

 Arrhythmias and Clinical EP**PREDICTORS OF INCIDENT ATRIAL FIBRILLATION IN PATIENTS WITH ISCHEMIC STROKE: A NATIONWIDE COHORT STUDY**

Moderated Poster Contributions

Arrhythmias and Clinical EP Moderated Poster Theater, Poster Hall, Hall C  
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Session Title: Stroke and AF: Thinking About the Heart

Abstract Category: 8. Arrhythmias and Clinical EP: Supraventricular/Ventricular Arrhythmias

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**Background:** Atrial Fibrillation (AF) is associated with a substantial part of ischemic strokes (IS). CHA2DS2-VASc score is able to identify patients at higher risk of AF following IS among patients without known AF. We aimed to find other independent predictive factors related to AF occurrence after IS.

**Methods:** This French longitudinal cohort study was based on the national database covering hospital care from 2009 to 2012 for the entire population.

**Results:** Of 336,291 patients with IS from 2009 to 2012, 240,459 (71.5%) did not have AF at baseline. A total of 14,095 (5.9%) of these patients were diagnosed as having AF during a follow-up of  $7.9 \pm 11.5$  months (incidence rate 8.9 per 100 person-years). Beyond CHA2DS2-VASc score, newly found independent predictors of subsequent diagnosis of AF were coronary artery disease (HR 1.22, 95% CI 1.15-1.28), abnormal renal function (HR 1.12, 95% CI 1.07-1.17), anaemia (HR 1.10, 95% CI 1.06-1.15), lung disease (HR 1.14, 95% CI 1.09-1.18), PM-ICD implantation (HR 1.56, 95% CI 1.48-1.64) and valvular disease (HR 1.44, 95% CI 1.37-1.51). From these results, we developed a new score with better predictive ability for identifying patients at higher risk of incident AF following IS (C statistics 0.756 95%CI 0.754-0.757) than CHA2DS2-VASc score (0.703 95%CI 0.701-0.704,  $p < 0.0001$  for comparison with DeLong test) and Framingham score (0.698 95%CI 0.697-0.700,  $p < 0.0001$  for DeLong test).

**Conclusions:** New risk factors, particularly a history of coronary artery disease, pacemaker/ICD implantation, valvular disease and kidney disease, anaemia or chronic lung disease were associated with AF onset after IS. These findings helped us to build a new risk score identifying patients at higher risk of incident (or previously unknown) AF following IS with better predictive ability than previously described scores.