Stellingen behorende bij het proefschrift

Public neoantigens for immunotherapy of acute myeloid leukemia

1. Recurrent driver mutations in acute myeloid leukemia form a valuable source of neoantigens for T-cell receptor-engineered T-cell therapy. – *This thesis.*

2. Neoantigens for which T cells are exceptionally rare in the repertoire of patients are relevant to explore as targets for T-cell receptor-engineered T-cell therapy, particularly when they possess favorable therapeutic properties. – *This thesis.*

3. Because patient-derived acute myeloid leukemia samples vary in their capacity to stimulate T cells, T-cell clones or receptors should preferably be tested against multiple samples to better assess their anti-leukemic potential. – *This thesis.*

4. The ability of an HLA class I-restricted T-cell receptor to bind to peptide-HLA class I tetramers in CD4 T cells lacking the CD8 coreceptor can predict superior anti-tumor reactivity in preclinical assays. – *This thesis.*

5. Developing strategies to generate receptor-engineered T cells *in vivo* will broaden the application of T-cell receptor-engineered T-cell therapy. – *Bot A, et al. Nature Reviews Drug Discovery. 2026;25(2):116-137.*

6. Effective T-cell receptor-engineered T-cell therapy against acute myeloid leukemia requires expression of the target antigens on leukemic stem cells. – *Adapted from Foldvari Z, et al. Nature Reviews Cancer. 2025;25(12):965-985.*

7. Because intra-tumor heterogeneity is a key determinant of therapeutic resistance, future treatment strategies for each individual patient should also depend on the intra-tumor heterogeneity of the tumor. – *Keenan BP, et al. Annals of Oncology. 2026;37(3):314-328 and Marusyk A, et al. Cancer Cell. 2020;37(4):471-484.*

8. CD4 T cells should be better exploited to enhance the efficacy of cancer immunotherapy.

9. A PhD trajectory is also a journey of self-understanding and personal development.

10. Spending time in nature helps to put your life into perspective.