

**CONCLUSION:** Influenza is not a benign disease. For some infected patients, ER or hospital care is needed. More aggressive and effective prevention and treatment strategies may lead to cost avoidance via fewer influenza related ER visits and hospitalizations.

**PID 19**

**COST-EFFECTIVENESS OF ONCE-DAILY CLARITHROMYCIN COMPARED TO AMOXYCILLIN/CLAVULANIC ACID IN THE TREATMENT OF ACUTE EXACERBATION OF CHRONIC BRONCHITIS**

Hutton J<sup>1</sup>, Ryan J<sup>2</sup>, Conway D<sup>2</sup>

<sup>1</sup>MEDTAP International, London, UK; <sup>2</sup>Abbott Laboratories, Abbott Park, IL, USA

**OBJECTIVE:** Treatment for acute exacerbation of chronic bronchitis (AECB) frequently consists of antimicrobial therapy. The persistence of recurrent symptoms can lead to substantial morbidity and increased healthcare costs. These factors make it important to consider antimicrobial treatment from an economic as well as a clinical perspective. This study was designed to assess the relative effectiveness and cost of once-daily clarithromycin (CL OD) 500 mg versus amoxicillin/clavulanic acid (AMCL) 625 mg TID in the treatment of AECB.

**METHODS:** Of 250 patients enrolled in this investigator-blind, multicenter, multicountry comparative trial of CL OD and AMCL in adults with AECB, 127 were randomized to treatment with CL OD, and 123 with AMCL. The primary measure of clinical effectiveness was response to therapy. Healthcare resource utilization was monitored from initiation of therapy to 19–23 days after the last study medication. UK costs were applied to resource use aggregated across all countries in the base case analysis.

**RESULTS:** Investigator-defined clinical response rates were similar in the clinically evaluable population (93/106 [88%] CL OD and 85/99 [86%] AMCL,  $p = 0.837$ ). Mean per patient costs were CL OD £120 (95% CI 6–234) and AMCL £146 (95% CI 5–287). Mean length of stay for hospitalized patients was 10.80 days for CL OD versus 15.25 days for AMCL. Both hospitalization costs and study medication costs were lower for CL OD.

**CONCLUSIONS:** Previous studies have shown favorable cost comparisons for CL OD versus AMCL but these have been based on decision models. Results from this study provide the first evidence of a trend of cost savings for CL OD versus AMCL from a prospective randomized, multicountry trial.

**PID 20**

**SAVINGS IN DIRECT MEDICAL COSTS PRODUCED BY AN INHALED SOLUTION OF TOBRAMYCIN (TOBI) IN CHILDREN WITH CYSTIC FIBROSIS**

LeLorier J<sup>1</sup>, Perreault S<sup>1</sup>, Birnbaum H<sup>2</sup>, Greenberg P<sup>2</sup>

<sup>1</sup>Centre de recherche, Centre hospitalier de l'Université de

Montréal, Campus Hôtel-Dieu, Montréal, Canada; <sup>2</sup>Analysis Group, Boston, MA, USA

**OBJECTIVE:** Cystic fibrosis is a genetic disease in which respiratory infections, usually due to *Pseudomonas*, are the major cause of morbidity and mortality. A 20-week double-blind placebo (P) controlled trial conducted in the United States has shown that a new formulation of Tobramycin (T) designed for jet nebulization and better tolerability produces significant improvements in pulmonary function tests, as well as decreases in the concentrations of *Pseudomonas aeruginosa* in sputum and a 26% (95% CI 2–43%) decrease in the probability of being hospitalized (Ramsey et al. NEJM 340:1;23–30, 1999).

**METHODS:** Individual patient-data from the trial were used to calculate the average number of days spent in hospital, on home intravenous (IV) and oral antibiotic therapy. Separate calculations were performed for the subgroups of patients with  $FEV_1 \leq 50\%$  of predicted and  $FEV_1 > 50\%$  of predicted. To adjust for Canadian pricing, pertinent economic parameters were obtained from the Ontario and Quebec Ministries of Health. Usual care data were obtained from a Delphi panel composed of the medical directors of the cystic fibrosis clinics.

**RESULTS:** Pertinent pharmacoeconomic results reported in days and 95% CI were as follows: In hospital: T = 5.2, P = 8.2; Dif = -3 (-5.02 to -0.97). Home IV therapy: T = 5.9, P = 10.1; Dif. = -3.1 (-6.25 to -1.03). Home oral therapy: T = 15.4, P = 18.1; Dif = -2.7 (-6.52 to -1.07). The average savings in direct medical costs that could be produced by the use of T during a 20-week treatment period in Quebec and Ontario would amount to \$10,802 per patient. A maximal saving of \$22,735 would be obtained in Ontario children with  $FEV_1 < 50\%$  of predicted. A minimal saving of \$4869 would correspond to Quebec adults with  $FEV_1 > 50\%$  of predicted.

**CONCLUSIONS:** Substantial savings in direct medical costs could be obtained by using inhaled T to decrease the rate of recurrent pulmonary infections in patients with cystic fibrosis.

**ECONOMIC AND OUTCOMES ISSUES OF ARTHRITIC DISEASE**

**PADI**

**EFFICACY OF AN INTERVENTION TO RATIONALIZE PRESCRIBING OF NON-STEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDs)**

Elkharat D, Chastang C, Le Corre A, Caulin C

Emergency Department, Hôpital Lariboisière, Paris, France

NSAIDs are considered minor drugs in that their clinical benefit is limited to reduction of symptoms. Although they may be responsible for about 25% of side effects, some of them fatal, most NSAIDs are prescribed for controversial indications. An intervention was prospectively