**How Important Is It To Give High Intensity Statins to PAD Patients: How Low Should We Go? What About Adding Other Drugs: What About Statins In Older PAD Patients**

Jeffrey S Berger, MD, MS
Associate Professor of Medicine and Surgery
Co-Director, Center for the Prevention of Cardiovascular Disease

**2018 ACC/AHA Multisociety Guideline on the Management of Blood Cholesterol**

In patients with clinical ASCVD, reduce low-density lipoprotein cholesterol (LDL-C) with high-intensity statins or maximally tolerated statins to decrease ASCVD risk. Greater LDL-C reductions on statin therapy, leading to lower LDL-C levels, lower significant risk. Use a maximally tolerated statin to reduce LDL-C levels by ≥50%

**Secondary Prevention in Patients with ASCVD**

*High-Risk Conditions
- Age ≥65 y
- Heterozygous FH
- CABG/PCI
- Diabetes
- HTN
- CKD
- Current smoker
- Persistently elevated LDL (≥100mg/dl)
- History of CHF

**Statins in PAD**

Heart Protection Study
20,536 adults with ASCVD (33% w PAD)
Simvastatin 40mg daily vs placebo

**High Intensity Statins in PAD: National Veterans Affairs Data**

All-cause Mortality
Amputation

Low-Medium vs None: HR 0.94 (0.82, 0.85)
High vs None: HR 0.75 (0.70, 0.79)

Low-Medium vs None: HR 0.80 (0.76, 0.85)
High vs None: HR 0.68 (0.62, 0.73)

**Disclosures**

Funding: National Institutes of Health
American Heart Association

Advisory Board: Janssen
Astra Zeneca
What About Adding other Drugs?

- In addition to (not in replacement of) high-intensity/maximally tolerated Statin:
  - Ezetimibe
  - PCSK9 Inhibitors
  - Icosapent ethyl (if Triglycerides are elevated)

What About Statins In Older PAD Patients?

9 trials encompassing 19,569 patients
Age ranged from 65 to 82 years

- All-cause Mortality
  - Low-Medium vs None: HR 0.84 (0.82, 0.86)
  - High vs None: HR 0.73 (0.70, 0.76)
  - Among ≥ 75 years
    - Low-Medium vs None: HR 0.85 (0.82, 0.89)
    - High vs None: HR 0.75 (0.69, 0.81)
  - Amputation
    - Low-Medium vs None: HR 0.68 (0.62, 0.73)
    - Among ≥ 75 years
      - Low-Medium vs None: HR 0.61 (0.48, 0.77)
      - High vs None: HR 0.61 (0.48, 0.77)

What About Statins?

- In addition to (not in replacement of) high-intensity/maximally tolerated Statin:
  - Ezetimibe
  - PCSK9 Inhibitors
  - Icosapent ethyl (if Triglycerides are elevated)
Prevalence of Medication Use and/or Lifestyle Counseling in Patients with PAD Seeing Physicians in U.S. Ambulatory Care Visits, 2006-2013

Prevalence (%)

<table>
<thead>
<tr>
<th>Medication/Therapy</th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antiplatelet Rx</td>
<td>37.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statin</td>
<td>38%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACE-I/ARB</td>
<td>31.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cilostazol</td>
<td>6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diet/Exercise Counseling</td>
<td>25.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoking Cessation</td>
<td>30.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

THANK YOU