

Supporting Information

Cytotoxic potential of A-azepano- and 3-amino-3,4-seco-triterpenoids

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Figure S1. Anticancer screening data of compound 1 at single dose assay

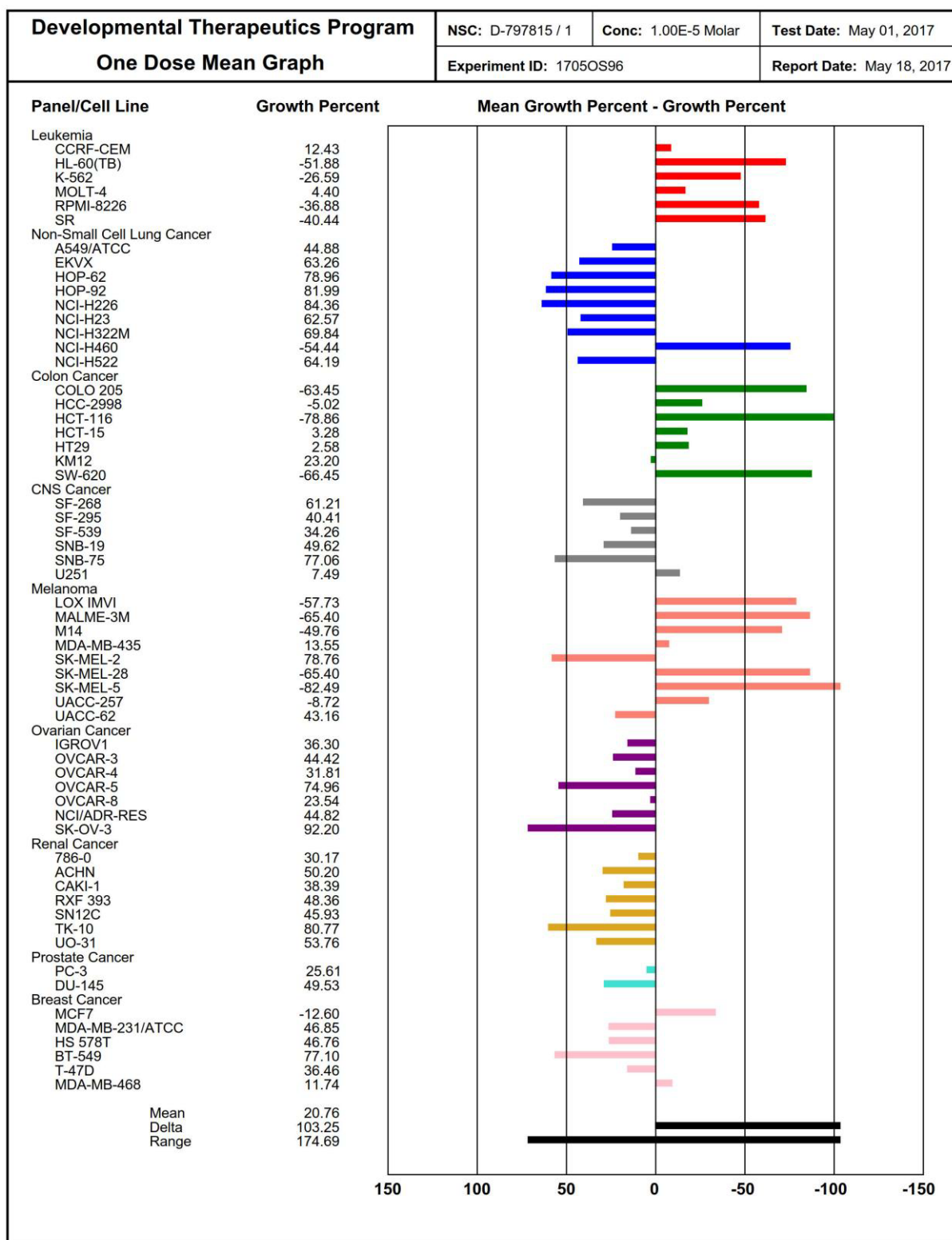


Figure S2. Anticancer screening data of compound 2 at single dose assay

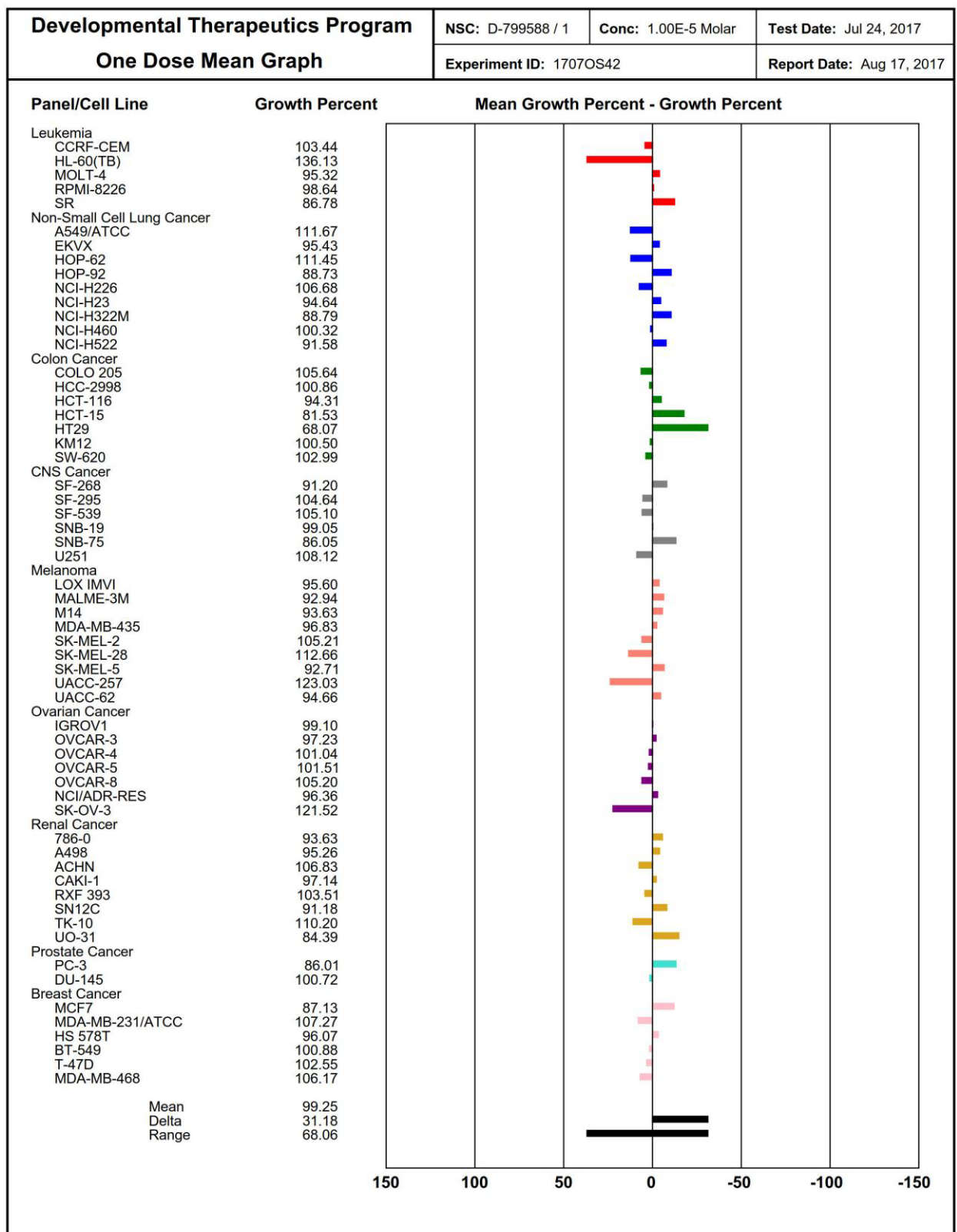


Figure S3. Anticancer screening data of compound 3 at single dose assay

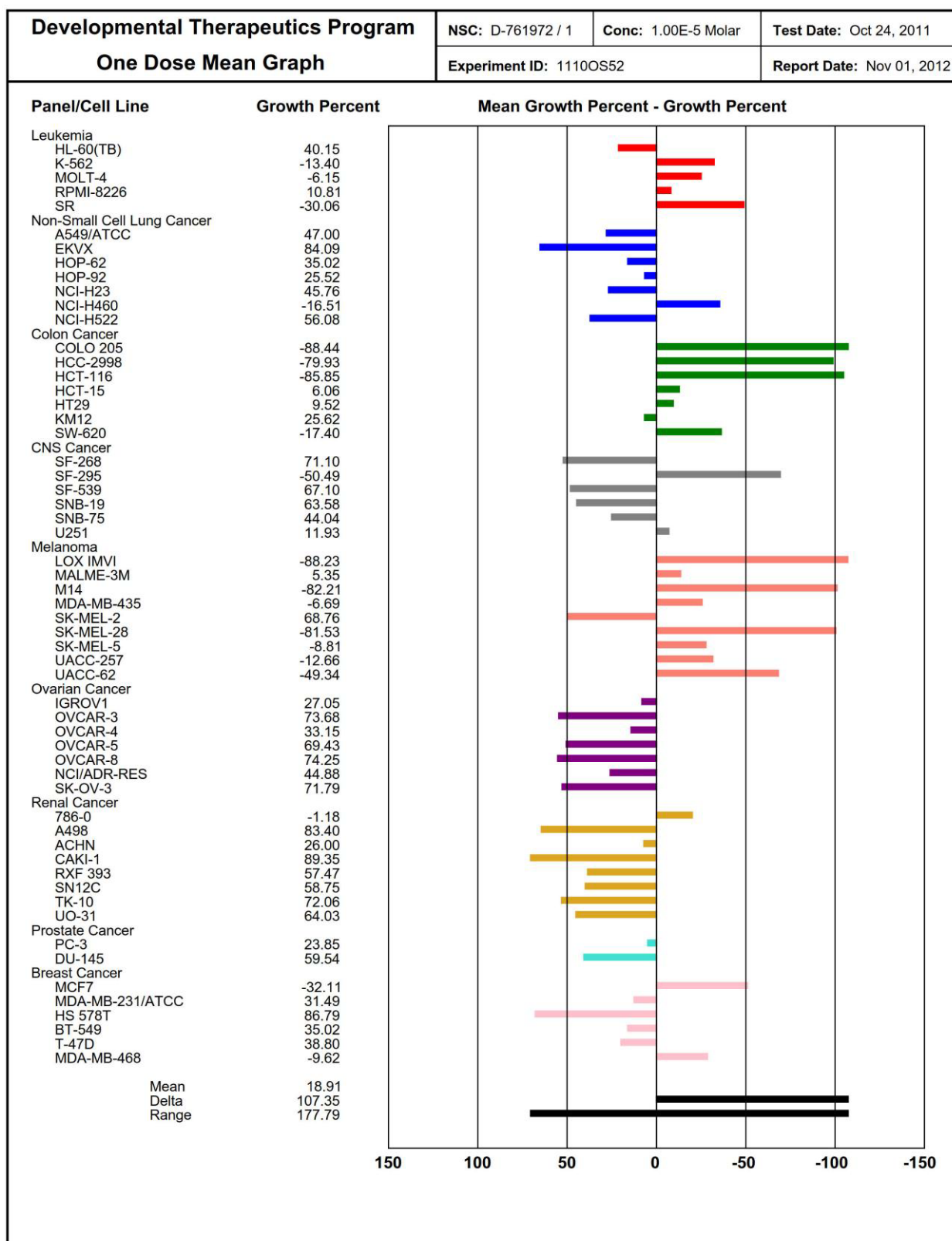


Figure S4. Anticancer screening data of compound 4 at single dose assay

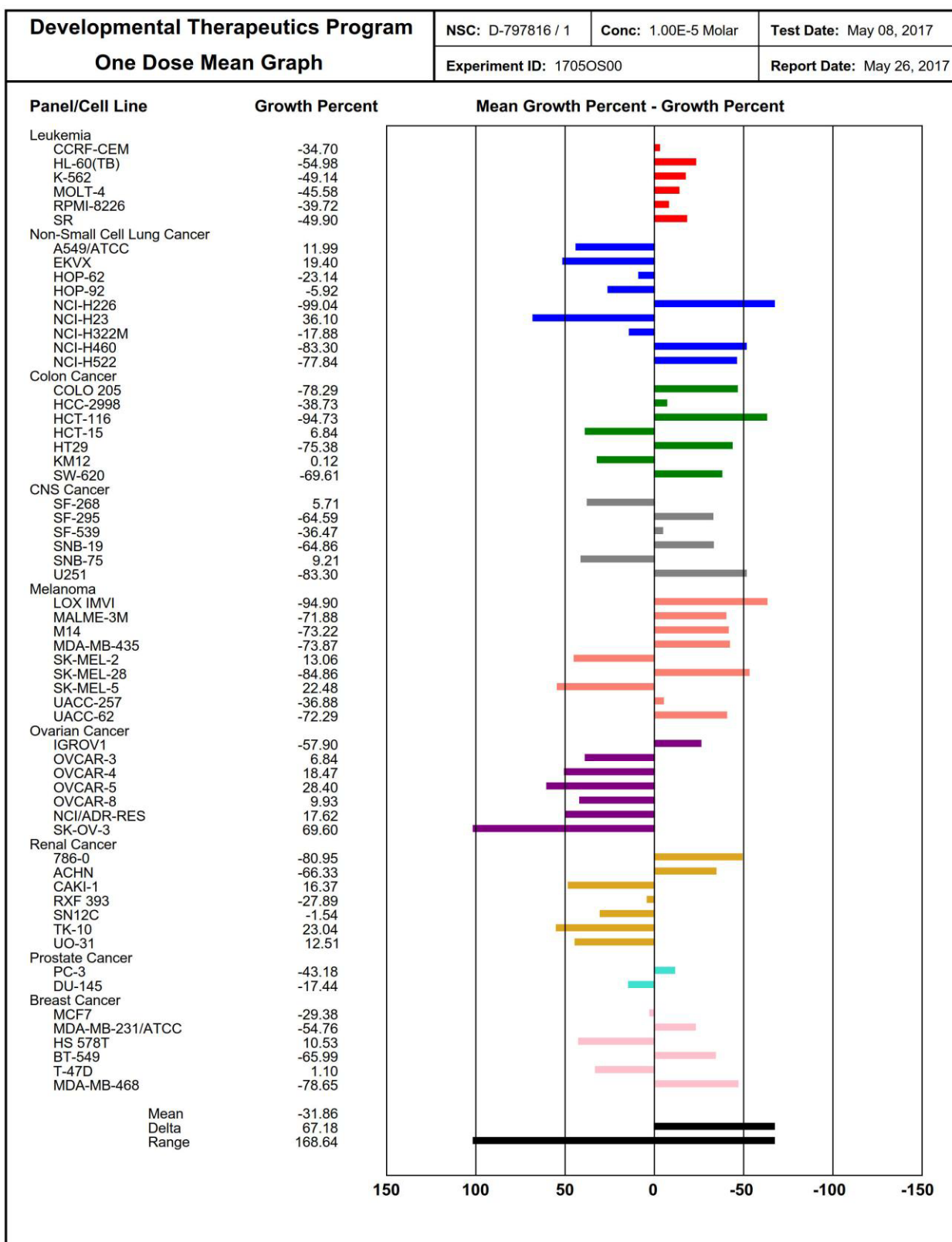


Figure S5. Anticancer screening data of compound 5 at single dose assay

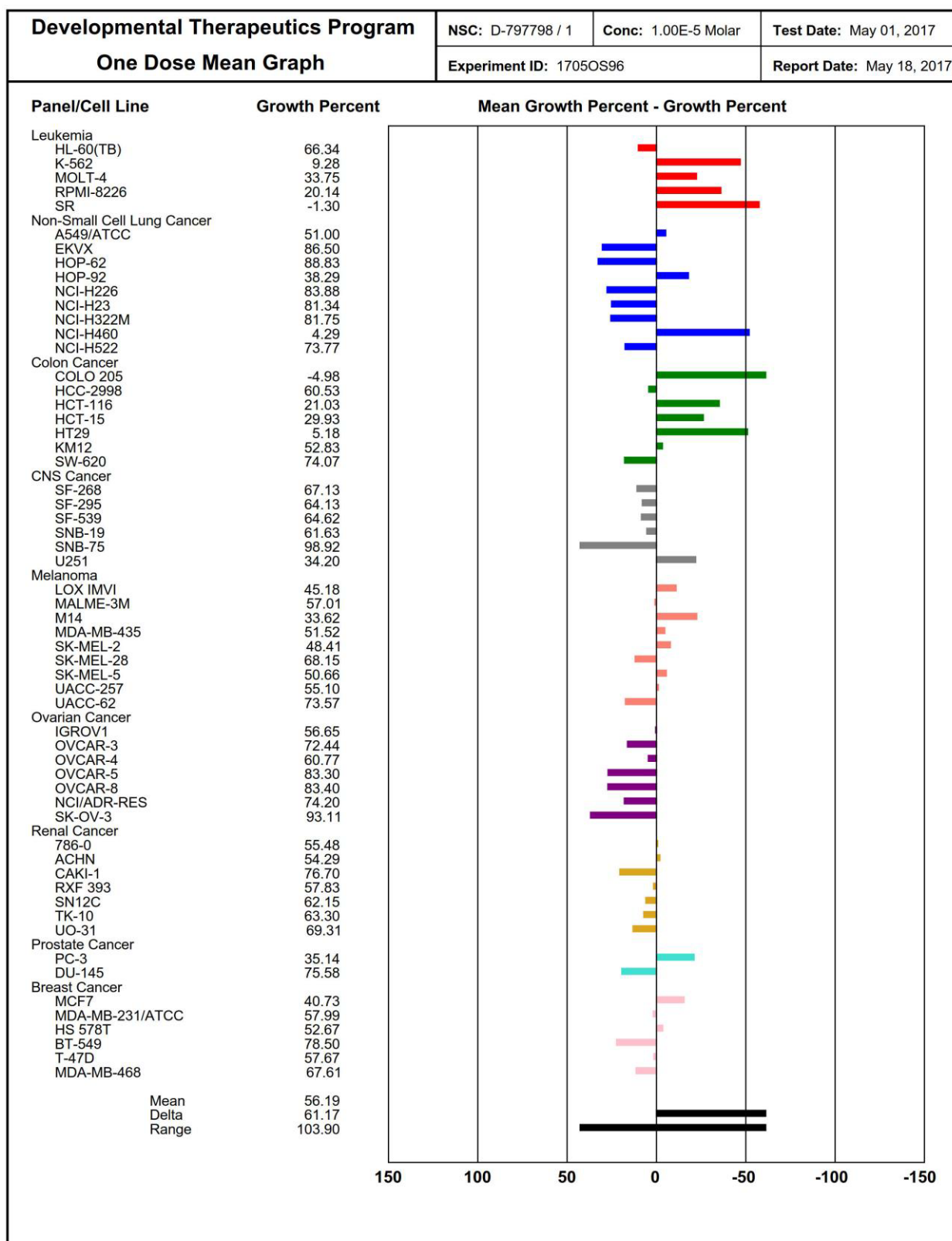


Figure S6. Anticancer screening data of compound 6 at single dose assay

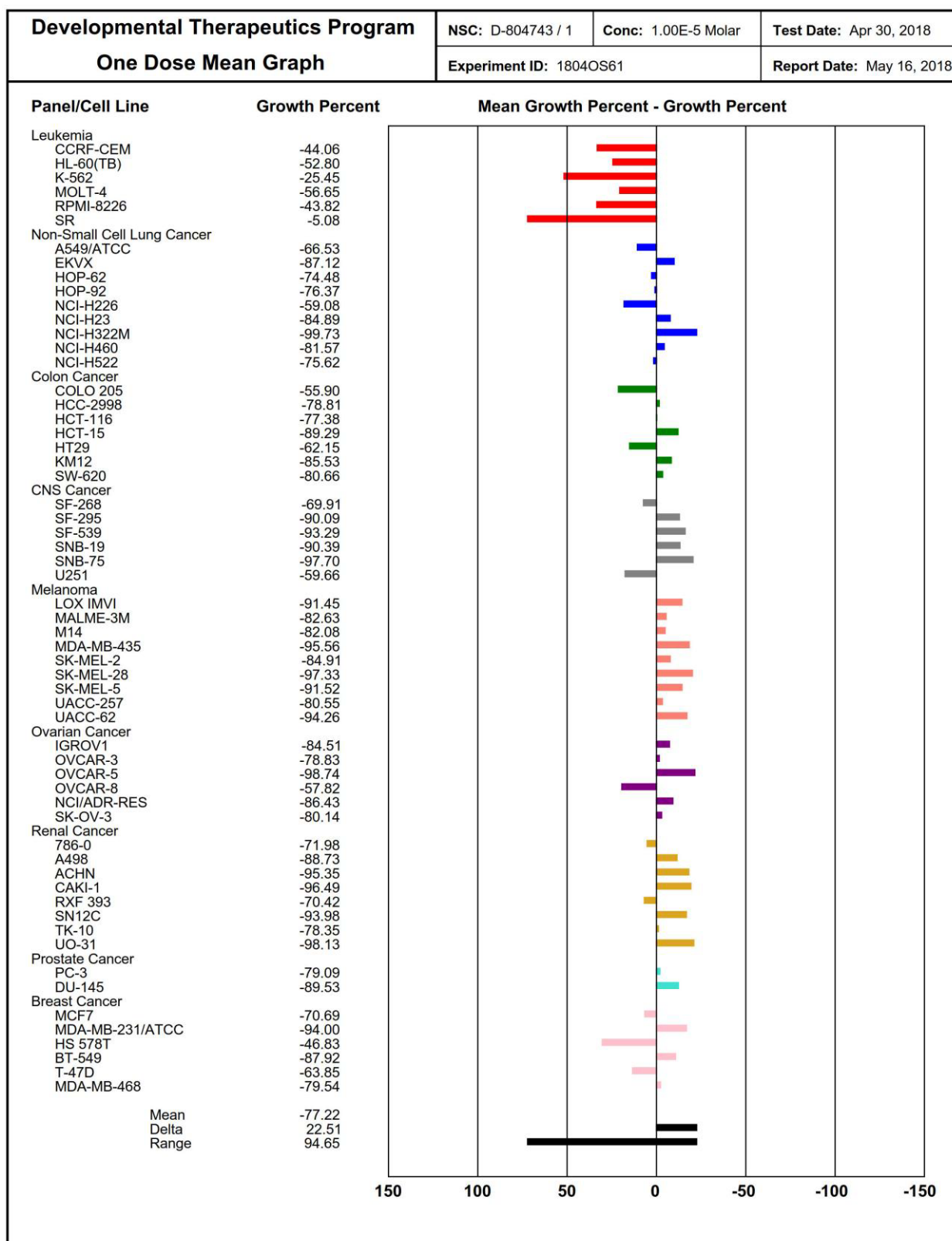


Figure S7. Anticancer screening data of compound 7 at single dose assay

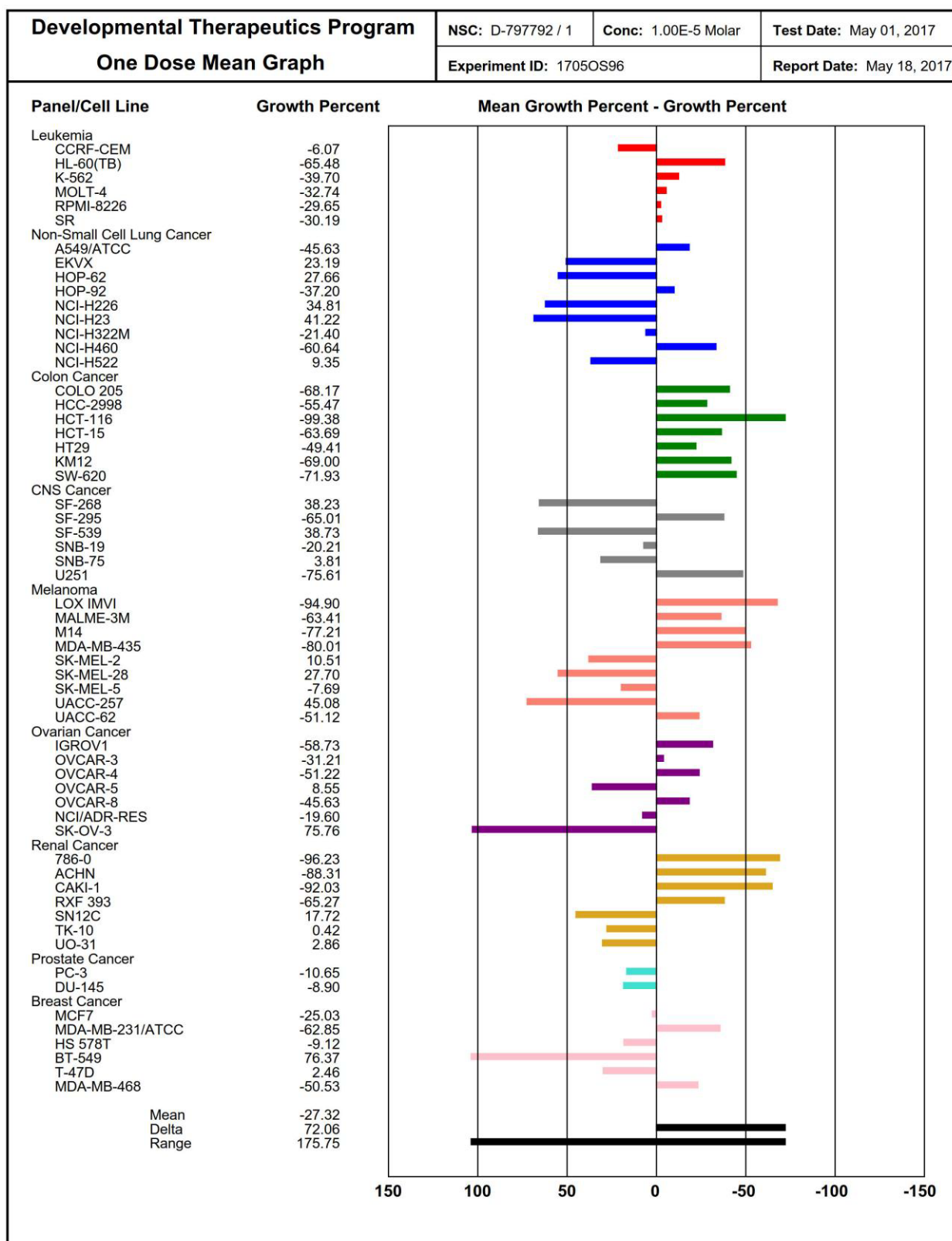


Figure S8. Anticancer screening data of compound 8 at single dose assay

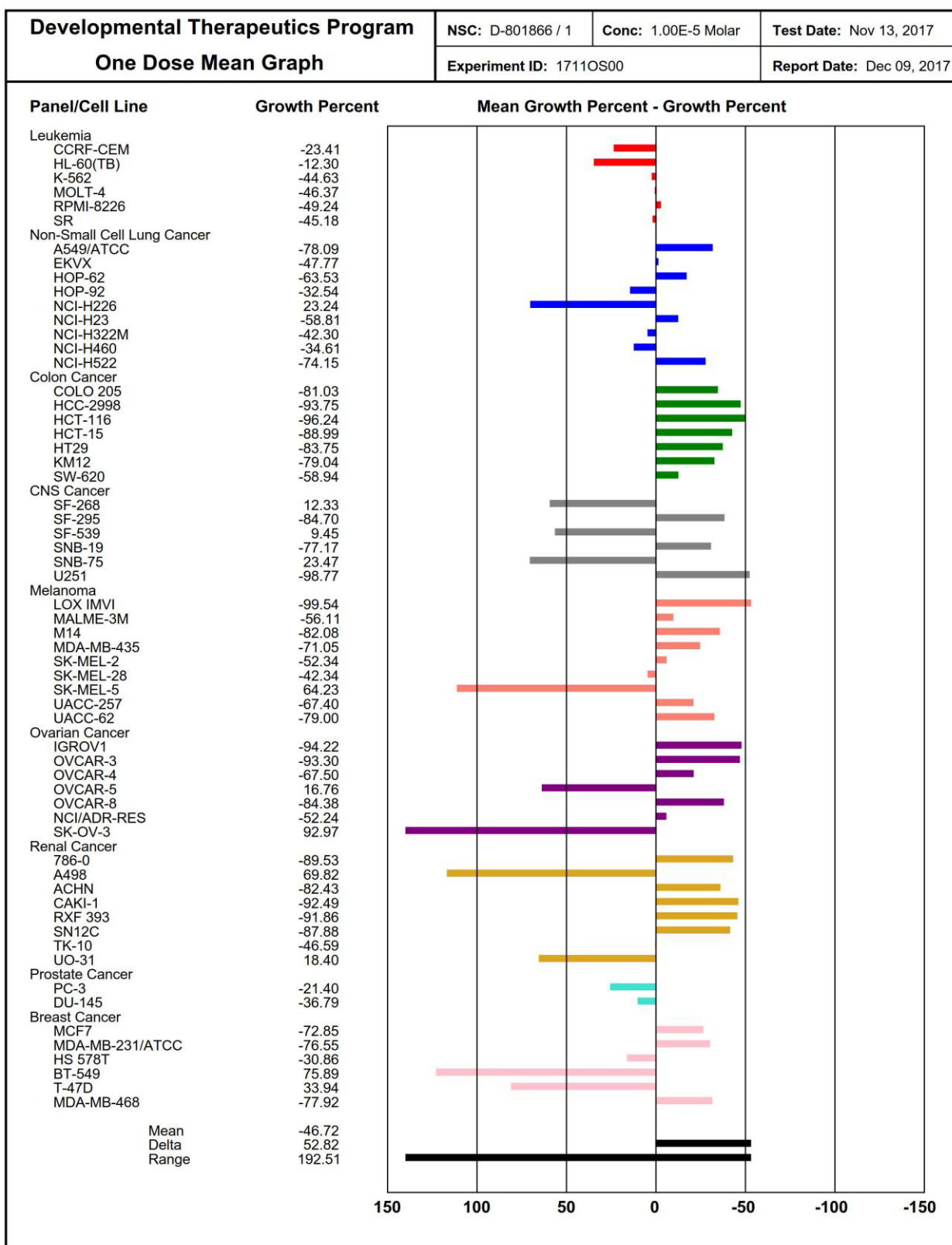


Figure S9. Anticancer screening data of compound 9 at single dose assay

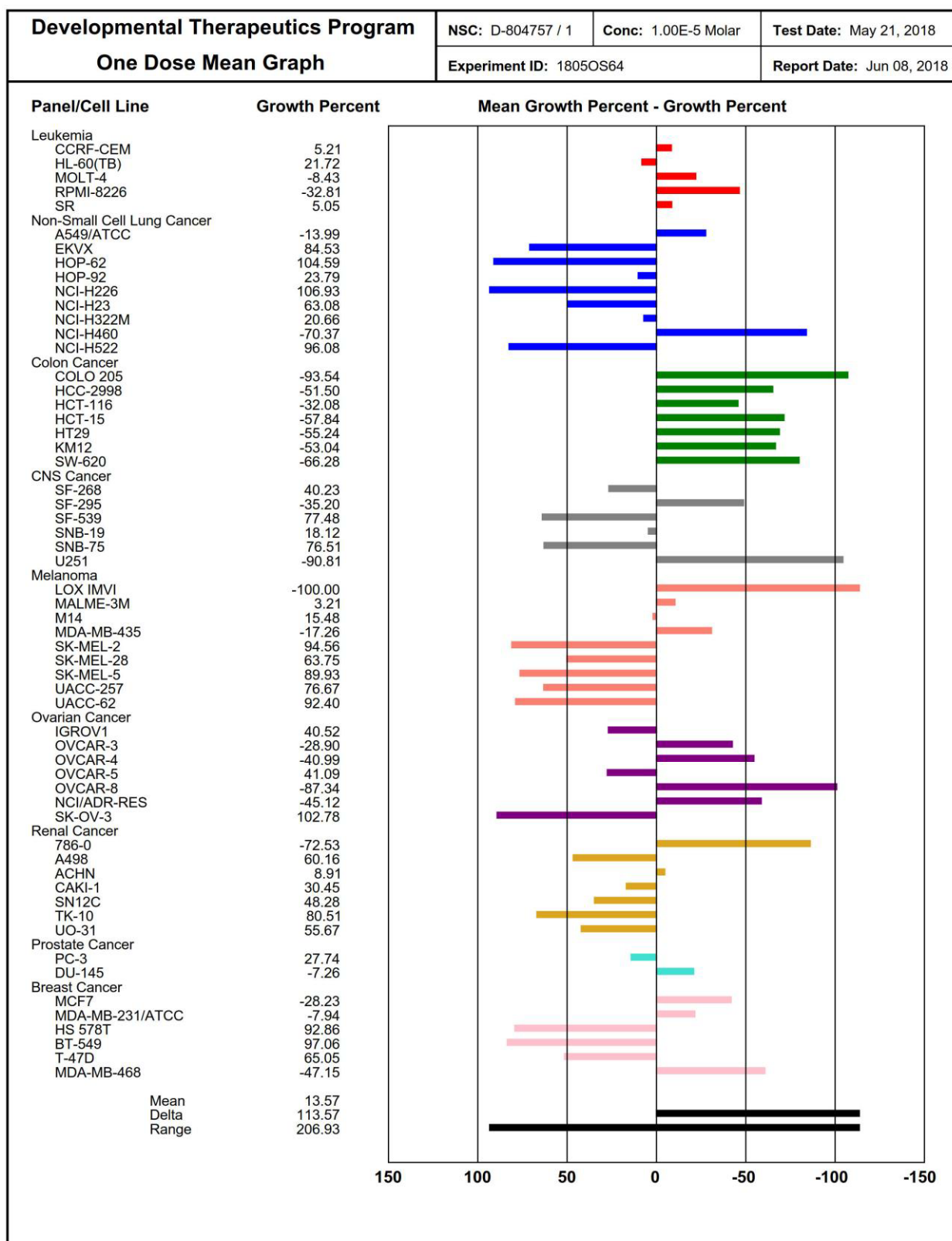


Figure S10. Anticancer screening data of compound 11 at single dose assay

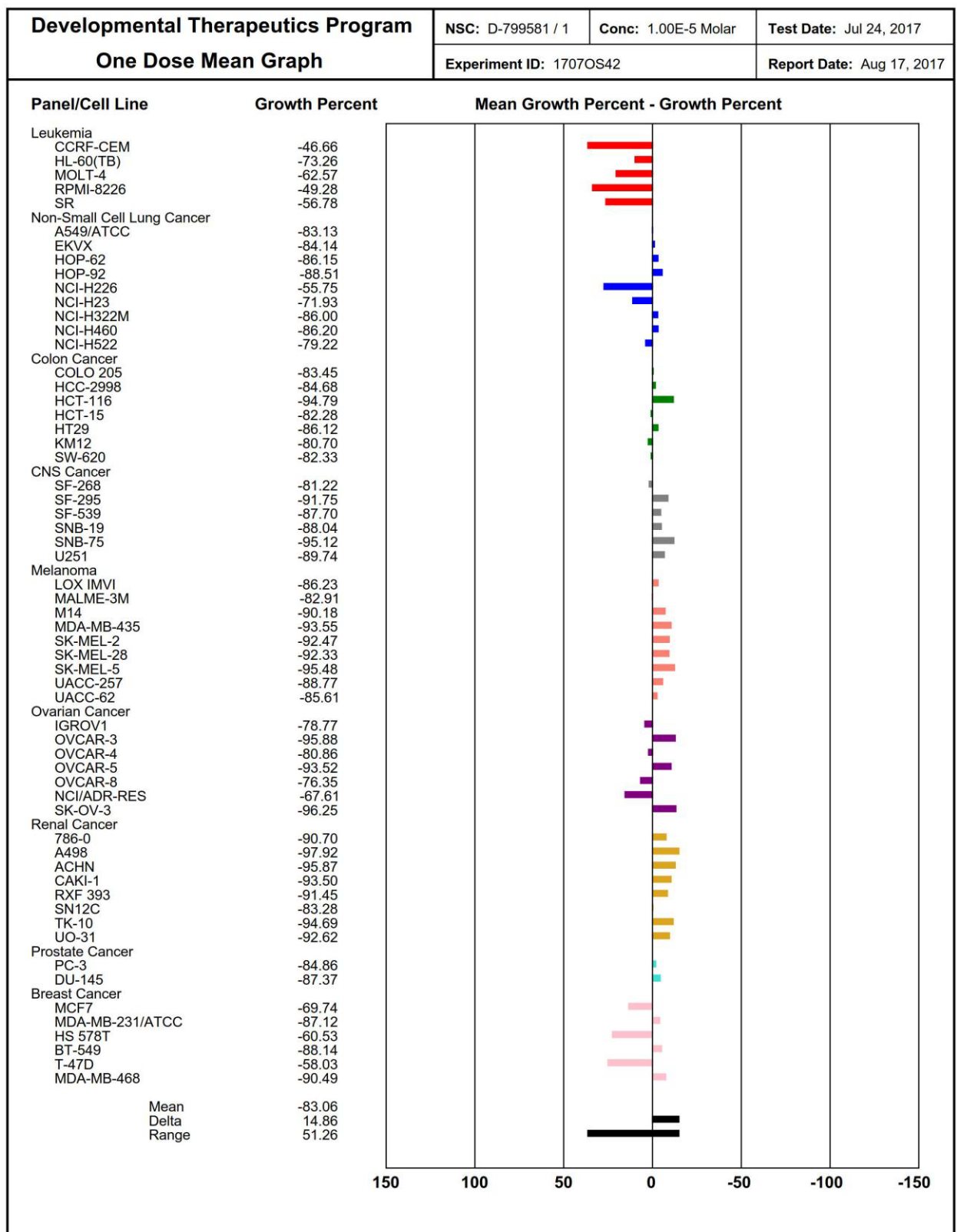


Figure S11. Anticancer screening data of compound 12 at single dose assay

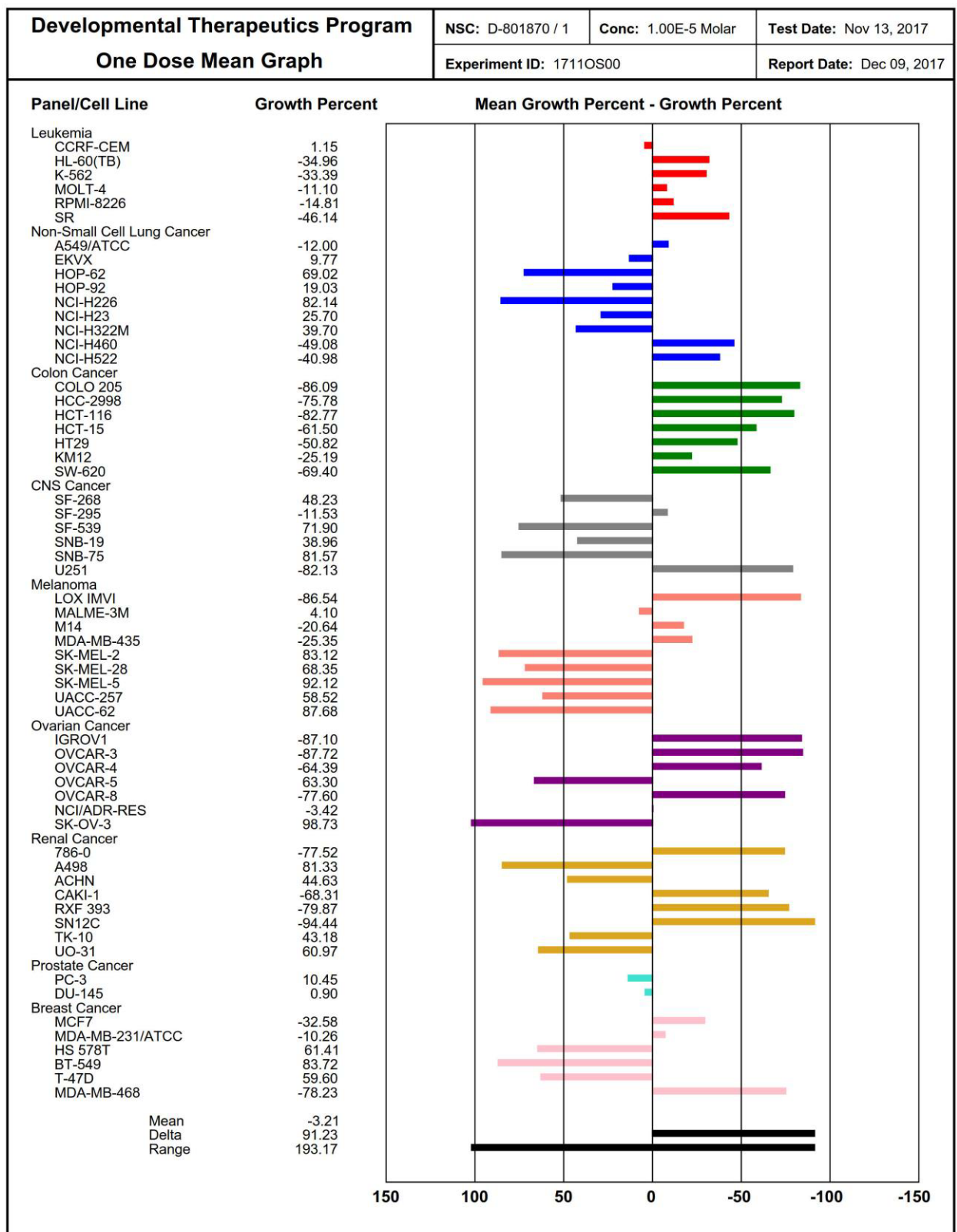


Figure S12. Anticancer screening data of compound 13 at single dose assay

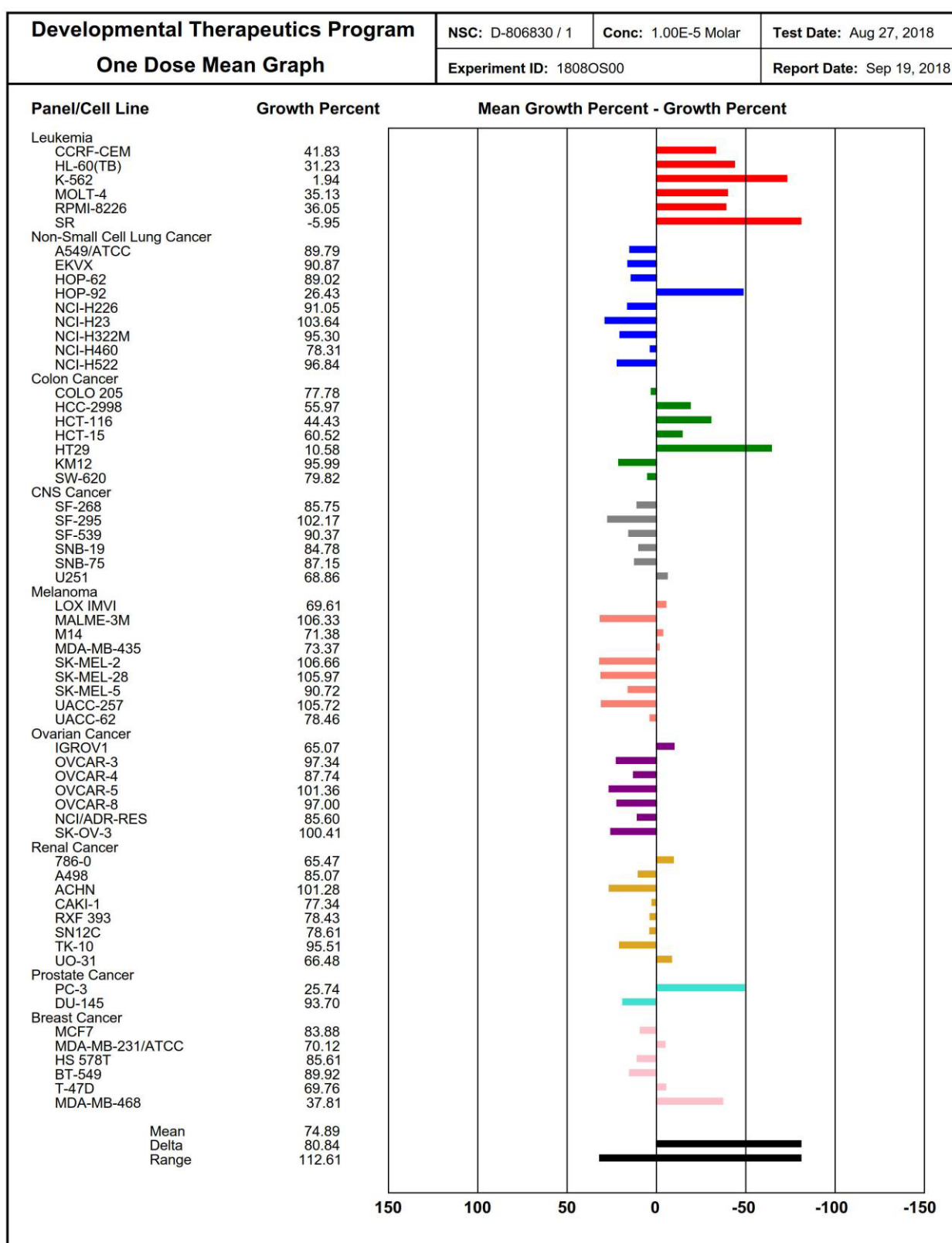


