pared to adalimumab and infliximab when using actual drug utilization data from US commercially-insured population.

PMS16

POSSIBLE COST SAVING OF EPOETIN ALFA COMPARED TO AUTOLOGOUS BLOOD DONATION OR TO NO-BLOOD-CONSERVATION-STRATEGY BEFORE ELECTIVE HIP OR KNEE SURGERY DUE TO REDUCTION IN ALLOGENEIC BLOOD TRANSFUSIONS AND ITS SIDE EFFECTS

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OBJECTIVES: Transfusion of allogeneic blood still is common in orthopedic surgery, albeit associated with higher morbidity and mortality. This analysis evaluates from the perspective of a German hospital the potential cost savings of Epoetin alfa compared to preordained autologous blood transfusions or to no-blood-conservation-strategy before elective hip and knee surgery by reducing allogeneic blood transfusions and their associated infectious adverse events.

METHODS: Individual patients (n = 10,000) were created based on data from controlled trials, the German DRG institute (InEK) and various publications and entered into a comprehensive inpatient clinical trial database including German DRG records and medical publications - in particular cost per transfusion (allogeneic red blood cells: €22.92/unit and autologous red blood cells: €28.70/unit), pneumonia treatment (€5,000), and length of stay (€220/day). Probabilistic sensitivity analyses were performed in RiskCalc, which, if any, factors had an influence on the model’s clinical and cost outcomes. RESULTS: At acquisition costs of €10,000 per patient, Epoetin alfa is cost saving compared to autologous blood donation, and at €18,000 per patient, it is no-better than no-blood-conservation-strategy. The results were most sensitive to the cost of Epoetin alfa, blood units and hospital days.

CONCLUSIONS: Upcoming shortages and increasing prices of red blood cells will make Epoetin alfa an attractive blood conservation strategy for anemic patients at reasonable costs, due to the shortages and increasing prices of red blood cells.

PMS17

THE EFFECT OF BIOLOGICAL TREATMENT ON WORK PRODUCTIVITY AND PRODUCTIVITY COSTS OF RHEUMATOID ARTHRITIS PATIENTS

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OBJECTIVES: Biologics represent significant costs of rheumatic diseases treatment. Our study has focused on productivity comparison of rheumatoid arthritis (RA) patients treated with biologics and patients on DMARDs who are indicated to biologic treatment however therapy is unavailable due to economic limitations. METHODS: In a retrospective analysis on the biologics and DMARDs therapy, patients were assigned into two groups of patients - patients treated with biologics (n ~ 70) with low disease activity and patients just on DMARDs (n ~ 23) with high disease activity (DAS28 score ≥ 5.1). All patients were in productive age. Patients' demographic and clinical data were collected. RESULTS: Upcoming shortages and increasing prices of red blood cells will make Epoetin alfa an attractive blood conservation strategy for anemic patients at reasonable costs, due to the shortages and increasing prices of red blood cells.

CONCLUSIONS: Despite of the fact, patients on biologics had longer time from diagnosis to start of therapy, which reflected about 53.6% higher productivity costs. Costs are supposed to increase with increasing HAQ.score. Therefore, we calculated direct and productivity costs for five groups of patients according to their HAQ (<0, 0.6-1.1, 1.1-1.6, 1.6-2.1, >2) to confirm this assumption also in the Czech Republic. METHODS: This calculation was based on a retrospective cross-sectional study. We included 126 patients with rheumatoid arthritis, aged 18-84 years either at working status, part-time disabled or full-time disabled. For calculation of direct and indirect costs, we used microcosting method retrospectively reviewing individual patients' medical records. For calculation of productivity costs we excluded patients older than 63 years of age (retirement pensioners). We used friction costs approach (FCA) with defined friction period of 130 workdays, based on patients' absenteeism. Productivity of part-time-disabled and full-time disabled patients were assumed to be deteriorated by 52% and 70%, respectively, based on the Czech law on pension insurance. The height of average monthly income in year 2010, €966.3 was used as denominator. Costs were expressed as means with 95% confidence intervals, for each group, and compared using FCA.

CONCLUSIONS: Direct and productivity costs for patients with rheumatoid arthritis are closely related to the height of HAQ score. Total (direct and productivity) annual mean costs were €713.6. 31.0% of all patients were treated with biological treatment which represented up to 79.4% of the overall direct medical costs.

PMS19

THE ECONOMIC BURDEN OF POST-MENOPAUSAL OSTEOPOROSIS AND RELATED TRACTIONS IN GREECE

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OBJECTIVE: To assess resource use (RBU) and costs attributable to osteoporosis and osteoporosis-related fractures in post-menopausal women in Greece. METHODS: A multi-point data collection procedure, based on strictly-structured interviews with 117 geographically distributed physicians, was conducted to collect and process using a questionnaires data. RESULTS: Osteoporosis patients were 41.0 years (21-61) and 45.7 years (22 – 61), respectively. Mean time from diagnosis was 17.5 years with mean HAQ score 1.4 and mean DAS28 3.62. Mean annual medical direct costs, for each HAQ group, were €4076.7, €6595.2, €6493.1, €5932.1, and €6727.1, respectively. Mean annual productivity costs associated with productivity loss were €4852.6, €1267.7, €1585.6, and €6212.5, respectively. CONCLUSIONS: Direct and productivity costs for patients with rheumatoid arthritis are closely related to the height of HAQ score. Total (direct and productivity) annual mean costs were €713.6. 31.0% of all patients were treated with biological treatment which represented up to 79.4% of the overall direct medical costs.