## Unravelling the Genomic Landscape of Metastatic Prostate Cancer: A prospect on Patient Stratification

Lisanne F. van Dessel

1. Whole genome sequencing allows for clustering of clinically relevant subgroups based on genomic characteristics. In metastatic prostate cancer, this is preferable over mutation-based clustering using targeted (sequencing) approaches.

This thesis

2. Standardization of pre-analytical conditions of liquid biopsies facilitates implementation in routine clinical cancer care.

This thesis

- In metastatic prostate cancer, therapy response evaluation using circulating tumor DNA is the
  way forward and therefore improving sensitivity of current and novel techniques is key.
  This thesis
- 4. Liquid biopsy-derived organoids have the potential to guide individualized treatment decisions. *This thesis*
- Demonstrating the importance of 11-oxygenated androgens in castration-resistant prostate cancer urges us to reconsider the criteria for 'castration'.

This thesis

6. The traditional system of anatomic cancer classification should be supplemented by a classification system based on molecular alterations shared by tumors across different tissue types.

K.A. Hoadley et al., Cell. 2018. 173, 291–304

- 7. Therapeutic approaches must be as multidimensional as the cancers that they are designed to overcome.
  - I. Dagogo Jack and A.T. Shaw, Nature Reviews Clinical Oncology. 2018. 15, 81-94
- 8. In parallel to developing the tools for "-omic" analyses, we urgently need to develop methods to help our patients absorb large amounts of complex information that will help them make choices among increasingly numerous options with increasingly numerous trade-offs. These methods should also help our colleagues answer the age-old question, "What would you do, doctor?"
  - D.J. Hunter, N Engl J Med. 2016. 375, 711-713
- 9. There are known knowns; there are things we know we know. We also know there are known unknowns; that is to say, we know there are some things we do not know. But there are also unknown unknowns- the ones we don't know we don't know. Donald Rumsfeld
- 10. Success is going from failure to failure without losing your enthusiasm. Winston Churchill
- 11. Treur niet omdat iets voorbij is. Geniet ervan dat het gebeurd is. *Ludwig Jacobowski*