Figure S13. Anticancer screening data of compound 14 at single dose assay

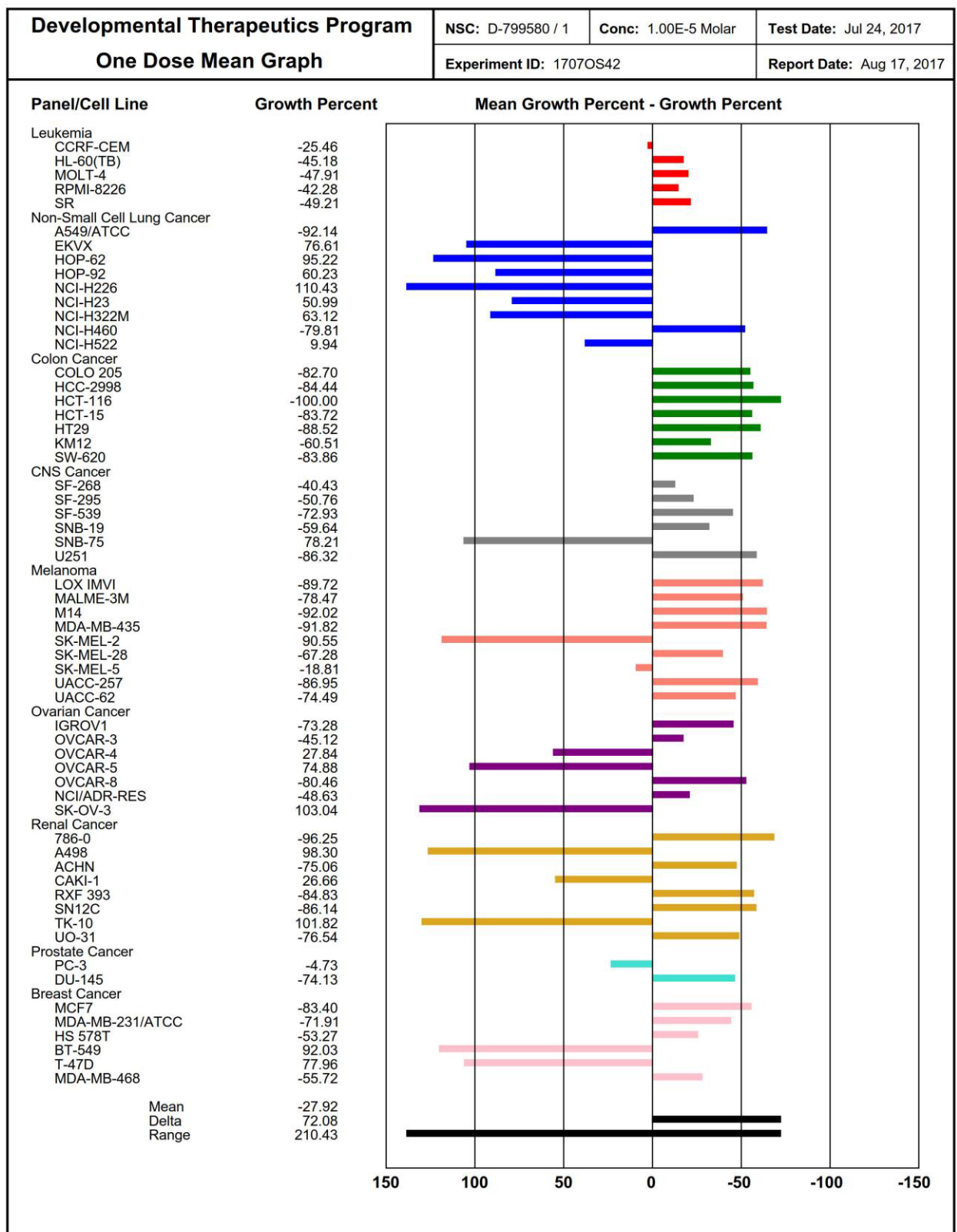


Figure S14. Anticancer screening data of compound 15 at single dose assay

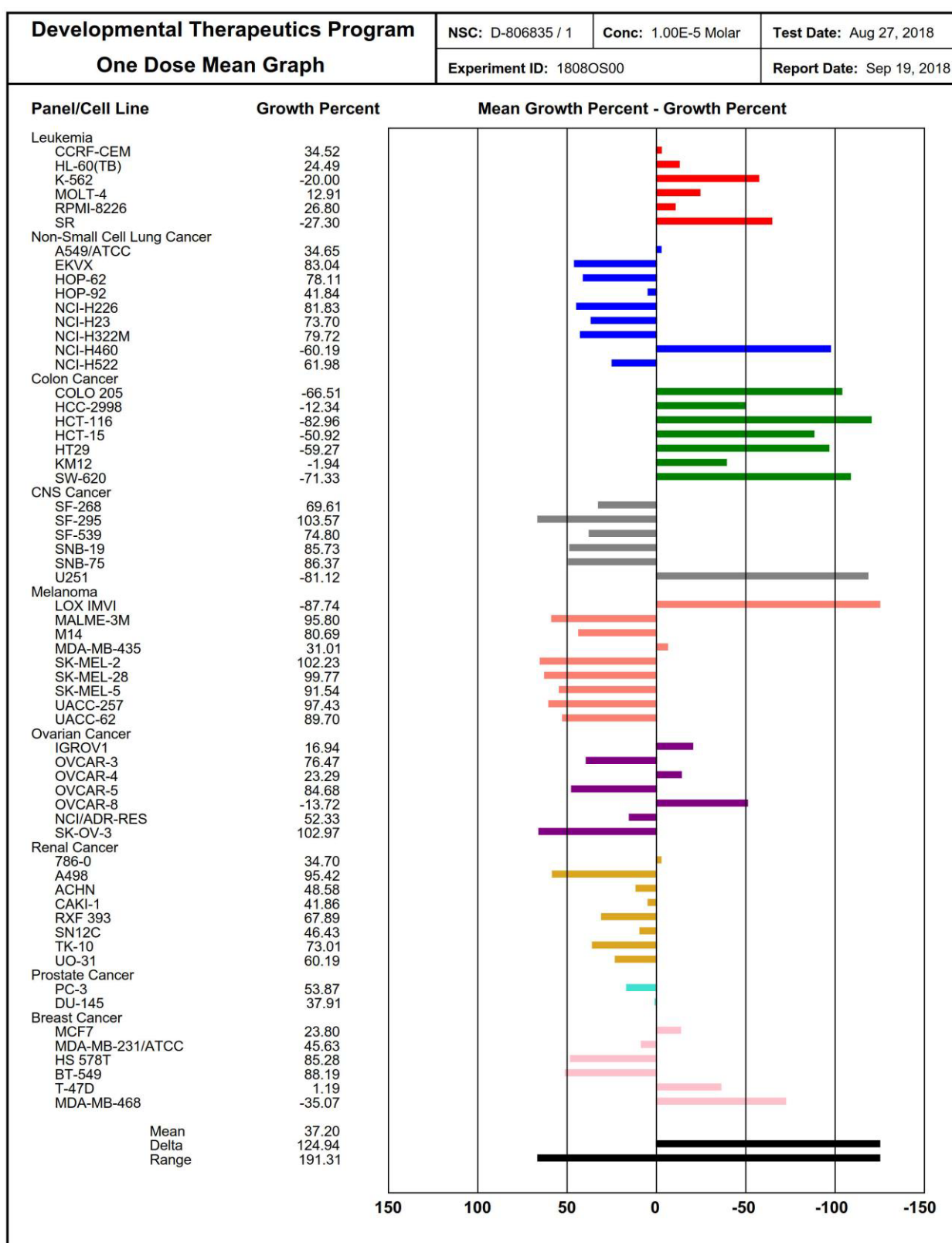


Figure S15. Anticancer screening data of compound 16 at single dose assay

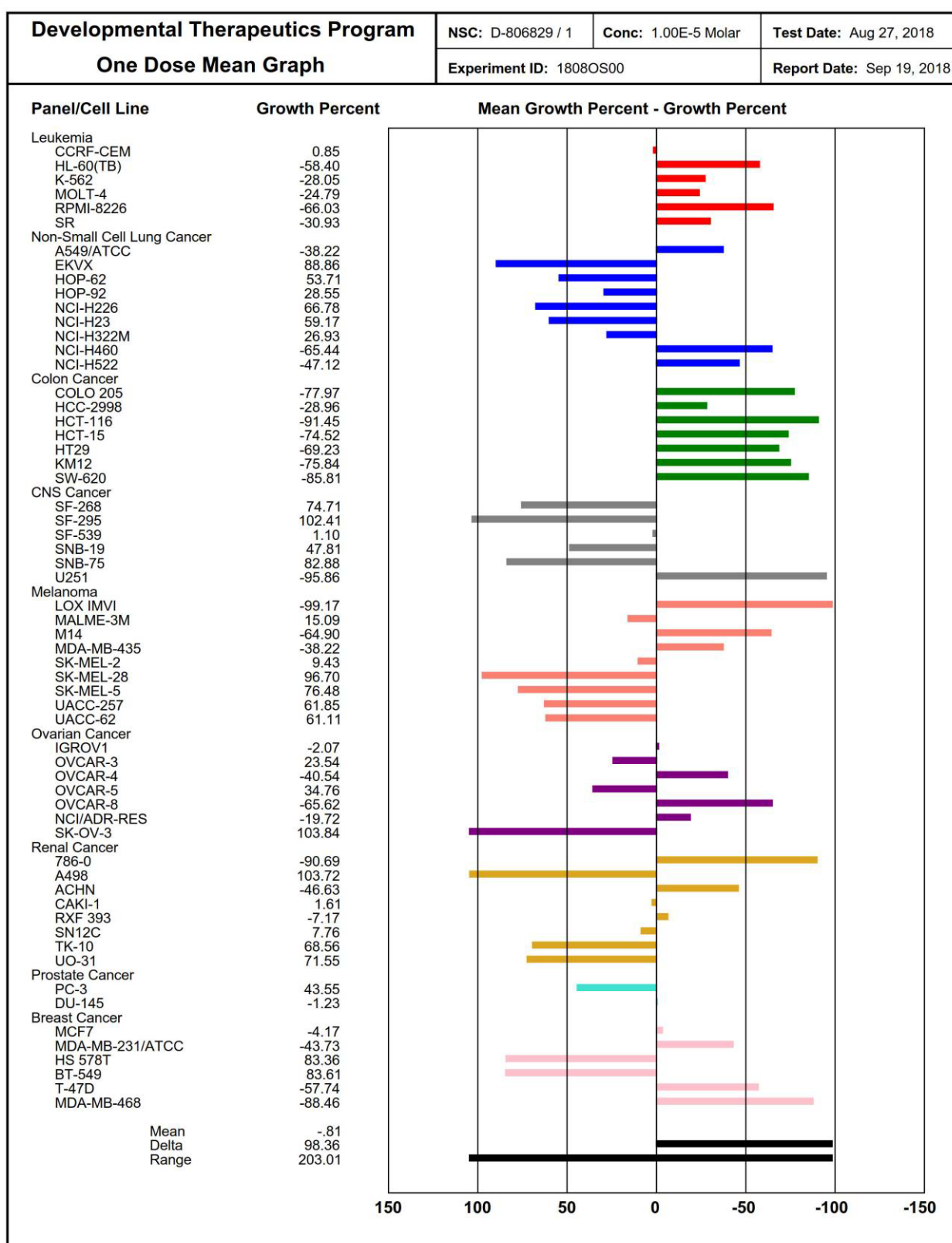


Figure S16. Anticancer screening data of compound 17 at single dose assay

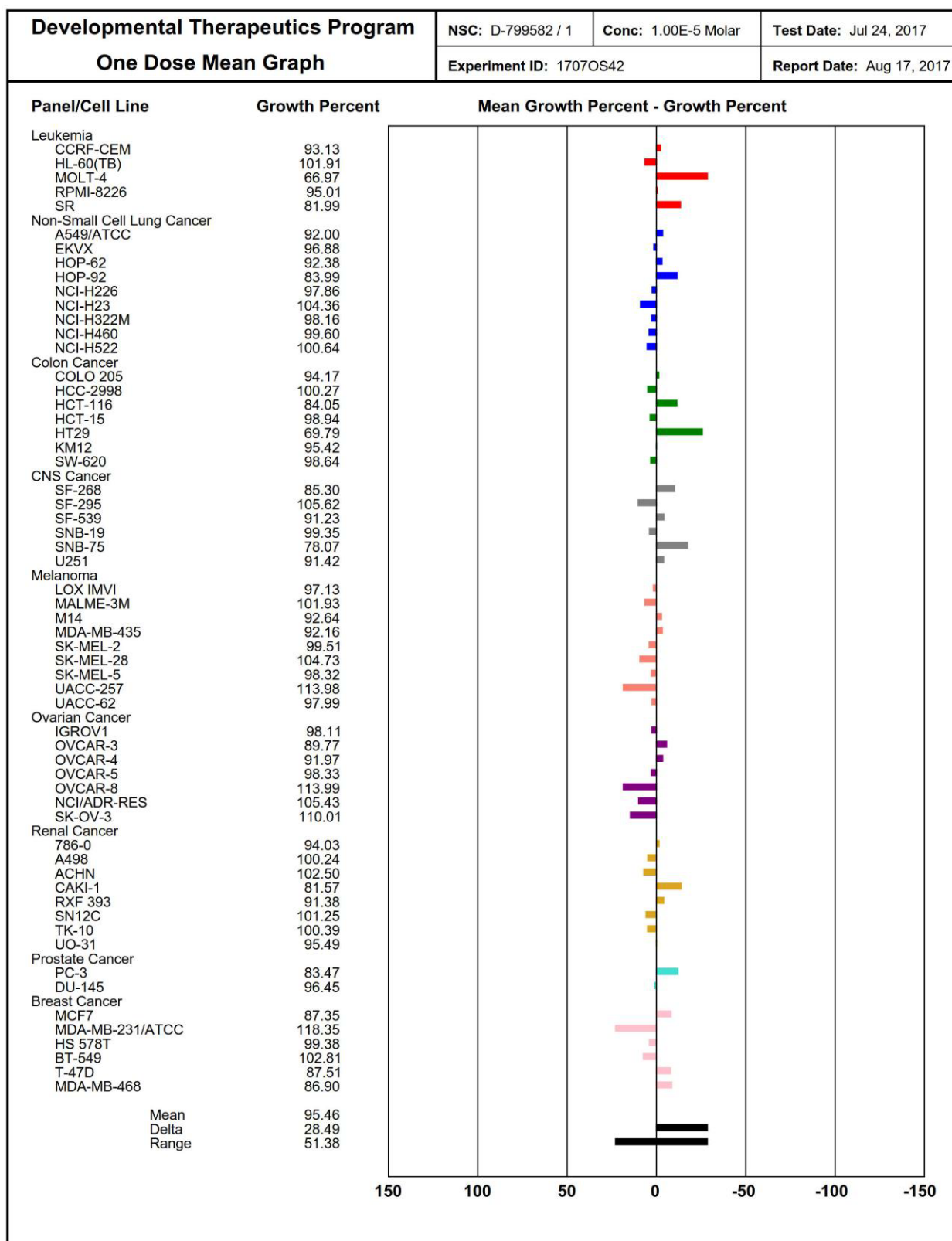


Figure S17. Anticancer screening data of compound 19 at single dose assay

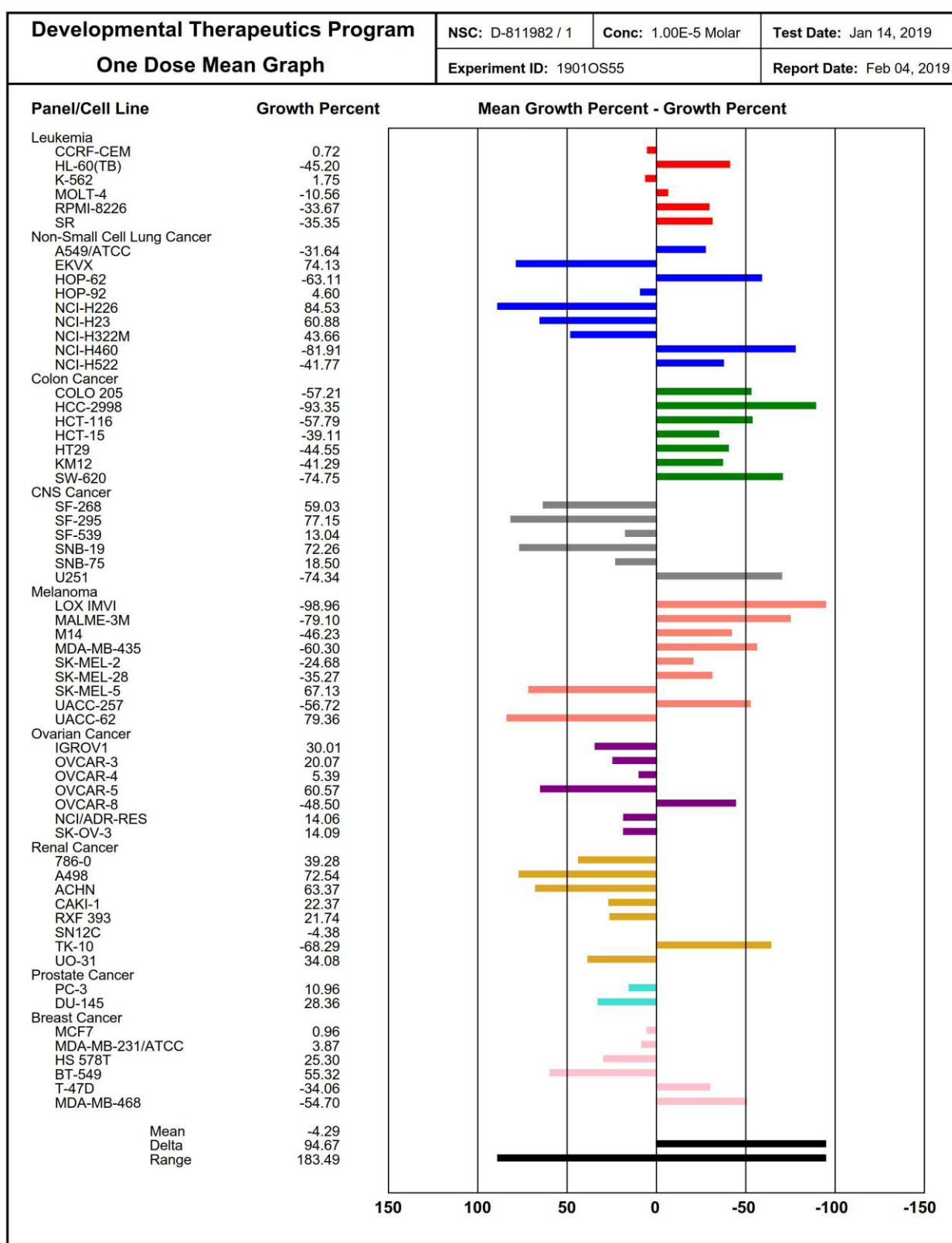


Figure S18. Anticancer screening data of compound 20 at single dose assay

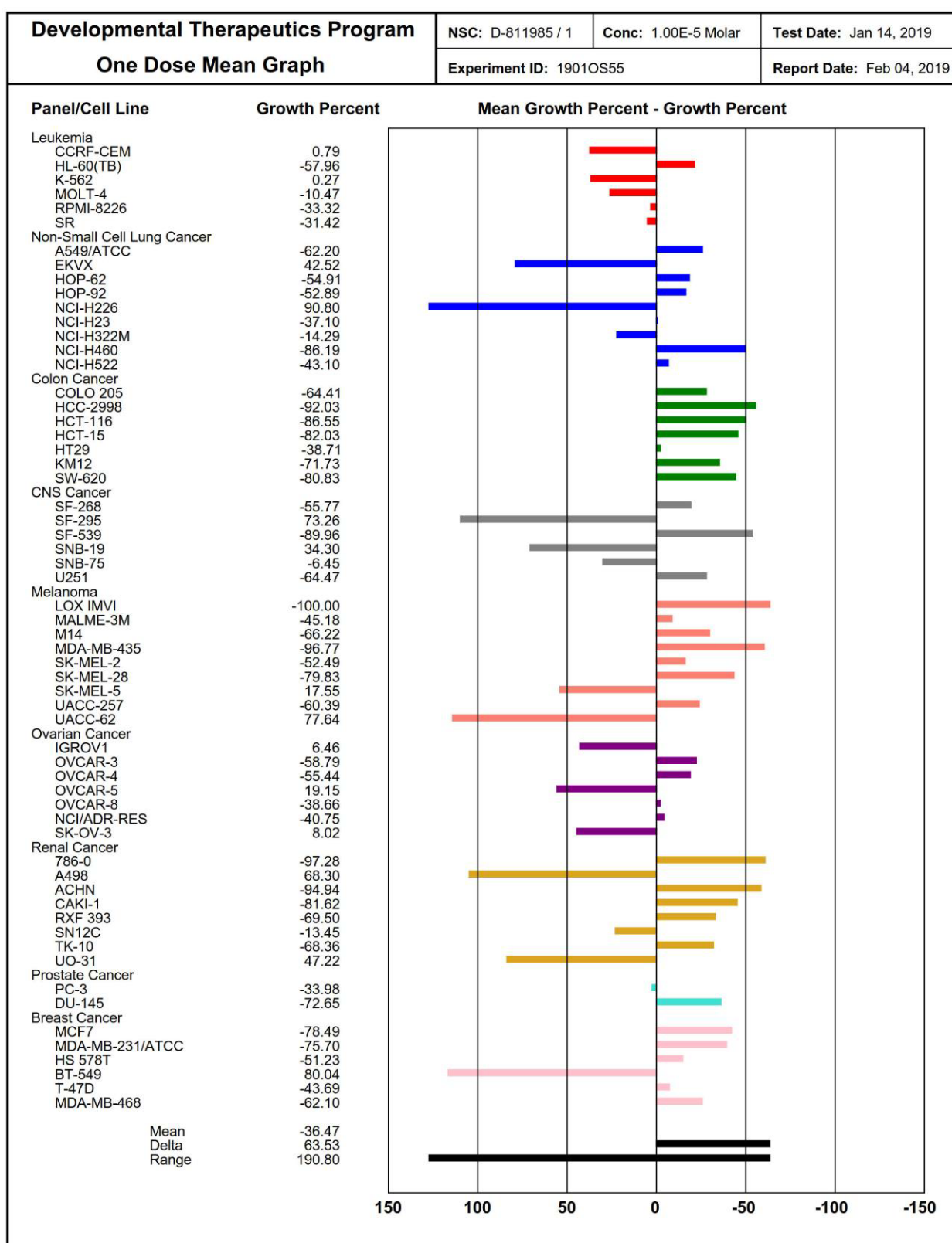


Figure S19. Anticancer screening data of compound 1 at a 5-dose assay

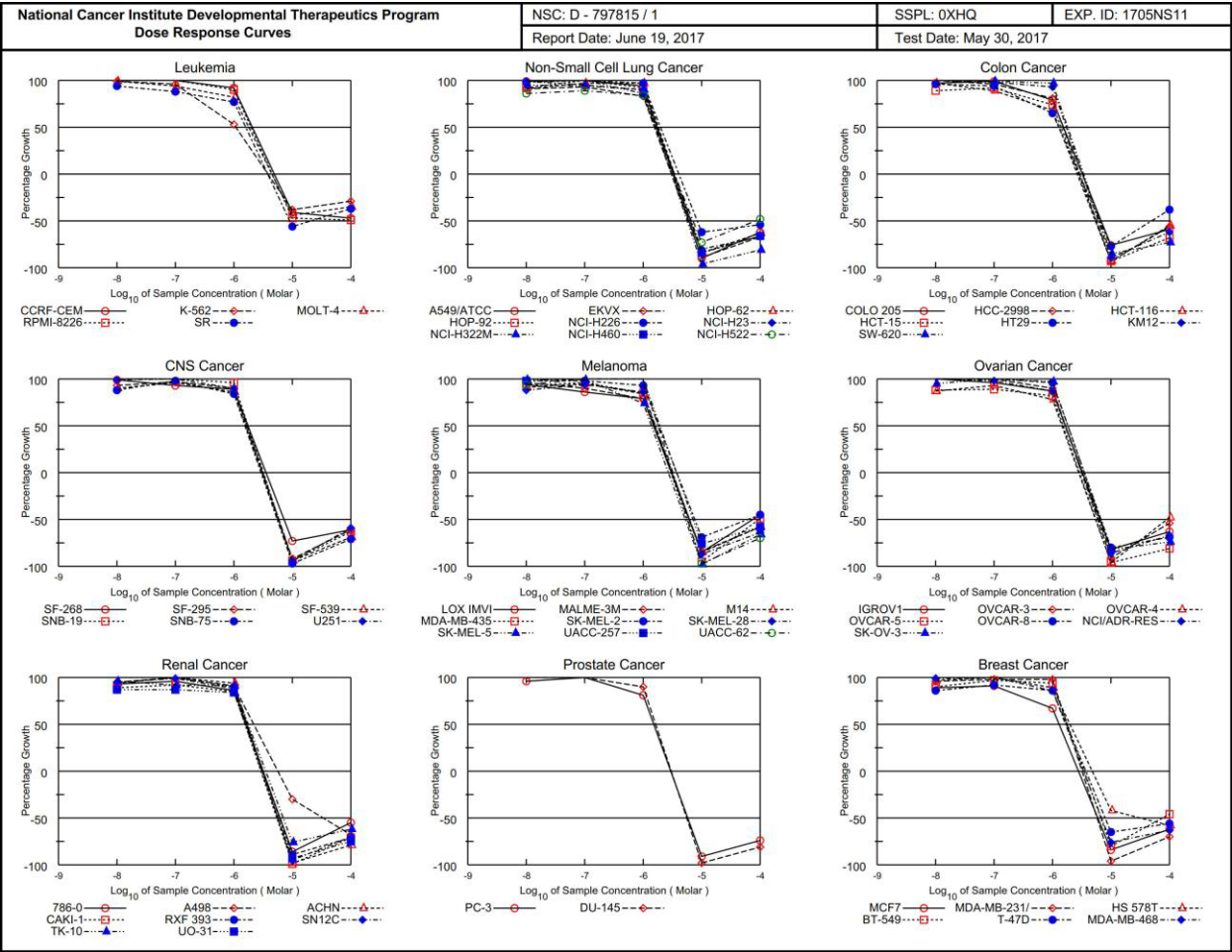


Figure S20. Anticancer screening data of compound 3 at a 5-dose assay

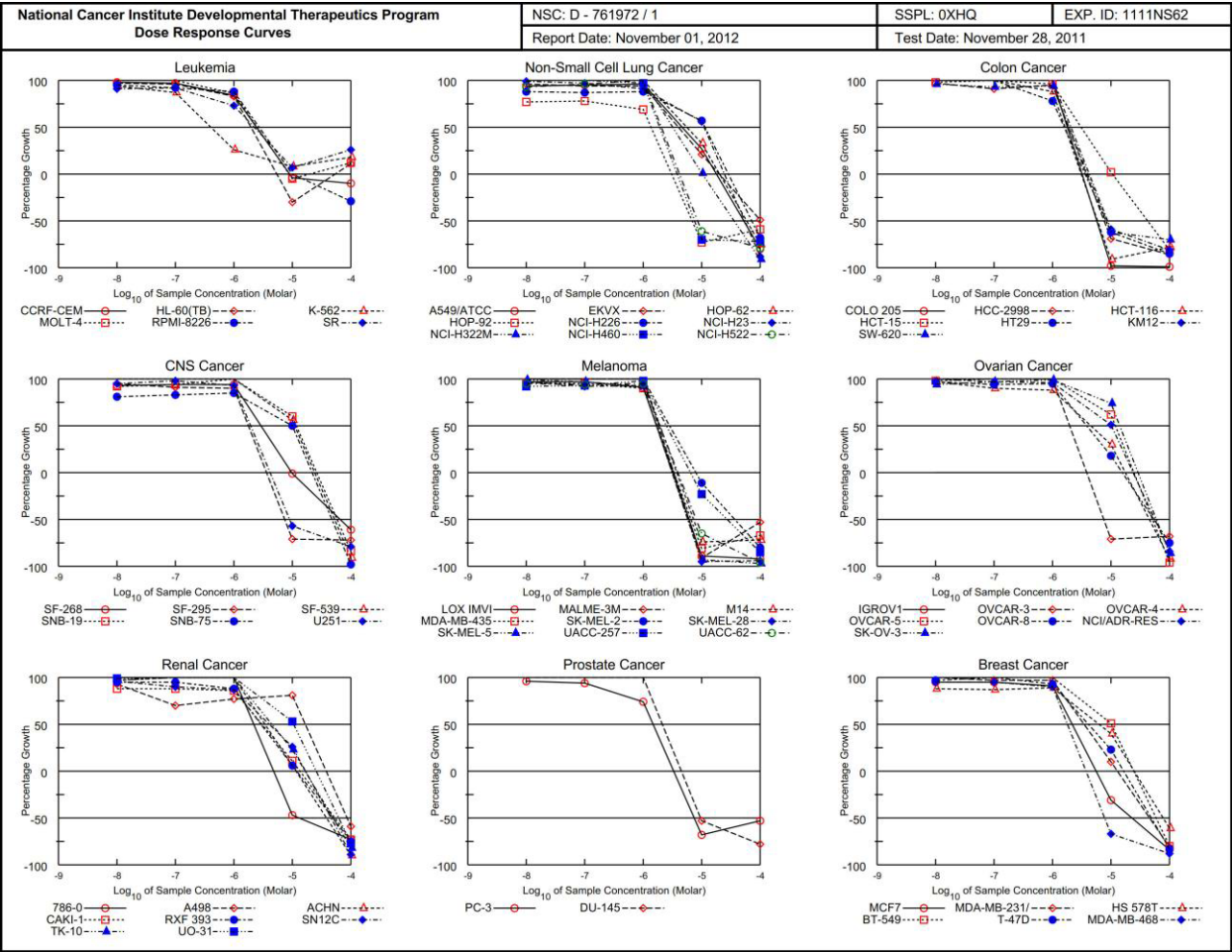


Figure S21. Anticancer screening data of compound 4 at a 5-dose assay

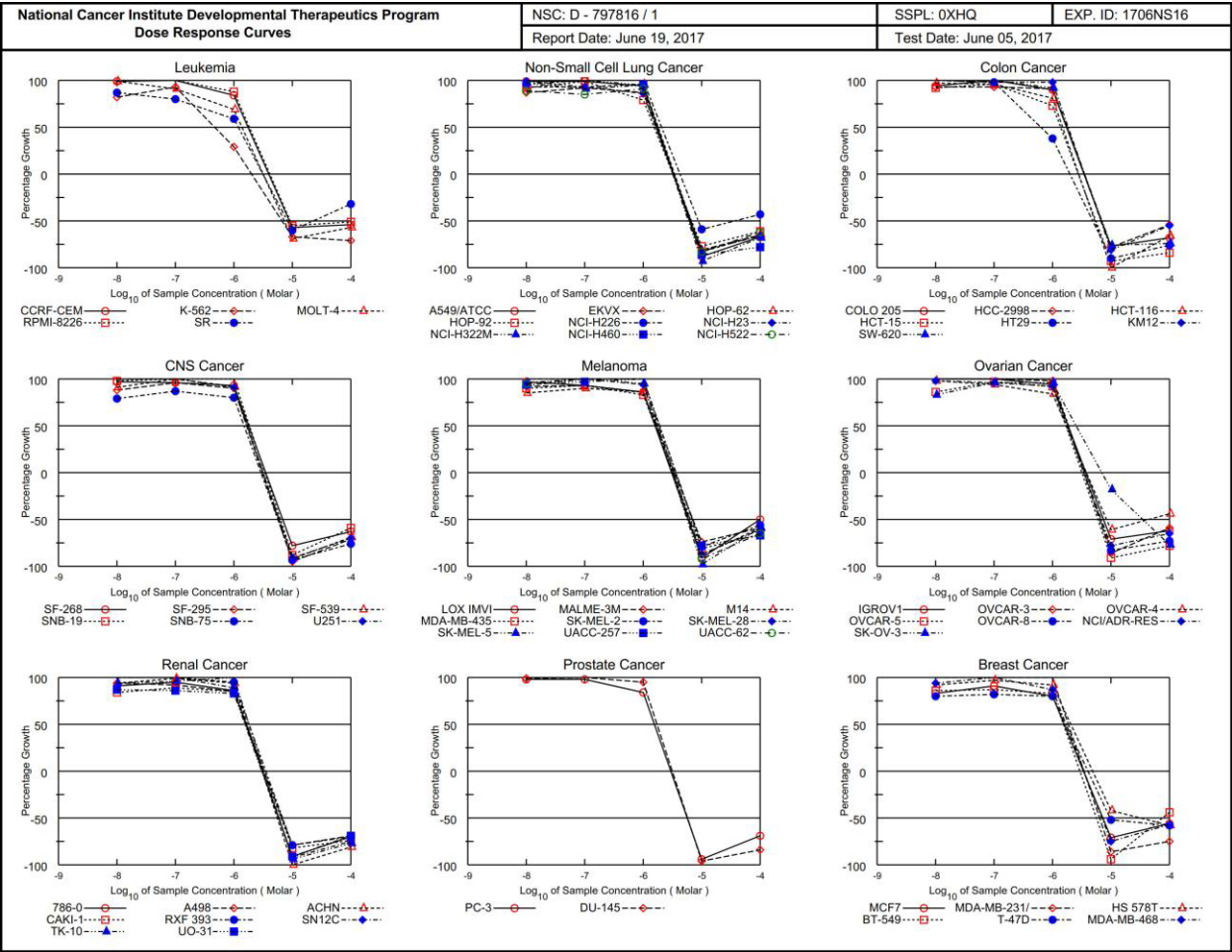


Figure S22. Anticancer screening data of compound 6 at a 5-dose assay

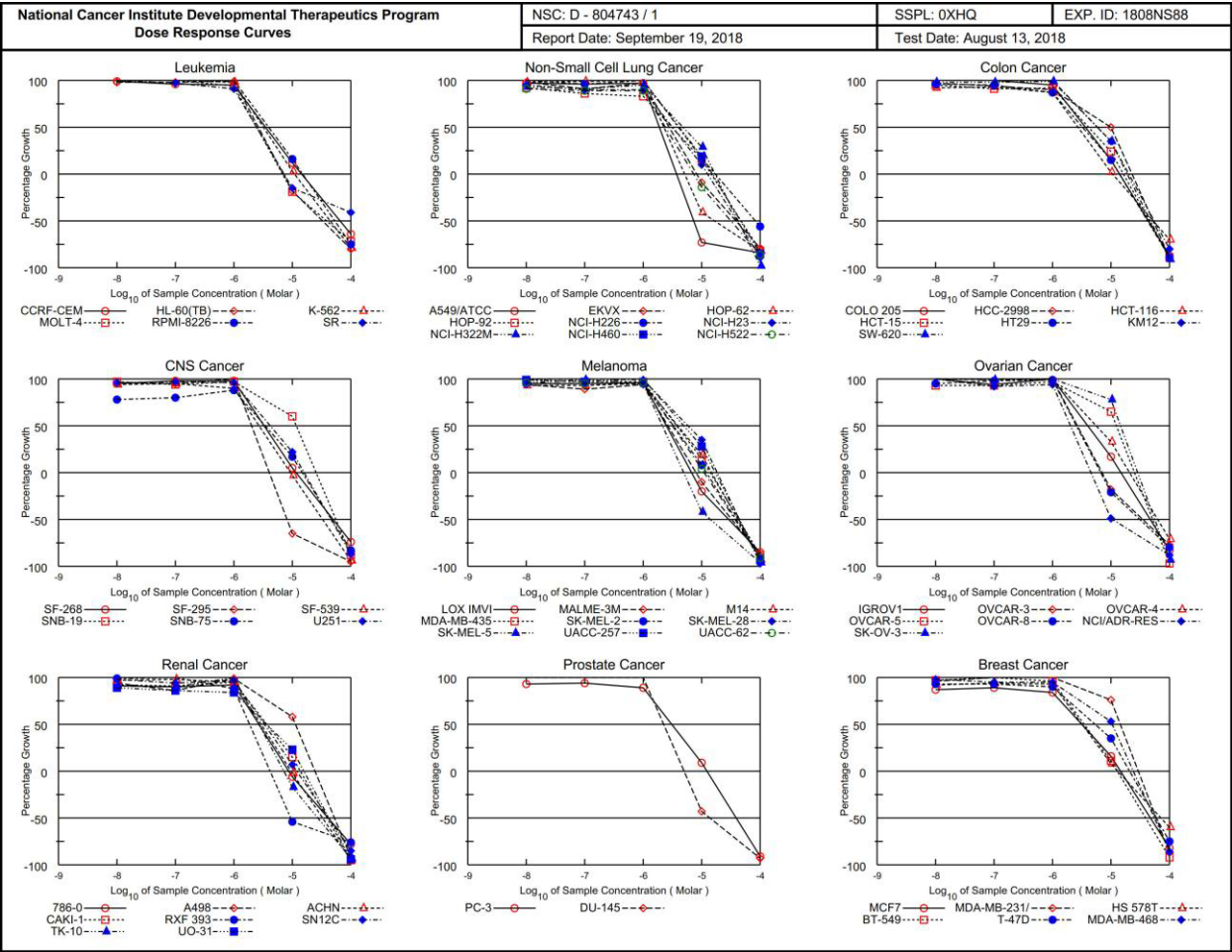


Figure S23. Anticancer screening data of compound 7 at a 5-dose assay

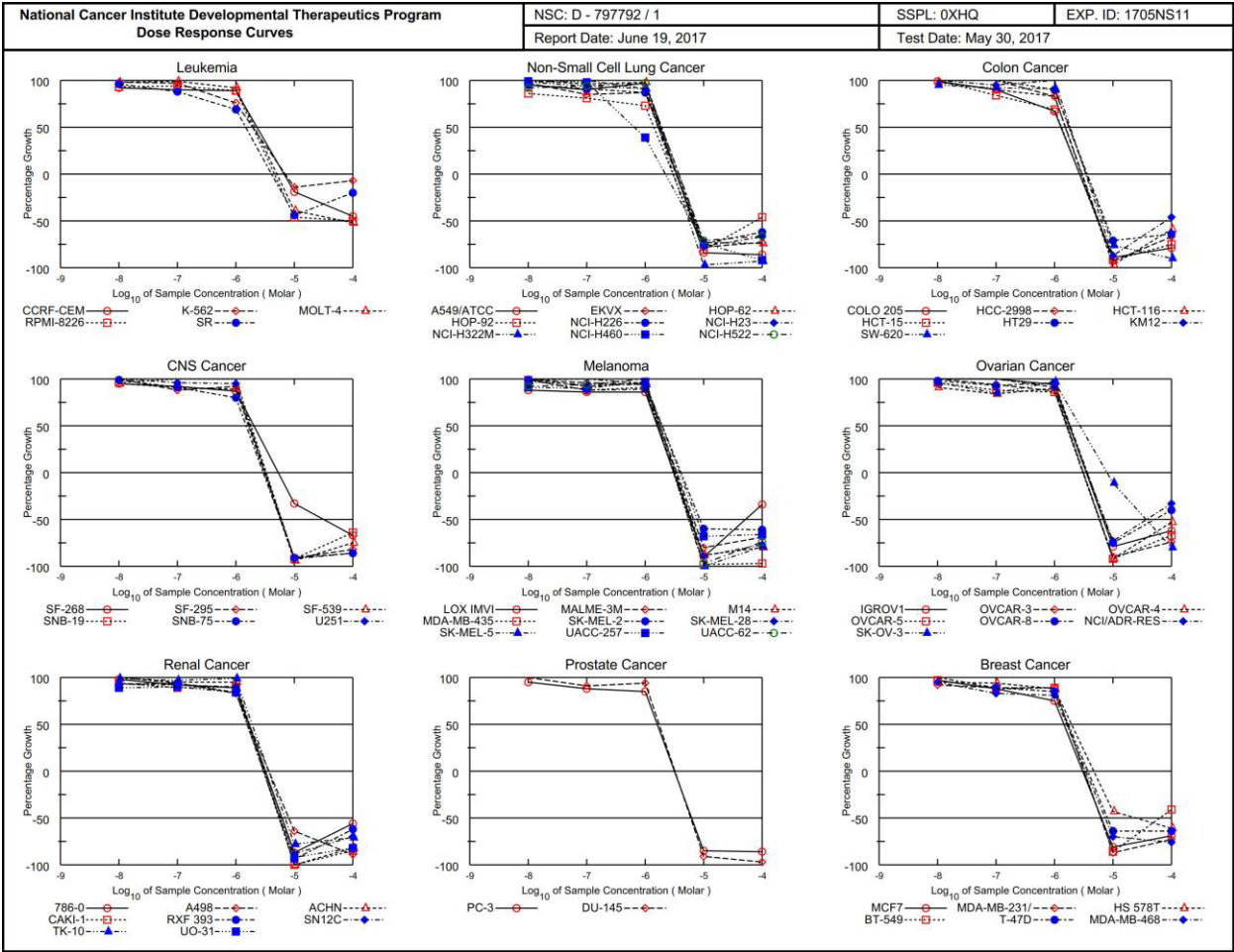


Figure S24. Anticancer screening data of compound 8 at a 5-dose assay

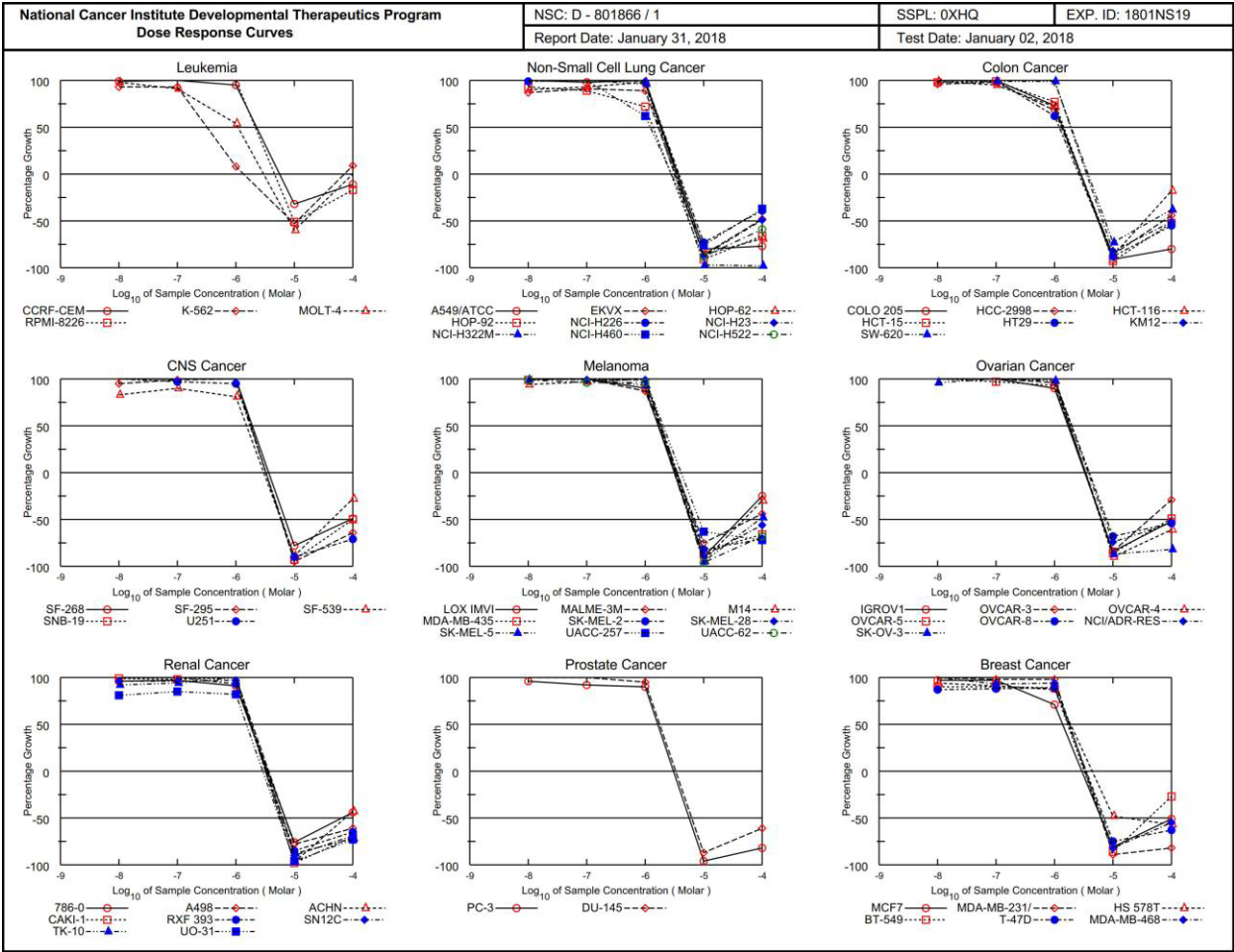


Figure S25. Anticancer screening data of compound 9 at a 5-dose assay

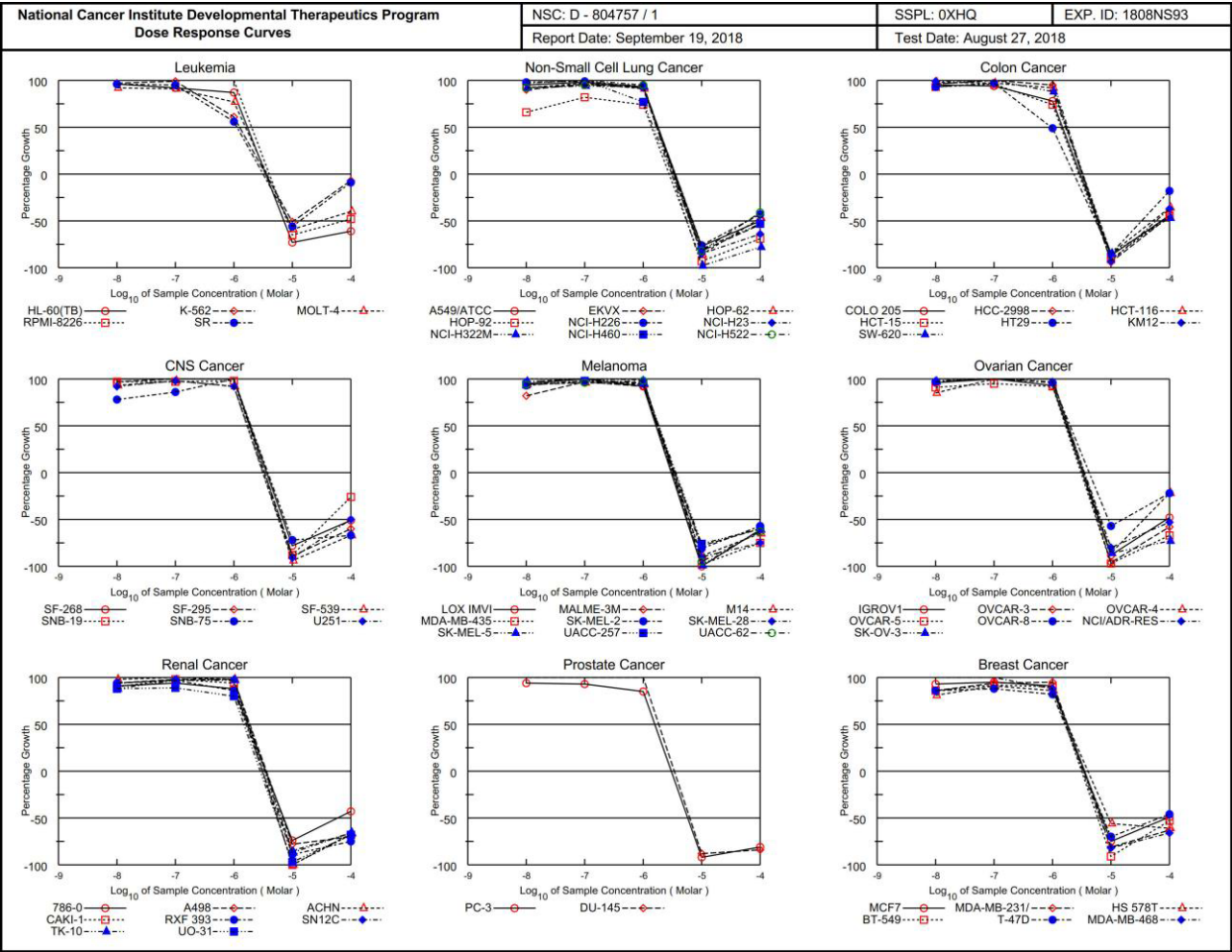


Figure S26. Anticancer screening data of compound 11 at a 5-dose assay

