

Innovative Modeling of Outcome in Cardiac Surgery

M. Mostafa Mokhles

Rotterdam

December 18, 2013

- 1 There is no late patient survival difference in the first postoperative decade between the Ross procedure and mechanical aortic valve implantation with optimal anticoagulation self-management (*this thesis*).
- 2 The outcome of the Ross procedure is strongly depended on patient characteristics and center experience and expertise (*this thesis*).
- 3 Right-ventricular outflow-tract reconstruction with an allograft conduit can be performed with good patient survival, acceptable long-term allograft durability, and good perceived quality of life (*this thesis*).
- 4 The analysis of serial patient data such as (allograft) valve function is complex, and requires advanced longitudinal models for adequate statistical analysis (*this thesis*).
- 5 The application of novel statistical methods in assessment of outcome in cardiac surgery can increase the quality of analyses and the quality of scientific conclusions (*this thesis*).
- 6 There is no perfect heart valve substitute, but many of the valve related complications can be minimized through careful patient selection, shared decision making and careful medical management and follow-up.
- 7 For correct assessment and interpretation of the degree of mortality in a certain patient population, the mortality of this group needs to be compared with that of a reference group.
- 8 Accepting shared decision making as an integral part of healthcare is necessary for further improvement of quality of care and reduction of costs.
- 9 When interpreting statistical outcomes, knowledge of statistics counts but common sense matters.
- 10 Holidays are a risk factor for cardiac and non-cardiac mortality (*Phillips, Circulation 2004;110:3781-3788*).
- 11 There are no facts, only interpretations (*Nietzsche, Notebooks, Summer 1886 – Fall 1887*).