



Universiteit
Leiden

The Netherlands

The glyocalyx: a diagnostic and therapeutic target in cardiometabolic diseases

Velden, A.I.M. van der

Citation

Velden, A. I. M. van der. (2024, September 3). *The glyocalyx: a diagnostic and therapeutic target in cardiometabolic diseases*. Retrieved from <https://hdl.handle.net/1887/4039604>

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/1887/4039604>

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

Stellingen behorende bij het proefschrift, "The glycocalyx; a diagnostic and therapeutic target in cardiometabolic diseases"

1. The endothelial glycocalyx may play a role in future cardiovascular risk management (CVRM), identifying and monitoring individuals at risk for developing cardiovascular disease. *This thesis*
2. Labelling and quantifying active heparanase-1 (HPSE-1) with activity based binding probes (ABP) gives a better understanding of HPSE-1 release in urine or tissue. *This thesis*
3. The fasting mimicking diet should be used with caution in patients with decreased kidney function or CKD and in patients using diuretics, where kidney function should be monitored regularly. *This thesis*
4. For use in clinical practice, specific cut off points for interpretation of the microvascular parameters have yet to be determined. This will make it more accessible to use the technique in daily practice. *This thesis*
5. South Asian ethnicity indeed appears to be an independent cardiovascular risk factor, one that clearly deserves our attention.
M. Gupta et al, Canadian Journal of Cardiology, 2006.
6. Evidence suggests that glycocalyx dysfunction is reversible, suggesting that these mechanisms could be considered as therapeutic targets to prevent the progression of renal and cardiovascular disease.
Rabelink TJ et al. The glycocalyx--linking albuminuria with renal and cardiovascular disease. Nature Reviews Nephrology, 2015
7. Disordered metabolism and hemodynamics trigger the activation of numerous inflammatory molecules and pathways in the diabetic kidney, which together explain how these abnormalities translate into functional and structural renal injury.
Navarro-González JF et al. Inflammatory molecules and pathways in the pathogenesis of diabetic nephropathy. Nature Reviews Nephrology, 2011
8. The endothelial glycocalyx, protecting the vascular wall against atherogenic influents, could be used for cardiovascular risk stratification. For this purpose, new methods to estimate glycocalyx dimension are promising.
Broekhuizen LN et al. Endothelial glycocalyx as potential diagnostic and therapeutic target in cardiovascular disease. Current Opinion in Lipidology, 2009
9. 'A man is as old as his arteries'. *Thomas Sydenham, 1624–1689*
Your vascular health reflects the risk of developing cardiovascular complications
10. 'Perseverance is rewarded sooner or later - but usually later'. *Wilhelm Busch, 1832–1908*
Organizing and conducting a clinical trial can be challenging and the results are only revealed at the very end