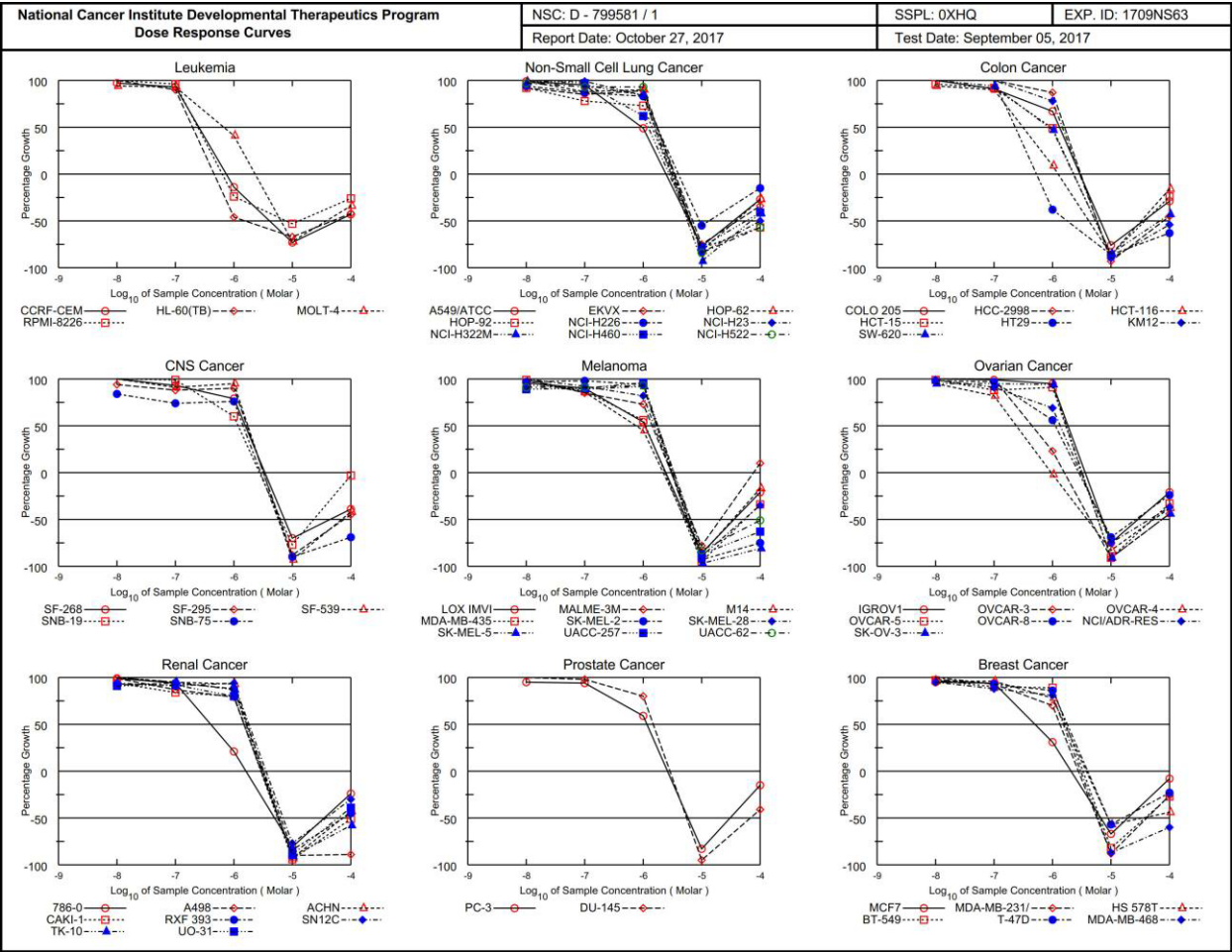


Figure S27. Anticancer screening data of compound 12 at a 5-dose assay

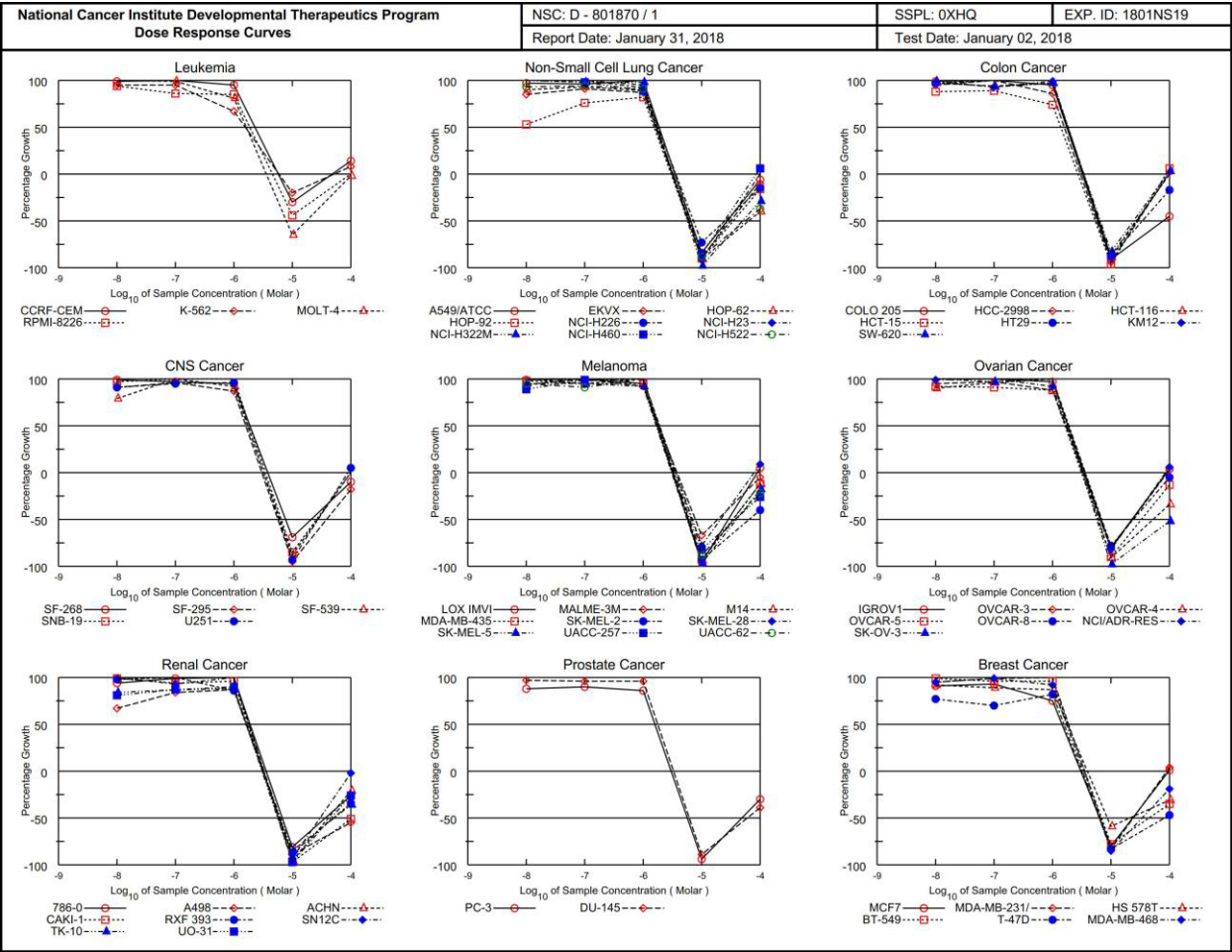


Figure S28. Anticancer screening data of compound 14 at a 5-dose assay

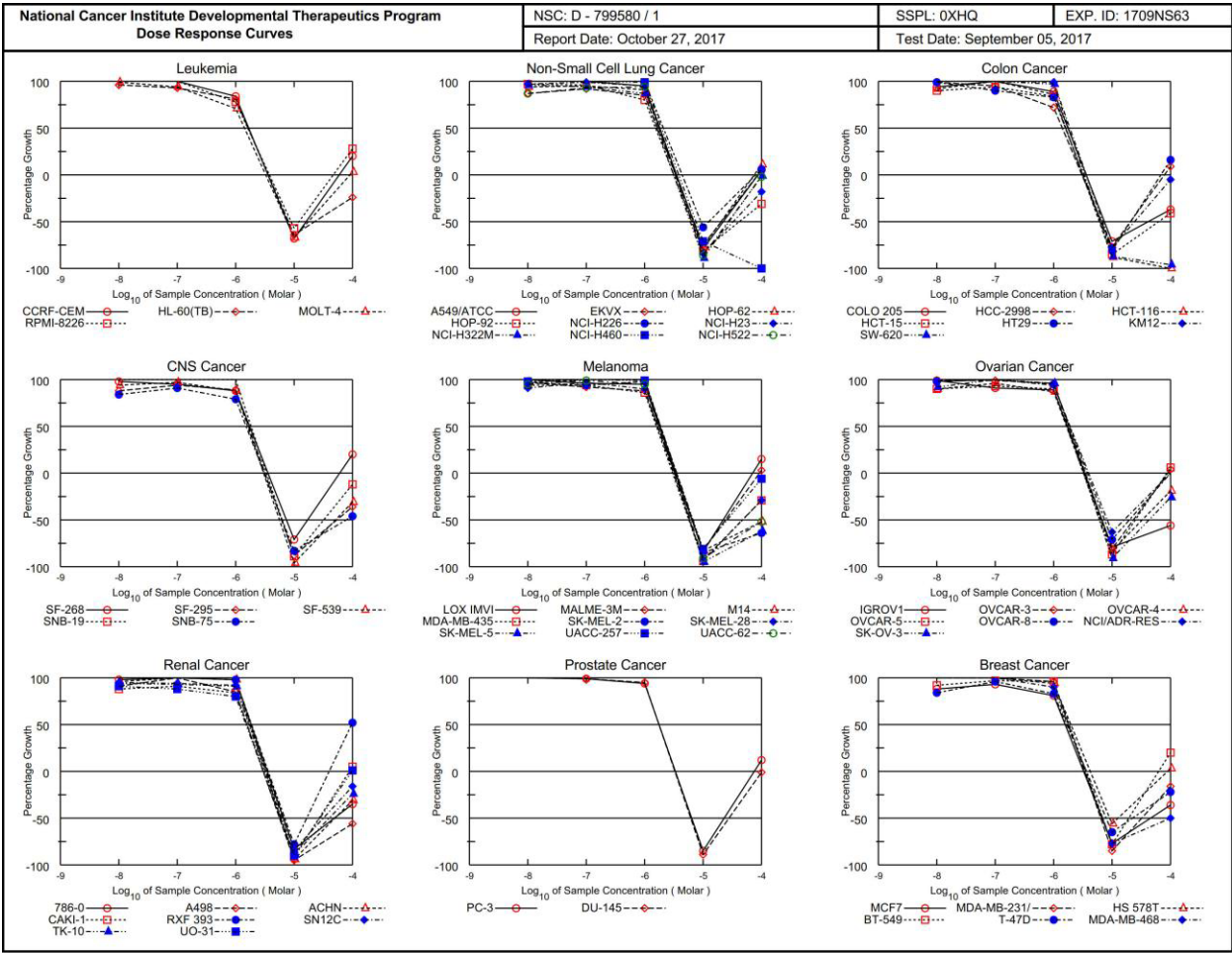


Figure S29. Anticancer screening data of compound 15 at a 5-dose assay

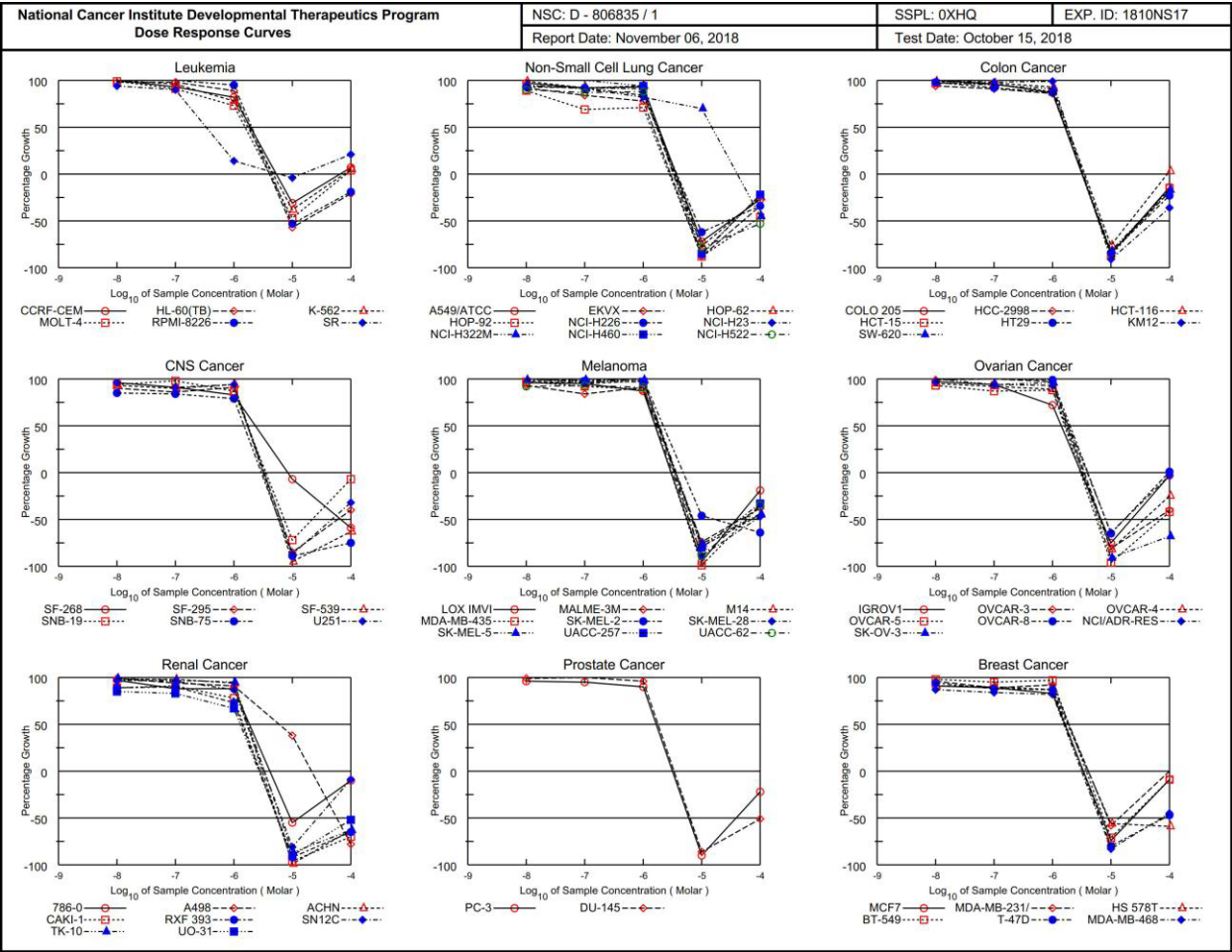


Figure S30. Anticancer screening data of compound 16 at a 5-dose assay

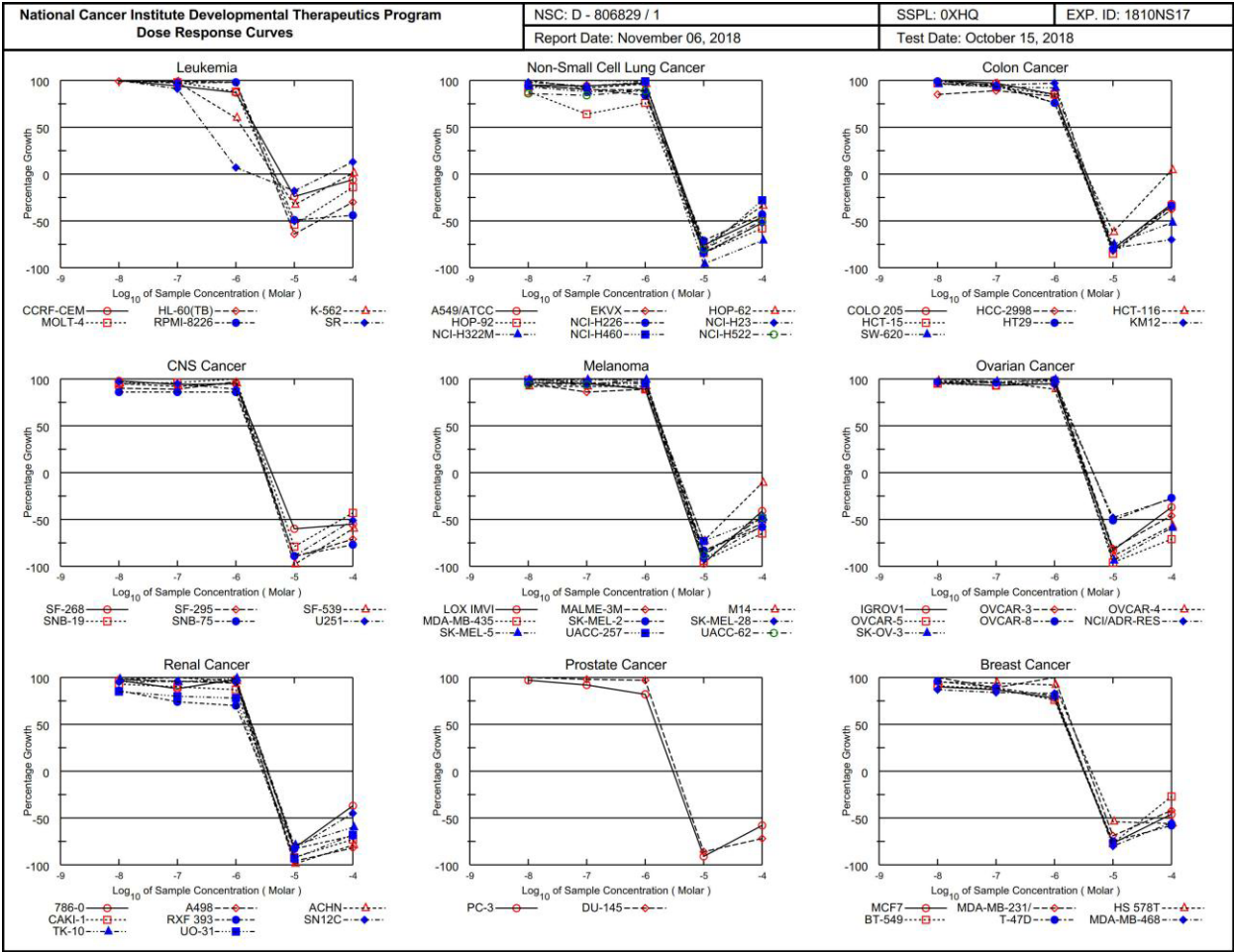


Figure S31. Anticancer screening data of compound 19 at a 5-dose assay

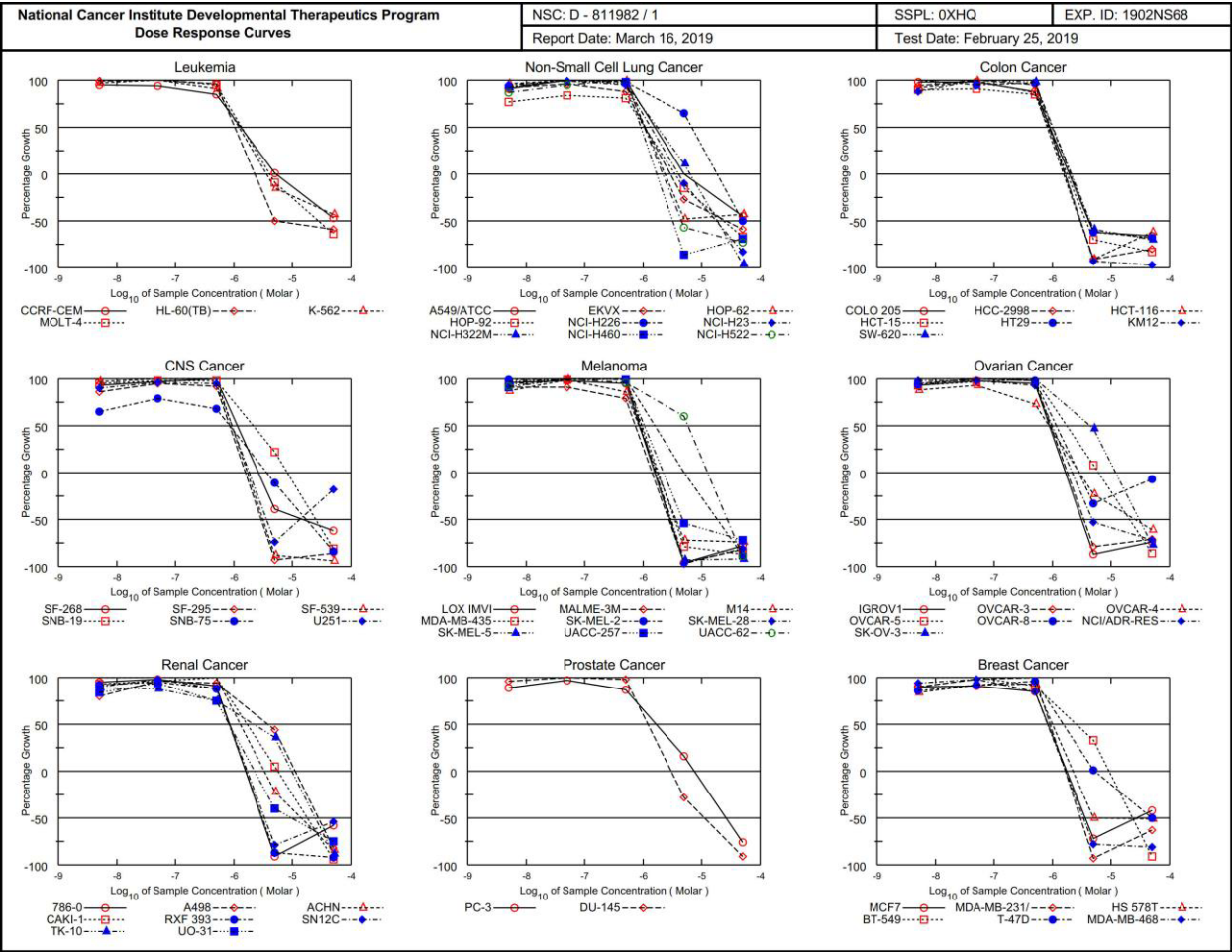


Figure S32. Anticancer screening data of compound 20 at a 5-dose assay

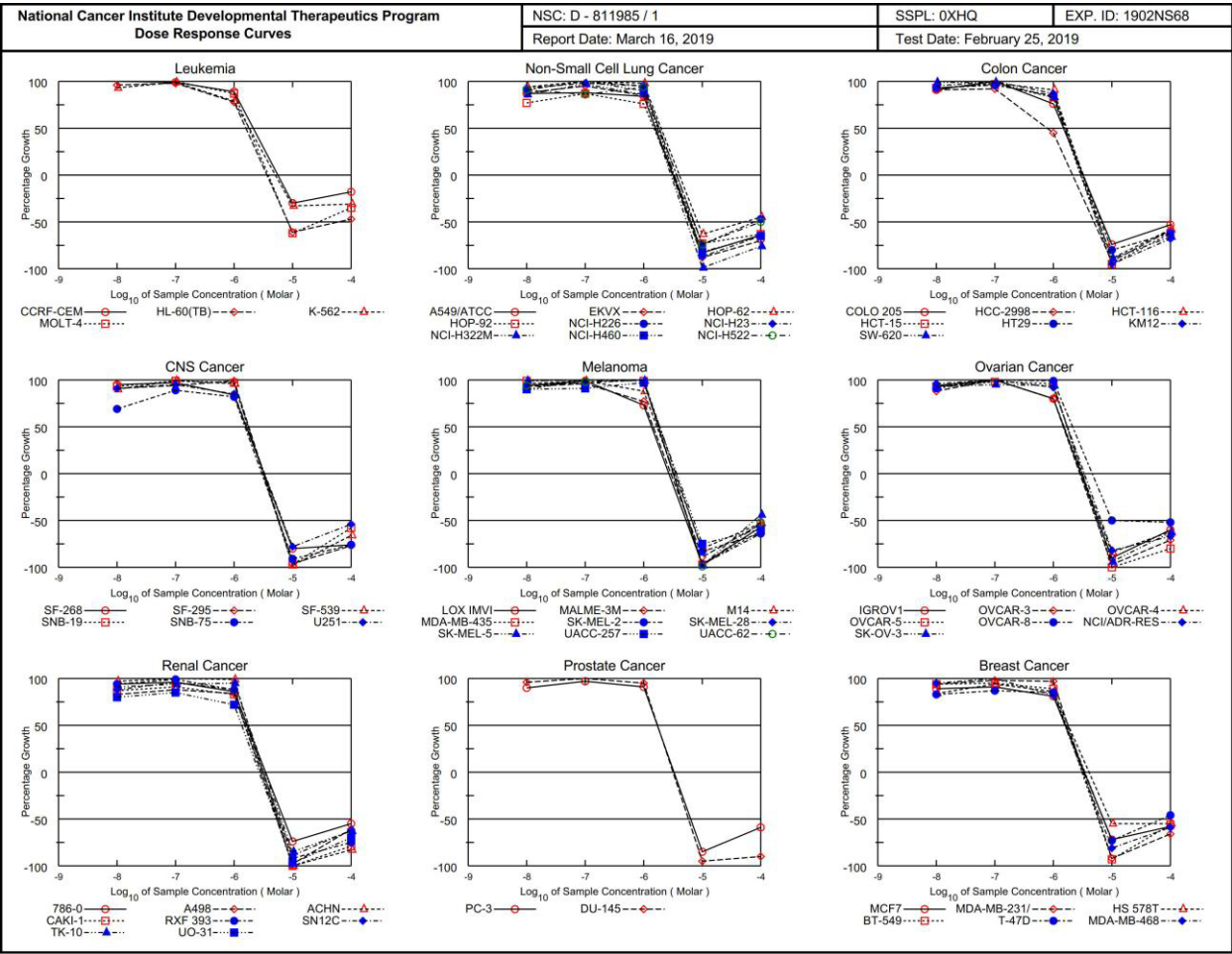


Table S1. Influence of compounds 1, 3, 4, 6, 7-9, 11, 12, 14-16, 19, 20 and standard drugs doxorubicin (DRB) and 5-fluorouracil (5-FU) on the growth of individual tumor cell panel.

Panel/cell line	GI ₅₀ ^a , μ M															
	1	3	4	6	7	8	9	11	12	14	15	16	19	20	DRB	5-FU
Leukemia																
CCRF-CEM	2.07	2.41	1.74	3.52	2.32	2.27	NT	0.25	2.28	1.67	1.93	2.14	1.31	2.12	0.08	9.97
HL-60(TB)	NT	1.95	NT	2.63	NT	NT	1.70	0.20	NT	1.64	1.85	1.98	1.03	1.58	0.19	2.30
K-562	1.08	0.40	0.47	3.18	1.96	0.32	1.25	NT	1.57	NT	1.75	1.28	1.22	1.80	NT	3.58
MOLT-4	1.79	2.50	1.37	2.46	2.10	1.09	1.59	0.67	1.62	1.42	1.55	1.84	1.35	1.78	0.03	0.35
RPMI-8226	1.94	2.71	1.85	3.91	1.94	2.26	2.06	0.24	1.86	1.60	2.03	2.12	NT	NT	0.08	0.04
SR	1.59	2.22	1.18	2.42	1.49	NT	1.14	NT	NT	NT	0.34	0.31	NT	NT	0.03	NT
