compression fractures in Spain. **METHODS:** Two alternative models will be introduced here. One standard contingent valuation model (CV), where mean values for willingness to pay (WTP) for the treatment with BKP are obtained through a survey including patients with primary osteoporosis. A new quality of life adjusted wages model (QAW) is also introduced here. The main assumption of this model is that a disease acts on individuals as a tax, where wages are deflected here by a quality of life index (EuroQol 5-D) in the same way as a proportional income tax. The burden of disease is given by this model in terms of an equivalent variation or welfare changes in monetary terms. The model avoids different kind of biases introduced in many times by the CV approach and is a faster and more rigorous tool to find welfare changes determined by diseases and their medical treatments. **RESULTS:** A sample of 168 individuals who had been asked about their WTP for BKP was used to develop the CV model. A mean value for WTP of €3909 is revealed by the sample. A sample of 300 patients 21 years of age or older and both genders coming from a clinical trial designed by Kyphon, was used to develop QAW model, here is that BKP determines in the first month a yearly welfare gain of €2665, increased to €3311 after 12 months. **CONCLUSIONS:** The results using CV models and QAW model are similar in the first year of life. It can be explained through a temporal downward bias introduced by WTP responses that means that a patient doesn't include in his personal WTP an estimation of his life expectancy.

MUSCULAR-SKELETAL DISORDERS—Health Care Use & Policy Studies

PMS67

HEALTH GAINS FOREGONE DUE TO THE SUSTAINED DELAY OF ADEQUATE UTILIZATION OF EVIDENCE BASED TREATMENTS: THE CASE OF BISPHOSPHONATES FOR THE TREATMENT OF OSTEOPOROSIS

Storz P[1], Gothe H[1], Klein S[1], Marx P[2], Häussler B[1]
[1]IGES Institut GmbH, Berlin, Germany, [2]Pfizer GmbH, Karlsruhe, Germany

OBJECTIVES: Evidence-based guidelines recommend treatment for postmenopausal women with osteoporosis to prevent fractures. The study aims at determining since when this was known and whether the utilization of bisphosphonates in Germany from this point onward was adequate and to what extent health gains might have been foregone due to a limited use of bisphosphonates. **METHODS:** To determine since when the beneficial effect (prevention of fractures) was known, cumulative meta-analyses of randomized controlled trials derived from systematic reviews were conducted. The evidence-base was considered as established, when a significant (5%-level) reduction of fractures was observed in trial populations combined in meta-analysis compared to therapies without bisphosphonates. Utilization figures for bisphosphonates and epidemiological estimates where taken from published sources. **RESULTS:** The hip/femur fracture risk was significantly lower if treatment included bisphosphonates compared to treatment without bisphosphonates (RR 0.62; 95%-CI 0.40–0.97 / RR 0.45; 95%-CI 0.23–0.90). In principal, this was known since 1995/1996. Utilization of bisphosphonates in 1996 was sufficient for the continuous treatment of about 8,200 patients (440,000 patients in 2006). About 1.6 to 1.9 million patients annually might have benefitted from treatment. About 22,800 fractures might thus have been avoided, had all patients with potential benefit continuously received bisphosphonates since 1996/1997. **CONCLUSIONS:** The delay in the wider use of bisphosphonates for osteoporosis treatment has resulted in a considerable loss of potential health gains in terms of avoided fractures. An arguable lack of evidence for the expected benefit from bisphosphonate therapy does not sufficiently explain this finding. Other factors (e.g. cost considerations) might have contributed to this result. Limitations of the present analysis are primarily associated with uncertainties of epidemiological estimates and the application of study results to the entire patient population.

PMS68

ANTI-TUMOUR NECROSIS FACTOR-&ALPHA; INHIBITOR DOSE CHANGES IN RHEUMATOID ARTHRITIS PATIENTS IN A PROSPECTIVE PATIENT REGISTRY SETTING

Kievit W[1], Tatt ID[2], Van Riel P[1]
[1]Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands, [2]F.Hoffmann-La Roche Ltd, Basel, Switzerland

OBJECTIVES: Real-world data on long-term dosing patterns in first time anti-TNFα inhibitor treated rheumatoid arthritis patients is lacking. Such data are important for the calculation of treatment cost, especially for products where the label allows for varying doses and frequency of administrations. **METHODS:** The Dutch Rheumatoid Arthritis Monitoring (DREAM) project is a longitudinal, multi-centre patient register monitoring biologic DMARD usage in clinical practice since February 2003. Patients meeting the Dutch reimbursement criteria (DAS28 > 3.2, inadequate response to ≥2 DMARDs including methotrexate, no prior bDMARDs) were assessed at three-month intervals for 48 months. Dosing was determined by the attending rheumatologist guided by the recommended labelled doses (adalimumab 40 mg every other week, etanercept 25 mg twice weekly, infliximab 3 mg/kg at week 0, 2, 4, 8 and every 8 weeks thereafter). Mean dose was calculated based on the actual dose prescribed at each visit and the change over time evaluated for each anti-TNFα. **RESULTS:** The mean baseline doses for adalimumab (N = 374), etanercept (N = 432) and infliximab (N = 325) were 39.9 mg/two weeks, 24.2 mg twice weekly, and 3.4 mg/kg per eight weeks. Mean baseline DAS28 and HAQ ranged from 5.2–5.4 and 1.3–1.4, respectively. Nearly one-third of infliximab patients were prescribed greater than the labelled dose at baseline (32%, N = 105) compared to 2.5% and 0.2% for adalimumab and etanercept. At 12, 24, and 48 months follow-up, mean doses were: adalimumab, 41.5, 43.3, and 45.7 mg/two weeks (42 months); etanercept, 24.0, 24.9, and 23.9 mg twice per week (45 months); infliximab, 4.3, 4.9, and 4.9 mg/kg/every eight weeks (48 months). Mean doses in infliximab patients prescribed greater than the recommended labelled dose at baseline were 4.7, 5.2, and 5.6 mg/kg at the same follow-up intervals. **CONCLUSIONS:** Longitudinal patient registry data from The Netherlands show a marked and continued dose escalation in RA patients prescribed infliximab as a first-line anti-TNFα when compared to either adalimumab or etanercept.

PMS69

PATTERNS OF MORBIDITY AND DIRECT COSTS ASSOCIATED IN THE OSTEOPOROSIS SPANISH POPULATION SETTING

Sicras A[1], Navarro R[1], Rejas J[2]
[1]Badalona Servicios Asistenciales, Barcelona, Spain, [2]Pfizer Spain, Madrid, Spain

OBJECTIVES: To determine the co-morbidity and direct cost influence in patients with osteoporosis in a Spanish population setting in under usual medical practice. **METHODS:** We performed a transversal retrospective study realized beginning from registers of subjects older than ≥44 years appertaining to seven centers of primary care (year 2,006). A control group without osteoporosis was formed. Main measures: general (age, gender), general co-morbidities and specific (ICPC-2), Charlson index