

## **Inferring predictive treatment effects from the Cochrane Collaboration reviews**

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The Cochrane Collaboration is an independent (non-profit and non-governmental) organization that conducts very systematic and extensive reviews of health-care interventions that are meant to help health-care providers, patients, and policy makers to make informed evidence-based medical decisions.

I will present a statistical testing framework for using the Cochrane Collaboration review, for a given outcome, to provide a confidence statement regarding the distribution of the treatment effect of the same outcome in a new treatment group. Specifically, I will show how to construct a confidence interval for the probability that in the new treatment group the risk-ratio between treated and controls subjects is less than 1, and how to construct a confidence interval for the median of the new treatment group risk-ratio. I will also show how this framework can be extended to provide confidence statement regarding the conditional distribution of the new group treatment effect in the case where we also have data from a small pilot study assessing the treatment efficacy in the new treatment group.