Next generation sequencing of ovarian metastases of colorectal cancer

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Stellingen
behorend bij het proefschrift
Next generation sequencing of ovarian metastases of colorectal cancer

1. The analysis of the complete *APC* gene, can be helpful in correctly classifying ovarium tumors with endometrioid or mucinous features, when APC mutations are identified.
(this thesis)

2. There is no clear relationship between the number of discordant variants and the time interval between primary CRCs and the detection of ovarian metastases, suggesting the presence of dormant metastases in the early stages of the primary tumor.
(this thesis)

3. The clinical relevance of targetable targets that are present in only a small percentage of tumour cells needs to be clarified.
(this thesis)

4. Subtle changes in the settings of the NGS analysis pipeline can be the cause of false positive and false negative results.
(this thesis)

5. Given the poor prognosis of carcinoma of unknown primary (CUP) treated by nontargeted conventional therapies, comprehensive genomic profiling shows promise to identify targeted therapeutic approaches to improve outcomes for this disease while potentially reducing the often costly and time-consuming search for the tumor's anatomic site of origin.
Ross et al. *JAMA Oncol*. 2015;1(1):40-49.

6. It is becoming increasingly clear that cancers are characterized by extensive intratumour genetic heterogeneity, and that patients being considered for treatment with a targeted agent might, therefore, already possess resistance to the drug in a minority of cells.
Schmitt et al. *Nat Rev Clin Oncol*. 2016 Jun; 13(6): 335–347.

7. The clinical usefulness of genomic sequencing requires advancement in our knowledge of the genome and bioinformatic systems to progress genetic data.
Shen et al. *Front Genet*. 2015 Jun 17;6:215

8. In order for large-scale genomics to become fully integrated into the clinic, we need to reduce the costs and timescales associated with storage and interpretation of genome data.
Reuter et al. *Mol Cell*. 2015 May 21; 58(4): 586–597.

9. Molecularly targeted cancer therapy remains challenged by a high failure rate and an extremely small proportion of patients that can benefit.
Huang et al. *Trends Pharmacol Sci*. 2014 Jan;35(1):41-50.

10. While basket trials indicate the right direction, future precision oncology trials might overcome their limitations by integrating anatomic with mutational and more functional molecular profiling.
Klauschen et al. *Pathol Res Pract*. 2015 Dec;211(12):897-900.

11. Gezond, zoet, gezond, zoet, gezond, zoet. Zo is het leven, toch?
Vera Crobach
“Bottom-up” visies van een frisse kindergeest kunnen een welkome aanvulling zijn op het klassieke “top-down” leermodel.

ASLP Crobach, 2018