

Novel insights in thrombosis pathophysiology using Mice with Impaired anticoagulation

Heestermans, M.

Citation

Heestermans, M. (2018, September 25). *Novel insights in thrombosis pathophysiology using Mice with Impaired anticoagulation*. Retrieved from https://hdl.handle.net/1887/66034

Version: Not Applicable (or Unknown)

License: License agreement concerning inclusion of doctoral thesis in the

Institutional Repository of the University of Leiden

Downloaded from: https://hdl.handle.net/1887/66034

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

Cover Page



Universiteit Leiden



The handle http://hdl.handle.net/1887/66034 holds various files of this Leiden University dissertation.

Author: Heestermans, M.

Title: Novel insights in thrombosis pathophysiology using Mice with Impaired

anticoagulation

Issue Date: 2018-09-25

PROPOSITIONS

affiliated with the thesis entitled

NOVEL INSIGHTS IN THROMBOSIS PATHOPHYSIOLOGY USING MICE WITH IMPAIRED ANTICOAGULATION

By Marco Heestermans

- 1. Direct platelet inhibition prevents venous thrombosis in mice (this thesis)
- 2. The involvement of neutrophils and coagulation factor XII in human venous thrombosis can be overestimated due to the lack of appropriate *in vivo* models to study the disease (this thesis)
- 3. Depending on the direct cause of (recurrent) venous thrombosis, the disease can be prevented using tailored anticoagulants with limited to no bleeding as a side effect
- 4. Natural anticoagulant protein C plays an important role in preventing plaque rupture or erosion in atherosclerotic mice (this thesis)
- 5. Occurrence of atherothrombosis in atherosclerotic mice depends on the local hemodynamic profile of the vessel (this thesis)
- Human counterparts of genes associated with atherosclerotic lesion development in mice are scarcely found to be crucial for disease development in humans (inspired by Pasterkamp et al. Arterioscler Thromb Vasc Biol. 2016 Jun;36(6):1240-6)
- 7. The use of oligonucleotides as therapy will become a widely accepted therapeutic strategy to treat human diseases
- 8. The potential for genome-wide association studies to identify risk factors for common diseases is limited and probably has been reached (inspired by Trégouët et al. *J Thromb Haemost*. 2016 Sep;14(9):1798-802)
- Most government funding for science should go to research that is likely to affect the lives of many people (inspired by Rosendaal and Reitsma, *J Thromb Haemost*. 2017 Dec;15(12):2287)
- 10. Good news provokes good reading and quick responses
- 11. There is more to biology than rats, *Drosophila, Caenorhabditis*, and *E. coli* (Ernst Mayr in *Acquiring Genomes: A Theory Of The Origin Of Species* by Lynn Margulis and Dorion Sagan, 2002)