



Indian Health Service
IHS National Pharmacy and Therapeutics Committee
Dabigatran Etexilate (Pradaxa®)
September 2011



Background:

The IHS National Pharmacy and Therapeutics Committee (NPTC) provided a clinical review of dabigatran (Pradaxa®) at the September 2011 meeting. This presentation included a literature review of dabigatran as compared to warfarin for the prevention of stroke and systemic embolism in patients with atrial fibrillation. Warfarin is currently on the IHS National Core Formulary (NCF).¹ While the NPTC felt dabigatran has some advantages for use in appropriate patients, it did not add dabigatran to the IHS NCF. However, because of these advantages, it was felt a 1-pager should be developed to discuss its place in therapy.

Discussion:

Dabigatran is a direct thrombin inhibitor indicated to reduce the risk of stroke and systemic embolism in patients with non-valvular atrial fibrillation. It is available in 75mg and 150mg capsules and is dosed twice daily. The 75mg dose is used in patients with a creatinine clearance between 15-30 mL/min.²

The majority of the clinical information and outcomes on dabigatran in patients with atrial fibrillation presented were courtesy of the RE-LY study (The Randomized Evaluation of Long-Term Anticoagulation Therapy) which included 18,113 patients in 44 countries.³ The study demonstrated that dabigatran reduced the primary efficacy endpoint of stroke and systemic embolism by a statistically significant 34 percent while the primary safety outcome (bleeding) and secondary outcomes of all-cause mortality showed no significant differences versus patients receiving warfarin. Practical considerations and limitations based upon the pharmaceutical characteristics of dabigatran were also discussed including the increased incidence of gastrointestinal bleeding, compliance with twice daily administration and lack of clinical outcomes with the renal-impaired dabigatran dose. Cost-effectiveness analyses were presented as well as a post-hoc analysis describing the disparity of dabigatran's clinical impact when differences in warfarin time in therapeutic range were stratified.⁴⁻⁶ It was noted that stable patients with well-managed warfarin therapy (i.e., INR time in range of >66%) were associated with similar rates of stroke and similar or less major bleeding compared to dabigatran.⁵ Based on a composite of the aforementioned literature, dabigatran's primary advantages occur in patients with increasing risk for stroke and intracranial bleeding as well as when warfarin management is poor.³⁻⁶ Two other non-approved oral anticoagulants, rivaroxaban and apixaban, were discussed along with their accompanying clinical studies in patients with atrial fibrillation and the outcomes of both trials were compared with the RE-LY study outcomes.^{7,8}

Findings:

Based upon the overall review of the available data, the NPTC felt that dabigatran did not meet the usual criteria for inclusion to the NCF as it is currently not considered standard of care and its use may be limited to a specific patient population. However, dabigatran may be clinically warranted for select patients seen in IHS facilities.

If you have any questions regarding this document, please contact the NPTC at nptc1@ihs.gov.

References:

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