MG_MID	1.69	2.03	1.32	3.02	1.96	1.48	1.55	0.34	1.83	1.58	1.57	1.61	1.23	1.82	0.08	3.25
NSC lung cancer																
A549/ATCC	1.73	4.62	1.74	1.89	1.81	2.02	1.79	0.96	1.87	1.81	1.83	1.86	1.59	1.60	0.06	0.18
EKVX	1.55	4.04	1.66	2.77	1.68	1.66	1.74	1.73	1.62	1.66	1.48	1.70	1.08	1.60	0.41	NT
HOP-62	1.81	5.89	1.81	2.30	1.91	1.82	1.70	1.71	1.65	1.76	1.81	1.84	1.08	1.98	0.07	0.39
HOP-92	1.73	1.36	1.52	3.10	1.41	1.37	1.39	1.42	1.54	1.54	1.35	1.45	1.04	1.48	0.10	77.9
NCI-H226	1.98	1.13	2.07	4.00	1.70	1.97	1.79	1.74	1.81	2.10	1.71	1.66	6.72	1.85	0.05	54.7
NCI-H23	1.71	1.11	1.65	3.15	1.76	1.83	1.78	1.60	1.75	1.76	1.70	1.82	1.34	1.77	0.15	0.33
NCI-H322M	1.63	3.69	1.73	4.78	1.64	1.73	1.68	1.55	1.76	1.72	14.9	1.62	1.74	1.57	NT	NT
NCI-H460	1.63	1.92	1.78	4.17	0.65	1.22	1.48	1.21	1.68	1.94	1.77	1.85	0.91	1.71	0.02	0.05
NCI-H522	1.65	2.04	1.71	2.38	1.90	1.93	1.80	1.75	1.70	1.75	1.69	1.70	1.04	1.83	0.03	7.27
MG_MID	1.71	2.87	1.74	3.17	1.49	1.73	1.68	1.52	1.71	1.78	3.14	1.72	1.84	1.71	0.11	20.12
Colon Cancer																
COLO 205	1.54	1.83	1.74	3.63	1.28	1.38	1.48	1.31	1.75	1.75	1.63	1.62	0.90	1.49	0.18	0.15
HCC-2998	1.51	1.89	1.75	10.1	1.54	1.31	1.74	1.61	1.58	1.40	1.63	1.58	0.87	0.79	0.26	0.05
HCT-116	1.29	1.64	1.49	2.73	1.52	1.37	1.73	0.31	1.79	1.60	1.80	1.54	0.81	1.69	0.08	0.22
HCT-15	1.39	3.06	1.39	4.21	1.31	1.44	1.40	0.97	1.38	1.59	1.65	1.61	0.84	1.53	6.46	0.11
HT29	1.27	1.59	0.63	3.25	1.78	1.20	0.94	0.24	1.93	1.59	1.64	1.48	0.99	1.63	0.12	0.17
KM12	1.73	2.07	1.84	6.09	1.86	1.93	1.92	1.47	1.84	1.89	1.82	1.86	0.91	1.60	0.27	0.21
