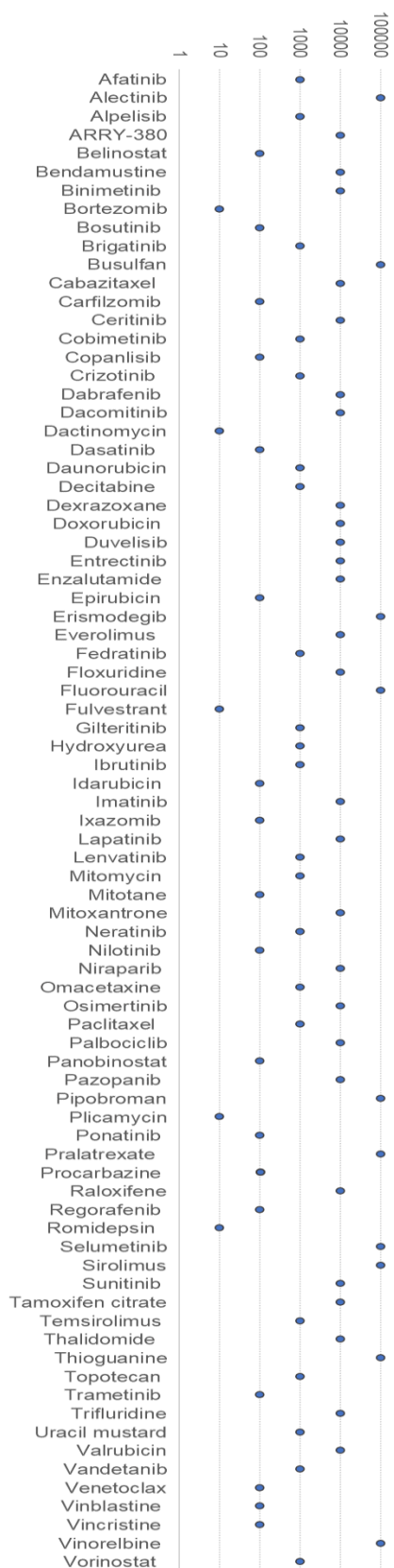
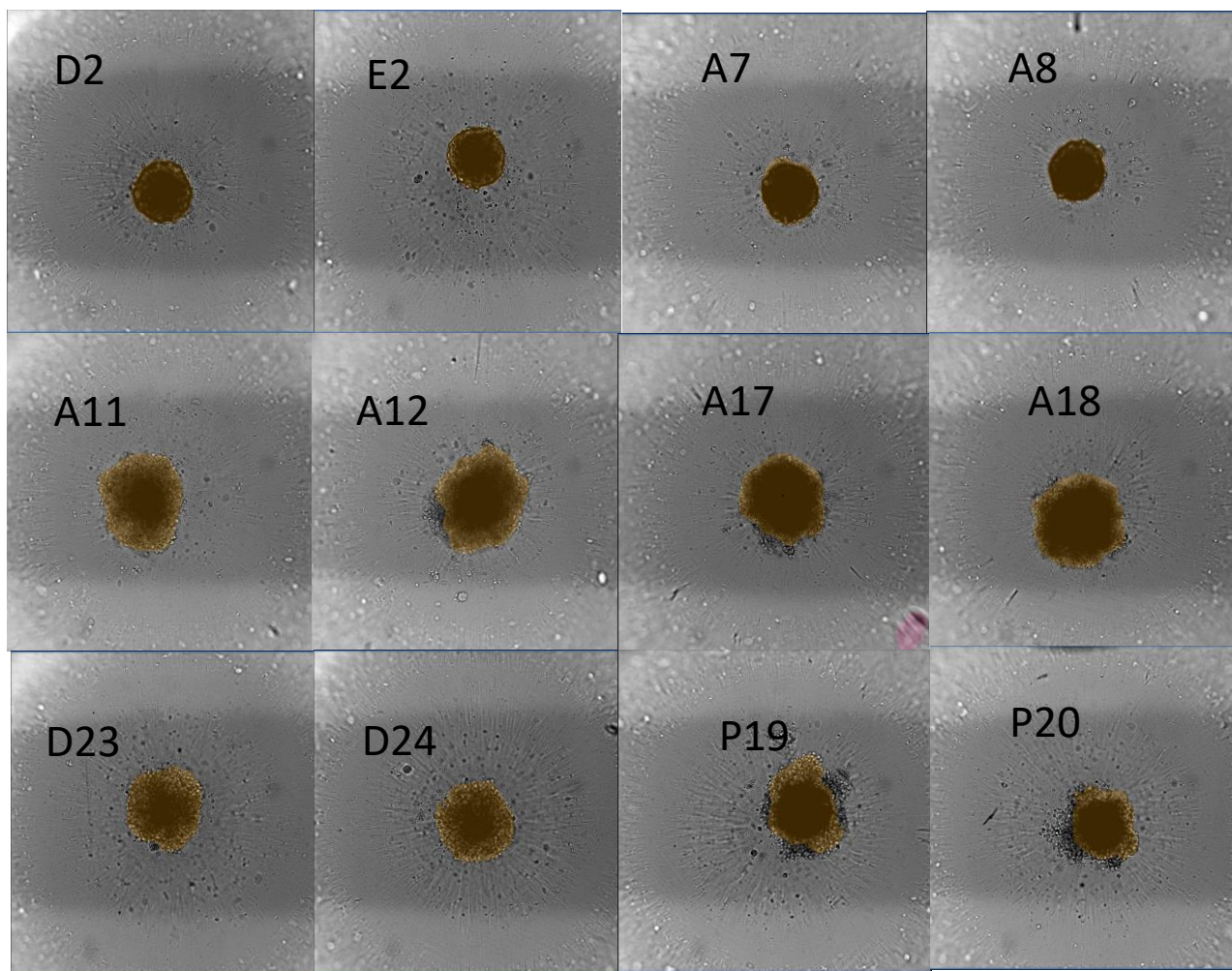




