Exploring the Antitumor Potential of Novel Quinoline Derivatives *Via* Tubulin Polymerization Inhibition in Breast Cancer; Design, Synthesis and Molecular Docking

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Supplementary data:

The data are divided into three parts; chemistry, biological studies, and docking studies.

Chemicals and reagents:

Solvents and reagents were obtained from Aldrich and were used without further purification unless otherwise indicated. Melting points were determined by the open capillary tube method using the Stuart SMP10 melting point apparatus and were uncorrected. The elemental analysis was carried out by Thermo Scientific TM FLASH 2000 CHNS/O analyzer, by Thermo Fisher Scientific at The Regional Center for Mycology and Biotechnology, Al-Azhar University, Egypt. Infrared Spectra were recorded as potassium bromide discs on Bruker FT-IR spectrophotometer, MUST university and expressed in wave number v_{max} (cm⁻¹). ¹H NMR spectra were performed on Bruker 400 MHz spectrophotometer using TMS as internal standard, chemical shifts(δ) were recorded in ppm on δ scale at Ain Shams University, Egypt. ¹³C NMR spectra were carried out using Bruker 100 MHz using TMS as internal standard, chemical shifts (δ) were recorded in ppm on δ scale at Ain Shams University, Egypt. Mass spectra were run on Hewlett Packard 5988 spectrometer or Shimadzu QP-2010 plus at The Regional Center for Mycology & Biotechnology, Al-Azhar University, Egypt. Progress of the reactions was monitored by TLC using precoated aluminum sheets silica gel (Merck 60 F ₂₅₄) using chloroform:methanol (9.5:0.5) as the eluting system and was visualized by UV lamp.

Spectral data:



Fig. S1: ¹H NMR (400 MHz, DMSO- d_6), spectrum of the compound **3a**.



Fig. S2: ¹H NMR (400 MHz, DMSO- d_6) magnified spectrum of the compound **3a**.



Fig. S3: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound **3a**.



Fig. S4: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound **3b**.



Fig. S5: ¹H NMR (400 MHz, DMSO- d_6) magnified spectrum of the compound **3b**.



Fig. S6: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound **3b**.



Fig. S7: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound **3c**.



Fig. S8: ¹H NMR (400 MHz, DMSO- d_6) magnified spectrum of the compound 3c.



Fig. S9: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound **3c**.



Fig. S10: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound 3d.



Fig. S11: ¹H NMR (400 MHz, DMSO-*d*₆) magnified spectrum of the compound 3d.



Fig. S12: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound 3d.



Fig. S13: ¹H NMR (400 MHz, DMSO-*d*₆) magnified spectrum of the compound 3e.



Fig. S14: ¹H NMR (400 MHz, DMSO- d_6) magnified spectrum of the compounds 3e.



Fig. S15: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound **3e**.



Fig. S16: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound 4a.



Fig. S17: ¹H NMR (400 MHz, DMSO-*d*₆) magnified spectrum of the compound 4a.



Fig. S18: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound 4a.



Fig. S19: MS of the compound 4a.



Fig. S20: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound 4b.



Fig. S21: ¹H NMR (400 MHz, DMSO-*d*₆) magnified spectrum of the compound 4b.



Fig. S22: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound 4b.



Fig. S23: MS of the compound 4b.



Fig. S24: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound **4c**.



Fig. S25: ¹H NMR (400 MHz, DMSO-*d*₆) magnified spectrum of the compound 4c.



Fig. S26: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound 4c.



Fig. S27: MS of the compound 4c.



Fig. S28: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound 4d.



Fig. S29: ¹H NMR (400 MHz, DMSO-*d*₆) magnified spectrum of the compound 4d.



Fig. S30: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound 4d.



Fig. S31: MS of the compound 4d.



Fig. S32: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound 4e.



Fig. S33: ¹H NMR (400 MHz, DMSO-*d*₆) magnified spectrum of the compound 4e.



Fig. S34: MS of the compound 4e.



Fig. S35: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound 5a.



Fig. S36: ¹H NMR (400 MHz, DMSO-*d*₆) magnified spectrum of the compound 5a.



Fig. S37: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound 5a.



Fig. S38: MS of the compound 5a.



Fig. S39: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound 5b.



Fig. S40: ¹H NMR (400 MHz, DMSO-*d*₆) magnified spectrum of the compound **5b**.


Fig. S41: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound 5b.



Fig. S42: MS of the compound 5b.



Fig. S43: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound 5c.



Fig. S44: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound 5c.



Fig. S45: MS of the compound 5c.



Fig. S46: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound 5d.



Fig. S47: ¹H NMR (400 MHz, DMSO-*d*₆) magnified spectrum of the compound 5d.



Fig. S48: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound 5d.



Fig. S49: MS of the compound 5d.



Fig. S50: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound 5e.



Fig. S51: ¹H NMR (400 MHz, DMSO- d_6) magnified spectrum of the compound 5e.



Fig. S52: MS of the compound 5e.



Fig. S53: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound 6a.



Fig. S54: ¹H NMR (400 MHz, DMSO-*d*₆) magnified spectrum of the compound 6a.



Fig. S55: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound **6a**.



Fig. S56: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound 6b.



Fig. S57: ¹H NMR (400 MHz, DMSO-*d*₆) magnified spectrum of the compound **6b**.



Fig. S58: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound 6b.



Fig. S59: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound 6c.



Fig. S60: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound 6c.



Fig. S61: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound 6c.



Fig. S62: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of the compound 6d.



Fig. S63: ¹H NMR (400 MHz, DMSO- d_6) magnified spectrum of the compound 6d.



Fig. S64: ¹³C NMR (100 MHz, DMSO- d_6) spectrum of the compound 6d.



Fig. S65: ¹H NMR (400 MHz, DMSO- d_6) spectrum of the compound 6e.



Fig. S66: ¹H NMR (400 MHz, DMSO-*d*₆) magnified spectrum of the compound 6e.



Fig. S67: 13 C NMR (100 MHz, DMSO- d_6) spectrum of the compound 6e.

The biological studies

Table S1: *In vitro* growth inhibition (GI%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compounds (3a-e and 4a-e).

	3 a	3b	3c	3d	3e	4 a	4b	4c	4d	4e
Leukaemia										
CCRF-CEM	26.85	64.95	87.78	а	а	а	а	80.39	а	a
HL-60(TB)	45.75	61.03	73.45	a	а	а	а	71.28	а	a
K-652	a	55.74	68.13	a	а	19.93	20.02	31.45	27.17	33.46
MOLT-4	16.79	49.22	49.91	а	а	11.88	а	76.43	15	a
RPMI-8226	22.15	56.17	78.23	a	a	a	a	74.51	14.03	a

SR	38.39	80.06	61.54	а	ND	а	а	77.32	ND	ND
Non-small cell lung	g cancer									
A549/ATCC	a	43.48	52.07	a	a	а	a	88.16	a	a
EKVX	а	a	17.12	a	a	12.28	14.24	50.12	a	a
НОР-62	а	a	А	а	a	а	а	87.86	а	а
НОР-92	27.31	27.39	26.83	a	а	29.84	11.29	L	а	a
NCI-H226	79.88	L	L	a	а	15.4	а	L	14.27	a
NCI-H23	а	20.25	27.39	a	а	a	a	68.61	12.04	a
NCI-H322M	а	22.35	31.08	a	а	a	а	53.67	а	a
NCI-H460	а	27.68	18.35	a	а	a	а	58.58	а	a
NCI-H522	21.13	41.47	80.68	а	а	11.87	14.74	L	а	а
Colon Cancer										
COLO 205	а	22.4	18.42	а-	а	a	а	а	а	a
HCC-2998	а	17.71	63.82	а	а	а	а	46.95	а	а
HCT-116	а	62.78	61.58	a	а	a	а	69.06	а	a
НСТ-15	а	20.39	44.52	а	а	а	а	35.78	11.14	а
HT29	а	26.93	77.4	а	а	а	а	а		а
KM12	a	23.52	80.66	а	a	а	а	55.14	a	а
SW-620	а	72.24	65.44	а	а	а	а	17.43	а	а
CNS Cancer										
SF-268	a	a	32.21	а	a	21.44	16.08	34.36	a	а
SF-295	а	21.83	31.32	а	а	16.73	а	96.38	а	а
SF-539	18.88	99.38	L	11.01	а	а	а	L	а	а
SNB-19	а	54.44	66.41	а	а	а	а	89.58	а	а
SNB-75	a	L	61.72	a	a	45.69	29.64	L	a	а
U251	17.87	65.25	78.15	a	a	a	a	L	a	a
Melanoma										
LOX IMVI	11.32	43.44	71.98	a	a	а	a	91.58	15.3	a

MALME-3M	а	а	14.77	а	а	а	а	89.41	а	а
M14	а	а	31.93	a	a	а	а	42.76		а
MDA-MB-435	а	17.15	59.18	а	a	а	a	56.48	а	а
SK-MEL-2	а	а	44.49	a	a	а	а	29.76	а	а
SK-MEL-28	а	а	15.04	а	а	а	а	68.91	а	а
SK-MEL-5	а	23.24	39.88	а	а	13.93	a	78.58	16.75	12.97
UACC-257	а	a	43.59	а	а	а	a	26.54	а	а
UACC-62	17.15	35.88	41.92	а	а	а	а	L	16.46	а
Ovarian Cancer										
IGROV1	а	a	a	а	а	а	a	66.3	а	а
OVCAR-3	a	31.69	L	а	а	a	a	L	а	а
OVCAR-4	13.47	42.33	41.97	a	a	21.9	14.03	L	11.03	10.78
OVCAR-5	а	12.51	26.77	a	a	а	а	33.33	а	а
OVCAR-8	а	57.79	84	a	a	а	а	92.11	а	а
NCI/ADR-RES	а	45.75	67.57	a	a	а	а	59.91	а	а
SK-OV-3	а	а	17.38	a	a	а	а	61.41	а	11.74
Renal Cancer										
786-0	a	25.74	41.69	а	а	11.45	a	L	а	а
A498	а	а	а	а	а	а	a	L	а	а
ACHN	а	24.48	32.01	а	а	а	a	75.69	а	а
CAKI-1	19.34	40.25	38.71	11.8	12.83	34.88	39.22	95.06	19.48	17.59
RXF 393	23.77	22.09	42.58	а	а	a	33.79	L	а	а
SN12C	а	23.68	42.34	а	а	а	a	L	а	а
TK-10	а	а	а	а	a	а	а	L	а	а
UO-31	a	41.81	45.05	а	a	a	a	L	27.95	17.79
Prostate Cancer										
PC-3	а	32.05	53.5	a	a	а	а	67.59	a	a
DU-145	a	15.79	29.03	a	a	a	a	80.55	a	а

Breast Cancer										
MCF7	18.04	37.15	70.94	а	а	16.04	11.32	54.75	24.64	20.65
MDA-MB-							а			
231/ATCC	а	29.32	39.55	а	а	10.04		L	19.85	а
HS 578T	а	а	а	а	а	14.91	10.34	L	а	а
BT-549	22.52	50.34	76.12	a	а	15.31	а	57.52	17.79	27.68
T-47D	44.03	57.87	72.8	a	а	17.11	16.55	91.56	14.44	а
MDA-MB-468							а		а	
	а	39.76	61.14	а	а	13.97		51.91		а

a=GI % < 10

L= Letha

ND=Not Determined

Table S2: *In vitro* growth inhibition percent (GI%) for the NCI60 cancer cell lines upon treatment with 10 μ M of Compounds (5a-e and 6a-e)

	5a	5b	5c	5d	5e	6a	6b	6c	6d	6e
Leukaemia										
CCRF-CEM	а	28.8	57.63	а	a	а	11	32.85	а	а
HL-60(TB)	14.94	a	51.76	a	a	а	10.73	41.55	а	а
K-652	28.78	27.99	33.86	29.26	a	а	10.53	44.64	27.55	а
MOLT-4	12.65	44.31	61.16	26.8	a	а	53.3	67.65	48.79	26.25
RPMI-8226	15.71	29.16	63.06	23.03	14.71	а	36.1	57.59	19.32	10.65
SR	11.58	а	49.05	ND	ND	ND	ND	ND	ND	ND
Non-small cell lun	g cancer									
A549/ATCC	а	19.71	38.11	а	а	a	а	26.33	а	а
EKVX	10.28	23.9	34.88	19.65	а	a	а	37.93	а	а
НОР-62	а	а	10.62	а	а	a	10.96	10.46	15.15	а
НОР-92	36.16	47.37	77.38	11.4	a	а	а	28.27	а	а
NCI-H226	15.89	20.27	63.27	25.9	а	a	15.39	57.97	21.71	a
NCI-H23	11.79	20.32	33.67	16.45	a	а	а	25.78	11.77	а

NCI-H322M	17.55	а	33.97	12.42	а	а	а	18.3	а	а
NCI-H460	а	a	21.83	a	a	a	а	29.96	а	а
NCI-H522	19.63	a	65.68	11.75	a	a	22.15	50.3	25.04	a
Colon Cancer										
COLO 205	a	a	12.69	a	a	a	a	24.36	a	a
HCC-2998	a	a	33.01	a	a	a	a	26.08	a	a
HCT-116	14.77	a	27.1	a	a	a	17.19	41.18	21.51	10.5
HCT-15	a	12.16	28.96	14.84	a	a	а	30.95	26.18	а
HT29	a	-	20.39	a	а	а	а	36.36	28.26	11.92
KM12	a	19.91	37.2	a	a	a	a	28.05	13.15	a
SW-620	a	a	10.03	a	a	a	a	13.45	a	a
CNS Cancer										
SF-268	23.06	32.23	31.72	21.02	a	a	16.63	42.42	14.86	a
SF-295	13.79	16.52	30.97	12.28	a	a	a	29.97	a	a
SF-539	a	21.97	29.68	a	a	a	a	30.33	a	a
SNB-19	13.2	22.6	39.09	10.5	a	а	а	23.35	а	а
SNB-75	21.56	10.81	а	39.15	19.75	14.94	а	23.2	а	a
U251	a	13.68	30.97	a	a	a	а	26.6	а	а
Melanoma										
LOX IMVI	a	a	38.34	12.37	a	a	a	33.32	a	a
MALME-3M	a	a	a	a	a	a	a	a	a	a
M14	a	a	31.17	a	10.98	13.19	a	30.14	10.84	a
MDA-MB-435	9	9	24.92	a	a	a	a	43.45	a	a
	a	u	21.92							
SK-MEL-2	a	a	33.02	a	a	a	a	10.15	a	a
SK-MEL-2 SK-MEL-28	a a	a	33.02 a	a	a	a	a	-	a	a
SK-MEL-2 SK-MEL-28 SK-MEL-5	a a a	a a 21.02	33.02 a 52.17	a a 15.32	a a a	a a a	a a 14.13	10.15 - 38.21	a a a	a a a
SK-MEL-2 SK-MEL-28 SK-MEL-5 UACC-257	a a a a	a a 21.02 a	a 33.02 a 52.17 20.13	a a 15.32 a	a a a a	a a a a	a a 14.13 a	10.15 - 38.21 13.06	a a a a	a a a a

|--|

IGROV1	12.91	a	33.4	28.58	a	a	a	14.31	a	a
OVCAR-3	a	a	16.86	-	a	a	a	14.21	a	a
OVCAR-4	24.5	22.4	41.62	13.35	a	a	19.9	48.88	21.02	10.18
OVCAR-5	a	a	a	a	a	a	а	А	a	a
OVCAR-8	10.13	31.46	36.71	a	a	a	a	12.25	a	a
NCI/ADR-RES	a	24.86	28.5	a	a	a	11.1	34.01	16.96	a
SK-OV-3	a	a	a	20.89	11.18	14.95	a	а	a	10.74
Renal Cancer										
786-0	a	18.71	27.85	a	a	a	a	18.24	a	a
A498	a	-	18.77	a	a	а	а	11.59	a	a
ACHN	a	15.69	32.54	a	а	а	a	24.38	a	a
CAKI-1	44.69	45.79	69.81	31.08	20.05	16.19	30.19	64.11	26.14	10.37
RXF 393	20.63	24.58	37.29	a	a	a	a	40.65	a	a
SN12C	10.35	21.7	39.67	a	a	a	а	21.68	a	a
TK-10	a	a	a	a	a	a	а	12.62	a	a
UO-31	19.73	23.28	45.23	40.15	24.05	18.59	37.17	67.70	49.53	32.66
Prostate Cancer										
PC-3	a	21.34	48.91	4.57	а	а	а	46.18	22.02	a
DU-145	a	20.2	32.26	-	a	a	a	21.68	a	a
Breast Cancer										
MCF7	20.75	26.65	46.53	40.43	19.71	a	15.73	44.31	24.62	18.42
MDA-MB-										
231/ATCC	18.14	19.15	52.51	31.21	12.89	а	а	46.06	а	а
HS 578T	19.77	23.11	32.67	18.23	а	а	12.89	39.64	а	а
BT-549	20.39	28.17	21.06	12.24	а	а	12.82	10.52	a	а
T-47D	12.67	41.08	60.59	21.1	10.4	a	24.95	48.61	23.88	a
MDA-MB-468	18.66	22.77	50.55	13.97	а	а	13.21	40.49	-	а
-CI % < 10										

a=GI % < 10

L= Letha

ND=Not Determined

Developmental Thera	apeutics Program	NSC: D-847872/1	Cono: 1.00E-5 Molar	Test Date: Aug 21, 2023
One Dose Bar	Graph	Experiment ID: 2308	90865	Report Date: Oct 11, 2023
Panel/Cell Line	Growth Percent	Bar Graph		
Leukemia	000000			
CCRF-CEM	73.15			
HL-60(TB)	54.25			
MOLT-4	83.21			
RPMI-8225	77.85			
SR	61.61			
Non-Small Cell Lung Cancer				
A549(ATCC	94.95			
HOP-62	115.97			
HOP-92	72.69			
NCI-H226	20.12			
NCI-H23	92.81			
NOTH SZ2M	101.73			
NCI-H522	78.87			
Colon Cancer		2		
COLO 205	101.11			
HCC-2998	97.16			
HCT-15	99.65			
HT29	105.85			
KM12	100.95			
SW-620	93.44			
CNS Cancer	107.30			
25-295	97.54			
3F-539	81.12	-		
8NB-19	89.32			
SNB-75	112.57			
0251	82.13			
LOX IMVI	88.68			
MALME-3M	104.19			
M14	105.34			
MDA-MB-435	95.48			
SK-MEL-2	109.35			
SK-MEL-5	102.29			
UACC-257	101.87			
UACC-62	82.85			
IGROV1	173 69			
OVCAR-3	105.11			
OVCAR-4	86.53			
OVCAR-5	109.88			
OVCAR-8	95.41			
86-01/-3	112 34			
Renal Cancer				
786-0	96.20			
A498	108.14			
ACHN CAKI-1	109.84			
RXF 393	75.23			
SN12C	93.96			
TK-10	118.77	-		
UO-31	90.17			
Prostate Cancer	95.09			
DU-145	113.51			
Breast Cancer	10000			
MCF7	81.96			
MDA-MB-231/ATCC	91.30			
BT-549	77.48			
T-47D	55.97	1		
MDA-MB-468	91.41			
				00.5
		125 62.5	Dercentage Crowth	-62.5 -125
			Percentage Grown	

