Methods: A systematic review was conducted in the databases MEDLINE via Pubmed, Embase, The Cochrane Library, and LILACS addressing the question "Is patisiran treatment effective and safe for patients diagnosed with ATTRh amyloidosis with stage 2 polyneuropathy or who have an inadequate response to tafamidis?"
Results: The 13 studies included in the review demonstrate the efficacy of patisiran in reducing the neuropathic progression of the disease, as evidenced by decreased mNIS+7 scale scores following 18-month use of the drug. Improvements in the quality of life of patients taking patisiran have been reported, as measured by reduced scores on the Norfolk-QoL-DN scale. Patisiran has also been shown to be effective in reducing NT-proBNP, a marker related to cardiac stress. Improvements in the nutritional status of patients taking patisiran were demonstrated by increasing modified body mass index (BMI). Good tolerability of patisiran was observed by patients using it. Most adverse events were classified as mild or moderate. The studies indicated that the occurrence of deaths is similar between the patisiran and placebo groups. Most deaths were related to cardiac events and were not associated with the use of patisiran.
Conclusions: The use of patisiran in patients with hATTR demonstrated efficacy in reducing the neuropathic progression of the disease, evidenced by decreased mNIS+7 scale scores, improvements in quality of life as measured by reduced Norfolk-QoL-D scale scores, and reduced NT-proBNP. The drug patisiran was well tolerated, with most adverse events rated as mild and moderate.

PP125 Why Understanding The Burden Of The Population Is Fundamental

Franziska J. Schöb and Julie Hviid Hahn-Pedersen
(CRJP@novonordisk.com)

Introduction: Despite intense efforts in development of new treatments over the last two decades, symptomatic treatments remain the only option for the vast majority patients diagnosed with dementia due to Alzheimer's disease (AD). There remains a significant unmet need for disease modifying therapies (DMTs) to slow or stop AD progression. DMTs in development are targeting early stages of AD (pre-clinical, mild cognitive impairment and mild dementia stages), thereby creating an entirely new treatment paradigm for patients, clinicians, and payers. A key challenge will be in identifying the appropriate patient for treatment in a very heterogenous population. We have performed a literature review to better understand and define the AD population, with a view to enabling more targeted treatment in future.
Methods: Embase, MEDLINE and the Cochrane Library were searched to identify publications between 2010-2021 on observational studies reporting evidence on prevalence and subgroup identification, including clinical feasibility of identification. The search was restricted to English language.
Results: We identified 45 studies, mostly from Europe, USA and Asia. Populations were primarily grouped based on generic demographic factors (e.g., age, sex, gender), AD staging, comorbidities or biomarkers. Prevalence data was available for six subpopulations: pre-dementia stage, mild dementia, age, Apolipoprotein E (APOE) genotype, comorbid obesity and hypertension. Across these, data on prevalence were heterogenous depending on study design and country of origin, and ranging between 66 million to 102 million for people with mild AD dementia, or as another example, ranging between 46 million to 92 million for APOE genotype carriers worldwide.
Conclusions: The heterogeneity and the uncertainty in prevalence of the AD population represent big challenges to clinicians and payers. Future discussions on target patient identification for new treatments should be aligned and integrated with current clinical practice e.g. leveraging validated biomarkers as diagnostic tools. Additional research on an integrated approach to identify patients who would benefit the most from DMTs will be needed.

PP127 Early Health Technology Assessment (HTA) Of Medical Technologies To Inform Subsidy Decision-making In Singapore

Ada PM Batcagan-Abueg (ada_pm_batcagan_abueg@moh.gov.sg), Swee Sung Soon, Hong Ju and Kwong Ng

Introduction: Medical technologies are evolving rapidly, with many new and expensive technologies entering the market constantly, challenging the sustainability of the public healthcare system. Early health technology assessment (HTA) to inform subsidy decision for innovative medical technologies, before they diffuse into the public healthcare system, may drive appropriate early adoption or curtail inappropriate use. This abstract describes the Agency for Care Effectiveness (ACE)'s experience in conducting early HTAs and key challenges faced.
Methods: During ACE's 2021 topic prioritization exercise, ACE took a proactive approach by considering medical technologies identified from horizon scanning (HS) for subsidy evaluation. Two topics were shortlisted from HS. Standard HTA evaluation framework and local clinician consultation were used to define the evaluation scope and clinical pathways. Literature search and appraisal were conducted for safety, effectiveness, and economic evidence. Budget impact estimations and organizational feasibility assessment were additional domains considered for subsidy decision-making by the Ministry of Health Medical Technology Advisory Committee (MTAC).
Results: MTAC did not recommend subsidy for the two technologies due to weak evidence base, largely due to a lack of comparative evidence, small samples, short-term follow-ups, or heterogeneity of population. Additional considerations included potentially high budget impact or organizational feasibility issues such as substantial capital and maintenance cost and infrastructure reconfiguration required. During the evaluation, key challenges of assessing such technologies in their early diffusion within the healthcare system were: (i) differing clinical opinions on whether the technology meets an unmet need; (ii) uncertain place in the clinical management algorithm for the relevant indications; (iii) sparse and weak evidence;

https://doi.org/10.1017/S0266462323002398 Published online by Cambridge University Press

(iv) uncertain financial implications to the healthcare system due to a lack of available local costs.
Conclusions: Early HTA on medical technologies identified from HS can be a useful tool to guide subsidy decisions; however, several challenges exist. Careful selection of technologies and timing of evaluation are critical. Seeking stakeholder inputs earlier would ensure shortlisting appropriate technologies with greater clinical need for HTA.

