No significant differences in the time to first RSVH between the two groups were detected from a Cox regression, controlling for daycare attendance, age, weight, and neonatal complications (Hazard ratio: 1.7, 95% CI 0.3-9.2, p=0.54). **CONCLUSIONS:** Infants with CAA pose a significant overall risk for RSVH and merit prophylaxis. FS and SS infants have a similar RSVH risk. This implies that high-risk SS infants are accurately selected for RSV prophylaxis and may benefit from prophylaxis for 2 seasons.

PRS13
BURDEN OF DISEASE AND HEALTH CARE COSTS OF ADULT PATIENTS WITH SEVERE REFRACTORY ASTHMA IN A BIG REAL-WORLD DATA BASE (ARCO)

Pedrini A[1], Rossi E[2], Calabria S[1], Dondi L[1], Esposito I[3], Martini N[1]
[1]CORE srl - Collaborative Outcome Research, Bologna, Italy, [2]CINECA Interuniversity Consortium, Casalecchio di Reno, Italy, [3]Accademia Nazionale di Medicina, Roma, Italy

OBJECTIVES: The aim of this study was the analysis of the healthcare and clinical pathways of adult patients with Severe Refractory Asthma (SRA at stage V of GINA guidelines), by assessing the healthcare and the economic burden of disease. **METHODS:** From the ARCO database (a collection of administrative data of about 17 million Italian citizens), a record linkage of administrative data was performed. From a population of 4,654,780 of citizens aged ≥18 years, a cohort of 1,894 patients with SRA was selected in 2013 and followed-up over 12 months. **RESULTS:** Prevalence of SRA was 0.04%: mean age 50±14 years, mostly women (62.2%). The average per capita total expenditure was €2,815: 40% due to treatments (€10,859 for Omalizumab), 28% to hospitalizations and 32% to specialist procedures. Among background therapies: Prednisone and Betamethasone were the most prescribed corticosteroid for systemic use (79%, 22%), Salbutamol and Formoterol/Beclometasone were the most prescribed drugs for obstructive airway diseases (40.5%, 29%). Omalizumab was prescribed to 55 patients (2.9%). Patients hospitalized from all causes during the follow-up were 12%. A focus on Omalizumab showed that 83 patients (0.018‰) received the treatment during Jan-Mar 2014. Throughout the 9-month follow-up, 87% of them never discontinued therapy and laboratory tests to detect IgE presence were performed only on 18% patients. 81% didn't try any Tiotropium Bromide therapy the one-year before the Omalizumab prescription. **CONCLUSIONS:** Patients with SRA represent a high burden on the Italian Health Service. Particularly, this study highlights the dramatically high costs of patients treated with the biologic therapy. Nevertheless, new drugs (Omalizumab, Mepolizumab and others), by limiting exacerbations, will reduce costs with time. Real world data analyses can help the health governance to improve and balance clinical and economic decisions and to monitor the appropriateness of clinical pathways on the basis of a patient centered view.

PRS14
PREVALENCE OF THE TYPES OF DRUG RESISTANCE TB IN PATIENTS ATTENDING FATIMA JINNAH TB SANATORIUM IN QUETTA: A RETROSPECTIVE STUDY

ul Haq N[1], Nasim A[1], Razaque G[1], Ahmed N[1], Mohammad S[1], Riaz S[1], Zeeshan M[2]
[1]University of Balochistan, Quetta, Pakistan, [2]University of The Punjab, Lahore, Pakistan

OBJECTIVES: This study aimed to assess the prevalence of the types of Drug Resistance TB in patients attending Fatima Jinnah TB Sanatorium in Quetta. **METHODS:** A retrospective study was conducted to assess the assess the prevalence of TB types in patients who attended Fatima Jinnah TB Sanatorium, the only tertiary care unit in Balochistan for the treatment of patients suffering from TB. Data was collected from patients of TB sanatorium that came for. treatment to hospital between 2014 and 2015. Data was collected of patients files and arranged into domains. Collected data was fed into Microsoft Excel and analyzed to determine the most prevalent type of MDR TB. **RESULTS:** The total number of registered patients of DR-TB during study period were 225. Out of which majority of patients 42 (33.3%) were belongs to age group 21-30 years, and female gender was dominating (n=139, 61.7%). The patients were classified into CAT-1 (new cases) were 123 (54.6%) patients while CAT-2 (relapse) 78 (43.66%) patients were reported. MDR plus (n=55, 24.44%). Furthermore, DR-TB patients were categorized into MDR-TB (n= 152, 67.5%), XDR-TB (n=9, 4%), Mono (n=2, 0.9%), Poly (n=7, 3.1%), was MDR type TB. **CONCLUSIONS:** This study concluded that the cases related to DR TB are increasing in population. Furthermore, newly diagnosed patients are having drug resistance TB which is an alarming situation and efforts should be made to reduce not only the spread of infection n society but also the proper treatment of existing TB patients should be done to avoid cases of drug resistance.

