ADHERENCE AND EFFECTIVENESS OF PCSK9 INHIBITORS IN ROUTINE CLINICAL PRACTICE
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Background
Alirocumab and evolocumab are monoclonal antibodies that belong to a new class of cholesterol-lowering drugs by inhibiting the proprotein convertase subtilisin/kexin type-9 (PCSK9) enzyme.

Purpose
Evaluate the adherence to alirocumab and evolocumab therapies and its relation with drug effectiveness.

Material and methods
✓ Observational, descriptive and retrospective study conducted in a tertiary hospital. All patients that initiated treatment with alirocumab and evolocumab from October-2016 to February-2018 were included.
✓ Data sources were patient’s electronic medical records and outpatient’s electronic prescription and dispensation program. Main variables collected were: gender, age, indication, prescriber’s medical departments and LDL-C.
✓ Adherence was calculated indirectly by consulting dispensing data in the outpatient prescription tool.
✓ Effectiveness was defined as the percent decrease in LDL-C from baseline to week 24.

Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>22</td>
<td>55%</td>
</tr>
<tr>
<td>Women</td>
<td>18</td>
<td>45%</td>
</tr>
<tr>
<td>Median age</td>
<td>57</td>
<td>19-85</td>
</tr>
<tr>
<td>Patients treated with Alirocumab</td>
<td>19</td>
<td>47,50%</td>
</tr>
<tr>
<td>Patients treated with Evolocumab</td>
<td>21</td>
<td>52,50%</td>
</tr>
</tbody>
</table>

Severe cardiovascular disease
Severe cardiovascular disease and statin intolerance
Heterozygous primary hypercholesterolemia
Heterozygous primary hypercholesterolemia and...
Statin intolerance

1. Patients under PCSK9-inhibitors treatment are strong adherents to these therapies
2. Effectiveness of PCSK9-inhibitors in routine clinical practice has been proven with data comparable to randomized clinical trials. Apparently, evolocumab shows better effectiveness than alirocumab
3. Despite of the high adherence index for all patients, a slightly higher index has been found in patients with the best outcomes in LDL-C percent decrease