PP128 A Transparent Methodology To Assess Innovativeness Of Health Technologies At Marketing Authorization Time

Ludmila Gargano (ludgargano@gmail.com), Isabela Freitas, Luila Henriques, Ariane André, Juliana Álvares-Teodoro, Francisco Acurcio and Augusto Guerra Jr.

Introduction: Defining drug innovation can be challenging and there is no consensus on what a truly "innovative" medicine is. The Italian Medicine Agency (AIFA) has established an approach to assess innovativeness based on therapeutic need, added therapeutic value, and quality of evidence. However, judgment can be subjective and may not be adequate for assessment at the time of marketing authorization, when only preliminary evidence – often from non-comparative or non-randomized trials – are available. We developed a transparent methodology for early assessment of innovativeness at the time of marketing authorization, based on AIFA guidelines.
Methods: Since the perspective was the marketing authorization date, only data available at agency's Medical Review or pivotal trial publications were considered. AIFA criteria were revisited, using oncology medicines approved in the last 10 years as a base case. Impact of preliminary evidence and inadequate study design was considered.
Results: Each assessment should refer to the first approved specific indication and predefined clinically relevant outcomes. When more than one study was presented, best methodological quality, larger sample and/or longer follow-up was selected. Four domains were established: Therapeutical need: existence and clinical benefits of alternative therapies; Clinical benefit added when compared to those alternatives; Suitability of study design considering adequate comparator group, relevant outcome assessed and randomization; Risk of bias. For each domain, clear and specific criteria were defined in consensus by a group of experts in health technology assessment (HTA) and were applied to all cancer drugs evaluated.
Conclusions: Efficacy evidence available for marketing authorization are often based on preliminary data, arising from single randomized clinical trials or even non-comparative studies, which difficult early assessments of innovativeness. For this reason, transparent and reproducible methodologies can be useful not only to HTA bodies, but also for other key stakeholders in the pharmaceutical market, such as investors, researchers, doctors, and governments.

PP129 Health Technology Assessment Adaptation: Pharyngolaryngeal Biopsies (OLB) For People with Suspected Head and Neck Cancer in the Outpatient Setting

Charlotte Bowles (charlotte.bowles@wales.nhs.uk), Rebecca Boyce, Gareth Hopkin, Matthew Prettyjohns, Sophie Hughes, Elise Hasler, Katie McDermott and Susan Myles

Introduction: In the UK over 12,400 yearly cases of head and neck cancers are reported (2021). Pharyngolaryngeal biopsies (OLB) may improve the speed of diagnosis and treatment of head and neck cancers under local anesthetic. The Scottish Health Technologies Group (SHTG) published advice on this technology in 2018. Since this, additional evidence has been published to warrant a health technology assessment (HTA) for Wales. The aim of this review was to provide update on the clinical and cost-effectiveness of OLB when compared to undergoing biopsy in an operating theatre (OTB) under general anesthetic to inform decision making in Wales.
Methods: A rapid review was undertaken of relevant databases since 2018 of the clinical evidence, health economics and patient perspectives relevant to Wales. Health Technology Wales (HTW) developed a de-novo cost-utility analysis comparing OLB to OTB over a lifetime horizon. Inputs were sourced from the SHTG budget impact analysis, updated with values more relevant to a Welsh setting.
Results: From consultation to biopsy procedure, the mean number of days was 1.3 for OLB compared to 17.4 days under OTB ($p < 0.05$). The mean time from consultation to start of treatment was 27 days for OLB compared to 41.5 days for OTB ($p < 0.05$). The economic analysis found a resulting ICER of GBP21,011 (EUR23,824.23) in a population with 2,183 at risk patients. As OLB was associated with lower costs (GBP816 per person) (EUR925.26) and fewer quality adjusted life years than OTB (-0.04), this ICER corresponds to OLB being considered a cost-effective diagnostic strategy.
Conclusions: HTW guidance was able to recommend use of OLB within the diagnostic pathway for head and neck cancers within Wales. For people with a positive test, OLB is sufficient to confirm a diagnosis but should not be used to rule out a diagnosis due to the potential in reducing the time to diagnosis and treatment in a cost-saving way.

https://doi.org/10.1017/S0266462323002398 Published online by Cambridge University Press