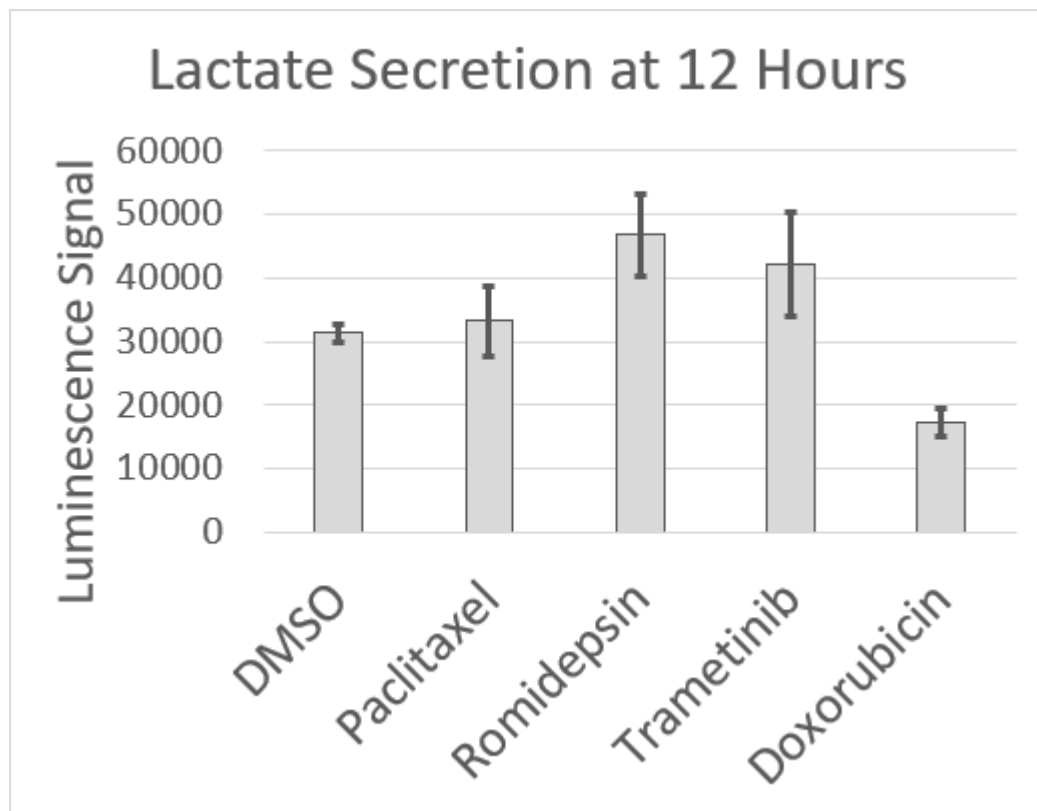
Supplemental Figure1.

