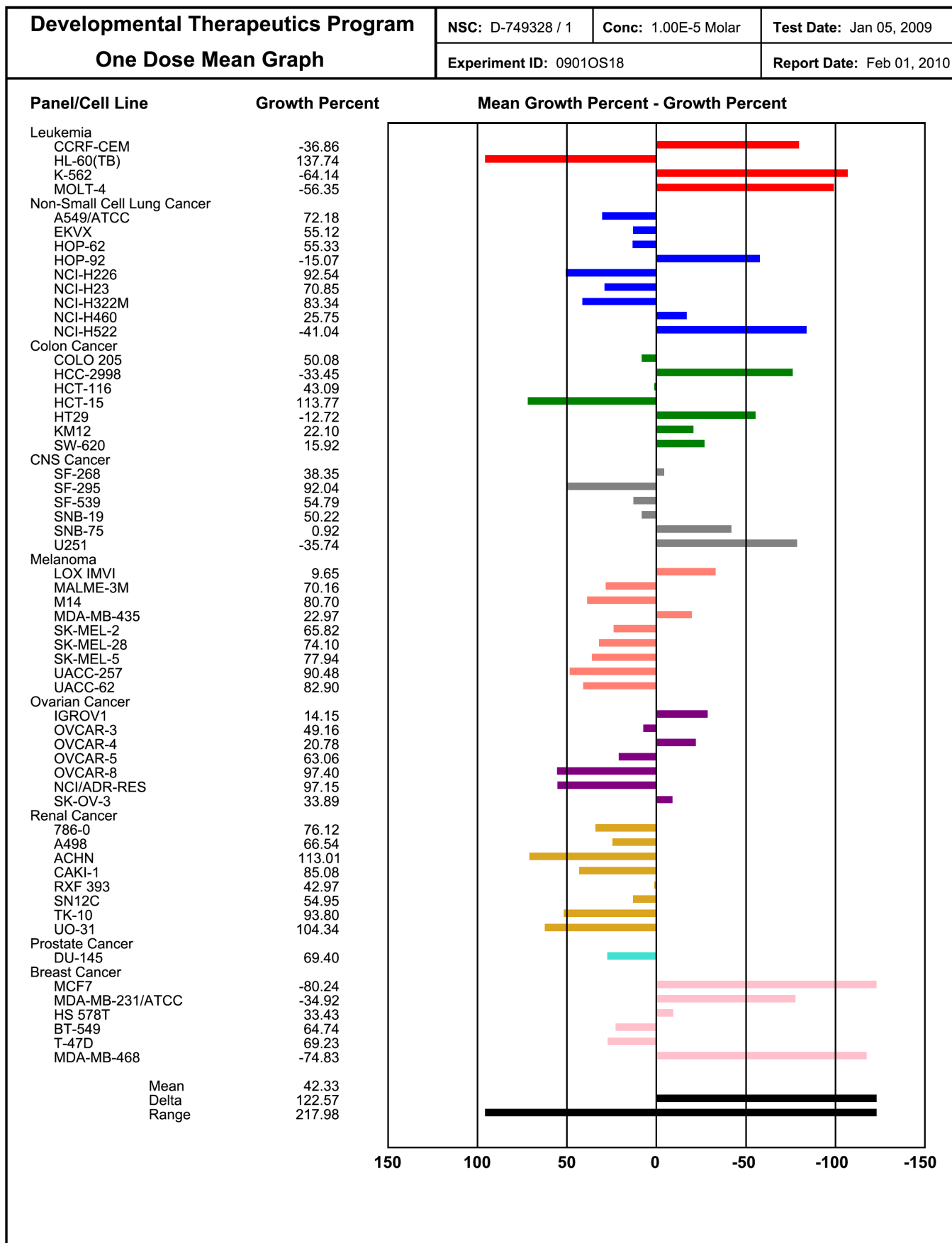


Psychotrimine (1) – 1 Dose



Psychotrimine (1) – 5 Dose

National Cancer Institute Developmental Therapeutics Program In-Vitro Testing Results

NSC : D - 749328 / 1	Experiment ID : 0903NS12	Test Type : 08	Units : Molar
Report Date : April 17, 2009	Test Date : March 23, 2009	QNS :	MC :
COMI : psb-4 (82901)	Stain Reagent : SRB Dual-Pass Related	SSPL : 0RCH	

