

# Anticoagulation medications show no gender-based variations in outcomes for TAVR patients

May 6 2016

---

A study on the impact of using different anticoagulation medications on men and women who have undergone a transcatheter aortic valve replacement (TAVR) found no difference in early vascular complications or mortality. The BRAVO 3 results were presented today as a late-breaking clinical trial at the Society for Cardiovascular Angiography and Interventions (SCAI) 2016 Scientific Sessions in Orlando, Fla.

BRAVO 3 assessed contemporary TAVR procedures administered through the leg, or transfemoral procedures, and compared the use of two anticoagulation medications, bivalirudin and unfractionated heparin (UFH). The study was a randomized multicenter trial with 31 centers participating (n = 802). The primary endpoint was [major bleeding](#) occurring within 48 hours. Major [bleeding](#) was defined as Bleeding Academic Research Consortium (BARC) type 3b, which is overt bleeding with a significant drop in hemoglobin or that requires surgical intervention and/or IV vasoactive agents to control.

"Prior evidence has shown that while [women](#) have a higher rate of survival post TAVR, they are at a greater risk of complications from bleeding soon after a procedure," said Anita W. Asgar, MD, the paper's lead author. "BRAVO 3 was designed to look at whether different anticoagulation medications could reduce the early risk in women."

The study was comprised of 49 percent women (n = 391, 195 received bivalirudin and 196 received UFH) and 51 percent men (n = 411, 209 received bivalirudin and 202 received UFH). Women were older than men and had fewer comorbidities, such as [coronary artery disease](#), atrial fibrillation and diabetes. While women had a lower EuroSCORE I—a predictor of operative mortality in patients undergoing cardiac surgery—all patients were considered high-risk for TAVR.

Compared with men, at 30 days, women demonstrated similar survival (19 men vs. 19 women, p = 0.87), major adverse cardiac event (34 men vs. 29 women, p = 0.65) and vascular complications (32 men vs. 43 women, p = 0.12).

"The good news is that we found early outcomes for women were comparable to those of men," said Dr. Asgar. "That being said, the BRAVO 3 study only looked at outcomes over 30 days, so the next step would be to see long-term results for post-TAVR procedures."

BRAVO 3 did find a trend—although not statistically significant—that women who were given bivalirudin experienced less mortality. Dr. Asgar noted this indication could warrant further studies, with a larger population, on using [bivalirudin](#) over UFH for women.

**More information:** Dr. Asgar presented "Sex-Based Differences in Outcomes with Bivalirudin or Unfractionated Heparin for Transcatheter Aortic Valve Replacement: Results from the BRAVO 3 Randomized Trial" on Friday, May 6, 2016 at 9:45 a.m. ET.

For more information about the SCAI 2016 Scientific Sessions, visit [www.SCAI.org/SCAI2016](http://www.SCAI.org/SCAI2016).

Provided by Society for Cardiovascular Angiography and Interventions

Citation: Anticoagulation medications show no gender-based variations in outcomes for TAVR patients (2016, May 6) retrieved 4 May 2024 from

<https://medicalxpress.com/news/2016-05-anticoagulation-medications-gender-based-variations-outcomes.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.