Minimal effective concentrations (in 10-100,000nM range) shown for active compounds from NCI library.



Supplemental Figure2.

Tumoroids were cultured for 5 days with compounds from NCI library, 10uM concentration, then imaged on IXM-C HT.ai automated imaging instrument without staining in transmitted light using 10X objective. Images were analyzed using SYNAP module of InCarta software (Molecular Devices). Analysis mask shown in yellow. Selected images presented for DMSO controls (D2 and E2), un-effected wells (A7 and A8), also effected by compounds (A11, A12 doxorubicin; A17, A18 mitoxantrone, D23, D24 copanlisib; P19, P20 erdafitinib).



Supplemental Figure 3.

Compound treatments and secretion of lactate were studied using a Pu·MA System, a microfluidic-based automated organoid assay platform that allows multistep protocols. Supernatants were collected from treated tumoroids using flowchip automation five times after 3hr incubation periods. The first time point was with media only (baseline); the subsequent four incubations were with media + compound. Tumoroids were exposed to drug at 1 uM concentrations or vehicle, for 12 hours. Supernatants were analyzed for lactate concentration using the Lactate-Glo assay (Promega).

Compounds	10nM	100nM	1uM	10uM	100uM
DMSO	204	225	230	264	270
DMSO	200	219	249	255	347
DMSO	369	262	273	294	291
DMSO	264	260	286	258	245
DMSO	229	218	259	295	278
DMSO	315	260	250	326	279
DMSO	204	214	239	268	280
DMSO	243	262	227	272	268
DMSO	243	278	254	255	235
DMSO	235	304	297	287	246
DMSO	246	336	219	244	262
DMSO	250	301	271	247	301
Metformin	208	300	297	286	296
Quercetin	319	398	197	355	488
Quercetin	345	277	322	331	318
Everolimus	250	177	337	329	259
Quercetin	266	273	305	319	361
Paspalin hydrochloride	254	304	299	288	335
Metastatin	400	318	333	303	343
Metastatin	378	357	325	337	344
Metastatin	328	326	308	301	335
Allosteric	277	311	544	355	229
Allosteric	185	334	221	313	319
Leptin	270	288	276	297	335
Dactin	492	479	456	431	478
Metastatin	338	294	379	372	322
Chloramphenicol	253	289	286	219	229
Chloramphenicol	230	192	313	248	278
Chloramphenicol	286	232	265	323	275
Levodopa	320	265	283	327	286
Levodopa	206	265	306	218	343
Levodopa	266	221	232	261	289
Trethynemendamine	227	342	239	322	329
Retinone	280	214	278	321	344
Allosteric	285	355	294	349	288
Allosteric	330	298	283	247	376
Allosteric	330	340	380	244	274
Sunifil	315	299	313	234	327
Fluoride	300	376	228	321	319
Fluoride	257	310	311	299	351
Picamycin	501	436	483	428	413
Quercetin	280	331	277	268	292
Ribononin	265	202	256	256	316
Ribononin	405	424	598	452	601
Cyclophosphamide	301	378	325	207	300
Pradaxin	330	282	286	210	334
Metformin	227	293	331	307	404