Panel/Cell Line	Time Zero	Mean Optical Densities						Percent Growth					GI50	TGI	LC50
		Ctrl	-8.0	-7.0	-6.0	-5.0	-4.0	-8.0	-7.0	-6.0	-5.0	-4.0			
Leukemia															
CCR5-CEM	0.601	1.668	1.572	1.634	1.617	0.261	0.161	91	97	95	-57	-73	1.99E-6	4.24E-6	9.04E-6
HL-60(TB)	0.632	1.294	1.300	1.280	1.195	0.315	0.126	101	98	85	-50	-80	1.82E-6	4.26E-6	9.97E-6
K-562	0.178	0.944	0.900	0.923	0.898	0.041	0.035	94	97	94	-77	-80	1.81E-6	3.54E-6	6.93E-6
MOLT-4	0.461	1.028	1.016	1.017	1.017	0.126	0.084	98	98	98	-73	-82	1.91E-6	3.75E-6	7.37E-6
RPMI-8226	0.872	2.190	2.231	2.075	2.118	1.422	0.321	103	91	95	42	-63	6.96E-6	2.50E-5	7.48E-5
SR	0.274	0.658	0.596	0.612	0.632	0.131	0.106	84	88	93	-52	-61	1.98E-6	4.37E-6	9.63E-6
Non-Small Cell Lung Cancer															
A549/ATCC	0.312	1.575	1.617	1.573	1.630	0.737	0.132	103	100	104	34	-58	5.86E-6	2.33E-5	8.21E-5
EKVX	0.611	1.437	1.440	1.354	1.246	0.746	0.197	100	90	77	16	-68	2.78E-6	1.56E-5	6.14E-5
HOP-62	0.585	1.540	1.523	1.542	1.462	1.004	0.056	98	100	92	44	-90	7.44E-6	2.12E-5	5.00E-5
HOP-92	0.585	1.021	0.988	0.929	0.872	0.544	0.091	93	79	66	-7	-84	1.65E-6	7.99E-6	3.59E-5
NCI-H226	0.792	1.646	1.655	1.666	1.603	0.928	0.172	101	102	95	16	-78	3.71E-6	1.48E-5	5.00E-5
NCI-H23	0.813	2.482	2.429	2.473	2.425	2.044	0.102	97	99	97	74	-88	1.40E-5	2.87E-5	5.85E-5
NCI-H322M	0.648	1.390	1.356	1.324	1.295	0.844	0.052	95	91	87	26	-92	4.09E-6	1.67E-5	4.42E-5
NCI-H460	0.284	2.061	2.156	2.120	2.104	0.132	0.033	105	103	102	-54	-89	2.17E-6	4.54E-6	9.49E-6
NCI-H522	0.643	1.660	1.646	1.574	1.569	0.223	0.202	99	92	91	-65	-69	1.83E-6	3.82E-6	7.97E-6
Colon Cancer															
COLO 205	0.334	1.154	1.176	1.172	1.050	0.065	0.046	103	102	87	-81	-86	1.67E-6	3.31E-6	6.58E-6
HCC-2998	1.214	3.177	3.215	3.203	3.149	2.623	0.136	102	101	99	72	-89	1.37E-5	2.80E-5	5.73E-5
HCT-116	0.296	2.097	2.116	2.117	2.014	0.238	0.017	101	101	95	-20	-94	2.48E-6	6.75E-6	2.55E-5
HCT-15	0.365	2.228	2.199	2.326	2.186	2.002	0.059	98	105	98	88	-84	1.66E-5	3.25E-5	6.34E-5
HT29	0.280	1.710	1.698	1.626	1.442	0.043	0.019	99	94	81	-85	-93	1.54E-6	3.09E-6	6.18E-6
KM12	0.306	1.485	1.496	1.551	1.421	0.035	0.027	101	106	95	-89	-91	1.75E-6	3.28E-6	6.16E-6
SW-620	0.288	1.941	2.007	1.968	1.919	0.067	0.025	104	102	99	-77	-91	1.89E-6	3.65E-6	7.04E-6
CNS Cancer															
SF-268	0.414	1.289	1.280	1.300	1.209	0.482	0.033	99	101	91	8	-92	3.10E-6	1.19E-5	3.79E-5
SF-295	0.649	1.997	1.830	1.698	1.695	0.294	0.127	88	78	78	-55	-80	1.62E-6	3.86E-6	9.21E-6
SF-539	0.492	1.555	1.551	1.565	1.539	0.065	0.032	100	101	98	-87	-94	1.83E-6	3.40E-6	6.33E-6
SNB-19	0.680	1.576	1.566	1.638	1.540	1.087	0.038	99	107	96	45	-94	8.12E-6	2.11E-5	4.81E-5
SNB-75	0.522	1.099	1.032	1.042	0.936	0.244	0.020	88	90	72	-53	-96	1.49E-6	3.74E-6	9.40E-6
U251	0.187	1.127	1.108	1.148	1.028	0.053	0.039	98	102	89	-72	-79	1.76E-6	3.58E-6	7.31E-6
Melanoma															
LOX IMVI	0.324	2.044	2.020	2.051	1.971	0.076	0.094	99	100	96	-77	-71	1.84E-6	3.59E-6	7.00E-6
