



Antithrombotic Management and Bleeding Complications Among Pregnant Patients with Atrial Fibrillation and Atrial Flutter: A Retrospective Cohort Study Using the Premier Database

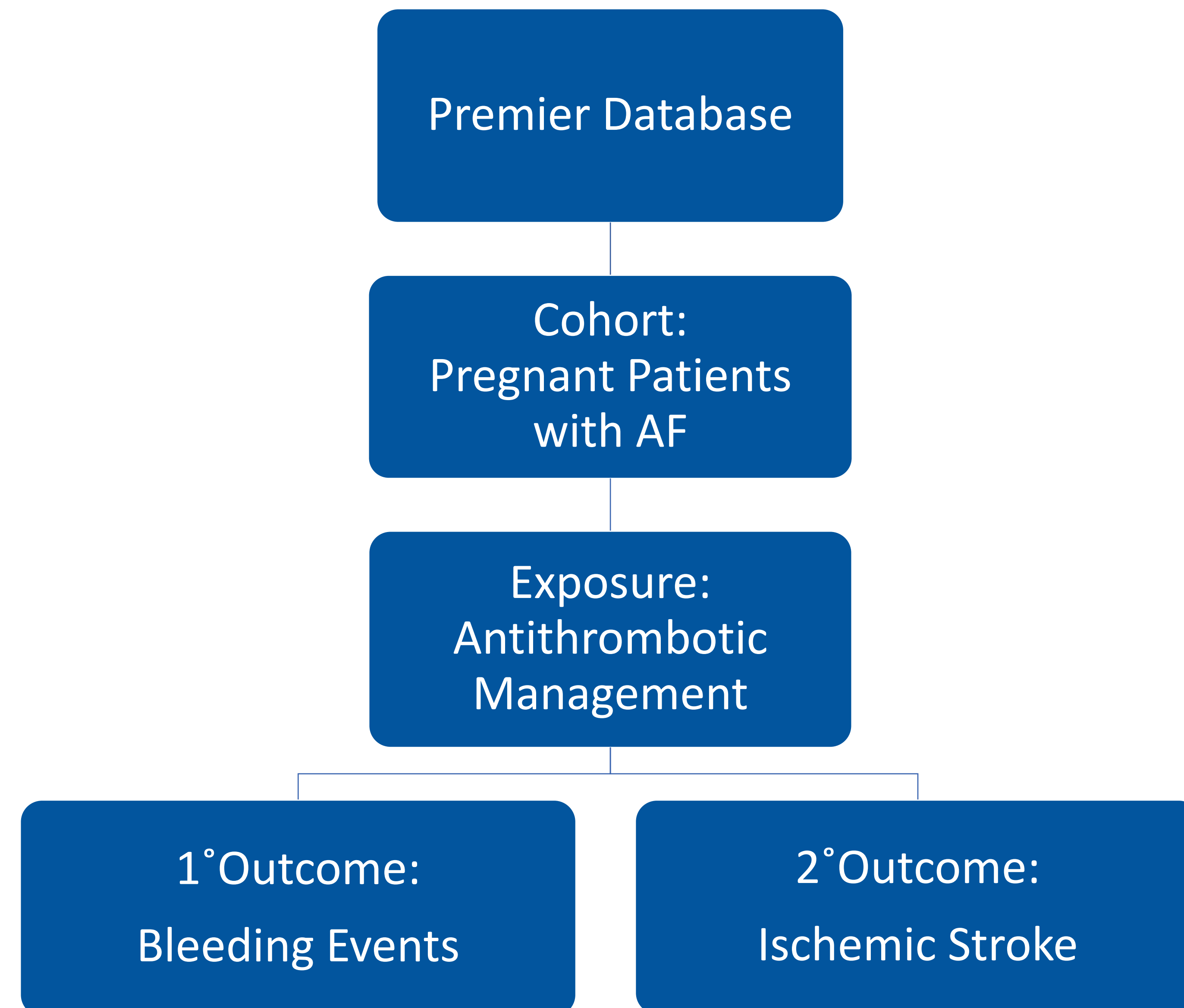


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INTRODUCTION

- Atrial fibrillation & atrial flutter (AF) are the second most common arrhythmias in pregnancy [1].
- Guidelines for the management of AF during pregnancy recommend using the CHA₂DS₂-VASc score to guide antithrombotic management as there are no pregnancy specific guidelines [2].
- The prothrombotic state of pregnancy and the risk of obstetric bleeding add additional layers of complexity to the risk-benefit discussion of starting antithrombotic medications in pregnancy.
- Objective:** Determine if there is a difference in bleeding events among pregnant patients managed with different antithrombotic agents during delivery hospitalization.
- Hypothesis:** Pregnant patients managed on anticoagulants will have increased bleeding events compared to patients who did not receive anti-thrombotic medications or who received aspirin.

