

Strategies of Inorganic Chemistry for the Design of Anticancer Drug Candidates

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I will discuss some strategies from Inorganic Chemistry that may be employed for the discovery of new anticancer drug candidates. Opportunities exist to exploit the unique properties of metal complexes, such as accessibility of multiple metal oxidation states, overall charge, different geometries, and different metal radioisotopes for the development of anticancer metallodrugs. However, control of metal reactivity and toxicity are important challenges in Medicinal Inorganic Chemistry. In this context, I intend to highlight approaches for the choice of the metal and some examples will be given of the design of targeting ligands, in order to increase potency while limiting side-effects of the compounds.