Stellingen

Behorende bij het proefschrift:

Bipolar Role for Myelo-Monocytic Cells

in Autoimmune Diseases and Psychiatric Disorders

1. A high prevalence of psychiatric disorders and endocrine autoimmune diseases in patients and/or their family members refute the concept that psychiatric disorders and endocrine autoimmune disease are cause or consequence of each other (*This thesis*).

2. Abnormalities in proliferation, cell renewal and differentiation of the precursors in the myelo-monocytic cell lineage (occurring at the level of the brain, bone marrow and endocrine tissues) are a key element underlying the pathogenesis of psychiatric disorders and endocrine autoimmunity (*This thesis*).

3. Alteration of prenatal microglial preferentially alters genes involved in neurite formation, and induces a defasciculation of axonal tracts within the corpus callosum (*This thesis*).

4. Microglia in the NOD mouse have an altered gene expression profile characterized by a differential expression of genes involved in neuronal support (*This thesis*).

5. NOD pancreatic $CD11c^{+}CD8\alpha^{-}$ DCs show an altered inflammatory set point and an altered expression of several molecular networks important for the prime functions of the cell such as cell renewal, immune tolerance induction, migration and the provision of growth factors for β cell regeneration (*This thesis*).

6. Euthyroid females with at least one first or second degree relative with documented autoimmune hyper- or hypothyroidism show a characteristic pattern of abnormalities in serum protein levels of tissue remodelling factors, growth factors, chemokines, adhesion molecules and cytokines during very early stages of AITD before the presence of TPO-antibodies in serum is observed (*This thesis*).

7. Chronic schizophrenia patients show an activated monocyte/macrophage system (*This thesis*).

8. Adequate and appropriate microglial function is crucial for the homeostasis of the central nervous system in both health and disease (*Perry et al., Nature Reviews Neurology, (2010), 6, 193–201*).

9. Fate mapping analysis reveals that adult microglia derive from primitive macrophages. (*Ginhoux et al., Science, (2010), 330(6005), 841-5*).

10. Prenatal exposure to infection and subsequent inflammatory responses have been implicated in the etiology of schizophrenia. (*Meyer et al, Pediatric Research, (2011), 69, 26R–33R*)

11. Science is not only a disciple of reason but, also, one of romance and passion (*Stephen Hawking*).

Wouter Beumer

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