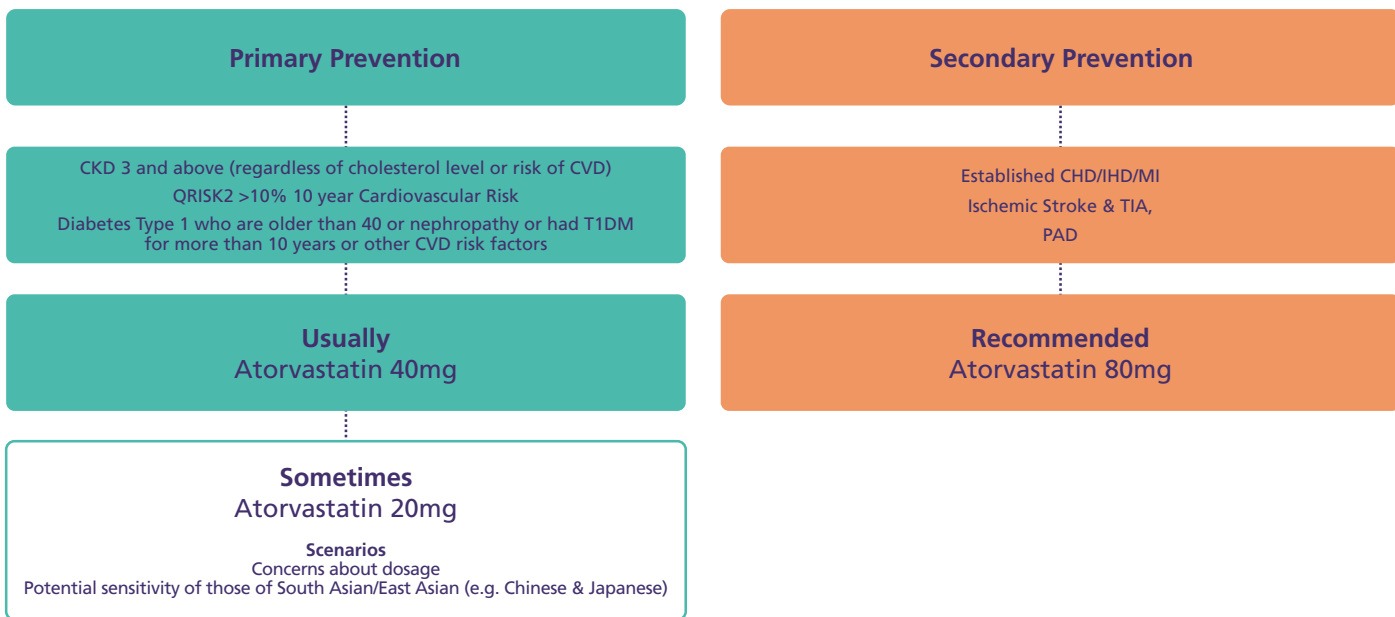


# Lipid Treatment Guidance

Guidance: Lipid management for patients with CVD and risks of CVD  
(up to and inc. 84 years exc. frailty / women of child bearing age <55years)

