

SUPPLEMENTARY INFORMATION

Phosphinogold(I) dithiocarbamate complexes: effect of the nature of phosphine ligand on anticancer properties

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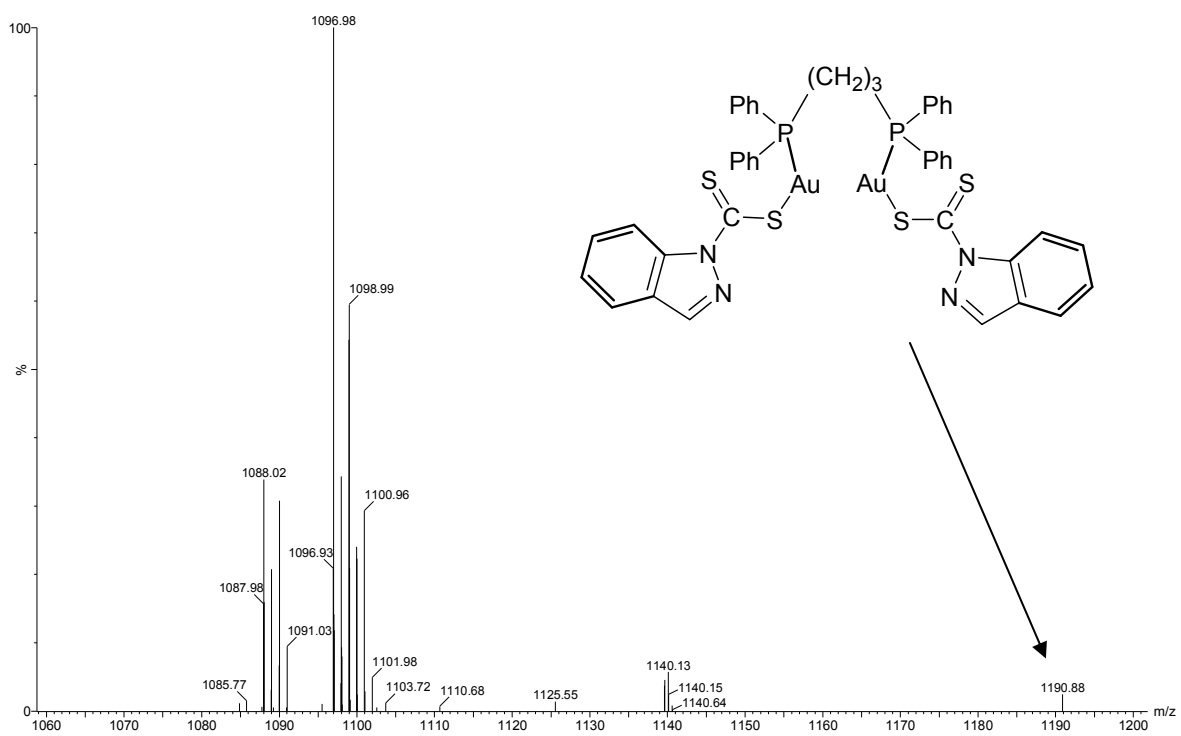


Figure S1. Time of flight ESI-MS spectrum of **9** ($m/z = 1190.88$)

