

Table 1. Database for drugs analyzed in this study.

Mechanism of action*	Drug†	mean NSC No.	-log GI50	std dev	# expts	average # lines/expt	Mechanism of action*	Drug†	mean NSC No.	-log GI50	std dev	# expts	average # lines/expt
A2	Mitomycin	26980	6.11	0.56	137	42.9	Db	Cyanomorpholinodoxorubicin	357704	10.29	0.32	11	46.1
A2	Porfiromycin	56410	5.43	0.61	13	43.2	Db	Hycanthone	142982	5.10	0.20	9	31.1
A6	Carmustine (BCNU)	409962	4.15	0.22	136	42.5	Db	Morpholino-adriamycin	354646	7.73	0.32	8	49.0
A6	Chlorozotocin	178248	3.21	0.40	10	45.8	Db	N-N-Dibenzyl-daunomycin	268242	4.83	0.47	15	41.6
A6	Clomesone	338947	3.72	0.38	15	43.1	Db	Pyrazolacridine	366140	6.56	0.29	15	43.4
A6	Lomustine (CCNU)	79037	4.35	0.31	56	38.9	Di	5-6-Dihydro-5-azacytidine	264880	4.63	0.75	16	40.0
A6	Mitozolamide	353451	3.93	0.31	15	43.0	Di	alpha-2'-Deoxythioguanosine	71851	3.80	0.38	15	43.3
A6	PCNU	95466	3.68	0.44	15	42.1	Di	Azacytidine	102816	6.11	0.29	15	44.2
A6	Semustine (MeCCNU)	95441	4.37	0.18	15	39.9	Di	beta-2'-Deoxythioguanosine	71261	5.94	0.50	15	44.7
A7	Asaley	167780	5.30	0.44	16	38.3	Di	Thioguanine	752	5.91	0.46	135	43.3
A7	Busulfan	750	3.22	0.36	4	54.8	Df	Aminopterin	132483	6.18	1.39	3	44.3
A7	Carboplatin	241240	3.88	0.27	59	39.8	Df	Aminopterin-derivative	134033	6.60	1.23	3	43.0
A7	Chlorambucil	3088	4.22	0.40	130	42.8	Df	Aminopterin-derivative	184692	6.67	1.55	3	47.7
A7	Cisplatin	119875	5.38	0.37	127	41.4	Df	an-antifol	623017	7.01	1.40	2	39.0
A7	Cyclodisone	348948	4.41	0.26	14	44.1	Df	an-antifol	633713	8.17	0.80	2	50.5
A7	Diaminocyclohexyl-Pt-II	271674	5.51	0.50	16	44.0	Df	Baker's-soluble-antifolate	139105	6.24	1.47	5	50.6
A7	Dianhydrogalactitol	132313	4.33	0.51	16	40.4	Df	Methotrexate	740	6.94	1.28	4	53.2
A7	Diaziridinylbenzoquinone	182986	5.50	0.42	52	39.0	Df	Methotrexate-derivative	174121	8.05	0.87	3	51.0
A7	Fluorodopan	73754	3.46	0.23	10	39.4	Df	Trimetrexate	352122	8.58	1.11	4	50.8
A7	Hepsulfam	329680	3.67	0.38	14	43.4	Dr	Guanazole	1895	2.23	0.24	15	44.1
A7	Iproplatin	256927	4.45	0.31	16	40.0	Dr	Hydroxyurea	32065	3.14	0.42	55	39.9
A7	Mechlorethamine	762	5.52	0.57	56	39.9	Dr	Pyrazoloimidazole	51143	2.59	0.39	15	43.6
A7	Melphalan	8806	4.56	0.38	56	38.2	Ds	Aphidicolin-glycinate	303812	5.02	0.78	14	42.4
A7	Piperazine mustard	344007	3.97	0.51	15	42.8	Ds	Cyclocytidine	145668	4.73	1.37	17	38.4
A7	Piperazinedione	135758	6.11	0.57	16	41.6	Ds	Cytarabine (araC)	63878	4.82	1.49	132	39.7
A7	Pipobroman	25154	4.16	0.28	56	38.8	Ds	Floxuridine (FUDR)	27640	6.39	1.13	4	54.5
A7	Spiromustine	172112	3.82	0.29	12	33.2	Ds	Fluorouracil (5FU)	19893	4.63	0.73	1149	53.6
A7	Teroxicrone	296934	4.90	0.47	15	43.3	Ds	Ftorafur	148958	2.67	0.34	4	51.8
A7	Tetraplatin	363812	5.91	0.52	13	43.8	Ds	Thiopurine (6MP)	755	5.31	0.67	134	42.4
A7	Thiotepa	6396	4.09	0.46	131	42.8	Rs	Acivicin	163501	5.50	0.48	16	39.4
A7	Triethylenemelamine	9706	5.20	0.47	136	43.3	Rs	Dichlorallyl-lawsone	126771	4.97	0.50	16	41.9
A7	Uracil mustard	34462	4.56	0.51	56	40.1	Rs	DUP785 (brequinar)	368390	5.80	1.07	10	42.5