Fig. S68: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compound 3a



Fig. S69: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μ M of Compound 3b

Developmentar The	apeutos rrogram	NSC: D-847881/1	Cono: 1.002-5 Molar	Test Date: Aug 21, 2023
One Dose Ba	r Graph	Experiment ID: 2308	0865	Report Date: Oct 11, 202
Panel/Cell Line	Growth Percent	Bar Graph		
eukemia				
CCRF-CEM	12.22			
HL-6D(TB)	26.55			1 1
MOI T-4	50.09			1 1
RPMI-8225	21.77			
SR	38.46			
Non-Small Cell Lung Cancer				
A549/ATCC	47.93		-	
EKVX	82.88			1 1
HOP-62	92.75			1 1
HOP-92	/3.1/			_ _
NCI-H226	72.63			_
NCI-H322M	68.97			1 1
NCI-H450	81.55			1 1
NCI-H522	19.32			1 1
Colon Cancer				1 1
COLO 205	81.58			
HCC-2998	36.18			
HCT-116	38.42			
HCT-15	55.48			
HT29	22.60			
DM12	34.55			1 1
NO Caprer	4.50		100	1 1
3F-268	67.79			1 1
8F-295	68.68	and the second se		1 1
8F-539	-22.12			1 1
SNB-19	33.59			
3NB-75	38.28	N		1 1
U251	21.85			1 1
Melanoma				1 1
LOX INVI	28.02			1 1
MIL ME SM	69.07			
MDA-MB-435	40.82	-		1 1
SK-MEL-2	55.51	and the second se	1	1 1
SK-MEL-28	84.95			1 1
SK-MEL-5	60.12			
UACC-257	56.41			
UACC-62	58.08			
John Gancer	90.35			1 1
OVCAR-3	-2.67			1 1
OVCAR-4	58.03		1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A	
OVCAR-5	73.23			
OVCAR-8	16.00			
NCUADR-RES	32.43			
SK-OV-3	82.62			
Tec.n	50.34			
400	113.45			
ACHN	67.99	Concession of the local division of the loca		
CAKI-1	61.29			
RXF 393	57.42		()	
SN12C	57.66	Sector Sector Sector Sector Sector	(s) (s)	
TK-10	143.93	-		
00-31	54.95	and the second		
Prostate Cancer	10.00		<u></u>	
PU-3	46.50		-	
inant Cancer	10.37			
MCE7	29.05			
MDA-MB-231/ATCC	60.45			
HS 578T	92.61			
BT-549	23.88			
	37.30			I I
T-47D	27.20			1 1
T-47D MDA-MB-468	38.85			

Fig. S70: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compound 3c



Fig. S71: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μ M of Compound 3d

Developmental mera	peutics Program	NSC: D-847921/1	Cono: 1.00E-5 Molar	Test Date: Aug 28, 2023
One Dose Bar	Graph	Experiment ID: 2308	0868	Report Date: Oct 15, 20
Panel/Cell Line	Growth Percent	Bar Graph		
eukemia				
UL CO(TR)	106.75			1 1
K-562	112.27			1 1
MOLT-4	106.85			1 1
RPMI-8226	104.89			1 1
Ion-Small Cell Lung Cancer				
A549/ATCC	116.02			
EKVX	106.83			
HOP-62	109.56			
NOLU226	142.74			
NOLH22	95 39			
NCI-H322M	143 35			
NCI-H460	113.78			
NCI-H522	102.16			
olon Cancer				
COLO 205	108.72			
HCC-2998	112.93			
HCT-116	95.13			
HUTTE	102.15			
1122	102.00			
SW-620	102.55			
NS Cancer	100.50			
SF-268	99.67			
3F-295	95.68			
8F-539	95.20	2 C		
SNB-19	99.06			
SNB-75	100.75			
U251	112.15			
LOX MO/	04.00			
MALME-3M	111.22			
M14	94.29	-		
MDA-MB-435	101.59			
SK-MEL-2	110.91			
SK-MEL-28	110.78			
SK-MEL-5	96.59			
UACC-257	109.90			
UA00-62	97.45			
ISBOULA	141.01			
OVCAR-3	110.49			
OVCAR-4	96.23			
OVCAR-5	108.40			
OVCAR-8	110.42			
NCI/ADR-RES	100.36			
SK-OV-3	92.71			
enal Cancer	103.13			
A499	103.47			
ACHIN	105.75			
CAKI-1	87.17	and the second se		
RXF 393	110.93			
SN12C	105.95			
TK-10	137.53	-		
UO-31	90.87			
rostate Cancer				
PG-3	123.96			
reast Cancer	100.51			
MCF7	93.28			
MDA-MB-231/ATCC	93.88			
H8 578T	106.09			
BT-549	96.24			
T-47D	104.61			
MDA-MB-468	101.65			
		150 75	0.0	-75 -15

Fig. S72: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compound 3e

Developmental Thera	peutics Program	NSC: D-847875/1	Cono: 1.00E-5 Molar	Test Date: Aug 21, 202
One Dose Bar	Graph	Experiment ID: 2308	0865	Report Date: Oct 11, 2
Panel/Cell Line	Growth Percent	Bar Graph		
eukemia			55	100
CCRF-CEM	93.63			
HL-60(TB)	104.28			
K-562	80.07			
MOLT-4	88.12			
RPMI-8226	98.18			
SR	96.77			
AC49/ATOC	95.10			
EKVX	87.72			
HOP-62	113.71			
HOP-92	70.16			
NCI-H225	84.60			
NCI-H23	90.99			
NCI-H322M	90.20			
NCI-H460	98.68			
NCI-H522	88.13			
cion Cancer				
0010 205	101.57			
HCT-115	95 77			
HCT-15	95.80			
HT29	118.08			
KM12	96.19			
SW-620	103.15			
INS Cancer				
8F-268	78.56			
8F-295	83.27			
SF-539	98.38			
SNB-19	91.81			
SNB-75	54.31			
0251	93.66			
relanoma	04.02			
MALME-3M	99.34			
MALA STATES	109.95			
MDA-MB-435	95.57			
SK-MEL-2	99.29			
SK-MEL-28	111.88			
SK-MEL-5	86.07			
UACC-257	104.24			
UACC-62	91.70			
Ovarian Cancer				
IGROV1	103.99			
OVCAR-1	79.10			
OVCAR-5	112 32			
OVCAR-8	94.64			
NCUADR-RES	94.62			
SK-OV-3	126.30			
tenal Cancer				
786-0	88.55			
A498	99.37			
ACHN	102.92			
CAULT	65.12			
PAP 393	11/.88			
TK-10	105.42			
UO-31	96.04			
rostate Cancer				
PC-3	97.68	Common and C		
DU-145	105.22			
reast Cancer				
MCF7	83.96	1		
MDA-MB-231/ATCC	89.96			
HS 578T	85.09			
81-549	84.69			
MDA-MB-458	85.03			
			22	

Fig. S73: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μ M of Compound 4a

Developmental Therapeutics Program One Dose Bar Graph		NSC: D-847876/1	Cono: 1.00E-5 Molar	Test Date: Aug 21, 2023
		Experiment ID: 23080865		Report Date: Oct 11, 2023
Panel/Cell Line	Growth Percent	Bar Graph		
eukemia				
OCRF-CEM	100.75			1 1
HL-60(TB)	110.59			1 1
K-562	79.98			1 1
MOLT-4	96.14			1 1
RPMI-8226	95.23			1 1
SH Call Lung Capper	97.37			1 1
ACADIATOO	105.44			
FK/X	85.75			
HOP-62	109.66			
HOP-92	88.71			
NCI-H226	96.19			
NCI-H23	93.37			
NCI-H322M	103.64			
NCI-H460	101.29			
NCI-H522	85.26			
olon Cancer				
COLO 205	117.28			
H00-2998	107.46			
HOT-15	97.33			
101-15	115 10			
KM412	98.14			
SW-620	103.97			
NS Cancer	100.01			
3F-268	83.92	a		
3F-295	90.78			
8F-539	93.61			
SNB-19	90.25			
3NB-75	70.36	C. C		
U251	95.51			
felanoma		-		
LOX IMVI	96.22	6		
MALME-3M	108.33			
M14	113.84			
MUA-MB-435	105.45			
OK-MEL-2	100.40			
OK-MEL-20	93.95			
UACC-257	110.18			
UACC-62	91.28	No. of Concession, Name		
varian Cancer				
IGROV1	109.76			
OVCAR-3	101.94			
OVCAR-4	85.97			
OVCAR-5	108.97			
OVCAR-8	98.76			
PROVADIN-HES	36.23			
an-OV-3	115.87			
785-0	97.32			
Adge	101 68			
ACHN	98.63			
GAKI-1	60.78	Concession of the local division of the loca		
RXF 393	66.21			
SN12C	96.92	Common and C		
TK-10	98.96			
00-31	93.77			
rostate Cancer				
PC-3	97.94			
00-145	105.68			
reast Cancer				
MOP/	86.88			
HO STOT	90.27			
BT-549	00.00			
T-47D	83.45			
MDA-MB-468	93.47			