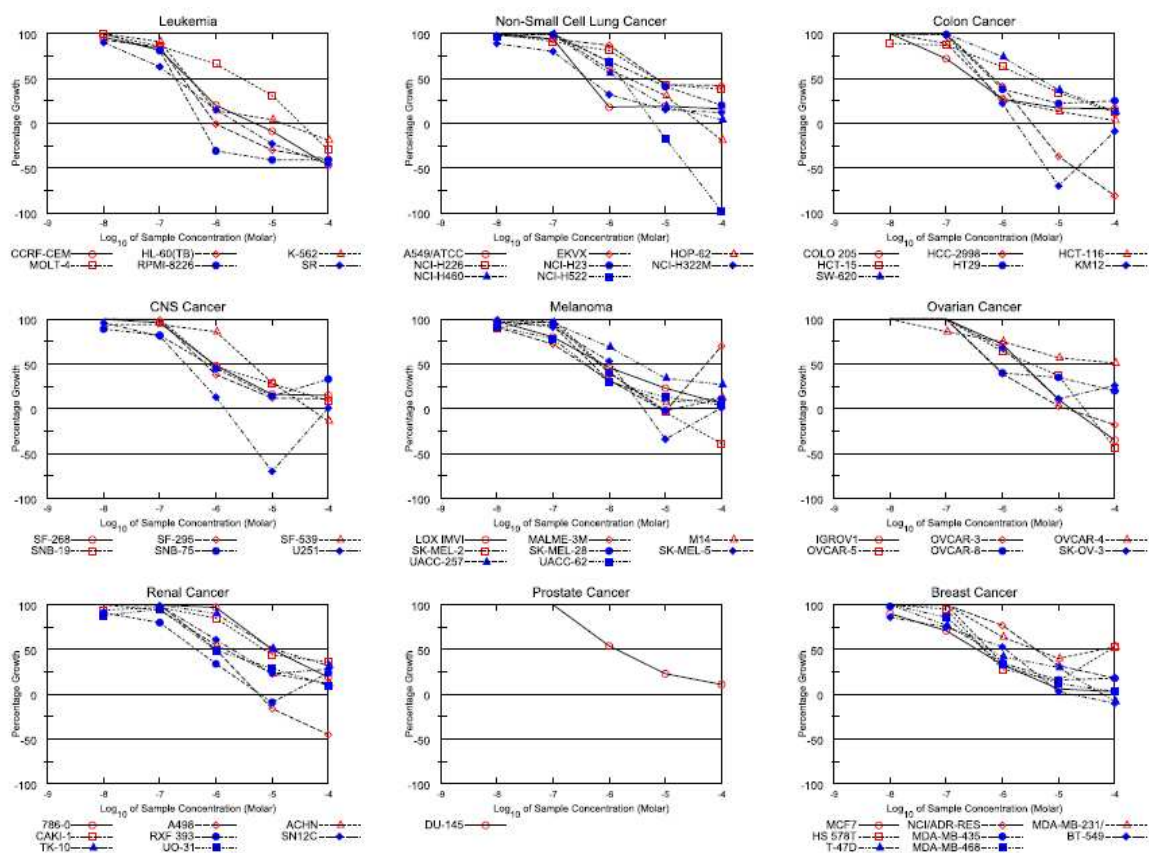


Figure S2. Data showing the anticancer action of compound 10. The data is generated from five-dose response experiments.