Nitroglycerin hydrochloride	259	273	331	293	340
Fluoride	259	134	342	249	233
Fluoride	324	329	261	327	303
Fluoride	271	336	302	264	311
Fluoride	298	341	318	282	387
Fluoride	244	334	277	210	453
Levodopa	347	314	227	254	456
Metastatin	361	344	594	402	403
Metastatin	303	263	298	321	325
Metastatin	274	257	264	332	318
Metastatin	376	275	316	289	309
Metastatin	265	200	301	309	297
Racipropyl phosphite	173	178	238	226	326
Metastatin	325	215	456	378	432
Citric acid	231	261	309	373	408
Citric acid	361	273	299	317	284
Retinone	177	657	514	378	463
Thalidomide	220	307	366	267	311
Thalidomide	263	280	332	341	368
Vincristine sulfate	264	377	404	452	554
Actin	318	313	305	322	346
Metastatin	294	260	270	290	348
Fluoride	244	235	334	388	469
Trifluoride	270	316	449	303	323
Fluoride	292	360	347	324	349
Procaine hydrochloride	328	320	309	403	377
Carbamate	335	290	669	711	764
Levodopa	226	161	205	252	286
Oxipropyl mesopropionate	239	177	252	304	515
Deuterium hydrochloride	262	249	248	304	578
Isosorbide dinitrate	352	277	685	487	565
Streptococcus	384	311	346	294	317
Fluoride	360	337	376	488	799
Acetaminophen	189	337	272	301	360
Bismuth	354	415	529	560	525
Acetaminophen	319	310	329	350	324
Metastatin	381	368	338	255	351
Cladribine	334	276	357	306	332
Vandetanib	360	360	337	288	400
Fluoride	266	308	274	343	356
Calcitonin	251	300	257	327	328
Clozapine	230	289	339	273	317
Paracetamol	288	211	661	606	576
Vitamin	229	249	363	275	275
Fluoride	149	164	244	329	316
Teniposide	256	292	279	323	372
Fluoride	175	236	268	280	319
Doxorubicin hydrochloride	266	318	315	337	308
Vitamin	234	233	301	241	330
Metastatin	277	332	335	296	339
Calcitonin	322	350	337	313	343
Fluoride	305	321	276	316	458
Fluoride	334	372	329	341	432
Doxorubicin	307	301	362	356	443
Fluoride	289	344	272	325	350
Benzalkonium hydrochloride	368	325	280	311	355
Riboflavin	312	263	627	366	364
Fluoride	290	275	250	255	350
Allosteric	292	309	304	291	319
Oxipropyl	214	209	279	294	290
Retinone	205	199	247	296	276
Tamoxifen citrate	288	198	226	295	318
Oxipropyl	332	265	296	229	331
Potassium	181	250	280	315	370
AMV-580	312	277	253	254	285
Fluoride	191	240	268	297	254
Retinone	355	301	367	405	416
Carboplatin	215	244	346	272	323
Doxorubicin	200	222	268	312	318
Vitamin	246	220	222	285	356
Riboflavin	301	360	239	260	428
Metastatin	227	198	415	369	399
Vitamin	274	264	463	385	387
Isosorbide dinitrate	242	320	420	388	516
Teniposide	266	300	316	266	349
Doxorubicin	227	229	307	329	292
Metastatin	162	160	217	301	391
Metastatin	188	211	272	242	269
Cobalamin	347	343	300	316	429
Allosteric	214	180	318	381	332
Allosteric	328	271	296	340	321
Fluoride	307	251	320	313	335
Allosteric	214	180	318	381	332
Teniposide	301	252	288	319	322
Doxorubicin	327	293	342	322	398