Fig. S74: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compound 4b



Fig. S75: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μ M of Compound 4c
One Dose Bar Graph Expertment ID: 2000660 Report Date: Oct 15. Panel/Cell Line Growth Percent Bar Graph Expertment ID: 2000660 CCRF-CEM 54.56 57.72 56.57 MonoPmail Cell Ling Cancer 85.97 55.97 Non-Pmail Cell Ling Cancer 96.85.97 105.45 MonoPmail Cell Ling Cancer 96.85.97 105.42 Non-Pmail Cell Ling Cancer 96.85.97 105.42 NCH-H225 85.73 105.42 NCH-H226 91.44 107.22 COLO 205 114.44 101.70 COLO 205 134.07 HCD-2598 91.44 COLO 205 134.07 HCD-2598 91.44 COLO 205 134.07 HCD-2598 91.44 COLO 205 134.07 MALME-33 91.34 SP-538 91.40 SP-538 91.40 SP-538 91.40 SP-538 91.40 SP-538 91.40 SP-538 <t< th=""><th colspan="2">Developmental Therapeutics Program</th><th colspan="2">NSC: D-847922 / 1 Cono: 1.00E-5 Molar</th><th colspan="2">Test Date: Aug 28, 2023</th></t<>	Developmental Therapeutics Program		NSC: D-847922 / 1 Cono: 1.00E-5 Molar		Test Date: Aug 28, 2023	
Panel/Cell Line Growth Percent Bar Graph Lcukemis OCRF-OEM H-GOTTB) 94-55 95-72 K-562 MOLT-4 94-55 92-23 MOLT-4 94-56 92-23 MOLT-4 MOLT-4 85.00 RPM-8225 MOLT-425 MOLT	One Dose Bar	Graph	Experiment ID: 23080868		Report Date: Oct 15, 202	
Leukemia CORF-CEM 94.56 H-60(TE) 95.72 K4552 MOLT-42 SPMM5201 Lung Cancer APMM5201 Lung Cancer APMM5201 Lung Cancer BEV/X HOP-52 HOP	Panel/Cell Line	Growth Percent	Bar Graph			
Out-Out-Bin P3 # 73 K-552 # 22.83 MOLT-4 # 85.00 RMI-1226 # 5.57 AdditArton 108.57 AdditArton 108.57 AdditArton 108.57 NCH-1225 # 5.73 NCH-1226 # 5.73 NCH-1225 # 5.73 NCH-1226 # 1.44 MCH-132 # 10.170 MCH-132 # 128.02 K1412 # 10.170 NCH-135 # 88.86 K1412 # 10.170 NC-1428 # 14.44 MC-1416 # 18.39 HCT-115 # 88.86 K1412 # 10.170 NC-1428 # 14.42 NC-1429 # 18.85 MALM-39 # 18.25 MALM-39 # 18.25 MALM-20	eukemia	04.05				
K-252 07 72.23 RPM.6226 85.00 RPM.6226 85.97 Kordmail Cell Lung Cancer 85.97 BC/VX 94.94 HOP-92 194.44 HOP-92 97.95 NCH-423 87.73 NCH-423 87.75 NCH-423 87.76 NCH-423 87.75 NCH-423 87.95 NCH-423 87.95 NCH-423 87.95 NCH-423 83.95 NCH-423 83.95 SNB-53 91.84 9F-285 91.44 9F-285 91.40 9F-285 91.40 9F-285 91.40 9F-285 91.40 <	UL-ED(TE)	96.72			1 1	
MDC17-4 85.00 RPM-16226 55.97 RAS491ATCO 108.59 EX/VX 90.81 AS491ATCO 105.51 EX/VX 90.82 EX/VX 90.84 MOC+423 87.96 NCI+423 87.96 NCI+423 87.96 NCI+423 87.96 NCI+423 87.96 NCI+423 105.22 91.44 107.277 NCI+430 107.277 NCI+430 107.277 NCI+430 107.277 NCI+430 101.70 SIM-6207 91.44 SIM-6207 10.00 SIM-6207 10.00 SIM-6207 91.40 9F-538 91.40 9F-539 94.00 9F-539 95.40 9F-539 95.40 9F-539 95.40 9F-539 95.40 9F-539 95.40	K-562	72.83			1 1	
RFM:0236 05.97 AS49/ATCC 108.59 PKVX 56.81 HOP52 104.64 HOP52 104.64 HOP52 104.64 HOP52 95.73 NCH432M 109.22 NCH432M 109.22 NCH432M 109.22 NCH452 91.44 NCH452 124.07 HC7-15 98.86 HT23 128.02 NCH452 10.04 SP-265 91.44 NCH452 10.04 SP-265 91.40 SP-265 91.40 SP-265 91.40 SP-265 91.40 SP-265 91.40 SP-265 91.40 SP-267 95.50 UACO-21 105.57 SP-400 95.12 SP-401 10.27 SP	MOLT-4	85.00			1 1	
Großmäll Cell Lung Cancer 108.59 BK/WX 96.81 HOP-52 106.441 HOP-52 95.71 NCH+225 95.73 NCH+225 95.73 NCH+225 95.73 NCH+420 107.27 NCH+420 107.27 NCH+421 91.44 COLO 2055 124.67 SP-285 91.44 SP-285 91.40 SP-285 91.40 SP-285 91.40 SP-285 91.40 SP-285 91.40 SP-285 91.41 SP-285 91.40 SP-285 91.40 SNP-19 96.93 SNP-19 96.93 SNP-19 96.93	RPMI-8226	85.97				
Advance 108.59 HCP-K2	on-Small Cell Lung Cancer					
ENVA 99.81 HDP-52 95.71 NCH-225 95.71 NCH-225 95.73 NCH-225 95.73 NCH-420 87.96 NCH-421 109.22 NCH-423 97.96 NCH-423 91.44 Gold Cancer 91.44 COLO 205 124.07 HCO-1988 114.44 HCT-116 98.19 HCT-116 98.19 GOLO 205 110.04 SV-520 110.05 SV-517 150.64 Elanoma 161.50 SV-612-2 112.04 SV-612-5 114.00 OVCAR-4 86.97 <td>A549/ATCC</td> <td>108.59</td> <td></td> <td></td> <td></td>	A549/ATCC	108.59				
Hidp-B2 D9571 NCH+22S 8573 NCH+23 8735 NCH+23 8735 NCH+420 107.27 NCH+450 107.27 NCH+450 107.27 NCH+521 91.44 old Cancer 92 OCL0.2025 124.07 HC7-115 81.85 HC7-115 81.85 HC7-115 81.85 SP-285 91.34 9F-285 91.34 9F-285 91.40 9F-285 91.81 9K-MEL-28 112.04 9K-MEL-28 12.04 9K-MEL-28 118.07 9K-MEL-28 95.59 9K-	EKVX HOR-62	96.81				
NCI+22s 8573 NCI+321 8795 NCI+4321 10522 NCI+452 91.44 of Cancer 00.0205 COLO 205 124.67 HC0-2998 114.44 HC7-115 88.86 HT29 128.02 HT29 128.02 BT-288 91.44 SP-285 91.44 SP-285 91.44 SP-285 91.40 SP-285 91.40 SP-285 91.40 SP-285 91.40 SP-285 91.40 SP-285 91.40 SP-285 91.44 SP-285 91.40 SNB-75 98.40 U251 105.04 Eanoma 84.70 M24.ME-23 121.71 SK-MEL-23 122.71 SK-MEL-23 122.71 SK-MEL-23 122.71 OVCAR-4 95.55 SK-MEL-5 124.57 SK-MEL-6 95.57 <	HOP-92	95.71				
NCH-H321 87.95 NCH-H322M 109.22 NCH-H450 107.27 NCH-H522 91.44 Jon Cancer 91.44 OCL0.205 124.07 HC7-115 83.85 HC7-115 83.85 SW-520 110.04 SV-528 91.34 SV-528 101.00 SV-515 95.40 UASI 101.80 SK-MEL-2 112.04 SK-MEL-28 121.71 SK-MEL-23 101.80 SK-MEL-23 101.80 SK-MEL-24 101.87 OVCAR-3 104.81 OVCAR-4 95.52 SK-MEL-5 103.31	NCI-H226	85.73				
NCH-H322M 109.22 NCH-H450 107.27 NCH-H450 107.27 Son Cancer 124.07 COLO 2055 124.07 HCO-2398 114.44 HCT-115 93.19 HCT-115 128.02 HT23 101.70 SP-268 91.34 SP-268 91.34 SP-255 91.40 SP-255 91.40 SP-255 91.40 SNB-75 99.40 U251 105.04 LOK IMVI 84.70 MALME-3M 111.52 M14 91.18 SNB-75 129.40 U251 105.04 Ianoma 81.70 MALME-3M 111.52 M14 91.18 SNM-75 138.51 UAC0-62 123.54 Varian Cancer 105.71 SN-MEL-23 104.51 OVCAR-4 85.81 OVCAR-5 114.00 OVCAR-5 114.00 OVCAR-6 105.57 NCH00-72 133.54 Varian Cancer 101.05 SN-130 117.35 DV-145 101.05 SN-15 101.05	NCI-H23	87.96				
NCI-H450 107.27 NCI-H450 107.27 NCI-H522 91.44 Son Gancer 91.44 HCC-116 93.19 HCT-116 93.19 HCT.116 93.19 HCT.12 101.70 SUPSoc 91.34 SUPSoc 91.34 SUP-Set 91.34 SP-525 91.40 SNB-75 99.40 UAS1 105.04 clanoma 101.80 SK-MEL-23 111.02 SK-MEL-23 121.71 SK-MEL-23 121.71 SK-MEL-23 122.04 SK-MEL-35 83.25 UAC0-62 83.54 SK-MEL-35 104.51 OVCAR+3 104.51	NCI-H322M	109.22				
MCH-H522 Son Cancer COLO 205 124.07 HCO-2398 114.44 HCT-116 93.19 HCD-2398 H1.44 HCT-116 93.19 HCD-2398 HT.23 SCancer 87-285 91.34 87-285 91.34 87-285 91.34 97-285 91.34 97-285 91.40 97-285 91.40 97-285 91.40 97-285 91.40 97-285 91.40 97-285 91.40 97-285 91.40 97-285 91.40 97-285 91.40 97-285 91.40 97-285 91.40 97-285 91.40 97-285 91.40 97-285 91.40	NCI-H460	107.27				
adn Cancer 124.07 HCO-2998 114.44 HCT-116 53.16 HCT-115 53.16 HCT-116 53.16 BV-200 10.170 BV+520 110.04 BC-368 91.34 BF-235 91.40 BF-235 94.01 QS-111 105.04 elanoma 111.52 MALME-335 101.80 SK-MEL-23 121.71 SK-MEL-23 8.25 UACC-257 119.67 UACC-227 8.354 UACC-227 112.04 SK-MEL-23 124.51 UACC-227 135.59 BK-0V3 97.55 BK-0V3 97.55 BK-0V3 97.55	NCI-H522	91.44				
CUCC 2013 124.07 HCD-22958 114.449 HCT:116 93.15 HCT:116 93.16 HCT:116 128.02 Bith/500 110.04 Bross 91.40 Br-535 91.40 Br-535 94.01 BR-75 99.40 UZ51 105.04 LOX INVI 84.70 MALME-33 101.80 BR-MEL-2 112.04 BR-MEL-3 101.80 BR-MEL-2 112.04 BR-MEL-3 101.80 BR-MEL-3 104.61 OVCAR-3 104.61 OVCAR-3 104.61 OVCAR-4 88.97 OVCAR-5 114.00 OVCAR-5	col o 205	124 07			1 1	
HTT-Tris 1378 HTT-Tis 128.02 KM12 101.70 KM12 101.70 KM12 101.70 KM12 101.70 KM12 101.70 SC568 91.34 SF-258 91.40 SF-258 91.40 SF-258 91.40 SF-258 91.40 SF-258 91.40 SK-258 91.40 SK-258 91.40 SK-258 91.40 SK-258 91.40 SK-258 91.40 SK-258 91.40 SK-251 105.44 U251 105.44 U251 101.80 M14 91.18 M14 91.18 M14 91.18 M14 91.84 VACC-257 119.54 VACC-257 119.54 VACC-257 119.54 VACC-257 119.54 VACC-257 119.57 SK-MEL-28 110.57 OVCAR-3 95.18	HCC-7998	114.44				
HCT-16 HT29 10170	HCT-116	93.19				
HT29 128.02 KM12 101.70 SW-620 110.04 SF-268 91.34 SF-268 91.34 SF-268 91.30 SF-275 99.40 U251 105.04 elanoma 105.04 elanoma 111.52 UAC -153 101.80 SM-ME-33 101.80 SM-ME-33 101.80 SM-ME-33 101.80 SM-ME-33 121.71 SM-ME-23 112.04 SM-ME-23 122.04 SM-ME-23 83.54 varian Cancer 9 SF-265 114.00 OVCAR-5 114.00 OVCAR-5 114.00 OVCAR-5 114.00 OVCAR-5 114.00 OVCAR-6 15.97 NCIUADR-RE8 96.59 SM-0V-3 97.55 enal Cancer 95.12 ACH 1 95.12 SM-100 105.17 SM-200 10 SM-200 10 SM-2	HCT-15	88.85				
KM12 101.70 SW-520 110.04 NS Gancer 91.34 9F-258 91.40 SP-539 94.01 SM-97 95.83 SMB-75 95.40 U251 105.04 LOX IMVI 84.70 MALME-3M 111.52 M14 91.18 MAME-35 101.80 SK-MEL-23 121.71 SK-MEL-25 121.71 SK-MEL-26 82.25 UACC-257 115.67 UACC-257 115.67 OVCAR-3 104.81 OVCAR-4 89.97 OVCAR-3 104.81 OVCAR-4 80.57 NCIMOR-REB 95.12 A498 127.90 OK-0V1 110.27 OVCAR-8 105.57 NCIMOR-REB 95.12 A498 127.90 OK-0V=3 97.55 enal Cancer 77.205 PC-3 95.02 DU-145 101.06 restat Cancer 97.25 PC-3 95.02 DU-145 101.06 restat Cancer 97.24 PC-3 95.02 DU-145 101.06	HT29	128.02				
30V-820 110.04 9F-268 91.34 9F-265 91.40 9F-265 91.40 9F-275 93.401 9R-19 96.83 9MB-75 99.40 U251 105.04 elanoma 111.22 M14 91.18 M14 91.18 M14 91.18 M14-435 101.80 SK-MEL-2 112.04 SK-MEL-28 121.71 SK-MEL-28 121.71 OVCAR-3 104.61 OVCAR-3 104.61 OVCAR-4 88.97 OVCAR-5 114.00 OVCAR-8 105.97 IGROV1 110.27 OVCAR-8 105.97 IGROV1 102.57 IGROV1 102.71 OVCAR-8 105.97 SR-10 97.55 enal Cancer 97.25 TK-10 163.91 UO-31 72.05 rostate Cancer 97.25 PC-3 95.02 DU-445 101.06 rest Cancer 97.36 MDA-MB-231WATCC 80.15 MDA-MB-231WATCC 80.15 MDA-MB-468 97.36	KM12	101.70				
NB Canter 97-368 97-358 91.40 97-539 94.00 NF-539 94.00 NF-539 94.00 NF-53 95.93 94.00 NF-53 95.93 94.00 NF-53 95.93 94.00 NF-53 105.04 NF-48-35 105.04 NF-48-35 105.04 NF-48-35 101.80 NF-48-45 102.7 112.04 NF-48-45 101.80 NF-48-45 102.7 110.2 110.27 110	SW-620	110.04				
b1-285 51.54 b7-285 51.40 b7-295 51.40 b7-539 94.01 b101 105.04 elanoma 0.05.1 LOX IMVI 84.70 MALME-3M 111.52 M14 91.18 M0A-MB-435 101.80 BK-MEL-2 112.04 BK-MEL-28 121.71 BK-MEL-2 112.04 BK-MEL-28 121.71 BK-MEL-28 121.71 BK-MEL-5 83.25 UACO-62 83.54 Varian Cancer 0VCAR-3 IGROV1 10.27 OVCAR-3 104.51 OVCAR-4 68.97 OVCAR-5 114.00 OVCAR-8 105.97 BROV1 102.77 OVCAR-8 105.97 SNI20 97.55 Brail Cancer 72.85 TK-10 15.97 SNI20 97.25 DV-145 101.06 Fest Cancer 72.05 PC-3 95.02 DV-145 101.06 rest Cancer 75.36 MDA-MB-231/ATCC 80.15 PC-3 95.02 DV-145 <t< td=""><td>N8 Gancer</td><td>01.01</td><td>-</td><td></td><td></td></t<>	N8 Gancer	01.01	-			
SI-525 SIA01 SNB-19 S6.93 SNB-75 S9.40 U251 105.04 LOX IMVI 84.70 M4LME-3M 111.52 M14 91.18 M0A-MB-435 101.80 SK-MEL-2 112.04 SK-MEL-28 121.71 SK-MEL-28 121.71 SK-MEL-28 121.71 SK-MEL-28 121.71 SK-MEL-5 63.25 UACC-62 83.54 varian Cancer 119.67 OVCAR-3 104.81 OVCAR-4 88.97 OVCAR-5 114.00 OVCAR-5 105.97 NDIA-MB-233/ATCC 95.12 A498 127.90 SNH2C 97.25 TK-10 163.91 UO-31 72.05 Cancer 7 PC-3 95.02 DU-145 101	25-265	91.34				
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BK-MEL-2 112.04 BK-MEL-28 121.71 SK-MEL-28 12.171 UACD-257 119.67 UACD-257 119.67 UACD-257 110.27 OVCAR-3 104.61 OVCAR-5 114.00 OVCAR-5 104.51 OVCAR-8 105.97 NCIADR-RES 95.59 SK-0V-3 97.55 Brail Cancer 785-0 786-0 95.12 A498 127.90 ACHN 96.18 CANO-1 80.52 RKF 333 111.79 SN12C 97.25 Tri-10 163.91 UO-31 72.05 rostate Cancer 95.02 DU-145 101.06 reast Cancer 97.44 BT-549 82.21 T-47D 85.56 MDA-MB-268 97.36	MDA-MB-435	101.80				
BK-MEL-28 121.71 BK-MEL-5 83.25 UAOC-257 119.67 UAOC-252 83.54 varian Cancer 0/QAR-3 O/QAR-3 104.51 O/QAR-4 85.97 O/QAR-5 114.00 O/QAR-5 105.97 NGIAOR-RES 95.59 BK-OU-3 97.55 enal Cancer 786-0 786-0 95.12 A498 127.90 ACHN 95.18 CAN-1 80.52 RXF 393 111.79 SN12C 97.25 TK-10 15.391 U0-31 72.05 restate Cancer 75.36 MDA-MB-231/ATCC 80.15 H3 578T 97.44 BT-549 82.21 T-47D 85.56 MDA-MB-468 97.36	SK-MEL-2	112.04	Concession and the second second			
0K-MEL-5 63.25 UACC-257 119.67 UACC-62 83.54 VBROV1 110.27 OVCAR-3 104.51 OVCAR-4 88.97 OVCAR-5 114.00 OVCAR-5 114.00 OVCAR-6 105.97 NDLADE-RES 96.59 SK-OV-3 97.55 enal Cancer 785-0 786-0 95.12 A498 127.90 ACHN 96.18 CAKI-1 80.52 RXF 393 111.79 SN12C 97.25 TK-10 163.91 UC-31 72.05 cotate Cancer 75.36 PC-3 95.02 DU-145 101.05 reast Cancer 75.36 MDA-ME-231/ATCC 80.15 MDA-ME-458 97.36	SK-MEL-28	121.71				
UACC-257 119.67 UACC-252 83.54 UACC-62 83.54 UACC-62 83.54 UACC-62 83.54 UCAR-3 104.51 OVCAR-3 104.51 OVCAR-5 114.00 OVCAR-5 114.00 OVCAR-5 105.97 OVCAR-8 105.97 OVCAR-8 55.59 SIX-OV-3 97.55 enai Cancer 786-0 95.12 A498 127.90 ACHN 95.18 CAKO-1 80.52 RVF 393 111.79 SM12C 97.25 TX-10 153.51 UC-31 72.05 Totate Cancer PC-3 95.02 DU-145 101.05 rest Cancer T-47D 85.56 MDA-MB-231/ATCC 80.15 T-47D 85.56 MDA-MB-231/ATCC 97.36	SK-MEL-5	83.25				
UNCORD 23.54 IGROV1 110.27 IGROV1 110.27 OVCAR-3 104.51 OVCAR-4 68.97 OVCAR-5 114.00 OVCAR-8 105.97 IGROV-3 97.55 IGRICOR-RED 96.59 SN-OV-3 97.55 IGRICORCE 111.79 RAF0 95.12 AA98 127.90 ACHIN 96.18 CAXI-1 80.52 RXF 393 111.79 SN12C 97.25 TK-10 15.391 UO-31 72.05 Tostate Cancer 95.02 DU-145 101.06 resit Cancer 95.02 MDA-MB-231/ATCC 80.15 MDA-MB-458 97.36	UACC-257	119.67				
BROV1 110.27 OVCAR-3 104.81 OVCAR-4 88.97 OVCAR-5 114.00 OVCAR-8 105.97 NCIADR-RES 96.59 SR-OV-3 97.55 enal Cancer 95.12 786-0 95.12 A498 127.50 ACHN 96.18 CAKI-1 80.52 RXF 333 111.79 SN12C 97.25 TK-10 163.91 UO-31 72.05 rotate Cancer 95.02 DU-145 101.05 reast Cancer 95.02 MCF7 75.36 MOA-MB-231/ATCC 80.15 H0 578T 97.44 8T-549 82.21 T-47D 85.56 MDA-MB-468 97.36	varian Cancer	03.54				
OVCAR-3 104.81 OVCAR-4 88.97 OVCAR-5 114.00 OVCAR-8 105.97 NCIADR-REB 96.59 SR-OV-3 97.55 enal Cancer 786-0 786-0 95.12 AA98 127.90 ACHN 95.18 CAMO-1 80.52 SN12C 97.25 TK-10 163.91 UO-31 72.05 rotate Cancer 72.05 PC-3 95.02 DU-145 101.06 reast Cancer 95.02 MCF7 75.36 MDA-MB-231/ATCC 80.15 HS 758T 97.44 BT-549 82.21 T-47D 85.56 MDA-MB-268 97.36	IGROV1	110 27				
OVCAR-4 88.97 OVCAR-5 114.00 OVCAR-6 105.97 NCIMADF-RES 96.59 SR-OV-3 97.55 enal Cancer 786-0 786-0 95.12 A498 127.90 ACHN 96.18 CAKI-1 80.52 RKF 393 111.79 SIN12C 97.25 TK-10 163.91 UO-31 72.05 rostate Cancer 95.02 DU-145 101.06 reast Cancer 95.02 DU-145 101.06 reast Cancer 95.02 MDF7 75.36 MDF31ATCC 80.15 MDF4-MB-231/ATCC 80.15 MDA-MB-468 97.36	OVCAR-3	104.61				
OVCAR-5 114.00 OVCAR-6 105.97 NCIADR-RES 96.59 SR-OV-3 97.55 enal Cancer 785-0 785-0 95.12 A498 127.90 ACHN 95.18 CAKI-1 80.52 RXF 393 111.79 SM12C 97.25 TK+10 163.91 UO-31 72.05 rostate Cancer 95.02 DU-145 101.05 reast Cancer 97.54 MCF7 75.36 MOA-MB-231/ATCC 80.15 TH-47D 85.56 MDA-MB-468 97.36	OVCAR-4	88.97				
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Number New BS.39 BN-OV-3 97.55 enal Cancer 786-0 786-0 95.12 A498 127.90 ACHIN 96.18 CAXI-1 80.52 RXF 333 111.79 SIN12C 97.25 TK-10 163.91 UO-31 72.05 rostate Cancer 95.02 DU-145 101.06 resat Cancer 95.36 MDA-MB-231/ATCC 80.15 MD4.MB-231/ATCC 80.15 MD4.MB-231/ATCC 80.56 MDA-MB-468 97.36	OVCAR-8	105.97				
Rul Cancer 785-0 95.12 785-0 95.12 4398 A438 127.90 AGHN ACHN 96.18 0.52 RXF 333 111.79 90.12 9M12C 97.25 7K+10 UO-31 72.05 70.11 DU-145 101.05 101.05 reast Cancer 75.36 MGP7 MGF7 75.36 MGP4.MB-231/ATCC BT-549 82.21 744 BT-549 82.21 7470 MDA-MB-68 97.36 101.05	SK-OV-3	97.55				
756-0 95.12 A498 127.90 ACHN 56.18 CAXI-1 80.52 RXF 393 111.79 SN12C 97.25 TK-10 153.91 UO-31 72.05 rotate Cancer 95.02 DU-145 101.06 reast Cancer 95.02 DU-145 50.16 MDP7 75.36 MD4-MB-231/ATCC 80.15 PA-4MB-231/ATCC 80.15 MD4-MB-231/ATCC 82.21 T-47D 85.55 MDA-MB-468 97.36	enal Cancer					
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ACHN 95.18 CAK0-1 80.52 RXF 393 111.79 SN12C 97.25 TX-10 153.91 UC-31 72.05 rotate Cancer 95.02 DU-145 101.05 reast Cancer 95.02 MDA-MB-231/ATCC 80.15 HD 578T 97.44 BT-549 82.21 T-47D 85.56 MDA-MB-268 97.36	A498	127.90				
CAKIP1 80.52 RXF 393 111.79 SN12C 97.25 TK-10 163.91 UO-31 72.05 rotate Cancer 95.02 DU-145 101.06 reast Cancer 97.44 BT-549 82.21 T-47D 85.56 MDA-ME+688 97.36	ACHN	96.18				
DAT 20 97 25 TK-10 153.91 UO-31 72.05 ostate Cancer 95.02 DU-145 101.06 test Cancer 75.36 MCF7 75.36 MCF4/MB-231/ATCC 80.15 H0 578T 97.44 8T-549 82.21 T47D 85.56 MDA-MB-68 97.36	CAKI-1	80.52				
37.450 37.451 UO-31 72.05 votate Cancer 72.05 PC-3 95.02 DU-145 101.05 reast Cancer 80.15 MDA-MB-231/ATCC 80.15 H0 S78T 97.44 BT-549 82.21 T-47D 86.55 MDA-MB-68 97.36	ON 120	97.75				
UO-31 72.05 rostate Cancer 95.02 DU-145 101.05 reast Cancer MCF7 MD54/MB-231/ATCC 80.15 H5 578T 97.44 BT-549 82.21 T447D 85.56 MDA-MB-68 97.36	TK-10	163.91				
rotate Cancer PC-3 95.02 DU-145 101.05 reast Cancer 75.35 MDA-MB-231/ATCC 80.15 H0 578T 97.44 BT-549 82.21 T-47D 85.56 MDA-MB-468 97.36	UO-31	72.05	and the second			
PC-3 95.02 DU-145 101.05 reast Cancer 75.36 MDA-MB-231/ATCC 80.15 H9 578T 97.44 BT-549 82.21 T-47D 85.56 MDA-MB-468 97.36	rostate Cancer	2012				
DU-145 101.05 result Cancer MCF7 MCF7 75.36 MCA-MB-231/ATCC 80.15 HD 578T 97.44 BT-549 82.21 T-47D 85.56 MDA-MB-468 97.36	PC-3	95.02				
reast cancer MCP7 75.36 MCP4/MB-231/ATCC 80.15 H0.578T 97.44 BT-549 82.21 T-47D 85.56 MDA-MB-468 97.36	DU-145	101.06				
MCA ⁺ /MDA ⁻ /MD ⁻ /MDA ⁻ /MD ⁻ //MD ⁻ /MD ⁻ //MD ⁻ /MD ⁻ //MD ⁻ ///MD ⁻ ///MD ⁻ ///MD ⁻ ///MD ⁻ ///MD ⁻ ///MD ⁻ ////MD ⁻ ////MD ⁻ ////MD ⁻ /////MD ⁻ ////////////////////////////////////	reast cancer		1			
HB 578T 97.44 BT-549 82.21 T-47D 85.55 MDA-MB-469 97.36	MDA-ME-231/ATCC	75.35				
87-549 82.21 T-47D 85.56 MDA-MB-468 97.36	H3 578T	97.44				
T-47D 85.56 MDA-MB-468 97.36	BT-549	82.21				
MDA-MB-468 97.36	T-47D	85.56				
	MDA-MB-468	97.36				

