Economic evaluation of Vernakalant (Brinavess®) for haemodynamically stable, symptomatic patients with atrial fibrillation of less than 48 hours duration.

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Summary

1. The NCPE received a rapid review submission in relation to the product vernakalant (Brinavess®) from the company (MSD) on the 26th October 2010. Following the rapid review there were issues in relation to the cost-effectiveness of the product and a formal pharmacoeconomic assessment was advised. The process was initiated on the 16th December 2010.

2. The submitted cost-effectiveness analysis was performed for a subset of the licensed patient population i.e. haemodynamically stable, symptomatic patients with atrial fibrillation (AF) of less than 48 hours duration, where cardioversion with existing intravenous pharmacological agents is not considered appropriate, or where rapid cardioversion is considered advantageous from a patient and/or health service perspective.

3. The economic model was populated with a scenario which allowed for the estimation of cost offsets associated with the use of vernakalant versus day case direct current cardioversion (DCCV) for the treatment of an atrial fibrillation episode of less than 48 hours duration. The base case assumed that all patients receiving vernakalant are discharged from the Accident and Emergency Department whilst those receiving DCCV are managed as a day case.

4. The main outcome measures from the analysis included the mean total cost per patient and the proportion of patients who failed to cardiovert successfully. The cardioversion rate and occurrence of relapse from vernakalant was taken from the AVRO trial. The perspective of the analysis was that of the Health Service Executive (HSE). The time horizon included the initial atrial fibrillation episode and the management of one relapse episode where that relapse occurred within 6 weeks of the initial episode.

5. Initial management with vernakalant resulted in lower total management costs per patient as compared with DCCV i.e. €1,196 versus €1,212. Fewer patients failed to convert to normal sinus rhythm following vernakalant therapy i.e. 8.4% versus 15.8%.

6. We are happy to recommend reimbursement of vernakalant (Brinavess®) for the treatment of haemodynamically stable, symptomatic patients with atrial fibrillation of less than 48 hours duration in the hospital setting.