total, with COPD, of all stages, who were hospitalized in the pulmonary department, in 2006 and 2007. The analysis was performed retrospectively. Information on mean treatment cost per patient is presented separately for the I-IV COPD stages, according to GOLD criteria. Direct cost analysis was based on cost of personnel of the clinic, medication, laboratory and imaging tests. The economic analysis did not include the depreciation of capital assets as well as the overhead cost. The prices used for the analysis were based on Greek NHS prices (FEK157/91, A’ issue), 2006 Euros. RESULTS: The mean (SD) length of stay in the department of pneumonology for a COPD patient was 6 (4) days and the mean(SD) actual cost per patient with stage I COPD was €1091 (85), the mean cost for a patient with stage II COPD was estimated at €1081 (106.5) for the the whole length of stay and the mean cost for stage III and IV COPD patients are 1146 (120,3) and €1222 (197), respectively. CONCLUSIONS: COPD poses a considerable economic burden to health care systems and societies. These findings are in accordance to international literature.

PRS17
COMPARISON OF OUTPATIENT AND INPATIENT COSTS OF MODERATE AND SEVERE EXACERBATIONS OF COPD IN POLAND IN 2007
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OBJECTIVES: Assessment of direct and indirect costs of COPD exacerbations under usual clinical practice in primary and secondary care from societal perspective in Poland METHODS: An observational, prospective study was conducted among patients with exacerbation of moderate or severe COPD. All patients (n = 197) were divided into two groups depending on place of care. The group treated in hospital care (HC) and in ambulatory care (AC) adequately consisted of 89 and 108 patients. The direct costs included cost of drugs, diagnostic tests, inpatient and outpatient care. We singled out one-day medical treatment facility costs for inpatients. The indirect costs included costs of work days lost. RESULTS: The mean duration of COPD exacerbation did not differ significantly between the groups (p > 0.5, adequately 9.3 and 8.8 days for HC and AC group). The total health care cost per exacerbation was €1410,0 (3078,30 PLN) in secondary care (the HC group) and it was 10.5 times higher than the total cost of exacerbation in primary care (the AC group) €134,3 (483,80 PLN) (according to course of currencies on 15 December 2007). The costs of drugs and diagnostic tests were significantly higher in the HC group than in the AC group, however it were facility costs of inpatient stay and medical visits in the HC group that influenced expenditures related to COPD exacerbations most tremendously, as they were 27 times higher than in the AC group. CONCLUSIONS: In Poland the costs of COPD exacerbation managed in secondary care are 10.5-fold higher than in primary care. Therefore, the decisions about admission of patients with COPD exacerbation to hospital should be made carefully.

RESPIRATORY-RELATED DISORDERS—
Patient-Reported Outcomes Studies

PRS18
DIFFERENCES IN TREATMENT COSTS AND RESOURCE UTILIZATION AMONG COPD PATIENTS TREATED WITH ALBUTEROL MDI OR LEVALBUTEROL MDI
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OBJECTIVES: To estimate differences in total payments for treatment and resource utilization among patients with COPD over a one-year period following initiation of treatment with albuterol MDI (ALB) or levalbuterol MDI (LEV) in usual practice in the United States. METHODS: MarketScan® data were used to identify 46,454 COPD patients age ≥ 5 who filled a new prescription for ALB or LEV between October 1, 2003 through September 30, 2006 and met other study inclusion/exclusion criteria. Multivariate methods were used to adjust for differences in potential confounders across treatment groups, such as patient age, gender, COPD severity score, Charlson comorbidity score, prescribing physician specialty, patterns of other respiratory drug use, and geographic region. Given the eminent ban (effective January 1, 2009) on MDIs using CFC propellant, in addition to actual claims payments, hypothetical “HFA-propellant-only” claims payments, calculated by replacing payment rates for CFC drugs with payment rates for HFA versions of the same drugs, also are analyzed to enhance the applicability of study results to the post-CFC environment. RESULTS: Total payments for LEV patients were $2769 higher (p < 0.001) compared to ALB patients. Total payments for LEV patients were $2467 higher (p < 0.001) than hypothetical ALB-HFA-only patients. Payments for respiratory drugs were higher for LEV patients ($673, p < 0.001; projected HFA-only payments $515; p < 0.001). There was no statistically significant difference between ALB and LEV patients in risk of hospitalization (OR = 1.033, p = 0.56) or frequency of ED visits (IRR = 0.99, p = 0.80). However, LEV patients had a higher frequency of total outpatient visits (IRR = 1.13, p < 0.001) and COPD-related outpatient visits (IRR = 1.17, p < 0.001). CONCLUSIONS: COPD patients using LEV had higher total payments and respiratory drug payments compared to ALB patients. LEV patients had more frequent outpatient visits. There was no consistent, statistically significant association between treatment and either likelihood or frequency of hospitalization or ED visits.

