

most important cost drivers in COPD. The purpose of this analysis was to assess the cost-effectiveness of tiotropium, a once daily inhaled anticholinergic. **METHODS:** A cost-effectiveness analysis has been performed, defining effectiveness as each exacerbation avoided. Effectiveness data of tiotropium and comparator have been obtained from a one-year clinical trial comparing tiotropium plus standard treatment (short-acting beta-adrenergic and/or inhaled/oral corticoids) with placebo plus standard treatment (defined as above), which showed that the group receiving tiotropium had less exacerbations per year (1.57 vs. 2.41; $p < 0.01$).¹ Health care resources utilization has been taken from the same clinical trial, a systematic review of the literature, and a local expert panel. The analysis has only included direct medical costs from the perspective of the Spanish National Health System. Drug costs were taken from an official source and other costs from a Spanish health care cost database, both dated 2005. The time horizon selected was one year, the follow-up period of the aforementioned clinical trial. **RESULTS:** Total costs per patient in the tiotropium group was €1388 and in the placebo group €1119. Hospitalisation costs accounted for 44% and 84% in the tiotropium and placebo group, respectively. The incremental cost-effectiveness ratio was €320 to prevent one exacerbation in a COPD patient when using tiotropium instead of placebo. **CONCLUSIONS:** The use of tiotropium in addition to the standard treatment as defined in the clinical trial from which effectiveness data were derived is a cost-effective measure in the management of patients with COPD in Spain. IMISTRAL study—Eur Resp J 2004;24(Suppl. 48):S513.

PRS6

ECONOMIC EVALUATION OF TIOTROPIUM AND SALMETEROL IN THE TREATMENT OF COPD IN GREECE

Maniadaakis N¹, Tzanakis N¹, Geitona M², Fragoulakis V³, Hatzikou M⁴, Siafakas N¹

¹University Hospital of Heraklion, Crete, Greece; ²University of Thessaly, Dionisos, Greece; ³Foundation for Economic and Industrial Research, Athens, Greece; ⁴Boehringer Ingelheim Hellas, Elliniko, Greece

OBJECTIVE: To estimate the cost-effectiveness of Tiotropium compared with Salmeterol in Greece from the perspective of National Health System. **METHODS:** A Markov model was structured around disease states and exacerbations based on patient-level data derived from clinical trials comparing tiotropium (18ig qd) with Salmeterol (50ig bid) [1]. At the start of the model simulation, 20% of the patients were assumed to have moderate COPD, 50% severe and 30% very severe COPD according to the international GOLD classification. During each Markov cycle patients had a certain probability to experience a severe or non-severe exacerbation. An exacerbation was clinically defined as a complex of respiratory symptoms. Costs of exacerbations were divided into hospitalization and other costs. Total costs comprise of the costs for exacerbations and maintenance therapy. All costs are expressed in 2004 Euro. The time horizon of the analysis was one year. **RESULTS:** The mean number of exacerbations per patient in one year was 0.92 in the tiotropium arm, and 1.1 in the salmeterol arm, resulting in 0.18 exacerbations avoided per patient and year when using tiotropium instead of salmeterol. The total costs per patient in one year were €1.324 in the tiotropium arm, and €1.239 in the salmeterol arm, resulting in a cost difference of €85. The higher acquisition costs for tiotropium were almost offset by savings in hospitalisation costs. The incremental cost per exacerbation avoided was €472. **CONCLUSION:** Tiotropium appears to be a cost-effective treatment for the Greek health care system with acceptable costs per exacerbation avoided. [1] Oostenbrink J,

Rutten-van Molken M, Monz B, FitzGerald J. Probabilistic Markov model to assess the cost-effectiveness of bronchodilator therapy in COPD patients in different countries. Value Health 2005;8:32–46.

PRS7

COST-EFFECTIVENESS OF FENSPIRIDE IN ADULTS WITH CHRONIC BRONCHITIS EXACERBATIONS IN POLAND

Pirozynski M¹, Bartminski W², Czech M², Faluta T², Pachocki R²

¹Medical Center for Postgraduate Education, Warsaw, Poland; ²Servier Poland, Warsaw, Poland

OBJECTIVES: To evaluate short term cost-effectiveness of fenspiride therapy in patients with chronic bronchitis exacerbations in Poland. **METHODS:** A cost-effectiveness analysis was performed based on the results of a randomized controlled clinical trial comparing fenspiride and placebo in the concomitant treatment of chronic bronchitis. The study population ($n = 183$ age 57 ± 9) was treated with fenspiride 80 mg or placebo twice daily for 6 months. The number and duration of acute exacerbations of chronic bronchitis (AECB) defined according to the American Thoracic Society were the main efficacy criteria. Cost analysis was performed from the societal perspective. Costs of medical consultations and diagnostic tests were based on the Polish National Health Fund rates index. Indirect costs were calculated using human capital approach. **RESULTS:** Number and duration (days) of AECB over 6 months were lower in the fenspiride group compared to the placebo group, on average 0.56 vs. 1.0 and 3.21 vs. 6.54, respectively. The number needed to treat (NNT) to avoid an AECB episode was 2.27 over 6 months. In the population of patients with exacerbations, 32% of fenspiride group and 60.5% of placebo group experienced more than one AECB episode. In this population the NNT to avoid an AECB episode was 1.85 over 6 months. Taking only direct costs into consideration, the incremental cost-effectiveness ratio of fenspiride was €19.61 for one AECB episode. Indirect costs equaled €43.79 per patient per one day of AECB. In the fenspiride group indirect costs constituted 61% and in the placebo group 82% of the total costs. Including direct and indirect costs, fenspiride concomitant treatment is a cost-saving alternative. **CONCLUSION:** In Poland, concomitant treatment of chronic bronchitis with fenspiride is a cost-effective alternative in patients who experienced AECB.

PRS8

COST-EFFECTIVENESS OF FLUTICASONE PROPIONATE NASAL DROPS VERSUS SURGICAL TREATMENT FOR NASAL POLYPOSIS IN POLAND

Golicki D¹, Latek M², Niewada M¹, Glogowski C³, Kukwa W¹, Macioch T¹

¹Medical University of Warsaw, Warsaw, Poland; ²Warsaw School of Economics, Warsaw, Poland; ³GlaxoSmithKline Pharmaceuticals S.A., Warsaw, Poland

OBJECTIVES: To compare early polypectomy based strategy with initial treatment with fluticasone propionate nasal drops (FPND) for the treatment of bilateral nasal polyposis in adults in Poland. **METHODS:** A decision analytic model was developed to reflect current clinical practice in management of bilateral nasal polyposis in Poland. Early polypectomy, preceded by computed tomography and followed by FPND for four months was compared with initial treatment with FPND. In case of treatment failure of the drug based strategy, patients were treated with systemic corticosteroids and thereafter polypectomy. Data on treatment methods efficacy were derived from literature review. Cost analysis was performed from payer perspective. Sensitivity analysis focused on surgical treatment costs and FPND efficacy.