Fluoride	372	336	329	321	318
Fluoride	320	261	343	322	307
Fluoride	214	135	256	307	342
Potassium	333	286	318	333	320
Cladribine	234	358	300	303	293
Cladribine	243	319	272	240	300
Vitamin	247	256	285	331	253
Certinib	287	126	221	265	309
Topotecan hydrochloride	268	370	262	313	312
Tamoxifen	232	302	176	131	237
Genistein hydrochloride	195	276	326	261	337
Calcitonin	310	326	344	347	344
Metastatin	267	269	342	296	303
Metastatin	259	259	305	364	273
Doxorubicin	367	378	254	294	331
Riboflavin	322	276	227	303	306
Metastatin	268	236	328	311	374
Oxipropyl	321	283	292	266	289
Vitamin	325	302	352	324	495
Metastatin	223	263	244	266	315
Etanercept	273	261	293	265	338
Metastatin	226	252	297	352	278
Captodipine	235	261	275	237	297
Fluoride	313	165	363	232	267
Levodopa	328	316	326	278	285
Levodopa	266	343	217	248	277
Fluoride	301	274	206	289	302
Fluoride	318	307	311	210	394
Etanercept	230	224	344	331	306
Fluoride	296	352	343	296	403
Fluoride	332	482	393	438	376
Fluoride	286	354	324	288	340
Acetaminophen	297	265	285	297	294
Uridine	351	364	279	317	363
Levodopa	254	358	346	345	310
Allosteric	227	330	311	328	302
Citric acid	284	256	270	296	307
Potassium	292	292	332	346	312
Oxipropyl	238	241	255	253	300
Acetaminophen	151	153	254	214	256
Acetaminophen	300	246	199	189	297
Acetaminophen	295	179	202	257	395
Acetaminophen	202	215	252	301	283
Captodipine	188	144	368	484	543
Fluoride	246	219	261	267	311
Fluoride	221	320	245	314	365
Fluoride	279	317	321	345	252
Selipagranol	295	232	322	343	326
Fluoride	252	193	312	250	341
Zinc	339	269	309	314	310
Fluoride	245	360	241	227	278
Dactin	288	274	241	331	306

Supplemental Table 1.

Data from analysis tumourid images after 5 days of treatment with 10uM concentrations of indicated compounds. Images were taken after staining cells as indicated in the Methods section. Images were analyzed using MetaPress software. Numbers represent nuclei counts in the projection images of tumourids. Numbers were conditionally formatted if they were above (green) or below (red) of 25TDEV from the DMSO controls for each concentration separately. Data from highest concentration grayed out as less reliable, since high concentrations of compounds caused severe cell damage and potential errors in nuclear count.

Supplemental Table 2.

Data from analysis tumoroid images after 5 days of treatment with 10uM concentrations of indicated compounds. Images were taken with transmitted light, 10X objective, then analyzed using InCarta software. Synap module of InCarta software was created to find tumoroids, then the objects were measured for dimensions and intensity. Area, diameter, perimeter of objects were measured and presented in the table.

