

Is Higher RV Afterload Associated With Greater Atrial Fibrillation Risk Independent of LA and LV Remodeling?

STUDY DESIGN

Observational prospective study of 2,246 older adults; those **without cardiovascular disease** identified and followed for **6.3 years (median)**



Incident atrial fibrillation (AF) identified in 215 patients



Echocardiogram used to measure estimated **pulmonary artery systolic pressure (PASP)** and **pulmonary vascular resistance (PVR)**

RESULTS

AF risk significantly higher in the 3rd (vs 1st) tertile of both

PASP

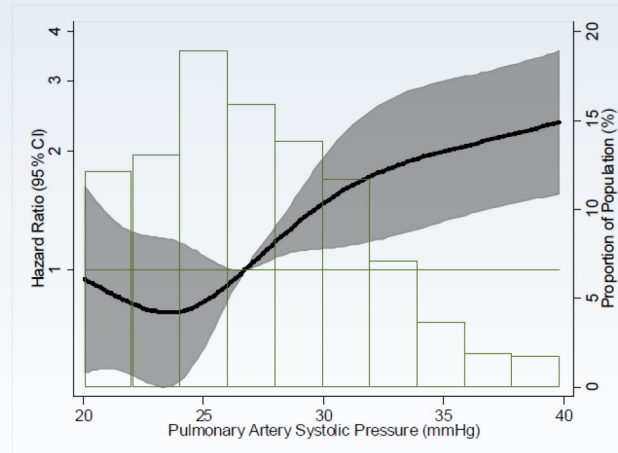
[HR 1.65; 95% CI, 1.08-2.54]

PVR

[HR 1.38; 95% CI, 1.00-2.08]

Association was

- Independent of LA and LV structure/function, HR, BMI, sleep apnea, systolic blood pressure, antihypertensive medications, and lung, kidney, and thyroid function
- Persisted after exclusion of those with elevated tricuspid and mitral velocity



In older adults, higher RV afterload is associated with greater AF risk independent of LA and LV remodeling.