# Development of an in vitro vascular network using zebrafish embryonic cells

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# Stellingen

behorende bij het proefschrift

***Development of an in vitro vascular network using zebrafish embryonic cells***

1. The percentage of *kdrl:GFP*$^{+}$ cells in blastocyst cell culture is increased in suspension culture compared to adherent culture (this thesis, Chapter 5).

2. For the development of a vascular network, fibrin is a crucial component of the 3D matrix (this thesis, Chapter 5, 6).

3. Zebrafish embryoid bodies generate longer vascular sprouts under flow of medium in a microfluidic system compared to static culture (this thesis, Chapter 6).

4. Cultures of zebrafish vascular networks may provide a low-cost platform for biomedical research (this thesis, Chapter 6).

5. An increase in the use of vascularized organ culture will reduce the use of laboratory animals in research (Groeber et al. 2016).

6. Results in zebrafish model should always be validated in a mammalian models before going to Phase-I clinical trials (Chavez et al. 2016).

7. Primary cells are closer to the *in vivo* state compared to repeatedly passaged cell lines (Staton et al. 2009)

8. Transgenic zebrafish lines should be used with great care for research purposes as the transgene may influence gene expression (Liu and Liu 2012).

9. The more our knowledge increases the more we feel ignorant.

10. It is easier to think about a problem then to think about a solution.

11. A living body can be thought of as a combination of hundreds of thousands of tiny factories producing unique goods.