Atomoxetine for the Treatment of Adults with Attention Deficit Hyperactivity Disorder: A Cost-Utility Analysis in Spain

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Abstract

Background:
Attention-deficit hyperactivity disorder (ADHD) frequently persists into adulthood and leads to a significant burden of illness. Many adults with ADHD suffer from comorbid conditions such as substance and alcohol use disorders and anxiety. Atomoxetine is the only drug therapy approved in Spain for the treatment of adult ADHD. This study estimates the cost-utility of atomoxetine compared with no treatment in adults with ADHD in Spain and in two specific subgroups: patients with comorbid anxiety or comorbid alcohol abuse.

Method:
A simple, state-transition Markov model with three health-states (treatment initiation, response and no-response) was developed. The model estimated the incremental cost per quality-adjusted life year (QALY). Treatment effectiveness and discontinuation rates were estimated from nine atomoxetine clinical trials. Utilities were estimated from a vignette study. Costs and outcomes were estimated over a one-year period from the perspective of the Spanish National Healthcare System.

Results:
The incremental cost per QALY gained with atomoxetine versus no treatment was €23,645 in the general ADHD population, €20,860 in patients with comorbid anxiety, and €24,675 in the comorbid alcohol abuse population. These values were below the willingness-to-pay threshold of €30,000 per QALY considered acceptable in Spain. The model was most sensitive to changes in the utility value of patients in the no-response health state. With the exception of some of the utility values, a positive net monetary benefit value was maintained following variations in all model parameters.

Conclusion:
Atomoxetine represents a cost-effective option compared with no treatment in adults with ADHD in Spain, including those with comorbid anxiety and alcohol abuse.