



SEMINÁRIO DIA 05/11/2021

Sala de Web Conferência – 10 horas

"Ruthenium- and gold-based compounds as potential chemo- and targeted-therapeutics for breast cancer."

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Abstract:

A Metal-based chemotherapeutics such as platinum-based drugs in combination or monotherapy regimes are used to treat a large number of cancers. However, their efficacy is still hindered by clinical problems, including acquired or intrinsic resistance, a limited spectrum of activity, and high toxicity leading to significant side effects. A number of unconventional metal-based compounds highly effective in cancers resistant to cisplatin and other chemotherapeutics, have been described over the past decade (including recent successful clinical trials). In this context, our laboratory is exploring some of these metallodrugs as potential treatments for different types of breast cancer (still the most deadly type of cancer for women). Two types of breast cancers have a direr prognosis and are especially difficult to treat: triple negative and HER-2 positive breast cancers. We will present our latest work on Ruthenium(II) compounds containing p-cymene and iminophosphorane ligands which have been extremely efficacious in triple negative breast cancer (both in vitro and in vivo). We will also report on strategies to target HER-2+ breast cancers by using antibody drug conjugates containing Trastuzumab and gold(I) cytotoxic species, as well as on immunoliposomal formulations.