

Aggregate Data Drug Information System (ADDIS)

an open source tool for clinical trial analysis

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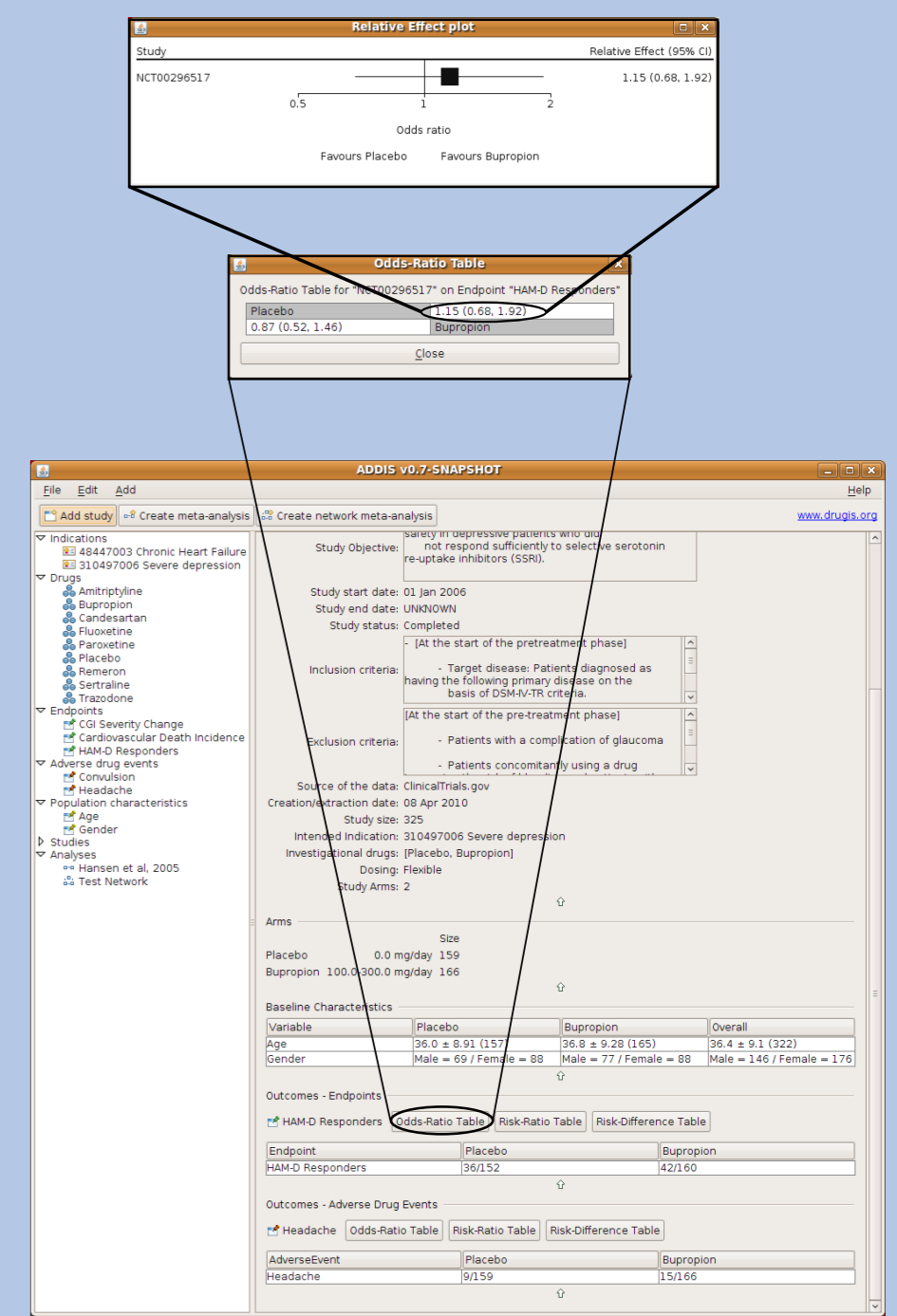
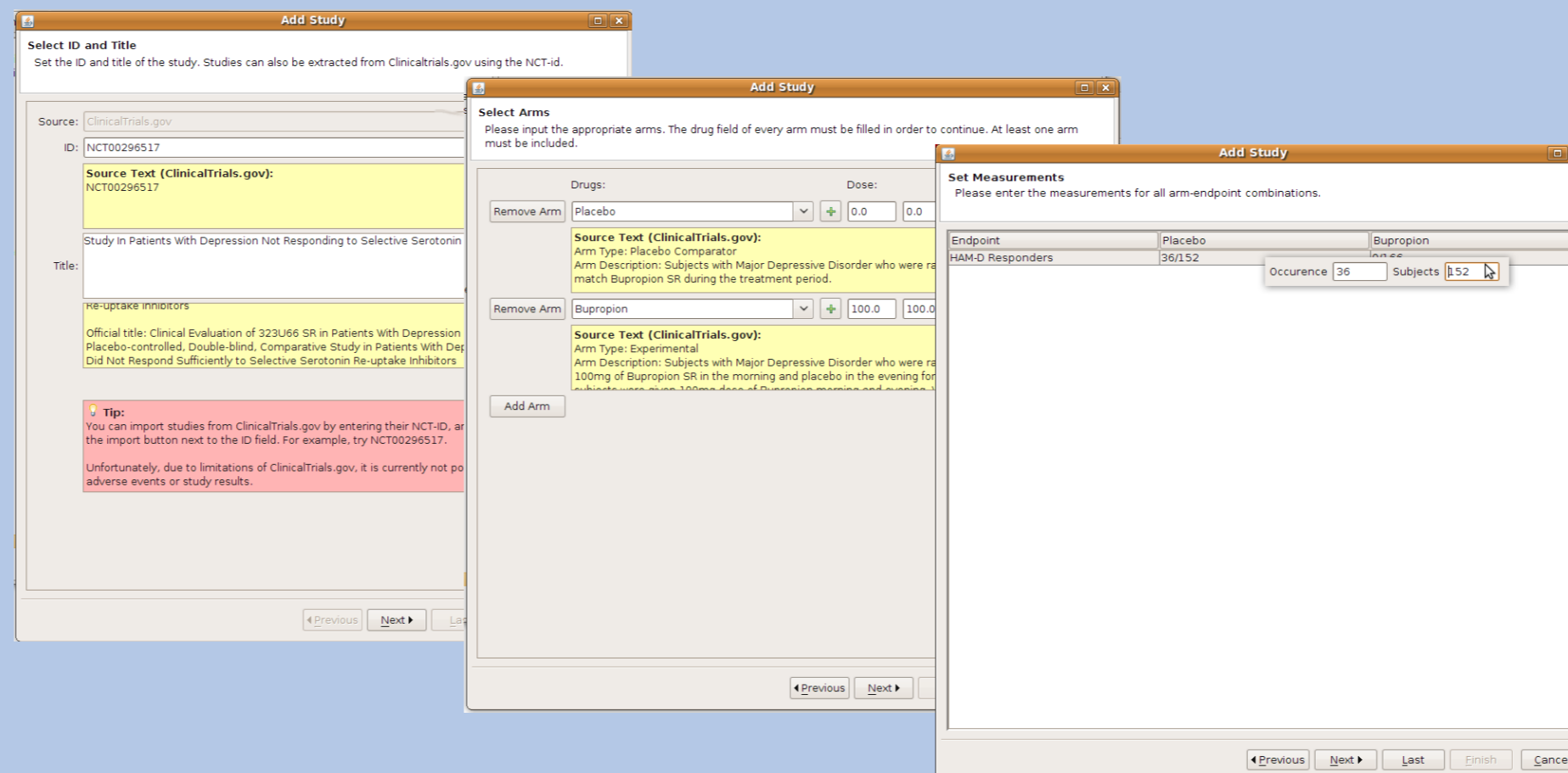
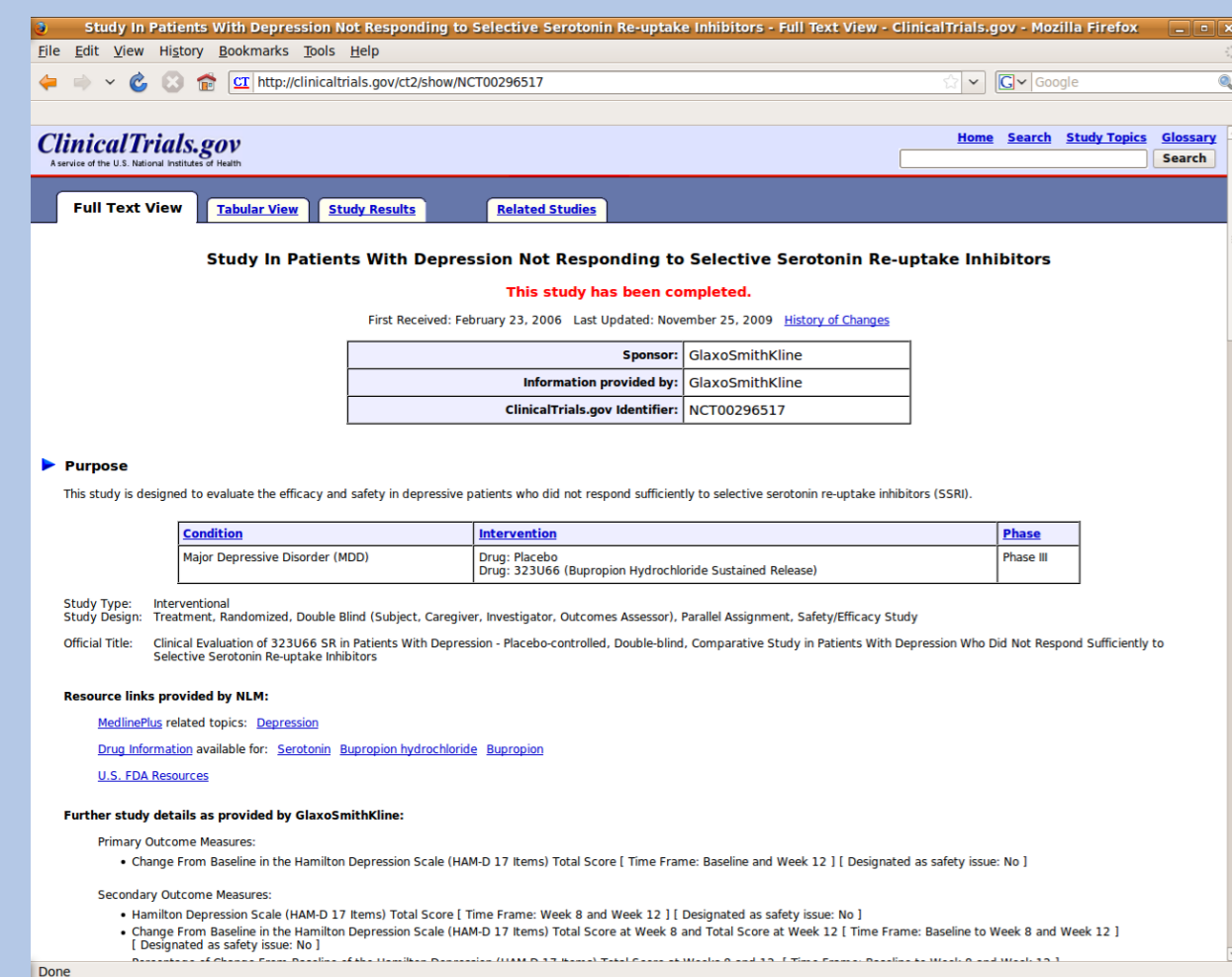
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This work was performed within the framework of the Dutch Top Institute Pharma project Escher (T6-202).