MALME-3M	0.543	0.845	0.818	0.802	0.802	0.248	0.131	91	86	86	-54	-76	1.80E-6	4.09E-6	9.31E-6
M14	0.292	1.100	1.043	1.086	1.060	0.018	0.024	93	98	95	-94	-92	1.73E-6	3.18E-6	5.85E-6
MDA-MB-435	0.504	2.020	1.777	1.742	1.655	0.112	0.097	84	82	76	-78	-81	1.47E-6	3.12E-6	6.59E-6
SK-MEL-2	0.679	1.479	1.588	1.589	1.545	0.305	0.178	114	114	108	-55	-74	2.27E-6	4.60E-6	9.31E-6
SK-MEL-28	0.745	2.293	2.307	2.264	2.277	2.133	0.025	101	98	99	90	-97	1.63E-5	3.03E-5	5.62E-5
SK-MEL-5	0.527	1.797	1.797	1.822	1.695	0.430	0.005	100	102	92	-18	-99	2.40E-6	6.81E-6	2.46E-5
UACC-257	0.810	1.609	1.617	1.631	1.619	1.127	0.167	101	103	101	40	-79	6.78E-6	2.15E-5	5.66E-5
UACC-62	0.603	2.302	2.194	2.214	2.159	1.677	0.062	94	95	92	63	-90	1.22E-5	2.59E-5	5.50E-5
Ovarian Cancer															
IGROV1	0.316	0.924	1.006	1.027	0.964	0.352	0.093	113	117	107	6	-71	3.64E-6	1.19E-5	5.38E-5
OVCAR-3	0.458	1.241	1.291	1.262	1.202	0.649	0.034	106	103	95	24	-93	4.33E-6	1.61E-5	4.32E-5
OVCAR-4	0.421	1.247	1.249	1.207	1.158	0.513	0.014	100	95	89	11	-97	3.18E-6	1.27E-5	3.69E-5
OVCAR-5	0.469	1.077	1.070	1.071	1.030	0.730	0.051	99	99	92	43	-89	7.18E-6	2.11E-5	5.05E-5
OVCAR-8	0.245	1.136	1.145	1.209	1.197	0.568	0.137	101	108	107	36	-44	6.38E-6	2.82E-5	> 1.00E-4
NCI/ADR-RES	0.901	2.439	2.549	2.595	2.542	2.550	1.084	107	110	107	107	12	3.98E-5	> 1.00E-4	> 1.00E-4
SK-OV-3	0.565	1.182	1.198	1.236	1.191	0.468	0.030	103	109	101	-17	-95	2.71E-6	7.16E-6	2.64E-5
Renal Cancer															
786-0	0.479	1.891	1.905	1.836	1.817	1.034	0.043	101	96	95	39	-91	6.40E-6	2.00E-5	4.84E-5
A498	1.206	1.922	1.911	1.913	1.901	1.672	0.179	98	99	97	65	-85	1.26E-5	2.71E-5	5.83E-5
ACHN	0.261	1.153	1.229	1.232	1.253	1.073	0.043	108	109	111	91	-84	1.72E-5	3.32E-5	6.43E-5
CAKI-1	1.047	1.889	1.872	1.824	1.789	1.490	0.085	98	92	88	53	-92	1.04E-5	2.31E-5	5.13E-5
RXF 393	0.605	1.073	1.103	1.093	1.043	0.535	0.203	107	104	94	-12	-67	2.60E-6	7.75E-6	5.00E-5
SN12C	0.420	1.651	1.568	1.669	1.569	0.931	0.082	93	101	93	41	-80	6.85E-6	2.19E-5	5.62E-5
TK-10	0.772	1.371	1.308	1.283	1.295	1.165	0.096	90	85	87	66	-88	1.27E-5	2.68E-5	5.69E-5
UO-31	0.130	0.701	0.686	0.645	0.659	0.462	0.069	97	90	93	58	-47	1.20E-5	3.56E-5	> 1.00E-4
Prostate Cancer															
DU-145	0.344	1.331	1.408	1.389	1.341	0.943	0.025	108	106	101	61	-93	1.17E-5	2.48E-5	5.26E-5
Breast Cancer															
MCF7	0.248	1.194	1.174	1.228	1.169	0.034	0.045	98	104	97	-86	-82	1.81E-6	3.38E-6	6.33E-6
MDA-MB-231/ATCC	0.396	1.034	1.063	1.092	0.945	0.087	0.038	105	109	86	-78	-91	1.66E-6	3.34E-6	6.74E-6
HS 578T	0.678	1.501	1.529	1.518	1.436	0.793	0.301	103	102	92	14	-56	3.46E-6	1.58E-5	8.29E-5
BT-549	1.119	1.532	1.529	1.448	1.361	0.948	0.160	99	79	59	-15	-86	1.31E-6	6.21E-6	3.11E-5
T-47D	0.436	1.001	0.976	1.007	0.944	0.386	0.088	96	101	90	-11	-80	2.47E-6	7.71E-6	3.66E-5
MDA-MB-468	0.447	1.018	0.982	0.948	0.820	0.060	0.041	94	88	65	-87	-91	1.26E-6	2.69E-6	5.74E-6

