

(adjusted OR, 0.53; 95% CI, 0.29-0.99) were associated with a more profound protective effect than those prescribed <0.45 DDD (adjusted OR, 0.88; 95% CI, 0.52-1.51). The longest continuous use of statins (>265 days) was found to have the greatest protective effect (adjusted OR, 0.57; 95% CI, 0.34-0.95) among all of the examined durations. **CONCLUSIONS:** Any use of statins was associated with a reduced risk of COPD exacerbation, and the protective effect was further enhanced as statins prescribed more currently, at a higher average daily dose or for a longer duration. Use of statins might be considered for preventing COPD exacerbations.

PRS9

WATERPIPE SMOKING AMONG UNIVERSITY STUDENTS IN THE UNITED STATES: PREDICTORS OF AN INTENTION TO QUIT

Wu IH¹, Rajan SS¹, Peters RJ², Essien EJ¹, Abughosh S¹

¹University of Houston, Houston, TX, USA, ²University of Texas Health Science Center at Houston, Houston, TX, USA

OBJECTIVES: Waterpipe smoking has emerged as a new trend of tobacco use with growing popularity especially among adolescents and young adults. Our objectives were to determine the predictors of having an intention to quit waterpipe smoking among University of Houston students who smoked a waterpipe in the past month (N=276). **METHODS:** Cross-sectional study through an online survey in February 2011. Questions included demographics (gender, age, race/ethnicity), tobacco use history (waterpipes, cigarettes, and cigars), perception of risk, and perceived social acceptability of waterpipe smoking. The survey also inquired about characteristics of tobacco waterpipe users such as the age and place of starting the waterpipe smoking, ownership of a waterpipe, frequency and duration of waterpipe smoking sessions, as well as willingness to quit. Descriptive statistics and chi-square analyses were used to determine the frequencies and associations of participant characteristics and multivariate logistic regression models were carried out to determine predictors of having an intention to quit. **RESULTS:** Most of the sample (83%) reported no intention to quit. Participants who believed that waterpipe smoking was harmful to one's health were more likely to have a desire to quit (OR=2.38, 95% CI=1.05-5.36). Participants with Indian or Pakistani descent were more likely to have an intention to quit compared to white participants (OR=4.74, 95% CI=1.61-13.93). Those who smoked waterpipe for more than 60 minutes were less likely to have a desire to quit (OR=0.29, 95% CI=0.12-0.73). **CONCLUSIONS:** Findings demonstrate a low level of a desire to quit among waterpipe smokers and underscore the urgent need to develop interventions that educate waterpipe smokers about the expected harms of continued use. This may increase the desire to quit and the odds of a successful cessation thereafter.

PRS10

PREDICTORS OF PERSISTENT WATERPIPE SMOKING AMONG UNIVERSITY STUDENTS IN THE UNITED STATES

Abughosh S¹, Wu IH¹, Peters RJ², Essien EJ¹, Crutchley R¹

¹University of Houston, Houston, TX, USA, ²University of Texas Health Science Center at Houston, Houston, TX, USA