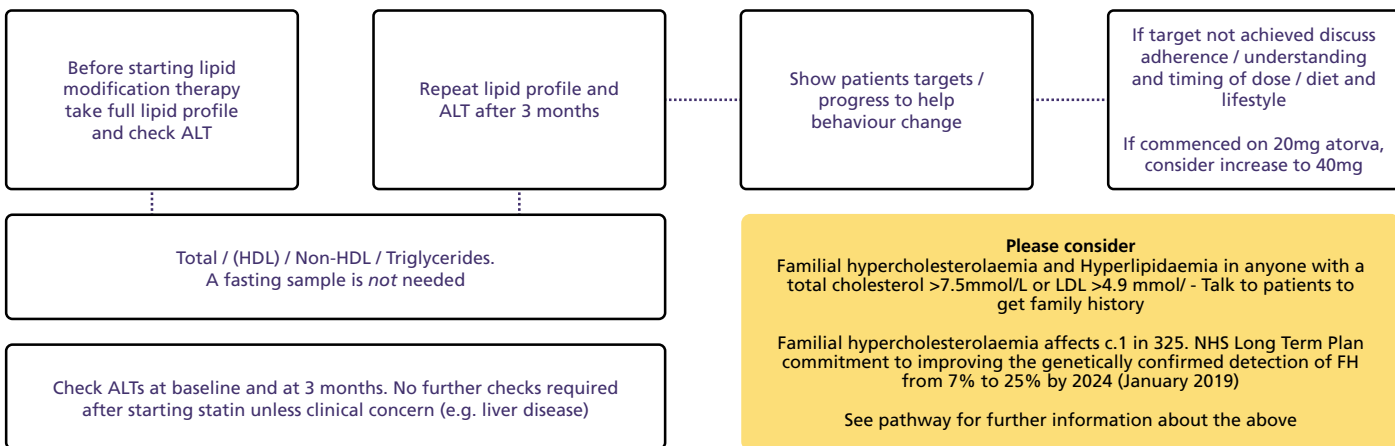
<p>Details provided on <a href="http://westyorkshireandharrogatehealthyhearts.co.uk/cholesterol">westyorkshireandharrogatehealthyhearts.co.uk/cholesterol</a></p> <p>inc. <a href="http://nice.org.uk/guidance/cg181/resources/patient-decision-aid-pdf-243780159">nice.org.uk/guidance/cg181/resources/patient-decision-aid-pdf-243780159</a></p> <p><a href="http://meandmymedicines.org.uk">meandmymedicines.org.uk</a></p>	<p><b>Shared Decision Making</b></p> <p>Outline the risks and benefits of statin treatment, taking into account lifestyle modifications, comorbidities, polypharmacy, general frailty and life expectancy</p>	<p>Show patients the QRISK 2/3 risk assessment tool <a href="http://qrisk.org/three">qrisk.org/three</a></p> <p>and/or</p> <p><a href="http://jbs3risk.co.uk/JBS3Risk.swf">jbs3risk.co.uk/JBS3Risk.swf</a></p> <p><a href="http://westyorkshireandharrogatehealthyhearts.co.uk/cholesterol">westyorkshireandharrogatehealthyhearts.co.uk/cholesterol</a></p>
<p><b>Lifestyle</b></p> <p>Lifestyle to be considered fundamental to this guidance. Lifestyle helps to reduce future CVD risk. Statins are effective at reducing cholesterol. Both important</p>		



**Aim for Total cholesterol <4mmol/l or >40% reduction in baseline non-high density lipoprotein (HDL) with up-titration to 80mg Atorvastatin if required**

**Second Line (those intolerant to Atorvastatin)**

Initiate one month of Rosuvastatin 5 mg once daily (doubled to 10 mg daily for primary prevention on repeat prescription after one month if no reported side effects) For secondary prevention up to 20 mg once daily, dose to be increased gradually at intervals of at least 4 weeks



This is a summary version of the treatment guidance. The full guidance can be found on [www.westyorkshireandharrogatehealthyhearts.co.uk](http://www.westyorkshireandharrogatehealthyhearts.co.uk)

# Lipid Clinical System Searches

Clinical searches are important to help practices identify suitable patients for statin switches and initiation of a statin.

A number of searches have been created that will help:

- identify patients not on a statin who have a 10-year cardiovascular risk score of >10% (including those that have had the offer of a statin previously and may now benefit)
- identify patients on low-intensity statins for primary and secondary prevention of cardiovascular disease.

Instructions on how to access the searches can be found on our website, as well as more details on the specific search criteria.

The searches practices can use are as follows:

1.  
**Statin switch, primary prevention** - Patients prescribed low-intensity statins and who do not have established CVD with a cholesterol >4 or LDL >2 (in last 18 months).

2.  
**Statin switch, secondary prevention** - Patients prescribed low-intensity statins and who have established CVD and a cholesterol >4 or LDL >2 (in last 18 months).

3.  
**Offer statin QRISK 10-20%, never had statin before** - Patients that have a QRISK >10% not currently on a statin (both calculated and actual QRISK scores).

4.  
**Offer statin QRISK 10-20%, previously tried statin** - As per search 3. Not currently on a statin – but have been previously more than 2 years ago.

5.  
**Offer statin QRISK >20%, never had statin before** - Patients that have a QRISK >20% not currently on a statin (both calculated and actual QRISK scores).

6.  
**Offer statin QRISK >20%, previously tried statin** - As per search 5, not currently on a statin – but have been previously more than 2 years ago.

7.  
**Deprescribing statin: over 80, no CVD** - Patients over age of 80 with no other CVD who may benefit from deprescribing of a statin.

8.  
**Potential FH (Familial hypercholesterolaemia), consider review and referral** - Patients whose current cholesterol >7.5mmol and LDL>4.9 who have not previously been referred to a specialist FH / Lipid service and may need referring.

## \*Notes:

- a) These searches have a number of exclusions built in (see website for further details).
- b) Only practices will have access to patient identifiable data.
- c) Some searches rely on including patients with CVD codes. Incomplete coding may mean that some patients with CVD are not identified by the search. A manual review of the record may therefore be required to verify that the patient does not have CVD.
- d) Practices can choose which searches to run – depending on capacity, clinical need etc. For example, targeting those who have a greater than 20% QRISK score (search no.5) may be a priority over search no.7 (Deprescribing statin).
- e) Patients that are in the >QRISK 20% searches are not in the QRISK10-20% searches.

