**PRS34**

**DIRECT COST INVOLVED IN THE TREATMENT OF MOST COMMONLY OCCURRING ILLNESS IN CHILDREN AT A PEDIATRIC OUTPATIENT CLINIC IN NORTH INDIA**

Ahlawat R1, Tiwari P1, Gupta G2

1National Institute of Pharmaceutical Education and Research (NIPER), S.A.S Nagar, India, 2Paediatric Service, AIIMS, New Delhi, India

**OBJECTIVES:** The cost of medicine is an important factor in any disease treatment. Strengthening health systems to provide such interventions at affordable cost to all children will save many lives. The present study was carried out to determine the total direct costs associated with the treatment of most commonly occurring illnesses in children. METHODS: The study was carried out prospectively at a pediatric outpatient clinic over a period of 1 year in children (≤18 years of age). The data in the prescriptions of patients were captured at the time of consultation. The cost of treatment were calculated for three most commonly occurring diseases which were upper respiratory tract infection (URT), acute gastroenteritis (AGE) and upper respiratory tract (URTI).

**RESULTS:** A total of 2,902 patients were included in the study. URTI (1,078 patients) was the most common illness followed by AGE and RAD (468 and 332 patients, respectively). The average age of drug utilized for the treatment of RAD, AGE and URTI were found to be 3 years old, 3.4 years and 1.5 years old, respectively. The maximum cost were spent on the use of Cough and Cold combinations (42%, of total cost spent on all drugs). While in RAD and AGE maximum cost were spent on the use of Steroids and Probiotics (33% and 43%, respectively). **CONCLUSIONS:** URTI was found to be the most commonly occurring illness in children. RAD treatment was found to be the most costly treatment among all. These findings help in building evidence regarding the cost of treatment for different childhood illness.

**PRS35**

**COST-EFFECTIVENESS ANALYSIS OF GLYCOPRIPRONIUM VERSUS TIOTRIPOM AND FIXED Dose COMBINATION (FORMOTEROL/BUDENOIDE/SALMETEROL/FLUTICASONE) FOR COPD IN THE COLOMBIAN HEALTH CARE SYSTEM**

Giraldo LE1, Kafri Benouvides E2, Kraemer M1, Thussenc P3...

1Universidade de La Sabana, Colombia, 2Novartis Colombia, Bogota, China, 3Novartis Pharma AG, Basel, Switzerland, *TSMS Health, Basel, Switzerland, Bogota, Colombia*

**OBJECTIVES:** To evaluate the cost-effectiveness of Glycopyrronium (once daily) compared to tiotropium bromide and fixed dose combinations of Formoterol/budesonide and Salmeterol/Fluticasone for the treatment of COPD from the Colombian Health Care system perspective. METHODS: A Markov model was designed considering health's state transitions modeled using a 1-year cycle length (1YCL) and a 2-year horizon (2YH). Patients were assumed to be in one of 3 health states: a) Controlled (NLM), b) Uncontrolled (URTI), or c) Severe (URTI). Cycles were 3-months and the time horizon was 5 years. Discount rate for costs and benefits was 5% per year. Effectiveness was evaluated by QALYs according to COPD severity. Health costs were determined from medical records from a third level hospital of the Colombian Social Security (INSS) and from estimations based on the GOLD guide recommendations for care. A probabilistic sensitivity analysis (PSA) was performed using the Monte Carlo method. **RESULTS:** An analysis of URG and QALYs found that Glycopyrronium was dominant compared to tiotropium and formoterol/budesonide and was inconclusive for salmeterol/Fluticasone.

**Mean savings per patient per year compared to formoterol/budesonide, Salmeterol/ Fluticasone and Tiotropium were of COP 1,959,128.1 (USD822.9), COP 2,366,779.1 (USD1,222.6) and COP 8,990.6 (USD4.64). The probabilistic sensitivity analysis presented Glycopyrronium as a dominant alternative compared to tiotropium and formoterol/ budesonide in more than 90% of the cases and against salmeterol/Fluticasone the results were non-conclusive.**

**CONCLUSIONS:** Tiotropium is cost-effective when compared to other long-acting bronchodilators in the Colombian Health Care System.

