

# Clinical profile and predictors of stroke and major bleeding among non-valvular atrial fibrillation patients on oral anticoagulant therapy: An Asian real-world multicentre study

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## ABSTRACT

**Introduction:** Managing non-valvular atrial fibrillation (NVAF) remains challenging to balance between preventing thromboembolism and bleeding. This study aimed to assess the clinical profile and identify predictors affecting stroke and major bleeding among NVAF patients on oral anticoagulants (OAC). **Methods:** This multicenter retrospective study analyzed data on NVAF patients initiated on OAC from 2013 to 2022 in eight public tertiary hospitals in Malaysia. The primary outcome measures were ischemic stroke and major bleeding. Convenience sampling was used in this study. Logistic regression analyses were used to assess independent predictors of primary outcomes. **Results:** We analyzed 688 patients with a mean age of 70.0±10.4 years and were predominantly male (n=386, 56.1%). Most patients were on warfarin (n=324, 47.1%), followed by dabigatran (n=139, 20.2%), apixaban (n=137, 19.9%), and rivaroxaban (n=88, 12.8%). The incidence of ischemic stroke and major bleeding were 2.8% (n=19) and 2.6% (n=18), respectively. History of ischemic stroke (aOR=5.139, p=0.001) was the only predictor for ischemic stroke occurrence after OAC initiation. Non-vitamin K OAC (NOAC) (aOR=0.198, p=0.011) and concurrent antiplatelet(s) (aOR=3.349, p=0.024) use were the predictors for major bleeding after OAC initiation. **Conclusion:** Identified predictors of stroke and major bleeding allow clinicians to manage NVAF patients better. In stroke prevention among NVAF patients, anticoagulant treatment with NOAC has a similar stroke risk but lower major bleeding risk than warfarin. The concurrent use of antiplatelet(s) among NVAF patients on OAC must be cautious.