A methodological review of how heterogeneity has been examined in systematic reviews of diagnostic test accuracy

Dinnes J, Deeks J, Kirby J, Roderick P

Record Status
This is a bibliographic record of a published health technology assessment from a member of INAHTA. No evaluation of the quality of this assessment has been made for the HTA database.

Citation
Dinnes J, Deeks J, Kirby J, Roderick P. A methodological review of how heterogeneity has been examined in systematic reviews of diagnostic test accuracy. Health Technology Assessment 2005; 9(12): 1-128

Authors' objectives
The aim of this study was to review how heterogeneity has been examined in systematic reviews of diagnostic test accuracy studies.

Authors' conclusions
The emphasis on pooling individual aspects of diagnostic test performance and the under-use of statistical tests and graphical approaches to identify heterogeneity perhaps reflect the uncertainty in the most appropriate methods to use and also greater familiarity with more traditional indices of test accuracy. This indicates the difficulty and complexity of carrying out such reviews. In these cases it is strongly suggested that meta-analyses are carried out with the involvement of a statistician familiar with the field. Further methodological work on the statistical methods available for combining diagnostic test accuracy studies is needed, as are sufficiently large, prospectively designed primary studies of diagnostic test accuracy comparing two or more tests for the same target disorder. Use of individual patient data meta-analysis in diagnostic test accuracy reviews should be explored to allow heterogeneity to be considered in more detail.

Project page URL
http://www.hta.ac.uk/1353

INAHTA brief and checklist

Indexing Status
Subject indexing assigned by CRD

MeSH
Data Interpretation, Statistical; Diagnostic Techniques and Procedures; Research Design; Review Literature

Language Published
English

Country of organisation
England

Address for correspondence
NETSCC, Health Technology Assessment, Alpha House, University of Southampton Science Park, Southampton, SO16 7NS UK Tel: +44 23 8059 5586 Email: hta@hta.ac.uk
AccessionNumber
32005000186

Date bibliographic record published
06/04/2005

Date abstract record published
06/04/2005