Fig. S76: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compound 4d

One Dees Dees							
One Dose Bar	Graph	Experiment ID: 23080868		Report Date: Oct 15, 202		Report Date: Oct 15, 2	
Panel/Cell Line	Growth Percent	Bar Graph					
eukemia	101.12		3. ° ·	16			
ULCO(TE)	101.12			1 1			
K-562	66.54						
MOLT-4	96.15						
RPMI-8226	93.88						
ion-Small Cell Lung Cancer							
A549/ATCC	99.91						
EKVX	101.89						
HOP-62	99.69						
NOI-H225	94.75						
NCI-H23	95.75						
NCI-H322M	101.35						
NCI-H460	103.49						
NCI-H522	92.10						
olon Cancer							
COLO 205	123.61						
HCC-2998	123.62						
HUT-116	98.85						
HU1-15	139.30	_					
10412	107.19						
SW-620	105.59						
NS Cancer							
3F-268	91.55						
8F-295	91.90						
8F-539	92.03						
SNB-19	96.14						
SNB-75	89.87						
elanoma	101.71						
LOX IMVI	98 57						
MALME-3M	109.41						
M14	95.51	Concession of the local division of the loca					
MDA-MB-435	97.73						
SK-MEL-2	115.22						
SK-MEL-28	118.92						
SK-MEL-5	87.03						
UACO-257	112.89						
Warlan Cancer	32.03						
IGROV1	100.85						
OVCAR-3	107.26						
OVCAR-4	89.22						
OVCAR-5	117.67						
OVCAR-8	108.11						
NCUADR-RES	101.24						
GN-OV-S	00.20						
785-0	93.75						
A498	111.59						
ACHN	106.17						
CAKI-1	82.41						
RXF 393	111.14						
SN12C	100.69						
TK-10	145.40	-					
00-31	82.21						
Tostate Cancer	00.37						
DU-145	104.15						
reast Cancer	104.10						
MCF7	79.35						
MDA-MB-231/ATCC	91.93						
H8 578T	96.92						
BT-549	72.32						
T-47D	98.64						
MDA-MB-468	96.14						

