

## Stellingen / Propositions

Behorende bij het proefschrift

**Innovations in the clinical use of OCT****Antonios Karanasos**

1. Quantitative OCT analysis might pose challenges in specific settings, such as in longitudinal catheter movement, assessment of cap thickness, or coronary bifurcations, and several methodological considerations must be taken into account. The use of dedicated methodology or dedicated software can provide a fast, automated and more robust assessment in these scenarios. **(This thesis)**
2. OCT can visualize the pathomechanisms of very late stent failure that comprises the major pitfall of metallic drug-eluting stents. One of the most important mechanisms of late metallic stent thrombosis or restenosis, which is observed both with bare metal and drug-eluting stents, is the de novo development of atherosclerosis within the stent, called neoatherosclerosis. In bioresorbable vascular scaffolds, suboptimal implantation with incomplete lesion coverage, underexpansion, and malapposition comprise the main pathomechanisms for both early and late thrombosis. **(This thesis)**
3. Bioresorbable vascular scaffolds have the potential to restore vascular morphology at long term after implantation. At a very long-term follow-up of bioresorbable scaffolds, there is a favorable vascular healing response, mediated by hemodynamic factors, with complete strut bioresorption, absence of permanent vessel jailing, late luminal enlargement due to plaque burden reduction, side-branch patency, and OCT evidence of a signal-rich, low-attenuating tissue layer that covers thrombogenic plaque components. **(This thesis)**
4. Bioresorbable vascular scaffold implantation in STEMI is feasible and associated with a good acute procedural outcome, while the mid-term vascular healing response by OCT is comparable to the healing response of a metallic DES with biodegradable polymer, demonstrating absence of lumen compromise, a low rate of malapposed struts in both groups and a lower rate of uncovered struts compared to metallic DES. **(This thesis)**
5. A varying extent of vascular injury is observed by OCT after renal denervation with five different systems, however different patterns of vessel injury can be identified in balloon-based and non-balloon-based denervation systems. **(This thesis)**
6. *Ὅτι ἐν τῷ πολλῷ τὸ εὖ, ἀλλ' ἐν τῷ εὖ τὸ πολὺ.*  
Quantity does not imply quality, but quality weighs over quantity. **(Ancient Greek saying)**
7. *Τὰ πάντα ρεῖ.*  
Everything in a state of flux. **(Heraclitus)**
8. *Aut viam inveniam aut faciam.*  
I will either find a way or make one. **(Hannibal)**
9. There is more to the picture than meets the eye.
10. *Οὐδὲν ἀτέκμαρτον, οὐδὲν τυφλόν.*  
Nothing is without cause, nothing is inexplicable. **(Plutarch)**
11. There is a light that never goes out. **(Steven Patrick Morrissey)**