Immune monitoring in thoracic malignancies

1. Within the heterogeneous population of myeloid-derived suppressor cells, ILT3 marks an especially unfavorable subset of these cells in non-small cell lung cancer patients. (This thesis)

2. Treatment with radiotherapy, but not surgery, induces activation and proliferation of T cells in non-small cell lung cancer patients and may therefore enhance immunotherapy. (This thesis)

3. Activation and proliferation of circulating T cells after paclitaxel/carboplatin/bevacizumab treatment is not related to the survival of advanced stage lung cancer patients.

4. Machine learning algorithms are useful in exploratory immune monitoring studies to identify an immune profile that is associated with the clinical outcome of cancer patients. (This thesis)

5. Dendritic cell immunotherapy in which dendritic cells are pulsed with allogeneic tumor lysate is a safe, feasible and promising treatment for malignant mesothelioma patients. (This thesis)

6. A common misconception in various scientific fields is that predictive power can be inferred from explanatory power. However, the two are different and should be assessed separately. (Galit Shmueli)

7. Novel cancer treatments – especially immunotherapies – should be evaluated on their efficacy in cancer patients grouped by biomarkers, rather than the organ from which the primary tumor has derived.

8. The status of CD8+ T cell priming is a major contributor to anti-PD-1 therapeutic resistance, which can be prevented by simultaneous treatment with cell-activating therapies such as vaccination, immune stimulatory antibodies or radiation therapy (Verma et al, Nat Immunol 2019).

9. The human species as a whole now displays all four major characteristics of a malignant process: rapid, uncontrolled growth; invasion and destruction of adjacent normal tissues (ecosystems); metastasis (distant colonization); and dedifferentiation (loss of distinctiveness in individual components) (Warren Hern)

10. Science is a collaborative effort. The combined results of several people working together is often much more effective than could be that of an individual scientist working alone. (John Bardeen)

11. I can’t change the direction of the wind, but I can adjust my sails to always reach my destination. (Jimmy Dean)

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