successfully but only after introducing a multiplicative scale parameter to distinguish between both approaches. With 1600 respondents, adding 1 TTO offers more informative value than adding 1 DC but not as much as adding 2 DC's. **CONCLUSIONS:** The likelihood approach effectively estimates the structure underlying the simulated data. Given that DC is less burdensome than TTO, one may prefer to add more DC's than TTO's. That is – as in this case – when the underlying modelling assumption apply.

UT2
UPDATE OF THE PATIENT-REPORTED OUTCOME AND QUALITY OF LIFE INSTRUMENTS DATABASE (PROQOLID) USING THE FDA GUIDANCE ON PRO MEASURES

Caron M, Perrier LL, Vaissier V, Savre I, Acquadro C, Emory MP
MAPI Research Trust, Lyon, France
OBJECTIVES: In 2002, PROQOLID was launched to provide an overview of existing PRO instruments and facilitate access to the instruments and their developers, through the structured presentation of synthesized, reliable, and updated data. In 2009, the Food and Drug administration (FDA) published its final guidance on the use of PRO measures which describes how the FDA will review PRO instruments used to support claims in approved medical product labeling. The objectives of this study were to review and adapt the template of PROQOLID to harmonize its structure and language with those used in the FDA guidance, acknowledging that PROQOLID and the guidance have different **OBJECTIVES:** provision of information vs. review of information. **METHODS:** Content and structure of PROQOLID and the FDA guidance were compared. Proposed changes in terminology and structure were submitted to a panel of PRO experts (n=2). **RESULTS:** The information on PROQOLID is divided into 12 sections. The FDA guidance categorizes information into 5 parts. Twelve changes in terminology were made across all sections. For instance, Time recall" was changed to "Recall/Observation period", and "Dimensions" to "Domains". Fourteen changes of structure were made, mainly in Sections 6 and 7. Section 6 (Methodology of development) was renamed "Content Validity documentation". In this section, the heading "Information retrieval" was replaced by "Concept elicitation and Item generation". "Conceptual framework" will be moved to Section 5 (Descriptive information). Section 7 (Psychometric properties) was renamed "Measurement Properties". Within the "Reliability" heading, a subheading on "Inter-interviewer reproducibility" was added. A new section was created: "Data analysis and Interpretation". Five sections remained unchanged (1 to 4, and 8). **CONCLUSIONS:** The comparison of PROQOLID and the FDA guidance led to numerous changes in the wording and structure of the database. These changes will improve the functionality of PROQOLID and help users to better fulfill FDA requirements.

UT3
THE VALIDITY OF THE EQ-5D, SF-6D, SF-36 AND SF-12 IN MENTAL HEALTH CONDITIONS: A SYSTEMATIC REVIEW

Papaioannou D, Peasgood T, Brazier J, Parry G
University of Sheffield, Sheffield, UK
OBJECTIVES: To assess the validity and responsiveness of the SF-36, SF-12, SF-6D and EQ-5D in mental health conditions. **METHODS:** Systematic reviews were undertaken in five mental health conditions. Ten databases were searched to August 2009. Studies were appraised and data extracted. A narrative synthesis was performed on construct validity including known groups validity (KGV) (ability to detect differences in HRQL scores between groups), convergent validity (CV) (strength of association between generic HRQL and other related measures (e.g. symptoms or function) and responsiveness (R) (i.e. changes in scores in responders/non-responders to treatment and correlation with changes in related measures). **RESULTS:** Within schizophrenia, the majority of evidence related to the SF-36 (n=25) and EQ-5D (n=9). Both measures demonstrated KGV but this was mostly limited to demonstrating differences between individuals with schizophrenia and the general population. Contradictory results were found in studies measuring CV and R using clinical measures of symptom severity. For bipolar disorder, 23 studies were identified, almost exclusively on the SF-36; which was able to detect known differences in symptom severity and correlated strongly with clinical measures of depression (weakly with mania measures). For personality disorders; the majority of studies (6/9) related to the EQ-5D, which showed good KGV and R. For depression and anxiety, 23 EQ-5D and eight SF-6D studies were identified. Both measures demonstrated good CV and R for depression; however KGV may be driven by the presence of co-morbid depression in patients with anxiety disorders. **CONCLUSIONS:** Overall, the evidence suggests that the generic HRQL measures are appropriate in four mental health conditions, but raises doubts about their use in schizophrenia. Caution is required when interpreting CV evidence using clinical measures, since the lack of relationship may reflect genuine lack of difference in HRQL. More evidence using better indicators for testing validity and responsiveness are required.

UT4
COMPARISON OF THE PERFORMANCE OF EQ-5D AND SF-6D IN PATIENTS WITH CHRONIC PAIN –RESULTS FROM 3 RANDOMIZED CONTROLLED TRIALS