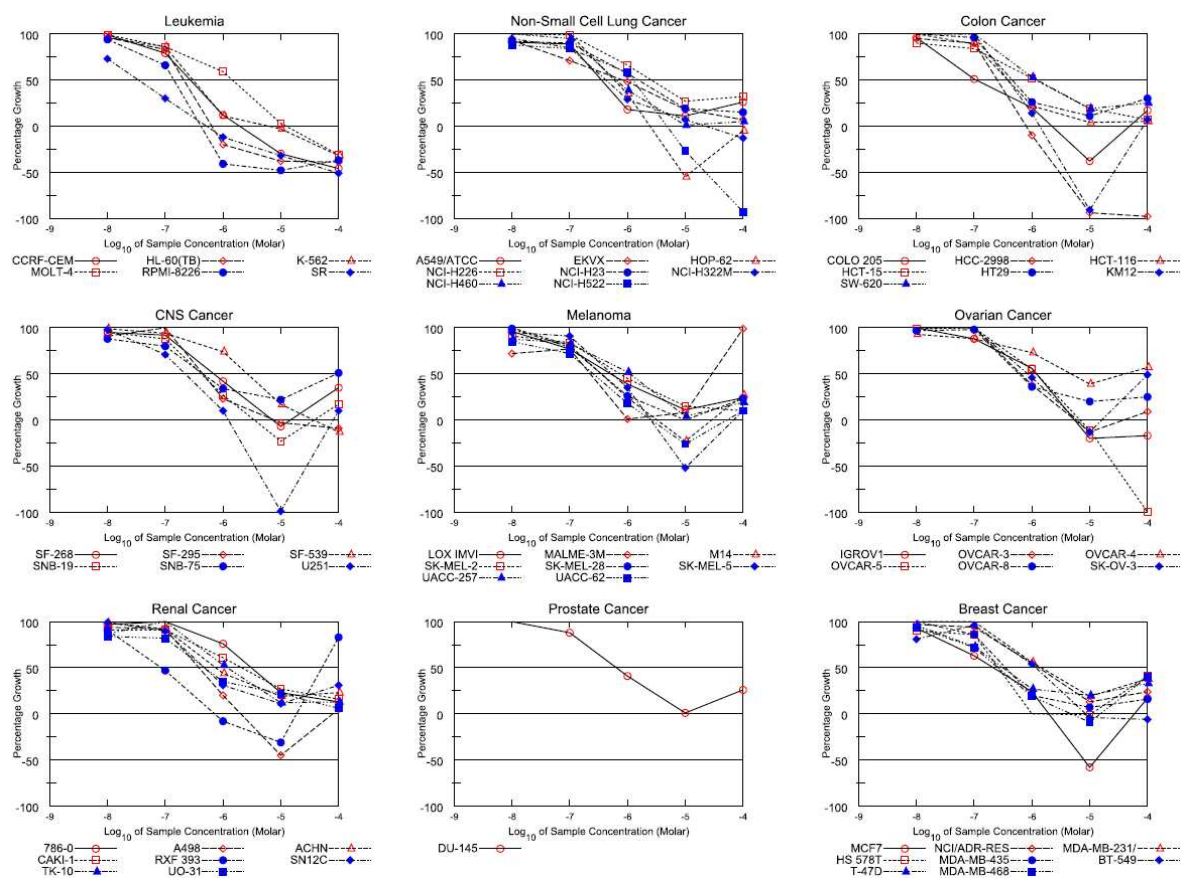


Figure S3. Data showing the anticancer action of compound 11. The data is generated from five-dose response experiments.

Table S1. Activity of compound 10 against a panel of a panel of 60 cancerous cell lines

Panel/Cell line	GI ₅₀ (μ M)	Log ₁₀ GI ₅₀	TGI (μ M)	Log ₁₀ TGI	LC ₅₀ (μ M)	Log ₁₀ LC ₅₀
Leukemia						
CCRF-CEM	3.27E-7	-6.49	4.99E-6	-5.30	>1.00E-4	>-4.00
HL-60	2.53E-7	-6.60	9.67E-7	-6.01	>1.00E-4	>-4.00
K-562	3.39E-7	-6.47	1.51E-5	-4.82	>1.00E-4	>-4.00
MOLT-4	2.84E-6	-5.55	3.23E-5	-4.49	>1.00E-4	>-4.00
RPMI-8226	1.88E-7	-6.73	5.26E-7	-6.28	>1.00E-4	>-4.00
SR	1.86E-7	-6.73	2.41E-6	-5.62	>1.00E-4	>-4.00
Non-small Cell Lung Cancer						
A549/ATCC	3.82E-7	-6.42	>1.00E-4	>-4.00	>1.00E-4	>-4.00
EKVX	6.98E-6	-5.16	>1.00E-4	>-4.00	>1.00E-4	>-4.00
HOP-62	2.26E-6	-5.65	4.23E-5	-4.37	>1.00E-4	>-4.00
NCI-H226	6.63E-6	-5.18	>1.00E-4	>-4.00	>1.00E-4	>-4.00
NCI-H23	4.76E-6	-5.32	>1.00E-4	>-4.00	>1.00E-4	>-4.00
NCI-H322M	4.17E-7	-6.38	>1.00E-4	>-4.00	>1.00E-4	>-4.00
NCI-H460	1.43E-6	-5.85	>1.00E-4	>-4.00	>1.00E-4	>-4.00
NCI-H522	1.62E-6	-5.79	6.33E-6	-5.20	2.56E-5	-4.59
Colon Cancer						
COLO 205	3.08E-7	-6.51	>1.00E-4	>-4.00	>1.00E-4	>-4.00
HCC-2998	7.59E-7	-6.12	3.34E-6	-5.48	1.94E-5	-4.71
HCT-116	4.20E-7	-6.38	>1.00E-4	>-4.00	>1.00E-4	>-4.00

