

# Multi-criteria drug benefit-risk assessment through mixed treatment comparisons

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**Summary.** Pharmaceutical decision making is based on assessing benefits and risks of alternative drugs, ideally by considering all available clinical evidence. In practice this is not achieved as the assessments are based on meta-analytical methods that allow only single criterion pairwise comparisons. The recently proposed Mixed Treatment Comparison (MTC) models enable indirect comparisons within a set of alternative treatments. In this presentation we show how MTC can be used to construct stochastic multi-criteria models that allow to compare multiple treatments in terms of multiple criteria.

**Key words:** Health Care Management, Multi-Criteria Decision Aid, Mixed Treatment Comparison, Stochastic Models, Decision Analysis, Medical Applications