Non-HDL-C = TOTAL CHOLESTEROL MINUS HDL-C

Non-HDL cholesterol (non-HDL-C) represents the cholesterol components carried by atherogenic lipoproteins such as LDL, very low-density lipoprotein (VLDL) and intermediate density lipoprotein (IDL). Higher non-HDL-C levels indicate increased risk of atherosclerosis. Non-HDL-C is calculated as total cholesterol minus HDL cholesterol.

According to the ESC cholesterol guideline, non-HDL-C evaluation is recommended for risk assessment, particularly in people with high TG levels, diabetes, obesity, or very low LDL-C levels.

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Non-HDL Secondary Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very High-Risk Individuals</td>
<td>&lt; 85 mg/dL</td>
</tr>
<tr>
<td>High-Risk Individuals</td>
<td>100 mg/dL</td>
</tr>
<tr>
<td>Moderate-Risk Individuals</td>
<td>130 mg/dL</td>
</tr>
</tbody>
</table>

The 2019 AHA/ACC cholesterol guideline identifies four statin treatment groups:

* Secondary ASCVD prevention for which high-intensity statin therapy is recommended;
* Severe hypercholesterolemia (LDL-C 190 mg/dL or greater) for which maximally-tolerated statin therapy is recommended;
* Patients with diabetes for which moderate- or high-intensity statin therapy is recommended depending upon risk; and
* Primary prevention

The use of statin therapy in primary prevention patient begins with ASCVD risk estimation using pooled cohort equations (tools.acc.org/ascvd-risk-estimator) and considers the presence of risk enhancing factors (see guideline), and the patient's thoughts and values. Although the guideline recommends statin therapy when 10-year risk estimate is 7.5% or greater, a clinician-patient risk discussion must occur before prescribing a statin.

References:


