Supplementary Online Content


eFigure 1. Post infusion changes in HDL-C
eFigure 2. Prespecified subgroup analysis of change in percent atheroma volume
eFigure 3. ABCA1 mediated cholesterol efflux
eTable 1. Cholesterol efflux and plaque burden
eTable 2. Change in plaque burden in treatment groups in patients stratified according to prior statin use

This supplementary material has been provided by the authors to give readers additional information about their work.
Supplement Figure 1. Percentage change in high-density lipoprotein cholesterol (HDL-C) at 2 hours following infusion of either placebo (upper panel) or MDCO-216 (lower panel) at each visit.

eFigure 2. Prespecified Subgroup Analysis of Change in Percent Atheroma Volume
Supplement Figure 2. Prespecified subgroup analysis of change in percent atheroma volume (PAV) in patients treated with MDCO-216 or placebo. Non-HDL, non-high-density lipoprotein; TAV, total atheroma volume.
Supplement Figure 3. Percentage ABCA1 mediated cholesterol efflux prior to and at 2 and 4 hours following infusion of MDCO-216 at day 1 (upper panel) and 29 (lower panel). * P<0.001 compared with baseline (pre-infusion sample).
### eTable 1. Cholesterol efflux and plaque burden

<table>
<thead>
<tr>
<th></th>
<th>Percent Atheroma Volume</th>
<th>Total Atheroma Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r value</td>
<td>P Value</td>
</tr>
<tr>
<td><strong>Baseline Plaque Burden</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline efflux at day 1</td>
<td>-0.30</td>
<td>0.12</td>
</tr>
<tr>
<td><strong>Change in Plaque Burden</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 hour efflux change at day 1</td>
<td>-0.07</td>
<td>0.72</td>
</tr>
<tr>
<td>4 hour efflux change at day 1</td>
<td>0.04</td>
<td>0.83</td>
</tr>
<tr>
<td>2 hour efflux change at day 29</td>
<td>-0.01</td>
<td>0.97</td>
</tr>
<tr>
<td>4 hour efflux change at day 29</td>
<td>-0.16</td>
<td>0.40</td>
</tr>
</tbody>
</table>

Supplement Table. Correlation between ABCA1 mediated efflux at baseline and post infusion changes with baseline measures of plaque burden and progression.
eTable 2. Change in plaque burden in treatment groups in patients stratified according to prior statin use.

<table>
<thead>
<tr>
<th></th>
<th>Placebo</th>
<th>MDCO-216</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percent atheroma volume</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior statin use</td>
<td>-1.39 (-2.06, -0.73)</td>
<td>-0.22 (-0.98, 0.53)</td>
<td>0.025</td>
</tr>
<tr>
<td>Statin naive</td>
<td>-0.65 (-1.51, 0.21)</td>
<td>-0.46 (-1.36, 0.43)</td>
<td>0.76</td>
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<tr>
<td><strong>Total atheroma volume (mm³)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior statin use</td>
<td>-7.2 (-11.8, -2.7)</td>
<td>-8.4 (-13.5, -3.2)</td>
<td>0.74</td>
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<tr>
<td>Statin naive</td>
<td>-4.6 (-13.2, 4.1)</td>
<td>0.6 (-8.4, 9.6)</td>
<td>0.42</td>
</tr>
<tr>
<td><strong>Atheroma volume most diseased 10-mm (mm³)</strong></td>
<td></td>
<td></td>
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<tr>
<td>Prior statin use</td>
<td>-3.4 (-6.0, -0.8)</td>
<td>-3.9 (-6.7, -1.1)</td>
<td>0.80</td>
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<tr>
<td>Statin naive</td>
<td>0.4 (-4.2, 5.0)</td>
<td>1.1 (-3.6, 5.8)</td>
<td>0.84</td>
</tr>
</tbody>
</table>

Supplement table 2. Changes in measures of plaque burden in patients with prior statin use or statin naïve treated with placebo (n=32, n=29) or MDCO-216 (n=25, n=27) respectively.