Propositions accompanying this thesis

Improving percutaneous Coronary intervention using post procedural physiology and intravascular imaging

- **1.** Certain predictors of post PCI FFR such as gender and presence of thrombus should be taken into account when interpreting post PCI FFR values (this thesis)
- 2. In patients with an impaired post PCI FFR, IVUS reveals focal signs of residual luminal narrowing in a significant number of cases (this thesis)
- **3.** In patients with untreated stent edge dissections, dissection length, cavity depth and proximal reference area are identified as predictors for future adverse cardiac events and may help clinicians evaluate the necessity for additional treatment (this thesis)
- **4**. Generic non hyperemic pressure ratios and 3D angiography based FFR are promising new alternatives for physiological coronary lesion assessment (this thesis)
- **5**. Intravascular polarimetry adds important detail to the conventional OFDI intensity images (this thesis)
- **6.** Multiple large observational studies and post hoc analyses of randomized trials have established that post PCI FFR value is independently predictive of long-term outcomes (higher is better) (Hakeem et al. Circulation, 2019)
- **7.** Merely using intravascular imaging is not enough since at the end the goal should be to achieve optimal luminal dimensions with minimal vascular injury (adjusted from Zhang et al. JACC, 2018)
- **8.** There is a clear need for faster and safer means of coronary physiological lesion assessment (adjusted from Morris et al. JACC cardiovascular interv, 2015)
- **9.** Hybrid intravascular imaging has gradually matured and is expected to constitute an advantageous approach for the study of atherosclerosis and the identification of high-risk patients (Bourantas et al. European Heart Journal, 2017)
- **10**. There are 3 main barriers to implementing an intravascular imaging and physiology program: cost, expertise, and convincing interventional cardiologists of the limitations of relying on coronary angiography alone (Mintz et al. JACC, 2014)
- **11**. Read not to contradict and confute; nor to believe and take for granted; nor to find talk and discourse; but to weigh and consider (Francis Bacon)