PROPOSITIONS

belonging to the thesis

“The Dual Face of Endothelial Control of Vascular Tone”

1. The hypertension produced by the VEGFR inhibitor sunitinib is not due to reduced NO bioavailability but the result of increased endothelin (this thesis).

2. CYP 2C9 metabolites exert a vasoconstrictor influence in the coronary circulation (this thesis).

3. The vascular interaction between PDE5 and ET is highly tissue specific (this thesis).

4. Up₄A is a novel and potent vasodilator in the coronary microcirculation (this thesis).

5. The purinergic receptors and endothelial signaling involved in Up₄A-mediated coronary vasodilation are markedly altered in a variety of cardiovascular disease states, even when the overall vasodilator response to Up₄A is maintained (this thesis).

6. ET₄A receptor blockade is a potentially attractive adjuvant therapy in the treatment of breast cancer (Fischgrabe et al., Curr Clin Pharmacol 2008; this thesis).

7. The role of a proximal coronary artery obstruction in the pathogenesis of ischemic heart disease is overestimated (Marzilli et al., J Am Coll Cardiol 2012).

8. An optimal combination therapy regimen for patients with pulmonary hypertension is questionable and should be customized for each individual patient (Buckley, Int J Clin Pract Suppl 2013).

9. Juvenile hypertension can be attributed to alterations in purinergic signaling (Jankowski et al., Arterioscler Thromb Vasc Biol 2007).

10. Up₄A may act by amplifying the biological effects of VEGF (Jankowski et al., J Mol Med 2013).

11. The coin has three sides.

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