Streszczenie w języku angielskim

The modification of biologically active compounds using organometallic substituents can significantly alter their biological activity. Currently, research is being conducted on the synthesis and evaluation of the antiproliferative potential of organometallic compounds, which may have applications as chemotherapeutic agents with higher selectivity, better bioavailability, and lower toxicity. Organometallic analogs of antimitotic compounds may exhibit enhanced anticancer activity and potentially overcome drug resistance that cancer cells develop during treatment.

This doctoral dissertation describes the synthesis and evaluates the biological activity of organometallic analogs of monastrol, CPUYL064, and ispinesib, which are inhibitors of kinesin-5.