Pooled Analysis of Two Randomized Trials Comparing Titanium-nitride-oxide-coated Stent Versus Drug-eluting Stent in ST Elevation Myocardial Infarction

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e Department of Medicine, Turku University Hospital, Turku, Finland
f Division of Cardiothoracic and Vascular Surgery, Department of Surgery, Oulu, Finland
Table 1

Baseline Clinical Characteristics of the Two Study Groups in the TITAX-AMI Trial

<table>
<thead>
<tr>
<th>Variable</th>
<th>BAS group N=83</th>
<th>DES group N=97</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, mean (SD), y</td>
<td>63.3 (10.5)</td>
<td>62.0 (11.8)</td>
<td>.43</td>
</tr>
<tr>
<td>Male gender</td>
<td>60 (72.3)</td>
<td>77 (79.4)</td>
<td>.27</td>
</tr>
<tr>
<td>Family history of CAD</td>
<td>36 (43.4)</td>
<td>47 (48.5)</td>
<td>.50</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>12 (14.5)</td>
<td>9 (9.3)</td>
<td>.28</td>
</tr>
<tr>
<td>Hypertension</td>
<td>41 (49.4)</td>
<td>45 (46.4)</td>
<td>.69</td>
</tr>
<tr>
<td>Hypercholesterolemia</td>
<td>47 (56.6)</td>
<td>68 (70.1)</td>
<td>.06</td>
</tr>
<tr>
<td>Current smoking</td>
<td>27 (32.5)</td>
<td>43 (44.3)</td>
<td>.11</td>
</tr>
<tr>
<td>Prior MI</td>
<td>10 (12.0)</td>
<td>6 (6.2)</td>
<td>.17</td>
</tr>
<tr>
<td>Prior PCI</td>
<td>4 (4.8)</td>
<td>4 (4.1)</td>
<td>.82</td>
</tr>
<tr>
<td>Prior CABG</td>
<td>4 (4.8)</td>
<td>0 (0)</td>
<td>.03</td>
</tr>
<tr>
<td>Prior stroke</td>
<td>1 (1.2)</td>
<td>4 (4.1)</td>
<td>.23</td>
</tr>
</tbody>
</table>

BAS, bioactive stent; DES, drug-eluting stent; CABG, coronary artery bypass grafting; CAD indicates coronary artery disease; MI, myocardial infarction; PCI, percutaneous coronary intervention; SD, standard deviation.

Continuous variables are presented as mean (standard deviation), while categorical variables are presented as frequency (percentage).
Table 2

Baseline Clinical Characteristics of the Two Study Groups in the BASE-ACS Trial

<table>
<thead>
<tr>
<th>Variable</th>
<th>BAS group N=162</th>
<th>DES group N=159</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, mean (SD), y</td>
<td>61.9 (12.0)</td>
<td>61.5 (12.5)</td>
<td>.79</td>
</tr>
<tr>
<td>Male gender</td>
<td>128 (79.0)</td>
<td>121 (76.1)</td>
<td>.53</td>
</tr>
<tr>
<td>Family history of CAD</td>
<td>75 (46.3)</td>
<td>60 (37.7)</td>
<td>.12</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>23 (14.2)</td>
<td>24 (15.1)</td>
<td>.82</td>
</tr>
<tr>
<td>Hypertension</td>
<td>54 (33.3)</td>
<td>61 (38.4)</td>
<td>.35</td>
</tr>
<tr>
<td>Hypercholesterolemia</td>
<td>50 (30.9)</td>
<td>55 (34.6)</td>
<td>.48</td>
</tr>
<tr>
<td>Current smoking</td>
<td>73 (45.1)</td>
<td>66 (41.5)</td>
<td>.52</td>
</tr>
<tr>
<td>Prior MI</td>
<td>13 (8.0)</td>
<td>8 (5.0)</td>
<td>.28</td>
</tr>
<tr>
<td>Prior PCI</td>
<td>5 (3.1)</td>
<td>12 (7.5)</td>
<td>.07</td>
</tr>
<tr>
<td>Prior CABG</td>
<td>5 (3.1)</td>
<td>2 (1.3)</td>
<td>.26</td>
</tr>
<tr>
<td>Prior stroke</td>
<td>5 (3.1)</td>
<td>2 (1.3)</td>
<td>.26</td>
</tr>
</tbody>
</table>

