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Questions in the comparative effectiveness of dabigatran and warfarin in atrial fibrillation

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We appreciate Dr Kawada's letter to the editor regarding our manuscript assessing the comparative effectiveness of dabigatran and rivaroxaban versus warfarin in patients with non-valvular atrial fibrillation (AF) [1, 2]. In the letter, Dr Kawada highlights the consistency of our results with those from a recent report by Chan and colleagues comparing outcomes in patients with AF receiving dabigatran to those receiving warfarin using data from the Taiwan National Health Insurance Research Database [3]. The similarity in findings across diverse geographic regions should reassure both clinicians and patients about the effectiveness of dabigatran (and possibly other newer oral anticoagulants) in the prevention of stroke and systemic embolism in non-valvular AF.

Dr Kawada also mentions the previously reported association between use of selective serotonin reuptake inhibitors (SSRIs) and risk of intracranial bleeding, particularly among individuals taking oral anticoagulants [4]. Although we did not specifically adjust for SSRI or antidepressant use, our decision to use high-dimensional propensity score adjustment ensures that our analysis controlled for the most important measured confounders. If SSRIs, other antidepressants, or a diagnosis of depression confounded the associations being studied, these clinical covariates would have been incorporated into the calculation of high-dimensional propensity scores since our approach included both diagnostic codes from inpatient and outpatient claims and outpatient pharmacy claims, as has been recommended [5]. Future studies should explore whether SSRIs and other antidepressants interact with warfarin and non-vitamin K antagonists oral anticoagulants to modify the risk of bleeding in patients with non-valvular AF.

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