Abstracts

effectiveness results. The objective of this study was to determine whether there was a relationship between the source of funding and the reporting of positive results. METHODS: We conducted a systematic review of the literature to identify economic evaluations of bisphosphonates for the treatment of osteoporosis. We extracted the source of funding, region of study, the journal name and impact factor and all reported incremental cost effectiveness ratios (ICERs). We identified which ICERs were under the thresholds of \$20,000, \$50,000 and \$100,000 A quality score between 0 and 7 was also given to each of the studies. We used generalized estimating equations (GEE) for the analysis. RESULTS: The systematic review yielded 532 potential abstracts: Seventeen met our final eligibility criteria, 531 ICERs were analyzed, and ten studies (59%) were funded by industry. There was no significant difference between industry and non-industry funded studies reporting ICERs below the thresholds of \$20,000 and \$50,000. However industry sponsored studies were more likely to report ICERs below \$100,000 [OR = 4.69, 95%CI (1.77-12.43)]. Studies of higher methodological quality (higher than 4.5) were less likely to report ICERs below \$20,000 and \$50,000 than studies of lower methodological quality (score under 4). Methodological quality was not significantly different between studies reporting ICERs under \$100,000. CONCLUSIONS: Our study shows that funding source (industry vs. non-industry) did not significantly affect the reporting of ICERs below \$20,000 and \$50,000 thresholds. Methodological quality might be a more significant factor than source of funding in differentiating which studies are likely to report favorable ICERs, with the higher quality studies significantly less likely to report ICERs below \$20,000/QALY and \$50,000/QALY.

REAL WORLD COSTS AND DOSING PATTERNS OF ABATACEPT AND INFLIXIMAB FOR THE TREATMENT OF RHEUMATOID ARTHRITIS

PMS28

Trivedi DN, Kreilick C, Rosenblatt LC

Bristol-Myers Squibb Company, Plainsboro, NJ, USA

OBJECTIVE: To determine the annual drug and administration costs and dosage patterns for patients with rheumatoid arthritis (RA) treated with infliximab or abatacept from a managed care perspective. METHODS: A retrospective analysis of medical claims was performed using the PharMetrics claims database. Patients with RA were identified from Janaury 1, 2003-December 31, 2005 for those prescribed infliximab and February 1, 2006-December 31, 2006 for those prescribed abatacept as first or subsequent biologic treatment. Patients were followed until medication switch, discontinuation, or end of study period. Primary outcomes of interest were annual drug and administration costs and dose escalation (increase in dose, dosing frequency or both). Patients' weight information required to calculate dose were unavailable, therefore paid amounts were used as proxy for dose. **RESULTS:** From first to last infusion, patients receiving infliximab (n = 1913) as first or subsequent biologic experienced an average dose increase of 17% and 39%, respectively. A total of 58% and 73% patients prescribed infliximab as first or second-plus biologic experienced dose escalation, respectively. For patients receiving abatacept (n = 184) as first or subsequent biologic, dose increase averaged 1.2% and 6.5%, respectively (no increase in number of vials for either). The dosing interval for patients receiving abatacept followed the recommended dosing regimen. Patients treated with infliximab experienced an increase in dosing frequency, averaging 49 days earlier in treatment (from 4^{th} to 14^{th} infusion) and 33 days later in treatment (15^{th} to last infusion). The estimated annual drug plus infusion administration cost of first and subsequent biologic therapy was \$13,354 and \$14,465 for abatacept and \$16,608 and \$23,913 for infliximab, respectively. **CONCLUSION:** Patients treated with infliximab experienced an increase in dosage and/or dosing frequency, resulting in an increase in real world treatment costs. Patients treated with abatacept showed no considerable increase in dose or dosing frequency from first to last infusion.

PMS29

BAYESIAN COST-EFFECTIVENESS ANALYSIS OF TREATMENT OF ANKYLOSING SPONDYLITIS

Jansen JP¹, Gaugris S², Stam W³

¹Mapi Values, Boston, MA, USA, ²Merck & Co., Inc, Whitehouse Station, NJ, USA, ³Mapi Values, Houten, Netherlands

OBJECTIVE: To evaluate the cost-effectiveness of etoricoxib (90 mg), celecoxib (200/400 mg), and the non-selective NSAIDs naproxen (1000 mg) and diclofenac (150 mg) in the initial treatment of ankylosing spondylitis (AS) in the UK. METHODS: A Bayesian cost-effectiveness model was developed to estimate the costs and benefits associated with initiating AS treatment with etoricoxib, celecoxib, diclofenac, or naproxen. Efficacy, safety and medical resource and cost data were obtained from the literature. With mixed treatment comparison meta-analysis the obtained efficacy estimates were synthesized. Treatment benefit and degree of disease activity, as reflected with BASFI and BASDAI scores, were related to quality adjusted life years (QALYs) and disability related costs. Other cost outcomes related to drug acquisition, gastrointestinal and cardiovascular safety were taken into consideration. Uncertainty in the source data was translated into uncertainty in cost-effectiveness estimates and therefore decision uncertainty. RESULTS: There was more than 98% a probability that etoricoxib results in greater QALYs than the other interventions. Over a 30-year time horizon, etoricoxib is associated with about 0.5 more QALYs than the other interventions. At 2 years there is a 77% probability that etoricoxib shows the lowest cost. This increases to >99% at 30 years. At 30 years etoricoxib is expected to save $\leq 19,460$ relative to celecoxib (200/400 mg) and ≤14,140 relative to naproxen and diclofenac. For a willingness-to-pay ceiling ratio of \leq 20,000 per QALY there is a >97% probability that etoricoxib is the most-cost-effective treatment. Additional analysis with different assumptions, including celecoxib 200 mg, and ignoring cost-offsets associated with AS disability, supported these findings. CONCLUSION: This economic evaluation demonstrated that etoricoxib is the most cost-effective NSAID treatment for AS patients in the UK.

PMS30

EFFECTS OF 12-HOUR, EXTENDED-RELEASE HYDROCODONE/ACETAMINOPHEN ON PAIN-RELATED WORK PRODUCTIVITY: A SUBANALYSIS FROM A 56-WEEK OPEN-LABEL STUDY

Webster D¹, Herrington D², Corser B³, Rapoport R⁴,

Dikranian AH⁵, Thomas JW⁶, <u>Vo PG</u>⁶, Marx SE⁶, Best AE⁶, Jain R⁶ ¹Team Research of Central Texas, Killeen, TX, USA, ²Benchmark Research, San Angelo, TX, USA, ³Community Research, Cincinnati, OH, USA, ⁴Phase III Clinical Research—Truesdale Clinical, Fall River, MA, USA, ⁵San Diego Arthritis Medical Clinic, San Diego, CA, USA, ⁶Abbott Laboratories, Abbott Park, IL, USA

OBJECTIVE: Chronic pain conditions, such as osteoarthritis (OA) and mechanical chronic low back pain (CLBP), among active workers cost employers ~\$61.2 billion/yr in lost productive time, which includes both reduced performance while at work and days of work missed (absenteeism). An analysis of lost productivity time from a 56-week, open-label study was con-