SW-620	1.81	1.91	1.79	5.76	1.75	1.92	1.66	0.85	1.83	1.80	1.73	1.78	1.01	1.56	0.09	0.92
MG_MID	1.51	1.99	1.52	5.11	1.58	1.51	1.55	0.96	1.73	1.66	1.70	1.64	0.90	1.47	1.06	0.26
CNS cancer																
SF-268	1.74	2.90	1.79	3.27	2.04	1.91	1.97	1.56	1.88	1.73	2.32	1.95	1.22	1.61	0.10	1.62
SF-295	1.66	1.77	1.64	2.00	1.70	1.81	1.87	1.67	1.60	1.65	1.71	1.78	0.85	1.78	0.10	NT
SF-539	1.58	11.0	1.69	2.69	1.64	1.52	1.69	1.73	1.70	1.61	1.71	1.71	0.95	1.73	0.12	0.06
SNB-19	1.75	11.7	1.86	11.6	1.85	1.93	1.81	1.17	2.04	1.85	1.72	1.91	2.14	1.75	0.04	3.81
SNB-75	1.54	9.84	1.49	3.43	1.50	NT	1.98	1.43	NT	1.52	1.48	1.61	0.85	1.53	0.07	78.7
U251	1.65	1.94	1.67	4.17	1.74	1.76	1.69	NT	1.75	NT	1.74	1.66	0.92	1.64	0.04	0.92
MG_MID	1.65	6.53	1.69	4.53	1.58	1.79	1.83	1.51	1.79	1.67	1.78	1.77	1.15	1.67	0.08	17.02
Melanoma																
LOX IMVI	1.51	1.68	1.59	2.49	1.60	1.67	1.65	1.07	1.72	1.78	1.60	1.63	0.86	1.37	0.07	0.24
MALME-3M	1.50	2.02	1.68	2.64	1.79	1.70	1.77	1.42	1.84	1.66	1.77	1.68	0.73	1.46	0.12	0.05
M14	1.58	2.04	1.61	3.91	1.77	1.89	1.73	0.74	1.83	1.94	1.87	1.80	0.85	1.69	0.18	0.98
MDA-MB-435	1.56	1.71	1.59	3.76	1.65	1.87	1.85	1.10	1.73	1.58	1.61	1.64	0.95	1.78	0.25	0.07
SK-MEL-2	1.84	3.25	1.90	3.31	1.95	2.01	1.81	1.72	1.84	1.84	2.19	1.88	1.73	1.92	0.17	56.7
SK-MEL-28	1.62	1.70	1.75	5.87	1.66	1.81	1.81	1.55	2.15	1.66	1.84	1.77	0.95	1.82	0.21	1.03
SK-MEL-5	1.38	1.68	1.70	2.14	1.69	1.70	1.70	1.67	1.67	1.85	1.90	1.82	0.91	1.72	0.08	0.46
UACC-257	1.95	2.49	1.95	5.24	1.92	2.19	1.86	1.78	1.97	1.87	1.85	1.85	1.07	1.82	0.14	3.55