A7	Yoshi-864	102627	2.90	0.31	15	44.0	Rs	L-Alanosine	153353	5.06	0.74	16	39.8
T1	Camptothecin	94600	7.40	0.58	9	38.3	Rs	N-Phosphonoacetyl-L-aspartic-acid	224131	3.35	0.75	15	39.5
T1	Camptothecin, 7-Cl	249910	7.42	0.83	5	48.8	Rs	Pyrazofurin	143095	5.26	1.03	12	43.6
T1	Camptothecin, 9-MeO	176323	7.10	0.97	4	52.0	TU	Colchicine	757	7.26	1.17	7	45.9
T1	Camptothecin, 9-NH2 (RS)	629971	7.36	0.74	5	51.2	TU	Colchicine-derivative	33410	7.58	0.93	7	47.3
T1	Camptothecin, 9-NH2 (S)	603071	7.43	0.66	6	49.8	TU	Dolastatin-10	376128	9.53	0.42	4	47.0
T1	Camptothecin, 10-OH	107124	7.51	0.56	7	35.7	TU	Halichondrin B	609395	8.93	0.48	4	47.8
T1	Camptothecin, 11-formyl (RS)	606172	5.69	0.69	3	50.3	TU	Maytansine	153858	8.23	0.33	5	52.2
T1	Camptothecin, 11-HOME (RS)	606173	5.43	0.60	2	46.5	TU	Trityl-cysteine	83265	6.01	0.51	15	42.7
T1	Camptothecin,20-ester (S)	606497	6.51	0.75	4	50.5	TU	Vinblastine-sulfate	49842	9.04	1.00	134	39.0
T1	Camptothecin,20-ester (S)	606985	7.42	0.79	2	51.5	TU	Vincristine-sulfate	67574	6.82	0.65	60	37.8
T1	Camptothecin,20-ester (S)	610456	6.84	0.74	4	51.5	TU	Taxol (Paclitaxel)	125973	7.35	0.59	14	55.2
T1	Camptothecin,20-ester (S)	618939	7.19	0.75	3	51.7	TU	Taxol analog	600222	5.65	0.68	2	54.5
T2	Amonafide	308847	5.49	0.21	16	39.9	TU	Taxol analog	656178	5.66	0.75	2	49.5
T2	Amsacrine	249992	6.32	0.70	135	42.5	TU	Taxol analog	658831	5.43	0.83	2	50.0
T2	Anthrapyrazole-derivative	355644	6.68	0.68	9	48.2	TU	Taxol analog	661746	6.86	0.60	2	51.5
T2	Bisantrene	337766	6.76	0.67	11	39.4	TU	Taxol analog	664402	6.85	0.71	2	49.5
T2	Daunorubicin	82151	7.10	0.58	78	45.8	TU	Taxol analog	664404	7.80	1.11	2	51.0
T2	Deoxydoxorubicin	267469	7.34	0.55	7	49.3	TU	Taxol analog	666608	7.00	0.72	2	54.0
T2	Doxorubicin	123127	6.84	0.56	1171	54.8	TU	Taxol analog	671867	7.59	0.93	2	52.5
T2	Etoposide	141540	5.36	0.65	43	37.6	TU	Taxol analog	671870	6.11	0.59	2	55.5
T2	Menogaril	269148	6.07	0.62	15	43.6	TU	Taxol analog	673187	6.43	0.85	2	56.0
T2	Mitoxantrone	301739	7.19	0.71	13	40.1	TU	Taxol analog	673188	7.30	0.97	2	54.5
T2	Oxanthrazole (piroxantrone)	349174	5.83	0.44	14	43.0	P90	Geldanamycin	330500	6.26	0.60	12	42.4
T2	Teniposide	122819	6.35	0.65	13	42.6	Uk	3-Hydropicolinaldehyde-thiosemicarbazone	95678	5.79	0.40	15	43.3
T2	Zorubicin (Rubidazone)	164011	6.59	0.49	16	40.6	Uk	5-Hydroxypicolinaldehyde-thiosemicarbazone	107392	5.01	0.45	14	43.0
Pi	L-Asparaginase	109229	-0.35	0.64	104	40.6	Uk	Inosine-glycodialdehyde	118994	3.54	0.33	16	38.4

*Alkylation agents: A2, A7 = alkylating at N-2, N-7 position of guanine, respectively; A6 = alkylating at O-6 position of guanine; T1 = topoisomerase I inhibitor; T2 = topoisomerase II inhibitor;

Db = DNA binder; Di = DNA incorporation; Df: antifolds; Dr = ribonucleotide reductase inhibitor; Ds = DNA synthesis inhibitor; Rs = RNA synthesis inhibitor;

Tu = tubulin-active antimitotic agents; Pi = protein synthesis inhibitor; P90 = hsp90 binder; Uk = unknown