

CrossOver Healthcare Ministry Hyperlipidemia Best Practices

What lifestyle modification should be recommended?

Adhere to a heart-healthy diet:

- Eat vegetables, fruits, whole grain, low-fat dairy, poultry, fish, beans, nontropical vegetable oils, and nuts, but avoid red meat (i.e., Mediterranean-style diet, DASH [Dietary Approaches to Stop Hypertension] diet).
- Limit sugary drinks and sweets.
- Limit saturated and trans fat to 5% to 6% of calories.
- Limit sodium intake to 2400 mg daily (about one teaspoon table salt [kosher/sea salt have less sodium per teaspoon]). For adults who would benefit from blood pressure lowering, further reduction to 1500 mg daily is ideal. Combine sodium restriction with the DASH diet.²

Exercise regularly:

- Engage in moderate-to-vigorous aerobic activity for at least 40 minutes (on average) three to four times each week.²

Avoid tobacco

Maintain a healthy weight

Who should be placed on a Statin to reduce Cardiovascular risk?

1. Anyone in the following categories should be placed on a statin (regardless of LDL)
 - a. **Coronary Artery Disease**
 - b. **Peripheral Arterial Disease**
 - c. **Aortic Aneurysm**
 - d. **Carotid Artery Disease**
 - e. **Diabetics 40-75 years old**
2. Anyone with and **LDL ≥ 190**
3. If none of the above apply, calculate the ASCVD risk using the below calculator. Anyone with a **ASCVD risk score >7.5%** should be offered statin therapy.
<http://tools.cardiosource.org/ASCVD-Risk-Estimator/> (a link is found on crossover’s website)

Treatment Intensity & Goal, ***

<u>Patient Characteristics</u>	<u>Statin Intensity</u>	<u>Treatment Goal</u>
<ul style="list-style-type: none"> • Known cardiovascular disease • Diabetic with ASCVD ≥7.5% • LDL ≥190 	High	>50% LDL lowering from baseline
<ul style="list-style-type: none"> • age >75 years old • Diabetic 40-75 years old with ASCVD risk <7.5% 	Moderate	30% or greater LDL lowering from baseline
<ul style="list-style-type: none"> • 40-75 years old and ASCVD risk >7.5% 	Moderate or High	30% or greater LDL lowering from baseline

*see table below re: statin intensity

**the primary goal is no longer a specific LDL target. However, if the baseline is unknown, it is reasonable to aim for a LDL <100

Table 1: Statin Therapy

High Intensity	Moderate Intensity	Low Intensity
Atorvastatin (40+)-80 mg	Atorvastatin 10 (20) mg	<i>Simvastatin 10 mg</i>
Rosuvastatin 20 (40) mg	Rosuvastatin (5) 10 mg	Pravastatin 10-20 mg
	<i>Simvastatin 20-40 mg</i>	Lovastatin 20 mg
	Pravastatin 40 (80) mg	<i>Fluvastatin 20-40 mg</i>
	Lovastatin 40 mg	<i>Pitavastatin 1 mg</i>
	<i>Fluvastatin XL 80 mg</i>	
	Fluvastatin 40 mg bid	
	<i>Pitavastatin 2-4 mg</i>	

†Evidence from one randomised controlled trial (RCT) only; down-titration if unable to tolerate atorvastatin 80 mg in the IDEAL. Boldface indicates statins/doses studied in RCTs. Italics indicates statins that are FDA approved but not studied in RCTs. Adapted from Stone, et al., 2013.⁶

Other Caveats

- If a patient does not have other high risk conditions, but ASCVD risk score is between **5-7.5%** they are in a “**consider statin therapy**” group. Consider factors such as Family History of CAD/CVA, hs-CRP, coronary artery calcium score, or abi to help make the decision, along with patient preferences and the amount of margin for lifestyle modifications to aid in determining whether or not to start statin therapy.
- There is not a lot of data on the benefits/risks of statin usage for patients >75 years old.
- Patients with an LDL <40 on 2 separate occasions should have their statin dose reduced.
- Risk calculator may overestimate risk for primary prevention.

Monitoring

Obtain a baseline CMP, Hemoglobin A1c, and TSH after diagnosis of hyperlipidemia.

A fasting lipid panel should be ordered 4-12 weeks after statin initiation to determine if the appropriate % lowering of LDL from baseline has been obtained (see above table). Ordering an ALT is optional.

After patient has met treatment goal, *additional blood testing is not required*. However, it may be considered to assess compliance.

Hypertriglyceridemia

- Make sure the level drawn was done with the patient fasting
- Treat with lifestyle measures alone, unless Triglycerides are >500 (increased risk of pancreatitis)
- If triglycerides are >500, start niacin or a fibrate. Gemfibrozil is currently the most affordable fibrate available to our patients at retail stores (with a goodrx coupon). Our pharmacy also has Lovaza and Advicor (simvastatin/niacin).

References

1. Stone NJ, Robinson J, Lichtenstein AH, et al. 2013; ACC/AHA guideline on the treatment of blood cholesterol to reduce atherosclerotic cardiovascular risk in adults: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *Circulation* 2013 Nov 12
2. Eckel RH, Jakicic JM, Ard JD, et al. 2013 AHA/ACC guideline on lifestyle management to reduce cardiovascular risk: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *Circulation* 2013 Nov 12
3. Cupp, Melanie. 2013 ACC/AHA Cholesterol Guidelines Review; *The Pharmacist's Letter / Prescriber's Letter*; January 2014