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## The use of light in cancer immunotherapy

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# STELLINGEN

behorende bij het proefschrift

## THE USE OF LIGHT IN CANCER IMMUNOTHERAPY

1. Tumor ablation by Photodynamic Therapy can be sufficient to ignite immune responses against tumors. (*this thesis*)
2. Photodynamic Therapy can be well combined with both specific and non-specific immunotherapies. (*this thesis*)
3. Optical imaging tools can visualize the extreme spatial and temporal characteristics of immune responses. (*this thesis*)
4. Encapsulation of antigen vaccines in nanoparticles improves antigen uptake by dendritic cells and induces stronger immune responses. (*this thesis*)
5. In its long evolutionary history, the immune system has gained mechanisms of recognizing and attacking virally infected cells, which has proved essential in dealing with tumors.
6. Modern technologies have caused an explosion of data in immunology, which has made the skill to distill relevance ever more important.
7. Scientific research on medical applications of light can create attractive pictures and unexpected admirers.
8. ‘Brute force’ tumor ablation methods may be an efficient way to deal with the intricate web of countermeasures that tumors are taking to avoid immune attack.
9. Scientists are defined not by education or reputation, but by correct application of the scientific method.
10. Correcting is usually perceived as annoying and offensive, but can also be interpreted as resulting from the (naïve) assumption that others always desire to learn something new.
11. The human nature to be fixated on small differences while ignoring massive similarities has sustained destructive illusions of superiority and exclusivity.
12. Symbolism tends to grow so powerful that it destroys the very thing it is supposed to symbolize.

Jan Willem Kleinovink