Psychotrimine (1) – 5 Dose

National Cancer Institute Developmental Therapeutics Program Dose Response Curves

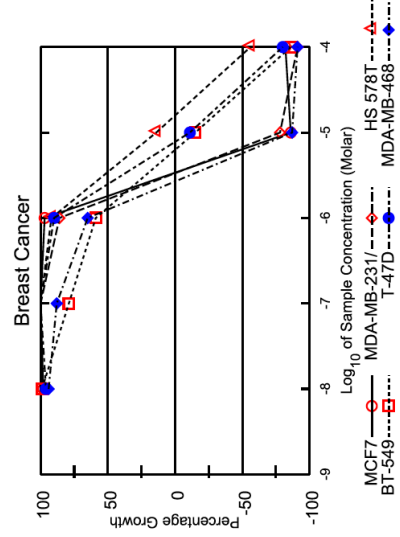
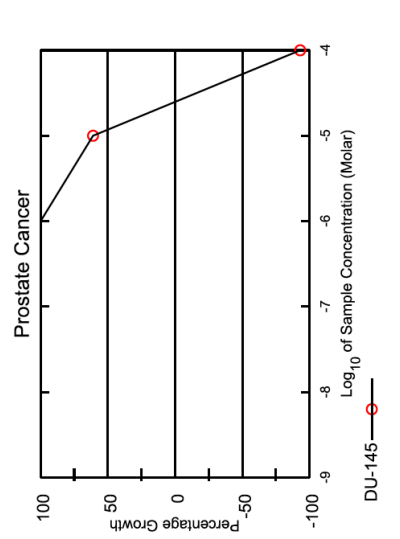
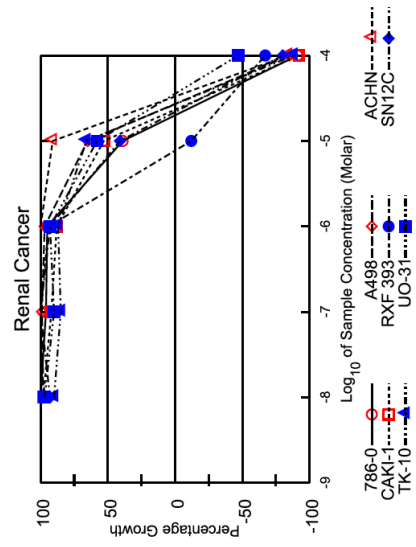
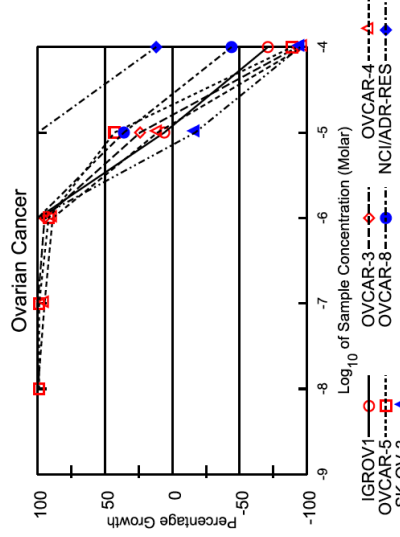
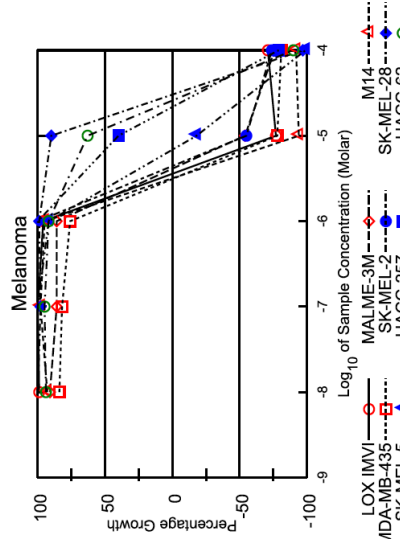
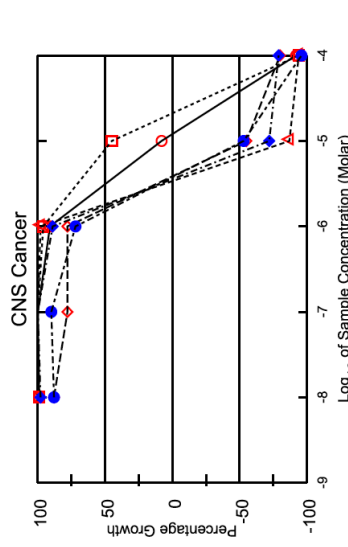
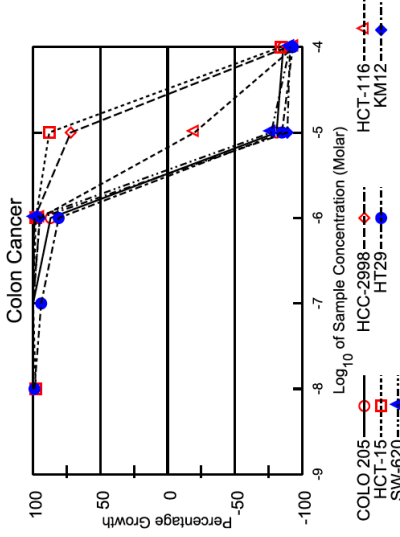
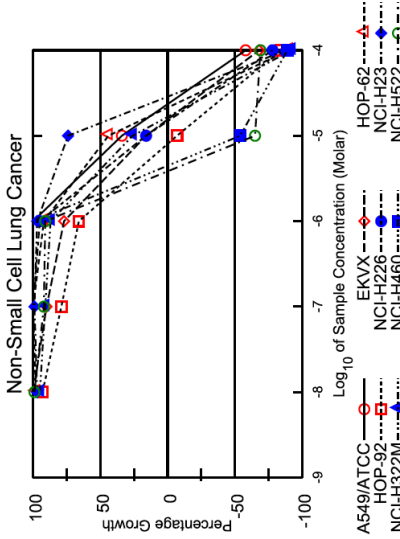
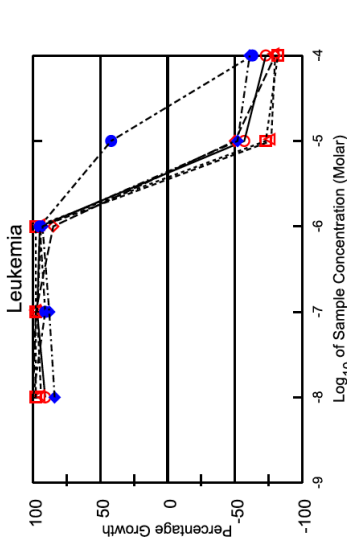
NSC: D - 749328 / 1

