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Sommario/riassunto For the past 40 years, metal-based drugs have been widely used for the

treatment of cancer. Cisplatin and follow-up drugs carboplatin (ParaplatinTM) and oxaliplatin (EloxatinTM) have been the gold standard for metallodrugs in clinical settings as antineoplastic agents. While effective, these drugs (either alone or in combination therapy) have faced a number of clinical challenges resulting from their limited spectrum of activity, high toxicity leading to significant side effects. resistance, poor water solubility, low bioavailability and short circulating time. In the past 10 years, various unconventional nonplatinum metal-based agents have emerged as a potential alternative for cancer treatment. These compounds are highly effective and selective in cancers resistant to cisplatin and other chemotherapeutic agents. Research in this area has recently exploded with a relevant number of patents and clinical trials, in addition to reports in scientific journals. Furthermore, in parallel to the synthesis of coordination and organometallic compounds comprising many different metals and unconventional platinum-based derivatives, researchers are focused on optimizing mechanistic and pharmacological features of promising drug candidates. This Special Issue aims to highlight the latest advances in anticancer metallodrugs with a focus on unconventional

anticancer agents, as well as novel activation, targeting and delivery strategies aimed at improving their pharmacological profile.