Fig. S77: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compound 4e

One Dose Bar Graph Panel/Cell Line Growth Leukemia CCRF-OEM 93 HL-60(TB) 85 K-562 71 MOLT-4 87 SR 88 Skn-562 71 MOLT-4 87 SR 88 Skn-562 108 HOP-52 108 HOP-52 63 HOP-52 63 NCI+H23 88 NCI+H32 80 NCI+H32 80 NCI+H32 91 MCLA1452 95 StME 96 Shell 97 StMS 95 Shell 95 StME 95 MALME-33 95 StMBL-12 96	h Percent 189 106 122 132 142 142 142 142 158 144 113 137 154 158 137 154 158 139 159 159 159 159 158 158 158 158 158 158 158 158	Experiment Bar Graph	ID: 2308	0665		Report D	Nate: Oct 11, 20
Panel/Cell Line Growth Leukemia 93 CCRF-CEM 93 HL-60(TB) 95 K-562 71 MOLT-4 87 SR 88 Kon-Bmail Cell Lung Cancer 89 AS49/ATCC 99 EKVX 89 HOP-62 103 HOP-52 63 NCH-23 88 NCH-23 88 NCH-23 88 NCH-23 88 NCH-23 88 NCH-423 88 NCH-123 88 NCH-123 88 NCH-132 88 NCH-132 81 HC7-116 85 97-258 76 97-258 76 97-258 76 97-258 76 97-258 76 97-258 76 97-258 76 97-258 76 98 94	h Percent .89 .22 .35 .22 .42 .42 .42 .42 .58 .44 .11 .37 .54 .45 .23 .58 .42 .13 .37 .58 .42 .13 .37 .58 .42 .13 .37 .58 .42 .13 .37 .58 .42 .13 .37 .58 .42 .13 .59 .42 .13 .59 .42 .13 .59 .42 .13 .59 .42 .13 .59 .42 .13 .59 .42 .13 .59 .42 .13 .59 .42 .13 .58 .42 .13 .59 .42 .13 .58 .44 .11 .58 .44 .11 .58 .44 .11 .58 .49 .58 .49 .49 .41 .45 .58 .49 .58 .49 .58 .49 .58 .49 .59 .49 .49 .49 .49 .49 .49 .49 .4	Bar Graph					
Leukemia 93 CCRF-CEM 93 HL-60(TB) 85 K-562 71 MOLT-4 87 RPMI-9225 84 9R 88 Kon-Bmail Cel Lung Cancer AsayiArCoC AsayiArCoC 99 HOP-52 63 NCH+423 88 NCH+225 80 NCH+423 88 NCH+423 88 NCH+423 88 NCH+423 80 Oclo 205 110 HCP-52 93 NCH+423 88 NCH+423 88 NCH+52 80 Oclo 205 110 HCT-115 95 HT29 111 KM12 91 SP-265 76 SF-255 86 SF-539 90 SNB Cancer 90 UASINV1 93 MALME-3M 95 MALME-3M	.89 222 35 229 442 442 442 45 88 84 44 113 137 54 88 223 54 121 54 88 223 59 2 92 54 118 80 44						
CURP-DEM 33 HL-60(TB) 65 K-562 71 MOLT-4 67 RPMI-5225 84 9R 88 Som-Small Cel Lung Cancer 4549/KTCC A549/KTCC 99 HOP-52 63 NCH+4225 83 NCH+423 88 NCH+323 88 NCH+423 88 NCH+423 88 NCH+423 88 NCH+426 99 NCH+427 80 Solion Cancer 90 COLO 205 110 HC7-115 95 HC7-15 95 HC715 95 SAS Cancer 92 SP-265 76 SF-255 86 SF-255 95 SMALME-33 90 NALME-34 95 MALME-35 95 SK-MEL-2 96 SK-MEL-2 96 SK-M	.06 222 35 229 442 442 442 45 88 84 44 111 121 54 54 54 54 54 121 54 54 54 54 54 54 54 54 54 54 54 54 54						
N-562 81 K-562 71 MOLT-4 87 SR 84 SR-Statistics 84 SR-Statistics 84 MOP-F2 108 HOP-52 63 NCH-H23 88 NCH-H32 99 NCH-H32 91 HC7-16 85 HC7-15 96 HC7-16 85 SCARE 75 StM2 91 Wh20 93 StM20 93 StM20 93 </td <td>322 335 329 442 452 588 441 451 454 451 453 453 453 453 453 453 453 453 453 453</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	322 335 329 442 452 588 441 451 454 451 453 453 453 453 453 453 453 453 453 453						
MOLT-4 10 MOLT-4 87 RPMI-6226 84 R 88 Km-Small Cell Lung Cancer 99 A549/ATCC 99 EK/VX 89 HOP-52 108 HOP-52 63 NCH+225 84 NCH+225 84 NCH+225 84 NCH+225 84 NCH+225 84 NCH+225 84 NCH+522 80 NCH-52 80 NCH-52 80 NCH-52 80 NCH-52 90 NCH-52 90 NCH-52 91 MCH-16 85 HCT-116 85 SF-238 75 SF-238 76 SF-239 90 SH-31 90 MALME-34 95 ML4 99 MA-MB-435 95 9K-MEL-28 96 </td <td>135 229 142 142 172 188 111 121 113 137 154 188 223 19 70 58 92 94 111 113 137 154 154 154 154 154 154 154 154 154 154</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	135 229 142 142 172 188 111 121 113 137 154 188 223 19 70 58 92 94 111 113 137 154 154 154 154 154 154 154 154 154 154						
RPIM-9225 64 9R 88 Ion-Small Cell Lung Cancer 88 A549/ATCC 99 EKVX 89 HOP-52 63 NCH-H23 88 NCH-H23 88 NCH-H23 88 NCH-H23 80 NCH-H23 80 NCH-H23 80 NCH-H23 80 NCH-H23 80 NCH-H23 80 NCH-H323 80 NCH-H324 80 NCH-H325 80 NCH-H326 90 NCH-H327 91 MCM-M325 91 MCM-15 96 HC7-16 95 SK-Scancer 97 SK-Scancer 98 SF-258 96 SF-258 96 SH-9 90 NALME-3M 93 MALME-3M 94 MALME-3S 95 NALME-3	29 42 42 58 58 44 1,12 1,58 44 1,13 1,37 55 55 55 59 59 59 59 59 59 59 59 59 59						
SR 88 SR-Small Ceil Lung Cancer AS49/ATCC 99 EKVX 89 HOP-52 108 HOP-52 63 NCI-H225 84 NCI-H225 84 NCI-H225 84 NCI-H225 84 NCI-H225 84 NCI-H225 80 NCI-H222 80 NCI-H322M 82 NCI-H452 80 NCI-H522 80 NCI-H522 80 NCI-H522 80 NCI-H522 80 Store 93 NCH-S20 93 SP-285 86 SP-285 96 SP-285 96 SP-285 96 SNS Cancer 92 U251 90 SN=415 96 SK-MEL-28 111 SM14 99 MDA-MB-435 95 SK-MEL-28 111	.42 .42 .72 .58 .84 .84 .11 .13 .13 .13 .13 .13 .15 .44 .13 .15 .88 .23 .19 .58 .92 .19 .58 .92 .19 .58 .80 .11 .11 .15 .44 .84 .44						
ion-@mail Cell Lung Cancer 99 A549iATCC 99 EK/VX 89 HOP-52 108 HOP-52 108 HOP-52 63 NCI-H225 84 NCI-H225 84 NCI-H225 80 NCI-H322M 82 NCI-H452 80 IOInd Cancer 60 COLO 205 110 HC7-115 95 HC7-15 95 HC7-15 95 HC7-15 95 MC-2058 76 87-539 90 SR-539 90 SR-539 90 SNS Cancer 93 LOK IMVI 93 MALME-3M 95 M14 95 M14 95 MALME-38 118 WcAR-5 88 UACC-257 79 VuACC-52 79 VuACC-62 79 VuACC-62	142 172 158 184 1.11 1.21 1.21 1.21 1.21 1.3 1.37 1.54 1.88 1.22 1.19 1.21 1.9 1.21 1.18 1.80 1.21 1.18 1.80 1.21 1.18 1.80 1.21 1.18 1.21 1.21 1.21 1.21 1.21 1.21						
AssgiATCC 99 EKVX 89 HOP-52 108 HOP-52 108 HOP-52 63 NCH425 84 NCH423 88 NCH423 88 NCH423 88 NCH423 88 NCH4322M 82 NCH452 99 NCH452 99 NCH452 99 NCH452 99 HCT-15 96 HCT-15 96 HCT-29 HCT-15 96 HCT-15 96 HCT-29 HCT-15 96 HCT-15 96 HCT-29 HCT-15 96 HCT-15 96 HCT-29 HCT-15 96 HCT-15 96 HCT-29 HCT-15 96 HCT-15 96 HCT-29 HCT-15 96 HCT-29 HCT-15 97 HCT-15 97 HCT-15 97 HCT-15 96 HCT-15 96 HCT-15 97 HCT-15 97 HCT-1	142 158 158 141 145 145 154 137 154 138 139 154 139 154 139 159 154 139 159 158 139 158 139 158 139 158 149 158 158 158 158 158 158 158 158						
EKVX 89 HOP-52 108 HOP-52 63 HOP-52 63 NCH4235 84 NCH423 88 NCH423 88 NCH4322M 62 NCH4522 80 olon Cancer 600 COLO 205 110 HCT-116 85 HCT-15 95 HCT-16 85 HCT-15 95 HCT-16 85 SP-558 75 SP-558 76 SH-295 86 SH-295 86 SH-295 86 SH-295 86 SH-19 86 SH-19 86 SH-19 86 SH-19 86 SH-419 96 SH-MEL-28 111 SH-44 99 MLA-MB-35 95 SH-44 96 SH-44 95	772 58 84 821 821 821 13 73 154 88 223 154 88 223 154 88 223 154 88 223 154 88 82 19 92 92 19 92 93 121 18 88 82 19 92 84 10 121 11 121 121 121 121 121 121 121 1						
NCH-22 63 NCH+226 63 NCH+226 84 NCH+226 84 NCH+23 88 NCH+322M 62 NCH+423 88 NCH+426 99 NCH+450 99 NCH+450 99 NCH+52 80 OLO 205 110 HC7-116 85 HC7-115 95 HC7-12 91 KM12 91 SC-268 76 SF-259 86 SF-539 90 SNB-19 86 SNE-15 78 U251 90 Icon KIMVI 93 MALME-3M 95 SK-MEL-28 118 WAC02-257 97 VAC0-257 97 VAC0-257 97 VAC0-257 97 VAC0-257 97 VAC0-257 97 VAC0-252 79	38 84 11 12 15 15 15 15 15 15 15 15 15 15 15 15 15						
NCI-H-225 B NCI-H-225 B NCI-H-223 82 NCI-H-224 82 NCI-H-225 80 NCI-H-222 80 Idon Cancer 60 COLO 205 110 HC7-116 85 HC7-116 85 HC7-129 111 KM12 91 SW-620 93 SP-285 86 SP-285 86 SP-585 76 SP-593 90 SNB-15 78 U251 90 SNA-15 78 SNM-15 95 MLALME-3M 95 ML4 99 MLA-MB-435 95 SK-MEL-28 111 SK-MEL-2 96 SK-MEL-2 96 NACO-2577 97 VACO-257 97 VACO-257 97 VACO-257 97 VACO-62	.11 121 121 137 154 .88 223 219 .70 .68 .92 .92 .92 .92 .211 .118 .80 .80 .44						
NCI-H-23 88 NCI-H-23 82 NCI-H450 99 NCI-H450 99 NCI-H450 99 NCI-H450 99 NCI-H450 99 NCI-H452 80 Ioin Cancer 00 COLO 205 110 HC7-116 85 HC7-115 96 HT29 111 KM12 91 SW-520 93 NB Cancer 93 SF-58 76 SF-295 86 SF-59 90 SNB-19 86 SN-15 78 U251 90 LOX IMVI 93 MALME-3M 99 MALME-3B 118 WCA-MEL-2 96 SK-MEL-28 118 WCAC-257 97 VACC-257 97 VACC-257 97 VACC-257 97 VACC-257 9	121 145 137 154 158 123 199 192 199 192 194 193 194 193 194 194 194 194 194 194 194 194 194 194						
NCI-H4322M 82 NCI-H432 89 NCI-H450 99 NCI-H452 80 Iolon Cancer 80 COLO 205 110 HCT-116 85 HCT-15 96 HCT-15 96 HT29 111 KM12 91 SV-268 76 SF-268 76 SF-259 96 SH-19 68 SND-75 78 U251 90 Icancer 95 MLAME-3M 95 MLAME-3M 95 MALME-3M 95 MALME-3M 95 MCM-4435 95 SK-MEL-2 96 SK-MEL-5 88 UACC-257 97 VIACC-62 79 VIACC-62 79 VIACC-62 79 VIACC-62 79 VIACC-62 79 VIACC-62 79<	.45 1.13 1.57 1.54 1.88 1.92 1.70 1.58 1.92 1.92 1.92 1.92 1.21 1.18 1.80 1.44						
NCI-H450 99 NCI-H4522 80 NCI-H522 80 NCI-H522 81 HC0-2998 114 HC7-115 96 HT29 111 KM12 91 SW-526 93 NSC-620 93 SW-526 93 SW-528 76 SF-258 86 SF-539 90 SNE-19 86 SNE-75 78 U251 90 ICX IMVI 93 ML4 99 MCA-ME-35 95 SK-MEL-2 96 SK-MEL-5 88 UAC0-257 97 VAC0-257 97 VAC0-257 92 VAC0-255 103	.13 154 154 158 158 192 194 121 118 180 180						
NCI-H522 80 Olon Cancer 10 COLO 205 110 HC7-2998 104 HC7-116 85 HC7-115 95 HC7-298 104 HC7-115 95 SW-620 93 SW-620 93 SF-268 76 SF-259 86 SF-259 90 SNB-19 86 SNP-75 78 U251 90 LOK IMVI 93 MALME-3M 99 MOA-MB-435 95 SK-MEL-28 118 MALME-34 96 SK-MEL-28 118 UACC-257 97 VACC-257	137 154 188 119 7.68 192 194 194 180 180 144						
oion Cancer COLO 205 110 HCC-2998 104 HCT-116 85 HCT-15 96 HT29 111 KM12 91 SW-520 99 SF-285 75 SF-285 88 SF-295 88 SF-295 88 SF-59 90 SNB-15 86 SNB-75 78 SNB-75 78 SN-82-75 78 ML/ME-39 90 HL21 99 ML4-MB-435 95 SK-MEL-2 96 SK-MEL-2 96 SK-MEL-2 96 SK-MEL-2 97 UACC-257 97	54 .88 .23 .19 .70 .68 .92 .94 .221 .18 .80 .44						
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HCT-15 86 HCT-15 96 HCT-15 96 HCT-15 96 HCT-15 96 HCT-15 96 HCT-15 96 HCT-15 96 HCT-15 97 HCT-15	.19 .58 .92 .94 .21 .80 .44						
HT39 111 KM12 91 KM-620 93 SR-268 76 SF-258 86 SF-259 86 SF-259 86 SH-19 86 SNB Cancer 90 SH-539 90 SNB-19 86 SNB-19 86 SNM-19 93 MALME-3M 93 MALME-3M 93 MALME-3M 95 SK-MBL-2 96 SK-MEL-28 118 WACO-257 97 UACO-257 97 VACO-257 92 OVCAR-3 92 OVCAR-4 75 OVCAR-5 103 OVCAR-8 103	.70 .68 .92 .21 .18 .80 .44						
KM12 91 SW-520 93 SW-520 93 SF-285 76 SF-295 86 SH-295 86 SH-295 86 SH-295 86 SH-295 86 SH-219 86 SHE-19 86 ILDX IMVI 93 MALME-3M 99 MA-MB-435 95 SK-MEL-2 96 SK-MEL-28 118 W-MD-257 97 UAC0-257 97 UAC0-257 97 OVCAR-3 92 OVCAR-3 92 OVCAR-4 75 OVCAR-5 103 OVCAR-5 103	.68 .92 .21 .18 .80 .44						
SW-620 93 N8 Cancer 92 N8 Cancer 96 SF-288 76 SF-295 86 SF-39 90 SNB-19 86 SNE-75 78 U251 90 LOX IMVI 93 MALME-3M 99 SK-MEL-2 96 SK-MEL-2 96 SK-MEL-28 118 WCO-257 97 VACC-257 97 VACC-257 97 OVCAR-3 922 OVCAR-4 75 OVCAR-5 103 OVCAR-5 103 OVCAR-5 103	92 94 5.21 1.18 80 44						
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SF-268 76 SF-295 86 SF-295 86 SNB-75 78 U251 90 L0X IMVI 93 MALME-3M 99 M14 99 MDA-MB-435 95 SK-MEL-2 96 SK-MEL-38 11 SK-MEL-35 88 UAC0-257 97 Varian Cancer 19 SROV1 87 OVCAR-3 92 OVCAR-4 75 OVCAR-5 103 OVCAR-8 92	.94 5.21 18 .80 .44						I
8F-295 88 8F-539 90 8NE-75 78 U251 90 LOK IMW 93 MALME-3M 99 MALME-3M 91 MALME-3M 93 MALME-3M 95 SK-MEL-2 96 SK-MEL-2 96 SK-MEL-5 88 UACC-257 97 VACC-257 97 VACC-257 97 OVCAR-3 92 OVCAR-3 92 OVCAR-4 75 OVCAR-5 103 OVCAR-5 103	.21 .18 .80 .44	-					I
8F-539 90 SNB-19 86 SNB-75 78 U251 90 LOX IMVI 93 MALME-3M 95 M14 99 MDA-MB-435 95 SK-MEL-2 96 SK-MEL-38 118 SK-MEL-35 88 UAC0-257 97 Varian Cancer 15 IGROV1 87 OVCAR-3 92 OVCAR-5 103 OVCAR-6 103	.18 .80 .44						I
SINE-15 86 SINE-75 78 U251 90 LOX IMVI 93 MALME-3M 95 MDA-MB-435 95 SK-MEL-2 96 SK-MEL-28 118 VACC-257 97 VACC-257 97 VACC-257 97 VACC-257 97 OVCAR-3 92 OVCAR-4 75 OVCAR-5 103 OVCAR-8 92	44						
ULS1 90 Iuls1 90 LOX IMVI 93 MALME-3M 99 MA-MB-435 95 SK-MEL-2 96 SK-MEL-28 118 SK-MEL-5 88 UACC-257 97 UACC-62 79 VAGAR-3 92 OVCAR-3 92 OVCAR-5 103 OVCAR-5 103							I
telanoma 20 LOX IMVI 93 MALME-3M 99 MDA-MB-435 99 MDA-MB-435 99 SK-MEL-2 96 SK-MEL-2 96 SK-MEL-38 118 SK-MEL-38 118 SK-MEL-38 118 SK-MEL-38 19 UACC-257 97 UACC-62 79 Varian Cancer 10 SRCVI 87 OVCAR-3 92 OVCAR-3 92 OVCAR-5 103 OVCAR-5	73	-	1.2				I
LOK IMVI 93 MALME-3M 99 MDA-MB-435 95 MCM-MB-435 95 SK-MEL-2 96 SK-MEL-2 96 SK-MEL-2 96 SK-MEL-2 79 UACC-62 79 UACC-62 79 UACC-62 79 UACC-62 79 UACC-62 79 OVCAR-3 92 OVCAR-3 92 OVCAR-5 103 OVCAR-5 103							I
MAL/ME-3M 95 M14 99 MDA-MB-435 95 SK-MEL-28 96 SK-MEL-28 118 SK-MEL-28 118 UACC-52 79 UACC-62 79 Varian Cancer 103 GROV1 87 OVCAR-3 92 OVCAR-5 103 OVCAR-5 103	.80						I
M14 99 MDA-MB-435 95 SK-MEL-2 96 SK-MEL-3 18 SK-MEL-5 88 UACD-257 97 Varian Cancer 11 ISROV1 87 OVCAR-3 92 OVCAR-5 103 OVCAR-5 103	2.61	9 B					I
MDA-MB-435 95 SK-MEL-2 96 SK-MEL-28 118 SK-MEL-5 88 UACC-257 97 UACC-257 97 UACC-257 97 OVCAR-3 92 OVCAR-3 92 OVCAR-5 103 OVCAR-5 103	.38						I
3K-MEL-2 96 SK-MEL-28 118 SK-MEL-28 118 UACC-52 97 UACC-62 79 Varian Cancer 108 OVCAR-3 92 OVCAR-5 103 OVCAR-5 103	.16						I
3K-MEL-26 118 3K-MEL-5 88 UACC-257 97 UACC-62 79 Varian Cancer 1080/V1 0VCAR-3 92 0VCAR-3 92 0VCAR-5 103 0VCAR-5 103	.69						I
SrV-mileL-5 86 UACC-257 97 UACC-62 79 Varian Cancer 1 IGROV1 87 OVCAR-3 92 OVCAR-4 75 OVCAR-5 103	1.51						I
UACC-62 79 Varian Cancer 1GROV1 87 OVCAR-3 92 OVCAR-4 75 OVCAR-5 103 OVCAR-5 103	101						I
Warlan Cancer 87 IGROV1 87 OVCAR-3 92 OVCAR-4 75 OVCAR-5 103 OVCAR-9 89	52						I
IGROV1 87 OVCAR-3 92 OVCAR-4 75 OVCAR-5 103 OVCAR-5 89							I
OVCAR-3 92 OVCAR-4 75 OVCAR-5 103 OVCAR-8 89	.09						I
OVCAR-4 75 OVCAR-5 103 OVCAR-8 89	.49						I
OVCAR-5 103 OVCAR-8 89	50						
	97		1				
NCIADB-RES SO	36						
SK-OV-3 113	87		10				I
ienal Cancer		1					
786-0 93	34						I
A498 103	23						
ACHN 96	.96						I
CAKI-1 55	.31						
KAF 393 79	-57						I
TK-10 83	65						
U0-31 80	27	-	_				
rostate Cancer							I
PC-3 86	.28		-				I
DU-145 96	.35		- A				
ireast Cancer							I
MCF7 79	25						I
MDA-MB-231/ATCC 81	.86						I
HS 578T 80	23	-					
T-47D 97	33						
MDA-MB-468 81	34	-					I
	100						
		150	75		0.0	-75	-15

Fig. S78: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compound 5a

Developmental Thera	velopmental Therapeutics Program		NSC: D-847878 / 1 Cono: 1.00E-5 Molar	
One Dose Bar	Graph	Experiment ID: 23	080865	Report Date: Oct 11, 2023
Panel/Cell Line	Growth Percent	Bar Graph		
Leukemia				
OCRF-CEM	71.20			
HL-60(TB)	101.49			
MOLT-4	55.69		·	
RPMI-8225	70.84			
SR	90.27			
Non-Small Cell Lung Cancer	1.000	1		
A549(ATCC	80.29			
HOP-52	103.90			
HOP-92	52.63			
NCI-H226	79.73			
NCI-H23	79.68			
NCI-H322M	93.91			
NCI-H460	91.05			
Colon Cancer	100.27			
COLO 205	94.72			
HCC-2998	97.81			
HCT-116	90.61			
HCT-15	87.84			
HT29	112.10			
KM12 200-520	90.08			
CNS Caprer	30.35			
8E-268	67.77	the second se		
3F-295	83.48			
8F-539	78.03			
SNB-19	77.40	05 505655		
SNB-75	89.19			
0251	86.32	2		
LOX MVI	97.95			
MALME-3M	118.15			
M14	91.72			
MDA-MB-435	96.24	1000000000		
SK-MEL-2	102.99			
SK-MEL-28	106.30			
UACC-257	104 31			
UACC-62	80.94	and the second se		
Ovarian Cancer				
IGROV1	90.73			
OVCAR-3	106.78			
OVCAR-4	104.35			
OVCAR-8	68.54			
NCI/ADR-RES	75.14			
SK-OV-3	120.44			
Renal Cancer				
A 400	81.29			
ACHN	84 31			
CAKI-1	54.21			
RXF 393	75.42		80 A	
3N12C	78.30			
TK-10	102.02			
Prostate Cancer	10.12			
PC-3	78.66			
DU-145	79.80			
Breast Cancer				
MCF7	73.35			
MDA-MB-231/ATCC	80.85			
HS 5/81	76.89			
T-47D	58.92			
MDA-MB-468	77.23			
		125 62	5 0.0	-62.5 -125
			Percentage Grow	th

Fig. S79: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compound 5b



Fig. S80: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μ M of Compound 5c

Developmental Therapeutics Program		NSC: D-847924 / 1 Cono: 1.00E-5 Molar		Test Date: Aug 28, 2023	
One Dose Bar	Graph	Experiment ID: 2308	0868	Report Date: Oct 15, 2023	
Panel/Cell Line	Growth Percent	Bar Graph			
Leukemia			1		
CCRF-CEM	96.12			1 1	
HL-60(TB)	104.43				
K-562	70.74			1 1	
DDML 99	75.20			1 1	
Non-Small Cell Lung Cancer	19.37				
A549/ATCC	95.99				
EKVX	80.35				
HOP-62	101.15				
HOP-92	88.60		10 M		
NCI-H226	74.10				
NCI-H23	83.55				
NCI-H322M	87.58				
NCI-H460	20.22				
Color Cancer	00.25				
COLO 205	122.95				
HCC-2998	104.97				
HCT-116	94.98				
HCT-15	85.16	The second se			
HT29	135.36				
KM12	99.92				
SW-620	103.08				
CNS Cancer		3 S.J.			
05-265	/8.98				
95-539	90.39				
SNR-19	89.50				
3NB-75	60.85	0.00	- C		
U251	96.99	20 M			
Melanoma					
LOX IMVI	87.63				
MALME-3M	101.77	6			
M14	94.84				
MDA-MB-435	100.42				
SK-MEL-2	117.73				
SK-MEL-E	94 69				
UACC-257	118.13	Concession and Conces			
UACC-62	74.30	80 B			
Ovarian Cancer					
IGROV1	71.42				
OVGAR-3	90.78				
OVCAR-4	86.65				
OVCAR-S	102.25			1	
NCUADR-RES	92.95	Concession of the local division of the loca			
SK-OV-3	79.11				
Renal Cancer					
786-0	98.23				
A498	114.41			1	
ACHN	93.28				
CAKI-1	68.92		-		
HXF 393	99.54				
3N12G	175.67				
UO-31	59.85	Constant of the local division of the local	-		
Prostate Cancer		2			
PC-3	95.43			1	
DU-145	101.57	0			
Breast Cancer					
MCF7	59.57				
MDA-MB-231/ATCC	68.79				
05/61	81.77				
T-47D	79.90				
MDA-MB-468	86.03				
		200 100	0.0	-100 -200	
		200 100	0.0 Percentage Growt	-100 -20	

