

PAR9

CO-PRESCRIPTION OF GASTROPROTECTIVE AGENTS FOR PATIENTS AT RISK OF NSNSAID-INDUCED GASTROINTESTINAL HARMLister S¹, Makinson G², Koncz T²¹Pfizer Ltd, Tadworth, UK, ²Pfizer Limited, Tadworth, UK

OBJECTIVE: Patients prescribed non-selective (ns) NSAIDs are at risk of gastrointestinal (GI) adverse events, hence the co-prescription of gastroprotective agents (GPAs) as prophylactic therapeutic options. Concerns over appropriate GPA co-prescribing, especially for high-risk patients, prompted this assessment of the level of GPA co-prescription for patients at GI risk. **METHODS:** A primary care database (DIN-LINK), representative of the UK, containing records of over 800,000 patients was used. Patients with osteoarthritis and/or rheumatoid arthritis who received nsNSAIDs and co-prescribed GPA between September 2003 and August 2005 were identified. Gastroprotection level (%) was defined by days on GPA within any three months of nsNSAID use. Patients were grouped by level of gastroprotection. For each month, the percentage of patients at different levels of gastroprotection was calculated and analysed according to GI risk factors (NSAID use frequency, serious co-morbidity, aspirin use, and previous GI adverse events). **RESULTS:** Approximately 25,000 patients with nsNSAID prescriptions were identified. Of these, over half were frequent nsNSAID users (prescribed nsNSAIDs for at least 75% of the observed period), 2.5% had previous GI adverse events, 12% were taking aspirin, and over two thirds had serious co-morbidity. Of total nsNSAID users, 18% used GPAs for the full period (100%); of frequent nsNSAID users, 19.5%. By analysing patients with risk factors and frequent nsNSAID use, the percentage of those using GPAs for the full period was less than 40% with previous GI adverse events, 30% for aspirin takers, and 22% with serious co-morbidities. High, but not full (80–99%), GPA use was achieved in similarly low numbers of patients with risk factors. **CONCLUSION:** Prescription data revealed frequent NSAID users receive little co-prescribed GPAs. Presence of risk factors of NSAID-induced GI risk did not increase GPA use, which may increase GI-related hospitalisation risk.

PAR10

THE COST-UTILITY OF ADALIMUMAB (HUMIRA®) IN PATIENTS WITH RHEUMATOID ARTHRITIS (RA) IN DENMARKAagren M¹, Davies A², Pang F³, Winding B⁴¹MUUSMANN Research & Consulting, Copenhagen, Denmark,²United BioSource Corporation, London, England, ³AbbottLaboratories Ltd, Maidenhead, Berks, UK, ⁴Abbott Laboratories, Gentofte, Denmark

OBJECTIVES: Adalimumab is a human anti-TNF monoclonal antibody for the treatment of RA. This study was designed to assess the cost-effectiveness of adalimumab and the other biologic agents compared with conventional disease-modifying anti-rheumatic drugs (DMARDs) in patients with moderate/severe RA. **METHODS:** A Monte-Carlo patient-level simulation was developed to model patients' Health Assessment Questionnaire (HAQ) scores over a lifetime horizon. Efficacy data were taken from published literature and quality adjusted life years (QALYs) were de-ri-ved from HAQ-utility relationships. Both direct costs (e.g. drug, administration, monitoring, hospitalizations etc.) and indirect costs were calculated for each patient. Discounting was applied at 5% for both costs and effectiveness. **RESULTS:** Total discounted costs for adalimumab were 1,506,869 DKK, while costs of DMARDs were 1,398,958 DKK. Effectiveness amounted to 2.23 vs. 1.22 QALYs for adalimumab and DMARD-therapy, respectively. Thus, the incremental cost-

effectiveness ratio (ICER) for adalimumab versus DMARD is 289,005 DKK per QALY. Infliximab and etanercept generated fewer QALYs than adalimumab, and had ICERs vs DMARDs, of 321,723 DKK and 306,990 DKK per QALY, respectively. **CONCLUSIONS:** This was the first health economic analysis of RA biologics in Denmark. The results suggest that adalimumab is a cost-effective treatment option for patients with RA and is more cost-effective than infliximab and etanercept.

PAR11

ARE THEY MEASURABLE? A STUDY ON ELICITING INDIRECT AND INTANGIBLE COSTS OF KNEE OSTEOARTHRITIS USING HUMAN CAPITAL APPROACH AND WILLINGNESS-TO-PAY IN MULTIETHNIC ASIAN POPULATION IN SINGAPOREXie E¹, Thumboo J², Fong KY³, Lo NN³, Yeo SJ³, Yang KY³, Li SC⁴¹National University of Singapore, Singapore, Singapore, ²SingaporeGeneral Hospital, Singapore, Singapore, ³Singapore General Hospital,Singapore, Singapore, Singapore, ⁴National University of Singapore,

Singapore, Singapore, Singapore

OBJECTIVES: To determine acceptability and feasibility of human capital and willingness-to-pay approaches, estimate indirect and intangible costs of knee OA using these approaches, and identify factors potentially affecting these costs in Singapore. **METHODS:** Data were collected through face-to-face interview among knee OA patients. Human capital approach was used to estimate indirect costs by multiplying: 1) days of absence from work due to OA with average gross earning per capital per day for working patients, or 2) productivity loss with the market price of housekeeping and leisure activities for homemakers/retirees. A closed-ended iterative bidding contingent valuation method was used to elicit willingness-to-pay for a hypothetical cure of OA as a proxy for intangible costs. Mann-Whitney U or Kruskal-Wallis H tests were performed in univariate analysis, and linear regression in multivariate analysis. **RESULTS:** Indirect costs per year and intangible costs were estimated at US\$1008 and US\$1200, accounting for 2.8% and 3.3% of annual household income, respectively. The indirect costs were significantly higher for male or working patients, while intangible costs were higher for Chinese, working patients, patients with higher income, or worse global wellbeing. **CONCLUSION:** This study indicated that both human capital and WTP approaches are acceptable and feasible methods in eliciting indirect and intangible costs which are substantial for patients with knee OA in Singapore. Most importantly, a congruence in the magnitude of indirect costs relative to annual household income was observed across countries, which implies that it may be possible to provide a "standard reference range" of indirect costs for economic evaluation for various diseases.

DIABETES

PDB1

BETTER HBA1C CONTROL WITH BOT VERSUS CT AVOIDS LONG-TERM MICRO-VASCULAR COMPLICATIONS IN PATIENTS WITH TYPE-2-DIABETES: MODEL SIMULATIONS WITH THE DMMWalzer S¹, Huppertz E², Mueller E¹, Janka HU³¹Analytica International, Loerrach, Germany, ²Sanofi-AventisDeutschland GmbH, Berlin, Germany, ³Zentralkrankenhaus Bremen-

Nord, Bremen, Germany

OBJECTIVES: Based on the clinical results of the LAPTOP study (Diabetes Care 2005;28:254–9) a simulation with the Diabetes-Mellitus-Model (version 3.2) was conducted. Long-term out-