Metal-based Anticancer Drugs for Selective Tumour-Targeting

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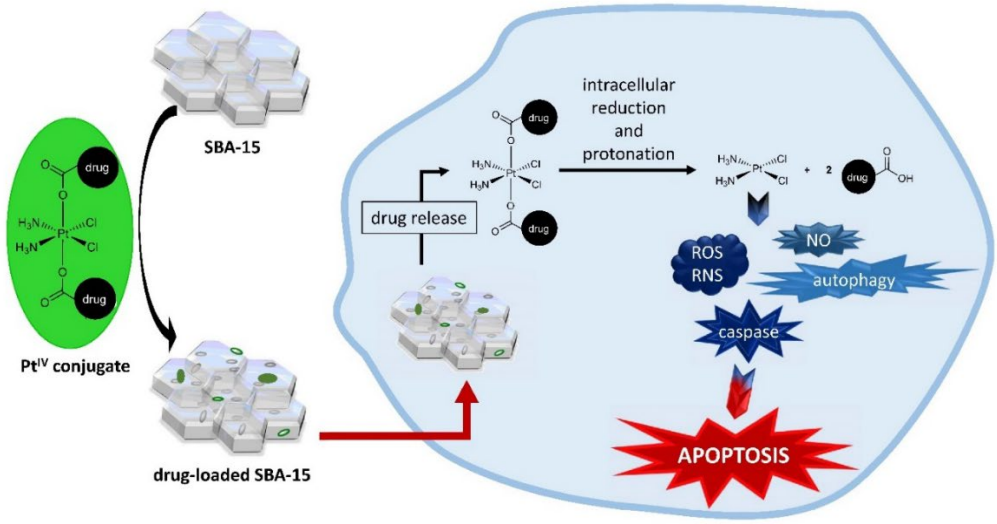
Cancer is among the leading causes of death worldwide. Chemotherapy, one of the most common treatments, is often accompanied by significant side effects, and tumour resistance to certain chemotherapeutic drugs is another major problem. Therefore, the search for new antitumour agents and new therapy methods is important.
We design metal-based chemotherapeutic agents which, when combined with biologically active compounds or drugs already used in cancer therapy, have a higher selectivity and activity towards tumour cells (hybrid compounds, dual therapy). Furthermore, these drug conjugates are loaded into mesoporous silica SBA-15 with the aim to utilise the passive enhanced permeability and retention (EPR) effect of nanoparticles for accumulation in tumour tissues.



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