



New Derivatives of 5-((1-methyl-pyrrol-2-yl) methyl)-4-(naphthalen-1-yl)-1,2,4-triazoline-3-thione and its Coordination Compounds with Anticancer Activity

Agnieszka Czyłkowska ^{1,*}, Suneel Lanka ¹, Małgorzata Szczesio ¹, Kamila Czarnecka ², Paweł Szymański ^{2,3}, Monika Pitucha ⁴, Aneta Drabińska ⁵, Bruno Cury Camargo ⁶ and Jacek Szczytko ⁶

¹ Institute of General and Ecological Chemistry, Faculty of Chemistry, Lodz University of Technology, Zeromskiego 116, 90-924 Lodz, Poland; ² Department of Pharmaceutical Chemistry, Drug Analyses and Radiopharmacy, Faculty of Pharmacy, Medical University of Lodz, Muszynskiego 1, 90-151 Lodz, Poland

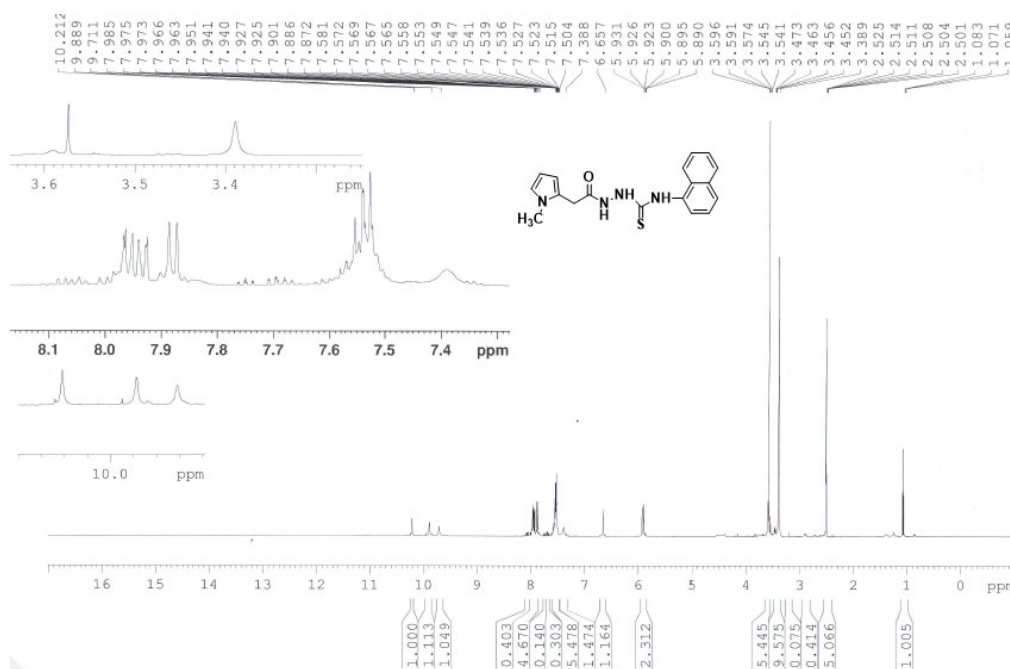
³ Department of Radiobiology and Radiation Protection, Military Institute of Hygiene and Epidemiology, 4 Kozielska St., 01-163 Warsaw, Poland

⁴ Independent Radiopharmacy Unit, Faculty of Pharmacy, Medical University of Lublin, Chodzki 4A, 20-093 Lublin, Poland

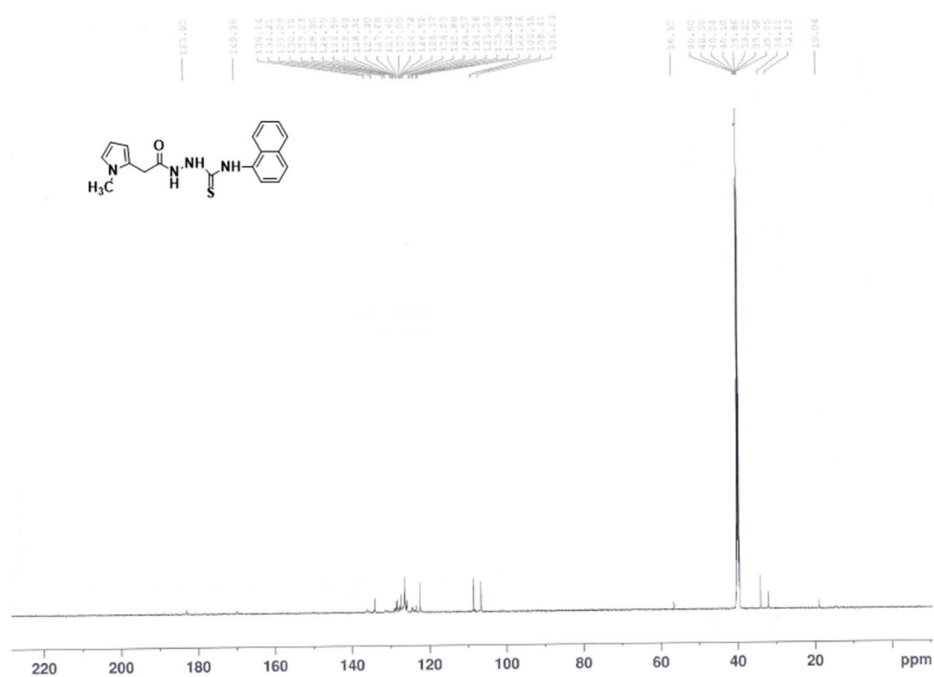
⁵ Faculty of Physics, University of Warsaw, Pasteura 5, 02-093 Warszawa, Poland

