

Non-vitamin K antagonist oral anticoagulants (NOACs)

Apixaban (Eliquis®), Dabigatran (Pradaxa®), Edoxaban (Lixiana®▼), Rivaroxaban (Xarelto®▼)

Venous thromboembolism: treatment and prevention of recurrence

Considerations for Commissioners:

It was the opinion of the committee that Commissioners may wish to consider the following points:

- ➤ Ensure that local trusts have robust treatment pathways/procedures for timely diagnosis and treatment of venous thromboembolism (VTE: deep vein thrombosis [DVT] or pulmonary embolism [PE]) as described in the NICE clinical guideline on venous thromboembolic diseases (CG144; 2015).
- > Agree mechanisms for transfer of care (e.g. RiCAD) from secondary to primary care, with the duration of preventative treatment agreed and discussed with the patient at the time of transfer.

References

- Sterne JA et al. Oral anticoagulants for primary prevention, treatment and secondary prevention of venous thromboembolic disease, and for prevention of stroke in atrial fibrillation: systematic review, network meta-analysis and cost-effectiveness analysis. *Health Technol Assess* 2017; 21(9):1-386.
- Schulman S et al. Extended Use of Dabigatran, Warfarin, or Placebo in Venous Thromboembolism. N Engl J Med 2013; 368(8):709-718.
- Weitz JI et al. Rivaroxaban or Aspirin for Extended Treatment of Venous Thromboembolism. N Engl J Med 2017; 376(13):1211-1222.
- Kakkos SK et al. Editor's Choice efficacy and safety of the new oral anticoagulants dabigatran, rivaroxaban, apixaban, and edoxaban in the treatment and secondary prevention of VTE: a systematic review and metaanalysis of phase III trials. Eur J Vasc Endovasc Surg 2014; 48(5):565-575.
- Cohen AT et al. Comparison of the Novel Oral Anticoagulants Apixaban, Dabigatran, Edoxaban, and Rivaroxaban in the Initial and Long-Term Treatment and Prevention of VTE: Systematic Review and Network Meta-Analysis. *PLoS One* 2015; 10(12):e0144856.
- 6. Caldeira D et al. Systematic review with meta-analysis: the risk of major gastrointestinal bleeding with non-vitamin K antagonist oral anticoagulants. *Aliment Pharmacol Ther* 2015; 42(11-12):1239-1249.
- Tornyos A et al. Risk of Myocardial Infarction in Patients with Long-Term Non-Vitamin K Antagonist Oral Anticoagulant Treatment. *Prog Cardiovasc Dis* 2016; 58(5):483-494.
- Apixaban for the treatment and secondary prevention of DVT and/or PE (TA341). NICE 2012
- Dabigatran etexilate for the treatment and secondary prevention of DVT and/or PE (TA327). NICE 2014
- Edoxaban for treating and for preventing DVT and PE (TA354). NICE 2015
- Rivaroxaban for the treatment of deep vein thrombosis and prevention of recurrent deep vein thrombosis and pulmonary embolism (TA261). NICE 2012

- Rivaroxaban for treating pulmonary embolism and preventing recurrent venous thromboembolism (TA287). NICE 2013
- Praxbind 2.5 g/50 mL solution for injection/infusion. EMC 2017
- 14. Bayer plc. Xarelto 20mg film-coated tablets. EMC 2016
- Bristol-Myers Squibb-Pfizer. Eliquis 5 mg film-coated tablets. EMC 2017
- Daiichi Sankyo UK Limited. Lixiana 60mg Film-Coated Tablets. EMC 2016
- Boehringer Ingelheim Limited. Pradaxa 150 mg hard capsules. EMC 2017
- Robertson L et al. Oral direct thrombin inhibitors or oral factor Xa inhibitors for the treatment of PE. Cochrane Database Syst Rev 2015;(12):CD010957.
- Robertson L et al. Oral direct thrombin inhibitors or oral factor Xa inhibitors for the treatment of deep vein thrombosis. Cochrane Database Syst Rev 2015;(6):CD010956.
- Sindet-Pedersen C et al. Safety and efficacy of direct oral anticoagulants compared to warfarin for extended treatment of VTE -a systematic review and metaanalysis. *Thromb Res* 2015; 136(4):732-738.
- Almutairi AR et al. Effectiveness and Safety of Nonvitamin K Antagonist Oral Anticoagulants for Atrial Fibrillation and VTE: A Systematic Review and Metaanalyses. Clin Ther 2017; 39(7):1456-1478.
- 22. van EN et al. Direct oral anticoagulants compared with vitamin K antagonists for acute VTE: evidence from phase 3 trials. *Blood* 2014; 124(12):1968-1975.
- 23. Gomez-Outes A et al. Direct oral anticoagulants in the treatment of VTE, with a focus on patients with pulmonary embolism: an evidence-based review. *Vasc Health Risk Manag* 2014; 10:627-639.
- Loffredo L et al. Sex related differences in patients with acute VTE treated with new oral anticoagulants. A metaanalysis of the interventional trials. *Int J Cardiol* 2016; 212:255-258.
- 25. Bova C et al. Extended anticoagulation and mortality in venous thromboembolism. A meta-analysis of six randomized trials. Thrombosis Research 2016

WARNING: This sheet should be read in conjunction with the Summaries of Product Characteristics
This guidance is based upon the published information available in English at the time the drug was considered. It remains open to review in the
event of significant new evidence emerging.

Keele University Centre for Medicines Optimisation

School of Pharmacy, Keele University, Keele, Staffordshire ST5 5BG Tel: 01782 733831 Email: mtrac@keele.ac.uk Web: www.mtrac.co.uk

©Midlands Therapeutics Review & Advisory Committee



NICE has accredited the process used by the Midlands Therapeutics Review and Advisory Committee to produce Commissioning support summaries. Accreditation is valid for 5 years from 7 March 2017. More information on accreditation can be viewed at www.evidence.nhs.uk