EVPI was €1368 at a value of the ceiling ratio of €20,000. EVPPPI analysis showed that utilities had the largest contribution to the overall EVPI. The partial EVPI for this subset of input parameters was €517. Incorporating the newly collected data on utilities into the model reduced the overall EVPI to €563 and the partial EVPI for the utility input parameter to approximately €0.

CONCLUSIONS: Collecting additional information on utilities strongly reduced the overall and partial EVPI. At the population level, the value of collecting additional data on utilities outweighed the costs of data collection. Value of information analysis proved to be useful to determine the parameters for which additional data collection is most beneficial.

**PRS13**

**USING PATIENT DESCRIPTORS TO DEVELOP A PRO MEASUREMENT STRATEGY FOR CLINICAL TRIALS: EVALUATING THE COPD PATIENT’S EXPERIENCE OF DYSPNEA**

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OBJECTIVES: There are currently no well-validated Patient Reported Outcome (PRO) tools to measure dyspnea in COPD patients that have been accepted for label claims. Guidelines for measuring PROs to support label claims encourage patient input to define endpoints for clinical trials. This study was designed to understand COPD patients’ experience of dyspnea, and inform strategy for measuring PRO endpoints in clinical trials.

METHODS: Seventy-eight individuals (55% male; mean age 58 years) with moderate to severe COPD (MRC grades III-V) across 6 countries participated in interviews/focus groups, describing their breathing difficulties, severity, impacts and fluctuations. Themes were identified from a systematic content review of the transcripts, and further reviewed by an additional 18 patients.

RESULTS: Six distinct sensations of dyspnea were reported, with patients across multiple cultures demonstrating the ability to differentiate between sensations. Patients reported a high level of diurnal and day-to-day variation in both the nature and severity of symptoms. A conceptual model was developed based on this qualitative work and discussion with an expert panel of six clinicians and three psychometric experts. Patients confirmed the multi-sensational nature of dyspnea that is also suggested within the literature—“a subjective experience of breathing discomfort that consists of qualitatively distinctive sensations that vary in intensity”. However, existing measures evaluate dyspnea as a one-dimensional symptom (a single construct of shortness of breath) with a broad recall period (one to two weeks).

CONCLUSIONS: The model showed that a daily diary (with symptoms differentiated and assessed by patient-generated descriptive language) is more relevant for evaluating patients’ experience of dyspnea in clinical trials. This work demonstrates the value of extensive, multi-cultural patient input during early stages of PRO development to ensure that the endpoint strategy for supporting labelling claims adequately fits the conceptual model for the patient experience of that condition.

**PRS14**

**PERSISTENCE WITH TIOTROPIUM: A COMPARISON WITH ESTABLISHED MEDICATIONS FOR COPD**

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OBJECTIVES: Tiotropium is a once-daily inhaled anticholinergic maintenance treatment with demonstrated effectiveness in chronic obstructive pulmonary disease (COPD). We aimed to compare persistence of tiotropium-use with other respiratory drugs in COPD in current clinical practice.

METHODS: The PHARMO database includes, among others, drug-dispensing and hospital discharge records for >2 million subjects in The Netherlands. All probable COPD-patients were identified by new respiratory drug use (age ≥54 yrs) or COPD-hospitalizations. New users of tiotropium, ipratropium, long-acting beta-agonists (LABAs), or fixed combination of inhaled corticosteroids and LABA (ICS&LABA), in 1998–2003, were included in the study. Persistence was assessed quarterly during the first year of follow-up. Patients with a proportion of days covered (PDC) ≥80% were considered persistent. Persistence was analysed using generalised estimating equations model.

RESULTS: About 37% of new users of tiotropium continued treatment for one year, compared with 14% for ipratropium, 13% for LABA, and 17% for ICS&LABA. Multivariate analyses showed that tiotropium-users were 2–3 times more persistent with their therapy than patients using ipratropium (relative risk [RR]: 2.0; 95% confidence interval [CI]: 1.8–2.3), LABA (RR: 2.9; 95%CI: 2.4–3.6), or ICS&LABA (RR: 2.4; 95%CI: 2.1–2.8), respectively. Male gender, age >70 years, pulmonologist as first prescriber, prior use of other respiratory drugs, and previous hospitalization for COPD were all associated with enhanced persistence with the initial drug-therapy.

CONCLUSIONS: Persistence with tiotropium was increased compared to other respiratory drugs in COPD in clinical practice. Additional research is required to understand the reasons for these higher persistence levels. Enhanced treatment persistence may offer benefits to both patients and society in terms of decreased morbidity and costs.

**PRS15**

**IMPROVING THE PERSISTENCE OF PATIENTS UNDERGOING SUBLINGUAL IMMUNOTHERAPY: SCORING AND VALIDATION OF A PATIENT-MANAGEMENT TOOL**

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OBJECTIVES: Long-term patient adherence to treatment is the key issue in the efficacy of sublingual immunotherapy (SLIT). To help clinicians to manage SLIT patients and improve their adherence, a specific questionnaire: QUARTIS, has been developed and validated. METHODS: Relevant concepts were identified through a combination of literature research and clinician and patient interviews. After comprehension tests with patients, two pilot versions, one for patients beginning SLIT (QUARTIS-Start) and one for patients undergoing SLIT (QUARTIS-Follow-up), were drawn up and pilot tested in clinical practice. A cross-sectional observational study including 191 adult patients with allergic rhinitis beginning SLIT and 381 undergoing SLIT was conducted to reduce the questionnaires, create their scoring and assess their psychometric properties. The ability of the QUARTIS-Follow-up to predict patients’ intentions to complete SLIT, motivations to continue the course of SLIT, and adherence