



Universiteit  
Leiden

The Netherlands

## Understanding hypercoagulability: determinants and impact on cardiometabolic disease

Han, J.

### Citation

Han, J. (2025, November 19). *Understanding hypercoagulability: determinants and impact on cardiometabolic disease*. Retrieved from <https://hdl.handle.net/1887/4283325>

Version: Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/4283325>

**Note:** To cite this publication please use the final published version (if applicable).

**Stellingen**  
behorende bij het proefschrift

**Understanding Hypercoagulability:  
Determinants and Impact on Cardiometabolic Disease**

1. A comprehensive understanding of hypercoagulability requires not only an in-depth investigation of traditional risk factors but also a broad exploration of its interactions with diverse pathophysiological processes to fully elucidate its role in cardiometabolic disease. *(this thesis)*
2. Identification of genetic risk factors associated with venous thromboembolism has improved risk prediction. To further achieve clinical benefit, the critical question is not merely “To Sequence or Not to Sequence” but rather “When, Who, Which, and What For?”. *(this thesis, inspired by David-Alexandre Trégouët and Pierre-Emmanuel Morange, JTH, 2024)*
3. Genetic research on hypercoagulability shows links between the coagulation system and lipid metabolism, reinforcing the idea that dysregulated coagulation contributes not only to venous thromboembolism but also to type 2 diabetes and atherosclerosis. *(this thesis)*
4. Size-dependent associations between high-density lipoprotein (HDL) particles and coagulation parameters indicate that different HDL compositions play distinct roles in hypercoagulability. *(this thesis)*
5. Impairment of the endothelial glycocalyx, reflected by increased perfused boundary region markers, is positively associated with coagulation parameters, which demonstrates that microvascular dysfunction contributes to hypercoagulability. *(this thesis)*
6. The reciprocal interplay among factors driving hypercoagulability complicates its elucidation, which highlights the need for longitudinal studies that capture the dynamic progression of these processes rather than relying on static snapshots.
7. Observational epidemiologic research advances our knowledge through the gradual accumulation of evidence across diverse scientific disciplines based on precise and valid measurements. *(Inspired by Timothy L. Lash & Jan P. Vandenbroucke, Epidemiology, 2012)*
8. Evidence-based strategies derived from predominantly white European populations often underperform in other ethnicities. Addressing this disparity requires that diverse populations are included from the very beginning of study design. *(Inspired by Shivani Misra, Nature Medicine, 2024)*
9. “Your qualities are admirable. Even if you choose to do nothing with them, I cannot say anything against it. However, if you dedicate your heart and effort, what could you not achieve?”, a reminder that scientific progress depends not only on talent but also on wholehearted dedication *(Inspired by The Veritable Records of King Sejong, Volume 90, July 21, 1440)*