Fig. S81: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compound 5d

One Dose Bar Graph Experiment ID: 2000668 Repot Date: Oct 15, 2 Panel/Cell Line Growth Percent Bar Graph Lotkernia 111.05 112.44 K452,1 105.60 105.47 Monomia 200 65.23 105.60 Monomia 201 105.40 105.60 Monomia 201 105.47 105.40 Monomia 201 105.47 105.40 Monomia 201 105.40 105.41 MOH+23,23 94.80 100.54 MOH+23,23 100.54 100.54 MOH+32,24 100.54 100.54 HT12 100.54 100.54 HT12 100.54 100.54 HT12 100.54 100.54 HT12 100.54 100.54 HT23 100.54 100.54 MALE-3M 80.52 100.54 MALE-3M 80.52 100.54 MALE-3M 80.52 100.54 MALE-3M 80.52 100.54 MALE-3M <td< th=""><th colspan="2">Developmental Therapeutics Program</th><th>NSC: D-847925/1</th><th>Cono: 1.00E-5 Molar</th><th>Test Date: Aug 28, 2023</th></td<>	Developmental Therapeutics Program		NSC: D-847925/1	Cono: 1.00E-5 Molar	Test Date: Aug 28, 2023
Paral/Cell Line Growth Percent Bar Graph Leukemis CORP-GEM 111.05 112.44 K-562 106.50 MOLT-4 APM-622 52.37 MOLT-4 MOP-52 52.37 MOLT-4 MOP-52 52.37 MOLT-4 MOP-52 10.47 BS.20 MOH-52 52.37 MOLT-4 MOH-52 10.57 MOLT-1 MOH-52 10.57 MOLT-1 MOH-52 10.27 MOLT-1 MOH-52 10.27 MOLT-15 MOH-52 10.27 MOLT-15 MOH-52 90.91 BF-539 SP-256 97.16 BF-539 SP-255 97.16 BF-539 SP-255 97.16 BF-238 SP-255 97.16 BF-238 SP-255 97.16 BF-238 SP-255 97.16 BF-238 SP-268 90.91 BF-238 SP-268 97.1 MALE-30 103.47 </th <th>One Dose Bar</th> <th>Graph</th> <th colspan="2">Experiment ID: 23080668 Report Date</th> <th>Report Date: Oct 15, 202</th>	One Dose Bar	Graph	Experiment ID: 23080668 Report Date		Report Date: Oct 15, 202
Leukemia H-GOTED-CEM 111.06 H-GOTED-112.44 K-552 MOLT-42 SPAM-8225 MOLT-42 HOP-52 EV/X 100 Cancer 108.47 HOP-52 EV/X 2525 HOP-52 EV/X 2525 HOP-52 EV/X 111.43 NOLH-522 Color Cancer COLO 2055 HI 4.54 HOT-116 HOT-115 HOD-54 HT29 SP-256 SP-256 SP-256 SP-256 SP-256 SP-257 HI 4.54 HOT-116 HI 4.54 HOT-116 HI 4.54 HOT-116 HI 4.54 HOT-116 HI 4.54 HOT-116 HI 4.54 HOT-116 HI 4.54 HOT-116 HI 4.54 HOT-116 HI 4.54 HOT-116 HI 4.55 HI	Panel/Cell Line	Growth Percent	Bar Graph	2	
CCRF-CEM 111.06 H-60/TB 112.64 KK5C1-4 105.00 RPM-16226 85.39 Ven-Gmail Cel Lung Cancer 3451ATCX AdstATCX 92.37 HOP-52 91.37 HOP-52 103.47 HOP-52 105.37 HOP-52 105.37 HOP-52 105.37 NCH-4320 115.74 NCH-4320 115.74 NCH-4320 105.37 NCH-4321 105.37 NCH-4322 97.76 Good Cancer 103.57 NCH-432 90.91 B7-358 90.42 B7-361 91.42 B7-37 115.42 B7-48 101.11<	Leukemia				
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K452-4 106.80 MOLT-4 105.20 WordBhall Callung Cancer 85.29 WordBhall Callung Cancer 98.47 HOP-62 92.57 HOP-62 92.57 HOP-62 92.57 HOP-62 93.75 Doin Cancer 105.47 MOLH480 105.57 MOLH480 105.57 MOLH423 10.57 MOLH423 10.57 MOLH420 105.57 MOLH420 105.57 MOLH420 105.57 MOLH420 105.57 MOLH420 105.57 MALME-33 100.54 HT73 100.54 HT73 100.54 HT73 100.54 MM24 80.02 RMP-75 80.25 SP-395 97.16 SP-395 97.16 SP-395 101.88 Wei CXI INVI 91.12 MALME-335 101.08 SM-448-35 101.88 Wei CXI INVI 90.71 UACO-537 195.87 Wei CXI INVI 90.71 MALME-345 101.85 SM-448 100.257 WACM-453 101.557	HL-60(TB)	112.64			
MOLT-4 106.20 MPRM-823 85.29 More Address 104.7 BOX 92.9 MOP-62 92.57 MOP-62 92.57 MOH-425 100.14 NCH-423 94.60 NCH-423 94.60 NCH-423 94.60 NCH-423 105.27 NCH-423 105.27 NCH-423 103.57 COLO 205 114.94 HCT-116 101.94 HT73 103.57 SB-266 9.91 BY-353 103.57 SB-368 9.91 BY-353 103.57 SB-369 103.57 SB-375 103.57 SB-39 103.17 SB-39 103.17 SB-39 103.17 SB-31 95.88 UAS1 104.72 MALME-3M 104.29 CAX INVI 96.12 MALME-33 104.42 SH-MEL-33 104.42 SH-MEL-33 104.42 SH-MEL-33 104.42 SH-MEL-34 107.14 OVCAR-3 101.14 OVCAR-4 97.68 OVCAR-5 112.96 <td>K-562</td> <td>106.60</td> <td></td> <td></td> <td></td>	K-562	106.60			
RFM:e226 95.29 MS:000000000000000000000000000000000000	MOLT-4	106.20			
Word-Brail Cel Lung Cancer 108.47 Addition 82.93 EV/VA 82.93 HOP-92 111.43 NCH423 94.80 NCH423 95.75 Color Cancer 114.98 Color Cancer 114.83 Color Cancer 114.84 Color Cancer 108.527 NCH422 95.75 Color Cancer 103.57 CNM 520 103.82 CNM 520 103.82 CNM 520 103.82 CNM 521 19.88 MAMM-333 104.73 MAMM-34 104.73 MAMM-333 104.73 MAM 400.74 107.14 COVCAP-5 102.12 COVCAP-5 102.12 Coveral 107.14 COVCAP-5 102.12 Coveral 107.72 Coveral 107.72 Coveral 107.73	RPMI-8226	85.29			
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BVX 98.29 HQP-52 10.14 NOH-123 116.74 NOH-123 98.75 Ocion Cancer 116.74 COLO 205 114.94 HCC-298 114.04 HCC-298 114.04 HCC-298 114.04 HCC-298 100.54 HCC-298 100.57 SM-50 101.68 SM-51 10.68.2 SM-55 10.08 SM-40 102.27 MLM-41-25 10.68 SM-41-25 10.68 UACC-257 116.87 UACC-257 116.87 UACC-42 102.57 SM-40 102.257 IGROV1 107.12 OVCAR-5 112.59 OVCAR-5 112.59 OVCAR-5 102.257 SM-10 16	A549/ATCC	108.47			
HUD-Fb23 92.57 NCH-H235 110.14 NCH-H235 116.74 NCH-H322M 116.74 NCH-H322 98.75 COLO 205 114.94 HCC-116 101.91 HCT-116 101.91 BC-325 97.16 GR-539 100.11 BC-351 80.25 GW-819 98.42 GW-81-23 115.66 GW-MEL-23 115.66 GW-MEL-24 115.67 UACO-257 116.87 UACO-257 116.87 UACO-257 102.15 UACO-257 102.15 UACO-257 102.16 GR-07 102.25 GACAP 107.24 ASB	EKVX	98.29			
PUP-X2, NCH-423:	HOP-62	92.57			
MU-H-225 MCH-4322M MCH-4322M MCH-4322M MCH-4322M MCH-4322M MCH-4322M MCH-4322M MCH-4322M MCH-4322M MCH-432	HOP-92	111.43			
NCI-H123 94.80 NCI-H123 116.71 NCI-H123 105.71 NCI-H122 105.71 NCI-H122 105.71 NCI-H122 105.71 COLO 205 114.54 HC2-2958 114.06 HCT-116 101.91 HT73 100.54 HT73 100.54 HT23 100.57 SP-535 90.91 SP-535 90.91 SP-535 90.91 SP-535 90.91 SP-535 90.91 SP-535 90.25 ULX1 INV1 94.20 DNB-75 80.25 ULX51 99.88 Elanoma 101.16 SNH-19 90.42 SNH-19 90.42 UACC-237 116.87 SNH-18-3 101.14 SNH-18-3 101.14 SNH-18-3 102.45 SNH-18-4 90.42 SNH-19 90.71 UACC-42 93.02 Dvarian Cancer 101.14 SNH-19 90.71 OVCAR-3 101.14 OVCAR-3 101.14 Ad98 118.51 Ad98 118.51	NGI-H226	100.14			
NCH-H322M 115.74 NCH-H322 93.75 NCH-H322 93.75 DOC Operation 114.94 HCT-115 100.54 HT23 120.27 KM12 108.82 SW-520 101.57 SR-538 90.91 BF-538 100.11 SH-538 90.91 BF-538 90.91 SH-538 90.91 SH-MEL-2 115.65 SH-MEL-2 115.86 SH-MEL-2 115.86 SH-MEL-38 101.08 SH-MEL-42 91.68 SH-MEL-5 90.48 UACO-237 116.87 SH-MEL-5 92.88 OVCAR+4 91.88 OVCAR+5 102.12 AB8 118.51 ACHN 104.29 <tr< td=""><td>NCI-H23</td><td>94.80</td><td></td><td></td><td></td></tr<>	NCI-H23	94.80			
NCI-H4320 105.27 NCI-H4322 92.75 COLO 2015 114.94 MCD-2165 110.91 HCT-15 100.54 HT23 120.27 KM12 108.82 SW-300 103.57 SR0 Cancer 90.91 SP-285 57.16 SP-285 57.16 SP-285 57.16 SP-295 50.25 U251 98.82 Walkm2-28 101.08 SH-MEL-5 90.48 UACO-227 116.87 UACO-227 116.87 UACO-227 116.87 UACO-227 116.87 UACO-428 102.12 SR-MIL-28 102.12 MSRO 102.27 SROV1 90.11 OVCAR-3 101.14 <tr< td=""><td>NGI-H322M</td><td>116.74</td><td></td><td></td><td></td></tr<>	NGI-H322M	116.74			
NOI-HS22 98.76 COLO 205 114.94 HCC-2998 114.08 HCT-116 101.91 HCT 101.91 HT 101.92 MAI 2 108.27 SP-358 90.91 SP-358 97.16 SP-358 91.11 SNB-75 50.25 UX51 59.88 LOX IMVI 98.12 MALME-33 101.88 SK-MEL-28 102.42 SK-MEL-28 102.42 SK-MEL-28 102.42 SK-MEL-28 102.47 MCA-MB-435 101.44 OVCAR-3 102.42 ACH 75.95 OVCAR-3 102.42 ACH 102.42 ACH	NCI-H460	105.27			
Joen Cancer COLD 205 114.94 HCD-2998 114.05 HCT-116 10.194 HT3 102.27 KM12 108.82 SW-30 103.57 SW Cancer 90.91 SP-285 57.16 SP-285 57.16 SP-383 100.11 SNB-19 59.4.2 SNB-75 80.25 U251 59.88 Iclaimma 104.73 MLME=3M 104.73 M14 80.02 MAHAB=35 101.08 SH-MB2-35 101.88 SH-MB2-35 101.88 SH-MB2-35 101.88 SH-MB2-35 101.88 SH-MB2-35 101.88 SH-MB2-36 101.22 MCA-MB-31 101.14 OVCAR-3 101.14 OVCAR-4 57.58 OVCAR-5 112.96 OVCAR-5 112.95 OVCAR-5 102.12 TH4 104.29 OVCAR-5 102.16 <	NCI-H522	98.76			
CUCLO 205 114.34 HCC-2958 114.08 HCT-116 101.91 HCT-115 100.544 HT23 120.27 SW-322 108.82 SW-323 101.57 SW-323 90.91 SF-338 90.91 SF-338 90.91 SF-338 90.91 SF-339 100.11 SN-575 80.225 U251 99.88 LOX IMWI 98.12 MALME-3M 104.73 M14 88.02 MALME-3M 104.73 MALME-23 115.66 SK-MEL-2 115.67 UACC-257 116.87 UACC-22 93.02 Varian Cancer 102.42 IGROV1 90.14 OVCAR-3 101.14 OVCAR-5 112.95 OVCAR-5 112.95 OVCAR-5 112.95 OVCAR-6 102.12 AS48 118.81 ACHN 104.29 CAN-1 79.95 SPI20 98.73 TK-10 168.87 U0-31 75.95 Sreat Cancer 90.29 PO-3 107.72	coon cancer			1	
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HT22 120.27 KM12 108.82 SW-200 103.57 SF-285 90.91 SF-285 97.16 SF-295 97.16 SF-295 97.16 SF-539 100.11 SK-96.75 80.25 U251 98.88 telanoma 104.73 M14 80.02 MA/MB-435 101.08 SK-MEL-22 115.66 SK-MEL-23 124.42 SK-MEL-23 124.42 SK-MEL-22 93.02 VACC-257 116.87 UACC-257 115.87 UACC-257 115.87 UACC-257 115.87 UACC-257 112.96 OVCAR-3 101.14 OVCAR-3 101.14 OVCAR-4 97.68 OVCAR-5 112.96 OVCAR-8 111.47 NCLAOR-RE8 111.47 NCLAOR-RE8 111.47 NCLAOR-RE8 112.57 SK-0V1 02.57 SK-0V1 79.95 SK-VM2 3 88.82 tenal Cancer PC-3 107.72 DU-145 TK-10 168.87 UC-31 77.95 SK-7 MCF7 80.29 MDA-MB-231/ATCC 87.11 MCF7 80.29 MDA-MB-231/ATCC 87.11 MCF7 80.29 MDA-MB-231/ATCC 87.11 MCF7 80.29 MDA-MB-231/ATCC 87.11 MCA-MB-468 100.59	HCT-15	100.54			1 1
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8W-520 103.57 BP-286 90.91 BP-295 97.16 BP-539 100.11 SNB-75 80.25 U251 99.88 telanoma 104.73 M14 80.02 MA-ME-435 101.08 SK-MEL-2 115.65 SK-MEL-25 101.08 SK-MEL-26 124.42 SK-MEL-27 115.65 SK-MEL-28 124.42 SK-MEL-29 10.14 OVCAR-3 10.14 OVCAR-3 10.14 OVCAR-3 101.14 OVCAR-4 97.68 OVCAR-5 112.96 OVCAR-5 102.12 R-MEN 104.29 OVCAR-5 102.12 RAB8 111.81 AdPN 104.29 OVCAR-5 102.12 SR-75 102.57 SN-12 98.73 Tr-10 168.87 U0-31 77.95 SND 107.72 DU-145 107.34 Ereat Cancer 90.71 MDA-MB-231/ATOC 87.11 MDA-MB-231/ATOC 87.11 MDA-MB-231/ATOC 92.11 MDA-MB-235	KM12	108.82			1 1
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LOX IMVI 98.12 MALME-3M 104.73 M14 85.02 MDA-MB-435 101.08 SK-MEL-23 115.65 SK-MEL-23 115.65 SK-MEL-38 124.42 SK-MEL-5 90.48 UACC-257 116.87 UACC-62 93.02 Varian Cancer ISR.0V1 90.71 OVCAR-3 101.14 OVCAR-4 97.68 OVCAR-5 112.96 OVCAR-6 111.47 NCLADR-REB 102.57 SK-0V-3 88.82 Ienal Cancer 785-0 102.12 A498 118.51 ACHN 104.29 CAKI-1 75.95 RXF 393 105.29 SK 107.34 IF 0.21 IV 0.45 RXF 393 107.34 IF 0.21 IV 0.45 RXF 393 107.34 IF 0.21 IV 0.45 ST 57 TK-10 165.87 UC-31 75.95 Frostate Cancer PC-3 107.72 UC-145 107.34 IF 0.21 IF 0.21 IF 0.21 IV 0.21	leianoma				
