

# Quality assessment of publication bias for meta-analysis in Chinese medical articles on hematological stem cell transplantation

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**Objectives** To evaluate publication bias of meta-analysis articles related to hematological stem cell transplantation from the published Chinese medical journals.

**Methods** Searching the Meta-analysis related articles in Chinese medical journal database (CNKI,CBM) published from January 2006 to December 2016. Evaluate the statistical methodology quality of Meta-analysis articles according to entries of the methodological quality of the evaluation of Meta-analysis.

**Results** A total of 14 journals, 161 literatures were included. 83.2% articles correctly used heterogeneity test, but only 55.3% of the articles had explained the reasons. 41(25.5%) articles had been merged unreasonable. 65 (40.3%) meta-analysis had no publication bias test, 76 (47.2%) had no sensitivity analysis. Of the 96 meta-analysis that were included the published bias, there were 8 articles in the literature less than 5 articles. There are 109 (67.7%) adopted the funnel plot to test the publication bias and 35 (21.7%) were used two or more than two methods. 13 meta-analysis used Egger regression analysis or Begg rank correlation. Multiple correspondence analysis showed that meta-analysis articles with no funded, and from the rural hospital were prone to have statistical problems, and existing publication bias.

**Conclusions** There is a widespread phenomenon of publication bias in medical papers, and room exists for improving the methodological quality of Meta-analysis for Chinese hematological related articles.

[Key words] Meta-analysis; publication bias; Quality assessment; Methodology;



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