Objectives

- Machine Learning Methodology
- Predicts Comorbidities are Associated with Increased Total Healthcare Costs among Patients with Severe Peripheral Artery Disease

**Exclusion Criteria**
- Treatment with PAD and associated comorbidities, which may increase these costs.
- Increased number of comorbidities contributes to greater healthcare resource utilization.

**Methods**

- Applying machine learning methods to identify clinical factors, from hundreds to thousands
- Of death during the 12 months post-index date

**Results**

<table>
<thead>
<tr>
<th>Comorbidity</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
</tr>
<tr>
<td>Gender</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Race</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Income</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Limitations**

- This study is an observational design, presenting a risk of confounding from unmeasured risk factors.
- The models are not true representations of the general PAD population.

**References**

- For references, please refer to the original research paper.