



## SEX DIFFERENCES IN DISTRIBUTION, MANAGEMENT AND OUTCOMES OF COMBINED ISCHEMIC-BLEEDING RISK FOLLOWING ACUTE CORONARY SYNDROME

Moderated Poster Contributions Monday, May 17, 2021, 1:30 p.m.-1:40 p.m.

Session Title: Age and Sex Differences in Prognostic Assessment of Ischemic Heart Disease

Abstract Category: 24. Ischemic Heart Disease: Special Populations

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**Background:** Risk factors of bleeding and recurrent ischemic events after acute coronary syndrome (ACS) often overlap. Whether the distribution and management of these complications vary by sex remains unknown.

**Methods:** ACS hospitalizations in the United Kingdom between 2010 and 2017 were retrospectively analyzed, stratified by sex and bleeding-ischaemic risk combination (using CRUSADE and GRACE scores). Regression analyses were performed to examine the association between risk-groups and receipt of percutaneous coronary intervention (PCI) and dual antiplatelet therapy (DAPT) on discharge, as well as in-hospital clinical outcomes.

**Results:** Out of 584,360 patients, a third of males (32.3%) and females (32.6%) were in the dual high bleeding-ischemic risk group. Dual high-risk patients of both sexes were less likely to receive PCI and DAPT, with a significant increase in odds of MACE, all-cause and cardiac mortality, and bleeding (see figure), with the greatest difference between sexes observed in the dual-high risk group in which females were less likely to receive guideline-recommended therapy (PCI and DAPT) and more likely to experience adverse outcomes.

**Conclusion:** ACS patients with dual high bleeding-ischemic risk are less likely to receive guideline-recommended therapy and experience significantly worse outcomes, especially in females. Novel strategies are needed to effectively manage this highly prevalent and complex patient group and address the under-treatment of females.

