CD8+ T-cells in atherosclerosis: recognizing their contribution

Jong, M.J.M. de

Stellingen

Behorend bij dit proefschrift

$CD8^+$ T-cells in atherosclerosis: Recognizing their contribution

1. The pro-inflammatory microenvironment of the atherosclerotic lesion affects the function and phenotype of $CD8^+$ T-cells. *(This thesis)*

2. Different $CD8^+$ T-cell subsets influence lesion development in distinct ways, making their phenotype, maturation stage, and activation level critical factors to consider in future research aimed at $CD8^+$ T-cell-based interventions for atherosclerosis. *(This thesis)*

3. Antigen specific $CD8^+$ T-cell responses do not affect atherosclerotic lesion progression, while autoreactive $CD4^+$ T-cells protect against early atherosclerosis. *(This thesis)*

4. Inducing an antigen specific $CD8^+$ T-cell response against ApoB100 derived antigens poses a promising strategy for increasing lesion stability. *(This thesis)*

5. T-cells represent the largest population of leukocytes in the plaque, in particular in humans, with a great and largely unexpected phenotypic diversity. *(Adapted from: Winkels et al. ATVB (2020), PMID: 33267666)*

6. Bystander activation, through cytokine exposure or co-stimulation, can result in the upregulation of TCR-associated activation markers, including CD69. *(Adapted from: Le et al. JCI Insight. (2023), PMID: 37737264)*

7. Defining tissue-specific targets is key for the development of specific immunotherapies in cardiovascular disease. *(Adapted from: Kim et al. Sci. Transl. Med. (2022), PMID: 36044599)*

8. Over the past two decades, research on anti-atherosclerosis vaccination has shown that this approach offers a promising and cost-effective strategy for the treatment of cardiovascular disease. *(Adapted from Moreno-Gonzalez et al. Nanotod. (2023), PMID: 37860053)*

9. Optimisme is de kracht van wetenschap; het is het vertrouwen dat voor elk probleem een oplossing bestaat.

10. Reizen is een vorm van onderwijs. Het helpt ons perspectieven te verbreden en nieuwe ideeën te omarmen. *(Adapted from: Mark Twain)*

Maaike de Jong
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