

Synthesis of new organometallic compounds and their radioprotective activity evaluation

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Abstract Further to our work concerning organometallic compounds active in chemical radioprotection, we report the synthesis and pharmacological study (radioprotective activity, toxicity) of new germathiazolidines and germadithioacetals derived from cysteamine, methylcysteamine and N-substituted cysteamine. A germylated oxide and sulfide with methylcysteamine hydrochloride as ligand were also investigated.

A notable decrease in the toxicity and a fairly large increase in the radioprotective activity of these new organogermylated compounds were observed compared with cysteamine, methylcysteamine and N-substituted cysteamine.

Keywords: germathiazolidines, germadithioacetals, germylated sulfide, toxicity, radioprotective activity.