Immune modulation and monitoring of cell therapy in inflammatory disorders

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STELLINGEN

behorend bij het proefschrift

Immune modulation and monitoring of cell therapy in inflammatory disorders

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1. Elucidating the heterogeneous phenotype of pancreatic tissue and immune cells will lead to a better understanding about the etiology of type 1 diabetes. (*This thesis)*
2. Monitoring tools to evaluate the immunological effect of antigen-specific cell therapy *in vivo* should include quantification as well as functional characterization of immune populations. *(This thesis)*
3. Tolerogenic dendritic cells with low expression of CD86 induce regulatory T-cells with heterogeneous phenotype and function. *(This thesis)*
4. Intradermal injection of tolerogenic dendritic cells pulsed with proinsulin peptide decreases autoimmunity in type 1 diabetes patients. *(This thesis)*
5. Regulatory T-cells induced by tolerogenic dendritic cells *in vivo* resemble $CD25^{hi}$ Tregs identified *in vitro. (This thesis)*
6. Mesenchymal stromal cells inhibit inflammatory gut- and skin-homing T-cells and ameliorate steroid-refractory acute graft-versus-host disease in children. *(This thesis)*
7. Patients with therapy-responsive acute graft-versus-host disease can be distinguished from therapy-resistant patients by a unique immune signature, which reflects a state of escalating immune reactivity. (*This thesis*)
8. Tolerogenic dendritic cells and mesenchymal stromal cells can be applied in various inflammatory disorders.
9. The goal of high dimensional analysis is to generate a large dataset and retrieve the essence from this.
10. Highlighting outliers within a dataset can lead to novel insights.
11. Induction of immune tolerance is an active process that needs prior immunization.