

Special Issue

Current Advances in Metal Complexes with Biological Activity

Message from the Guest Editors

Since the unexpected discovery by Rosenberg and his co-workers, cisplatin and its analogues have been largely employed in the clinical treatment of several cancers. However, despite their potential, some crucial issues such as poor tumor selectivity and the occurrence of severe side effects, made it urgent to explore suitable alternatives.

This has opened the way to the study of other transition metal complexes over the last few decades, that have been showed to possess encouraging antitumoral activities, by virtue of many different mechanisms of action. At the same time, the antibacterial properties of many of them have been highlighted too. Indeed, a series of peculiar features, such as the extremely versatile chemical physical repertoire, the capacity to interact with key biological targets (such as DNA and proteins) and the multimodal mechanisms of action (just to name a few), make this class of compounds a challenging choice to develop therapeutic alternatives with improved outcomes.

Keywords: Metal-based drugs, Drug discovery, Anticancer activity, Antibacterial activity, Transition metal complexes.

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