UACC-62	1.82	1.92	1.85	3.13	1.79	1.73	1.77	1.76	2.05	1.74	1.68	1.84	5.82	1.78	0.12	0.52
MG_MID	1.64	2.05	1.74	3.61	1.76	1.84	1.77	1.42	1.87	1.77	1.81	1.77	1.54	1.71	0.15	7.07
Ovarian Cancer																
IGROV1	1.65	NT	1.85	4.08	1.79	1.69	1.73	1.83	1.84	1.70	1.41	1.79	0.89	1.50	0.17	1.22
OVCAR-3	1.66	1.96	1.83	2.69	1.62	1.79	1.91	0.46	1.67	1.81	1.84	1.88	0.93	1.48	0.39	0.01
OVCAR-4	1.45	4.48	1.72	5.63	1.65	1.86	1.99	0.24	1.86	1.66	1.69	1.66	0.86	1.53	0.37	4.43
OVCAR-5	1.51	11.9	1.69	1.24	1.60	1.75	1.67	1.69	1.64	1.68	1.61	1.77	1.76	1.71	0.41	10.9
OVCAR-8	1.83	3.83	1.96	2.55	1.87	1.99	2.01	1.12	1.91	1.86	1.99	2.12	1.16	2.13	0.10	1.74
NCI/ADR-RES	1.63	10.2	1.76	2.02	1.78	1.98	1.84	1.35	1.74	1.91	1.89	2.05	0.99	1.74	7.16	0.31
SK-OV-3	1.83	14.1	2.54	14.5	2.73	1.81	1.89	1.73	1.87	1.77	1.76	1.79	4.42	1.72	0.22	21.8
MG_MID	1.65	7.75	1.91	4.67	1.86	1.84	1.86	1.20	1.79	1.77	1.74	1.86	1.57	1.69	1.26	5.77
Renal Cancer																
786-0	1.62	2.25	1.60	2.66	1.66	1.76	1.71	0.40	1.92	1.85	1.85	1.84	0.84	1.68	0.13	0.72
A498	2.17	16.7	1.63	11.4	1.68	2.03	1.87	1.49	1.63	1.56	5.99	1.71	3.83	1.54	0.10	0.35
ACHN	1.70	3.44	1.69	2.93	1.71	1.84	1.76	1.71	1.98	1.77	1.68	1.72	1.42	1.76	0.08	0.27
CAKI-1	1.55	3.05	1.62	3.70	1.62	1.81	1.69	1.49	1.74	1.56	1.45	1.61	1.69	1.52	0.95	0.07
RXF 393	1.68	2.88	1.81	1.84	1.56	1.74	1.61	1.67	1.62	NT	1.38	1.35	0.83	1.62	0.10	2.61

SN12C	1.62	4.02	1.64	3.34	1.68	1.79	1.83	1.81	1.88	1.73	1.67	1.79	0.84	1.64	0.07	0.49
TK-10	1.76	4.64	1.84	2.66	1.89	1.88	1.81	1.61	1.66	1.69	1.77	1.88	2.21	1.78	NT	1.12
