Results: The updated treatment algorithm captured and quantified the impact of nuanced comorbidity management called for in guidelines. In a cohort of newly diagnosed T2D patients, 81 percent initiated an SGLT2 inhibitor within five years, predominantly due to increasing cardiovascular risk, versus zero percent when escalation was dictated by HbA1c alone. Broad, early use of SGLT2 inhibitors resulted in an additional 0.73 predicted QALYs and GBP10,757 (USD13,600) in predicted lifetime cost savings per patient versus a "traditional" approach. Cost savings were primarily due to avoided renal events; extrapolation to the national level predicted cost savings to the payer of GBP2.8 billion (USD3.5 billion), which traditional models cannot capture.
Conclusions: The modernized Cardiff model incorporates multifactorial prescribing guidelines and contemporary evidence around cardio-renal protection and is more adept at modeling costs and outcomes of multidimensional antidiabetic treatments; traditional glucose-centric modeling methods may introduce bias. Economic modeling and HTA processes must adapt to follow the complexities of modern disease management and remain relevant as healthcare systems address the cardiovascular-kidney-metabolic syndrome epidemic.

OP05 Efficiency Frontier Analysis Of Ciltacabtagene Autoleucel For Relapsed/Refractory Multiple Myeloma In Brazil

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Introduction: Multiple myeloma (MM) is a challenging hematological malignancy, primarily treated with autologous stem cell transplantation (ASCT). However, relapse or refractoriness is inevitable, necessitating alternative treatments. This study evaluates ciltacabtagene autoleucel (Carvykti®), a novel therapy, against a second ASCT, using an efficiency frontier approach to assess its therapeutic value and cost-effectiveness.
Methods: We conducted a comparative analysis using data from CARTITUDE-1 clinical trials and a Brazilian real-world cohort (2002 to 2015) of MM patients treated under SUS (Brazilian Healthcare System). We estimated survival curves and area under the curve (AUC) for both interventions over 48 months and projected the curves for a 10-year horizon using parametric distributions. Cost-effectiveness was assessed by calculating the incremental cost per month of survival. Efficiency frontier methodology was employed to determine a proportional price for ciltacabtagene autoleucel, based on the cost and median survival benefits compared to the second ASCT.
Results: Ciltacabtagene autoleucel demonstrated a 7.27 percent increase in AUC for overall survival over 48 months compared to the second ASCT. The incremental cost was BRL54,219.15 (USD11,133.30) per month of survival. Over a 10-year horizon, the estimated cost for ciltacabtagene autoleucel was significantly higher than that for the second ASCT. Using the efficiency frontier approach, the cost of ciltacabtagene autoleucel should not exceed BRL228,226.42 (USD46,863.74), considering its survival benefit and cost of production.
Conclusions: Ciltacabtagene autoleucel demonstrates significant anti-tumor activity in relapsed/refractory MM, with a notable survival advantage. Efficiency frontier analysis suggests a maximum justified cost, providing a framework for pricing decisions. This study highlights the importance of balancing innovation with cost-effectiveness in healthcare decision-making.

OP06 Utilizing Health Technology Assessment Outputs To Develop Health Technology Management Protocols In The Irish Setting

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Introduction: Increasingly in Ireland, there are specific criteria attached to reimbursement approval for new medicines. Health technology assessment (HTA) identifies where uncertainty is greatest in relation to clinical and cost-effectiveness evidence and budget impact estimates; our health technology management (HTM) approach uses these outputs from HTA to design protocols to manage these uncertainties in the post-reimbursement phase.
Methods: A bespoke managed access protocol (MAP) is developed for each medicine reimbursed under this approach, informed by uncertainties highlighted in the HTA, directions from the decision-maker, and relevant particulars arising from commercial negotiations. Individual patient reimbursement applications are submitted via an online application system linked directly to the national pharmacy claims system. Pharmacists review the applications and approve reimbursement support where the patient meets the reimbursement criteria. The process is adaptive, allowing expansion of the criteria to include previously excluded patient cohorts, and the addition of new indications. It can also work across differing reimbursement arrangements (hospital/primary care).
Results: The MAP for liraglutide for weight management confines reimbursement to patients with a body mass index greater than or equal to 35 kg/m^2, prediabetes, and high risk for cardiovascular disease. Phase I reimbursement support lasts for six months; patients not attaining greater than or equal to five percent weight loss are deemed non-responders as per the HTA, and reimbursement support