Compound	Well	Area	Diameter	Perimeter	Area Intensity	Total Intensity	Intensity CV	Light Flux	Obj Intensity
DMSO	A-1	58020	314	1007	19784	1193919138	0.49	137169	39053
DMSO	A-2								
Metformin	A-3	47169	218	816	13317	429682794	0.45	46812	31992
Metformin	A-4	47932	193	898	12599	409178014	0.46	84812	31366
Thapsigargin	A-5	52794	275	893	13773	72711101	0.44	66884	33081
Thapsigargin	A-6	60839	304	964	14081	426821308	0.49	73754	34495
Cycloheximide	A-7	58935	196	942	12550	728317321	0.38	54847	31908
Cycloheximide	A-8	60740	303	989	13161	799386893	0.47	59869	31458
Indinavir sulfate	A-9	56525	110	1107	13428	880218428	0.44	79873	31943
Indinavir sulfate	A-10	74194	328	1123	14424	1071029575	0.46	86242	33373
DMSO	A-11	58935	140	1500	18835	246351540	0.33	183551	31733
Deoxycholic hydrochloride	A-12	140535	495	1498	17645	248145263	0.35	194444	34501
Deoxycholic hydrochloride	A-13	33001	228	888	9655	138429296	0.59	29454	33300
Deoxycholic hydrochloride	A-14	58935	186	959	9927	504847310	0.60	91328	34334
Indinavir sulfate	A-15	55121	280	950	10987	605106668	0.40	45466	33314
Indinavir sulfate	A-16	59323	185	973	11754	830988441	0.55	49750	34952
Metformin	A-17	311074	413	1474	13995	146910641	0.49	126164	31563
Metformin	A-18	130277	449	1370	13741	1810581871	0.50	148115	31144
Metformin	A-19	81447	362	1170	13144	1488819461	0.37	134584	31486
Metformin sulfate	A-20	107416	409	1385	15336	1647847786	0.40	136381	32717
Metformin sulfate	A-21	61783	300	972	13631	1677174186	0.41	96054	32554
Emodin	A-22	61559	291	967	13631	902615184	0.43	68320	33214
Emodin	A-23	56525	167	865	13664	588177013	0.38	58991	33275
DMSO	A-24	46027	258	844	15860	776179179	0.43	47805	37622
DMSO	A-25	46707	258	839	24194	652974679	0.39	62623	36075
DMSO	A-26	55893	275	907	13463	702835796	0.32	61472	32453
Docetaxel	B-3	73067	325	1165	14779	1078079100	0.43	94626	31168
Docetaxel	B-4	397996	144	1094	14420	1120528714	0.44	93770	32792
Levamisole	B-5	64802	301	994	14101	913801601	0.38	76444	32093
Levamisole	B-6	75889	319	1069	14548	1051831193	0.38	88523	31791
Levamisole	B-7	57884	289	946	13556	818451279	0.45	61537	31955
Levamisole	B-8	59197	292	956	13144	778092559	0.38	65244	30400
Levamisole	B-9	141913	414	1408	13836	1247143519	0.37	121451	29487
Cisplatin	B-10	130509	411	1645	16428	1619318746	0.39	153955	32047
Cisplatin	B-11	121715	415	1805	17078	2498614716	0.35	24674	32311
Cisplatin sulfate	B-12	126114	425	1466	16684	2119315814	0.34	194158	29387
Flutamide	B-13	68708	308	1014	13112	107805278	0.39	74087	32274
Flutamide	B-14	46887	315	1012	10975	125149446	0.36	76899	34802
Dofetilide mesylate	B-15	117995	426	1333	11853	1398178863	0.27	154288	32018
Dofetilide mesylate	B-16	612	452	1456	7914	1117991233	0.28	177000	31568
Cabotegravir	B-17	39030	237	801	9005	354902300	0.45	47881	24812
Cabotegravir	B-18	63955	342	1088	12731	450424891	0.46	88882	30676
Cabotegravir	B-19	69396	336	1066	10566	732371468	0.45	73173	29178
Tamoxifen	B-20	76884	358	1182	12374	988292679	0.47	145796	32968
Levamisole	B-21	61535	304	1021	12686	760215176	0.44	87145	32448
Levamisole	B-22	59566	293	950	11747	818874057	0.41	70436	32215
