OBJECTIVES: To gain utility values for asthmatic patients, self-administered direct TTO questions may seem to be a simple option. This study examined reported TTO values by disease severity groups, and the relationship between other health status measures, and with age.

METHODS: 228 consecutive adult outpatients and inpatients at four sites in Hungary participated in the study. Doctors had to report GINA severity group and lung function values. Patients had to fill in three QoL questionnaires and a direct TTO question that offered a choice between 20 years in current health or shorter length of life in perfect health. Statistical analysis applied F-statistics.

RESULTS: Mean TTO values were 0.99, 0.96, 0.82, 0.73 in the four severity groups, respectively. These were higher than corresponding EQ-5D index results of 0.93, 0.76, 0.65, 0.52. Correlation coefficients between TTO values and EQ-5D index, EQ-5Dvast, SF-36(PCS), SF-36(MCS), SGRQ, and FEV1% were 0.40, 0.40, 0.34, 0.25, −0.36, and 0.36, respectively. Age explained 23% of differences in TTO values after controlling for asthma severity. Within severity groups 4 and 3, patients over 50 reported TTO values lower by 0.21 and 0.20 than those below this age. These differences were larger than corresponding differences in EQ-5D index values suggesting that direct TTO responses may incorporate different concepts of remaining life years of the older. Results were statistically significant (p < 0.0001).

CONCLUSIONS: Utility values gained from direct TTO questions can lead to higher scores than generic utility-based questionnaires, low correlation values with other measures, and to biases in patient groups of heterogeneous age.

PSYCHOMETRIC EVALUATION OF THE CAP-SYM QUESTIONNAIRE: A NEW, PATIENT-BASED MEASURE OF SYMPTOMS IN COMMUNITY ACQUIRED PNEUMONIA

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OBJECTIVES: To develop a practical and scientifically rigorous, patient-based outcome questionnaire to evaluate symptoms in community-acquired pneumonia (CAP).

METHODS: The CAP-Symptom questionnaire (CAP-Sym) is an 18-item, interviewer-administered questionnaire that measures the bothersomeness of 18 symptoms during the past 24 hours using a 6-point Likert scale. We used gold-standard psychometric methods to comprehensively evaluate the acceptability, reliability, validity and responsiveness of the CAP-Sym in field testing involving 556 patients in 13 countries. The development and validation of the CAP-Sym were carried out as part of the CAP 2000 study, a multicentre, multinational, prospective, randomised, double-blind study to compare the effectiveness of moxifloxacin oral tablets to standard oral treatment regimes in patients with CAP.

RESULTS: Field testing in all countries confirmed the acceptability (item non-response, item endorsement frequencies, item/scale floor and ceiling effects), reliability (internal consistency, item-total and inter-item correlations, test-retest reliability), validity (content, construct, convergent, discriminant, known groups) and responsiveness of the CAP-Sym.

CONCLUSIONS: The CAP-Sym is a practical and scientifically sound patient-based outcome measure that can be used to evaluate CAP-related symptoms in clinical trials or clinical audit. The disease-specific CAP-Sym shows preliminary evidence of being more responsive than the generic SF-36 as a measure of outcome in CAP.
study of 100 adult asthmatics. **RESULTS:** The table reports outcomes over a 10-year period. Results were driven by the impact of ICS on quality of life, rather than on mortality. Findings were stable over most input data ranges. However, at efficacy levels below 3% and toxicity rates greater than 2.9%, the cost-effectiveness estimate exceeded $100,000/QALY. **CONCLUSION:** Results suggest that inhaled steroids deliver good comparative value in mild-to-moderate adult asthma. More research is needed, however, on the impact of ICS toxicity on patient preferences.

