European aortic valve patients can now take less warfarin for lowered bleeding rates
The On-X valve is the first and only mechanical valve to be tested in a randomized, FDA approved clinical trial for lowered levels of INR. On-X Life Technologies, Inc. (Austin, Texas) has received European regulatory approval—CE mark (Conformité Européenne mark)—for an aortic valve INR level of 1.5 to 2.0 compared to a standard recommendation of 2.0-3.0. Aortic valve patients in countries that recognize the CE mark can now control their anticoagulation level within this lowered labeling indication for On-X Plus 1.5 Aortic Valves.

A mechanical valve that offers less bleeding events
A presentation of the “High Risk” patient group data from the Prospective Randomized On-X Anticoagulation Clinical Trial (PROACT) was made at the American Association of Thoracic Surgery in Minneapolis. Bleeding was reduced by 60% and thromboembolism (TE) was not increased for these patients who were testing their INR levels at home (Table 1).

Table 1. PROACT: Adverse Events: High Risk Aortic Test Group (INR 1.5-2.0) vs. Control Group (INR 2.0-3.0)

<table>
<thead>
<tr>
<th>Adverse event (N)</th>
<th>Control</th>
<th>High Risk Aortic</th>
<th>Rate Ratio Test/Control</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major bleed</td>
<td>25</td>
<td>10</td>
<td>0.45</td>
<td>0.032</td>
</tr>
<tr>
<td>Minor bleed</td>
<td>25</td>
<td>8</td>
<td>0.36</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Ischemic stroke</td>
<td>5</td>
<td>5</td>
<td>1.12</td>
<td>0.859</td>
</tr>
<tr>
<td>All bleeding and thrombosis</td>
<td>64</td>
<td>38</td>
<td>0.66</td>
<td>0.046</td>
</tr>
<tr>
<td>Total mortality</td>
<td>11</td>
<td>10</td>
<td>1.02</td>
<td>0.968</td>
</tr>
</tbody>
</table>

The stunning result of the PROACT trial is that all bleeding was reduced while stroke and thromboembolic events did not increase. Further, these event rates remain well below FDA’s Objective Performance Criteria (OPC) despite the isolation of high risk patients into this cohort. Studies show that patients who are 65 or younger should receive mechanical valve implants to avoid the complications associated with repeated reoperations. Mechanical valve patients have better long term survival at any age. The benefits of warfarin in older patients have been overlooked in favor of patient preference for tissue valves that is based on somewhat unfounded fears. While uncontrolled warfarin use can be dangerous especially with respect to bleeding, patient self-monitoring has been shown to cut bleeding complications. The On-X valve provides the advantage of low reoperation rates, low mortality and reduced complications — the best of all worlds for a young valve recipient.
Your patients deserve the best chance for a long lasting valve without high bleeding rates — the On-X Plus 1.5™ Aortic Heart Valve!

References:

4. Food and Drug Administration; Draft Guidance for Industry and FDA Staff: Heart Valves – Investigational Device Exemption (IDE) and Premarket Approval Applications, January 10, 2010
5. ISO 5840, Standard for Cardiovascular Implants - Cardiac Valve Prostheses, 2005
7. PROACT Investigation Plan. Medical Carbon Research Institute, LLC, Austin, Texas USA, © 2006

On-X aortic and mitral valves are FDA approved.

The approval of a lower INR recommendation through the EU regulatory process applies only within that jurisdiction and others that accept EU review. This therapy is not approved in the US or other countries that have reviews independent of the EU. In these countries On-X Life Technologies, Inc., continues to recommend standard anticoagulation therapy as presently prescribed by various professional societies for the On-X valve.³

CAUTION: Federal law restricts this device to sale by or on the order of a physician. Refer to the Instructions for Use that accompany each valve for indications, contraindications, warnings, precautions and possible complications. Investigational use of this device in the Prospective Randomized On-X Valve Anticoagulation Trial (PROACT) is limited by federal law to investigational sites. For further information, visit www.onxlti.com.