TABLE 11-4

CANDIDATE SULFUR COMPOUNDS STUDIED AT WRAIR*

Walter Reed Number	Type**	Administration Route***	Protective Dose†(mg/kg)	Toxic LD_{50} Dose (mg/kg)	DRF	Therapeutic Index††
WR 2721	Phosphorothioate	i.p.	500	704	2.72	1.4
WR 2926	Thiosulfonate	i.p.	50	125	1.70	2.5
WR 3689	Phosphorothioate	i.p.	450	1,120	2.22	2.5
WR 176240	Phosphorothioate	p.o.	200	580	1.20	2.9
WR 1551	Thiosulfonate	p.o.	100	300	1.30	3.0
WR 2347	Sulfhydryl	i.p.	600	1,800	1.53	3.0
WR 3562	Thiosulfonate	i.p.	100	300	1.55	3.0
WR 2754	Thiosulfonate	i.p.	100	300	1.80	3.0
WR 2824	Phosphorothioate	i.p.	200	675	1.33	3.4
WR 1607	Thiosulfonate	i.p.	5	17	1.40	3.4
WR 3689	Phosphorothioate	p.o.	500	>1,750	1.22	3.5
WR 76841	Sulfhydryl	p.o.	175	900	1.19	5.1
WR 3302	Thiosulfonate	i.p.	5	30	1.39	6.0
WR 2721	Phosphorothioate	i.p.	100	704	1.20	7.0
WR 159243	Phosphorothioate	p.o.	40	300	1.30	7.5

* Data derived from studies using mice exposed to whole-body X or gamma radiation
** Compounds are listed in order of increasing therapeutic index
*** Route of administration: i.p. (intraperitoneal), p.o. (oral)
†Dose: Dosage of drug used to obtain the DRF listed
††TI is the ratio between toxic LD_{50} and protective dose

Source: Data taken from a report presented to NATO NBC Panel VII, AC 225/GEC, October 1987. Colonel David E. Davidson, Jr., Veterinary Corps, United States Army, compiled these data from the archives of the Division of Experimental Therapeutics, Walter Reed Army Institute of Research (WRAIR), Washington, D.C. 20307-5100

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