

characteristics of included studies and the expectations of those commissioning the review.

CONCLUSIONS:

Rapid review methods need to be chosen to fit the needs of the review, each of which may have different challenges. Collaboration between those producing rapid reviews and commissioners is crucial when choosing methods to ensure that the needs of commissioners are met and limitations associated with the chosen methods are understood.

REFERENCES:

1. Tsertsvadze A, Chen YF, Moher D, Sutcliffe P, McCarthy N. How to conduct systematic reviews more expeditiously? *Syst Rev*. 2015;4:160.
2. Polisena J, Garritty C, Umsheid CA, et al. Rapid review summit: an overview and initiation of a research agenda. *Syst Rev*. 2015;4:111.
3. Kaltenthaler E, Cooper K, Pandor A, et al. The use of rapid review methods in health technology assessments: 3 case studies. *BMC Med Res Methodol*. 2016;16(1):26.

VP167 Comparison Of Methodology In Mixed Treatment Comparisons Of Treatments For Multiple Sclerosis

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INTRODUCTION:

The expanding range of disease modifying therapies (DMT) for relapsing-remitting multiple sclerosis (RRMS) has led to increased interest in the relative effects of

different DMTs. Previous mixed treatment comparisons (MTCs) have used different methods to address similar questions highlighting the need for a consistent approach to the assessment of treatments in RRMS.

METHODS:

We compared the methodology of six published MTCs of DMTs for RRMS identified by a systematic search of the literature. We assessed sources of evidence, DMTs included, outcomes reported and methods of data synthesis.

RESULTS:

All six MTCs were based on systematic reviews that included randomized controlled trials (RCTs). MS relapse was reported as the rate ratio based on annualised relapse rates (four MTCs) and as odds ratios or relative risk (one MTC each) based on the proportion with relapse. The analysis of relapse included between sixteen and twenty-seven RCTs and seven to twenty DMTs in different MTCs. One MTC reported both disability progression confirmed after three months (CDP3M) and disability progression confirmed after six months (CDP6M) as hazard ratios. One MTC combined CDP3M and CDP6M as a single outcome. One MTC reported only CDP3M based on hazard ratios. Two MTCs reported only CDP6M as either odds ratios or risk ratios (one MTC each). In one MTC the definition of disability progression was not reported. The analysis of disability progression included between seven and twenty-six RCTs and between six and nineteen DMTs in different MTCs. All six MTCs fitted a random effects MTC model using either Bayesian (four MTCs) or frequentist (two MTCs) methods.

CONCLUSIONS:

There is substantial heterogeneity between published MTCs in RRMS with regard to inclusion criteria, outcome definitions, effect measures and statistical methods. There is a clear requirement for a consistent approach to health technology assessment of DMTs for RRMS.
