FRENCH GATEKEEPING COST-EFFECTIVENESS IMPACT ON CHRONIC PATIENTS TREATED WITH INHALED CORTICOSTEROIDS, IN REAL LIFE
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OBJECTIVES: To estimate the cost-effectiveness impact of the French gatekeeping system on chronic patient treated with inhaled corticosteroids (ICS). The study question is: Can an incentive economic system as the French gatekeeping (“coordinated care path”-CCP, August 2004 French Health Insurance reform) have a significant cost-effectiveness impact, from the French Health insurance perspective. METHODS: A retrospective Health insurance database comparative study was performed. A total of 290 patients in each group were included (e.g. the totality of the non-gatekeeping group available in the database), men and women, from 16 to 50 years old, treated with ICS over a minima period of three consecutive months. The propensity score (PS) was used in order to reduce selection bias from 12 covariates and a semi-Markovian decision model was performed for comparing costs and effectiveness results between treated group and baseline group, based on these matched individuals. RESULTS: The semi-Markovian model, based on these groups matched, estimates on one-year horizon a 10,000 bootstrap incremental cost-effectiveness ratio (ICER) equal to €6,13,979 (CI95% [€3,197, €93,960]) per QALY gained. This result is a relevant decision criterion which is lower than the thresholds (1 to 3 GDP per capita) recommended by the World Health Organization ($200023,927 to $200071,781 for the European Economic Community, region A). CONCLUSIONS: This retrospective study on annual observational data has shown that the French gatekeeping system is cost-effective in the management of patients with chronic respiratory disorder, from the health care system perspective.

IN REAL LIFE
PATIENTS TREATED WITH INHALED CORTICOSTEROIDS,

Cost-effectiveness of Grazax in the Paediatric Population for the Treatment of Grass Pollen Induced Rhinoconjunctivitis in Germany
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OBJECTIVES: To evaluate the cost-effectiveness of a grass allergen immunotherapy tablet, Grazax (ALK-Abelló AS) in combination with symptomatic medications compared to the standard care of symptomatic medicines alone for the treatment of grass pollen induced rhinoconjunctivitis. The analysis focuses on children, either with or without co-existing asthma, for the German setting. METHODS: The two treatment options were evaluated in terms of costs and health outcomes using a decision tree approach. The analysis was undertaken from the payer’s perspective, with only direct costs included in the base case. The model followed a cohort of 1000 hypothetical children over nine years in the reference case. Continuous use of Grazax was modelled, with the effects of treatment captured in terms of symptom management, reduced need for symptomatic medications and QALYs. Data inputs were drawn from published studies, databases and published clinical trials. RESULTS: The use of Grazax plus symptomatic medications compared to standard care showed an improvement in patient outcomes, 6.92 QALYs as opposed to 6.82 QALYs over the nine-year time horizon. The total cost per QALY gained with Grazax was €4117 compared to €1,502 for standard care. The resulting incremental cost per QALY is €25,900. The QALY gains are a result of increased quality of life related to effective symptom management and the reduction in allergic asthma development. Sensitivity analysis carried out around key parameters shows that the results estimated by the model remain robust. CONCLUSIONS: The analysis found Grazax treatment to have an incremental cost per QALY which falls below commonly accepted willingness to pay thresholds. Therefore, Grazax is a cost-effective option for the treatment of grass pollen induced rhinoconjunctivitis for children in Germany.

The Cost-Effectiveness Analysis of Varenicline for Smoking Cessation in Poland
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OBJECTIVES: The aim of the analysis was to estimate the costs and effectiveness of varenicline versus existing smoking cessation strategies in Poland. METHODS: A Markov model, the Benefits of Smoking Cessation on Outcomes (BENESCO) constructed in MS Excel® was used in the analysis. The smoking cessation strategies were varenicline, bupropion, nicotine replacement therapy (NRT), unaided cessation and placebo. The target population consisted of adult smokers and the time horizon in the model was lifelong. The analysis was performed from both payers’ perspective (National Health Fund and patient). The costs and benefits were discounted at 5% and 3.3% annual rate respectively. The utilities for the included smoking related disease were sourced from the published literature. The quality adjusted life-years (QALY), life years gained (LYG), additional smoking cessation case and additional avoidance of chronic obstructive lung disease (COPD) were used to estimate effectiveness of treatment strategies. A probabilistic and univariate sensitivity analysis was performed. RESULTS: Costs of gaining one additional QALY using varenicline versus bupropion, NRT, unaided cessation or placebo was 12,360 PLN; 8,673 PLN; 12,469 PLN and 19,961 PLN. Cost of one additional smoking cessation case using varenicline versus existing smoking cessation strategies was 6,260 PLN to 10,247 PLN and costs of one avoidance of COPD case was 27 PLN to 62 PLN. The semi-Markovian model, based on these groups matched, estimates on one-year observational data has shown that the coordinated care pathway strategy is cost-effective in the management of chronic patients treated with inhaled corticosteroids, from the French Health insurance perspective.