

# Biomarker discovery in heart failure

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## Propositions accompanying the dissertation

### **Biomarker Discovery in Heart Failure**

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2 July, 2018

1. N-terminal pro-B-type Natriuretic Peptide-guided therapy reduces the risk of recurrent hospitalizations in heart failure (HF) patients aged <75 years. (Chapter 3)
2. For the TIME-CHF study, a Bayesian approach to multivariate cutpoint estimation produces (in a single shot!) results which compare well to the outcomes of multiple univariate state-of-the-art studies. (Chapter 4)
3. Generalized Ranking Accuracy is the only measure reflecting both the goodness-of-fit and the predictive performance of the logistic Generalized Estimating Equations model. (Chapter 5)
4. Next to being descriptive, repeated measurements of six common biomarkers also allow to predict the response to therapy in individual HF patients. This has potential for personalized medicine. (Chapter 6)
5. Guiding HF therapy based on biomarkers can reduce hospitalization costs for the health system. (Valorization)
6. There is no such thing as soft data science: in the end it is all statistics.
7. As a statistician, one must be both a scientist and an artist: one needs to explain statistical results to non-statisticians.
8. The music you sing, play and listen is the best marker reflecting your heart rhythm.