

STELLINGEN

"Cardiac and carotid vascular effects of 5-hydroxytryptamine-related drugs in the pig"

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1. The putative 5-HT₄ receptor is involved in the positive chronotropic and positive inotropic effects induced by 5-HT, tryptamine- and benzamide derivatives in the pig (*this thesis*) and in humans (*Kaumann et al., Br. J. Pharmacol., 100, 879-885, 1990*).
2. 5-HT₁-like receptors unrelated to 5-HT_{1A}, 5-HT_{1B}, 5-HT_{1C} or 5-HT_{1D} binding site subtypes mediate either the decrease in arteriovenous anastomotic blood flow induced by indorenate in the pig (*this thesis*) or the contraction of the saphenous vein induced by sumatriptan in the dog (*Humphrey et al., Br. J. Pharmacol., 94, 1123-1132, 1988*).
3. The 5-HT₁-like receptors mediating constriction of arteriovenous anastomoses and dilatation of arterioles in the pig are pharmacologically different (*this thesis*).
4. Compounds with high affinity for certain 5-HT₁-like recognition sites in brain tissue membranes and without agonist action on peripheral 5-HT receptors do not necessarily have to behave as 5-HT receptor antagonists in pharmacological functional studies (*this thesis*).
5. Within the bounds of serotonergic mechanisms, the antimigraine action of drugs seems to depend mainly upon agonist action at 5-HT₁-like receptors mediating craniovascular contraction (*this thesis*).
6. Dopaminergic and/or purinergic neurons do not seem to be physiologically active in the porcine arteriovenous anastomoses (*this thesis*).
7. The prediction from radioligand binding tests/*in vitro* functional models of drug effects in *in vivo* studies can often be invalid.
8. People who disagree with each other in published papers rarely do so in terms so explicit that they cannot be misunderstood.

9. Allegations of scientific fraud undermine public confidence in the entire scientific community.
10. Science must be an objective search for truth.
11. In this world, the good is not always rewarded, and the bad not always punished.
12. We should be guided by the way nature operates.
13. A good scientist will always feel uneasy until someone else has confirmed his/her findings. Being wrong is no sin, especially since it is easiest to be right about trivial things.
14. An important source of our problem concerning animal research is the increasing insulation of people from the realities of biology.
15. To the assertion of animal rightists that tissue culture can replace the whole animal, we point out that the cells and the medium the cells grow on, both have to come from animals. The cells grown in culture, moreover, are not organs or organisms: we cannot study architecture by studying bricks, important as understanding bricks is to the understanding of the building.