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Bitter Sweet Symphony: the impact of sugars on autoimmunity

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Stellingen behorende bij het proefschrift getiteld:

BITTER SWEET SYMPHONY

THE IMPACT OF SUGARS

ON AUTOIMMUNITY

1. Autoantibodies - a characteristic of Rheumatoid Arthritis (RA) patients - are adjustable "Locks" encountering flexible "Keys". (this thesis)
2. N-linked glycosylation sites are introduced into the variable B-cell receptor regions in a "2nd" immunological "hit" following the help of T cells directed against citrullinated proteins presented by HLA-SE molecules. (this thesis)
3. The presence or absence of variable domain glycans can be predictive for the development of a chronic, persistent disease or the chance that RA patients achieve remission at a later time, respectively. (this thesis)
4. Glycans expressed in the variable domain of autoantibodies and B-cell receptors can impact antigen binding and set the threshold for B-cell activation. (this thesis)
5. Not only glycans attached to the fragment crystallizable (Fc) region can affect antibody effector functions, but also glycans attached to the antigen-binding domain. (this thesis)
6. Cross-reactivity and variable domain glycosylation of B-cell receptors may help these B cells to survive and to escape the tight control mechanisms in our body that are usually in place to prevent the development of autoimmunity.
7. Obtaining knowledge on how variable domain glycans influence B-cell activation will allow us to find ways to inhibit the activation of these autoreactive B cells.
8. Interactions between Siglecs and B-cell receptor sialic acids may contribute to homing of B cells.
9. Let's cross that bridge when we come to it.
10. The best moments in research are the unforeseen ones.
11. When it comes to scientific work "be quick, but don't hurry"! - *John Wooden*
12. „Es ist nicht genug zu wissen, man muss auch anwenden; es ist nicht genug zu wollen, man muss auch tun“. - Is it enough to know something, or is knowledge worthless if you don't put it into practice? - *Johann Wolfgang von Goethe*