

## METADISC 2.0 SOFTWARE FOR META-ANALYSIS OF TEST ACCURACY DATA

A research group from CIBER, Instituto de Investigación Sanitaria Ramón y Cajal, and Universidad Politécnica de Madrid has developed a comprehensive software for meta-analysis of diagnostic data.

### The Need

Systematic reviews and meta-analyses of test accuracy studies are increasingly being recognised as central in guiding clinical practice. However, there is currently no dedicated and comprehensive software for meta-analysis of diagnostic data.

### The Solution

Meta-DiSc 2.0 is a Windows-based, user-friendly, freely available (for academic use) software to perform diagnostic meta-analysis. It is an upgraded version of MetaDiSc®.

### Innovative Aspects

- It is a free software unlike other statistical tools such as STATA and SAS.
- Includes meta-analysis algorithms from MetaDTA application to perform additional statistics (analysis of subgroups and meta-regression, calculation of different statistics to describe the variability between studies, etc. ).
- Allows exploration of heterogeneity, with a variety of statistics including chi-square, I-squared and Spearman correlation tests.
- Implements meta-regression techniques to explore the relationships between study characteristics and accuracy estimates.
- Performs statistical pooling of sensitivities, specificities, likelihood ratios and diagnostic odds ratios using fixed and random effects models, both overall and in subgroups.
- Produces high quality figures, including forest plots and summary receiver operating characteristic curves that can be exported for use in manuscripts for publication.

### Stage of Development:

It has been developed, piloted, and validated to perform diagnostic meta-analysis.

### Intellectual Property:

- Freeware software

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[https://metadisc-irykis.shinyapps.io/oct\\_metadisc/](https://metadisc-irykis.shinyapps.io/oct_metadisc/)

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