The IQWiG Checklist for Indirect Comparison and Network Meta-Analyses

Andrea Schmetz   Helena Emich

Andrea Schmetz, MBA
Associate Consultant, Market Access Consulting, Evidera

Helena Emich, PhD
Senior Market Access Writer, Market Access Communications, Evidera

In times where health technology assessment (HTA) bodies demand increasing amounts of evidence in order to grant reimbursement for a newly developed drug, it has become vital for pharmaceutical companies to find innovative and efficient ways to demonstrate their products' added benefit. While head-to-head comparisons are still preferable in the eyes of Germany's Federal Joint Committee (G-BA), indirect comparisons and network meta-analyses with other existing products can provide a smart way to circumvent setting up additional trials or testing. However, they are riddled with pitfalls that could give reason to disregard the comparison as valid evidence.

Common problems are poor choice of trials included, non-validity of the underlying assumptions, and issues with the applicability/validity of the statistical methodology.

The following list published by the Institute for Quality and Efficiency in Health Care (IQWiG) contains nine questions on central aspects of conducting a network meta-analysis or an indirect comparison. The list does not cover technical details, especially those on statistical methodology, however, it does enable companies to gauge which questions IQWiG might ask when assessing their indirect comparisons or network meta-analyses. Considering these questions before designing an analysis can increase the likelihood of a successful assessment outcome. ■

For more information, please email info@evidera.com.

Assessment of Indirect Comparisons and Network Meta-Analyses

1. Has the question been established a priori?
   - Clear description of the question
   - Transferal into statistical hypotheses
   - Explanation of deviations from the originally established plan

2. Has the rationale for the use of an indirect comparison been explained sufficiently?

3. Has the choice of a common comparator in lieu of a direct comparison been explained sufficiently?

4. Has a systematic and thorough literature review been conducted and has it been described in detail?
   - For the intervention of primary interest?
   - For the common comparator?

5. Have initially defined inclusion and exclusion criteria been used and described?

6. Was there a complete report of all relevant study data?
   - Characteristics of all studies included
   - Assessment of all studies included
   - Graphics of the network, description of network geometrics
   - For all relevant endpoints, comparisons and sub-groups:
     - Individual results of all studies (effect estimates and corresponding confidence intervals)
     - Effect estimates and confidence intervals from paired meta-analyses

7. Have the core assumptions been researched and have the results from this research been treated adequately?
   - Similarity
   - Homogeneity
   - Consistency

8. Have adequate statistical tools been used and have they been described in sufficient detail?
   - Use of adjusted indirect comparisons
   - Treatment of studies with multiple groups
   - Technical details (especially when using Bayesian model)
   - Program code
   - Sensitivity analyses

9. Have limitations been described and discussed sufficiently?
   - Quality and exhaustiveness of the database
   - Methodological uncertainties, sensitivity analysis
   - Conflicts with core assumptions

Checklist provided by IQWiG on indirect comparisons (From: Auf den Punkt gebracht, Zahlen und Fakten aus dem IQWiG 2016; IQWiG January 2017(2)). https://www.iqwig.de/download/2016_IQWiG_Auf_den_Punkt_gebracht.pdf