**PRS36**

**THE COST EFFECTIVENESS ANALYSIS OF INDACATEROL VERSUS TIOTROPIUM IN A CHINESE MEDICAL COST SETTING**

Fan C1, Dong GP, Liu M1, Zhang P2

1Shanghai Pharmacoeconomics Research Centre, Beijing, China, 2Ministry of Human Resources and Social Security, Beijing, China, 3Beijing Novartis Pharma Co. Ltd., Beijing, China

**OBJECTIVE:** This study evaluated the cost-effectiveness of Indacaterol (150 µg) versus Tiotropium bromide (2 µg) for maintenance treatment in patients with COPD in Guangzhou, China. METHODS: Markov model was developed to simulate the progress of COPD for 3 years and whole life respectively. The transfer probability in the Markov model and the utility of different Markov states were determined by clinical characteristics and life expectancy. The total cost of treatment for the patients was estimated using condition-specific cost data. The cost-effectiveness was characterized by the incremental cost-effectiveness ratio (ICER). RESULTS: In a 1-year simulation, the Indacaterol group saved 3527 CNY and gained more 0.008 QALY or 0.006 LY per capita. Thus, compared with the Tiotropium group, the Indacaterol group saved 3527 CNY and gained more 0.008 QALY or 0.006 LY per capita. In a lifetime simulation, Indacaterol group saved 66,150 CNY and gained 8,083 QALY or 10.327 LY per capita, while the Tiotropium group cost 74,915 CNY and gained 8,000 QALY or 10.290 LY per capita. Thus, compared with the Tiotropium group, the Indacaterol group saved 7820 CNY and gained 80 QALY or 0.083 LY or 0.079 LY per capita in the lifetime. **CONCLUSIONS:** According to the medical costs of COPD patients in Guangzhou, China, the cost-effectiveness of Indacaterol is dominant over that of Tiotropium.

**PRS37**

**ECONOMIC EVALUATION OF BUDENOIDE/FORMOTEROL AS MAINTENANCE AND RELIEVER THERAPY IN PATIENTS WITH MILD TO SEVERE PERSISTENT ASTHMA**

Polanco AC1, Salazar A2, Carpio E3, Soto H2, Medina P3

1Aeruzona, Talpan, Mexico, 2Health Consulting, D. F, Mexico, 3Hospital Infantil de Mexico Federico Gomez, Mexico City, Mexico

**BACKGROUND:** Asthma is a global health problem and currently it is estimated that 300 million people are affected. The aim of asthma treatment is to achieve and maintain control. Commonly used anti-asthma medication analysis in children. METHODS: The study was carried out prospectively at a pediatric outpatient clinic over a period of 1 year in children (≤18 years of age). The data in the prescriptions of patients were captured at the time of consultation. The cost of treatment were calculated for three most commonly occurring diseases which were upper respiratory tract infection (URT), acute gastroenteritis (AGE) and upper respiratory tract (URTI).

**RESULTS:** A total of 2,902 patients were included in the study. URTI (1,078 patients) was the most common illness followed by AGE and RAD (468 and 332 patients, respectively). The average age of drug utilized for the treatment of RAD, AGE and URTI were found to be 3 years old, 3.4 years and 1.5 years old, respectively. The maximum cost were spent on the use of Cough and Cold combinations (42%, of total cost spent on all drugs). While in RAD and AGE maximum cost were spent on the use of Steroids and Probiotics (33% and 43%, respectively). **CONCLUSIONS:** URTI was found to be the most commonly occurring illness in children. RAD treatment was found to be the most costly treatment among all. These findings help in building evidence regarding the cost of treatment for different childhood illness.

**PRS38**

**EVALUATION ANALYSIS COMPARING TIOTROPIUM WITH SALMETEROL OR FORMOTEROL IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN TAIWAN**

Chen CJ, Lin M1, Yang T2, Lin M1, Wang Y1

1Show University, Kaohsiung, Taiwan

**OBJECTIVE:** This study presents a cost effectiveness of tiotropium compared to salmeterol or ipratropium for patients with chronic obstructive pulmonary disease (COPD) in Taiwan. METHODS: A medical reimbursement claims databases from Taiwan's National Health Insurance were used. National Health Insurance enrollees who had an index event of at least one prescription claim (index medication) for either tiotropium, salmeterol or ipratropium during the study period (January 1,2002-December 31,2006) and met all eligibility criteria were classified into one of three cohorts according to their medication use. Utilization and cost data of the 1-year post-index period was extracted from these 3 cohorts and used as a cost parameter. A published COPD probabilistic Markov model was adapted to compare the cost effectiveness of tiotropium, salmeterol or ipratropium. RESULTS: The study population included 31465 patients (n=1559 tiotropium cohort, n=169 salmeterol, n=1918 ipratropium). The estimated mean annual cost per patient on tiotropium was NT$29581, on salmeterol was NT$45039, and on ipratropium was NT$36645. National Institute of Health and Medical Research (NIHR) data cross-calibrated and compared to other sources of tiotropium being cost effective ranged from 20% to 30% at a willingness-to-pay of NT$0 per QALY and reached at least a 70% at a willingness-to-pay of NT$600000 per QALY across comparisons. **CONCLUSIONS:** Tiotropium is more expensive than salmeterol or ipratropium in Taiwan's National Health Insurance. Tiotropium may be less cost-effective than salmeterol or ipratropium in Taiwan's National Health Insurance but may be more cost-effective in the United States.