with relma-cel was estimated to be 38.1% representing those who will not experience disease progression or die from r/r DLBCL. The 5-year survival rates for chemotherapy and relma-cel were predicted to be 7.2% and 45.5%, respectively. Patients treated with relma-cel were estimated to gain 5.26 more QALYs and cost ¥1,067,430 more than those with chemotherapy. Hence, the incremental cost-effectiveness ratio was ¥203,137 per QALY. According to sensitivity analyses, the model was the most sensitive to the mixture cure model parameters, which were estimated based on the RELIANCE trial data, and the probability of relma-cel being cost-effective under a 3-time-GDP threshold was 74%. ***Conclusions:*** For Chinese r/r DLBCL patients, relma-cel was associated with a significant QALY gained. The uncertainty exists, which however may be reduced by a longer follow-up of the RELIANCE trial.

EE50
A COST-CONSEQUENCE MODEL OF USING THE 21-GENE BREAST RECURRENCE SCORE ASSAY TO IDENTIFY PATIENTS WITH EARLY-STAGE NODE-POSITIVE BREAST CANCER WHO BENEFIT FROM ADJUVANT CHEMOTHERAPY IN THE NETHERLANDS

Machielsen P,[1] de Jongh FE,[2] **Drost P,[3]** Simons M,[4] Spoorendonk JA[4]
[1]*Exact Sciences, -, Netherlands,* [2]*Pharmerit, Rotterdam, Netherlands,* [3]*Exact Sciences, Baar, Switzerland,* [4]*OPEN Health, Rotterdam, Netherlands*

Objectives: Patients with early-stage (I/II/IIIa) hormone receptor positive, human epidermal growth factor receptor-2 (HER2) negative invasive breast cancer with 1-3 positive lymph nodes (N1) often undergo surgical excisions followed by adjuvant chemotherapy (ACT). Many of these patients, e.g., post-menopausal women, have no benefit from ACT and receive unnecessary treatment that is costly and often associated with short and long-term adverse effects (AEs). Gene expression profiling (GEP) assays, such as the 21-gene breast recurrence score® (21-gene), can be used to identify patients at higher risk for recurrence and who may benefit from ACT. However, the budgetary consequence of using 21-gene versus no GEP in the Netherlands is currently unknown and therefore here assessed using a cost-consequence model. ***Methods:*** A validated model for node negative (N0) breast cancer patients was used as the basis to create the N1 model, which was revalidated by a clinical expert. The model compared the deterministic costs and consequences of using 21-gene versus no GEP, and subsequent ACT use with corresponding costs for chemotherapy, treatment of AEs, productivity losses, GEP testing, and treatment of recurrences, according to Recurrence Score® result. The model time horizon was 5 years. Data from the literature were used to populate the model. ***Results:*** Using 21-gene resulted in mean cost-savings of €11,907 per patient and €8,970,383 over 5 years for the Dutch healthcare system when compared to no GEP. 21-gene resulted in fewer patients receiving ACT and fewer AEs, sick days, and hospitalisations. The proportion of patients receiving ACT was mainly responsible for driving up the costs. ***Conclusions:*** Using 21-gene assay as a diagnostic test in post-menopausal N1 breast cancer patients results in overall cost-savings compared to no GEP. Implementing 21-gene in this population can prevent unnecessary overtreatment, which leads to less clinical and economic burden on the patient and Dutch healthcare system.

EE52
COST-MINIMISATION ANALYSIS OF RAVULIZUMAB COMPARED WITH ECULIZUMAB IN PATIENTS WITH ATYPICAL HEMOLYTIC UREMIC SYNDROME (AHUS) IN THE NETHERLANDS

Postma AJ,[1] Quist S,[2] de Jong L[3]
[1]*Asc Academics, Groningen, Netherlands,* [2]*University of Groningen, university medical center Groningen, Den Haag, Netherlands,* [3]*University of Groningen, Groningen, GR, Netherlands*

Objectives: aHUS is a rare disease characterized by a dysregulated and overactive complement system. Prior to the introduction of eculizumab, a complement C5-inhibitor, outcomes for patients with aHUS were generally poor. Eculizumab has substantially improved patient prognosis, but requires biweekly infusions that can impose a large treatment burden for patients and caregivers. Ravulizumab was designed via targeted modification of eculizumab to reduce dosing frequency to every 4 to 8 weeks, with an immediate, complete and sustained inhibition of complement C5. The aim of this study was to evaluate the economic impact of patients with aHUS switching from eculizumab to ravulizumab in the Netherlands from a societal perspective. ***Methods:*** A previously published US cost-minimization model was adjusted to the Dutch setting to compare ravulizumab with eculizumab in patients with aHUS. The model considered adult and paediatric treatment-naïve patients with aHUS. The primary outcomes were the average lifetime medical costs (treatment [drug acquisition, administration], monitoring, treatment of acute kidney injury) and societal costs (costs for patients and family [travel , informal care], productivity losses). ***Results:*** Ravulizumab produced lower lifetime medical and societal costs per patient than eculizumab in adult patients with aHUS (€6,200,521 vs. €8,289,022 respectively), reducing total costs by 25% (€2,088,501). In the paediatric population, ravulizumab cost €2,175,929 (24%) less per patient over a lifetime horizon. The estimated cost-savings were predominantly driven by a reduction in total treatment costs (€2,103,922 and €2,190,676 in adult and paediatric patients respectively). Compared to eculizumab, ravulizumab reduced the societal costs for patients and family in adult patients by 74.4% (€31,504) and in paediatric patients by 75.6% (€45,791). Moreover, in the adult population, ravulizumab lowered societal costs associated with productivity losses by 74.4% (€13,508). ***Conclusions:*** Ravulizumab is cost-saving compared to eculizumab for long-term treatment of both adult and pediatric patients with aHUS in the Netherlands.

