

Introduction. In many low- and middle-income countries scarcity of local data on health outcomes and health-related quality of life (HRQoL) is a hindrance to conducting cost-effectiveness analyses. The Tunisian National Authority for Accreditation and Assessment in Healthcare (INEAS) developed a set of methodological guidelines to support pharmaceutical companies in the submission of health technology assessment (HTA) dossiers. The guidelines include INEAS' methodological choices for pharmacoeconomic analysis, which take into consideration the specificities and constraints of the Tunisian context. We aimed to present the principal recommendations of the Tunisian guidelines for pharmacoeconomic studies, with a focus on patient-reported outcome and HRQoL measurement.

Methods. The INEAS pharmacoeconomic analysis guidelines were reviewed and the recommendations regarding outcome measurement and HRQoL were retrieved and reported.

Results. To populate the economic model, INEAS recommends using the best available evidence. Health outcomes should be measured in terms of life-years gained and quality-adjusted life-years (QALYs); disability-adjusted life-years can be used but are not the preferred method. To estimate QALYs, INEAS favors the indirect measure of patient preferences with a validated measurement instrument. Alternatively, other measures of utility may be used, including those identified through a systematic review of the scientific literature and the publications of other HTA agencies. Justification and details of the source of the data must be provided. The utility values selected should be recent and representative of the Tunisian population, as far as possible. The guidelines refer to a set of generic preference-based HRQoL instruments, including the EuroQol five-dimensions (EQ5D), the Health Utilities Index Mark 2 (HUI2) and Mark 3 (HUI3), and the Short-Form Six-Dimension (SF-6D), but do not provide any explicit recommendations on their use.

Conclusions. The INEAS pharmacoeconomic analysis guidelines adhere to international best practices but provide more flexibility for overcoming the lack of local data. The INEAS economic guidelines constitutes a further milestone in the process of implementing HTA in Tunisia and in the Middle Eastern and African regions.

PP47 Modelling Non-small Cell Lung Cancer Treatment: Predicted and Observed Impact Of Immunotherapy In The Netherlands

Zakile A Mfumbilwa (z.mfumbilwa@amsterdamumc.nl),
 Janneke A Wilschut, Mr Martijn J.H.G Simons,
 Bram Ramaekers, Manuela Joore, Valesca Retel,
 Christine M Cramer-van der Welle, Franz M.N.H Schramel,
 Ewoudt M.W van de Garde and Veerle M.H Coupé

Introduction. Patients treated with immunotherapy are divided into two subgroups: (i) long-term survivors (LTS) and (ii) moderate survivors. Nevertheless, clinical trials (RCTs) report only average

treatment effects such as hazard rate (HRs). Health economic-models often only input average treatment effects, even though it has been shown that accounting for the LTS subgroup is crucial for accurate projection of long-term survival under immunotherapy. We investigated the incorporation of a statistical mixture cure model (MCM) in a health-economic model for lung cancer as a way to account for LTS while incorporating reported average RCT-based treatment effects.

Methods. We developed a microsimulation model describing disease progression under three treatment lines in advanced lung cancer using Dutch real-world data of chemotherapies treated patients. Here we focus on first-line treatment, for which we used gompertz distribution to simulate time-to-progression. To simulate the impact of immunotherapy, we adjusted base-model assuming MCM for first-line treatment, where the LTS subgroup was not at risk to progress, but instead die from background mortality. The subgroup of moderate survivors on the other hand are at risk to progress with adjusted progression-free HR (PF-HR). We simulated the model with size of LTS (prop_LTS) ranging from 14-34 percent (keynote-001 five-year overall survival [OS], 95% confidence interval) while fixing average RCT PF-HR at 0.5. Model predictions under the different prop_LTS were compared to real-world Dutch OS as well as the long-term RCT five-year OS.

Results. With respect to observed short-term survival outcomes, model predictions were insensitive to assumptions regarding the size of the LTS subgroup. However, to match the five-year RCT OS rate reported (32%), the prop_LTS had to be equal to 34 percent. Under this latter setting for the prop_LTS, the progression HR in the subgroup of moderate survivors was calibrated to be 1.1.

Conclusions. The use of a mixture cure model improves long-term model-based projections with the implicit assumption that moderate survivors have little or no treatment benefit.

PP48 A Micro-Costing Study For Circulating Tumor DNA testing In Oncology

Astrid Kramer (a.kramer1@amsterdamumc.nl),
 Ed Schuurin, Daan Vessies, Paul van der Leest,
 Maartje Geerlings, Pim Rozendal, Mirthe Lanfermeijer,
 Theodora Linders, Léon van Kempen, Remond Fijneman,
 Marjolijn Ligtenberg, Gerrit Meijer, Daan van den Broek,
 Valesca Retèl and Veerle Coupé

Introduction. Circulating tumor DNA (ctDNA) is a promising new biomarker with multiple potential applications in cancer care. As part of the "ctDNA on the way to implementation in the Netherlands (COIN)" project, an early, comprehensive Health Technology Assessment (HTA) is ongoing. Information about the costs of ctDNA testing is essential for implementation. Estimating the total cost associated with ctDNA-testing is challenging due to variation in the workflow, wide range in purchase and operational costs of the platforms, and the highly dynamic field. As a first step in the HTA, the aim of this study was to develop a flexible micro-costing