BAS, bioactive stent; DES, drug-eluting stent; CABG, coronary artery bypass grafting; CAD, coronary artery disease; MI, myocardial infarction; PCI, percutaneous coronary intervention; SD, standard deviation.

Continuous variables are presented as mean (SD), while categorical variables are presented as frequency (percentage).
Table 3

Angiographic and Procedural Data of the Two Study Groups in the TITAX-AMI Trial

<table>
<thead>
<tr>
<th>Variable</th>
<th>BAS group N=83</th>
<th>DES group N=97</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vessel type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left anterior descending artery</td>
<td>49 (59.0)</td>
<td>39 (40.2)</td>
<td>.01</td>
</tr>
<tr>
<td>Left circumflex artery</td>
<td>4 (4.8)</td>
<td>21 (21.6)</td>
<td>.001</td>
</tr>
<tr>
<td>Right coronary artery</td>
<td>28 (33.7)</td>
<td>36 (37.1)</td>
<td>.64</td>
</tr>
<tr>
<td>Left main coronary artery</td>
<td>0 (0)</td>
<td>1 (1.0)</td>
<td>.35</td>
</tr>
<tr>
<td>Saphenous venous graft</td>
<td>2 (2.4)</td>
<td>0 (0)</td>
<td>.12</td>
</tr>
<tr>
<td>Thrombus</td>
<td>56 (67.5)</td>
<td>38 (39.2)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Reference vessel diameter, mean (SD), mm</td>
<td>3.26 (0.44)</td>
<td>3.20 (0.47)</td>
<td>.52</td>
</tr>
<tr>
<td>Lesion length, mean (SD) mm</td>
<td>14.3 (5.5)</td>
<td>12.5 (5.3)</td>
<td>.01</td>
</tr>
<tr>
<td>Stent diameter, mean (SD), mm</td>
<td>3.38 (1.15)</td>
<td>3.17 (0.44)</td>
<td>.10</td>
</tr>
<tr>
<td>Stent length, mean (SD), mm</td>
<td>18.1 (4.5)</td>
<td>17.4 (4.9)</td>
<td>.23</td>
</tr>
<tr>
<td>Total stent length, mean (SD), mm</td>
<td>19.3 (6.5)</td>
<td>17.9 (6.0)</td>
<td>.14</td>
</tr>
<tr>
<td>Number of stents per culprit lesion, mean (SD)</td>
<td>1.11 (0.31)</td>
<td>1.06 (0.28)</td>
<td>.30</td>
</tr>
<tr>
<td>Thrombus aspiration</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>NA</td>
</tr>
<tr>
<td>Direct stenting</td>
<td>11 (13.3)</td>
<td>18 (18.6)</td>
<td>.33</td>
</tr>
<tr>
<td>Post-dilatation</td>
<td>40 (48.2)</td>
<td>38 (39.2)</td>
<td>.22</td>
</tr>
<tr>
<td>Medications</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-molecular weight heparin</td>
<td>81 (97.6)</td>
<td>92 (94.8)</td>
<td>.34</td>
</tr>
<tr>
<td>Unfractionated heparin</td>
<td>1 (1.2)</td>
<td>1 (1.0)</td>
<td>.91</td>
</tr>
<tr>
<td>Glycoprotein IIb/IIIa inhibitor</td>
<td>55 (66.3)</td>
<td>56 (57.7)</td>
<td>.24</td>
</tr>
<tr>
<td>Bivalirudin</td>
<td>1 (1.2)</td>
<td>2 (2.1)</td>
<td>.65</td>
</tr>
</tbody>
</table>

BAS, bioactive stent; DES, drug-eluting stent; NA, not available; SD, standard deviation.

