

Meeting / Value in Health Info:	ISPOR 11th Annual European Congress Athens, Greece November, 2008
Code:	PMS25
Disease:	Arthritis, Rheumatoid Arthritis
Topic:	Cost Studies (CS)
Topic Subcategory:	Cost-Effectiveness Analysis (CE)
Title:	COST-EFFECTIVENESS OF RITUXIMAB (MABTHERA) COMPARED WITH TNF INHIBITORS FOR THE TREATMENT OF RHEUMATOID ARTHRITIS (RA) IN POLAND
Author(s):	Robert Plisko, MSc, CEO1, Joanna Krzystek, MsC, Analyst1, Przemyslaw Rys, MD, Vice president1, Monika Russel-Szymczyk, MA, Health Economics Specialist2, Monika Szkultecka-Debek, PhD, Health Economics Support Manager for CEMAI Region2, Katarzyna Szamotulska, PhD, Head of Epidemiology Department31HTA Consulting, Krakow, Poland; 2 Roche Polska, Warsaw, Poland; 3 National Research Institute of Mother and Child, Warsaw, Poland

OBJECTIVES:To evaluate the cost-effectiveness of rituximab compared with TNF inhibitors for the treatment of RA patients following the failure of 2 DMARDs and 1 TNF inhibitor in Polish setting.

METHODS: A cost-utility approach was adopted, evaluating the total direct National Health Fund costs and QALYs. Baseline patient characteristics were based on the REFLEX and DANCER phase III trials. A micro-simulation model of 50 000 RA patients estimated lifetime Health Assessment Questionnaire (HAQ) progression, QALYs and direct costs. The starting time-point of the model was the failure of two previous DMARDs. Two treatment options were compared. Upon treatment failure it was assumed patients would follow an identical lifetime treatment strategy consisting of: TRDM - infliximab, rituximab, leflunomide and palliative care or TTDM - infliximab, etanercept, leflunomide and palliative care. Rituximab was assumed to be administered every 9 months to responding patients. ACR response rates were taken from the phase III RCTs and adjusted for placebo response. The initial HAQ drop by ACR category and longterm HAQ progression were taken from the published literature.

RESULTS:Annual drug acquisition and administration costs were lower for TRDM compared to TTDM. Discounted total lifetime direct NHF costs were 216,460 pln and 233,734 pln for TRDM and TTDM groups respectively. Total QALYs were 29,952 and 25,854 for TRDM and TTDM, respectively. TRDM is a dominant therapy over TTDM.

CONCLUSION: The model predicted that TRDM dominated options for RA patients who have failed DMARD therapy, with higher estimated QALYs and lower NHF costs. The results will be different when different TNF inhibitors will be taken into account.