



Einladung zum Vortrag von

Ass. Prof. Norbert Lange

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**“From Flowers, Kings, Vampires, Sepia,
Bugs, and Cancer”**

The preferential induction of fluorescent and phototoxic protoporphyrin IX (PPIX) following the exogenous administration of 5-aminolevulinic acid (5-ALA) is one of the most selective phenomenon in oncology. However, 5-ALA's use in clinical practice is hampered by the hydrophilic character. The introduction of lipophilic derivatives of the naturally occurring heme precursor of 5-ALA into photomedicine, has led to a true revival of this research area. 5-ALA-mediated photodynamic therapy (PDT) and fluorescence photodetection (FD) of neoplastic disease is probably one of the most selective cancer treatments currently known in oncology. Until today, this method has been assessed experimentally for the treatment of various medical indications. However, the limited local bioavailability of 5-ALA has widely hampered its access to daily clinical practice until today. Although researches became aware of this drawback already early in the development of 5-ALA-mediated PDT, only recently, well established concepts in pharmaceutical science were adapted to this methodology. Currently, two derivatives of 5-ALA, methylaminolevulinate (MAL) and hexylaminolevulinate (HAL) gained marketing authorization from the regulatory offices in Europe and Australia. MAL is marketed under the trade name Metvix[®] for the treatment of actinic keratosis (AK) and difficult-to-treat basal cell carcinoma (BCC), HAL has recently been launched under the trade name Hexvix[®] for the improved diagnosis of superficial bladder cancer in Europe. Now, we have developed nano-micelle forming 5-ALA derivatives, appropriate for systemic administration, aiming at enlarging their field of administration.

Donnerstag, 8. März 2018, 15:00 Uhr
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