Obradovic M, Lal A, Liedgens H
Grünenthal GmbH, Aachen, Germany
OBJECTIVES: To compare EQ-5D and SF-6D utilities in patients with chronic pain due to osteoarthritis (OA) of the knee or low back pain (LBP) derived from phase III trials with tapentadol. **METHODS:** Three phase III trials with identical design included EQ-5D and SF-36 questionnaires to measure quality of life of patients with pain due to OA or LBP treated with tapentadol prolonged release (PR), oxycodone controlled release (CR) or placebo. EQ-5D and SF-6D indices were obtained using the UK weights. The ability of the two utility measurements to discriminate among different health states was tested. **RESULTS:** Both SF-6D and EQ-5D utility values

increased from baseline to endpoint (15 weeks). The increase (mean of all patients with active treatment) was substantially higher when measured with EQ-5D (0.16 vs. 0.06). The EQ-5D better distinguished among health states (different severity of adverse events, pain relief, withdrawal rates). While utilities were very similar in a group of patients who tolerated the treatment (0.695 and 0.694 for EQ-5D and SF-6D, respectively), EQ-5D utilities were considerably lower in patients who withdrew due to adverse events (0.503 and 0.597 for EQ-5D and SF-6D, respectively). A similar pattern was seen in patients with various levels of pain relief. In patients with >30% pain relief mean EQ-5D and SF-6D utility was 0.716 and 0.708, respectively. The EQ-5D utility in patients who withdrew due to lack of efficacy was 0.405, when analyzing the SF-6D utility this resulted in 0.580. **CONCLUSIONS:** Both generic instruments to measure quality of life, EQ-5D and SF-6D, showed that avoidance of severe treatment-related adverse events and sufficient pain relief has a large beneficial impact on patient's wellbeing. In the clinical trials analyzed the discriminative power of the EQ-5D was stronger showing that this instrument is a useful tool also in pain studies to analyze patient's QoL.

PODIUM SESSION II:
DISCUSSIONS ON THE ADDED VALUE OF VALUE OF INFORMATION

VI1
DETERMINING THE IMPACT OF MODELING ADDITIONAL SOURCES OF UNCERTAINTY IN VALUE OF INFORMATION ANALYSIS

Corro Ramos I, Rutten-van mölken MP, Al MJ
Erasmus University, Rotterdam, The Netherlands
The conditional reimbursement policy for expensive medicines in the The Netherlands requires real-world data collection on cost-effectiveness within a four years period (T=4) after the initial decision to reimburse a drug (T=0). This introduces *new sources of uncertainty*, which are less important in an RCT than in real life. This may affect the priorities for further (real-world) research as determined in a VOI analysis. **OBJECTIVES:** Identifying and modeling types of uncertainty that are usually not parameterized at T=0 but may become relevant at T=4. Include them in the VOI analysis. **METHODS:** We use a hypothetical model with four states and parameters related to transition and exacerbation probabilities, costs and utilities. Three additional uncertainties were parameterized: persistence, compliance and broadening of indication. Persistence refers to the duration of the treatment and it is determined by the probability of dropping out of the treatment. Compliance is characterized by the fraction of the treatment benefit obtained due to not taking the medication as it was indicated. The impact of indication broadening is modeled as the percentage of the RCT treatment effect realized in the outcome study. These extra parameters were included in the VOI analysis. **RESULTS:** Priorities change when new uncertainties are introduced in the model. Initially, the EVPPI was highest for transition probabilities followed by utilities; and it was very low for exacerbation probabilities and costs. After new uncertainties are included, compliance and broadening of indication (which is applied only to the new treatment) become as relevant as utilities. Persistence however has little impact in the model. **CONCLUSIONS:** VOI analysis at T=0 should anticipate and parameterize new types of uncertainty that may emerge during a four year outcomes study. This would help to focus the real-world outcomes study on those parameters that reduce uncertainty in the decision to continue the reimbursement most.

VI2
A NOVEL APPROACH TO ANALYSING VALUE DRIVER IMPORTANCE ACROSS MULTIPLE TARGET PRODUCT PROFILES

Wild L[1], Mukku SR[2]
[1]*Double Helix Consulting, London, UK*, [2]*Double Helix Consulting Group, London, UK*
OBJECTIVES: To develop a novel semi-quantitative model to assist pharmaceutical companies in making investment decisions, by assessing relative importance of value drivers in a given therapy area and how this translates to perceived value of a product profile. **METHODS:** Perceived value for a number of product profiles is assessed through a semi-quantitative scoring method, followed by an in-depth qualitative interview. In the scoring phase, respondents rate the relative importance of value drivers and provide thresholds for minimal and strong value in each domain. Respondents assess target product profiles, scoring profile performance in each value driver on a pre-defined scale. **RESULTS:** This methodology provides a range of valuable data in understanding the drivers of value in a given therapy area. First, the relative importance of value drivers can be used to understand which product attributes (efficacy, safety and tolerability or administration and others) drive product value. In addition, by providing value thresholds for each driver, we can understand expectations, in effect defining an 'ideal' product scenario. Testing product profiles against a scale calibrated by these expectations allows us to understand perceived product value in a set of likely product attributes. In addition, by testing a number of profiles, trade-offs between different product attributes, and the effect of these on product value, can be assessed. **CONCLUSIONS:** The insights gained from this type of analysis are vital in understanding product development priorities and the likely pricing and reimbursement potential for future products. Multiple applications of this technique have confirmed that this is a valuable approach in supporting pharmaceutical companies to inform their clinical programme, pricing and reimbursement strategy or commercial strategy.

VI3
SEQUENTIAL TREATMENT OF FOLLICULAR NON-HODGKIN LYMPHOMA: COST-EFFECTIVENESS AND VALUE OF INFORMATION

Soini EJ[1], Martikainen JA[1], Vihervaara V[2], Mustonen K[2], Nousiainen T[3]
[1]*ESiOR Ltd, Kuopio, Finland*, [2]*Roche Oy, Espoo, Finland*, [3]*Department of Medicine, University of Eastern Finland and Kuopio University Hospital, Kuopio, Finland*