	LDL C > 3.5 mmoL/L	

Inclisiran (prescribed in primary care)

If fasting LDL-C ≥ 2.6mmol/L despite maximum tolerated

If TC>7.5mmol/L and/or LDL-C, >4.9mmol/L and/or non-HDL-C, >5.9mmol/L, a personal and/or family history of confirmed CHD (<60 years), and with no secondary causes: suspect familial hypercholesterolaemia (FH)

If FH suspected: use Simon Broome or Dutch Lipid Clinic Network (DLCN) criteria to make a clinical diagnosis.
Consider secondary causes of hyperlipidaemia rather than FH.
Treatment targets in FH: if clinical diagnosis of FH and/or other risk factors present, follow the recommended treatment management pathway for primary or secondary prevention as for non-FH, BUT aim to achieve at least 50% reduction of LDL-C from baseline
Refer to Secondary Care Lipid Clinic for further assessment (using fasting lipid profiles) if unable to reach target or if TC>9.0mmol/L and/or LDL-C >6.5mmol/L and/or non-HDL-C >7.5mmol/L or TGs >20mmol/l
If TGs 10-20mmol/L. repeat test (after 5 days, but within 2 weeks). Refer if TGs remain> 10mmol/L.

Frequently asked questions

What do I do if someone is intolerant of statins?

Guidance is available here: NHS Accelerated Access Collaborative » Statin intolerance pathway (england.nhs.uk)

When do we ask for a fasting lipid profile?

Fasting lipid profiles are necessary before Lipid Clinic referral. Fasting lipid profiles provide a more accurate LDL cholesterol, particularly when triglycerides are high (>4.5mmol/L).

What is the target for HDL:cholesterol ratio ?

HDL:cholesterol ratio is used to assess initial risk. Once treatment has started there is no target ratio.

What do I do if LFTs are abnormal? N.B. It is recommended that only ALT needs to be monitored when statins are prescribed

If ALT is elevated but are less than 3 times the upper limit of normal then continue the statin and repeat in a month. If they remain elevated but are less than 3 times the upper limit of normal then continue statin and repeat again in 6 months.

If ALT is greater than 3 times the upper limit of normal then do not initiate a statin or discontinue statin therapy already prescribed and repeat the LFTs in a month. If ALT returns to baseline or are < 3 times the upper limit of normal, restart with lower dose/alternative statin. Repeat ALT in 1 month.

If ALT remains high off lipid-lowering therapy, look for other causes. The only lipid-lowering therapy that can be considered in this situation are bile acid sequestrants (colestyramine etc), PCSK9-inhibitors, and inclisiran, if the patient qualifies for any of these drugs. If the ALT subsequently falls, a statin could be re-tried provided the ALT is monitored.

Which statins are classed as high intensity?

Atorvastatin 20mg-80mg and rosuvastatin 10mg-40mg are high intensity statin doses.

Who needs a lower starting dose of rosuvastatin?

For people aged 70 and over, of Asian origin, with CrCL 30-60ml/min or on a fibrate or clopidogrel then start at 5mg.

How are newer therapies accessed?

Alirocumab and *Evolocumab* are prescribed by specialists because of the funding model recommended by NICE.

Bempedoic acid, bempedoic acid/ezetimibe and *icosapent ethyl* are available in line with respective TAs: NHS Accelerated Access Collaborative » Summary of national guidance for lipid management (england.nhs.uk)

Inclisiran can be prescribed in primary care and more information is available here: NHS Frimley - Cardiovascular (icb.nhs.uk)

Why are local lipid thresholds different from NICE?

The decision has been made to align with European Society of Cardiology guidelines on lipid targets in order to prioritise the prevention of CV disease. Appropriate up titration of statins and ezetimibe will improve local outcomes at a low cost. This was agreed by Frimley ICS CV Group, Frimley ICS Lipid Management Group and Frimley ICS Medicines Board.

References: 1. NHS Accelerated Access Collaborative » Summary of national guidance for lipid management (england.nhs.uk) Accessed on 03/04/24; 2. NHS Accelerated Access Collaborative » Statin intolerance pathway (england.nhs.uk) access on 11/08/22; 3. ESC Guidelines on Dyslipidaemias (Management of) (escardio.org) accessed on 11/08/22 4. NICE CG181 Overview | Cardiovascular disease: risk assessment and reduction, including lipid modification | Guidance | NICE Accessed on 11/08/22; 5. NICE TA393 Overview | Alirocumab for treating primary hypercholesterolaemia and mixed dyslipidaemia | Guidance | NICE access on 11/08/22; 6. NICE TA394 Overview | Evolocumab for treating primary hypercholesterolaemia and mixed dyslipidaemia | Guidance | NICE access on 11/08/22; 7. NICE TA733 Overview | Inclisiran for treating primary hypercholesterolaemia or mixed dyslipidaemia | Guidance | NICE access on 11/08/22. 8. ESC Guidelines ESC Guidelines on Dyslipidaemias (Management of) (escardio.org) 8.