

Table 1: Definition of consensus	
Criteria	Definition
Agreement threshold	<i>A priori</i> level of $\geq 80\%$
Central tendency	Median ≥ 7 on 9-point Likert scale - Highly relevant range 7, 8, 9 - Somewhat relevant 4,5,6 - Not relevant range 1, 2, 3
Stability	<i>A priori</i> Interquartile range < 3 on 9-point Likert scale
Consensus final decision classification (for each recommendation)	
Consensus IN	$\geq 80\%$ (scoring: 7, 8, 9) threshold PLUS Interquartile range < 3 stability
Consensus OUT	
Dissent	$\leq 50\%$ (scoring: 7, 8, 9) threshold
Undetermined	51-79% (scoring: 7, 8, 9) threshold
“no consensus”	Apply subgroup or further analysis

Table 5: The final summary of the guideline for the approach for conducting economic evaluation in KSA

Items	Recommendation from consensus decision	Additional information for implementation derived from thematic analysis of experts' comments for Saudi Arabia
Study population	The target population should represent the patients expected to use/benefit from the evaluated intervention/technology for the specified indication.	Ensure using national epidemiological data.
Setting and location	Clearly, indicate the healthcare setting, payment/funding schemes, and population level.	Consider the country-wide health transformation program to ensure that the results are relevant and applicable. Consider impact of discrimination when deciding on the population level.
Comparators	Use "current practice" as a main comparator (one or more) Comparators may include "do nothing", "the most widely used" or "the technology most likely to be replaced by the new technology".	If "current practice" cannot be determined, the most relevant comparator can be identified using national expert consensus or standard practice guidelines.
Perspective	Health system/payer's perspective	Other perspectives should be justified based on the research question
Time horizon	Long-time horizon	It should also depend on the technology. Consider clear justification for the adopted approach.
Discount rate	Report the discount rate, reason chosen, and apply sensitivity analysis for higher and lower rates including zero discount.	The rate of 3% per annum is still accepted as an empirical starting point. Although it is common to use the same rates for costs and health benefits, the decision should be guided by the purpose of the evaluation.
Outcomes (combined) (Selection, measurement, valuation)	Not explicitly specific. Describe what/how outcomes were used as the measure of benefits and harm. Describe the population and methods used to measure and value outcomes. Analyses based on preference-based outcome measures should describe how outcomes were measured and valued. (e.g., to estimate health state "utilities" [HSUs] or willingness to pay).	Natural unit and the generic health outcomes are recognized as the most applicable for usage in KSA. Preferred CEA and CUA as an analysis method. Consider national data for utility scores, if applicable.
Resources and costs (Measurement, valuation)	Not explicitly specific. Describe how costs and resources were measured and valued. The prices (unit costs) attached to resource items might be derived from alternative sources, for example, national unit cost databases or institution-specific cost lists. Recommend cost estimate adjustments to reflect the actual payment by the relevant payer. Note: an average discount rate can be applied for price confidentiality.	
Currency, price date and conversion	Saudi Arabian Riyal (SAR) and United States Dollar (USD) Price adjustment should be performed when adopting costs from different years (adjustment for inflation), or different countries/currency.	SAR/USD exchange rate are stable.
Rationale and description of model	Use model-based evaluation to allow a broader set of comparators.	
Analytics and assumptions	Model analytics and assumptions should be relevant to the KSA healthcare system and clearly justified.	
Characterizing heterogeneity	Subgroup analysis may be conducted when the outcomes and/or costs differ across subgroups.	
Characterizing distributional effects	Consider equity impact based on societal variables relevant to KSA to reflect priority populations.	
Characterizing uncertainty	Recommend addressing the uncertainty of parameter estimates used in the analysis through sensitivity analysis.	
Approach to engagement with patients and others affected by the study	Recommend reporting the approach to stakeholder, community and patient and public involvement and engagement (PPIE).	