Panel/Cell line	GI₅₀ (μM)	Log₁₀ GI₅₀	TGI (μM)	Log₁₀ TGI	LC₅₀ (μM)	Log₁₀ LC₅₀
HCT-15	2.88E-6	-5.54	>1.00E-4	>-4.00	>1.00E-4	>-4.00
HT29	6.42E-7	-6.19	>1.00E-4	>-4.00	>1.00E-4	>-4.00
KM12	4.34E-7	-6.36	1.73E-6	-5.76	-	-
SW620	4.49E-6	-5.35	>1.00E-4	>-4.00	>1.00E-4	>-4.00
CNS Cancer						
SF-268	9.20E-7	-6.04	>1.00E-4	>-4.00	>1.00E-4	>-4.00
SF-295	6.36E-7	-6.20	>1.00E-4	>-4.00	>1.00E-4	>-4.00
SF-539	4.32E-6	-5.36	4.81E-5	-4.32	>1.00E-4	>-4.00
SNB-19	8.79E-7	-6.06	>1.00E-4	>-4.00	>1.00E-4	>-4.00
SNB-75	7.17E-7	-6.14	>1.00E-4	>-4.00	>1.00E-4	>-4.00
U251	2.88E-7	-6.54	-	-	-	-
Melanoma						
LOXIMVI	7.44E-7	-6.13	>1.00E-4	>-4.00	>1.00E-4	>-4.00
MALME-3M	-	-	-	-	>1.00E-4	>-4.00
M14	4.87E-7	-6.31	>1.00E-4	>-4.00	>1.00E-4	>-4.00
SK-MEL-2	7.32E-7	-6.14	8.17E-6	-5.09	>1.00E-4	>-4.00
SK-MEL-28	6.69E-7	-6.17	-	-	>1.00E-4	>-4.00
SK-MEL-5	1.08E-6	-5.97	-	-	>1.00E-4	>-4.00
UACC-257	3.57E-6	-5.45	>1.00E-4	>-4.00	>1.00E-4	>-4.00
UACC-62	3.83E-7	-6.42	>1.00E-4	>-4.00	>1.00E-4	>-4.00
Ovarian Cancer						

Panel/Cell line	GI₅₀ (μM)	Log₁₀ GI₅₀	TGI (μM)	Log₁₀ TGI	LC₅₀ (μM)	Log₁₀ LC₅₀
IGROV1	2.26E-6	-5.65	1.71E-5	-4.77	>1.00E-4	>-4.00
OVCAR-3	7.00E-7	-6.15	1.42E-5	-4.85	>1.00E-4	>-4.00
OVCAR-4	>1.00E-4	>-4.00	>1.00E-4	>-4.00	>1.00E-4	>-4.00
OVCAR-5	3.63E-6	-5.47	2.89E-5	-4.54	>1.00E-4	>-4.00
OVCAR-8	6.96E-7	-6.16	>1.00E-4	>-4.00	>1.00E-4	>-4.00
SK-OV-3	2.06E-6	-5.69	>1.00E-4	>-4.00	>1.00E-4	>-4.00
Renal Cancer						
786-O	9.80E-6	-5.01	>1.00E-4	>-4.00	>1.00E-4	>-4.00
A498	1.01E-6	-5.99	5.73E-6	-5.24	>1.00E-4	>-4.00
ACHN	1.45E-6	-5.84	>1.00E-4	>-4.00	>1.00E-4	>-4.00
CAKI-1	7.15E-6	-5.15	>1.00E-4	>-4.00	>1.00E-4	>-4.00
RXF393	4.54E-7	-6.34	-	-	>1.00E-4	>-4.00
SN12C	1.95E-6	-5.71	>1.00E-4	>-4.00	>1.00E-4	>-4.00
TK-10	1.10E-5	-4.96	>1.00E-4	>-4.00	>1.00E-4	>-4.00
UO-31	9.33E-7	-6.03	>1.00E-4	>-4.00	>1.00E-4	>-4.00
Prostate Cancer						
DU-145	1.31E-6	-5.88	>1.00E-4	>-4.00	>1.00E-4	>-4.00
Breast Cancer						
MCF-7	3.56E-7	-6.45	>1.00E-4	>-4.00	>1.00E-4	>-4.00
NCI/ADR-RES	3.99E-6	-5.40	>1.00E-4	>-4.00	>1.00E-4	>-4.00

