service as the item being valued. We examined whether DC CV questions lead to hypothetical bias for this good, and we tested whether "definitely sure" hypothetical yes responses, as identified in a follow-up question, correspond to real yes responses. **METHODS:** 172 subjects with asthma were recruited from 10 Kentucky community pharmacies. Subjects received either a DC CV question or were given the opportunity to actually purchase the service. Three different prices were used: $15, $40, and $80. **RESULTS:** In the hypothetical group 38% of subjects stated they would purchase the good at the given price, but only 12% of subjects in the real group purchased the good ($p = 0.000$). We cannot, however, reject the null hypothesis that "definitely sure" hypothetical yes responses correspond to real yes responses. **CONCLUSIONS:** The DC CV method overestimates WTP in the HCS, but it may be possible to correct for this by sorting out "definitely sure" yes responses.

PAR14

ASSESSMENT OF THE RELATIONSHIP BETWEEN DISEASE SEVERITY, QUALITY OF LIFE AND WILLINGNESS TO PAY IN ASTHMA

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OBJECTIVE: The primary objective was to evaluate the relationship between willingness to pay (WTP), quality of life (QOL), and disease severity measures in asthma patients. The hypothesis studied was that asthma patients with more severe disease, as measured objectively via forced expiratory volume percent predicted (FEV1%), are willing to pay more for a hypothetical cure from asthma than those with less severe disease. **METHODS:** One-hundred asthmatic patients were recruited from community pharmacies in Kentucky for 30 minute face-to-face interviews. Spirometry was used to assess objective disease severity while a multiple choice question assessed subjective disease severity. The Short Form 36 (SF-36) and Asthma Technology of Patient Experience (Asthma TyPE) measured QOL. WTP was obtained via a dichotomous choice contingent valuation question. **RESULTS:** WTP was significantly related to both objective disease severity ($p = 0.02$) and subjectively assessed disease severity ($p = 0.01$). For objective disease severity the mean monthly WTP was $90 for mild asthma, $131 for moderate asthma and $331 for severe asthma; and for subjective disease severity the mean monthly WTP was $48 for mild asthma, $166 for moderate asthma and $241 for severe asthma. A majority of the QOL measures were correlated with WTP. **CONCLUSIONS:** The results suggest that the WTP for a cure from asthma is related to both objective and subjective disease severity.

PAR15

COMPARISON OF HEALTH CARE RESOURCE UTILIZATION OF COPD PATIENTS ON CILOMILAST, 15 MG BID VERSUS PLACEBO

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OBJECTIVES: Cilomilast is a potent and selective phosphodiesterase type 4 (PDE4) inhibitor currently under development for the treatment of chronic obstructive pulmonary disease (COPD) and asthma. **METHODS:** COPD-related health care resource utilization including physician visits, emergency room visits, hospitalizations and medication use were prospectively collected in a 6 month randomized, double-blind, placebo controlled, parallel group study of patients on cilomilast, 15 mg bid ($n = 431$) versus patients on placebo ($n = 216$). Methods of analysis included descriptive statistics, Kaplan-Meier estimates and Poisson regression. **RESULTS:** In the year prior to the study, COPD-related health care resource utilization was comparable between patients eventually randomized to cilomilast and those randomized to placebo; the majority of all patients had no or one emergency room visit or hospitalziation. During the entire 24-week study period, the cumulative incidence of health care utilization was significantly lower in the cilomilast group than the placebo group in terms of all utilization (11.0% vs. 21.1%, $p = 0.004$); including physician visits (11.9% vs. 23.1%, $p = 0.002$), emergency room visits (0.6% vs. 4.5%, $p = 0.004$) and hospitalization (0.5% vs. 3.4%, $p = 0.021$). The relative utilization rates per patient-month of follow-up for each of the utilization types were lower in the cilomilast group than in the placebo group. Treatment with cilomilast resulted in reduction of all utilization by 51% (C.I.: 31%, 65%), physician visits by 41% (C.I.: 15%, 59%). ER visits and hospitalizations were also significantly reduced. **CONCLUSIONS:** In this study, cilomilast was associated with significantly less COPD-related health care resource utilization, including hospitalizations, emergency room visits and physician visits than placebo.

PAR16

COST OF TREATING ASTHMA IN A MANAGED CARE POPULATION

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OBJECTIVES: Asthma is a common medical condition that is increasing in prevalence. The purpose of this study was to examine costs associated with treating asthma patients within a managed care organization (MCO). **METHODS:** Data for this study were obtained from a managed care organization located in the Western region of the US. Patients were eligible for inclusion if they met one of the following criteria: a diagnosis of asthma (ICD-9 code of 493.xx); two or more prescriptions used to control asthma (e.g., inhaled corticosteroid, leukotriene