OBJECTIVES: Waterpipe smoking is an understudied form of tobacco use with growing popularity among college students and a misconception of relative safety. Our objectives were to identify predictors of persistent waterpipe smoking among college students who have tried using a waterpipe to smoke tobacco in the past. The participants of our study included a sample of University of Houston (UH) students who previously used a waterpipe to smoke tobacco (N=1,141). **METHODS:** Cross-sectional study through a voluntary online survey in February 2011. Survey questions included demographics (gender, age, race/ethnicity), tobacco use, risk perception, social acceptability, and popularity of waterpipe smoking. Two outcome variables were identified in this study: outcome 1: monthly waterpipe smoking or more versus less than monthly use, outcome 2: weekly waterpipe smoking or more versus less frequent use. Descriptive statistics and chi-square analyses were used to determine the frequencies and associations of participant characteristics and multivariate logistic regression models were carried out to determine predictors of persistent waterpipe use. **RESULTS:** Among those who previously used a waterpipe, approximately one fifth reported smoking a waterpipe on a monthly basis or more, and 5% reported smoking on a weekly basis or more. Significant predictors of persistent waterpipe use included: White Middle-Eastern ethnicity, Indian Asian or Pakistani Asian ethnicity, past 30-day cigar use, ownership of a waterpipe, believing waterpipe smoking was cool, and longer than 30 minutes waterpipe smoking sessions. Those who believed that waterpipe smoking was harmful to one's health and those who thought government should evaluate the safety before selling the waterpipes were less likely to become persistent users. **CONCLUSIONS:** Findings of this study highlight the importance of developing interventions that address the predictors identified. Educational programs that explain the potential harms of waterpipe smoking and modify the cool image associated may be effective in preventing the spread of this rapidly emerging health hazard.

PRS11

NON-COMPLIANCE WITH PALIVIZUMAB AND INCREASED RISK OF RESPIRATORY SYNCYTIAL VIRUS HOSPITALIZATION AMONG A MEDICAID POPULATION

Krilov LR¹, Weiner LB², Wade SW³, Smith DM⁴, Masaquel A⁵

¹SUNY, Stony Brook School of Medicine, Mineola, NY, USA, ²Upstate Medical University, Syracuse, NY, USA, ³Wade Outcomes Research and Consulting, Salt Lake City, UT, USA, ⁴Thomson Reuters, Washington, DC, USA, ⁵MedImmune Inc., Gaithersburg, MD, USA

OBJECTIVES: Palivizumab given monthly prior to and throughout the RSV season reduces incidence of RSV hospitalization (RSV-H) in premature infants, infants with chronic lung disease of prematurity (CLDP), and children with hemodynamically

significant congenital heart disease (CHD). This study determines the impact of non-compliance with palivizumab dosing and risk of RSV-H among Medicaid-insured infants. **METHODS:** Infants with prematurity [≤ 34 weeks' gestational age (wGA)], CLDP and/or CHD born and discharged between May 1 and September 30 who received ≥ 1 dose of palivizumab during their first RSV season (October 1 - April 30) were identified retrospectively in Medicaid claims data from 12 states. Palivizumab compliance (first dose by November 30, ≥ 5 consecutive doses during the RSV season, and no gaps > 35 days between consecutive doses) was evaluated across 6 seasons (2003-2009). The percentage of infants with in-season RSV-H was calculated for non-compliant and compliant cohorts. Logistic regression of RSV-H was performed, adjusting for non-compliance, wGA, birthweight, comorbidities, and other demographic/clinical characteristics. **RESULTS:** A total of 8443 high-risk infants received ≥ 1 dose of palivizumab. Approximately 67% of all infants were non-compliant. The percentage of infants with RSV-H was significantly higher among non-compliant vs. compliant infants (12.0% vs. 7.4%, $P < 0.001$). In the logistic regression model, non-compliance compared to compliant infants had a 1.31 (95% CI= 1.18, 1.46) increased odds of RSV-H, and odds were also higher for males, rural residents, capitated healthplan members, infants who required neonatal intensive care at birth, gestational age < 32 weeks or unknown (vs. 33-34 weeks), age > 3 months at season onset, and comorbidities (including CLDP/CHD) or emergency room/hospitalization prior to first dose (all $P \leq 0.001$). **CONCLUSIONS:** Non-compliance with palivizumab was common and significantly increased the risk of RSV-H in this Medicaid population. Intervention strategies are needed to improve palivizumab administration among Medicaid infants prior to and throughout the RSV season.

