Combinatorial prospects of nanoparticle mediated immunotherapy of cancer

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STELLINGEN

behorende bij het proefschrift

COMBINATORIAL PROSPECTS OF NANOPARTICLE MEDIATED IMMUNOTHERAPY OF CANCER

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1. Numbers matter, and as such, ablation therapies which reduce the bulk of tumor cells greatly combine with immunotherapy which potentiates T cells to deal with remaining cancer cells. (this thesis)

2. Non-specific immunotherapy, which activates innate immune response sensors, can have profound effects on innate but also on adaptive immune responses. (this thesis)

3. NP-based local activation of immune cells combined with specific immunotherapy can be a valuable therapeutic strategy for cancer. (this thesis)

4. Intratumoral administration of biodegradable slow release formulations are one of the most efficient methods to achieve high concentration of drugs inside the tumor. (this thesis)

5. “The mechanisms regulating TLR pathway crosstalk maybe related, as multi-PAMP activation often leads to synergistic enhancement of late-peaking T cell polarizing cytokines.” From Lin et al., Cell Systems, 2017.

6. “Malignant cells can grow into clinically manifest tumors only if they lose the immunogenic determinants that make them recognizable by immune effectors (immunoselection) or if they actively inhibit immune responses (immunosuppression).” From Zitvogel et al., Cell Immunity, 2013.

7. “Most traditional antitumour drugs aim to kill cancer cells, but not all pathways of cell death are immunologically equivalent.” From Darrell J. Irvine, Nature reviews immunology, 2020.

8. “Tumors are more than insular masses of proliferating cancer cells.” From Douglas Hanahan, Cell, 2011.

9. Everyone has talent in our unique way. We just need to recognize our capacity and develop our talents to their full potential to achieve our goals. – inspired by *Erica Jong (born 1942).*

10. Any intelligent fool can make things bigger and more complex. It takes a touch of genius and a lot of courage to make things simple. – inspired by *E.F. Schumacher (1911 – 1977).*

11. True randomness does not exist. What we call random is just patterns we can't decipher yet. – inspired by *Chuck Palahniuk (born 21 February 1962) and Tony Hillerman (1925 – 2008).*

12. Every phenomenon has a cause. But it may require a mind infinitely powerful, and infinitely well-informed concerning the laws of nature to understand them all. – inspired by *Henri Poincaré (1854 - 1912).*