Introduction. The very high costs of orphan drugs, together with the uncertainties regarding their (cost-)effectiveness raise questions regarding the efficiency and legitimacy of their health technology assessment (HTA) and appraisal process. The aim of the present, qualitative study was to investigate how experts on the reimbursement of these treatments perceive the HTA and appraisal process in their country. Moreover, it aimed to provide specific conditions and practical recommendations for their improvement.

Methods. Twenty-two European experts from 19 different countries were included in a qualitative survey and semi-structured interviews. Transcripts were analyzed using the qualitative data analysis software Nvivo. A grounded theory approach was adopted to develop a set of well-defined concepts from the cyclic analysis of the empirical data.

Results. First, analysis of the expert interviews yielded five good practices for an efficient HTA and appraisal of orphan drugs: a high level of transparency, patient involvement, a clear decision-making structure with room for flexibility, mechanisms to minimize bias and an explicit consideration of the opportunity cost. Meanwhile, participants highlighted several barriers to the overall process, such as a lack of trust between the different stakeholders and imbalances in negotiation power. In addition, the results allowed to identify a number of 'contextual' determinants that may undermine the legitimacy of the final decision, such as bias and the perverse effects of the orphan drug legislation. Drawing from the experts' experiences, a toolkit was developed that includes an extensive number of specific recommendations (and conditions) for decision-makers to improve the legitimacy and efficiency of their HTA and appraisal of orphan drugs.

Conclusions. Overall, the results showed that decision-makers should focus on limiting the impact of the contextual determinants rather than improving the methods included in the HTA. This will contribute to further legitimize reimbursement choices for orphan drugs towards the wider public.

OP91 The Current State Of Disease-Specific Registries For The Monitoring Of Expensive Pharmaceuticals In The Netherlands

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Introduction. On a regular basis, new and innovative medicines come to the market; with uncertainties surrounding their exact effect in patients. To address these uncertainties, disease-specific registries are commonly being used. The Dutch National Health Care Institute (Zorginstituut Netherland [ZIN]) started, in collaboration with stakeholders, a national program on the management and coordination of disease-specific registries. The main goal is to improve the quality and consistency of these registries and thereby increase the value of the data in monitoring innovative, expensive medicines. As a starting point for this program, we performed a study on the current state of these registries in the Netherlands.

Methods. Using an initial list of 114 registries, we sent out questionnaires to 58 disease-specific registries that collected information on medicine use. Thirty registries responded and their registries were used for the analysis.

Results. Of 30 registries that responded, 15 registries collect information on orphan medicinal products. Most registries are in the field of internal medicine (n = 8), oncology (n = 6), and rheumatology (n = 5). The size of the registries ranged between 250 patients (orphan diseases) and more than 10,000 patients (oncology). Only 13 registries collect information on patient reported outcomes. Data collection is mostly performed manually and standard coding systems such as Systemized Nomenclature of Medicine (SNOMED), Logical Observation Identifiers, Names, and Codes (LOINC), and The International Classification of Diseases 10th Revision (ICD-10) are not routinely used. Finally, our results show that most registries are (partly) dependent on the funding of pharmaceutical companies.

Conclusions. Our assessment shows variation in the type, goal of, governance, and funding of the disease-specific registries investigated. We believe that these results show the importance of further national coordination of the disease-specific registries to increase the usability of their data to address the uncertainties surrounding these innovative, expensive medicines.

OP92 Impact Of Real-World Evidence On Health Technology Assessment And National Guidance For Interventional Procedures: A UK Perspective

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Introduction. The National Institute for Health and Care Excellence (NICE) interventional procedures programme (IPP) issues guidance on the safety and efficacy of new interventional procedures (IPS). The IPP considers a range of evidence from randomized controlled trials (RCTs) to case series to make final recommendations. Real-world evidence (RWE) can provide additional information on long-term outcomes and patient population characteristics that are not easily captured by RCTs. This study explores the impact of RWE in complementing RCTs on long-term safety and efficacy for national guidance development.

Methods. We review the impact of RWE in IPS guidance (IPG) updates and change in guidance recommendations in the last 5 years. This is done by analyzing NICE guidance updates and supporting evidence. A range of RWE was considered in the supporting evidence, for example, registries and clinical audits.

