

OBJECTIVES: Chronic spontaneous/idiopathic urticaria (CSU/CIU) is defined as the spontaneous appearance of itchy hives, angioedema, or both lasting ≥ 6 weeks. CSU/CIU has a significant yet underestimated impact on patient's work productivity. The ASSURE-CSU study aims to identify and quantify the humanistic and economic burden of CSU/CIU. Here we present Canadian data on work productivity and indirect costs. **METHODS:** Patients with CSU/CIU, aged ≥ 18 years, with disease for ≥ 12 months, symptomatic despite treatment were recruited in the study. Data were collected on absenteeism and productivity loss via the Work Productivity and Activity Impairment –Specific Health problem (WPAI-SHP) questionnaire. The associated indirectly monthly costs were estimated based on 150hr/working week and average wage \$CAD 25.62/hr. Descriptive statistics were provided and stratified by disease severity. **RESULTS:** Cohort included 99 patients with a mean age of 50.8 years; 5 years mean disease duration, and a higher proportion of women (77.8%). Overall, 86 patients completed the WPAI with 54.7% employed (assessed separately from the WPAI, 46.5% had full-time employment). In the last 7 days, the mean proportion of time missed at work due to CSU/CIU was 6.0% (SD=12.0%). The greatest percentage of time missed due to CSU/CIU was reported in moderate and severe patients (8.9% and 10.6%, respectively). The mean proportion of overall work impairment due to CIU/CSU was 30.6% (SD=27%). Total indirect monthly cost of work productivity loss was estimated to be a mean (SD) of \$1,177 per patient in full-time employment. The overall indirect costs increased with disease severity. **CONCLUSIONS:** This Canadian-specific analysis from ASSURE-CSU suggests that almost all patients in employment are affected at work by their disease, either through absenteeism or reduced productivity at work resulting in significant economic impact for employers and society.

PRS32

COST-CONSEQUENCE OF EOSINOPHILIC ASTHMA AMONG PATIENTS TREATED ACCORDING TO ERS/ATS GUIDELINES

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OBJECTIVES: Compare healthcare resource utilization of patients with severe asthma and elevated blood eosinophils (EOS) versus normal EOS. **METHODS:** Asthma patients were extracted from EMRClaims+ database from Jan 2004-July 2011. Date of asthma diagnosis was defined as the index date. The 12-month period following index was defined as 'assessment' period, with disease severity classified by factors such as medication use and lung function based on the newly published European Respiratory Society/American Thoracic Society guidelines. Patients with 'severe' asthma were classified as those with 'elevated' (≥ 400 cells/ μ L) and 'normal' EOS (< 400 cells/ μ L). Patients were followed for a maximum period of 12 months after index to record all-cause hospitalizations, ER and outpatient visits and associated costs. Mean hospitalizations, visits, and costs were compared using Wilcoxon signed rank test. Proportions were compared using Chi square tests. Logistic regression was conducted to assess the influence of elevated EOS on probability of incurring resource use after controlling for demographics and baseline comorbidities. **RESULTS:** Of the 2,164 asthma patients identified, 184 (9%) were concordant with guideline recommendation for medication use for severe asthma (Guideline-Concordant-Severe: GCS patients). Of these, 56 (30%) had elevated EOS. A significantly greater proportion of GCS patients with elevated EOS had admissions during follow-up compared to those with normal EOS (29% vs 13%, $p=0.013$). GCS patients with elevated EOS had significantly greater mean monthly admissions compared to normal EOS patients (0.1 vs 0.02, $p=0.011$) and 8 times the hospitalization cost compared to the group with normal EOS [\$834 (SD:4403) vs. \$106 (SD:336), $p=0.012$]. Logistic regression showed that patients with elevated EOS had greater likelihood of admissions during follow-up (OR: 2.61, $p=.033$). **CONCLUSIONS:** Among patients with severe asthma with treatments concordant with ERS/ATS guidelines, those with elevated EOS experienced more frequent hospital admissions and greater cost compared to those with normal EOS.

RESPIRATORY-RELATED DISORDERS - PATIENT-REPORTED OUTCOMES & PATIENT PREFERENCE STUDIES

PRS34

PATIENT PREFERENCE FOR REAL-TIME FEEDBACK IN EPRO ASSESSMENTS FOR COPD CLINICAL TRIALS

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OBJECTIVES: Clinical trials for COPD are increasingly using electronic methods to collect patient-reported outcomes (ePRO). As use of this technology increases, it is important to consider patient preference in questionnaire design. This study examined patient preference for receiving real-time feedback while completing ePRO assessments. **METHODS:** A total of 103 patients with COPD were surveyed. Patients were asked to assume that they were using a handheld or tablet device to complete questionnaires as part of a clinical trial; they were then presented with example screens and asked about types of feedback they might receive on the device. **RESULTS:** Patients ranged in age from 32 to 86 years and were 55% female. 50% reported previous participation in a clinical trial. 59% reported that they would like to see a "thank you" screen at the end of each questionnaire. 81% thought it would be helpful or necessary to regularly receive a graph summarizing their responses. 81% preferred to see their progress as they completed a questionnaire; of these, 41% preferred a progress bar and "Question X of X" message and 47% preferred just the progress bar. 69% said they would like the first screen to summarize the questionnaire's length and estimated completion time. Regarding feedback about daily diary compliance, 76% reported that a summary screen showing their percent compliance would motivate them to complete their diary each day. **CONCLUSIONS:** Patients with COPD prefer to receive real-time feedback while completing ePRO assessments, and are motivated by compliance information. Specifically, they prefer

summaries of their data, the ability to track their progress through a questionnaire, and "thank you" messages for completing frequent questionnaires. Patients would be motivated to complete a daily diary by seeing their overall percent compliance to date. Investigators should consider including these types of elements when designing ePRO assessments for clinical trials.

