To the Editor:

We read, with keen interest, the report by Dezman et al. regarding the severity of bleeding and mortality in trauma patients taking Dabigatran (1). Stroke physicians frequently prescribe non-Vitamin K antagonist oral anticoagulants (NOAC) like Dabigatran for stroke prevention in the context of non-valvular atrial fibrillation (AF). Whilst the introduction of NOAC into clinical practice has been a major advance with reduction of monitoring requirement, there remains ongoing concern about the risk of bleeding and the absence of an antidote. The NOAC RCTs have uniformly reported clinically significant reductions in intracranial haemorrhage (ICH) risk, but not gastrointestinal haemorrhage (GIH) (2).

Whilst ICH & GIH are of primary concern, there is also significant concern about management of traumatic bleeding as reported here. This is, in our knowledge, the first report that attempts to address the issue of traumatic bleeding severity and outcome.

In our view, the key finding is the relative infrequency of traumatic bleeding in people taking Dabigatran (0.1% of the overall study group), much less prevalent than embolic stroke rates which are the most frequent cause of disability in this population. Also relevant to informed patient discussion is the fact that there is no relative increase in severity of bleeding (as measured by blood product transfusion rates) and mortality.

Moreover, the recent introduction of an antidote for Dabigatran certainly makes this agent preferable where actual risk of bleeding is high (as measured objectively e.g. HAS-BLED), especially where there is history of previous bleeding. The temptation to use “perceived” bleeding risk should be avoided.

Whilst the case control design constitutes significant risk of biases the author allude to, this study does provide reassurance to physicians prescribing Dabigatran, specifically in relation to traumatic bleeding. Other reports provide similar reassurance with regard to ICH outcomes in people taking Dabigatran (3), Rivaroxaban (4) and Apixaban (5).

The key issue not considered in this paper is that low-dose (110mg twice daily) and high-dose (150mg twice daily) Dabigatran were separately randomised arms in RE-LY and each dosing regime was associated with specific benefits (high dose ~ significantly lower risk of embolic stroke, with similar major bleeding rates to warfarin; low dose ~ lower risk of major bleeding, with similar rates of major embolism and embolic stroke to warfarin) (2). Use of the appropriate dose as per license is essential, also keeping in mind the outcome of interest to the individual patient. We urge researchers to include dose regime in future reports on Dabigatran, and consider separate analyses where feasible.

We thank the authors for addressing an important concern with the use of Dabigatran and believe that this report should provide reassurance to physicians who have ongoing concerns about bleeding complications with Dabigatran. Ongoing pharmacovigilance programs should add to the increasing evidence base for NOAC.

References