MALME-3M 104.73 MI4 89.02 MDA-MB-435 101.08 SK-MEL-2 115.85 SK-MEL-28 124.42 SK-MEL-5 90.48 UACC-2577 115.87 UACC-2577 115.87 UACC-22 93.02 Dvarian Cancer 00/0AR-3 IOROV1 90.71 OVCAR-3 101.14 OVCAR-5 112.96 OVCAR-5 102.157 SK-0/-3 88.82 Tead Cancer 765-0 786-0 102.12 A498 118.51 ACHN 104.29 CAKI-1 79.95 TK-10 168.87 UO-31 75.95 PC-3 107.72 DU-44S 107.34 Breast Cancer 96.34 MDA-MB-231ATCC 87.11 HS 578T 96.34 BT-549 100.216 T-470 85.60 MDA-MB-458 100.59 <td>LOX IMVI</td> <td>98.12</td> <td>5 C</td> <td></td> <td></td>	LOX IMVI	98.12	5 C		
M14 89.02 MDA-MB-435 101.08 SK-MEL-2 115.65 SK-MEL-3 104.42 SK-MEL-5 90.48 UACC-257 116.87 UACC-62 93.02 Varian Cancer 101.14 OVCAR-3 101.14 OVCAR-5 112.96 OVCAR-6 111.47 NCIADR-REB 102.57 SK-0/2 93.02 VACR-6 111.47 OVCAR-7 102.12 A498 118.51 ACHN 104.29 CAKI-1 75.95 RK-7 333 105.29 SN 122 96.73 TK-10 158.87 UO-31 75.95 Frostate Cancer 96.34 MDA-MB-231/ATCC 87.11 HS 7849 107.34 BT-549 102.216 MDA-MB-231/ATCC 87.11 HS 747D 88.60 MDA-MB-231/ATCC 87.11 HS 747D 88.60 MDA-MB-231/ATCC 87.11 HS 549 102.216 T-47D 88.60 MDA-MB-2458 100.59	MALME-3M	104.73			
MDA-MB-435 101.08 SK-MEL-2 115.66 SK-MEL-28 124.42 SK-MEL-5 \$0.48 UACC-2577 116.87 UACC-2577 101.14 OVCAR-3 101.14 OVCAR-3 101.14 OVCAR-4 \$7.58 OVCAR-5 112.96 OVCAR-8 111.47 NCIMDR-RE9 102.57 SK-OV-3 88.82 temal Cancer 766-0 766-0 102.12 A498 118.51 ACHN 104.29 CAKH-1 79.95 TK-10 168.87 UO-31 75.95 Pirostate Cancer PC-3 MDA-MB-231(ATCC \$7.11 MDA-MB-231(ATCC \$7.11 HDA-MB-231(ATCC \$7.11 HDA-MB-2458 100.59 MDA-MB-468 100.59	M14	89.02			
BK-MEL-28 115.66 SK-MEL-28 124.42 SK-MEL-28 90.48 UAOC-557 116.87 UAOC-62 93.02 Warian Cancer 90.71 OVCAR-3 101.14 OVCAR-4 97.68 OVCAR-5 112.95 OVCAR-8 111.47 NCLADR-REB 102.57 SK-0V-3 88.82 Iemal Cancer 786-0 786-0 102.12 A498 118.51 ACHN 104.29 CAIX-1 79.95 RXF 393 109.29 SK-12 56.73 TK-10 168.87 UO-31 75.95 Frostate Cancer 79.95 Torstate Cancer 79.95 MD4-MB-231IATCC 87.11 HB 578T 96.34 BT-549 102.16 MDA-MB-2458 100.59	MDA-MB-435	101.08			
SK-MEL-28 124.42 SK-MEL-5 90.48 UAOC-257 116.87 UAOC-22 93.02 Dwafan Cancer 90.71 IOROV1 90.71 OVCAR-3 101.14 OVCAR-4 97.68 OVCAR-5 112.96 OVCAR-8 111.47 SK-MEL-28 12.12 ARADR-RED 102.12 AA98 118.51 ACNN 104.29 CAKI-1 79.95 RK7 393 109.29 SN12C 98.73 TK-10 168.87 UO-31 75.95 PC-3 107.72 DU-4S 107.34 Breat Cancer 96.34 BT-549 102.16 MDA-MB-231/ATCC 87.11 H9 S787 96.34 BT-549 102.16 MDA-MB-2458 100.59	SK-MEL-2	115.66	Contraction of the local distance of the loc		
SK-MEL-5 90.48 UACC-527 115.87 UACC-527 93.02 Warlan Cancer 90.71 OVCAR-3 101.14 OVCAR-4 97.58 OVCAR-5 112.95 OVCAR-8 111.47 NULADR-RE8 102.57 SK-0V-3 88.82 temal Cancer 765-0 786-0 102.12 A498 118.51 CAKH 79.95 RXF 393 109.29 SN12C 58.73 TK-10 168.87 U0-31 75.95 Frostate Cancer 90.29 BN12C 58.73 TK-10 168.87 U0-31 75.95 Frostate Cancer 90.29 MD4-MB-231(ATCC 87.11 HB 578T 96.34 BT-549 102.16 T-47D 98.60 MDA-MB-458 100.59	SK-MEL-28	124.42			
UACC-257 116.87 UACC-257 93.02 Dvarian Cancer 90.071 URCVAR-3 101.14 OVCAR-3 101.14 OVCAR-3 112.96 OVCAR-6 112.96 OVCAR-8 111.47 OVCAR-8 111.47 NCLADR-RED 102.12 RA-99 102.12 RA-99 102.12 A498 118.51 ACHN 104.29 CAKI-1 79.95 RXF 393 109.29 SN12C 98.73 TK-10 168.87 UO-31 75.95 Prostat Cancer PC-3 107.72 DU-145 107.34 BT-549 102.16 MDA-MB-231/ATCC 81.21 MDA-MB-231/ATCC 81.21 MDA-MB-231/ATCC 81.21 MDA-MB-231/ATCC 81.21 MDA-MB-231/ATCC 81.21 MDA-MB-231/ATCC 81.21 MDA-MB-231/ATCC 81.29 MDA-MB-231/ATCC 81.21 MDA-MB-231/ATCC 81.21 MDA-MB-231/ATCC 81.21 MDA-MB-231/ATCC 81.21 MDA-MB-2458 100.59	SK-MEL-5	90.48	the second se		
UACC-62 93.02 ISROV1 90.71 OVCAR-3 101.14 OVCAR-3 101.14 OVCAR-4 97.58 OVCAR-5 112.95 OVCAR-5 112.95 OVCAR-8 111.47 NCLADR-RE8 102.57 SK-OV-3 88.82 tenal Cancer 786-0 102.12 A498 118.51 ACHN 104.29 CAKI-1 79.95 RXF 393 109.29 SN12C 98.73 TK-10 188.87 UO-31 77.95 Testate Cancer PC-3 107.72 UO-145 107.34 Ireast Cancer MCA-MB-231(ATCC 87.11 H8 578T 96.34 BT-549 102.16 T-47D 89.60 MDA-MB-2458 100.59	UACC-257	116.87	and the second se		
Warlan Cancer 90.71 OVCAR-3 101.14 OVCAR-4 97.68 OVCAR-5 112.96 OVCAR-8 111.47 NUKADP-RES 102.57 SK-OV-3 88.82 Lenal Cancer 786-0 786-0 102.12 A498 118.51 ACHN 104.29 CAKI-1 79.95 RXF 333 109.29 SN12C 98.73 TK+10 168.87 UO-31 75.95 rostate Cancer PC-3 DU-145 107.72 DU-145 107.34 Ireast Cancer 96.34 BT-549 102.16 MDA-MB-231(ATCC 87.11 HB 57817 96.34 BT-549 102.16 MDA-MB-2458 100.59	UACC-62	93.02	Contraction of the Contraction		
IGROV1 90.71 OVCAR-3 101.14 OVCAR-4 97.68 OVCAR-5 112.96 OVCAR-6 111.47 NCIADR-RE8 102.17 SK-OV-3 88.82 lenal Cancer 786-0 786-0 102.12 A498 118.51 ACHN 104.29 CAK-1 79.95 RXF 393 109.29 9N12C 98.73 TK-10 168.87 UO-31 75.95 rostatc Cancer 75.95 rostatc Cancer 75.95 rostatc Cancer 75.95 motor Ambro Concer 75.95 motor Ambro Concer 75.95 motor Ambro Concer 71.11 HB 578T 96.34 BT-549 102.16 T-47D 89.60 MDA-MB-458 100.59	Varian Cancer				
OVCAR-3 101.14 OVCAR-4 97.58 OVCAR-5 112.96 OVCAR-8 111.47 NCIADR-RE8 102.57 SK-OV-3 88.82 tenal Cancer 785-0 785-0 102.12 A498 118.51 ACHN 104.29 CAKI-1 79.95 RK7 393 109.29 SN12C 98.73 TK-10 168.87 UO-31 75.95 Forstate Cancer PC-3 DU-14S 107.34 Ireast Cancer MCA-MB-231(ATCC MCF7 80.29 MDA-MB-231(ATCC 57.11 HB 5781 95.34 BT-549 102.16 MDA-MB-2458 100.59	IGROV1	90.71			
OVCAR-4 97.68 OVCAR-5 112.96 OVCAR-8 111.47 NCLADR-RE0 102.57 SK-OV-3 88.82 tenal Cancer 786-0 786-0 102.12 A498 118.51 ACHN 104.29 CAK-1 79.95 RXF 393 109.29 SN12C 98.73 TK-10 168.87 UO-31 75.95 Pc-3 107.72 DU-145 107.34 treat Cancer 76.34 MDA-MB-231(ATCC 87.11 HB 5787 96.34 BT-549 100.29 MDA-MB-2458 100.59	OVCAR-3	101.14	No. of Concession, Name	1	1 1
OVCAR-5 112.96 OVCAR-8 111.47 NCUADR-RE8 102.57 9K-0V-3 88.82 tenal Cancer 785-0 785-0 102.12 A498 118.51 ACNN 104.29 CAKI-1 79.95 RK7.393 109.29 SN12C 98.73 TK-10 168.87 UO-31 75.95 Frostate Cancer PC-3 DU-145 107.72 DU-145 107.34 treast Cancer MCAP MCF7 80.29 MDA-MB-231(ATCC 87.11 H8 5781 95.34 81-549 102.16 MDA-MB-2458 100.59	OVCAR-4	97.68			1 1
OVCAR-6 111.47 NCIADP-RES 102.57 SK-OV-3 88.82 tenal Cancer 786-0 786-0 102.12 A498 118.51 ACHN 104.29 CAKI-1 79.95 RXF 393 109.29 SN12C 98.73 TK-10 168.87 UO-31 75.95 rostate Cancer PC-3 MCF7 80.29 MDA-MB-231/ATCC 87.11 HB 7549 102.16 T-47D 89.60 MDA-MB-458 100.59	OVCAR-5	112.96		1	
NCILADR-RES 102.57 SK-OV-3 88.82 tensi Cancer 102.12 785-0 102.12 A498 118.51 ACHN 104.29 CAKI-1 79.95 RXF.7333 109.29 SM12C 98.73 TK-10 168.87 UO-31 75.95 rostat Cancer PC-3 DU-145 107.34 treat Cancer 96.34 BT-549 102.16 MDA-MB-231/ATCC 87.11 HB 578T 96.34 BT-549 102.16 MDA-MB-231/ATCC 89.60 MDA-MB-368 100.59	OVCAR-8	111.47			1 1
BK-OV-3 88.82 tenal Cancer 785-0 785-0 102.12 A498 118.51 ACHN 104.29 CAKI-1 79.95 RXF 393 109.29 BN12C 98.73 TK-10 158.87 UO-31 75.95 trostate Cancer 75.95 PC-3 107.72 DU-145 107.34 reast Cancer 96.34 BT-549 102.16 T-47D 89.60 MDA-MB-231/ATCC 87.11 MDA-MB-2458 100.59	NCI/ADR-RES	102.57			1 1
lenal Cancer 785-0 102.12 A498 118.51 ACHN 104.29 CARCH 75.95 RVF 393 109.29 SW12C 98.73 TK-10 168.87 UO-31 75.95 rostate Cancer PC-3 107.72 DU-145 107.34 resat Cancer MCF7 80.29 MDA-MB-231/ATCC 87.11 H8 578T 96.34 BT-549 102.16 T-47D 89.60 MDA-MB-458 100.59	SK-OV-3	88.82			1 1
786-0 102.12 A498 118.51 ACHN 104.29 CAK0-1 79.95 RXF 393 109.29 SN12C 98.73 TK-10 168.87 UO-31 75.95 rostate Cancer 75.95 PO-3 107.72 DU-145 107.34 resut Cancer 75.95 MDA-MB-231/ATCC 87.11 HS 78T 96.34 BT-549 102.16 T-47D 89.60 MDA-MB-468 100.59	enal Cancer				
A 98 118.51 A 0HN 104.29 CARCH 79.95 RXF 393 109.29 SN12C 98.73 TK-10 168.87 UO-31 75.95 rostate Cancer PC-3 107.72 DU-145 107.34 rest Cancer MCP7 80.29 MDA-MB-231/ATCC 87.11 H8 578T 96.34 BT-549 102.16 T-47D 89.60 MDA-MB-468 100.59	786-0	102.12	Concession of the local division of the loca		1 1
ACHN 104.29 CAKI-1 79.95 RXF 393 109.29 SN12C 98.73 TX-10 168.87 UO-31 75.95 rostate Cancer PO-3 107.72 DU-145 107.34 rest Cancer MCF7 80.29 MDA-MB-231/ATCC 87.11 H3 578T 96.34 BT-549 102.16 T-47D 89.60 MDA-MB-468 100.59	A498	118.51		1	
CARC-1 79.95 RXF 393 109.29 SN12C 98.73 TK-10 168.87 UO-31 75.95 rostate Cancer PC-3 DU-145 107.34 rest Cancer MCF7 MDA-MB-231/ATCC 87.51 BT-549 102.16 T47D 89.60 MDA-MB-468 100.59	ACHN	104.29			1 1
RXF 393 109.29 SN12C 98.73 TK-10 168.87 UO-31 75.95 PO-3 107.72 DU-145 107.34 reast Cancer 107.74 MCF7 80.29 MCA-ME-231/ATCC 87.11 HD 578T 96.34 BT-549 102.16 T-47D 89.60 MDA-ME-468 100.59	CAKI-1	79.95	Contraction of the local division of the loc	1	
BN12C 98.73 TK-10 168.87 UO-31 75.95 rostate Cancer 9C-3 PC-3 107.72 DU-145 107.34 resatt Cancer 96.34 MDA-MB-231/ATCC 87.11 HB 578T 96.34 BT-549 102.16 T47D 89.60 MDA-MB-458 100.59	RXF 393	109.29		1	
TK-10 168.87 UO-31 75.95 PO-3 107.72 DU-145 107.74 reast Cancer MOF7 MCF7 80.29 MCA-MB-231/ATCC 87.11 HD 578T 96.34 BT-549 102.16 T47D 89.60 MDA-MB-468 100.59	SN12C	98.73		1	1 1
U0-31 75.95 rostate Cancer PC-3 PC-3 107.72 DU-145 107.34 resat Cancer MCP7 MCP7 80.29 MDA-MB-231/ATCC 87.11 HS 578T 96.34 BT-549 102.16 T-47D 89.60 MDA-MB-458 100.59	TK-10	168.87		1	
rostate Cancer PC-3 107.72 DU-145 107.74 rest Cancer MCP7 80.29 MDA-MB-231/ATCC 87.11 H0 578T 96.34 BT-549 102.16 T-47D 89.60 MDA-MB-468 100.59	UO-31	75.95	and the second		1 1
PC-3 107.72 DU-145 107.34 rest Cancer MCF7 80.29 MDA-MB-231/ATCC 87.11 H9 578T 96.34 BT-549 102.16 T-47D 89.60 MDA-MB-468 100.59	rostate Cancer			1	
DU-145 107.34 reast Cancer 80.29 MCF7 80.29 MDA-MB-231/ATCC 87.11 HB 578T 96.34 BT-549 102.15 T-47D 89.60 MDA-MB-458 100.59	PC-3	107.72			1 1
Interst Cancer B0.29 MCP7 80.29 MDA-MB-231/ATCC 87.11 H3 578T 96.34 BT-543 102.16 T-47D 89.60 MDA-MB-468 100.59	DU-145	107.34	Concession of the local division of the loca	1	1 1
MCF7 80.29 MDA-MB-231/ATCC 87.11 H3 578T 96.34 BT-549 102.16 T-47D 89.50 MDA-MB-468 100.59	reast Cancer				1 1
MDA-MB-231/ATCC 87.11 H8 578T 96.34 BT-549 102.16 T-47D 89.60 MDA-MB-468 100.59	MCF7	80.29		1	1 1
H3 578T 96.34 BT-549 102.16 T-47D 89.60 MDA-MB-468 100.59	MDA-ME-231/ATCC	87.11		1	
BT-549 102.15 T-47D 89.60 MDA-MB-468 100.59	H8 578T	95.34			1 1
T-47D 89.60 MDA-MB-468 100.59	BT-EAD	102.15			1 1
MDA-MB-468 100.59	T-47D	99.60		1	1 1
	MDA-MB-468	100.59	-		1 1
		100.00	-		2
475 075 0.0					