<table>
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**CONTRIBUTED POSTER PRESENTATIONS**

**ARTHRITIS, OSTEOPOROSIS & MUSCULOSKELETAL DISORDERS**

**PAM1**

**JOINT COUNTS IN PATIENTS WITH NEW ONSET RHEUMATOID ARTHRITIS: PATIENT VS. PHYSICIAN ASSESSMENT**

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**BACKGROUND:** Both physician-assessed and patient self-reported joint counts have been used in the assessment of disease activity in rheumatoid arthritis. The objective of this study was to compare patient vs. physician reported joint counts in patients with new onset RA. **METHODS:** Baseline data was analyzed from the Study of New Onset Rheumatoid Arthritis (S.O.N.O.R.A.SM), a five-year prospective, longitudinal, inception cohort study to document long-term functional, clinical, and humanistic outcomes and patterns of treatment in patients with new onset RA. Baseline data collection consisted of physician and patient surveys. Physicians assessed swollen (SJ) and tender/painful joints (TJ) while patients reported painful joint (PJ). Physician's SJ and TJ consisted of examination in 64 and 66 joints, respectively. Patient's PJ was assessed in 16 joint areas with use of a mannequin. The Pearson product moment correlation coefficient was calculated for SJ, TJ, and PJ counts. **RESULTS:** One hundred and seven patients completed the baseline survey. Mean age of the sample was 55 ± 15 years; 79% were female; 80% were Caucasian. Mean joint counts were 12.6 (SE = 0.9) SJ, 14.0 (SE = 1.3) TJ, and 6.6 (SE = 0.4) PJ. Patient-reported PJ correlated with physician-reported SJ (r = 0.22, p = 0.023) and TJ (r = 0.55, p < 0.001). **CONCLUSION:** Higher correlation was observed between PJ and TJ compared to SJ. Patient, self-reported joint counts may be a useful surrogate of joint activity in the absence of physician assessment. However, caution should be taken given that the accuracy of patient, self-reported joint counts still needs further evaluation. Five-year follow-up of this population will provide further insight on the sensitivity to change for both patient and physician reported joint counts as it relates to disease activity.

**PAM2**

**AN ECONOMIC EVALUATION OF OSTEOPOROSIS MEDICATION USE PATTERNS IN A MANAGED CARE ORGANIZATION: A TIME TO FRACTURE ANALYSIS**

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Osteoporosis affects approximately 24 million Americans and accounts for an estimated annual direct medical costs of over $13.8 billion. An economic analysis that evaluates the effectiveness of osteoporosis medications for prevention of bone fractures in a naturalistic setting has not been formally conducted. **OBJECTIVES:** To compare differences among four therapeutic alternatives [estrogen replacement therapy (ERT), raloxifene, nasal calcitonin, and alendronate] with respect to health care costs (pharmacy, medical, and total), and time to fracture. **METHODS:** Retrospective pharmacy and medical claims data from a large managed care organization were analyzed. Patients were included if they were diagnosed with osteoporosis and newly initiated on medication between 1/1/98–12/31/98. All patients were followed for exactly 1 year. Cost data was log-transformed to correct for skewness. ANCOVA was conducted to compare total health care costs; Cox Proportional Hazard Model was performed to compare the risk of fracture. Total health care costs was defined as all osteoporosis-related services covered. **RESULTS:** There were 12,757 female patients identified for the analysis and the average age was 70(S.D. = 10). A total of 1,721(13.5%) patients had a fracture after initiation of drug therapy. After adjusting for age, prior medication costs, prior fracture event, and comorbidities, adjusted means (95%CI) of log-transformed total health care costs was lowest for ERT 5.87(5.84–5.90), compared to calcitonin 6.32(6.19–6.46), alendronate 6.55(6.51–6.59) and calcitonin 7.20(6.61–7.80). Compared to calcitonin, the adjusted hazard ratios (95%CI) for a fracture were 0.174(0.078–0.39) for ERT, 0.175(0.078–0.39) for alendronate, and 0.160(0.068–0.377) for raloxifene. **CONCLUSIONS:** In this population, ERT was associated with statistically significant lower total health care costs compared to raloxifene, alendronate, and calcitonin. Raloxifene was associated with statistically significant lower total health care costs.