Pathway CH 1 study

In the Pathway CH-1 study, on-demand stimulation of the sphenopalatine ganglion stimulation (SPG) by means of an implantable neurostimulation system was proven to be a safe and effective therapy for the treatment of chronic cluster headache. O

Clinical data from the Pathway CH-1 study were used as input for a model-based projection of the cost-effectiveness of SPG stimulation through 5 years. Medical management as the comparator treatment was modeled on the basis of clinical events observed during the baseline period of CH-1. The costs of treatment were derived from a previously published cluster headache costing study and 2014 medication, neurostimulator, and procedure costs. We computed the 5-year incremental cost-effectiveness ratio (ICER) in euros per quality-adjusted life year (QALY), with costs and effects discounted at 3 % per year.

SPG stimulation was projected to add 0.325 QALYs over the study period, while adding €889 in cost, resulting in a 5-year ICER of €2,736 per QALY gained. Longer follow-up periods, higher baseline attack frequency, and higher utilization of attack-aborting medications led to overall cost savings. SPG stimulation was found either cost-effective or cost-saving across all scenarios investigated in sensitivity analyses.

This model-based analysis suggests that SPG stimulation for the treatment of chronic cluster headache, under the assumption of sustained therapy effectiveness, leads to meaningful gains in health-related quality of life and is a cost-effective treatment strategy in the German healthcare system [1)].

1)
Pietzsch JB, Garner A, Gaul C, May A. Cost-effectiveness of stimulation of the sphenopalatine ganglion (SPG) for the treatment of chronic cluster headache: a model-based analysis based on the Pathway CH-1 study. J Headache Pain. 2015;16:530. doi: 10.1186/s10194-015-0530-8. Epub 2015 May 21. PubMed PMID: 26002638; PubMed Central PMCID: PMC4441877.