Continuous variables are presented as mean (standard deviation), while categorical variables are presented as frequency (percentage).
Table 4

Angiographic and Procedural Data of the Two Study Groups in the BASE-ACS Trial

<table>
<thead>
<tr>
<th>Variable</th>
<th>BAS group N=162</th>
<th>DES group N=159</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vessel type</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left anterior descending artery</td>
<td>66 (40.7)</td>
<td>79 (49.7)</td>
<td>.11</td>
</tr>
<tr>
<td>Left circumflex artery</td>
<td>27 (16.7)</td>
<td>30 (18.9)</td>
<td>.61</td>
</tr>
<tr>
<td>Right coronary artery</td>
<td>68 (42.0)</td>
<td>50 (31.4)</td>
<td>.05</td>
</tr>
<tr>
<td>Left main coronary artery</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>NA</td>
</tr>
<tr>
<td>Saphenous venous graft</td>
<td>1 (0.6)</td>
<td>0 (0)</td>
<td>.32</td>
</tr>
<tr>
<td><strong>Thrombus</strong></td>
<td>125 (77.2)</td>
<td>114 (71.7)</td>
<td>.26</td>
</tr>
<tr>
<td><strong>Reference vessel diameter, mean (SD), mm</strong></td>
<td>3.11 (0.40)</td>
<td>3.13 (0.41)</td>
<td>.57</td>
</tr>
<tr>
<td><strong>Lesion length, mean (SD), mm</strong></td>
<td>14.7 (5.0)</td>
<td>15.0 (7.4)</td>
<td>.72</td>
</tr>
<tr>
<td><strong>Stent diameter, mean (SD, mm)</strong></td>
<td>3.13 (0.40)</td>
<td>3.14 (0.41)</td>
<td>.89</td>
</tr>
<tr>
<td><strong>Stent length, mean (SD, mm)</strong></td>
<td>18.5 (5.0)</td>
<td>18.7 (5.4)</td>
<td>.72</td>
</tr>
<tr>
<td><strong>Total stent length, mean (SD), mm</strong></td>
<td>22.2 (10.2)</td>
<td>20.4 (7.6)</td>
<td>.14</td>
</tr>
<tr>
<td><strong>Number of stents per culprit lesion, mean (SD)</strong></td>
<td>1.17 (0.41)</td>
<td>1.13 (0.33)</td>
<td>.44</td>
</tr>
<tr>
<td><strong>Thrombus aspiration</strong></td>
<td>71 (43.8)</td>
<td>66 (41.5)</td>
<td>.67</td>
</tr>
<tr>
<td><strong>Direct stenting</strong></td>
<td>73 (45.1)</td>
<td>67 (42.1)</td>
<td>.60</td>
</tr>
<tr>
<td><strong>Post-dilatation</strong></td>
<td>65 (40.1)</td>
<td>70 (44.0)</td>
<td>.48</td>
</tr>
<tr>
<td><strong>Medications</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Low-molecular weight heparin</td>
<td>68 (42.0)</td>
<td>62 (39.0)</td>
<td>.59</td>
</tr>
<tr>
<td>Unfractionated heparin</td>
<td>39 (24.1)</td>
<td>50 (31.4)</td>
<td>.14</td>
</tr>
<tr>
<td>Glycoprotein IIb/IIIa inhibitor</td>
<td>64 (39.5)</td>
<td>67 (42.1)</td>
<td>.63</td>
</tr>
<tr>
<td>Bivalirudin</td>
<td>54 (33.3)</td>
<td>46 (28.9)</td>
<td>.39</td>
</tr>
</tbody>
</table>

BAS, bioactive stent; DES, drug-eluting stent; NA, not available; SD, standard deviation.

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