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Immune checkpoint pathways in the ageing immune system and their relation to vasculitides

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DOI:
[10.33612/diss.112111572](https://doi.org/10.33612/diss.112111572)

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Document Version
Publisher's PDF, also known as Version of record

Publication date:
2020

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):
Hid Cadena, R. (2020). *Immune checkpoint pathways in the ageing immune system and their relation to vasculitides*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen. <https://doi.org/10.33612/diss.112111572>

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STELLINGEN

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IMMUNE CHECKPOINT PATHWAYS IN THE AGEING IMMUNE SYSTEM AND THEIR RELATION TO VASCULITIDES

1. Loss of immunoinhibitory signaling in Giant Cell Arteritis renders the vessel wall susceptible to inflammation. (This thesis)
2. Collaboration between rheumatologists and oncologists is essential to monitor the incidence of auto-immune related immunotoxicity caused by the increasing use of immune checkpoint inhibitor therapy. (This thesis)
3. Differences in immune checkpoint expression imposed by sex and age should prompt further research into a better understanding of age-and gender related diseases. (This thesis)
4. Increased negative immune checkpoint expression in Granulomatosis with polyangiitis may reflect a compensatory mechanism to down regulate persistent T cell activation. (This thesis)
5. Harmful T helper cell responses in Giant Cell Arteritis are in part due to VISTA deficiency (This thesis)
6. Collaboration between immunologists and computational scientists is of key importance to advance our understanding of the multiple alterations in the immune system and how these contribute to disease. (This thesis)