# Lipid Guidance Supporting Clinical Information

The guidance and supporting information has been agreed across West Yorkshire and Harrogate Health and Care Partnership. It should not be seen as mandatory and clinical judgement can always be exercised as usual.

- As well as QRISK2 calculators within S1 or EMIS, clinicians may wish to consider the online JBS3 for lifetime risks or European SCORE Risk Charts (The European cardiovascular disease risk assessment model) when making clinical decisions with patients. QRISK3 to be used where/when available.
- Measure a full lipid profile after 3 months of treatment (total cholesterol, high-density lipoprotein (HDL) cholesterol, and LDL or non-HDL cholesterol (total cholesterol minus HDL cholesterol). The aim of treatment is to achieve a pragmatic target of <4 mmol/l of total cholesterol (since many practices are only measuring total cholesterol), or ideally, a more precise target of >40% reduction in baseline LDL or non-HDL levels. If the clinician prefers to aim for absolute targets in LDL, the European Society of Cardiology (ESC) targets are a great evidence-based choice:
 

Primary Prevention	LDL-C <3 mmol/L in moderate risk patients
	LDL-C <2.5 mmol/L in high risk patients
Secondary Prevention	LDL-C <1.8 mmol/L
- If muscle pains develop:
  - Check Creatine Kinase (CK).
  - If CK normal and pains intolerable, stop statin for 6 weeks and then re-challenge with statin at the same or lower dose.
  - If truly intolerant to Atorvastatin, try Rosuvastatin as second line.
  - If still intolerant, reducing to once or twice weekly dosing is worthwhile.
- Additional Lipid Lowering Agents –There is evidence of reduced mortality in secondary prevention by driving LDL below a target of 1.8mmol/L. GPs may wish to prescribe additional cholesterol lowering medications to achieve this target, as per NICE guidance.
- In Secondary prevention of CVD, this guidance is for ischemic stroke only, not haemorrhagic – since Atorvastatin can increase risk of haemorrhagic stroke.
- Provide annual medication reviews for people taking statins. Consider an annual non-fasting full lipid profile to inform the discussion (if needed to assess or support adherence/ response)
- Women of childbearing potential can still have statin dose optimisation, but they should be invited to speak to a health professional about teratogenic risks of statins and precautions that need to be taken. Statins are contra-indicated in pregnancy and precautions should be continued for 1 month after stopping a statin. Statins are less commonly routinely prescribed to women under the age of 55 as they tend to have lower 10yr CVD risks.
- Guidance is aimed at <84 years. For people 85 years or older consider Atorvastatin 20 mg as statins may be of benefit in reducing the risk of nonfatal myocardial infarction, taking into account patient choice, comorbidities, polypharmacy, general frailty and life expectancy.
- Consider A&G/e-consult if high-risk patients and intolerant to 3 different statins e.g. CVD (MI, CVA, TIA, PAD), CKD 3b or more, type 1 diabetes, type 2 diabetes or genetic dyslipidaemias.

[See further information on statin intolerance](#)



# Statin Intolerance

## An important clinical challenge

- Statins are the cornerstone for prevention and treatment of cardiovascular disease – they are the only class of lipid modifying agents with a substantial evidence of reduction of morbidity and mortality.
- There is a growing concern that clinicians are labelling patients as ‘statin intolerant’ too quickly.
- Up to 75% of people started on a statin will discontinue treatment within 2 years<sup>[1]</sup>.
- In clinical trials, statins were found to be largely well tolerated (often with a similar adverse effect profile to placebo), however this is not reflected in clinical practice<sup>[1]</sup>.
- Statin-associated muscle symptoms are one of the principal reasons for statin non-adherence and/or discontinuation. However, not all patients with such symptoms, if statins related, should lead to a label of ‘statin intolerance’.