Report Date: April 17, 2009

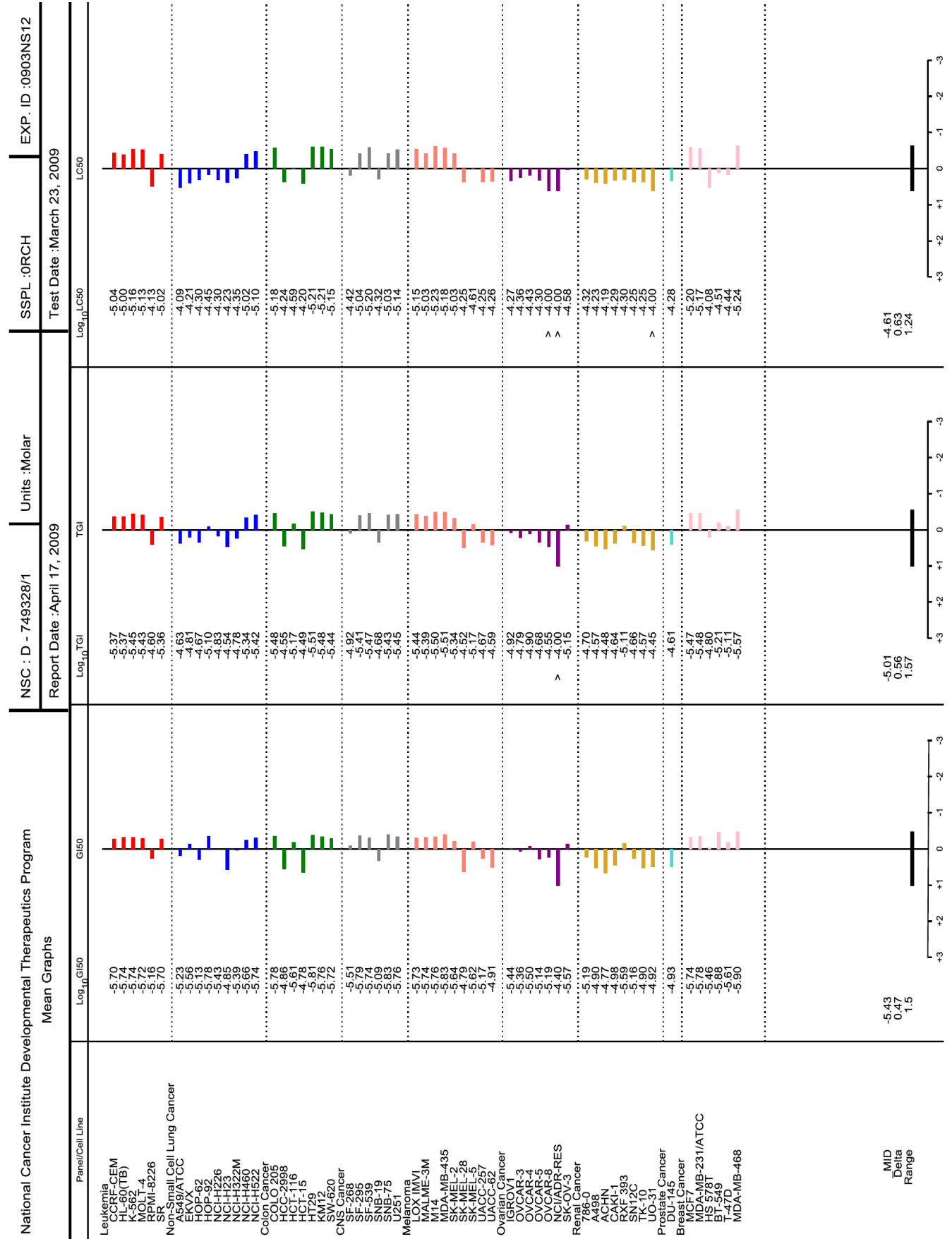
SSPL: ORCH

Test Date: March 23, 2009

EXP. ID: 0903NS12

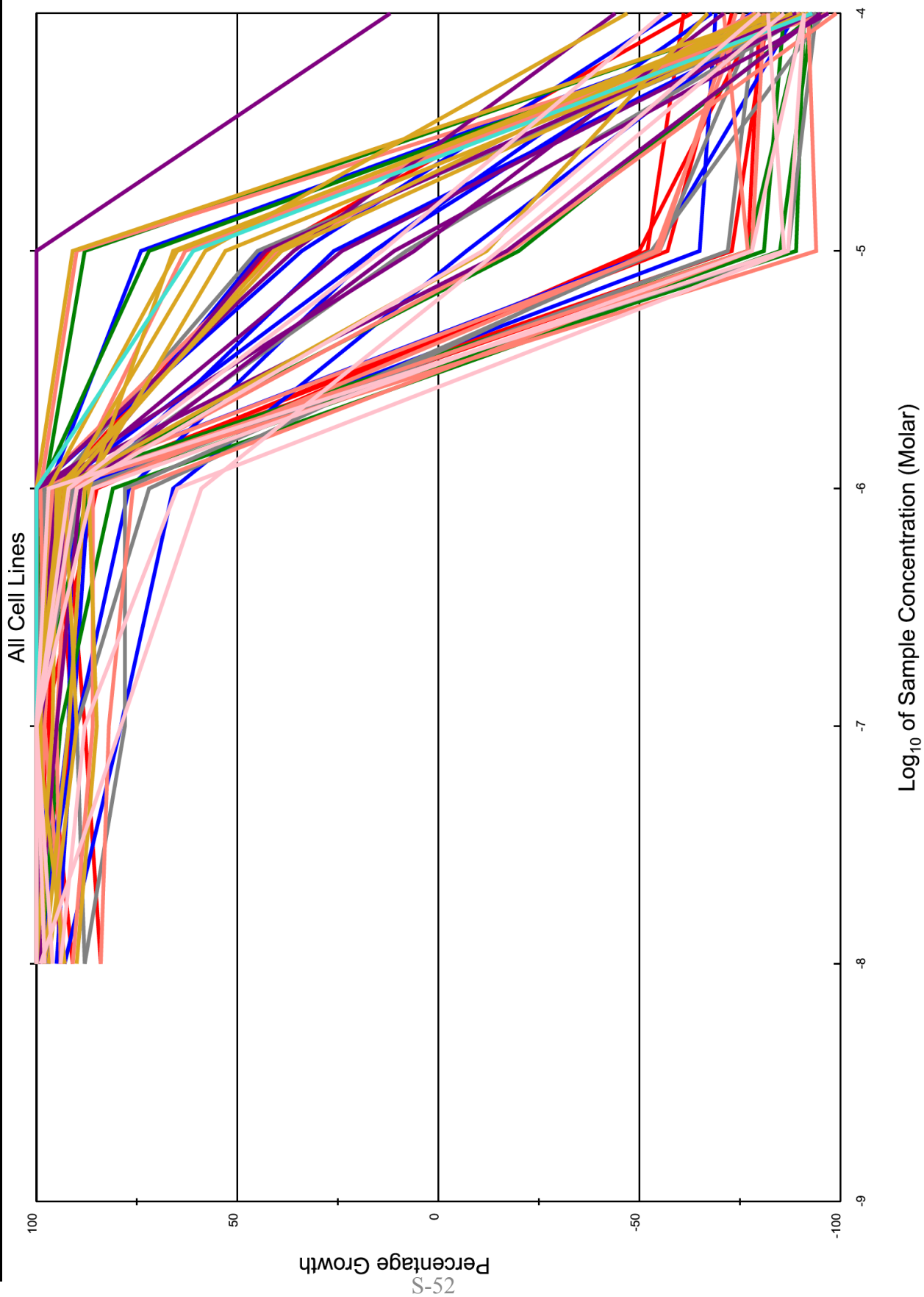


Psychotrimine (1) – 5 Dose

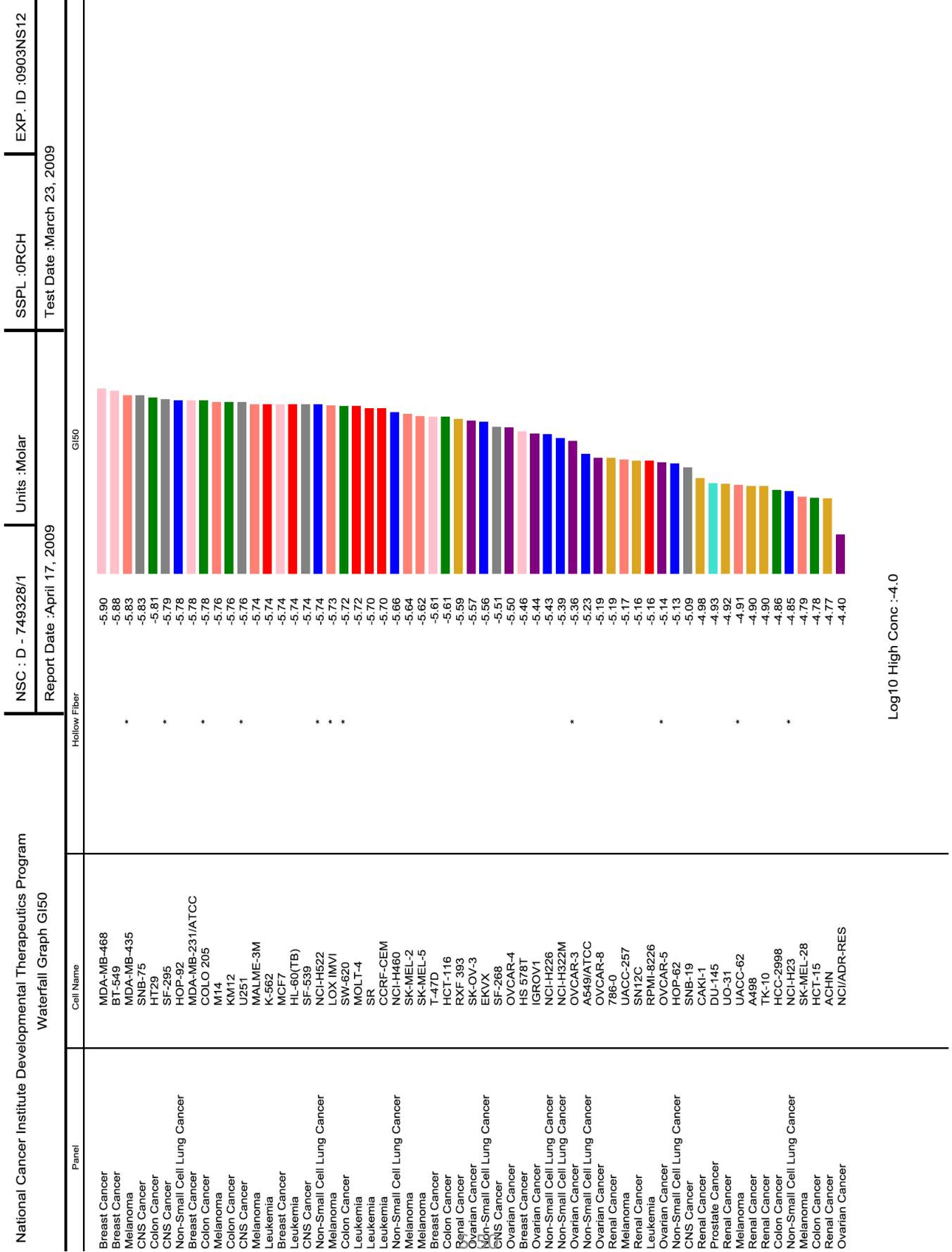


