and 474,000/QALY for the remaining two models. Differences in the outcomes could mainly be explained by differences in input values for disease progression, exacerbation-related mortality and all-cause mortality with high input values resulting in lower ICERs and vice versa. Lifetime results were mainly influenced by the input values for mortality. The probability of intervention four to be cost-effective at a willingness-to-pay of 50% for the other two models. **CONCLUSIONS:** Mortality was the most important factor determining the differences in cost-effectiveness outcomes between models.

PRM85 A DE-NOVO MODEL TO PREDICT OUTCOMES OF A NEW HYPOTHETICAL INTERVENTION TO REDUCE CV RISK IN POST-MI PATIENTS  
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OBJECTIVES: The risk cardiovascualar (CV) outcomes in post myocardial infarction (MI) patients poses a significant burden on the UK health care system despite the current standard of care (SoC). The objective of this analysis was to develop a model to quantify the relationship between efficacy and outcomes of a new hypothetical cardiovascualar intervention in post-MI patients when compared to SoC. METHODS: A 6-state lifetime Markov model with a 1-year cycle length was developed from a UK health care perspective. Recurrent MI, stroke and CV death were modeled. The hypothetical drug was assigned efficacy values for its ability to reduce the incidence of CV events. The outcomes were measured in terms of QALYs and LYs. A linear regression model was fitted to estimate the expected outcome/patient based on relative risk reduction (R(R)) in the incidence of CV events. All outcomes were discounted at 3.5% annually. RESULTS: The model addressed some of the limitations of previous economic models, namely increased risk due to stroke in MI patients and increased risk of subsequent events in the first year. For identical costs, the outcomes from the model compared well with other published studies. For a cohort of patients aged 40-years, the model predicted on an average, 1.7% and QALYs of 13.64. A hypothetical drug was assigned different efficacy estimates for recurrent events ranging from the ﬁnal QALYs of 0.23. The increase in incremental QALYs and LYs per percentage point reduction in relative risk as compared to SoC was estimated to be 0.043 and 0.054 respectively. **CONCLUSIONS:** A de-novo economic model quantifies the relationship between the efficacy and outcomes of a hypothetical drug when compared to the SoC to reduce the risk of CV events in post-MI patients.

PRM86 ESTIMATING THE LIFETIME HEALTH OUTCOMES OF TYPE 2 DIABETES MELLITUS (T2DM) PATIENTS INADEQUATELY CONTROLLED ON METFORMIN PLUS SUFENYLURTHE OR RECEIVING EACH CANAFGLINOLIF OR SITAGLIPTIN USING THE UKPDS OUTCOMES MODEL V1.3  
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OBJECTIVES: The goals of type 2 diabetes management are to control glycaemia and lower estimates of CVD risks. Therefore, economic models using this approach with and without considering dependence of risk factors. RESULTS: Due to the non-linearity of the CPH function, the stochastic prediction yielded 23% (PE) and 17% (RE) higher risks than the deterministic approach (14% and 10%, respectively, if age was 60 years). Differences between predictions approaches are even higher if the estimated correlation structure of risk factors is accounted for. **CONCLUSIONS:** When compared to the stochastic prediction, the deterministic approach leads to lower estimates of CVD events. Therefore, economic models using this approach might underestimate treatment effect.

PRM87 ARE CYCLES NEEDED IN MARKOV MODELS? – THE CONTINUOUS MODEL AS A SIMPLER APPROACH  
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OBJECTIVES: To present an alternative implementation for the conventional Markov models with area under the curve (AUC) approach: the continuous model (CM). METHODS: We compared how the CM avoids the need of determining cycles in theory and to compare the traditional and the CM approach in terms of results and complexity in an oncology model example. **METHODS:** The AUC model assumes that the survivor function is known at any timepoint not only at the beginning and end of model cycle. The CM calculates the model outcome for the whole time horizon by using the estimated survival function at every timepoint, instead of the discrete timepoints defined by cycle length. The CM approach overcomes the issue of the artificial characterization of time using cycles, that is often criticized in Markov models. Using CM can also lead to more precise estimates. A simple oncology AUC model with three health states (progression free survival, progression and death) and four-weekly cycles was built and converted to a CM model in Excel®, using user defined Visual Basic functions. Results, generalizability and user friendliness were compared. **RESULTS:** The results of the two models were similar: for health outcomes differences were around 1%, for costs and incremental cost-effectiveness ratios around 0.5%. Calculations were done in a single cell instead of a column of 100-200 cells depending on cycle length and time horizon, giving less scope for bugs and facilitating easier debugging. As a result the implementation of the CM model was faster and technical validation easier. **CONCLUSIONS:** The CM approach requires more technical background from the developer; custom functions have to be built even for point estimates. However, results of a CM, requires smaller spreadsheet space, and provides more transparency and easier debugging. While providing similar or potentially more precise estimates compared to the AUC model results.