Results. The addition of RWE evidence to IPP guidance update has led to significant changes in the recommendations. For example, in one recent IPG, standard arrangements recommendation based on

short-term RCT evidence was changed to a research recommendation when RWE showed an increase in long-term adverse effects. In another recent IPG update, special arrangements recommendation based on short-term RCT evidence was changed to a research recommendation when RWE reported long-term inferior efficacy and safety for the new intervention compared to current standard of care. A complete overview of results of the last 5 years will also be presented at the meeting.

Conclusions. These findings indicate that increased availability of RWE in HTA has the potential to impact national guidance recommendations. In addition, it shows how RWE can fill the evidence base gaps created by RCTs. Such data can confirm or contradict the findings of RCTs, or generate questions needing further research, or support disinvestment in non-effective technologies.

OP93 Informing Efficient Diagnostic Monitoring Pathways Using Prospective Cohort Data: A Case Study In Neovascular Age-Related Macular Degeneration

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Introduction. Several diagnostic tests are often adopted into diagnostic pathways for specific indications without strong evidence to support their use. In this context, real-world prospective cohort studies in combination with decision modelling can generate evidence to support decision-making. The Early Detection of neovascular Age-Related Macular Degeneration (EDNA) study was a prospective cohort designed to assess the diagnostic accuracy and cost-effectiveness of several diagnostic monitoring tests used in routine practice for the detection of neovascular age-related macular degeneration (nAMD) in the second eye of patients being treated for unilateral disease.

Methods. Five-hundred and fifty-two participants with newly diagnosed unilateral nAMD were monitored for up to 3 years in 24 UK eye clinics. The diagnostic monitoring performance of five index tests was compared: self-reported change in visual function, Amsler test, clinic measured change in visual acuity, fundus assessment by clinical examination or colour photography, and spectral-domain optical coherence tomography (SD-OCT). The reference standard was fundus fluorescein angiography (FFA). A patient-level state transition model was used to simulate the onset of nAMD in the second eye, and assess the impact of different tests on the timing of detection and

treatment, and associated costs and quality adjusted life years (QALYs) over a 25-year time-horizon.

Results. One hundred and forty-five (26.3%) patients developed active nAMD in the study eye, of whom 120 had an FFA at detection. SD-OCT had the highest sensitivity (91.7 percent (95% CI: 85.2-95.6) and provided high specificity (87.8% (95% CI: 83.8-90.9)). It generated more QALYs and lower health and personal social care costs compared to all other monitoring tests. The combination of SD-OCT with fundus-examination provided a marginal increase in sensitivity over OCT alone, but the associated incremental cost-effectiveness ratios was >GBP 100,000 per QALY.

Conclusions. The efficiency of diagnostic pathways for nAMD may be improved by using SD-OCT alone to monitor the second eye of people being treated for unilateral disease. Prospective cohort studies embedded into routine practice offer value for informing decisions surrounding the use of technologies already in routine use.

OP94 Online Elicitation Of Personal Utility Functions (OPUF): A New Tool For Eliciting EQ-5D-5L Value Sets On The Societal-, Group-, Subgroup-, And Individual-Level

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Introduction. The 'Online elicitation of Personal Utility Functions' (OPUF) is a new method for valuing health states. It is based on compositional preference elicitation techniques. In contrast to established, decompositional techniques, such as time trade-off or discrete choice experiment (DCE), the OPUF approach does not require hundreds or thousands of respondents, but allows estimating utility functions for small (patient) groups and even on the individual level. The objective of this study was to generate and compare EQ-5D-5L value sets on the societal-, group-, subgroup-, and individual-level.

Methods. A demonstration version of the EQ-5D-5L OPUF Tool is available at: https://eq5d5l.me. It broadly consists of three valuation steps: dimension weighting, level rating, and anchoring. Responses were combined on the individual level to construct personal utility functions. Every respondent also completed three conventional DCEs. Preferences were aggregated across individuals to estimate a societal and various group-level preference functions. We then assessed the heterogeneity of preferences between groups using descriptive statistics and k-means cluster analysis.

Results. A representative sample (n = 1,000) of the United Kingdom (UK) population was recruited through the prolific online platform. On average, it took participants about 7 minutes to complete the survey. Data of 874 respondents were included in the analysis. For