

Results: Assuming a market share of 10% for CZP at baseline (1,177 patients), CZP RMD in eligible patients generated a £13.34 million saving in CZP drug costs between 2021 and 2024 (-19.95% vs. CZP FMD). Incremental flare costs were marginal (£6,074; +0.11% vs. FMD). Overall, net savings with RMD were £13.33 million, out of £627.17 million total spend in the FMD scenario. Scenario analysis of RMD suggested that cost savings were still realised within reasonable CZP market share uptake assumptions. **Conclusions:** CZP RMD for axSpA patients in sustained remission led to net savings compared to continuing FMD regimen in the UK, due to lower overall cost of treatment despite a marginal direct cost increase associated with marginally higher risk of disease flare.

PBI15

THE ECONOMIC BURDEN FOR THE MANAGEMENT OF MODERATE-TO-SEVERE PSORIASIS IN THE KINGDOM OF SAUDI ARABIA

Al-Omar H,¹ Altawil E,² R. Hamadah I,³ Alsaqa'aby M,⁴ Al Shahwan MA,¹ Al-Haddab MA,¹ Abu-Shraie N,⁵ **Mohamed O**,⁶ Basu S,⁷ Roshdy A,⁸ Rateb M,⁸ Nour Y,⁸ A. Al-Sheikh A²

¹King Saud University, Riyadh, Saudi Arabia, ²King Saud University Medical City, Riyadh, Saudi Arabia, ³King Faisal Specialist Hospital & Research Center, Riyadh, Saudi Arabia, ⁴King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia, ⁵Ministry of National Guard - Health Affairs, King Abdul Aziz Medical City, Riyadh, Saudi Arabia, ⁶IQVIA AG, Dorfplatz 4, Cham, Switzerland, ⁷IQVIA, Gurgaon, India, ⁸Branch of AbbVie Biopharmaceuticals GmbH, Riyadh, Saudi Arabia

Objectives: Psoriasis is a chronic, immune-mediated disease of the skin and joints, with a global prevalence of 2-3%. Treatment options include topical treatment, phototherapy, conventional systemic drugs, and biologics. Psoriasis Area and Severity Index (PASI) 75 is accepted as a reasonable response to therapy. However, with advent of PASI90 being potentially achievable, data demonstrating relevant value associated with achieving PASI90 compared to PASI75 are indispensable. Objective: to estimate the economic burden of managing moderate-to-severe psoriatic patients in the Kingdom of Saudi Arabia (KSA) who achieve a clinical outcome of PASI75 and assess the cost-utility of achieving PASI90 using Risankizumab.

Methods: A Markov-model was developed with a 12-week cycle length and 40-year time horizon from a healthcare payer perspective. Costs considered were drug acquisition, drug administration, medical resources use, adverse events management, and travel costs. The model compared the current treatment sequence Anti-TNF-alpha (Adalimumab), IL12/23 inhibitors (Ustekinumab), and IL-17A inhibitor (Secukinumab), as 1st, 2nd, and 3rd line, respectively; targeting PASI75 versus IL-23 inhibitor (Risankizumab) as 1st line treatment option, targeting PASI90.

Results: Using the current treatment sequence and targeting PASI75 as a clinical outcome, the overall estimated cost of moderate-to-severe psoriasis management in KSA was USD 8.9 billion yielding 0.92 million (quality-adjusted life year) QALYs. The use of Risankizumab as 1st line option targeting PASI90 yielded an overall cost of USD 8.5 billion and 0.95 million QALYs. The cost-savings were attributed to the lower healthcare resource utilization while using Risankizumab. The increase in QALY gained was related to the increased probability of achieving PASI90 while using Risankizumab (72.2%). **Conclusions:** Targeting PASI90 using Risankizumab as a 1st line treatment option for moderate-to-severe psoriasis patients' was not only found dominant versus the current treatment options, yielding higher QALYs eventually at lower costs; but may also improve quality of life without additional cost.

PBI16

BETIBEGLOGENE AUTOTEMCEL GENE THERAPY (BETI-CEL) IS COST-EFFECTIVE VERSUS STANDARD OF CARE IN PATIENTS WITH TRANSFUSION-DEPENDENT B-THALASSEMIA (TDT) IN FRANCE

Undreiner L,¹ Roze S,² Caillon M³

¹bluebird bio France, Paris, France, ²VOO Agency, LYON, 69, France, ³Vyoo agency, Lyon, France

Objectives: To evaluate the cost effectiveness of beti-cel versus long-term non-curative treatments with transfusions and iron chelation therapy (SoC) in patients, aged ≥12 years, with TDT and non-β⁰/β⁰ genotype and eligible for allogeneic HCST but without a HLA-matched donor, in France. **Methods:** A discretely integrated condition event model adapted to the French setting was used to estimate costs and benefits of beti-cel versus the current SoC over a lifetime horizon. Clinical input data were sourced from clinical trials of beti-cel. For SoC, complication and mortality rates related to iron overload were derived from published sources and costs were estimated based on French data. Utilities were estimated from a UK Chart review by applying French preferences methods and from literature. An innovative payment scheme for beti-cel was considered. The base case analysis was performed according to the HAS guidelines perspective (all payers without indirect costs). Future costs and clinical outcomes were discounted at 2.5%. Sensitivity and scenario analyses were performed. **Results:** From the collective perspective, compared to SoC, beti-cel gene therapy was associated with a gain of 4.59 (26.90 versus 22.31) life years (LYs) and 6.41 (20.80 versus 14.39) quality-adjusted life years (QALYs). Direct lifetime costs of SoC were €1,207,166, while those of beti-cel were €314,141 higher, resulting in an incremental cost-effectiveness ratio (ICER) of €48,998/QALY. When indirect costs due to loss of productivity, including unemployment, were included, the ICER was

€427/QALY. Parameters with the greatest impact on ICER in sensitivity analyses were time horizon, discount rate, and perspective. Given a willingness to pay of €100,000/QALY, beti-cel has an 84% cost-effectiveness probability compared to the current SoC. **Conclusions:** Even in the context of no official threshold in France, this modeling study suggests that beti-cel can represent a cost-effective treatment option for TDT indication patients.

