Novel pathways in cholesterol metabolism to combat cardiometabolic diseases

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Stellingen behorende bij het proefschrift

Novel pathways in cholesterol metabolism to combat cardiometabolic diseases

1. Brown fat is a promising therapeutic target for the treatment of cardiometabolic diseases. (*This thesis; Becher, Nat Med 2021*)

2. The anti-atherogenic effects of brown fat activation are attributed to the hepatic LDL receptor pathway rather than the hepatic SRB1 pathway. (*This thesis*)

3. In contrast to current dogma based on suboptimal preclinical models, hepatic SRBI knockdown actually protects against atherosclerosis development. (*This thesis*)

4. Combination of current lipid-lowering strategies with brown fat activation is a feasible way to better achieve the lowering-cholesterol goal in the clinic. (*This thesis; Hoeke, Atherosclerosis 2017*)

5. DHCR24 inhibition is a promising pharmacological strategy to induce LXR to combat inflammatory and cardiometabolic diseases without causing hyperlipidemia. (*This thesis*)

6. With respect to physiological brown fat activation, the beta-adrenergic receptor ADRB2 is the human equivalent of murine ADRB3. (*Blondin, Cell Metab 2020*)

7. Atherosclerosis and non-alcoholic steatohepatitis are two aspects of a shared disease, with local presence of activated macrophages as common etiology. (*Bieghs, Atherosclerosis 2012*)

8. You may never know what results come of your actions, but if you do nothing, there will be no results. (*Mahatma Gandhi, 1869–1948*) When applied to science: practice is the sole way to test a hypothesis.

9. Every coin has two sides; negative results do not always fail to the null.

10. A man without distant care must have near sorrow. (*Confucius, The Analects, 475–221 BC*) In other words: one should not plan for tomorrow, but also for the distant future.

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