

PROPOSITIONS BELONGING TO THE THESIS

PRECISION MEDICINE FOR SOLID TUMORS

Intracellular Pharmacokinetics & Functional Molecular Imaging

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1. Controlled release of a drug at the target (i.e., tumor) can be achieved by combining mild hyperthermia (e.g., 42 °C) with thermosensitive nanoparticles. (This thesis)
2. Fluorescent lifetime imaging (FLIM) of DXR in tumor cells could be used to predict resistance in patients. (This thesis)
3. Double labeling of a lipid-based nanoparticle is required for studying targeted delivery and content release for precision nanomedicine. (This thesis)
4. DXR interacts with DNA in a defined reversible sequence which determines efficacy. (This thesis)
5. FLIM revealed that the cytoplasmic activities of doxorubicin directly impact on its interaction with DNA in live nuclei. (This thesis)
6. The charm of research lies in the possibility that the outcomes may not always meet expectations, leading to the discovery of new avenues.
7. When you direct your attention to the present moment, you will achieve what you aim for the future.
8. Anxiety, confusion, self-denial, and envy can be harnessed effectively into a powerful force towards achieving your goals.
9. Age and impact factor are mere numerical values, insufficient to indicate the true expertise and contribution of researchers, whose curiosity and ingenuity outweigh these values.
10. Choosing a straight path does not always guarantee the quickest route, conversely, opting for a winding road does not necessarily mean taking the long way round. Do not hesitate or complain when you embark on this journey and see it through to its end.
11. Inappropriate autophagy can also contribute to disease, for example, tumor resistance to chemotherapeutic agents. (M.A. Hayat, Academic Press, 2016)