

NICE TA 275: Apixaban for the prevention of stroke and systemic embolism in people with non-valvular atrial fibrillation

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| <p>1</p> | <p>Summary of NICE TA 275</p> <p>Atrial fibrillation (AF) is the most common cardiac arrhythmia (irregular heart beat). It occurs when the electrical impulses controlling the heart rhythm become disorganised, so that the heart beats irregularly and, occasionally, too fast and so cannot efficiently pump blood around the body. People with AF are at higher risk of developing blood clots and subsequent stroke; however the risk of stroke can be substantially reduced by appropriate use of antithrombotic therapy such as warfarin.</p> <p>Apixaban, which received its license for this indication in November 2012, is an orally administered anticoagulant that helps to prevent blood from clotting. It does this by stopping a substance called Factor Xa from working. Factor Xa is necessary in the formation of thrombin and fibrin, the key components in blood clot formation. Apixaban has a UK marketing authorisation for the prevention of stroke and systemic embolism in patients with non-valvular atrial fibrillation and one or more risk factors such as prior stroke or transient ischaemic attack, age 75 years or older, hypertension, diabetes mellitus, or symptomatic heart failure (New York Heart Association [NYHA] class 2 or higher)ⁱⁱ.</p> <p>TA 275 should be read in connection with TA 249 – Dabigatran and TA 256 – Rivaroxaban.</p> |
| <p>2</p> | <p>Number of people in Northern Ireland expected to take up service/therapy (new cases per year)</p> <p>Not known. The decision to start treatment with apixaban should be made after an informed discussion between the clinician and the person about the risks and benefits of apixaban compared with warfarin, dabigatran etexilate and rivaroxaban. For people who are taking warfarin, the potential risks and benefits of switching to apixaban should be considered in light of their level of international normalised ratio (INR) control.</p> <p>The prevalence of AF from the 2012/13 QOF return is 27,760. It is not known how many of these patients currently are on oral anticoagulant.</p> <p>NICE has produced a costing statement for TA 275 based on the costing templates developed for dabigatran and rivaroxaban TAs.</p> <p>The NICE costing statement estimated that for the general population the number of people with AF who are eligible for anticoagulation is 800 in a population of 100,000.</p> |

