

# Stellingen

behorende bij het proefschrift

## Making better use of clinical trials

Computational decision support methods for  
evidence-based drug benefit-risk assessment

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1. The benefits of automating network meta-analysis outweigh the risks. [Chapter 3]
2. Without information systems that provide structured clinical trials data, decisions in health care policy will remain opaque. [Chapter 2]
3. Software is an important prerequisite for the acceptance and use of structured benefit-risk approaches. [Chapters 2–9]
4. A decision model must allow imprecise preference statements for regulatory authorities to accept it. [Chapters 5–8]
5. Even when a decision concerns only a pair-wise comparison, the larger network of evidence should not be ignored. This holds especially when the evidence is presented on the basis of ‘non-inferiority’. [Chapter 8]
6. The models for benefit-risk assessment proposed in this thesis

should be extended so they are not specific to a fixed follow-up duration. Unfortunately, doing so requires significant advances in the frameworks and statistical models underlying regulatory decision making. [Chapters 5 and 8]

7. Health care policy could be improved greatly if researchers were to share their data without restriction. [Chapters 2, 9, and 10]
8. Publishers' protectionism, enabled by excessively long copyright terms, is a major factor holding back innovative approaches to the automated processing of the scientific literature.
9. Most systematic reviews published today would not have been accepted had their production not been so labour intensive.
10. "... with some exceptions, anything less than release of actual source code is an indefensible approach for any scientific results that depend on computation ..." [D.C. Ince, L. Hatton, and J. Graham-Cumming, *Nature* 482(7386):485–488, 2012]