PBI17

COST-EFFECTIVENESS ANALYSIS OF BIOLOGICAL AGENTS TO MODERATE TO SEVERE PLAQUE PSORIASIS TREATMENT FROM THE BRAZILIAN PUBLIC HEALTH SYSTEM PERSPECTIVE

Senna K,¹ Zimmermann IR,² Meirelles I,³ **Santos M**³

¹Instituto Nacional de Cardiologia, Rio de Janeiro, Brazil, ²Universidade Federal de Brasília, Brasília, Brazil, ³Instituto Nacional de Cardiologia, Rio de Janeiro, RJ, Brazil

Objectives: Psoriasis is a chronic inflammatory disease that affects mainly the skin and joints leading to social difficulties. The Brazilian Clinical Protocol of Psoriasis recommends biological agents in case of contraindication, intolerance or failure to non-biological systemic treatment. This study aimed to analyze the efficiency of nationally licensed biological agents for the treatment of moderate to severe plaque psoriasis, from the Brazilian Public Health System perspective. **Methods:** We developed a decision tree model attached to a Markov model to estimate costs per Quality Adjusted Life Years (QALY) of six biological treatment strategies (ixequizumab; secuquinumab; ustequinumab; risankizumab; adalimumab and infliximab) for plaque psoriasis moderate to severe in adults. For each treatment strategy, we conducted deterministic and probabilistic sensitivity analysis and a cost-effectiveness threshold analysis using the efficiency frontier approach. **Results:** Analyzing the efficiency frontier, we detected the dominance of infliximab and secuquinumab by adalimumab, ustequinumab and ixequizumab. Adalimumab is the most cost-effective strategy up to a willingness-to-pay of approximately \$37,424/QALY followed by ustequinumab up to a willingness-to-pay of \$65,492/QALY. **Conclusions:** The treatment effectiveness, expressed in QALY, is similar between the biological agents assessed, but we observed expressive differences in incremental costs. Adalimumab, followed by ustequinumab and, finally, ixequizumab are more likely to be cost-effective per willingness-to-pay. Following the efficiency profile of available treatments at Brazilian Public Health System, it would be necessary a price reduction of risankizumab, secuquinumab and ixequizumab in 55.1%, 10.74% and 9.1%, respectively.

PBI18

EFFICIENCY OF INNOVATIVE BIOLOGICS INDICATED FOR MODERATE-SEVERE PSORIASIS

Martínez de la Plata JE,¹ Gómez-Navarro V,² Armario-Hita JC³

¹Hospital de Poniente, El Ejido, Spain, ²LEO Pharma, Barcelona, Spain, ³Puerto Real University Hospital, Cadiz, Spain

Objectives: Cost-effectiveness analysis of biologics for the treatment of moderate-severe psoriasis in Spain. **Methods:** Cost analysis per responder (CPR) to achieve PASI100 for IL-17 therapies (brodalumab, secukinumab, ixekizumab), IL-12/23 therapies (ustekinumab), and IL-23 therapies (guselkumab, tildrakizumab, risankizumab) vs. placebo. Efficiency was based on achievement of PASI100 at 16 weeks (short-term) and 52 weeks (long-term), obtained from Network Meta-Analysis; 2020 ex-factory prices+VAT were obtained from BotPlus. Robustness was checked by a sensitivity analysis. **Results:** Brodalumab showed higher probability to achieve PASI100, PASI90, and PASI75 after one year. Short-term: brodalumab is among the treatments with the lowest number needed to treat (NNT) (2.56-2.60) together with ixekizumab (2.49-2.54), and risankizumab (2.48-2.54); however, it is the most efficient drug with a CPR of 11.638-11.808€. Long-term: brodalumab has similar results to risankizumab, NNT=1.89 vs 1.71, but CPR for brodalumab is much lower 25.733€ vs. 31.466€. With a scenario of 20% reduction of notified prices of brodalumab, the rest of the treatments would need discounts 49-91% for being as cost-effective in the short-term and 35-53% for the long-term. Considering 20% reduction on the prices, brodalumab is the most efficient drug within the IL-17 group (short-term: 9.379€/brodalumab vs 20.508€/secukinumab and 15.632€/ixekizumab; long-term: 20.586€/brodalumab vs 34.928€/secukinumab and 29.170€/ixekizumab). **Conclusions:** Brodalumab appears to be a cost-effective alternative versus the current biologic treatments for moderate-severe psoriasis in Spain, being the most cost-efficient alternative within the IL-17 therapeutic group.

PBI19

COST-EFFECTIVENESS ANALYSIS OF ADALIMUMAB BIOSIMILAR FOR RHEUMATOID ARTHRITIS IN BRAZIL COMPARED TO DELAYED BIOLOGIC TREATMENT INITIATION

Tanaka S,¹ Porter JK,² Santos F,¹ Aratanga G¹

¹Amgen, São Paulo, Brazil, ²Amgen (Europe) GmbH, Zug, Switzerland

Objectives: The progression of moderate and severe rheumatoid arthritis (RA) is controlled for many patients by biologic disease modifying anti-rheumatic drugs (bDMARDs). However, some patients face a delay to initiate biologic treatment after becoming eligible for these therapies. The aim of this analysis was to evaluate the