Panel/Cell line	GI ₅₀ (μ M)	Log ₁₀ GI ₅₀	TGI (μ M)	Log ₁₀ TGI	LC ₅₀ (μ M)	Log ₁₀ LC ₅₀
MDA-MB-231/ATCC	-	-	>1.00E-4	>-4.00	>1.00E-4	>-4.00
HS 578T	-	-	>1.00E-4	>-4.00	>1.00E-4	>-4.00
MDA-MB-435	5.95E-7	-6.23	>1.00E-4	>-4.00	>1.00E-4	>-4.00
BT-549	1.12E-6	-5.95	1.65E-5	-4.78	>1.00E-4	>-4.00
T-47D	5.93E-7	-6.23	6.19E-5	-4.21	>1.00E-4	>-4.00
MDA-MB-468	4.82E-7	-6.32	>1.00E-4	>-4.00	>1.00E-4	>-4.00

Table S2. Activity of compound **11** against a panel of a panel of 60 cancerous cell lines

Panel/Cell line	GI ₅₀ (μ M)	Log ₁₀ GI ₅₀	TGI (μ M)	Log ₁₀ TGI	LC ₅₀ (μ M)	Log ₁₀ LC ₅₀
Leukemia						
CCRF-CEM	2.66E-7	-6.57	1.89E-6	-5.72	>1.00E-4	>-4.00
HL-60	2.11E-7	-6.68	6.44E-7	-6.19	>1.00E-4	>-4.00
K-562	3.01E-7	-6.52	5.76E-6	-5.24	>1.00E-4	>-4.00
MOLT-4	1.42E-6	-5.85	1.20E-5	-4.92	>1.00E-4	>-4.00
RPMI-8226	1.40E-7	-6.85	4.13E-7	-6.38	>1.00E-4	>-4.00
SR	3.41E-8	-7.47	5.21E-7	-6.28	9.00E-5	-4.05
Non-small Cell Lung Cancer						
A549/ATCC	3.51E-7	-6.45	>1.00E-4	>-4.00	>1.00E-4	>-4.00
EKVX	7.92E-7	-6.10	>1.00E-4	>-4.00	>1.00E-4	>-4.00
HOP-62	6.52E-7	-6.19	2.45E-6	-5.61	-	-

Panel/Cell line	GI₅₀ (μM)	Log₁₀ GI₅₀	TGI (μM)	Log₁₀ TGI	LC₅₀ (μM)	Log₁₀ LC₅₀
NCI-H226	2.52E-6	-5.60	>1.00E-4	>-4.00	>1.00E-4	>-4.00
NCI-H23	1.54E-6	-5.81	>1.00E-4	>-4.00	>1.00E-4	>-4.00
NCI-H322M	4.23E-7	-6.37	2.24E-5	-4.65	>1.00E-4	>-4.00
NCI-H460	6.38E-7	-6.20	>1.00E-4	>-4.00	>1.00E-4	>-4.00
NCI-H522	1.24E-6	-5.91	4.80E-6	-5.32	2.23E-5	-4.65
Colon Cancer						
COLO 205	1.05E-7	-6.98	-	-	>1.00E-4	>-4.00
HCC-2998	2.52E-7	-6.60	7.99E-7	-6.10	2.99E-6	-5.52
HCT-116	3.80E-7	-6.42	>1.00E-4	>-4.00	>1.00E-4	>-4.00
HCT-15	1.12E-6	-5.95	>1.00E-4	>-4.00	>1.00E-4	>-4.00
HT29	4.58E-7	-6.34	>1.00E-4	>-4.00	>1.00E-4	>-4.00
KM12	3.86E-7	-6.41	-	-	-	-
SW620	1.26E-6	-5.90	>1.00E-4	>-4.00	>1.00E-4	>-4.00
CNS Cancer						
SF-268	6.80E-7	-6.17	-	-	>1.00E-4	>-4.00
SF-295	4.62E-7	-6.34	7.70E-6	-5.11	>1.00E-4	>-4.00
SF-539	2.64E-6	-5.58	3.64E-5	-4.44	>1.00E-4	>-4.00
SNB-19	4.17E-7	-6.38	-	-	>1.00E-4	>-4.00
SNB-75	-	-	>1.00E-4	>-4.00	>1.00E-4	>-4.00
U251	2.20E-7	-6.66	-	-	-	-
Melanoma						