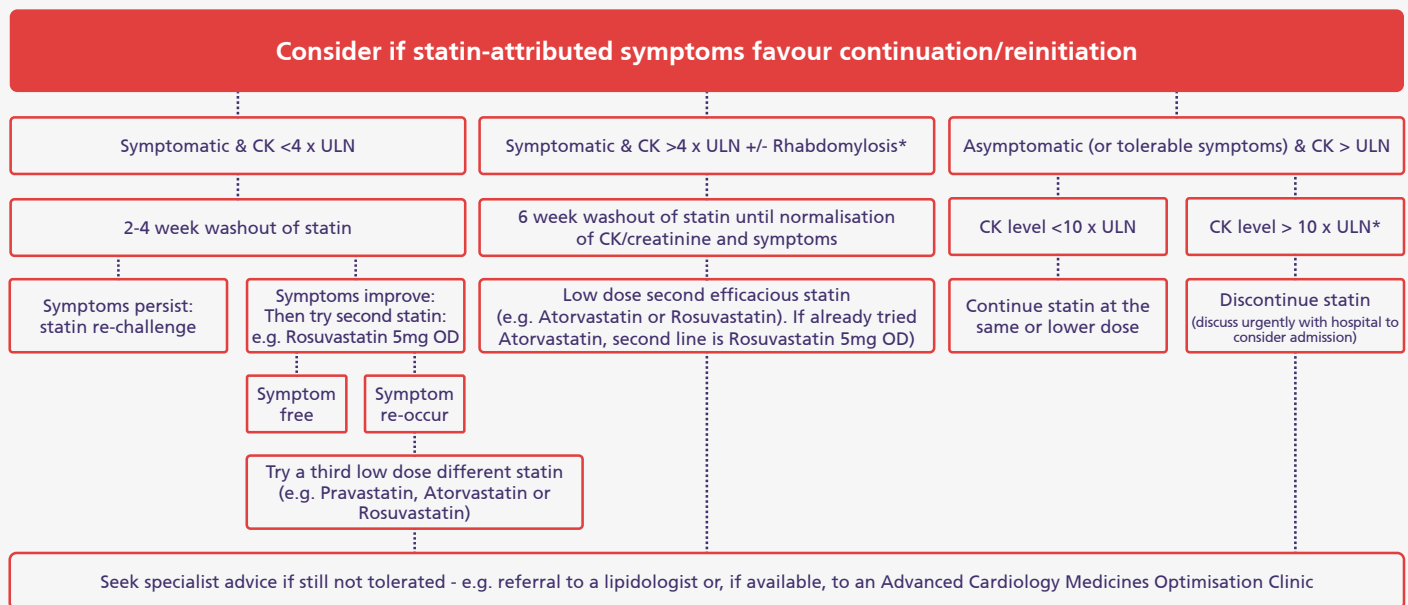
## What can you do?

- **Educate the patient on their benefits** and that it is highly likely that side effects can be dealt with successfully.
- **Identify factors that increase risk of side effects and address** - modify dose, swap to a suitable statin as appropriate (e.g. check for drug, herbal or food interactions with statins, renal failure, liver impairment etc).

### Golden Principal - Re-challenge

- If intolerant to Atorvastatin on rechallenge, use Rosuvastatin 5mg OD as per WY Healthy Hearts Treatment Guidance
- Do not routinely monitor CK unless clinically indicated
- Refer to a specialist for further advice.

## What if a patient experiences muscular side effects?



**Key**  
 CK = Creatinine Kinase  
 ULN = Upper Limit of Normal Reach

**\*Consider Rhabdomyolysis** if there is severe muscle pain, general weakness, sign of myoglobinaemia or Myoglobinuria or CK > 10 x ULN  
 Stop statin immediately  
 Do not restart that particular statin regimen  
 Discuss with hospital specialist urgently to consider admission

## Will this approach work?

- A retrospective cohort study in 107,835 patients<sup>[4]</sup>.
- 17.4% had statin related events - in around 60% statins were discontinued at least temporarily.
- On re-challenge 92.2% were still on a statin >12 months later.

## Summary

- Always strive to continue maximally tolerated dose of statin.
- Always apply repetitive de/re challenges - therapy with a lower dose statin is preferred to no statin.
- If someone is truly statin intolerant – seek specialist advice for further management options.

## References

1. European Atherosclerosis Society (EAS). (2015). Statin-associated muscle symptoms: impact on statin therapy—European Atherosclerosis Society Consensus Panel Statement on Assessment, Aetiology and Management. *European Heart Journal*. 36, pp1012–1022
2. JBS3. (2014). Joint British Societies' consensus recommendations for the prevention of cardiovascular disease. 2014. [online]. [Accessed 4th Jul 2016]. Available from: [http://heart.bmj.com/content/100/Suppl\\_2/i1.full](http://heart.bmj.com/content/100/Suppl_2/i1.full)
3. NICE. (2014). Lipid Modification. [online]. [Accessed 4th Jul 2016]. Available from: <http://www.nice.org.uk/guidance/cg181/evidence/lipid-modification-update-full-guideline-243786637>
4. Zhang et al. (2013). Discontinuation of Statins in Routine Care Settings: A Cohort Study. *Ann Intern Med* 158 (7) pp. 526-534
5. Adis Editors. (2010). Statin-induced myopathy: minimize the risk and manage according to symptoms and creatine kinase levels. *Drugs Ther Perspect* 26 (10), pp 21- 23