PRS19
RATES OF DISCONTINUATION AMONG COMMONLY PRESCRIBED MEDICATIONS IN THE US
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OBJECTIVES: To measure relative rates of discontinuation among commonly prescribed chronic disease medication classes under conditions of routine care. METHODS: De-identified pharmacy records for 1.99 million patients who received medication from retail pharmacy chains throughout the United States were used to select patients who obtained a fill between January 1, 2007 and January 30, 2007 for any of the following medication classes: antidepressants (n = 339,059); bisphosphonates (n = 120,098); cardiovascular agents (n = 622,947); glaucoma medications (n = 48,229); statins (n = 452,978); inhaled steroids (n = 95,900); insulins (n = 66,637); and oral antidiabetic agents (n = 248,280). The primary outcome measure was the median time-to-discontinuation (TD50). Kaplan-Meier analysis was used to estimate the risk of discontinuation over the subsequent 360 days for both “inexperienced” and “experienced” groups of patients. Inexperienced patients were defined as those who had not been dispensed an in-class medication in the prior 180 days; experienced patients were those who had been. Discontinuation was defined as being 30 days late for a scheduled refill. Patients switched to an in-class medication were considered to have continued therapy. RESULTS: Median days to discontinuation (TD50) among patients who had not filled a prescription for an in-class medication in the prior 180 days were: inhaled steroids...
PRS20

SYSTEMATIC REVIEW OF FIXED-DOSE COMBINATIONS AND UNIT-OF-USE PACKAGING IN PATIENTS WITH HYPERTENSION, DYSLIPIDEMIA, AIDS, ASTHMA AND DIABETES TYPE 2

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OBJECTIVES: Poor compliance is the primary reason for suboptimal clinical benefit, especially in patients with chronic diseases. Fixed-dose combinations (FDC) and unit-of-use packaging (UUP) are strategies designed to simplify medication regimen and potentially improve compliance. The aim of our study is to systematically analyze the effect of FDC and UUP on compliance and effectiveness in patients with hypertension (HTA), dyslipidemia, AIDS, asthma and diabetes type 2 (DMII).

METHODS: Systematic review (SR) of studies that compare medications combined in a single pill or within a UUP with the same free-drug combinations (UP). Only RCTs were included in the SR. The original language (North American English) was considered the reference language (RL). Values within 0.5 of the RL were considered comparable given that 0.5 is considered a clinically meaningful difference.

RESULTS: Number of patients completing each AQLQ language varied from 27 (Canadian French) to 256 (Mandarin Chinese). Mean age ranged from 31.7 years (Spain) to 52.9 years (Norway) and percent of males ranged from 30.3% (Brazil) to 74.4% (Norway). Mean overall AQLQ score [s.d.] at baseline in the RL was 4.59 [0.94]. Of the 16 languages all but three, Chile (3.58 [1.05]), Denmark (5.10 [0.82]) and Spain (5.19 [0.93]), reported mean baseline AQLQ overall scores within 0.5 of the RL. Similar findings were reported for AQLQ domain scores, with few countries reporting baseline values outside 0.5 of the RL. Mean change from baseline in the overall AQLQ score in the RL was 0.89 [1.06], with all translations reporting values within 0.5 of the RL indicating similar results in all languages. For the AQLQ domains, only the emotional function domain of the Norwegian, Canadian French and French for France translations were outside 0.5 of the RL.

CONCLUSIONS: The consistency of baseline and change from baseline scores comparing 16 translations with the original language version supports the validity of translations used in this study and the combining of data across countries for analyses.

PRS21

CAN ASTHMA QUALITY OF LIFE QUESTIONNAIRE (AQLQ) DATA FROM DIFFERENT COUNTRIES BE COMBINED FOR ANALYSES?

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OBJECTIVES: Health-related quality of life data are frequently collected in clinical trials from different countries and combined in analyses. This analysis compared AQLQ data across 16 countries (17 languages) to evaluate suitability to combine data in subsequent analyses. METHODS: AQLQ data from the Gaining Optimal Asthma control (GOAL) study was used for the analyses. Of 3416 patients treated, 1973 had an overall AQLQ score at baseline, 1850 at week 12 and 1832 at both. The original language (North American English) was considered the reference language (RL). Values within 0.5 of the RL were considered comparable given that 0.5 is considered a clinically meaningful difference.

RESULTS: Number of patients completing each AQLQ language varied from 27 (Canadian French) to 256 (Mandarin Chinese). Mean age ranged from 31.7 years (Spain) to 52.9 years (Norway) and percent of males ranged from 30.3% (Brazil) to 74.4%