| <p>3</p> | <p>Costs</p> <p>Currently, the standard treatment for people with nonvalvular atrial fibrillation who need anticoagulation is warfarin, or the newer oral anticoagulants rivaroxaban or dabigatran. Apixaban has a comparable cost to the newer oral anticoagulants and is more expensive than warfarin. Costs of this new drug are dependant on the uptake of this new drug.</p> <p>Most people currently receiving an anticoagulant take warfarin. However, according to clinical specialists some people who are eligible for anticoagulation receive the antiplatelet agent aspirin inappropriately because of clinical reluctance to prescribe warfarin.</p> <p>NICE concluded that apixaban has been shown to be cost effective compared to warfarin, the most plausible ICER being less than £20,000 per QALY gained for patients with non valvular atrial fibrillation who have one or more risk factors for stroke such as diabetes mellitus etc. (see section 1)</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <p>3.1</p> | <p>Cost per patient per annum</p> <p>The estimate annual cost is £803 (compared to £770 for rivaroxaban, £840 for dabigatran and £240 for warfarin)</p> <table border="1"> <thead> <tr> <th>Estimated annual prescribing costs of apixaban and comparators</th> <th>Warfarin</th> <th>Dabigatran</th> <th>Rivaroxaban</th> <th>Apixaban</th> </tr> </thead> <tbody> <tr> <td>Drug</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Estimated daily dose</td> <td>4.5 mg</td> <td>220–300 mg</td> <td>15–20 mg</td> <td>5 mg-10mg</td> </tr> <tr> <td>Unit cost</td> <td>£0.12a</td> <td>£2.20a</td> <td>£2.10b</td> <td>£2.20c</td> </tr> <tr> <td>Frequency</td> <td>Daily</td> <td>Twice daily</td> <td>Daily</td> <td>Twice daily</td> </tr> <tr> <td>Estimated annual drug cost^d</td> <td>£45a</td> <td>£800a</td> <td>£770b</td> <td>£800c</td> </tr> <tr> <td>Method of administration</td> <td>Oral tablet</td> <td>Oral tablet</td> <td>Oral tablet</td> <td>Oral tablet</td> </tr> <tr> <td>Estimated administration/testing costs</td> <td>£240a</td> <td>£40a</td> <td>-</td> <td>£3e</td> </tr> <tr> <td>Estimated annual prescribing and administration/testing costs</td> <td>£290</td> <td>£840</td> <td>£770</td> <td>£803</td> </tr> </tbody> </table> <p>^a Figures taken from the costing template of NICE technology appraisal guidance 249. ^b Figures taken from the costing template of NICE technology appraisal guidance 256. ^c Figures taken from the guidance document for this appraisal.. ^d List price before discount. ^e Liver function test to be performed before starting treatment as per the summary of product characteristics. Cost estimated from 'Provider to provider Services 2012–2013' tariff.</p> | Estimated annual prescribing costs of apixaban and comparators | Warfarin | Dabigatran | Rivaroxaban | Apixaban | Drug | | | | | Estimated daily dose | 4.5 mg | 220–300 mg | 15–20 mg | 5 mg-10mg | Unit cost | £0.12a | £2.20a | £2.10b | £2.20c | Frequency | Daily | Twice daily | Daily | Twice daily | Estimated annual drug cost^d | £45a | £800a | £770b | £800c | Method of administration | Oral tablet | Oral tablet | Oral tablet | Oral tablet | Estimated administration/testing costs | £240a | £40a | - | £3e | Estimated annual prescribing and administration/testing costs | £290 | £840 | £770 | £803 |
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| <p>3.2</p> | <p>In year cost per patient per annum (for new and prevalent cases)</p> <p>The NICE costing statement suggests that no additional net cost is associated with this treatment further to the costs already included in the Service Notifications for TA 249 Dabigatran (£736K) and TA 256 Rivaroxaban (£340k) as this is now a third option to replace warfarin and is similar in cost to the dabigatran and rivaroxaban.</p> <p>In both Service Notifications for TA 249 (Dabigatran) and TA 256 (Rivaroxaban), significant additional drug costs were identified when applying the NICE estimates for uptake of £4.7m (Dabigatran) and £4.3m (Rivaroxaban) respectively. It is anticipated that the implementation of TA 275 will not lead to increased costs over those already identified given that this drug will be indicated in the same population that will use either Dabigatran or Rivaroxaban.</p> <p>If uptake assumptions vary from the NICE costing statement, additional costs may be incurred.</p> |
| <p>3.3</p> | <p>Cost savings and how these will be secured</p> <p>Cost savings will be achieved through the reduction in strokes in the target population of people with AF on anticoagulants. However, with an increasingly aging population with stroke being more prevalent in the older age groups it is unlikely that any cash releasing savings will materialise.</p> <p>Costs associated with the current warfarin services will likely remain fixed because of the need to maintain this existing infrastructure for long standing warfarin patients.</p> |
| <p>3.4</p> | <p>Recurrent overall cost</p> <p>The NICE costing statement suggests that no additional cost is associated with this treatment further to the net costs already included in the Service Notifications for TA 249 Dabigatran (£736K) and TA 256 Rivaroxaban (£340k) as this is now a third option to replace warfarin and is similar in cost to the dabigatran and rivaroxaban.</p> <p>If uptake assumptions vary from the NICE costing statement, additional costs may be incurred.</p> |
| <p>4</p> | <p>Expected implementation period</p> <p>Immediate</p> |
| <p>5</p> | <p>Commissioning arrangements</p> <p>There will be a managed process to communicate the risks and benefits of apixaban to GPs and secondary care primarily through:</p> <ul style="list-style-type: none"> • ICP Clinical Leads • Practice-level reports providing comparisons of prescribing rates with peers, |

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| | <p>and trends</p> <ul style="list-style-type: none"> • Medicines Management advisers routine visits to practices & encouraging practices to use the NICE TA audit where appropriate. • GP educational events <p>Secondary care clinicians often initiate treatment while maintenance treatment is overseen by primary care. Common protocols (including how to manage associated bleeding) need to be developed between primary and secondary care at Trust level. Secondary care should ensure GPs are only asked to prescribe this drug for this indication in line with the recommendations in NICE i.e. for the prevention of stroke and systemic embolism in patients with non-valvular atrial fibrillation and one or more risk factors including:</p> <ul style="list-style-type: none"> • prior stroke or transient ischaemic attack • age 75 years or older • hypertension • diabetes mellitus • symptomatic heart failure (New York Heart Association [NYHA] class 2 or higher)ⁱⁱ. <p>NICE concluded that the available data is not robust enough to differentiate between the cost effectiveness of apixaban, rivaroxaban and dabigatran. However, it did note that apixaban was more clinically effective than warfarin for the primary efficacy outcome of reducing stroke and systemic embolism, that it resulted in fewer bleeds than warfarin and that it reduced the risk of intracranial bleeding for people with AF when compared with warfarin.</p> <p>Like rivaroxaban and dabigatran, there is still limited long term safety and efficacy data for apixaban (currently being investigated). There is no antidote or established treatments to stop active bleeding with these agents, although local protocols are being discussed.</p> |
| 6 | <p>Monitoring arrangements</p> <p>The prescribing trends for this budget will be monitored closely by:</p> <ul style="list-style-type: none"> ▪ Practices and GPs ▪ The Medicines Management Commissioning team (cost of drugs) ▪ ICP and LCG Leads (pathways) ▪ Medicines management advisers |
| 7 | <p>DHSSPS Legislative/Policy Caveats</p> <p>This advice does not override or replace the individual responsibility of health professionals to make appropriate decisions in the circumstances of their individual patients, in consultation with the patient and/or guardian or carer. This would, for</p> |

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| | example, include situations where individual patients have other conditions or complications that need to be taken into account in determining whether the NICE guidance is fully appropriate in their case. |
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