Try it yourself!
drugis.org

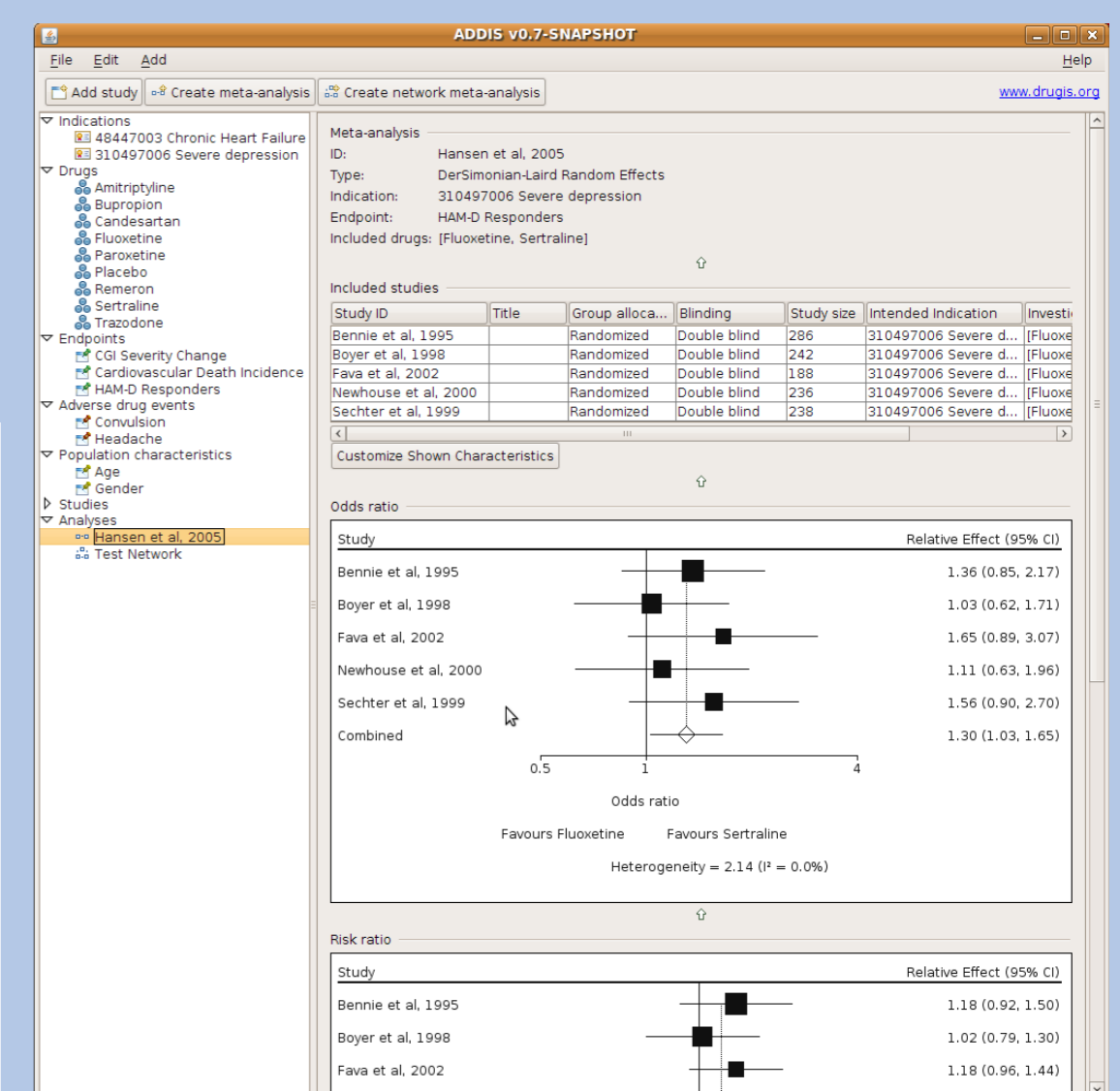
