

Propositions belonging to the thesis:

## Adoptive T cell Therapy Against Solid Tumors: Success Requires Safe TCRs and Countering Immune Evasion

**1. Expression of antigens, rather than co-stimulatory ligands, drives the extent of a T cell response.**

(Chapter 3, this thesis)

**2. Epigenetic Drugs are able to selectively enhance expression and presentation of Cancer Germline Antigens (CGAs) by malignant cells.**

(Chapter 3, this thesis)

**3. Stringent *in vitro* safety assessment of wild-type TCRs, but especially of modified TCRs, is necessary to limit toxicity risk of adoptive T cell therapy.**

(Chapter 4, this thesis)

**4. Providing TCRs with additional co-stimulatory signaling improves the numbers and persistence of T cells and thus the efficacy of adoptive T cell therapy.**

(Chapter 5, this thesis)

**5. Enhancing the infiltration of tumor-specific CD8 T cells into solid tumors is one of the key contributors to overcoming relapse.**

(Chapters 5 and 6, this thesis)

**6. "T cell immunity inherently features an extremely high level of receptor degeneracy, enabling each TCR to recognize multiple peptides."**

(Wooldridge, J Biol Chem, 2012)

**7. The immunephenoscore, based on the tumor genotype and the phenotype of tumor infiltrates, serves as a useful predictor of tumor escape mechanisms and therapy response.**

(adapted from Charoentong, Cell Rep. 2017)

**8. Epigenetic drugs are more selective than chemotherapy and radiation, but are equally capable of priming the immune system for an anti-tumor response.**

(adapted from Weintraub, Nature Medicine, 2016)

**9. Increasing emphasis on scientific performance has caused a surge of 'publishable' results which often goes at the expense of quality, validity, and rigor of scientific performance.**

(adapted from Tjldink, PLOS One, 2013)

**10. It is imperative to inform the general public about the true nature of science and research, otherwise popular fiction keeps on shaping the public's expectation of real science (i.e. the "CSI effect").**

(adapted from Schweitzer and Saks, Jurimetrics, 2007)

**11. Was it a good day? If you made just a single person smile - be it through an act of kindness or a joke, no matter how bad of a joke - it was a good day.**

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