Psychotrimine (1) – 5 Dose

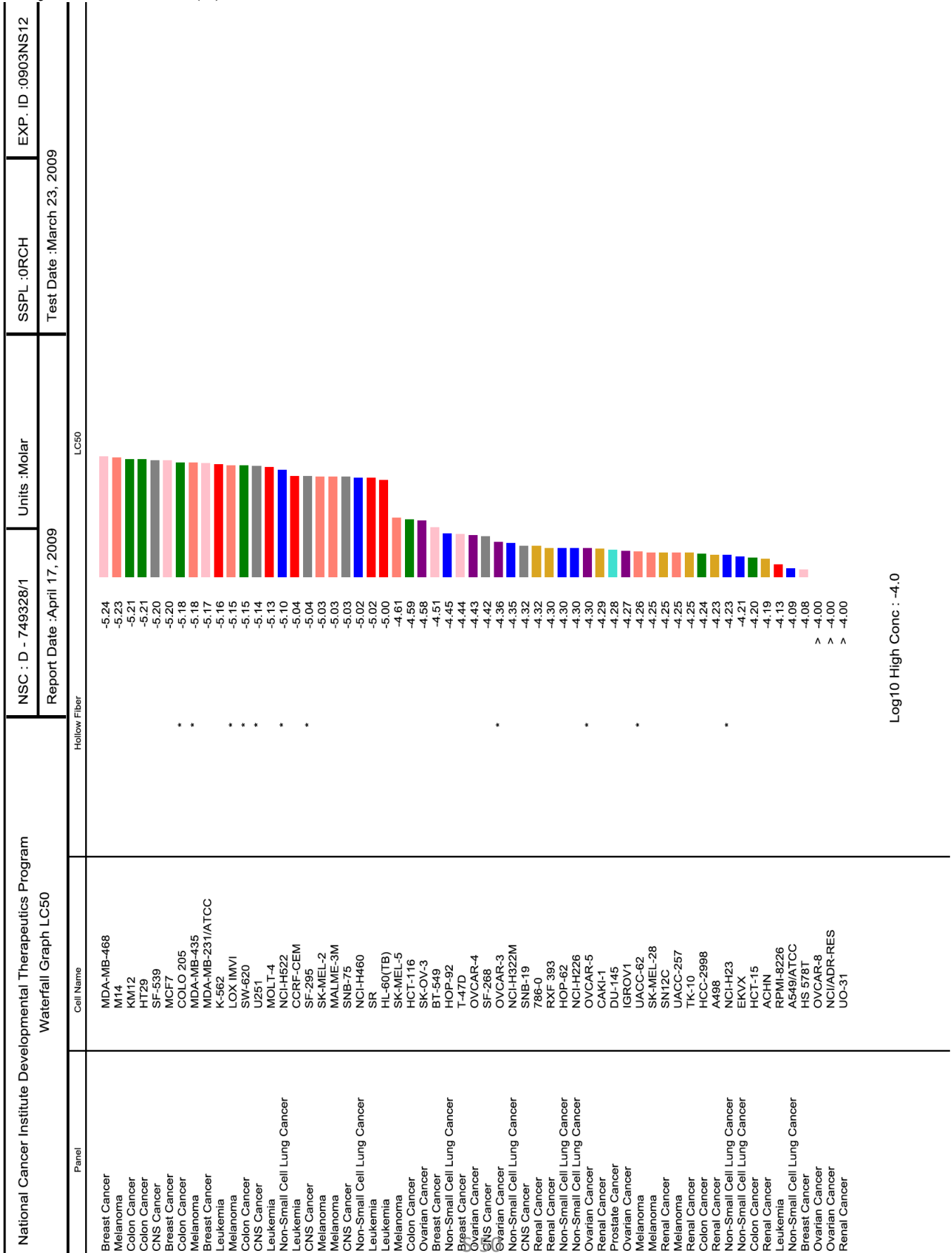
National Cancer Institute Developmental Therapeutics Program Dose Response Curves	NSC : D - 749328/1	SSPL:ORCH	EXP. ID:0903NS12
	Report Date: April 17, 2009	Test Date: March 23, 2009	