UO-31	1.56	10.5	1.54	3.59	1.56	1.52	1.47	1.50	1.64	1.50	1.29	1.46	0.82	1.34	0.49	1.42
MG_MID	1.71	5.94	1.47	4.01	1.67	1.79	1.72	1.46	1.76	1.66	2.13	1.67	1.56	1.61	0.27	0.88
Prostate cancer																
PC-3	2.94	1.48	1.55	3.05	1.61	1.65	1.58	1.16	1.58	1.76	1.66	1.53	1.65	1.70	0.32	2.36
DU-145	3.02	2.30	1.72	2.25	1.74	1.77	1.98	1.48	1.77	1.76	1.79	1.81	1.21	1.72	0.11	0.36
MG_MID	2.98	1.89	1.64	2.65	1.67	1.71	1.78	1.32	1.67	1.76	1.72	1.67	1.43	1.71	0.21	1.36
Breast cancer																
MCF7	1.29	2.16	1.58	3.14	1.44	1.37	1.77	0.49	1.45	1.56	1.62	1.51	0.83	1.60	0.03	0.07
MDA-MB-31/ATCC	1.77	3.50	1.88	14.5	1.66	1.81	1.80	1.34	1.88	1.80	1.91	1.98	0.96	1.77	0.51	6.60
HS 578T	1.99	6.16	2.05	3.20	1.96	1.87	1.79	1.61	1.79	1.96	1.82	1.94	0.99	1.80	0.33	9.77
BT-549	1.79	1.01	1.55	3.46	1.68	1.68	1.66	1.69	1.84	1.84	1.90	1.48	2.56	1.64	0.23	10.6
T-47D	1.73	4.08	1.68	5.38	1.71	1.72	1.63	1.80	1.57	1.67	1.67	1.55	1.51	1.67	0.06	8.12
MDA-MB-468	1.66	1.79	1.70	10.4	1.61	1.78	1.68	1.52	1.74	1.74	1.56	1.59	0.82	1.58	0.05	NT
MG_MID	1.71	3.12	1.74	6.68	1.68	1.71	1.72	1.41	1.71	1.76	1.75	1.67	1.28	1.68	0.19	7.03
MG_MID ₆₀	1.70	3.83	1.65	4.21	1.68	1.73	1.75	1.29	1.77	1.72	1.99	1.72	1.42	1.66	0.38	6.97

^aGI₅₀ was the drug concentration resulting in a 50% reduction in the net protein increase (as measured by SRB staining) in control cells during the drug incubation, determined at five concentration levels (100, 10, 1.0, 0.1 and 0.01 μ M).

Table S2. Influence of compounds 1, 3, 4, 6, 7-9, 11, 12, 14-16, 19, 20 on the growth of individual tumor cell panel.