PRS15
RECURRENT EPISODES OF PNEUMONIA IN ELDERLY PEOPLE FROM PRIVATE BRAZILIAN PERSPECTIVE

Squiassi HB, Ferreira CN, Santana CF
Pfizer, São Paulo, Brazil

OBJECTIVES: The incidence of infections in elderly people is higher than in the general population1. Pneumonia is an infection associated with more significant morbidity and mortality in older patients compared to younger adults; Streptococcus pneumoniae is the most common etiologic agent associated with this disease2. Pneumonia by pneumococcal infection is also associated with huge economic burden3. Therefore, this study presents the percentage of elderly people with recurrent episodes of pneumonia as well as related costs from PHS perspective. **METHODS:** The percentage of recurrent hospitalizations for pneumonia episodes, as well as the related hospitalization costs usage for PHS was identified comprising elderly patients (age of > 50 years), between October 2010 and December 2013, using a database containing approximately 18 million patients4. Pneumonia episodes were identified using ICD-10 codes A40.3, B95.3, G00.1, J13, J15, J15.0, J15.3, J15.4, J15.8, J15.9, J18, J18.0, J18.9, J20.2, P23.3. **RESULTS:** From 16.227 users identified in all age groups, 8,048 patients were over 50 years old. The analysis showed that 11% of the patients between 50 and 74 years old experienced two pneumonia episodes and 3% experienced three pneumonia episodes. The results for patients over 75 years old were of 17% and 7%, respectively. The average cost associated with hospitalization

per event in all age groups was BRL 11,399, compared with BRL 18,800 in patients over 50 years old. **CONCLUSIONS:** Recurrent hospitalizations for pneumonia in elderly adults and the associated costs are higher compared to the general population in the PHS. Pneumonia-related admissions, as well as healthcare costs, may potentially be reduced in this population, if prevention strategies be considered.

PRS16
PREDICTORS OF ELECTRONIC CIGARETTE USE AMONG INDIVIDUALS WITH ASTHMA

Geneus CJ, Davis RE
Tulane University School of Public Health and Tropical Medicine, New Orleans, LA, USA

OBJECTIVES: This study assessed predictors of electronic cigarette use among individuals with asthma, from nationally representative sample. **METHODS:** Using the 2014 National Health Interview Survey (NHIS), we identified (N = 8,154) survey participants, aged ≥18 years. Weighted adjusted multivariable logistic regression was used to assess predictors of e-cigarette use. **RESULTS:** The prevalence of e-cigarette use was 16.57% among study sample. Compared to never smokers, current cigarette smokers had 35.07 times (95% CI: 27.17-45.25) and former cigarette smokers had 6.38 times (95% CI: 4.95-8.23) higher odds of using e-cigarettes. Furthermore, compared to individuals aged ≥ 65 years, those aged 18-24 (aOR = 8.62; 95% CI: 5.63-13.21), 25-24 (aOR = 5.99; 95% CI: 4.05-8.86), 35-49 (aOR = 3.52; 95% CI: 2.45-5.04), and 50-64 years (aOR = 2.19; 95% CI: 1.53-3.13) all had higher odds of using e-cigarettes. Males, compared to females, had 1.20 times (95% CI: 1.00-1.45) higher odds of use. Both Hispanics (aOR = 0.72; 95% CI: 0.53-0.97) and Non-Hispanic Blacks (aOR = 0.26; 95% CI: 0.19-0.35) had lower odds compared to Non-Hispanic Whites, however, only Non-Hispanic Others (e.g. multiple race/ethnicity) had 1.52 times (95% CI: 1.03-2.42) higher odds of use. Compared to graduate students, only college students, had significantly higher odds of using e-cigarettes (aOR = 1.53; 95% CI: 1.07-2.18). Additionally, current alcohol users, compared to lifetime abstainers, had 2.37 times (95% CI: 1.75-3.97) higher odds of e-cigarette use. Self-reported health was a significant predictor of usage; those in very good/good health (aOR = 1.65; 95% CI: 1.27-2.14) and fair/poor health (aOR = 2.21; 95% CI: 1.60-3.04) had higher odds of using e-cigarettes, compared to self-reported excellent health. **CONCLUSIONS:** Self-reported cigarette smokers and young adults had the highest odds of e-cigarette use. Future research should determine factors associated with initiation and impact of e-cigarettes on wellbeing and better understand e-cigarettes for future interventions and health promotion activities.

