DOES GENERIC ALENDRONATE REALLY SAVE MONEY IN THE COST-EFFECTIVE TREATMENT REGARDLESS OF FRACTURE TYPE UPTO A LEVEL OF 90% COMPLIANCE COMPARED TO ALL OBs ONCE-YEARLY ADMINISTERED ZOL WAS DOMINANTLY THE MOST OVER GENERIC ALENDRONATE INCREASED WITH DECREASED GENERIC ALENDRONATE COMPLIANCE, WERE OBTAINED FROM THE LITERATURE.

For patients 70 years old with a T-score (Siris, 2006). Costs of fractures were taken from Danish cost studies and/or DRG cost lists and pharmacy costs of the medications were based on official list prices. Utilities were gathered from local price database. Annual compliance rates were taken from the literature (Willemijn, Cur Med Res Opin 2008;24:3217–22). RESULTS: Compared to each oral bisphosphonate (OB), ZOL generated the lowest clinical NNTs for all fracture sites. Under conservative compliance: patient rate of 50% for weekly and 75% for monthly OBs, cost of treatment to prevent one fracture in 3 years was €30,625 (VF) and €160,400 (HFr) for ZOL; €76,800 (VF) and €272,900 (HFr) for branded alendronate; €75,826 (VF) and €269,325 (HFr) for generic alendronate; €175,400 (VF) and €575,275 (HFr) for risedronate and €65,725 (VF) for ibandronate.

Sensitivity analyses were performed. CONCLUSIONS: In the Turkish setting, compared to all OBs once-yearly administered ZOL was dominantly the most cost-effective treatment regardless of fracture type up to a level of 90% compliance with oral therapies.

COST-EFFECTIVENESS SIMULATION MODEL OF BIOLOGIC STRATEGIES FOR THE TREATMENT OF MODERATE TO SEVERE RHEUMATOID ARTHRITIS BASED ON DISEASE ACTIVITY IN GERMANY Berencsen A1, Baerwald C2, Zeidler H1, Gronimca-Ihle E1, Kruger K1, Neubauer AS8, Dupont D3, Mekkesz S3

1Novartis Pharmaceuticals Corporation, East Hanover, NJ, USA, 2Novartis Sverige AB, Taby, Sweden, 3Hospital Germans Trias i Pujol, Badalona, Barcelona, Spain, 4RTI-Health Solutions, Basel, Switzerland, 5Bristol-Myers Squibb International Corporation, Braine-l’Alleud, Belgium, 6Bristol-Myers Squibb International Corporation, Braine-l’Alleud, Belgium, 7Istanbul University, Istanbul, Turkey, 8Bristol-Myers Squibb, Piscataway, NJ, USA

OBJECTIVES: The management of moderate to severe rheumatoid arthritis includes the use of biologic agents. Modelling allows simulation of complex biologic treatment strategies after an insufficient response (IR) to previous biologic agents. The objective is to assess the cost-effectiveness of various biologic treatment sequences over two years according to the Turkish health care system using a public payer perspective.

METHODS: Six treatment strategies using three successive biologic agents [etanercept (ETA), adalimumab (ADA), infliximab (IFN), abatacept (ABA) or rituximab (RTX)], were modelled based on Turkish medical practice. Effectiveness was derived from published evidence as expected number of days in low disease activity state (LDAS).

Biologic treatment was maintained for achieving LDAS or switched at each six months in case of IR. Total medical costs were estimated per level of disease activity over 6 months. Extensive probabilistic sensitivity analysis was performed. RESULTS: Consideration of IR to 1 anti-TNF agent, the sequence ETA-ABA-ADA was more efficacious and cost-effective (102 days in LDAS; 496 TL per day in LDAS) over 2 years than the sequence ETA-RTX-ADA (82 days in LDAS; 554 TL per day in LDAS or 81 days in LDAS; 563 TL / day in LDAS based on RTX current reimbursement status). Consideration of IR to 2 anti-TNF agents resulted in ETA-ABA-ADA and ETA-INF-ABA were more efficacious and cost-effective (64 days in LDAS for both; 841 and 826 TL / day in LDAS, respectively) over 2 years than a sequence of anti-TNF agents only (52 days in LDAS; 1480 TL per day in LDAS). CONCLUSIONS: These simulations suggest that over two years of therapy, sequences including abatacept after an IR to one anti-TNF agent are more efficacious and cost-effective vs. similar sequences including rituximab. Sequences including abatacept after IR to 2 anti-TNF agents also appear more effective and cost-effective than similar sequences composed of anti-TNF agents only.

ECONOMIC ANALYSIS OF DABIGATRAN ETEXILATE FOR THE PRIMARY PREVENTION OF VENOUS ThROMBOEMBOLISM FOLLOWING TOTAL HIP OR KNEE REPLACEMENT IN SPAIN González-Rojas N1, Vida V3, Monreal M1, Wolowacz SE2

1Hospital Germans Trias i Pujol, Badalona, Barcelona, Spain, 2Ibània Clinic, 3Bayer d’Espanya, S.A., Barcelona, Spain

OBJECTIVES: Evaluate the cost-effectiveness of dabigatran etexilate compared with enoxaparin for the primary prophylaxis of venous thromboembolism (VTE) after total hip replacement (THR) or total knee replacement (TKR) in Spain. METHODS: A published cost-effectiveness model was adapted to the perspective of the Spanish National Health Service. Oral dabigatran etexilate 220 mg/day was compared with injectable enoxaparin 40 mg/day. The efficacy and safety of the treatments was determined from two pivotal phase III studies comparing these interventions. The model combined a decision tree for the peri-operative period (acute phase, 10 weeks) with a Markov model for long-term events (chronic phase, 60 years). The treatment patterns, consumption of resources and costs were based on quantitative (databases, patient registries, official statistics) and qualitative (systematic literature review, expert surveys) data sources for Spain. Univariate deterministic and probabilistic sensitivity analyses were performed. RESULTS: The study results suggest that overall outcomes do not differ significantly between dabigatran etexilate and enoxaparin. Mean Life Years gained were 0.018 and 0.020 higher for dabigatran patients undergoing THR and TKR respectively; mean QALYs were 0.013 and 0.015 higher respectively. Mean overall costs were lower for dabigatran patients by €189 and €53 respectively. In the probabilistic sensitivity analysis, dabigatran etexilate was dominant for most of the one thousand simulations in THR. The probability that dabigatran is cost-effective at a threshold of €0,000 QALY was 99% in THR and 87% in TKR. In the deterministic sensitivity analysis, dabigatran was dominant versus enoxaparin in all scenarios in both THR and TKR. CONCLUSIONS: From the viewpoint of the Spanish NHS, primary prophylaxis with dabigatran etexilate (220 mg/day orally) has a lower cost than enoxaparin (40 mg/day subcutaneously) after THR and TKR with a comparable efficacy and safety profile.