Cholesterol Management in Primary Care

- Aspirin when appropriate
- Blood pressure control
- Cholesterol management
- Smoking cessation

This document was produced by the National Resource Center for Academic Detailing (NaRCAD), supported by a grant from the Agency for Healthcare Research and Quality. These are general recommendations only; specific clinical decisions should be made by the treating physician based on an individual patient’s clinical condition.

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### Statin benefits for patients with coronary artery disease

1. **Reduction in absolute risk of death**
   - **16%**

2. **Reduction in all major cardiovascular events**
   - **20%**

### Manage cholesterol aggressively for patients at highest risk of atherosclerotic cardiovascular disease (ASCVD)

Patients at highest risk should be prescribed statins unless contraindicated.

<table>
<thead>
<tr>
<th>High Risk Groups</th>
<th>High-intensity statin</th>
<th>Moderate-intensity statin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior ASCVD</td>
<td>≤ 75 y</td>
<td>&gt; 75 y</td>
</tr>
<tr>
<td>LDL-C ≥ 190mg/dL</td>
<td>YES</td>
<td>If not a candidate for high-intensity statin</td>
</tr>
<tr>
<td>Diabetes</td>
<td>≥ 7.5%</td>
<td>&lt; 7.5% Estimated 10-y ASCVD risk</td>
</tr>
<tr>
<td>LDL-C 70-189mg/dL, Age 40-75 y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASCVD risk ≥ 7.5%</td>
<td>Either high or moderate intensity (based on clinical factors)</td>
<td></td>
</tr>
</tbody>
</table>

### Intensity level definitions for commonly used statins

<table>
<thead>
<tr>
<th>High-intensity statins</th>
<th>Moderate-intensity statins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower LDL by ≥ 50%</td>
<td>Lower LDL by 30-50%</td>
</tr>
<tr>
<td>Atorvastatin 40-80 mg</td>
<td>Atorvastatin 10-20 mg</td>
</tr>
<tr>
<td>Rosuvastatin 20-40 mg</td>
<td>Simvastatin 20-40 mg</td>
</tr>
<tr>
<td></td>
<td>Rosuvastatin 5-10 mg</td>
</tr>
<tr>
<td></td>
<td>Pravastatin 40-80 mg</td>
</tr>
</tbody>
</table>
Prescribing statins for primary prevention based on CV risk

The 2013 ACC/AHA ASCVD risk calculator is the most recent tool for assessing patients’ risk of CV endpoints. While prior guidelines focused on LDL targeting, the **ASCVD approach** uses patient risk to guide treatment. The calculator incorporates race into the risk assessment, and outcomes are “hard” CV endpoints that patients care about.3

For interactive calculators, up-to-date statistics, and more information on this initiative, visit our website: [http://ophic.ouhsc.edu/rpr](http://ophic.ouhsc.edu/rpr)

Several other validated tools can be used to identify patients most likely to benefit from cholesterol treatment.4,5,6

- **Framingham Risk Score**
  - ATP-III calculator
  - Uses risk factors of age, sex, lipids, hypertension, and smoking.

- **Framingham Risk Score**
  - Global CVD
  - + Diabetes mellitus

- **Reynolds Risk Score**
  - + C-reactive protein (CRP)
  - + Family history

**Lifestyle modification remains a critical component of health promotion and ASCVD risk reduction, both prior to and in concert with the use of cholesterol-lowering drug therapies.**
Determining treatment based on ASCVD risk score

Non-statins for cholesterol treatment

Ezetimibe lowers LDL, but has limited hard endpoint data. Reserve its use for patients unable to take a statin.

PCSK9 inhibitors are injectable agents that reduce LDL dramatically, but their role is not yet clear. Statins should remain the first choice.

References