20 May 2019

Apixaban (Eliquis), dabigatran etexilate (Pradaxa), edoxaban (Lixiana 🗸) and rivaroxaban

(Xarelto V) are not recommended in patients with antiphospholipid syndrome due to possible increased risk for recurrent thrombotic events

Dear Healthcare Professional,

Bayer AG, Daiichi Sankyo Europe GmbH, Boehringer Ingelheim International GmbH, Bristol-Myers Squibb/Pfizer EEIG, in agreement with the European Medicines Agency and the Medicines and Healthcare products Regulatory Agency (MHRA), would like to inform you of the following:

Summary

- In patients with a history of thrombosis diagnosed with antiphospholipid syndrome (APS), use of rivaroxaban has been associated with an increased risk of recurrent thrombotic events, compared with warfarin. Other direct-acting oral anticoagulants (DOACs, apixaban, edoxaban, and dabigatran etexilate) may be associated with a similarly increased risk of recurrent thrombotic events, compared to a vitamin K antagonist such as warfarin.
- DOACs are not recommended in patients with APS, particularly high-risk patients (those who test positive for all three antiphospholipid tests lupus anticoagulant, anticardiolipin antibodies, and anti-beta 2 glycoprotein I antibodies).
- Review whether continued treatment is appropriate for patients with APS currently receiving a DOAC for preventing thromboembolic events, in particular high-risk patients, and consider switching to a vitamin K antagonist.

Background on the safety concern

The level of evidence for increased risk of recurrent thrombotic events in patients diagnosed with APS differs among the marketed direct oral anticoagulants (DOACs). Currently, there is not enough evidence that any DOAC offers sufficient protection in patients with established APS, particularly in those at highest risk for thromboembolic events. The use of DOACs in these patients is not recommended.

Rivaroxaban: In an investigator sponsored randomised open-label multicentre study (TRAPS, (registered at www.clinicaltrials.gov as #NCT02157272; Blood. 2018 Sep 27;132 (13):1365-1371)) with blinded endpoint adjudication, rivaroxaban was compared to warfarin in patients with a history of thrombosis, diagnosed with APS and at high risk for thromboembolic events (persistently tested positive for all 3 antiphospholipid tests). The trial was terminated prematurely after the enrolment of 120 patients due to an excess of thromboembolic events among patients in the rivaroxaban arm.

Mean follow-up was 569 days. Fifty-nine patients were randomised to rivaroxaban 20 mg (15 mg for patients with creatinine clearance <50 mL/min) and 61 to warfarin (INR 2.0 - 3.0).

Thromboembolic events occurred in 12% of patients randomised to rivaroxaban (4 ischaemic stroke and 3 myocardial infarctions). No thromboembolic events were reported in patients randomised to warfarin. Major bleeding occurred in 4 patients (7%) of the rivaroxaban group and 2 patients (3%) of the warfarin group.

Apixaban, edoxaban and dabigatran etexilate: The available data for these products are more limited, as there are no completed clinical trials of these products in patients with APS. There is an ongoing investigator sponsored research study specifically designed for studying patients with APS on apixaban (ASTRO-APS - Apixaban for the Secondary Prevention of Thrombosis among Patients with Antiphospholipid Syndrome) from which the final results are not yet available.

Further information

Approved indications in adults for all DOACs include treatment and prevention of venous thromboembolism (VTE) and prevention of stroke and systemic embolism in patients with non-valvular atrial fibrillation with additional risk factor(s). Apixaban, dabigatran etexilate, and rivaroxaban are also approved for prevention of VTE in conjunction with hip or knee replacement surgery. Rivaroxaban is also approved, in addition to acetylsalicylic acid (aspirin), in patients with coronary artery disease or symptomatic peripheral artery disease at high risk of ischaemic events, and in addition to acetylsalicylic acid plus clopidogrel or ticlopidine, after an acute coronary syndrome event.

The Product Information for these products will be amended to include a new warning regarding patients with APS.

Call for reporting

Both rivaroxaban V and edoxaban V are subject to additional monitoring. This will allow quick

identification of new safety information.

Healthcare professionals are asked to report any suspected adverse reactions to the MHRA through the Yellow Card Scheme, website: <u>https://yellowcard.mhra.gov.uk</u> or search for MHRA Yellow Card in the Google Play or Apple App Store.

Alternatively, prepaid Yellow Cards for reporting are available by writing to FREEPOST YELLOW CARD (no other address details necessary); by emailing yellowcard@mhra.gov.uk; at the back of the British National Formulary (BNF); by telephoning the Commission on Human Medicines (CHM) free phone line: 0800-731-6789; or by downloading and printing a form from the Yellow Card website.

Adverse events may also be reported to the relevant company (see contact details below).

Company contact point

If you have any questions, or if you require any further information, please contact the medical information service of the relevant company as listed below.

Product	Company	Medical information contact details
Rivaroxaban	Bayer plc	Email: medical.information@bayer.co.uk
(Xarelto)		Telephone: 0118 206 3116
Edoxaban (Lixiana)	Daiichi Sankyo UK Ltd	Email: medinfo@daiichi-sankyo.co.uk
		Telephone: 0800 028 5122
Dabigatran etexilate	Boehringer Ingelheim	Email:
(Pradaxa)	International GmbH	medinfo.bra@boehringer-ingelheim.com
		Telephone: 01344 742579
Apixaban	Bristol-Myers Squibb & Pfizer –	Email: medical.information@bms.com
(Eliquis)	please contact BMS for	
	apixaban related questions	Telephone: 0800 731 1736

Annexes

Not applicable.

Yours sincerely,

Dr Berkeley Phillips Medical Director Pfizer Ltd

Dr Tim Patel Medical Director Daiichi Sankyo UK Ltd

Dr Juliet Roberts Medical Director Boehringer Ingelheim Ltd **Dr Faisal Mehmud** Medical Director Bristol-Myers Squibb Ltd

Dr Amit Aggarwal Director of Medical Affairs – General Medicine Bayer plc