Panel/Cell line	GI₅₀ (μM)	Log₁₀ GI₅₀	TGI (μM)	Log₁₀ TGI	LC₅₀ (μM)	Log₁₀ LC₅₀
LOXIMVI	5.26E-7	-6.28	>1.00E-4	>-4.00	>1.00E-4	>-4.00
MALME-3M	-	-	>1.00E-4	>-4.00	>1.00E-4	>-4.00
M14	3.52E-7	-6.45	-	-	>1.00E-4	>-4.00
SK-MEL-2	7.27E-7	-6.14	>1.00E-4	>-4.00	>1.00E-4	>-4.00
SK-MEL-28	3.56E-7	-6.45	-	-	>1.00E-4	>-4.00
SK-MEL-5	5.41E-7	-6.27	-	-	-	-
UACC-257	1.11E-6	-5.96	>1.00E-4	>-4.00	>1.00E-4	>-4.00
UACC-62	2.54E-7	-6.59	-	-	>1.00E-4	>-4.00
Ovarian Cancer						
IGROV1	1.19E-6	-5.92	5.42E-6	-5.27	>1.00E-4	>-4.00
OVCAR-3	6.48E-7	-6.19	-	-	>1.00E-4	>-4.00
OVCAR-4	-	-	>1.00E-4	>-4.00	>1.00E-4	>-4.00
OVCAR-5	1.21E-6	-5.92	6.79E-6	-5.17	2.74E-5	-4.56
OVCAR-8	5.97E-7	-6.22	>1.00E-4	>-4.00	>1.00E-4	>-4.00
SK-OV-3	8.52E-7	-6.07	-	-	>1.00E-4	>-4.00
Renal Cancer						
786-O	3.10E-6	-5.51	>1.00E-4	>-4.00	>1.00E-4	>-4.00
A498	3.84E-7	-6.42	-		>1.00E-4	>-4.00
ACHN	7.52E-7	-6.12	>1.00E-4	>-4.00	>1.00E-4	>-4.00
CAKI-1	2.16E-6	-5.66	>1.00E-4	>-4.00	>1.00E-4	>-4.00
RXF393	-	-	-	-	-	-
SN12C	4.79E-7	-6.32	>1.00E-4	>-4.00	>1.00E-4	>-4.00

Panel/Cell line	GI₅₀ (μM)	Log₁₀ GI₅₀	TGI (μM)	Log₁₀ TGI	LC₅₀ (μM)	Log₁₀ LC₅₀
TK-10	1.21E-6	-5.92	>1.00E-4	>-4.00	>1.00E-4	>-4.00
UO-31	4.82E-7	-6.32	>1.00E-4	>-4.00	>1.00E-4	>-4.00
Prostate Cancer						
DU-145	6.33E-7	-6.20	>1.00E-4	>-4.00	>1.00E-4	>-4.00
Breast Cancer						
MCF-7	2.13E-7	-6.67	-	-	-	-
NCI/ADR-RES	1.30E-6	-5.88	>1.00E-4	>-4.00	>1.00E-4	>-4.00
MDA-MB-231/ATCC	1.42E-6	-5.85	>1.00E-4	>-4.00	>1.00E-4	>-4.00
HS 578T	2.63E-7	-6.58	-	-	>1.00E-4	>-4.00
MDA-MB-435	3.50E-7	-6.46	>1.00E-4	>-4.00	>1.00E-4	>-4.00
BT-549	1.18E-6	-5.93	8.44E-6	-5.07	>1.00E-4	>-4.00
T-47D	3.14E-7	-6.50	>1.00E-4	>-4.00	>1.00E-4	>-4.00
MDA-MB-468	2.62E-7	-6.58	-	-	>1.00E-4	>-4.00