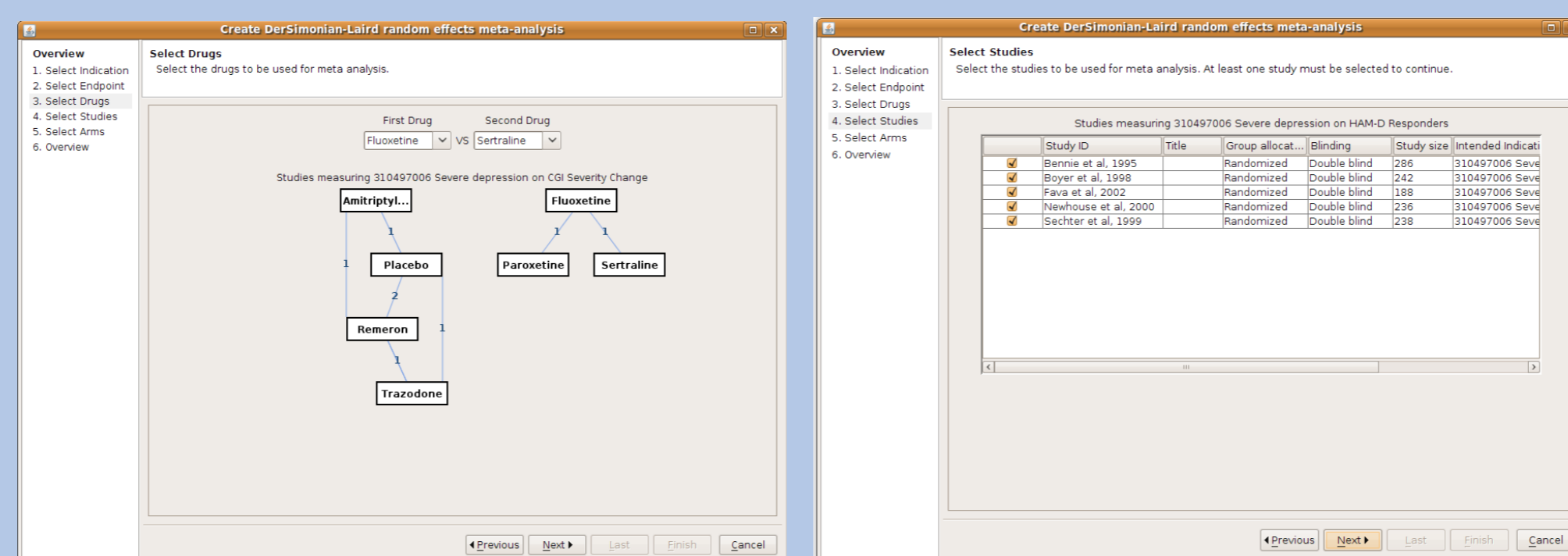
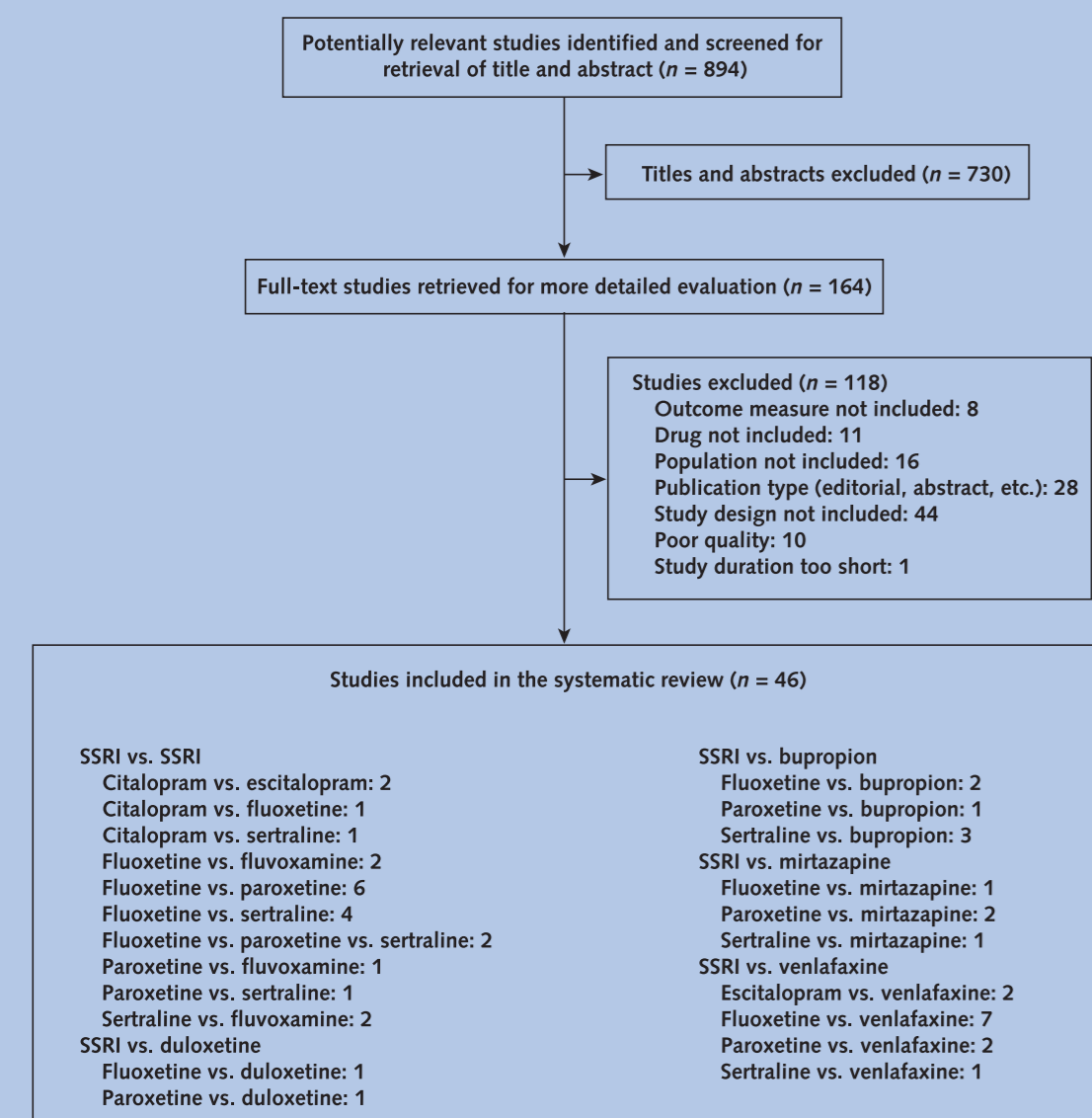
Data Collection