METHODS



Use of Enoxaparin and Heparin During Delivery Hospitalization Was Associated with Increased Bleeding Events.

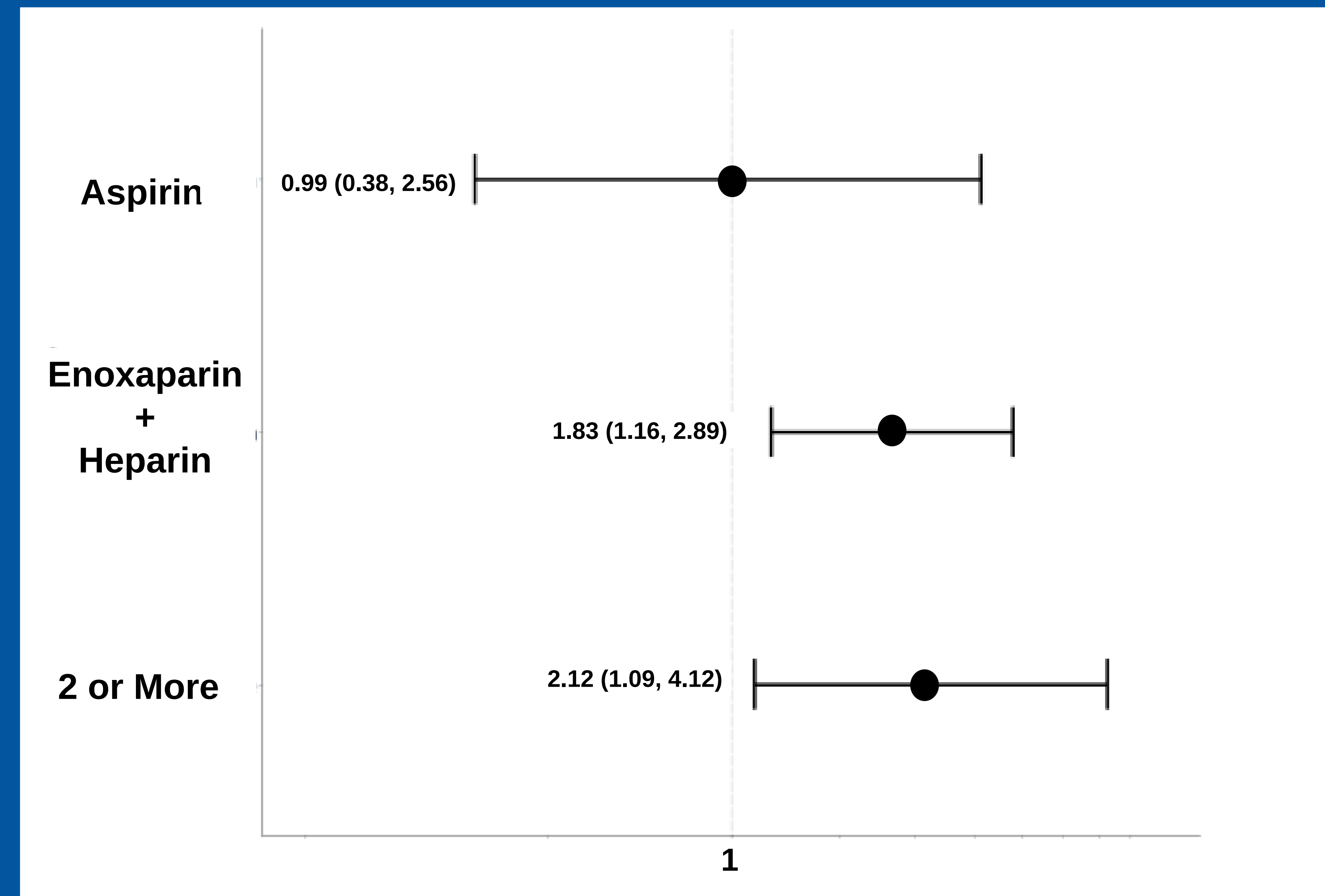


Figure 1: The odds ratios comparing bleeding events among patients receiving different antithrombotic medications to the patients receiving no antithrombotic medications.