Psychotrimine (1) – 5 Dose



Psychotrimine (1) – 5 Dose



Log10 High Conc : -4.0

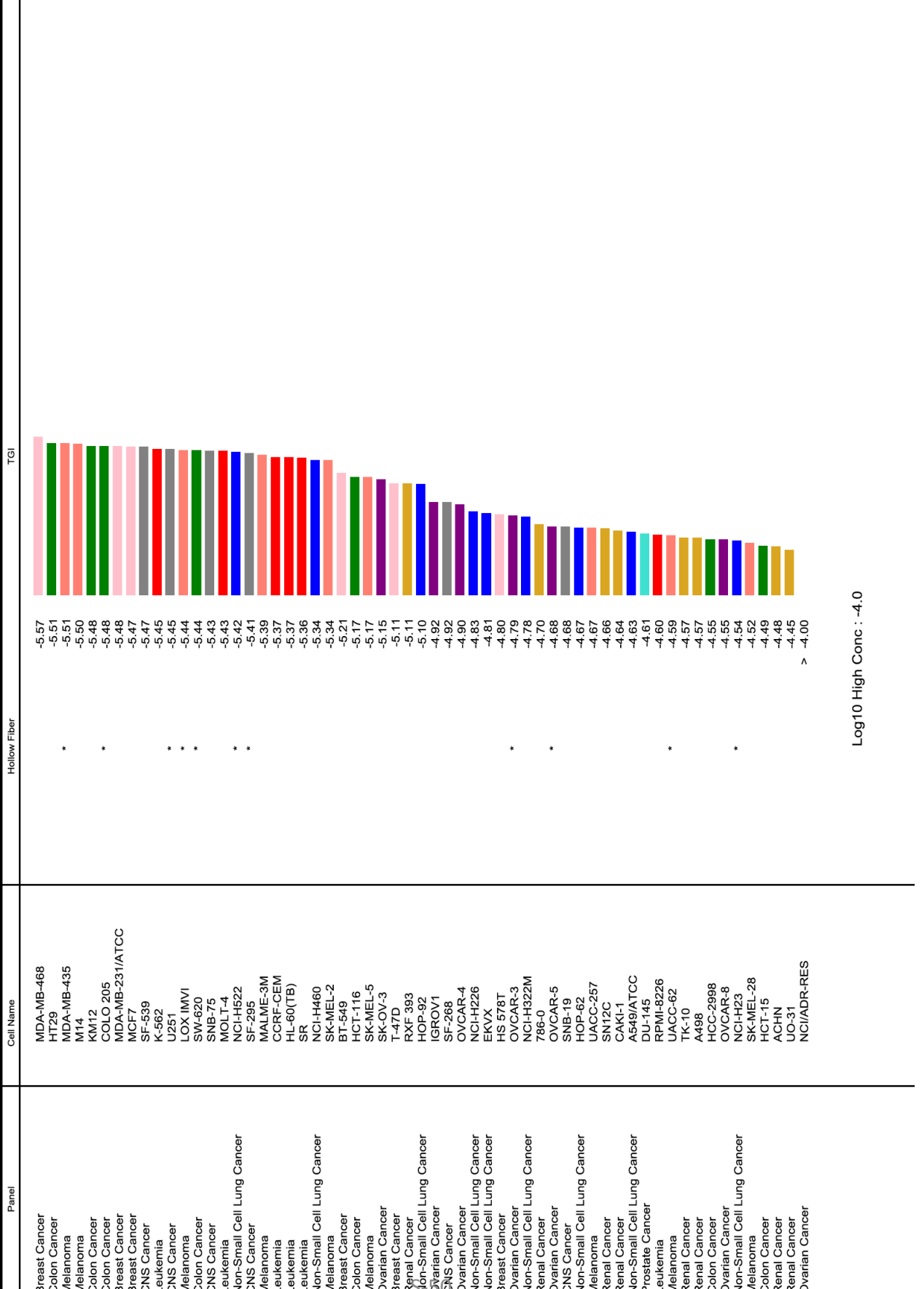
Psychotrimine (1) – 5 Dose

NSC : D - 749328/1
 Report Date :April 17, 2009

Units :Molar

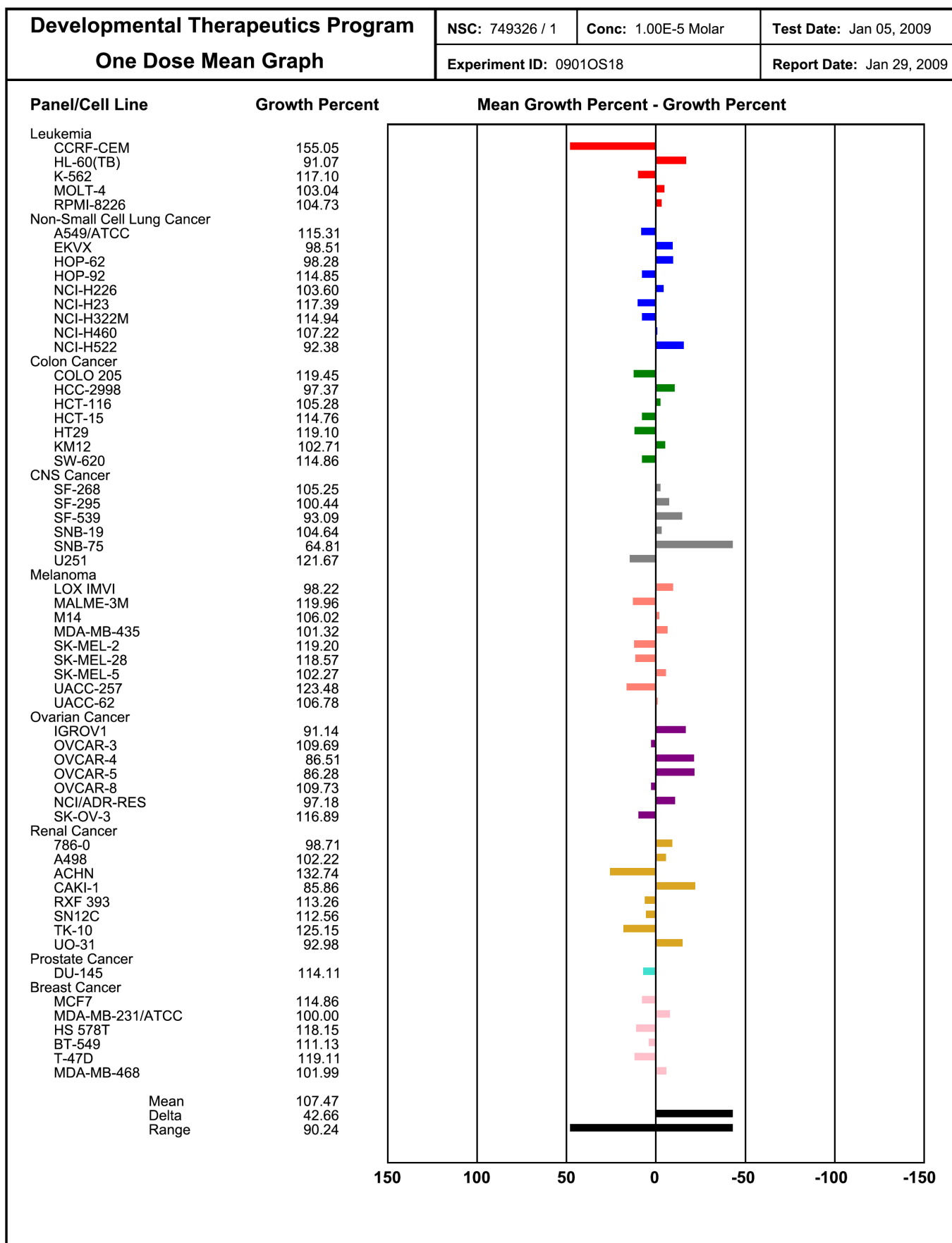
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 Test Date :March 23, 2009

