

## STELLINGEN

1. There is robust evidence to recommend the use of CTC enumeration in metastatic breast cancer patients with poorly evaluable disease, and in clinical trials as a baseline characteristic or an early response marker.  
*This thesis*
2. The initiation of studies using promising tumor-associated CEC markers will be essential for CECs to eventually make it as a reliable and robust biomarker in clinical oncology.  
*This thesis*
3. It is more sensitive and more robust to use cell-free DNA as a substrate to detect somatic mutations than DNA from CellSearch-enriched CTCs.  
*This thesis*
4. The current evidence on *ESR1* mutations warrants prospective studies in which patients are randomized and treated according to the *ESR1* mutation status in cell-free DNA.  
*This thesis*
5. Future efforts using cell-free DNA as a tool to detect somatic mutations in cancer patients should carefully consider all available methods for their detection and choose the method most fit to answer the specific research question.  
*This thesis*
6. Treating cancer patients with a targeted agent based on one specific DNA mutation is unlikely to yield large overall survival benefits in a majority of cancer patients.
7. Off-label use of molecularly targeted agents should be discouraged, and enrolment into clinical trials should be encouraged to help identify predictive biomarkers of efficacy.  
*Le Tourneau et al., Lancet Oncol. 2015 Oct;16(13):1324-34*
8. As every drug, device, and intervention we might choose, or not, to use in the care of a patient has a specific and often substantial cost attached to it, we can no longer ignore nor can we blindly accept that cost, and feel that it has no place in our medical decision making.  
*Saltz, J Clin Oncol. 2016 Mar 1;34(7):659-60*
9. Institutional review boards are increasingly entangled in trivia, requiring changes in protocols and consent forms on the basis of local templates that have no meaningful effect on study conduct or safety.  
*Steensma and Kantarjian, J Clin Oncol. 2014 Feb 10;32(5):376-8*
10. The weakness of all of the studies exploring factors predicting success in a medical career is the definition of that success.  
*Leinster, BMC Med. 2013 Nov 14;11:245*
11. Sometimes the road less travelled, is less travelled for a reason.  
*Jerry Seinfeld*