RESPIRATORY-RELATED DISORDERS – Cost Studies

PRS12

BUDGET IMPACT ANALYSIS OF TIOTROPIUM BROMIDE VERSUS IPRATROPIUM BROMIDE ON THE TOP OF STANDARD THERAPY IN THE TREATMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) IN RUSSIAN FEDERATION

Kulikov A, Komarov I

I.M. Sechenov First Moscow State Medical University, Moscow, Russia

OBJECTIVES: To estimate the budget impact of the inclusion of tiotropium bromide compared to ipratropium bromide on the top of standard COPD treatment scheme with long-acting bronchodilators. **METHODS:** The one-year budget impact analysis was conducted. Direct expenses associated with COPD exacerbations and resulting follow-up costs were calculated using general tariff agreement of Russian obligatory insurance system and official national statistics. For reference, accepted exchange rate was 1 EUR = 40 RUB. **RESULTS:** Tiotropium bromide inclusion into the standard COPD therapy provided cost saving benefits compared with inclusion of ipratropium bromide in the COPD standard therapy scheme. Total costs of COPD therapy were approximately 259,730 RUB (6,493 EUR) per patient in tiotropium bromide group and 266,887 RUB (6,672 EUR) per patient in ipratropium bromide group within one year. Treatment of COPD using standard therapy with tiotropium bromide inclusion compared to one with ipratropium bromide leads to cost savings of 7,157 RUB (179 EUR) per patient-year. **CONCLUSIONS:** The results of budget impact analysis illustrate that including tiotropium bromide into the standard therapy of COPD instead of ipratropium bromide has potential to reduce Russian health care system total costs for COPD treatment.

PRS13

A BUDGET IMPACT ANALYSIS OF INDACATEROL FOR THE TREATMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN COLOMBIA

Giraldo LF¹, Ariza JC², Acosta T³, Pinzon JF²

¹Universidad de la Sabana, Chia, Cundinamarca, Colombia, ²Novartis Corporation, Bogotá, Colombia, ³Universidad de la Sabana, Bogotá, Colombia

Chronic obstructive pulmonary disease (COPD) is an increasing cause of morbidity in adults worldwide with a heavy economic burden on society. The introduction of indacaterol, a new effective long acting beta agonist, justifies a budget impact analysis from the Colombian Health-Care System perspective. **OBJECTIVES:** To develop a budget impact analysis, for five years, of the indacaterol introduction in the Colombian Health-Care System. **METHODS:** Using the perspective of the Colombian Health-care System, we designed a budget impact model to compare costs with and without the introduction of indacaterol for patients with COPD GOLD stages II-III-IV. Clinical data and prevalence were obtained from published literature. Basal maintenance treatment costs were calculated according to GOLD guidelines consumption patterns and exacerbation costs were collected from university hospital registries. A probabilistic Montecarlo sensitivity analysis was performed. **RESULTS:** Total annual net costs (year 1-year 5) for the scenario without indacaterol were: USD \$40.123.556, \$40.591.558, \$41.056.575, \$ 1.531.189 and \$42.011.289. In the indacaterol scenario net costs were: \$ 41.743.333, \$ 38.772.406, \$ 38.862.224, \$ 38.838.471 and \$ 38.797.766. **CONCLUSIONS:** Under these assumptions the progressive introduction of indacaterol in Colombian health care system implies budgetary savings.

PRS14

COST-EFFECTIVENESS OF AZITHROMYCIN AND CLARITHROMYCIN TREATMENTS FOR COMMUNITY ACQUIRED PNEUMONIA REQUIRING HOSPITALIZATION FOR IMMUNOCOMPETENT INDIVIDUALS OF AGE 65 AND OLDER, FROM PRIVATE PERSPECTIVE IN BRAZIL

Fujii RK¹, Mould JF², Lanzara GDA¹, Manfrin DF¹

¹Pfizer, Inc., São Paulo, SP, Brazil, ²Pfizer, Inc., New York, NY, USA

OBJECTIVES: The private health care system in Brazil currently assists 47,008,888 individuals in Brazil. This study has the objective of evaluating the cost-effective-