PRS35

ASSURE-CSU CANADIAN RESULTS: ASSESSING HEALTH UTILITY IN CHRONIC SPONTANEOUS/IDIOPATHIC URTICARIA USING THE EQ-5D

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OBJECTIVES: Chronic spontaneous/idiopathic urticaria (CSU/CIU) is defined as the spontaneous appearance of itchy hives, angioedema, or both lasting ≥ 6 weeks. CSU/CIU has a significant yet underestimated socioeconomic impact. The ASSURE-CSU study aims to identify and quantify the humanistic and economic burden of CSU/CIU. Here we present Canadian specific data on utility values. **METHODS:** The study included a retrospective medical record abstraction, a cross-sectional PRO survey, and 7 day diary of patients with CSU/CIU still symptomatic despite treatment, aged ≥ 18 years, with disease persisting for ≥ 12 months. Patients completed the weekly Urticaria Activity Score (UAS7) and the EQ-5D-3L, a 2-part instrument comprised of the EQ-5D and the Visual Analog Scale (VAS). EQ-5D-3L and VAS utility values were derived using a Canadian-specific scoring algorithm and a standard UK algorithm, respectively. Descriptive statistics were provided for these variables and stratified by disease severity. **RESULTS:** The cohort included 99 patients with demographics in line with published characteristics of CSU/CIU patients and distributed across severity levels. The instrument was completed by 86 patients. Overall, the mean (SD) EQ-5D utility score was 0.7 (0.30); while the mean (SD) VAS utility score was 71.4 (19.24). The dimensions of the EQ-5D-3L most affected where pain/discomfort and anxiety/depression with 61.4% and 40.9% of patients reporting moderate to extreme problems, respectively. Utility values decreased with increased disease severity for overall and dimension specific scores for both tools. **CONCLUSIONS:** Compared to the average utility score of an average Canadian population (0.875), the results of this study at 0.7 demonstrate that CSU/CIU has a significant impact on patients' health status and quality of life; with patients suffering from moderate to severe urticaria showing a greater impact on patients' health state.

PRS36

IMPACT OF PHARMACISTS-LED INTERVENTIONS TO ASSESS KNOWLEDGE, ATTITUDE AND PERCEPTION AMONG TUBERCULOSIS PATIENTS IN PAKISTAN: AN INSIGHT FROM A RANDOMIZED CONTROLLED NON CLINICAL TRIAL

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OBJECTIVES: To assess the impact of pharmacists-led non-clinical interventions on knowledge, attitude and perception among pulmonary tuberculosis (PTB) patients in Pakistan. **METHODS:** A randomized controlled non-clinical trial was piloted on PTB patients under the supervision of registered pharmacists whereby PTB patients received educational non-clinical interventions regarding knowledge, attitude and perception on PTB. Self-administered research tool was used and demographic characteristics of the patients were determined by means of descriptive statistics. Data was analyzed by using SPSS 21.0. Comparison between trial group and control group was done with the help of inferential statistics. **RESULTS:** Two hundred and eighty PTB patients were randomly chosen for the study i.e. one hundred and forty in each group. No significant differences were observed in either group for mean age, gender, education level, occupation and income whereas a significant improvement ($p<0.001$) in the knowledge, attitude and perception was noted in the interventional group. **CONCLUSIONS:** The pharmacist-led, non-clinical intervention caused a significant improvement in PTB patients' knowledge, attitude and perception scores. This study highlights pharmacists' need and their significantly important role towards better patient care and education. These findings are considerably useful for better disease management and control.

PRS37

TREATMENT OUTCOMES OF SMEAR POSITIVE PULMONARY TB CASES REGISTERED IN TB PATIENTS IN QUETTA

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OBJECTIVES: The purpose of this study was to examine the treatment outcomes of smear positive pulmonary TB cases registered in TB patients in Quetta. **METHODS:** Cross sectional retrospective cohort study was performed on TB patient in Fatima Jinnah chest hospital, Quetta. Retrospective medical records of smear-positive tuberculosis patients registered in first quarter of year 2012. Tuberculosis treatment outcomes were assessed according to WHO guidelines. The descriptive statistics was used to present the demographic and disease related information. Inferential statistics was used to the evaluation relationship among study variables. All analyses were performed using SPSS 20.0. **RESULTS:** Out of the 131 TB patients (67 males and 64 females). Majority of the patients were in the age group 18-47 (73.7%). High percentage of the patients had successful treatment with treatment outcome "Completed" and "cured" were 65.5% (n=74), whereas, death occurred in only 5.3% (n=7) of patients. Demographic characteristics age was the only determine factor