Fig. S82: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compound 5e

Developmental Therapeutics Program		NSC: D-847926 / 1 Cono: 1.00E-5 Molar		Test Date: Aug 28, 2023
One Dose Bar	Graph	Experiment ID: 230	80868	Report Date: Oct 15, 2023
Panel/Cell Line	Growth Percent	Bar Graph		
Leukemia			8	
OCRF-CEM	103.59			
HL-6D(TB)	95.70			
K-562	100.93			
MOLT-4	108.99			
RPMI-8226	97.46			
AS 49(ATOC	107.24			1 1
EN/Y	00.00			
HOP-52	115 58			
HOP-92	103.98			
NCI-H226	93.61			
NCI-H23	95.02			1 1
NCI-H322M	100.47			
NCI-H460	104.23			
NCI-H522	99.75			
Colon Cancer				
COLO 205	117.79			
HCT-115	102.08			
HCT-15	97.95			
HT29	124.45			
KM12	102.36			
8W-620	95.94			1 1
CNS Cancer				
3F-268	96.78			
8F-295	97.52			
3F-539	90.66			
SNB-19	95.24			
U251	97.91			
Melanoma	51.51			
LOX IMVI	93.01			
MALME-3M	107.70			
M14	86.81			
MDA-MB-435	96.53			
SK-MEL-2	110.24			1 1
SK-MEL-28	109.29			
SK-MEL-5	92.41			
UACC-67	99 29			
Ovarian Cancer	0			
IGROV1	105.58			
OVCAR-3	101.21			
OVCAR-4	93.30			
OVCAR-5	104.42			1 1
OVCAR-8	103.94			
PICION-3	96.43			
Repai Cancer	00.05			
786-0	95.63			
A498	101.35			
ACHN	103.70			
CAKI-1	83.81			
RXF 393	106.21			
SN12C	95.34			
TK-10	117.07			
Prostate Cancer	81.41			
PC-3	102.99			
DU-145	105.05			
Breast Cancer				
MCF7	98.69			
MDA-MB-231/ATCC	90.92			
H8 578T	93.80			
BT-549	99.79			
T-47D	100.00			
MDA-MB-468	93.02			
		125 62.5	Percentage Growth	-62.5 -125

Fig. S83: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compound 6a

Developmental Therapeutics Program		NSC: D-847927 / 1	Cono: 1.00E-5 Molar	Tect Date: Aug 28, 2023
One Dose Bar	Graph	Experiment ID: 2308	Experiment ID: 23080668 Report Date: Or	
Panel/Cell Line	Growth Percent	Bar Graph		
Leukemia				
CCRF-CEM	89.00			
HL-60(TB)	89.27			1 1
MOLT-4	45 70			1 1
DDAL 9775	63.90			
Non-Small Cell Lung Cancer	63.50	1		1 1
A549/ATCC	97.56			
EKVX	93.78			1 1
HOP-62	89.04			
HOP-92	111.19			
NCI-H226	84.61			1 1
NCI-H23	97.14			1 1
NCI-H322M	96.20			1 1
NOLUE72	77.95			
Colon Cancer	//.00	1		1 1
COLO 205	103.32			
HCC-2998	101.61			
HCT-116	82.81			
HCT-15	95.81			
HT29	117.81	-		1 1
KM12	90.66			
SW-620	103.21			
CNS Cancer				
05-265	03.37			
85-539	91.65			
3NB-19	90.74			1 1
3NB-75	100.68			1 1
U251	93.54	and the second se		
Melanoma				
LOX IMVI	94.81			1 1
MALME-3M	118.86			1 1
M14	92.25			
MDA-MB-435	36.38			
OK-MEL-2	116.95			
SK-MEL-5	85.87			1 1
UACC-257	93.02			1 1
UACC-62	89.72			1 1
Ovarian Cancer				1 1
IGROV1	109.41			
OVCAR-3	107.43			
OVGAR-4	80.10			
OVCAR-5	105.70			
NCUADR-RES	88.90			
SK-OV-3	90.98			
Renal Cancer				
786-0	99.05			
A498	110.74			
ACHN	103.26			
GARD-1	69.81			
SN130	100.49			
TK-10	118 53			
UO-31	62.83	-		
Prostate Cancer				
PC-3	92.94			
DU-145	93.89			
Breast Cancer				
MCF7	84.27			
MDA-MB-231/ATCC	96.19			
ng 5/61	07.11			
T-47D	75.05			
MDA-MB-468	86.79			
		2	2.6	3 C
		125 02.5	0.0	C2 5 525
		62.3	Percentage Growth	-02.0 -120

Fig. S84: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compound 6b

Developmental Thera	peutics Program	ram NSC: D-847928 / 1 Cono: 1.00E-5 Molar Tect Date		Test Date: Aug 28, 2023
One Dose Bar	Graph	Experiment ID: 2308	Experiment ID: 23080668 Report Date: Oct	
Panel/Cell Line	Growth Percent	Bar Graph		
Leukemia	1000			
CCRF-CEM	67.15			1 1
HL-6D(TB)	58.45			
MOI T-4	32.35			1 1
RPMI-8226	42.41		-	
Non-Small Cell Lung Cancer				
A549/ATCC	73.67			1 1
EKVX	62.07			1 1
HOP-62	89.54			
HOP-92	71.73			
NGI-H226	42.03			1 1
NGPH23	74.22			1 1
NCI-H460	70.04			
NCI-H522	49.70			
Colon Cancer				1 1
COLO 205	75.64			1 1
HCC-2998	73.92			1 1
HCT-116	58.82			1 1
HCT-15	69.05			1 1
HT29	63.64			1 1
KM12 200-520	71.95			
CNS Capter	00.00			1 1
35-268	57 58			
35-295	70.03			1 1
SF-539	69.67	100		1 1
SNB-19	76.65			1 1
3NB-75	76.80			
U251	73.40			
Melanoma				
LOX IMVI	66.68			
MIA MIA	69.95			1 1
MDA-ME-125	55 55			1 1
SK-MEL-2	89.85			1 1
SK-MEL-28	90.96			
SK-MEL-5	61.79			1 1
UACC-257	86.94			
UACC-62	64.45			
Ovarian Cancer				
GROV1	85.69			
OVCAR-4	51.12			
OVCAR-5	90.08			
OVCAR-8	87.75			
NCI/ADR-RES	65.99			
SK-OV-3	95.06			
Renal Cancer	A4 75			
0014	81.76			
ACUNI	75.67			
CAKI-1	35.89		-	
RXF 393	59.35	Sector Se		
SN12C	78 32			1 1
TK-10	87.38			
UO-31	32.30		-	
Prostate Cancer	1972.5			
PC-3	53.82			
Breast Cancer	78.32			
MOE7	EE 69			
MDA-MB-231/ATCC	53.94			
H8 578T	60.36			
BT-549	89.48			
T-47D	51.39			
MDA-MB-468	59.51			
		105 05 5		00.5
		125 62.5	Percentage Growth	-62.5 -125
			and a stand	10

Fig. S85: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compound 6c

Developmental Thera	peutics Program	NSC: D-847929/1	Cono: 1.00E-5 Molar	Test Date: Aug 28, 2023
One Dose Bar	Graph	Experiment ID: 2308	OS68 Report Date: Oct 15, 2	
Panel/Cell Line	Growth Percent	Bar Graph		
Leukemia				
CORF-CEM	92.28			
K-562	72.45			1 1
MOLT-4	51.21	Contraction of the local division of the loc		1 1
RPMI-8226	80.68			1 1
Non-Small Cell Lung Cancer				
ASASIATOC	93.66			
HOP-62	84.85			1 1
HOP-92	104.64			
NCI-H226	78.29			1 1
NCI-H23	88.23			1 1
NCI-H322M	112.13			
NCLUE22	74.95			1 1
Colon Cancer	74.20	1		1 1
COLO 205	104.54			
HCC-2998	98.07			
HCT-116	78.49			
HCT-15	73.82			
HT29	71.74			
RM12 200-620	103.43			
CNS Cancer	103.43			1 1
3F-268	85.14			1 1
3F-295	90.13	and the second se		
3F-539	94.87	and the second se		1 1
3NB-19	93.63			1 1
SNB-75	122.80			
Melanoma	51.10			
LOX IMVI	95.41			1 1
MALME-3M	112.64			1 1
M14	89.16			1 1
MDA-MB-435	98.27			1 1
SK-MEL-2	117.98			1 1
SK-MEL-28	117.23			1 1
UACC-257	109.12			1 1
UACC-62	85.75	Comment of Comments of Comm		1 1
Ovarian Cancer				1 1
IGROV1	106.50			
OVCAR-3	104.03			
OVCAR-4	115.27	_		
OVCAR-S	103.55			1 1
NCUADR-RES	83.04			1 1
SK-OV-3	92.46			
Renal Cancer				
400	94.33			
ACHN	101.25			
CAKI-1	73.86			
RXF 393	96.97			
SN12C	100.63			
TK-10	121.01			
Prostate Cancer	50.47			
PC-3	77 98			
DU-145	95.26			
Breast Cancer				
MCF7	75.38			
MDA-MB-231/ATCC	98.38			
B5 5/81	91.71			
T-47D	76.12			
MDA-MB-468	92.02			
			100	
		125 62.5	0.0	-62.5 -125
			Percentage Growth	h

Fig. S86: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compound 6d

evelopmental Therapeutics Program		NSC: D-847930/1	Cono: 1.00E-5 Molar	Test Date: Aug 28, 2023
One Dose Bar	Graph	Experiment ID: 2308	0868	Report Date: Oct 15, 20
anel/Cell Line	Growth Percent	Bar Graph		
eukemia				
OURF-CEM	102.27			1 1
HL-60(18)	109.53			1 1
MOLT-4	73.75			1 1
RPMI-8226	89.35			1 1
on-Small Cell Lung Cancer				1 1
A549/ATCC	111.42			1 1
EKVX	92.01			
HOP-62	97.25			
HOP-92	118.54			
NCI-H226	95.91			
NCI-H23	95.02			
NCI-H322M	102.68			
NCI-H460	107.23			
NCI-H522	91.15			
olon Cancer	101.00			
W00-200	104.56			
HOT-115	112.86			1 1
HOT-15	101.27			
HT29	88.08			
KM12	94 57			
3W-620	105.34			
NS Cancer				
3F-268	99.12			
3F-295	95.97			
3F-539	99.20			
SNB-19	101.19			
SNB-75	120.89			
U251	103.20	-		
leianoma				
LOX IMVI	102.52	a la contra de la co		
MALME-3M	112.39			
M14	98.39			
MDA-MB-435	102.05			
SR-MEL-2	115.21			
SK-MEL-28	123.50			
SK-MEL-5	35.93			
UACC-62	99.31			
varian Cancer	22.21			1 1
IGROV1	105.48			
OVCAR-3	115.41			
OVCAR-4	89.82	and the second se		1 1
OVCAR-5	125.48			
OVCAR-8	117.11			
NCI/ADR-RES	99.56			
SK-OV-3	89.26			
enal Cancer				
786-0	100.39			
A498	127.40			
ACHN	114.66			
EVE 292	53.53			1 1
001 333	115.35		-	
TK-10	154.94			1 1
UO-31	67 34			
rostate Cancer				1 1
PC-3	102.75			1 1
DU-145	105.08	Concession and Concession of C		1 1
reast Cancer				
MCF7	81.58			
MDA-MB-231/ATCC	99.69			
H3 578T	97.85			1 1
BT-549	99.74			
T-47D	78.05			
MDA-MB-468	103.47			

Fig. S87: In vitro growth (G%) for the NCI60 cancer cell lines upon treatment with 10 μM of Compound 6e



Fig. S88: A graph represent the tubulin polymerization assay of Compound 4C



Fig. S89: A graph represent the tubulin polymerization assay of colchicine



Fig. S90: A graph represent the tubulin polymerization assay of CA-4

Table S3: Average of percentages of cells at early apoptosis, late apoptosis, and necrosis of control non-treated cells, 4c, and colchicine-treated cells.

	Sample	Total Cell Death (%)	Early Apoptosis (%)	Late Apoptosis (%)	Necrosis (%)
1	Control	2.37 + 1.56	0.52 + 0.3	0.19 + 0.08	1.66 ± 0.97
		_	_	_	_
2	4c	29.15 ± 2.9	7.44 ± 1.59	17.1 ± 1.9	4.61 ± 2
		_		_	_
3	Colchicine	37.22 ± 2.8	19.19 ± 0.87	6.62 ± 0.75	11.41 ± 2.8

Docking studies:

Table S4: Binding interactions, group of binding, type of interactions and interaction energies of Colchicine, 3b,c, 4c, and 5c into the colchicine binding site of tubulin enzyme.

Compound	Amino acidsInteracted group	Type of interaction	Affinity (Kcal/mol)
Ligand (Colchicine)	Val 181 Tetrahydrobenzoheptalene (C=O)	H-Bond	
	Val 238 Trimethoxy phenyl	H-Bond	-9.8
	Cys 241Trimethoxy phenyl	π-alkyl	

	Leu 242Trimethoxy phenyl	π-alkyl	
	Leu 248 Trimethoxy phenyl	π-sigma	
	Ala 250 Trimethoxy phenyl	H-Bond	
	Asp 251 Trimethoxy phenyl	H-Bond	
	Leu 255 Trimethoxy phenyl	π-sigma	
	Met 259 Tetrahydrobenzoheptalene	π-sulfur	
	Val 315 Tetrahydrobenzoheptalene (OCH ₃)	H-Bond	
	Ala 316tetrahydrobenzoheptalene ring	π-alkyl	
	Ile 318 Trimethoxy phenyl	π-alkyl	
	Asn 350 Tetrahydrobenzoheptalene (OCH ₃)	H-Bond	
	Lys 352 tetrahydrobenzoheptalene	π-alkyl	
	Ile 378 Trimethoxy phenyl	π-alkyl	
	Ala 180dimethoxyphenyl ring	π-alkyl	
	Glu 183 dimethoxyphenyl ring	H-bond	
	Ser 178 dimethoxyphenyl ring	H-bond	
3b	Cys 241chloroethylquinoline ring	π-alkyl	
	Leu 248 dimethoxyphenyl ring, chloroethylquinoline ring	π- sigma	-9.0
	Ala 250 chloroethylquinoline ring	π-alkyl	5.0
	Leu 255 chloroethylquinoline ring	π- sigma	
	Ala 316 chloroethylquinoline ring	π-alkyl	
	Ile 318 chloroethylquinoline ring	π-alkyl	
	Lys 352 chloroethylquinoline ring	π-alkyl	
2.5	Ala 180trimethoxyphenyl ring	π-alkyl	8.0
50	Ser 178 trimethoxyphenyl ring	H-bond	-0.0

-			
	Cys 241chloroethylquinoline ring	π-alkyl	
	Leu 248 dimethoxyphenyl ring,	π- sigma	
	chloroethylquinoline ring	π-alkyl	
	Ala 250 chloroethylquinoline ring	π-alkyl	
	Lys 254 trimethoxyphenyl ring	π- sigma	
	Leu 255 chloroethylquinoline ring	van der	
	Ala 316 chloroethylquinoline ring	waals	
	Ile 318 chloroethylquinoline ring	π-alkyl	
	Lys 352 chloroethylquinoline ring		
	Ser 178 Trimethoxyphenyl ring	H-bond	
	Thr 179 2-oxo-1,2-dihydropyridine ring	H-bond	
	Ala 180 2-oxo-1,2-dihydropyridine ring	H-bond	
4c	Tyr 224 Trimethoxyphenyl ring	H-bond	
	Cys 241 chloroethylquinoline ring	π-alkyl	-11.5
	Gln 247 Trimethoxyphenyl ring	H-bond	
	Leu 248 chloroethylquinoline ring	π- sigma	
	Ala 250 chloroethylquinoline ring	π-alkyl	
	Leu 255 chloroethylquinoline ring	π- sigma	
	Asn 2582-oxo-1,2-dihydropyridine ring	H-bond	
	Ile 318 chloroethylquinoline ring	π-alkyl	
	Lys 3522-oxo-1,2-dihydropyridine ring	π-alkyl	
5c	Ala 180 2-thioxo-1,2-dihydropyridine ring, trimethoxy phenyl	π-alkyl	
		H-bond	
	Val 1812-thioxo-1,2-dihydropyridine ring	H-bond	-10.9
	Tyr 224 Trimethoxyphenyl ring	π-alkyl	

Cys 241 chloroethylquinoline ring	H-bond
Gln 247 Trimethoxyphenyl ring	π- sigma
Leu 248 chloroethylquinoline ring, 2-thioxo-	
1,2-unydropyridine ring	π-alkyl
Ala 250 chloroethylquinoline ring	π- sigma
Leu 255 chloroethylquinoline ring	π- alkyl
Ile 318 chloroethylquinoline ring	π- alkyl
Lys 3522-thioxo-1,2-dihydropyridine ring	n− aikyi