Levamisole	B-23	61366	298	974	11310	769514406	0.46	69863	31678
Levamisole	B-24	50843	260	882	11849	604551518	0.45	67544	33142
DMSO	C-1	47163	260	840	13420	642317798	0.41	46861	31278
DMSO	C-2	51404	274	885	13291	816668131	0.35	61324	31848
Borismide	C-3	64209	302	969	14007	899199318	0.36	74798	30019
Borismide	C-4	69130	325	1035	14776	1007116319	0.35	78415	31669
Hydroxychloroquine	C-5	64121	299	1009	14398	932517699	0.36	76058	32308
Hydroxychloroquine	C-6	61525	305	1010	14882	175117218	0.40	77513	32913
Hydroxychloroquine	C-7	131968	421	1418	18149	1719037547	0.35	168818	31360
Metformin	C-8	130428	419	1454	16841	2028091037	0.36	162286	32043
Levamisole	C-9	61525	333	970	13614	788126301	0.38	66362	31274
Cisplatin sulfate	C-10	65558	303	1004	13413	888148925	0.38	64659	31974
Cisplatin sulfate	C-11	6117	117	1022	15341	1629533303	0.33	79798	32443
Shikonin	C-12	65388	304	988	14410	942349461	0.33	78727	32336
Deoxycholic hydrochloride	C-13	54539	484	2054	15237	2148981270	0.30	218198	26853
Deoxycholic hydrochloride	C-14	61525	312	1062	15051	1265219991	0.30	157120	28937
Deoxycholic hydrochloride	C-15	67555	325	1058	13973	107313063	0.38	74812	31836
Levamisole	C-16	61534	305	1002	14459	1059119176	0.36	74514	31830
Levamisole	C-17	64787	303	989	14179	938188930	0.32	72270	33029
Levamisole	C-18	71738	320	1063	13668	819424061	0.39	77087	32884
Levamisole	C-19	64351	316	1080	13956	896219018	0.50	75440	32008
Levamisole	C-20	76245	372	1256	12097	1224961378	0.43	107586	32756
Levamisole	C-21	61525	311	1018	14967	812381071	0.53	61731	31001
Cisplatin	C-22	71141	321	1059	11001	789043866	0.50	98148	33018
Cisplatin	C-23	61339	297	960	14456	122994465	0.39	84178	31878
DMSO	C-24	54115	280	906	13284	738872008	0.42	53405	32919
DMSO	D-1	48097	262	802	13611	688212940	0.42	53448	31910
DMSO	D-2	60864	287	942	13715	818484251	0.32	68853	31498
Emodin	D-3	58347	288	946	14622	831120101	0.42	69740	30793
Emodin	D-4	43171	147	828	13763	825759136	0.38	45992	32270
Indinavir sulfate	D-5	57900	274	937	15910	845646885	0.37	68863	32814
Indinavir sulfate	D-6	57174	273	899	14784	746215814	0.35	65223	33411
DMSO	D-7	71914	311	1063	14202	1049714979	0.36	79574	34053
Deoxycholic hydrochloride	D-8	57322	287	950	14421	826635873	0.38	68800	32017
Deoxycholic hydrochloride	D-9	548953	481	1701	18335	1738032638	0.33	233444	31427
Borismide	D-10	129109	441	1639	18978	2450209051	0.32	201187	31487
Borismide	D-11	28936	156	1282	14629	423645179	0.34	251146	30899
Flutamide	D-12	104067	584	1298	18815	1478891164	0.31	148706	31521
Flutamide	D-13	62118	297	992	14351	891461029	0.34	77136	31166
Flutamide	D-14	61375	305	975	13715	8444891199	0.36	69883	32750
Flutamide	D-15	54066	273	901	12492	677986117	0.37	57021	31142
Flutamide	D-16	54244	178	1165	13110	1213818171	0.40	59424	31343
Alendronate	D-17	131271	467	1561	15455	2055644115	0.33	178092	32297
Alendronate	D-18	138333	439	1452	16482	1811412845	0.39	139145	31708
Alendronate	D-19	71055	118	1074	14617	1079183883	0.33	92470	31770
Cabotegravir	D-20	69757	312	1016	15253	1563978564	0.31	84195	33730
Flutamide	D-21	69718	361	1425	17448	1330542711	0.36	138781	32104
Borismide	D-22	94970	363	1288	17083	1590710315	0.36	144943	32161
