PMS30
BUDGET IMPACT ANALYSIS OF IMPLEMENTING TENDERS BETWEEN THE BRANDED INFILIXIMAB AND ITS BIOSIMILARS IN THE PUBLIC HOSPITALS OF PARIS

Bacquet F1, Picart L2, Koutzoukis P3, Christou P3, Maniadakis N3

1National School of Public Health, Athens, Greece, 2University of Athens Medical School, Hypoglycaemia and General Diabetes Unit, Athens, Greece, 3Colloquium for Clinical Epidemiology and Outcomes Research (CLEO), Athens, Greece, 4UCB Pharma, Athens, Greece

OBJECTIVES: To estimate the incremental total and per-patient budget impact of adopting certolizumab pegol (CZP) for the recently indicated treatment of active psoriatic arthritis (PsA) patients in Greece. METHODS: A budget-impact model was adopted from a third-party payer perspective (EOPPY) to delineate the financial implications of introducing CZP for the treatment of PsA alongside currently indicated biologics: etanercept, golimumab, and adalimumab, over the next 5 years (2014-2018). The model framework considered market share scenarios with and without CZP, and directly reimbursed costs of treatment and disease management, applied to the prevalent and eligible Greek patient population. Quarterly treatment discontinuations were enabled to enable tracking of patients, so that the model could apply different costs to patients at different stages of treatment. Costs pertaining to drug acquisition, administration and monitoring were included for both the induction and maintenance phases of patients’ treatment and corresponded to current costing year. Resource unit costs and epidemiological data were retrieved from officially published sources. The measured outcomes were incremental costs per treated patient per year (TPPY) and total budget impact, calculated by comparing the respective patient and total budget expenditures with and without CZP in the market share mix scenarios.

RESULTS: The incremental total and TTPY costs resulting from the addition of CZP to the original treatment mix were estimated at €-2,132,966 and €859 respectively, over a 5-year time horizon. On average, annual cost-savings of €507,370 (1.76%) and €172 were observed for both outcomes respectively. In each model, yearly cost-savings were yielded and 2018 was the year with the highest total cost-savings for EOPPY (€12,236 [2.2%]). Cost-savings were driven by reduced drug and administration costs. CONCLUSIONS: The inclusion of CZP for active PsA treatment was predicted to be associated with short- and long-term cost-savings in Greece.

PMS31
BUDGET IMPACT ANALYSIS OF AN ETANERCEPT BIOSIMILAR FOR THE TREATMENT OF RHEUMATOID ARTHRITIS IN EUROPE

Ruff L1, Rezk MP2, Ulhig T3, Gomers JW4

1Covance Inc., London, UK, 2Biogen International GmbH, Zug, Switzerland, 3Diakonhjemmet Hospital, Oslo, Norway

OBJECTIVES: Rheumatoid arthritis (RA) has considerable impact on physical function and reduces quality of life. Biologics, such as etanercept, can be efficacious in reducing disease activity in their authorised indications. However, these treatment options can be very costly and present economic pressures on healthcare funding. The objective of this study was to assess budget impact of introducing an etanercept biosimilar in the five European countries (EUC): Belgium (BE), Italy (IT), Norway (NO), Spain (ES), and the United Kingdom (UK). A budget-impact model (BIM) was developed to estimate the impact of the hypothetical introduction of an etanercept biosimilar on the healthcare budgets in EU5 over a five-year horizon (2016-2020) from the payer’s perspective. Erosion of etanercept market share was calculated for each country. The model was linked to the COBRA RA model, which uses a Markov decision process that simulates the natural history of RA, taking into account several key clinical outcomes. The budget impact was calculated over a time horizon of 5 years, to estimate the impact of CZP sales in two segments: (1) taking CZP, where the price of CZP is the same as in the payer’s country of origin; (2) taking CZP in the payer’s country of origin, where the price of CZP is lower than in the payer’s country of origin. The calculations were performed for two discount scenarios versus etanercept (10%, 25%) were applied.

RESULTS: The hypothetical introduction of an etanercept biosimilar was estimated to result in a modest and acceptable increase in the total therapy cost. The budget impact of introducing an etanercept biosimilar, when compared to etanercept, was calculated to be a 1% increase in total therapy cost for the five years.

PMS32
BUDGET IMPACT ANALYSIS OF CERTOLIZUMAB PEGOL IN THE TREATMENT OF AXIAL SPONDYLOARTHITIS IN GREECE

Sakelakis P1, Parisot D2, Koutzoukis P3, Maniadakis N1

1National School of Public Health, Athens, Greece, 2Metropolitan Hospital, Athens, Greece, 3Collaborative Centre for Clinical Epidemiology and Outcomes Research (CLEO), Athens, Greece, 4UCB Pharma, Athens, Greece

OBJECTIVES: To estimate, from a Greek payer perspective, the budget impact of adopting certolizumab pegol (CZP) for the treatment of axial spondyloarthritis (axSpA), including ankylosing spondylitis (AS) and non-radiographic axSpA (nr-axSpA) in Greece.

METHODS: A budget-impact model was locally adapted over a time horizon of 5 years, to estimate the impact of CZP taking sales from adalimumab (ADA), infliximab (IFX), etanercept (ETA), and golimumab (GOL), but not from conventional care (CC) in AS, and ADA but net CC in nr-axSpA. Data from AS and nr-axSpA populations in Greece were combined with data on market shares of available anti-TNFs and associated costs (i.e. medication acquisition and administration, healthcare visits, laboratory and imaging tests) to estimate the budgetary consequences of CZP price erosion on the AS and nr-axSpA patient cohorts. All costs were calculated using 2015 prices. The costs were calculated using 2015 prices. The cost-utility analysis was performed using AS and nr-axSpA patients from the National Statistical Service, published literature and expert opinion. It was assumed that all AS patients would remain on AS therapy, while nr-axSpA patients would switch to CZP. The budget savings generated by CZP could be used to treat additional RA patients with a biosimilar.

