## Propositions

## "Joint Modelling of Longitudinal and Survival Data with Applications in Heart Valve Data"

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- 1. Risk predictions for patients with severe valve diseases that are updated as more longitudinal measurements become available over time, provide the physician with an evidence-based understanding of disease progression. (this thesis)
- 2. Medical experience coupled with an estimate of the survival probability of a patient that accounts for all available information, would enable physicians to make better informed decisions and thus improve clinical outcome. (this thesis)
- 3. Statistical methodology may be supportive in clinical decision making, but can never replace clinical expertise. (this thesis)
- 4. Joint models of longitudinal and survival data represent a powerful statistical tool capable of capturing the association between longitudinal and survival time data. (this thesis)
- 5. It is common practice that a model is selected from a set of different possible models upon which clinical predictions are based. However, such an approach neglects model uncertainty. (this thesis)
- 6. "Declare the past, diagnose the present, foretell the future." (Hippocrates)
- 7. "It is in your moments of decision that your destiny is shaped." (Tony Robbins)
- 8. "Man is born as a freak of nature, being within nature and yet transcending it. He has to find principles of action and decision-making which replace the principles of instincts. He has to have a frame of orientation which permits him to organize a consistent picture of the world as a condition for consistent actions. He has to fight not only against the dangers of dying, starving, and being hurt, but also against another danger which is specifically human: that of becoming insane. In other words, he has to protect himself not only against the danger of losing his life but also against the danger of losing his mind." (Erich Fromm)
- 9. Statistics is a reflection of modern man; it deals with probabilities it cannot value.
- 10. During decision-making the power of simplicity should be appreciated.
- 11. A statistical model is the tool to translate numbers to relevant conclusions.