Panel/cell line	TGI ^a , μ M													
	1	3	4	6	7	8	9	11	12	14	15	16	19	20
Leukemia														
CCRF-CEM	4.91	8.96	3.93	14.5	6.73	5.63	NT	0.74	NT	NT	NT	6.06	5.26	5.56
HL-60(TB)	NT	NT	NT	7.02	NT	NT	3.50	0.46	NT	3.63	4.06	4.02	2.27	3.62
K-562	3.79	>100	2.02	10.8	7.00	NT	3.50	NT	NT	NT	NT	NT	3.63	5.04
MOLT-4	4.50	NT	3.15	6.80	5.04	NT	3.70	2.30	3.59	NT	NT	4.16	4.07	3.86
RPMI-8226	4.51	10.1	4.15	14.9	4.58	4.73	4.10	0.63	4.54	NT	4.42	4.63	NT	NT
SR	3.79	>100	3.13	7.17	4.12	NT	3.16	NT	NT	NT	NT	NT	NT	NT
MG_MID	4.30	54.76	3.28	10.19	5.49	5.18	3.59	1.03	4.06	3.63	4.24	4.72	3.81	4.52
NSC lung cancer														
A549/ATCC	3.24	17.8	3.28	3.71	3.43	3.73	3.52	2.45	3.50	NT	3.66	3.62	5.11	3.18
EKVX	3.03	20.1	3.29	8.27	3.37	3.21	3.38	3.49	3.11	NT	2.96	3.29	2.94	3.10
HOP-62	3.42	20.4	3.49	5.16	3.75	3.41	3.25	3.34	3.13	NT	3.56	3.59	2.36	4.04
HOP-92	3.33	30.7	3.19	14.6	2.96	2.77	2.77	3.01	3.01	3.14	2.80	2.97	3.46	3.21
NCI-H226	4.09	28.5	4.25	16.9	3.47	3.81	3.54	4.01	3.63	NT	3.77	3.47	18.3	3.66
NCI-H23	3.39	24.6	3.26	12.5	3.50	3.40	3.37	3.17	NT	3.39	3.27	3.42	4.00	3.32
NCI-H322M	3.03	10.3	3.19	16.9	3.03	3.14	3.07	2.79	3.16	3.11	4.05	3.01	6.38	2.91
NCI-H460	3.21	3.80	3.35	15.2	2.20	2.81	3.09	2.77	NT	3.82	3.37	3.50	1.71	3.33
NCI-H522	3.42	4.19	3.32	7.31	3.77	3.50	3.44	3.35	3.23	3.33	3.38	3.36	2.17	3.63
MG_MID	3.35	17.82	3.40	11.17	3.28	3.30	3.27	3.15	3.25	3.36	3.42	3.36	5.16	3.38
Colon Cancer														
COLO 205	3.24	3.25	3.46	13.9	2.68	2.79	2.97	2.94	3.24	3.59	3.19	3.26	1.94	3.23
HCC-2998	2.93	3.81	3.46	23.0	2.97	2.76	3.19	3.05	NT	NT	3.21	3.18	1.62	2.14
HCT-116	2.63	3.11	2.81	10.6	2.88	2.82	3.31	1.25	3.33	3.11	NT	NT	1.54	3.21
HCT-15	2.77	1.04	2.75	16.4	2.68	2.84	2.81	2.32	NT	3.15	3.20	3.17	1.76	2.92
HT29	2.85	3.62	1.97	13.8	3.63	2.58	2.31	0.54	3.50	NT	3.23	3.08	2.04	3.28
KM12	3.24	4.26	3.51	20.3	3.44	3.60	3.42	2.91	3.41	3.63	3.33	3.57	1.65	3.02
SW-620	3.41	4.00	3.54	18.8	3.49	3.75	3.23	2.26	NT	3.37	3.36	3.54	2.11	3.04
MG_MID	3.01	3.30	3.07	16.69	3.11	3.02	3.03	2.18	3.37	3.37	3.25	3.30	1.80	2.98
CNS cancer														
SF-268	3.54	9.77	3.50	11.6	5.31	3.64	3.71	3.39	3.79	NT	8.44	4.12	2.69	3.25
SF-295	3.13	3.62	3.06	4.04	3.19	3.26	3.42	3.21	3.01	3.17	3.30	3.29	1.58	3.21
SF-539	3.01	2.41	3.16	9.26	3.07	2.99	3.13	3.19	NT	3.01	3.15	3.11	1.73	3.13
SNB-19	3.20	2.61	3.43	25.3	3.35	3.44	3.36	2.72	3.68	3.40	3.54	3.62	8.11	3.17
SNB-75	2.91	2.17	2.90	14.8	2.94	NT	3.84	2.87	NT	3.09	2.94	3.10	3.62	2.97
U251	3.09	4.18	3.15	15.9	3.23	3.26	3.17	NT	NT	NT	3.29	3.17	1.82	3.32
MG_MID	3.15	4.13	3.20	13.48	3.51	3.31	3.44	3.08	3.49	3.17	4.11	3.40	3.26	3.18
Melanoma														
LOX IMVI	3.03	3.19	3.05	6.76	3.08	3.16	3.01	2.42	NT	NT	3.00	3.02	1.57	2.70
MALME-3M	3.05	3.56	3.44	8.01	3.47	3.46	3.48	NT	3.79	NT	3.56	3.26	1.42	2.91
M14	3.13	3.87	3.12	14.8	3.31	3.38	3.26	2.19	3.30	3.59	3.58	3.62	1.76	3.34
MDA-MB-435	2.95	3.36	3.21	14.0	3.02	3.49	3.28	2.36	3.19	3.00	2.97	3.07	1.81	3.20
SK-MEL-2	3.75	8.17	3.63	12.2	4.09	3.69	3.48	3.18	3.32	3.43	4.83	3.52	5.04	3.58
SK-MEL-28	3.15	3.14	3.30	18.4	3.18	3.35	3.32	3.03	NT	3.11	3.38	3.26	1.67	3.25
SK-MEL-5	2.70	3.14	3.09	4.94	3.06	3.14	3.08	3.07	3.08	3.32	3.68	3.39	1.65	3.19
UACC-257	3.73	6.47	3.70	17.0	3.89	4.29	3.63	3.34	3.65	3.54	3.54	3.68	2.21	3.65
UACC-62	3.25	3.93	3.35	10.9	3.21	3.16	3.22	3.39	3.64	3.23	3.20	3.39	12.6	3.17
MG_MID	3.19	4.31	3.32	11.89	3.37	3.46	3.30	2.87	3.42	3.32	3.53	3.36	3.30	3.22
Ovarian Cancer														
IGROV1	3.26	NT	3.72	14.8	3.48	3.28	3.27	3.61	NT	3.37	3.08	3.43	1.67	2.95
OVCAR-3	3.13	3.84	3.42	7.06	3.10	3.40	3.37	1.60	NT	NT	3.51	3.56	1.79	2.85
OVCAR-4	2.81	17.5	3.79	20.8	3.12	3.39	3.60	0.94	3.38	3.25	3.32	3.16	2.85	3.09
OVCAR-5	2.89	24.6	3.18	25.3	3.04	3.32	3.07	3.18	3.13	NT	3.01	3.21	6.15	3.06
OVCAR-8	3.51	15.6	3.61	6.66	3.66	3.94	4.25	2.80	3.65	NT	NT	4.57	2.80	4.61
NCI/ADR-RES	3.18	24.0	3.47	4.52	3.59	3.80	3.52	3.01	NT	NT	3.93	4.59	2.17	3.37
SK-OV-3	3.49	28.9	3.97	28.6	7.93	3.37	3.50	3.23	3.30	3.27	3.26	3.25	12.0	3.17
MG_MID	3.18	19.07	3.59	15.39	3.99	3.50	3.51	2.62	3.37	3.30	3.35	3.68	4.20	3.30
Renal Cancer														
786-0	3.16	4.84	3.06	8.59	3.21	3.51	3.48	1.60	3.59	3.48	4.14	3.51	1.58	3.44
A498	5.63	38.1	3.29	24.5	3.67	3.79	3.60	2.94	3.14	2.96	21.4	3.13	11.2	2.90
ACHN	3.09	11.5	3.06	9.56	3.08	3.26	3.14	3.16	3.45	3.24	3.07	3.10	3.40	3.14
CAKI-1	2.89	13.7	3.23	13.8	2.97	3.22	3.05	2.89	3.15	NT	2.82	3.06	5.58	2.85
RXF 393	3.18	11.7	3.51	4.15	2.98	3.32	3.10	3.27	3.13	NT	2.78	2.86	1.59	3.07

SN12C		3.03	16.8	3.11	12.0	3.20	3.31	3.44	3.55	3.37	3.33	3.30	3.41	1.67	3.15
TK-10		3.50	16.7	3.32	7.15	3.61	3.45	3.37	3.08	3.23	3.20	3.33	3.59	9.75	3.36
UO-31		2.99	25.5	2.99	15.7	3.00	2.89	2.82	2.96	3.04	NT	2.68	2.85	2.24	2.65
	MG_MID	3.43	17.36	3.20	11.93	3.22	3.34	3.25	2.93	3.26	3.24	5.44	3.19	4.63	3.07
Prostate cancer															
PC-3		2.94	3.33	2.97	12.3	3.17	3.06	3.02	2.62	3.00	NT	3.16	2.98	7.48	3.28
DU-145		3.02	4.70	3.14	5.02	3.23	3.33	3.55	2.87	3.30	3.28	3.37	3.40	3.01	3.15
	MG_MID	2.98	4.02	3.06	8.66	3.20	3.20	3.29	2.75	3.15	3.28	3.27	3.19	5.25	3.22
Breast cancer															
MCF7		2.77	5.54	3.39	14.5	3.01	2.92	3.54	2.06	NT	3.25	3.38	3.18	1.73	3.40
MDA-MB-31/ATCC		3.21	13.0	3.48	29.3	3.20	3.35	3.47	2.77	NT	3.40	4.12	3.91	1.71	3.27
HS 578T		4.79	24.7	4.86	13.2	4.69	4.39	4.04	3.78	3.94	NT	4.08	4.26	2.23	4.07
BT-549		3.46	24.5	2.96	12.7	3.24	3.23	3.14	3.32	3.56	NT	3.78	3.14	9.23	3.07
T-47D		3.71	16.3	4.03	20.9	3.69	3.47	3.46	4.02	3.15	3.64	3.31	3.26	5.15	3.45
MDA-MB-468		3.38	3.74	3.44	24.0	3.45	3.43	3.30	3.03	3.33	3.45	3.13	3.22	1.66	3.20
	MG_MID	3.55	14.63	3.69	19.10	3.55	3.47	3.49	3.16	3.50	3.44	3.63	3.50	3.62	3.41
MG_MID ₆₀		3.34	15.49	3.31	13.17	3.64	3.53	3.35	2.64	3.43	3.35	3.80	3.52	3.89	3.36

^aTGI is a molar concentration of the compound leading to total inhibition

Table S3. Influence of compounds 1, 3, 4, 6, 7-9, 11, 12, 14-16, 19, 20 on the growth of individual tumor cell panel.

Panel/cell line	LC ₅₀ ^a , μ M													
	1	3	4	6	7	8	9	11	12	14	15	16	19	20
Leukemia														
CCRF-CEM	>100	>100	8.88	65.3	>100	>100	NT	NT	>100	NT	>100	>100	>50.0	>100
HL-60(TB)	NT	>100	NT	32.6	NT	NT	7.19	NT	NT	NT	NT	NT	5.00	NT
K-562	>100	>100	6.68	43.8	>100	NT	NT	NT	>100	NT	>100	>100	>50.0	>100
MOLT-4	>100	>100	7.25	38.2	74.8	NT	NT	NT	NT	NT	>100	NT	27.9	NT
RPMI-8226	>100	>100	9.27	52.9	96.8	NT	NT	NT	>100	NT	NT	>100	NT	NT
SR	NT	>100	NT	>100	>100	NT	NT	NT	NT	NT	>100	>100	NT	NT
MG_MID	>100	>100	8.02	55.47	94.32	>100	7.19	-	>100	-	>100	>100	33.22	>100
NSC lung cancer														
A549/ATCC	6.08	52.4	6.16	7.31	6.50	6.89	NT	NT	NT	NT	NT	NT	>50.0	6.34
EKVX	5.92	>100	6.53	38.4	6.77	NT	6.56	NT	NT	NT	NT	6.35	26.5	6.01
HOP-62	6.46	58.9	6.52	16.7	7.34	6.38	NT	NT	NT	NT	NT	NT	>50.0	NT
HOP-92	6.42	6.92	6.67	47.0	NT	5.61	5.52	6.42	NT	NT	NT	6.11	23.1	6.96
NCI-H226	8.43	71.8	NT	82.2	7.09	NT	NT	NT	NT	NT	NT	NT	49.9	NT
NCI-H23	6.68	54.5	6.47	40.0	6.95	NT	6.39	NT	NT	NT	NT	6.41	17.5	6.24
NCI-H322M	5.64	36.0	5.89	42.1	5.60	5.70	5.61	NT	NT	NT	>100	5.62	18.6	5.43
NCI-H460	6.30	7.56	6.30	46.2	6.12	NT	6.45	NT	NT	7.53	NT	NT	3.19	6.49
NCI-H522	NT	8.59	6.43	31.7	7.49	6.35	NT	6.40	NT	NT	6.78	6.64	4.54	NT
MG_MID	6.49	44.07	6.37	39.07	6.73	6.18	6.11	6.41	-	7.53	53.39	6.23	27.04	6.24
Colon Cancer														
COLO 205	6.82	5.77	6.86	43.0	5.61	5.64	NT	NT	NT	NT	NT	NT	4.17	6.96
HCC-2998	5.68	7.69	6.85	52.3	5.72	NT	NT	NT	NT	NT	NT	NT	3.02	4.97
HCT-116	5.38	5.92	5.31	52.9	5.47	NT	NT	NT	NT	6.05	NT	NT	2.93	6.08
HCT-15	5.52	42.3	5.52	45.4	5.47	5.59	NT	NT	NT	NT	NT	NT	3.69	5.56
HT29	NT	8.23	4.85	41.8	7.42	5.56	NT	1.75	NT	NT	NT	NT	4.22	6.59
KM12	6.09	8.78	6.68	55.1	NT	6.71	NT	5.78	NT	NT	NT	6.85	3.00	5.67
SW-620	6.44	8.35	7.03	47.0	6.95	NT	NT	NT	NT	6.31	NT	7.04	4.39	5.93
MG_MID	5.98	12.43	6.16	48.21	6.11	5.87	-	3.76	-	6.18	-	6.94	3.63	5.96
CNS cancer														
SF-268	7.19	65.6	6.84	49.6	31.5	NT	6.98	NT	NT	NT	67.9	8.68	14.8	6.56
SF-295	5.90	7.40	5.72	8.15	5.99	5.88	6.24	NT	NT	NT	NT	6.08	2.94	5.79
SF-539	5.72	52.7	5.90	33.0	5.78	NT	5.80	NT	NT	NT	5.79	5.66	3.17	5.67
SNB-19	5.86	58.1	6.31	55.2	6.07	NT	NT	NT	NT	NT	NT	NT	25.0	5.74
SNB-75	5.50	47.1	5.63	46.5	5.76	NT	7.44	5.72	NT	NT	5.85	5.97	17.1	5.77
U251	5.76	9.00	5.94	45.5	5.98	6.07	NT	NT	NT	NT	NT	6.07	NT	6.72
MG_MID	5.98	39.98	6.06	39.66	10.18	5.97	6.61	5.72	-	-	26.51	6.49	12.60	6.04
Melanoma														
LOX IMVI	NT	6.05	5.84	29.0	NT	NT	5.49	NT	NT	NT	NT	NT	2.86	5.31
MALME-3M	6.18	6.27	7.08	32.5	6.72	NT	6.84	NT	NT	NT	NT	6.34	2.74	5.82
M14	6.19	7.34	6.04	41.5	6.19	NT	6.12	NT	NT	6.65	NT	NT	3.64	6.62
MDA-MB-435	NT	6.59	6.49	43.0	5.55	6.51	5.81	NT	NT	NT	NT	5.75	3.45	5.76
SK-MEL-2	NT	36.7	6.91	38.9	8.57	6.80	6.69	5.87	NT	6.42	16.4	6.58	18.5	6.66
SK-MEL-28	6.13	5.78	6.22	44.0	6.07	6.18	6.11	NT	NT	NT	NT	5.97	2.94	5.80
SK-MEL-5	5.28	5.86	5.62	14.0	5.53	NT	5.56	5.64	NT	5.94	NT	NT	3.00	NT
UACC-257	7.14	27.6	7.01	43.8	7.77	8.38	7.09	6.25	NT	NT	NT	NT	4.68	7.14
UACC-62	5.80	8.07	6.06	37.0	5.77	5.76	5.85	6.52	NT	6.00	NT	NT	27.3	5.66
MG_MID	6.12	12.25	6.36	35.96	6.52	6.73	6.17	6.07	-	6.25	16.4	6.16	7.68	6.09
Ovarian Cancer														
IGROV1	6.44	NT	7.45	46.6	6.78	6.35	NT	NT	NT	6.69	NT	NT	3.14	5.80
OVCAR-3	5.91	7.52	6.39	34.8	5.94	NT	5.93	NT	NT	NT	NT	NT	3.44	5.46
OVCAR-4	NT	45.2	NT	63.1	5.88	6.17	NT	NT	NT	NT	NT	6.02	25.0	6.23
OVCAR-5	5.52	51.0	5.99	51.6	5.80	NT	5.65	NT	NT	NT	NT	5.81	20.9	5.57
OVCAR-8	6.73	54.1	6.67	30.8	NT	7.79	NT	NT	NT	NT	NT	NT	>50.0	10.0
NCI/ADR-RES	6.18	56.3	6.84	10.4	NT	7.30	6.73	NT	NT	NT	NT	>100	4.77	6.54
SK-OV-3	6.64	59.2	35.2	56.2	36.9	6.28	6.46	NT	5.82	NT	6.03	5.91	30.5	5.85
MG_MID	6.24	45.55	11.42	41.93	12.26	6.78	6.19	-	5.82	6.69	6.03	29.43	19.68	6.49
Renal Cancer														
786-0	6.19	12.7	5.85	40.9	6.18	NT	NT	NT	NT	NT	NT	NT	2.97	7.04
A498	33.0	86.7	6.63	52.7	8.00	7.08	6.93	5.81	6.04	5.60	57.6	5.74	27.7	5.44
ACHN	5.61	38.3	5.54	33.0	5.55	NT	5.62	NT	NT	NT	5.58	5.50	17.0	5.60
CAKI-1	5.40	53.6	6.43	39.3	5.45	5.73	5.53	5.60	5.71	NT	5.46	5.81	17.9	5.34
RXF 393	6.04	48.6	6.79	9.35	5.69	6.33	5.98	NT	NT	NT	5.59	6.05	3.07	5.81

SN12C	5.69	45.6	5.87	41.7	6.10	6.12	6.45	NT	NT	NT	NT	NT	3.34	6.03
TK-10	6.96	49.9	5.97	27.3	6.91	6.32	6.30	5.89	NT	NT	6.27	6.85	24.6	6.37
UO-31	5.74	62.1	5.79	42.1	5.77	5.52	5.42	NT	NT	NT	5.58	5.59	9.64	5.24
MG_MID	9.33	49.68	6.11	35.79	6.21	6.18	6.03	5.76	5.87	5.60	14.35	5.92	13.28	5.86
Prostate cancer														
PC-3	5.74	7.47	5.66	38.7	6.25	5.68	5.78	NT	NT	NT	NT	5.82	26.0	6.33
DU-145	5.58	9.61	5.75	13.8	6.00	6.26	6.38	NT	NT	NT	6.35	6.39	11.3	5.78
MG_MID	5.66	8.54	5.70	26.25	6.12	5.97	6.08	-	-	-	6.35	6.10	18.65	12.11
Breast cancer														
MCF7	5.94	22.7	7.28	46.7	6.30	6.22	NT	NT	NT	NT	NT	NT	NT	7.23
MDA-MB-31/ATCC	5.80	45.6	6.43	59.2	6.17	6.20	6.69	NT	NT	NT	NT	NT	3.04	6.02
HS 578T	31.0	77.4	32.6	71.2	2.44	15.9	9.11	NT	NT	NT	9.14	9.37	5.00	9.20
BT-549	NT	59.2	NT	39.0	NT	NT	5.96	NT	NT	NT	NT	NT	23.3	5.78
T-47D	7.96	48.6	9.66	59.5	7.99	7.00	NT	NT	NT	NT	NT	6.85	>50.0	NT
MDA-MB-468	6.88	7.81	6.98	55.1	7.39	6.60	6.50	6.01	NT	6.87	NT	6.51	3.36	6.47
MG_MID	11.52	43.55	12.59	55.12	6.06	8.38	7.06	6.01	-	6.87	9.14	7.57	16.94	6.94
MG_MID ₆₀	7.16	32.0	7.64	41.94	17.17	6.51	6.43	5.62	5.84	6.52	18.9	9.35	16.97	

^aLC₅₀ is a parameter of cytotoxicity and reflects the molar concentration needed to kill 50% of the cells.