These findings are in accordance to international literature.

**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 posses a considerable economic burden to health care systems and societies. These findings are in accordance to international literature.

**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.

**RESPIRATORY-RELATED DISORDERS—Patient-Reported Outcomes Studies**

**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 = 622,978); inhaled steroids (n = 452,978); inhaled steroids (n = 66,637); and oral antidiabetic agents (n = 248,280). The primary outcome measure was the median time-to-discontinuation (TD50) among patients who had not filled a prescription for an in-class medication in the prior 180 days; 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...