11 Presentation of Data and Results

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It is important that CUAs are transparent so that quality and validity can be assessed. Table 14 outlines the information to include when reporting detailed CUAs. Lower levels of analysis undertaken by PHARMAC may be less descriptive.

Table 14: Information to Include in Report for Detailed Cost-Utility Analyses

Section	Details	Description
Context	Statement of objective and perspective of analysis.	Decision problem that prompted the analysis.
	Statement of type, scope and level of analysis.	Levels of analysis include rapid, preliminary, indicative, and detailed.
Disease and patient population	Description of disease.	Symptoms Stage of disease Disease progression Prognosis.
	Description of target population.	Age Gender Risk factors Prevalence Incidence Ethnicity.
	Description of current treatment options available.	Aim of treatment Indications Contraindications Dose Administration Length of treatment Adverse events Pharmaceutical Schedule listing criteria

Section	Details	Description
		Any likely amendments to treatment over time.
Study drug	Description of pharmaceutical.	Indications Contraindications Formulation Strength Dose Administration Length of treatment Adverse events.
	Description of indication(s).	Registered and funded indication(s) Indication for which funding is sought (including any restrictions).
Clinical evidence	Description of literature search strategy.	Database searched Time period search undertaken Search strategy used Keywords Refinements Justification for excluding any citations.
	Description of key clinical studies.	Design Study population Follow-up period Intervention and comparator Withdrawals from treatment Clinical endpoints.
	Critical review of clinical studies	Grade of evidence (GATE, SIGN) Possible sources of bias Methods of randomisation.
	Discussion of relevance of trial results to New Zealand clinical practice.	Efficacy compared with effectiveness.
	Target population.	Target population included in the analysis.
	Comparator(s).	Rationale for choice of main comparator.

Section	Details	Description
Model	Description of model.	Model type Transition states Markov states Copy of decision tree or branch of decision tree.
	Time horizon and cycle length.	Justification for time horizon and cycle length.
	Discount rate.	Description of discount rate used for costs and benefits.
Outcome measures	Description of relevant outcomes and how they were measured.	Adverse events, disease progression, mortality, etc.
	Transformation and extrapolation.	Include information on transitional probabilities and how these were derived, including details of any extrapolation of data, synthesising data, etc. The inclusion of graphs and tables can be useful.
	List of parameter values.	Including confidence intervals.
	List of assumptions.	Assumptions regarding the structure of the model and data.
Health-related quality of life	Description of how HR-QoL was measured.	For example, methods for mapping to generic health state instruments, use of expert opinion, etc.
	Utility values used.	The health state (including a full description of the state) and corresponding utility value.
Costs	Description of costs.	Units of resources, unitary costs.
	Description of realisation of hospital costs.	Information on whether a new treatment results in real savings to DHBs, nominal savings, or additional costs.
	Description of data sources.	Including any strengths or weaknesses of data sources.
Results	Results derived from the model.	Disaggregation of costs, savings, life expectancy and quality of life gains/losses, as outlined in Chapter 9. Discounted incremental QALYs/$1M (point estimate and range) Corresponding cost/QALY results (point estimate and range), placed in brackets.

Section	Details	Description
	Interpretation and discussion of results.	Discussion on likely relative cost-effectiveness of pharmaceutical.
Sensitivity analysis	Results of sensitivity analysis.	Report using graphs, tables and/or elasticities. Include a full interpretation of the results.
	Discussion of sensitivity to modelling assumptions and data inputs.	Direction of bias and magnitude of effect.
Discussion	Discussion of results and other issues that should be considered under PHARMAC's Factors for Consideration.	For example, benefits to individuals and whānau other than the person treated; health need and suitability.
Validation	Description of validation method and result.	For example, pharmacoeconomic review and/or clinical review.
	Comparison with published analyses, including analyses undertaken by health technology assessment organisations.	Explanation of any differences in results.
Conclusions	Description of setting to which the results of analysis can be applied.	List of factors that could limit applicability in clinical practice.
	Description of any research in progress.	Description of how new data may alter results of analysis.

11.1 Checklist

Table 15 is a checklist of information to include in PHARMAC base-case analyses and sensitivity analyses.

Table 15: Checklist of Information to Include in Base-Case Analyses and Sensitivity Analyses

Section	Base-Case Analysis	Sensitivity Analysis
Perspective	Funder (health sector) and individual, taking into account PHARMAC's Factors for Consideration.	Perspectives that include costs and health benefits to others, and costs falling outside the health sector.
Target population	Population most likely to receive treatment.	May consider inclusion of retrospective subgroup analyses if these data were of inadequate quality to include in base-case analysis.
Comparator	Current clinical practice in New Zealand.	May consider inclusion of placebo and/or most effective treatment (if different from current clinical practice).
Clinical outcomes	Statistically and clinically significant outcomes obtained from high-quality RCTs, systematic reviews or meta-analyses (grade of evidence of 1+ or 1++). Include impact of non-compliance if significant.	Include statistically insignificant outcomes. May consider impact of including additional sources of clinical evidence (eg unpublished trials). Test all modelling assumptions, including any extrapolation of data.
HR-QoL	Base of NZ EQ-5D Tariff 2. Use GBD weights to check for consistency.	Alternative sources of utility values.
Pharmaceutical costs	Proposed price of pharmaceutical.	Deflate price by 2% per year as a proxy for inflation in other costs.
Other costs	Hospital, outpatient and patient costs.	Vary costs over likely ranges.
Discount rate	3.5%	0% and 5%

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