EXP. ID :0903NS12

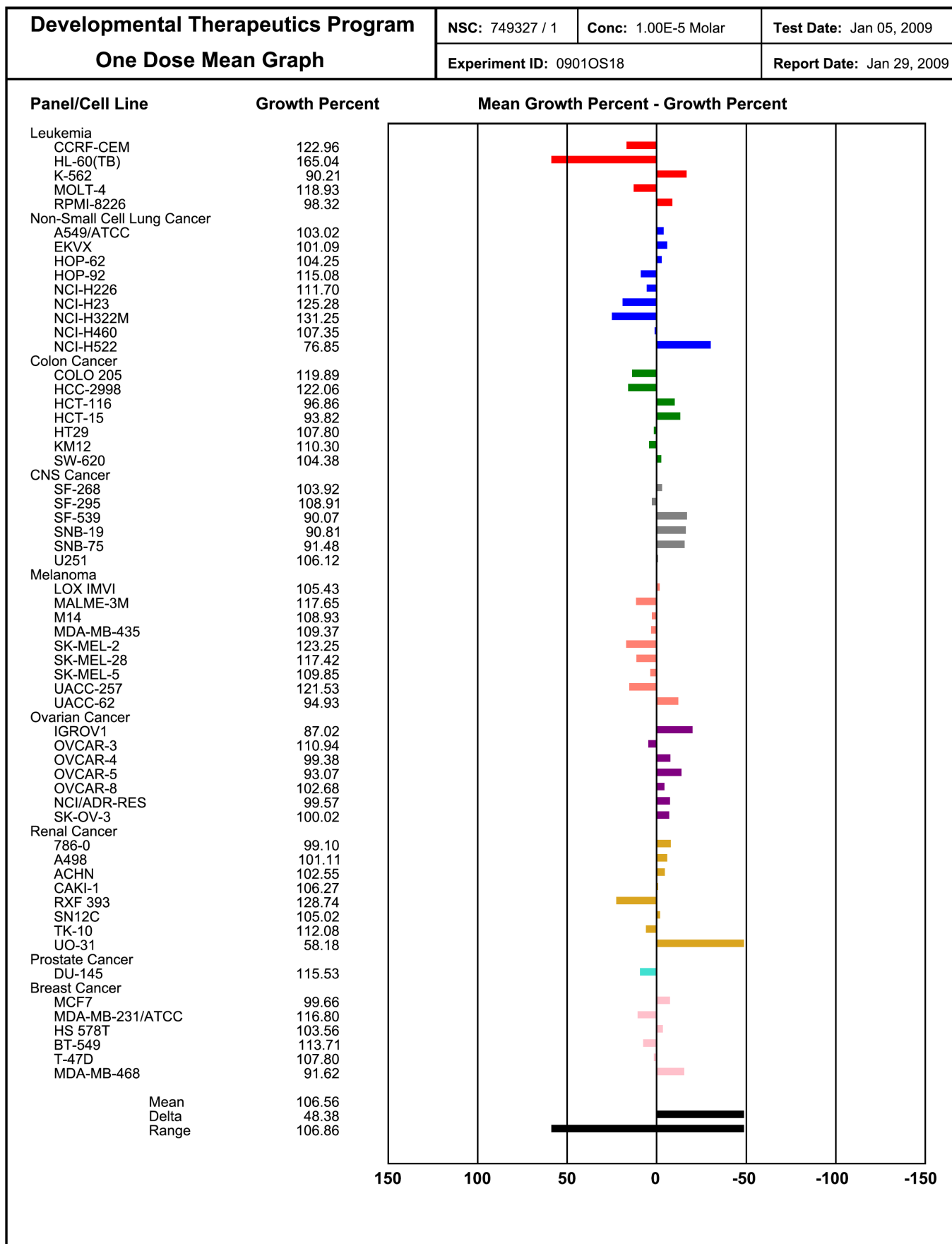


Log10 High Conc : -4.0

Kapakahine F (2) – 1 Dose



Kapakahine B (3) – 1 Dose



Kapakahine F (2) and Kapakahine B (3)

In Vitro Cytotoxicity Against a Human Tumor Cell Line Panel				
Tumor Cell Line	Tissue Type	IC50 (uM)*		
		Kapakahine B	Kapakahine F	Adriamycin
BT-549	Breast	45.3	>50.0	0.005
DU4475	Breast	11.7	49.0	<0.003
MDA-MB-468	Breast	26.3	>50.0	0.016
A549	Lung	>50.0	>50.0	0.376
PC-3	Prostate	>50.0	>50.0	0.201
LNCaP-FGC	Prostate	>50.0	>50.0	0.007
HCT116	Colon	>50.0	>50.0	0.022
MDA-MB-231	Breast	49.1	>50.0	0.040
A2780	Ovary	49.8	>50.0	0.005
Du145	Prostate	>50.0	>50.0	0.024
CCRF-CEM	Leukemia	22.7	>50.0	0.011
H661	Lung	20.8	>50.0	0.077
P388	Leukemia (mouse)	>50.0	>50.0	0.014

* Cell treated with drug for 72 hr and cytotoxicity evaluated by MTS tetrazolium dye conversion assay.