TSU QA Checklist

Major: These comments should be addressed and addressing these comments could change recommendations.

Moderate: These comments should be addressed to improve the quality and transparency of analysis in this and future guidelines. We do not expect them to have an impact on recommendations.

Minor: These comments should be considered to improve the quality and transparency of analysis in this and future guidelines. We do not expect them to have an impact on recommendations.

DATA PREPARATION/REPORTING	**COMMENTS**
Were any studies (included in the systematic review) that were excluded for statistical reasons clearly reported and is this appropriate (e.g. zero events in both arms)?	e.g. Major • A large study comparing treatment A versus B was excluded without justification and this may have influenced results and recommendations Moderate • A study comparing treatment A versus B was excluded and the justification given was poor. Minor • A study was excluded due to clearly being disconnected but this was not properly explained.
Are all the treatment options distinct (in terms of dose or other intervention characteristics), or have treatments been "lumped" together? If the latter, is it adequately justified?	
Where alternative outcomes are available, has the choice of outcome measure used in the synthesis been justified?	
Have the assumptions behind the choice of scale been justified?	

Were any data transformations required prior to NMA and were these clearly reported? Is it appropriate?	
How have different follow-up measurements been handled and has this been clearly reported? It is appropriate?	
Additional comments for this section	
STATISTICAL METHODOLOGY	
Has the statistical model been clearly described? E.g. link, likelihood, Frequentist/Bayesian. Is the choice of model appropriate for the outcomes?	
Has the software implementation been documented? Is the code used valid?	
If the model is Bayesian, have the following been clearly reported and are they appropriate? • Convergence checks, number of chains, iterations and burn-in samples • Choice of priors, including consideration of scale of outcome, and clear justification if priors are informative	
Is model selection clearly reported? E.g. model fit statistics and model selection criteria	
Has effect modification been carefully considered? Are any specific variables considered to be effect modifiers?	
Have methods for checking consistency been clearly reported?	
Have any sensitivity analyses been specified in the methods? Were these planned or a priori?	
Risk of bias – is this handled in any specific way within the analysis, and if so are the methods for this clearly reported?	
If there are multi-arm trials, have the correlations between the relative treatment effects been taken into account?	
Additional section comments	

RESULTS	
Are network plots shown for each analysis? Are any treatments disconnected?	
Are the following reported for treatment effects: • Relative effects versus a reference treatment • Forest plots • Do the results have face validity? (eg very wide CrIs may indicate an essentially disconnected network)	
Are treatment rankings reported, and if so are they reported with a measure of uncertainty (e.g. 95%CrIs)?	
Is the between-study SD reported (with 95%CrIs)?	
Has a justification been given for model selection (eg choice of random or fixed effect models) and is this reasonable based on the model fit statistics?	
Are consistency checks clearly reported at both global (e.g. UME vs consistency model fit) and local (e.g. dev-dev plots, and if appropriate node-splitting) levels? If inconsistency identified has it been investigated?	
Spot checks – do the numbers/results match up between main text, plots and tables?	
Has the model code been reported or clearly referenced, and does the code have any errors?	
Additional section comments	
USE IN COST-EFFECTIVENESS MODEL (if applicable/available in report)	
Does the evidence informing the economic model reflect the NMA used to assess clinical effectiveness? Is the use of NMA clinical evidence clearly justified?	

How are absolute outcomes (i.e. combining relative effects with baseline) calculated? Is the estimation/source of the baseline clearly reported? Do the absolute effects used in the cost-effectiveness model align with those used in the effectiveness results (eg to transform ORs to RRs)?	
Is uncertainty in the NMA results handled/incorporated appropriately?	
How are treatments for which NMA evidence is unavailable informed in the economic model?	
If any treatment estimates from the NMA are excluded in the economic model, is this justified (e.g. due to extreme uncertainty, or not licensed)?	
Additional section comments	
CONCLUSIONS	
Does the data support the conclusions that are drawn? If not, then is the reasoning for this clearly stated (e.g. due to expert input from the committee)?	
Have the impact of any violated assumptions been clearly explained/reported?	
Additional section comments	