RESULTS: On average, the use of CZP is estimated to decrease the mean annual budget per AS patient from €172 (95% CI €150-194) to €145 (95% CI €126-166). On the other hand, the incremental cost of CZP for the overall axSpA population, the average annual increase per patient ranges from €342 to €372 (3% to 5%), which is below the reimbursement threshold set by the National Health Insurance fund.

CONCLUSIONS: The reimbursement of CZP for the treatment of axSpA patients in Greece will, on aggregate, result in a modest and acceptable increase in the total therapy cost.

PMS33
BUDGET IMPACT ANALYSIS OF AN ETANERCEPT BIOSIMILAR FOR THE TREATMENT OF ALL LICENSED ETANERCEPT INDICATIONS FOR ADULTS IN EUROPE

Ruff L1, Rezk MP2, Ulhig T3, Gomers JW4

1Covance Inc., London, UK, 2Biogen International GmbH, Zug, Switzerland, 3Diakonhjemmet Hospital, Oslo, Norway

OBJECTIVES: Biologics such as etanercept, can be efficacious in reducing disease activity in their authorised indications, but are considered costly. The objective of this study was to assess future budget impact of introducing an etanercept biosimilar in all licensed and approved indications in five European countries (EUC): Belgium (BE), Italy (IT), Norway (NO), Spain (ES), and the United Kingdom (UK). A budget-impact model (BIM) was developed to estimate the impact of potentially introducing an etanercept biosimilar on the healthcare budgets in five European countries (EUC) over a five-year horizon (2016-2020) from the payer’s perspective. Erosion of etanercept market share was calculated for each country. The budget impact was calculated over a time horizon of 5 years, to estimate the impact of CZP taking sales from adalimumab (ADA), infliximab (IFX), etanercept (ETA), and golimumab (GOL), but not from conventional care (CC) in AS, and ADA but net CC in nr-axSpA. Data from AS and nr-axSpA populations in Greece were combined with data on market shares of available anti-TNFs and associated costs (i.e. medication acquisition and administration, healthcare visits, laboratory and imaging tests) to estimate the budgetary consequences of CZP price erosion on the AS and nr-axSpA patient cohorts. All costs were calculated using 2015 prices. The cost-utility analysis was performed using AS and nr-axSpA patients from the National Statistical Service, published literature and expert opinion. It was assumed that all AS patients would remain on AS therapy, while nr-axSpA patients would switch to CZP. The budget savings generated by CZP could be used to treat additional RA patients with a biosimilar.

RESULTS: On average, the use of CZP is estimated to decrease the mean annual budget per AS patient from €172 (95% CI €150-194) to €145 (95% CI €126-166). On the other hand, the incremental cost of CZP for the overall axSpA population, the average annual increase per patient ranges from €342 to €372 (3% to 5%), which is below the reimbursement threshold set by the National Health Insurance fund.

CONCLUSIONS: The reimbursement of CZP for the treatment of axSpA patients in Greece will, on aggregate, result in a modest and acceptable increase in the total therapy cost.

PMS34
BUDGET IMPACT ANALYSIS OF TOCILIZUMAB VERSUS ADALIMUMAB AS A FIRST LINE (1L) MONOTHERAPY FOR THE TREATMENT OF PATIENTS WITH RHEUMATOID ARTHRITIS (RA) IN GREECE

Argioudou A1, Papageorgiou L2, Koutzoukis P3, Skoumpos A2, Caporos P3

1Toxo Hellas, Athens, Greece, 2Toxo (Melas) S.A., Athens, Greece

OBJECTIVES: To evaluate and compare the budget impact of tocilizumab intravenous (IV) and adalimumab subcutaneous as a 1L monotherapy for the 6-month treatment setting for patients with RA, in the Greek healthcare system. METHODS: A budget impact model was developed to evaluate the impact of introducing an etanercept biosimilar to a segment of the anti-TNF market that includes innovator etanercept and adalimumab, comparing total costs with scenarios with and without a biosimilar. Patients naive to biologics and with appropriate endpoints and failing the min criteria were modelled under a set of conservative assumptions: (1) uptake of 5% to 40% (2016-2020) from etanercept to the biosimilar; (2) anti-TNF price erosion of 5% per year; (3) unknown price of etanercept biosimilar discount scenarios versus etanercept (10%, 25%) were applied. RESULTS: The hypothetical introduction of an etanercept biosimilar with a 10% or 25% cost reduction versus innovator etanercept pricing, resulted in projected net budget savings (millions): (1) UK £62-62, (2) France €19-46, (3) Germany €42-105, (4) Italy €26-62 and (5) Spain €16-37. Such savings could be potentially funds available for an additional 1,530 (UK) to 8,430 (Germany) patients with etanercept biosimilar over five years. CONCLUSIONS: The introduction of an etanercept biosimilar could represent cost-effective treatment options for healthcare systems as the ETN budget impact was sensitive to market uptake rates and discounts versus etanercept. This savings could be used to treat additional RA patients with a biosimilar.

A639

VALUE IN HEALTH 18 (2015) A335-A766