EE53
THE NET MONETARY BENEFIT OF INTRODUCING SODIUM-GLUCOSE COTRANSPORTER-2 INHIBITORS IN MIDDLE-INCOME COUNTRIES

Falavigna M,[1] Deyneli O,[2] Seyam A,[3] Mustafa N,[4] Giorgi M,[5] Gabriel Z,[6] Goncalves S,[7] **Solorzano J,[8]** Vasnawala H,[9] Schabert V,[10] Mihajlović J[11]
[1]*HTAnalyze Consulting and Training, Porto Alegre, RS, Brazil,* [2]*Koç University School of Medicine, Istanbul, Turkey,* [3]*Universal Health Insurance Authority (UHIA), Cairo, Egypt,* [4]*Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia,* [5]*Instituto Universitario CEMIC, Buenos Aires, B, Argentina,* [6]*AstraZeneca, Luton, UK,* [7]*AstraZeneca, Buenos Aires, Argentina,* [8]*AstraZeneca, San José, Costa Rica,* [9]*AstraZeneca, Bengaluru, India,* [10]*Epilogix LLC, Sarajevo, MD, Bosnia and Herzegovina,* [11]*Mihajlović Health Analytics, Novi Sad, Serbia*

Objectives: Sodium-glucose cotransporter-2 inhibitors (SGLT2i) reduce macrovascular complications and prolong survival in patients with type 2 diabetes (T2D); however, access to SGLT2i can be limited, particularly in some low- and middle-income countries (MICs). Our objective was to quantify the economic value of introducing SGLT2i in patients with T2D without complications in selected MICs. ***Methods:*** A cohort-level partitioned survival model was developed to quantify economic (from a national perspective) and clinical outcomes associated with the results of clinical cardiovascular outcome trials (CANVAS, EMPA-REG, DECLARE-TIMI 58) and real-world evidence (CVD-REAL 1&2 pooled) comparing SGLT2i with placebo or other glucose-lowering drugs (oGLD; standard of care), respectively. The model was applied over a time horizon of 20 years in six MICs with the following willingness-to-pay thresholds per incremental quality-adjusted life year (QALY), using the average exchange rate from Q4 2021: Argentina 18,306 US dollars (USD); Brazil 6,440 USD; Egypt 10,619 USD; Malaysia 31,372 USD; Mexico 27,231 USD; Turkey 18,157 USD. Data on healthcare resource utilisation, treatment costs and mortality were obtained for each country. The main outcome was net monetary benefit (NMB) per person. ***Results:*** A positive NMB for SGLT2i was observed across all countries. Using clinical trial data (versus placebo), we estimated the following 20-year NMB/person: Argentina 2,138 USD; Brazil 1,477 USD; Egypt 1,561 USD; Malaysia 11,685 USD; Mexico 15,029 USD; Turkey 3,811 USD. Based on real-world evidence (versus oGLD), 20-year NMBs were 1,571 USD, 2,918 USD, 3,469 USD, 19,985 USD, 13,796 USD and 7,328 USD, respectively. The positive NMBs resulted from increased QALYs and reductions in all-cause mortality in patients receiving SGLT2i. ***Conclusions:*** Early introduction of SGLT2i in patients with T2D, either as add-on therapy or to replace an existing oGLD, is a cost-effective therapeutic option in MICs, with the potential to reduce the complications of T2D and increase quality of life.

EE54
HAEMOPHILIA LIFETIME COST COMPARISON FOR AUSTRIA: ANNUAL DRUG COSTS IN COMPARISON WITH PROJECTED GENE THERAPY COSTS

Vavrovsky A
Academy for Value in Health GmbH, Vienna, 9, Austria

Objectives: Currently, substitution of clotting factors is the most commonly used option for patients affected by haemophilia. Factors are well established, but expensive. This research aims to explore the cost of the most widely used clotting factors in Austria and compares these with projected costs of gene therapy. ***Methods:*** We analysed the most widely used products for the treatment of haemophilia A (HA) and haemophilia B (HB) with standard half-life (SHL) and extended half-life (EHL), respectively. In Austria, most patients are diagnosed at birth, hence a time horizon of 67 years of maintenance therapy was chosen. The average patient weight was assumed to be 72,5 kg. The analysis was performed from the payer perspective restricting it to direct costs. Costs were extracted from Austrian cost catalogues using ex-factory prices. ***Results:*** For HA and HB, annual maintenance costs varied between €88.595 and €313.272 for SHL factors and between €56.414 and €318.052 for EHL products. Without consideration of inflation, costs of additional on-demand factor usage or immune tolerance induction, lifetime costs vary between €3,8 M and €21,3 M per patient in Austria. ***Conclusions:*** Even though the cost of gene therapy for haemophilia is still unknown, considering cost-effectiveness gene therapy has the potential to offer good value for money to the Austrian healthcare system. It is unlikely that the direct costs of gene therapy will be equal to the lifetime cost of clotting factors, and additional benefits offered by gene therapy need to be taken into account. These include quality of life improvements for patients and caretakers, improved compliance and fewer bleeds due to a durable response. Further research is needed around the projected costs of gene therapy and the wider implications of better haemophilia care to society via a reduction of indirect costs and caregiver burden.