

# Half-sandwich metal complexes for anticancer applications

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Cancer is projected to claim the lives of up to 24 million individuals worldwide by 2030, with potential costs exceeding 20 trillion euros by 2050 if no additional investments in research and prevention are done.<sup>[1]</sup> Despite significant advancements in the development of chemotherapy agents combatting cancers, drug resistance and toxicity persist as substantial barriers. Metal complexes, boasting a wider range of properties compared to organic drugs, emerge as promising candidates for acquiring specific functionalities.<sup>[2]</sup>

We have recently developed a strong interest in bidentate dithiolato metal-sandwich complexes and investigated their applications in biology,<sup>[3]</sup> and in the fabrication of nanocrystals.<sup>[4]</sup> By modification of the bidentate ligand, we have been able to design new families of such compounds.<sup>[5]</sup> Here we will discuss our latest syntheses of organometallics, their biological properties, and their overall potential.<sup>[6]</sup>

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## References

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