

Propositions belonging to the thesis

**Epigenetic Regulation of Somatostatin Receptors in Neuroendocrine Tumors**  
**A novel therapeutic approach?**

1. VPA is the most-studied HDACi and performs superior *in vitro*, however, under the conditions tested it is not a suitable drug to increase DOTATATE uptake in tumor-bearing animals, nor in NET patients. (*this thesis*)
2. Taking the reversibility profile of the induced effects on SSTR2 mRNA expression into account, a proper timing of HDACi treatment is essential for an enhanced DOTATATE uptake and PRRT outcome. (*this thesis*)
3. The baseline SSTR2 expression level is an important determinant for SSTR2 upregulation and the corresponding increased DOTATATE uptake after epigenetic drug treatment. (*this thesis*)
4. In contrast to histone modifications H3K27me3 and H3K9ac, DNA methylation is involved in regulating SSTR2 expression in small-intestinal NETs. (*this thesis*)
5. The complexity of the epigenetic machinery requires the development of a tumor-targeting approach to deliver the epigenetic drugs to the tumor cells specifically. (*this thesis*)
6. Further integration of high-throughput genetic and epigenetic analysis is necessary to enable informed precision therapy. (*adapted from Mafficini et al., Endocrine Reviews, 2019*)
7. The selection of the most appropriate *in vitro* model system will influence the quality and reproducibility of the downstream experiments. (*adapted from Mirabelli et al., Cancers, 2019*)
8. The scientific community should also highlight the positive elements of the PhD experience. (*adapted from Bernery et al., eLife, 2022*)
9. Unexpected data are very different from useless data; their main difference is how the data are obtained and analyzed. (*adapted from Emborg, Brain Research Bulletin, 2023*)
10. Singing is a psychosocial activity shown to improve social support, increase positive emotions, and reduce fatigue and stress. (*Fancourt et al., BMJ open, 2019*)
11. In every mistake there is the potential for growth. (*Albert Einstein*)

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