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Migraine – acute therapy: Pharmacological and Device based

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Cost-effectiveness analysis of erenumab vs onabotulinumtoxinA for chronic migraine in Spain

Patricia Pozo-Rosich*^{1,2}, José Luis Poveda³, Sergio Sánchez⁴, Carlos Crespo⁴, María Martínez⁵, Pablo Irimia⁶

¹Headache Unit, Neurology Department, Vall d'Hebron University Hospital; Headache, ²Research Group, VHIR, Universitat Autònoma de Barcelona, Barcelona, ³Pharmacy Department, Hospital Universitari i Politècnic La Fe, Valencia, ⁴Axentiva, ⁵Novartis, Barcelona, ⁶Department of Neurology, Headache unit, Clínica Universidad de Navarra, Pamplona, Spain

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Introduction: Migraine is a common, recurrent headache disorder that can lead to greater disability and cost.

Objectives: To compare effectiveness and cost of erenumab 140 mg vs onabotulinumtoxinA for the prophylaxis of chronic migraine after at least one prior preventive treatment failure in Spain.

Methods: We developed a cost-effectiveness analysis using a 10-year Markov model based on an indirect comparison from the societal perspective. Health states were based on responder, defined as having a minimum 50% reduction in the number of monthly migraine days (MMDs). Patients included in the model were 80.5% women with a mean age of 41 years suffering 18.24 (SE 0.3) MMDs. We estimated quality-adjusted life years (QALY) and MMD over a 10-year time horizon. Incremental cost-effectiveness ratios based on MMD avoided and QALYs gained were performed. Resource use and costs (2022) were obtained from official data sources and were validated by an expert panel. Indirect cost was estimated with MIDAS Questionnaire. Sensitivity analysis was performed to validate the robustness.

Results: Absenteeism and presenteeism cost were 7,718.63 € and 9,117.48 € for erenumab, and 8,300.34€ and 9,761.17€ for onabotulinumtoxinA, respectively. Erenumab showed a total societal cost per patient of 3,497€ vs onabotulinumtoxinA. Patients treated with erenumab showed improved mean MMDs over time, down to 12.35 MMDs at 10 years, while onabotulinumtoxinA patients reduced to 13.21. Given the total reduction of migraine days with erenumab, the cost per MMD avoided with erenumab was 32€. QALYs were 5.46 for erenumab and 5.30 for onabotulinumtoxinA. Incremental cost per QALY gained with erenumab vs onabotulinumtoxinA was 23,652€, below the Spanish efficiency threshold. Sensitivity analysis with indirect cost using WPAI, showed an incremental cost per QALY gained of 23,378€.

Conclusion: Erenumab (Aimovig®) could be a cost-effective alternative vs onabotulinumtoxinA for chronic migraine from the societal perspective in Spain.

Disclosure of Interest: P. Pozo-Rosich Conflict with: Consultant paid by Novartis, J. L. Poveda Conflict with: Consultant paid by Novartis, S. Sánchez Conflict with: Consultant paid by Novartis, C. Crespo Conflict with: Consultant paid by Novartis, M. Martínez Conflict with: Maria report that she are currently employees at Novartis Spain. Novartis is the owner of erenumab., P. Irimia Conflict with: Consultant paid by Novartis

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