## ASO AUTHOR REFLECTIONS

# ASO Author Reflections: Perioperative Atrial Fibrillation in Patients Undergoing Cancer Surgery

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#### **PAST**

Atrial fibrillation (AF) is becoming more widely recognized among patients with cancer, with epidemiological data indicating higher prevalence and worse outcomes among them. Studies have reported a bidirectional relationship between cancer and AF, possibly owing to shared biology and risk factors. Cancer-treatment-associated arrhythmia is actively being researched in the field of cardio-oncology, with efforts underway to identify its mechanisms and pathophysiology. Postoperative AF (POAF) is one of the most common cardiac complications after cardiac and noncardiac surgeries, but data are lacking on its incidence, risk factors, and prognosis among patients with cancer.

#### **PRESENT**

To determine the risk factors for POAF and investigate its in-hospital outcomes among patients with cancer, we conducted a systematic search of databases and performed a comprehensive meta-analysis. We found a high prevalence of POAF (13.5%) among patients undergoing cancer surgery. The meta-analysis showed that age, male sex, chronic obstructive pulmonary disease, hypertension, intraoperative blood transfusion, and open surgery were associated with the incidence of POAF in patients with cancer. Perioperative amiodarone use was associated with a reduced risk of POAF. POAF was associated with worse outcomes, with a fourfold increase in in-hospital death, a threefold increase in pneumonia, a sixfold increase in stroke, and a threefold increase in myocardial infarction.

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#### **FUTURE**

POAF is common among patients with cancer and contributes significantly to worse in-hospital prognosis. Further studies are needed to determine whether the prophylactic administration of antiarrhythmic agents and anticoagulants may improve the postoperative prognosis of patients with cancer.

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