This thesis is based on the following publications and manuscripts

Chapter 2
Y Vergouwe, EW Steyerberg, MJC Eijkemans, and JDF Habbema. Validity of prediction models: when is a model clinically useful? *Seminars in Urologic Oncology* 20:96-107, 2002

Chapter 3
Y Vergouwe, EW Steyerberg, MJC Eijkemans, and JDF Habbema. Sample size considerations for external validation studies of prediction models: simulations with logistic regression. *submitted for publication*

Chapter 4

Chapter 5

Chapter 6

Chapter 7

Chapter 8
Y Vergouwe, EW Steyerberg, RS Foster, DT Sleijfer, SD Fosså, A Gerl, R de Wit, JT Roberts, DF Bajorin, and JDF Habbema. Predicting retroperitoneal histology in postchemotherapy testicular germ cell cancer: a model update and multicentre validation with 1094 patients. *in preparation*

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