⁶ Institute of Experimental Physics, Faculty of Physics, University of Warsaw, Pasteura 5, 02-093 Warszawa, Poland

* Correspondence: agnieszka.czyłkowska@p.lodz.pl



¹H-NMR Spectra of Compound B



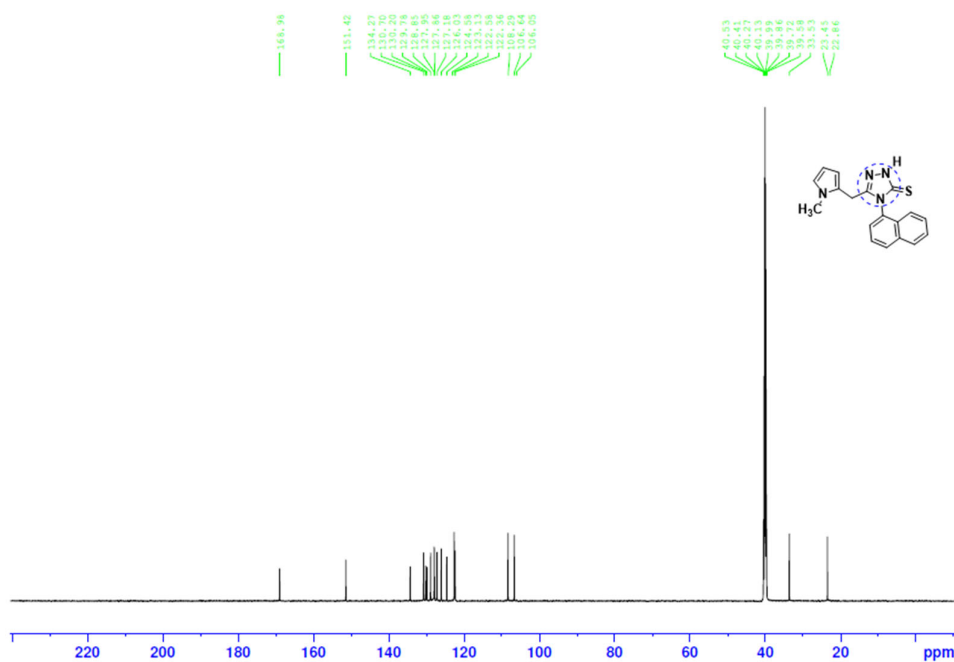
¹³C-NMR Spectra of Compound C15Figure S2. ¹H-NMR and ¹³C-NMR Spectra of Compound C15.

Table S1. ICP and CHN analysis of five (1-5) new coordination compounds.

No	Complex	M.W (g/mol)	Col- our	Metal%		Sulphur%		Carbon%		Hydrogen%		Nitrogen%	
				Calc.	Foun d	Cal c.	Foun d	Calc.	Foun d	Calc.	Foun d	Calc.	Foun d
(1)	C ₁₉ H ₂₀ OCl ₂ M nN ₄ S	478.281	Yel- low	11.49	11.8 1	6.7 0	7.37	47.7 1	48.19	4.22	3.98	11.7 1	12.14
(2)	C ₁₉ H ₂₀ OCl ₂ Fe N ₄ S	479.188	Red	11.65	12.5 6	6.6 9	6.61	47.6 2	47.87	4.21	4.00	11.6 9	12.11
(3)	C ₁₉ H ₂₀ OCl ₂ Ni N ₄ S	482.036	Yel- low	12.19	13.0 8	6.6 5	7.35	47.3 4	47.98	4.18	3.96	11.6 2	12.06
(4)	C ₃₆ H ₃₂ Cl ₂ Cu N ₈ S ₂	775.354	Black	8.19	8.52	8.2 7	8.34	55.7 7	55.89	3.64	3.66	14.4 5	14.61
(5)	C ₇₂ H ₆₄ Cl ₂ Zn N ₁₆ S ₄	1418.064	Pink	4.61	4.85	9.0 5	8.48	60.9 9	60.51	3.98	3.96	15.8 0	15.49