PRS17
EVALUATION OF ASTHMA TREATMENT CURRENTLY GIVEN IN PUBLIC SECTOR HOSPITAL OF BAHAWALPUR, PAKISTAN

Hassan A[1], Ahmad M[2], Masood I[2], Rauf A[1]
[1]Bahawal Victoria Hospital, Bahawalpur, Pakistan, [2]The Islamia University of Bahawalpur, Bahawalpur, Pakistan

OBJECTIVES: Asthma is a chronic inflammatory disorder of the airways in which many cells and cellular elements play a role: in particular, mast cells, eosinophil, T-lymphocytes, macrophages, neutrophils, and epithelial cells. In susceptible individuals, this inflammation causes recurrent episodes of wheezing, breathlessness, chest tightness, and coughing, particularly at night or in the early morning. The aim of this study was to evaluate prescribing patterns of asthma medication in a tertiary care hospital of south Punjab, Pakistan. **METHODS:** A retrospective study design was adopted to evaluate conveniently selected 300 patient charts/prescriptions of the patients, admitted in the ward from January to April 2015. The prescriptions were evaluated using WHO prescription indicators. **RESULTS:** Out of 300 selected cases, 247 (82.3%) patients had suffered with symptoms of asthma everyday while 25 patients had symptoms occasionally. It was found that number of drugs per prescription 5.4 (optimal ≤ 3), drugs prescribed by generic name 19.7% (optimal 100%), drugs prescribed from National Essential Drug List (NEDL) 78.4%. The prevalence of drug interactions was 50.7%. In prescribing of medicine to patients, practitioners were following standard guideline "Global Initiative for Asthma for prescribing medicines". In most of prescriptions dose, dosage form and frequency of administration were not mentioned. **CONCLUSIONS:** Based on the findings of this study, it is concluded that although WHO prescribing indicators were not followed properly but practitioners were followed standard treatment guidelines of GINA.

RESPIRATORY-RELATED DISORDERS – Cost Studies

PRS18
BUDGET IMPACT OF PNEUMOCOCCAL DISEASE: BRAZILIAN PRIVATE HEALTH CARE DATABASE ANALYSIS

Santana CF, Ferreira CN, Squiassi HB
Pfizer, São Paulo, Brazil

OBJECTIVES: Streptococcus pneumoniae is the most significant causal agent of invasive bacterial infections among children and adults1,2. Pneumococcal infections are responsible for severe clinical manifestations such as bacteremia, meningitis and pneumonia, being associated with a high economic burden to healthcare systems1,3,4. Our study aimed to evaluate the impact of the main pneumococcal diseases on Brazilian Private Healthcare System (PHS) and how this may affect Brazilian population. **METHODS:** The average number of hospital admissions, as well as the average hospitalization cost for pneumococcal diseases (pneumonia, meningitis and sepsis [PDs]) cases, were analyzed in all age groups, between October 2010 and December 2013, using a PHS database containing over 18 million lives5. The economic impact of absenteeism due to PD was also analyzed, considering the average number of hospital admissions in the PHS and Brazilian average cost of absenteeism per day of BRL 254 (Brazilian data on economically active population [EAP]6 and Brazilian gross national product [GNP]). **RESULTS:** From 70,850 PD episodes identified in all age groups, 68,717 (96.99%) were pneumonia episodes, 1,745 (2.46%) were bacteremia episodes and 388 (0.55%) were meningitis