RESULTS

Antithrombotic Medications and Associated Bleeding Events

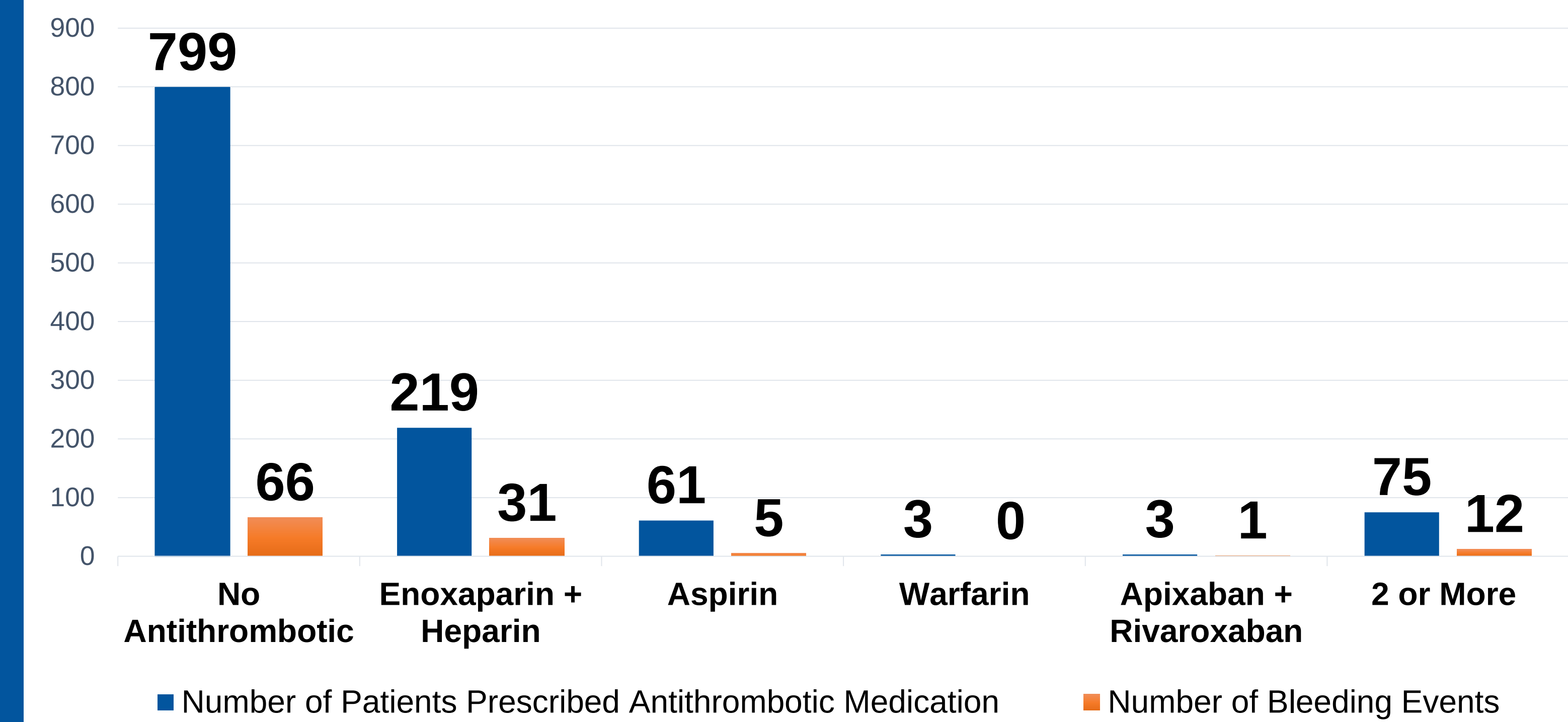
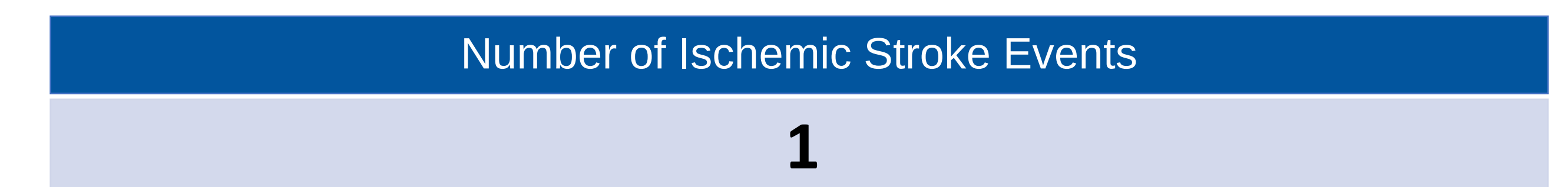


Figure 2: Bar graph illustrating how many patients were prescribed different classes of antithrombotic medications and the number of associated bleeding events.



DISCUSSION

- Enoxaparin+ Heparin was the most commonly prescribed anti-thrombotic regimen.
- The risk of bleeding was highest with use of 2 or more anti-thrombotic medications.
- Stroke during delivery hospitalization was a rare event in this population.
- Limitations:
 - The Premier database doesn't include patients' home medications.
 - Medications prescribed during delivery hospitalization are not necessarily representative of medications prescribed prior to delivery hospitalization.
 - Longer term follow up is needed to monitor for outcomes in postpartum period.