ADDIS aids in data collection through a wizard that partially automates import from ClinicalTrials.gov. Manual input is also possible.

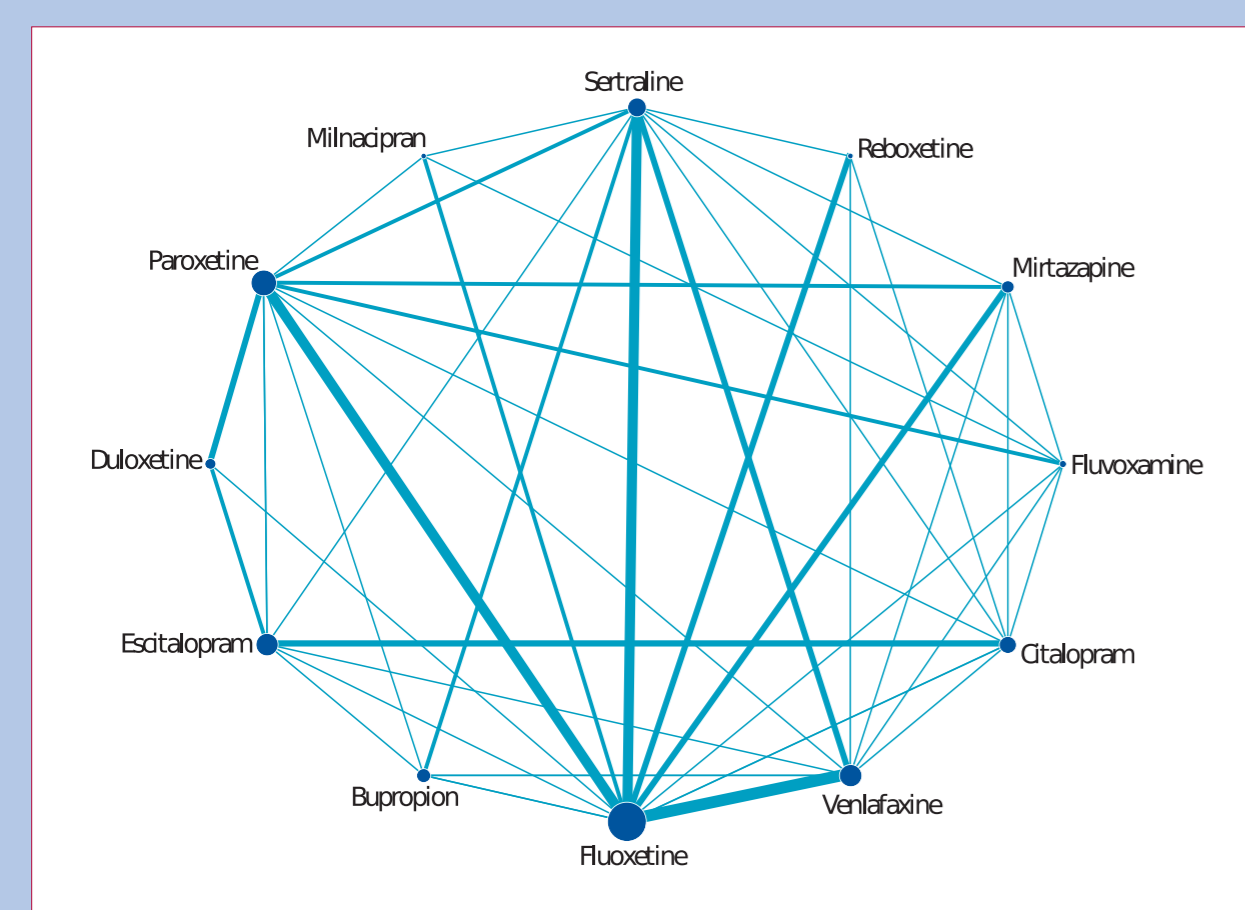


Random Effects Meta-Analysis

Storing studies in a structured manner allows easy construction of desired meta-analyses. ADDIS can construct a random effects meta-analysis semi-automatically.



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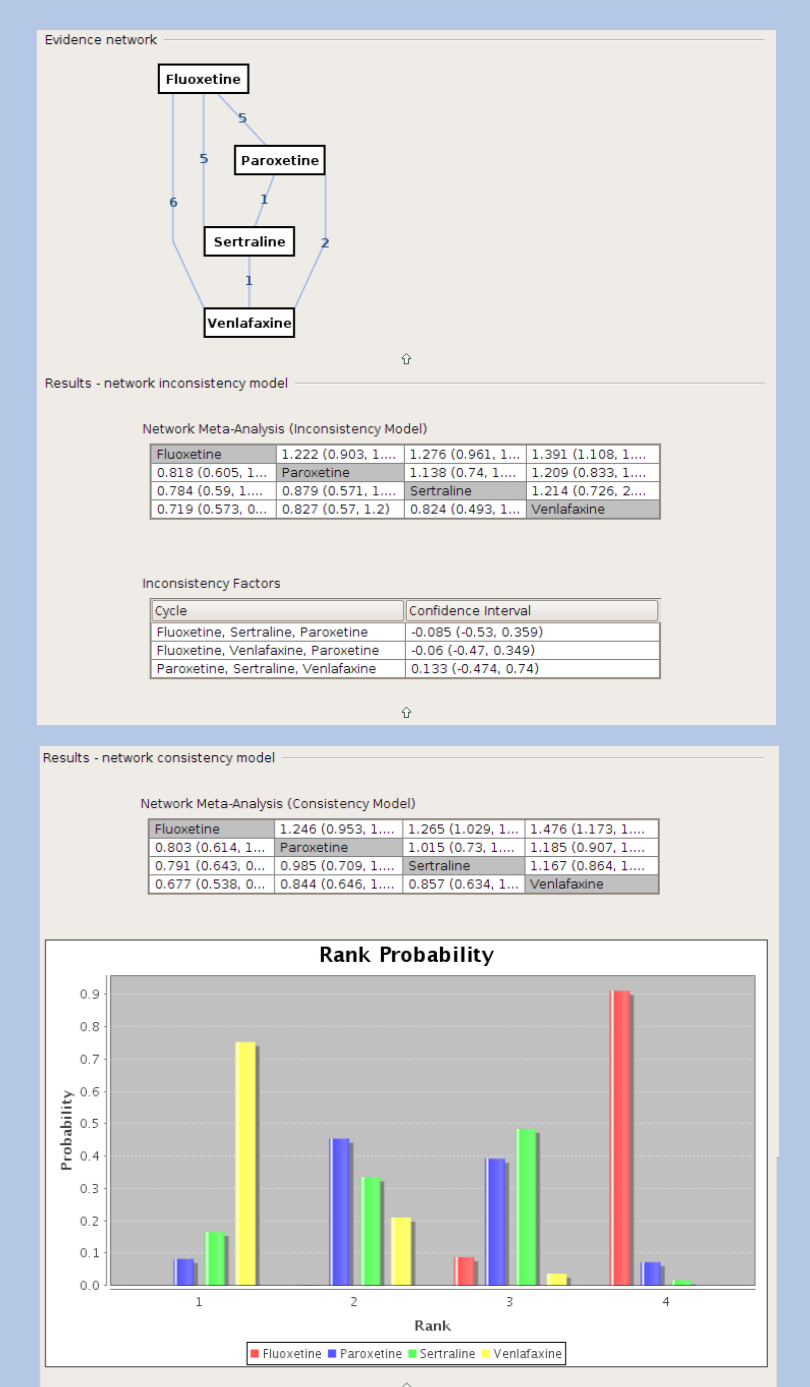
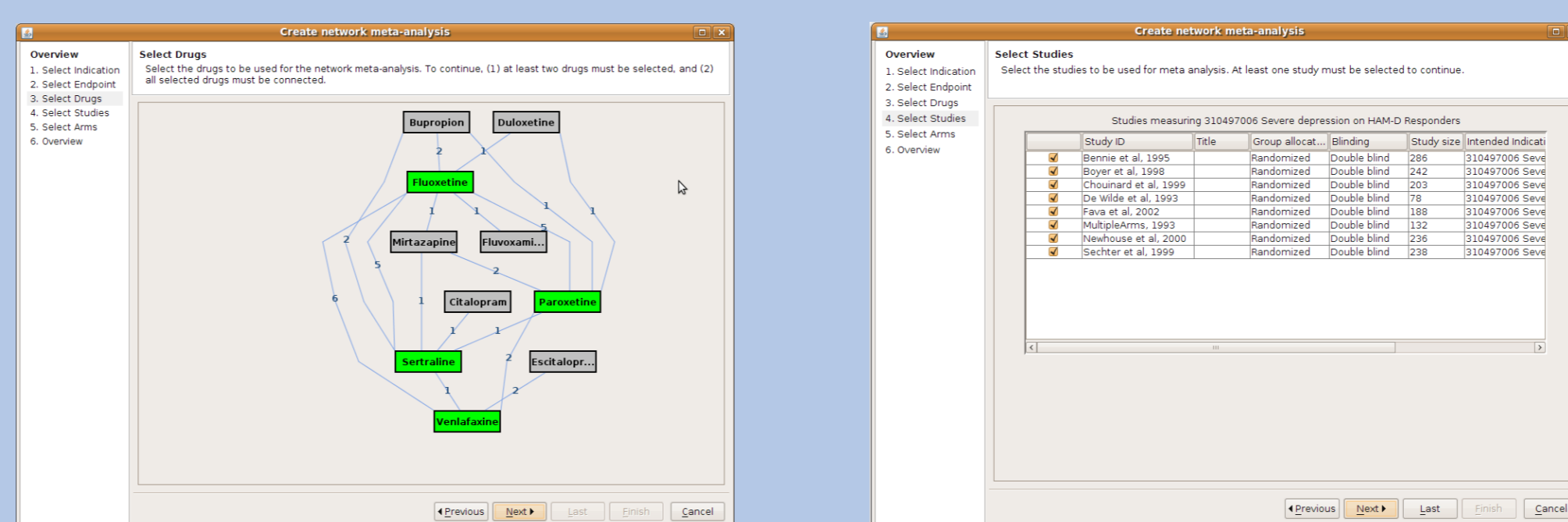


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<http://drugis.org/>
Download ADDIS

Network Meta-Analysis

A novel algorithm allows ADDIS to automatically generate network meta-analysis models for any evidence structure. That makes ADDIS the first complete software package for Mixed Treatment Comparison (MTC). Odds-ratios and rank-probabilities are provided, as well as an assessment of (in)consistency.



Summary

Constructing a meta-analysis includes manually collecting appropriate studies from abstract databases, and creating an ad-hoc data set for the purpose of the analysis. ADDIS implements both pair-wise and mixed-treatment meta-analyses (i.e., random effects and network meta-analyses). To help automate the labor-intensive data collection process, ADDIS allows to import study designs from ClinicalTrials.gov or to create them from scratch, to complete them with study results, and to construct (network) meta-analyses that include all relevant studies in the local database.

Future Work

Pharmaceutical decision making is based on assessing benefits and risks of alternative drugs, ideally by considering all clinical evidence. In practice this is not achieved as the assessments are based on meta-analytical methods that allow only single criterion pair-wise comparisons. The recently proposed Mixed Treatment Comparison (MTC) models enable indirect comparisons within a set of alternative treatments. We will use MTC to construct stochastic multi-criteria models that allow to compare multiple treatments on multiple criteria.