

CELL-BASED MONITORING OF CANCER Circulating Tumor and Endothelial Cells

1. A combination of standardization and external quality assurance may reduce the inter-laboratory variation for CTC counting in peripheral blood.
[this thesis]
2. Stringent selection of genes combined with sensitive pre-amplification, using multiplex real-time PCR enables the molecular characterization of a single CTC in the presence of large quantities of contaminating leukocytes.
[this thesis]
3. The vascular sialomucin CD34, a signature marker for hematopoietic progenitor cells, is highly expressed on mature endothelial cells.
[this thesis]
4. CEC enumeration protocols require a DNA specific stain to exclude platelets, aggregates and endothelial micro and/or macro particles, as these objects have an overlapping phenotype with CEC.
[this thesis]
5. Endothelial CD276 (B7-H3) expression is increased in human malignancies and distinguishes between normal and tumor-derived circulating endothelial cells.
[this thesis]
6. Recent advances in technologies to analyze circulating tumor cells and circulating tumor DNA are setting the stage for real-time, noninvasive monitoring of cancer and providing novel insights into cancer evolution, invasion, and metastasis.
Haber et al. Cancer Discov. 2014 Jun;4(6):650-61.
7. Exosomes are promising cancer biomarkers in personalized medicine and may provide new diagnostic and therapeutic opportunities.
Valadi et al. Nat Cell Biol. 2007 Jun;9(6):654-9.
8. Keeping endothelial homeostasis is the central key for a healthy long life of the human individual. "A man is as old as his arteries".
Thomas Sydenham, English Physician (1624 – 1689)
9. If you can't see your negatives, you have no idea where your positives are.
Robert Sutherland and Michael Keeney
10. In plaats van dat we organiseren waar het om draait, is het dankzij management (en kwaliteitssystemen) gaan draaien om hoe we organiseren.
11. Als een stelling te stellig wordt in wetenschap, politiek of religie onttaardt zij in een dogma.