DMSO	D-23	10719	175	1234	17548	1705943222	0.35	248802	32157
Cabotegravir sulfate	D-24	96505	378	1335	17153	1655315539	0.35	157133	32001
DMSO	E-1	51122	277	881	14368	812493053	0.33	82488	32021
DMSO	E-2	51797	384	1328	14518	812497748	0.38	66788	31713
Flutamide	E-3	58171	306	994	15483	816127290	0.36	79171	33965
Flutamide	E-4	68118	304	913	16420	1138444091	0.29	84654	33937
Trichloroethylene	E-5	38763	236	862	15183	168518091	0.37	56838	34421
Trichloroethylene	E-6	39652	223	780	14979	134022912	0.35	50903	31945
Trichloroethylene	E-7	61159	390	1174	14144	860210136	0.35	62430	30881
Flutamide	E-8	61039	296	967	14698	888866539	0.40	71163	33188
Flutamide	E-9	61944	325	1020	14470	970488821	0.32	83921	31362
Flutamide	E-10	64830	299	995	13949	1043017960	0.33	75187	32475
Flutamide	E-11	61687	317	1031	15514	1071615319	0.35	84713	31024
Flutamide	E-12	59539	289	840	15102	899157588	0.29	75048	33457
Borismide sulfate	E-13	66134	305	1035	14788	180391343	0.40	78813	33469
Borismide sulfate	E-14	81768	447	1206	13302	1120308841	0.38	105838	33882
Flutamide	E-15	42121	250	876	14790	629974444	0.39	52893	33602
Flutamide	E-16	44712	255	877	13705	628910941	0.47	51835	34172
Flutamide phosphate	E-17	69026	312	1043	14878	1029649250	0.36	84500	33975
Flutamide phosphate	E-18	57186	281	936	15749	880027392	0.34	76260	33615
Flutamide phosphate	E-19	59063	290	976	15342	880031217	0.41	70429	30511
Flutamide	E-20	52163	303	951	15573	812348771	0.42	68829	34455
Levamisole	E-21	47548	305	863	15395	132448718	0.34	54799	33836
Levamisole	E-22	50860	266	877	15683	797615212	0.33	62856	34013
Levamisole	E-23	74070	140	1152	12747	1071431088	0.42	86156	32810
DMSO	E-24	49416	282	875	15400	760133251	0.31	93943	34330
DMSO	F-1	60246	286	945	12518	715414002	0.46	17014	32912
DMSO	F								

Supplemental Table 2
(continuation).
Data from analysis tumoroid
images after 5 days of
treatment with 10uM
concentrations of indicated
compounds. Images were taken
with transmitted light, 10X
objective, then analyzed using
InCarta software. Synap module
of InCarta software was created to
find tumoroids, then the
objects were measured for
dimensions and intensity. Area,
diameter, perimeter of objects
were measured and presented
in the table.

DMG0	I-1	41486	264	835	13947	68289428	0.32	515757	32841
DMG0	I-2	64686	319	1037	10901	109941136	0.38	83613	2014
Neurospora crassa	I-3	51096	271	872	18506	81515733	0.36	70294	32190
Neurospora crassa	I-4	40738	290	975	15804	96022883	0.34	75126	33600
Neurospora crassa	I-5	42145	303	948	14740	116015448	0.33	68979	34104
Neurospora crassa	I-6	59897	290	941	15424	102780286	0.31	75887	34039
Neurospora crassa	I-7	74483	335	1064	13741	1174114535	0.43	88344	34513
Neurospora crassa	I-8	77633	335	1114	15688	1217884760	0.42	95176	35339
Neurospora crassa	I-9	68724	294	996	14543	90122833	0.34	79720	30744
Neurospora crassa	I-10	65933	311	1008	15549	1025511841	0.34	76467	34067
Neurospora crassa	I-11	60967	291	976	14674	98925267	0.33	72920	36558
Neurospora crassa	I-12	61435	315	1049	15635	106231494	0.32	73729	35118
Neurospora crassa	I-13	62540	301	971	15863	93024731	0.33	81955	34118
Neurospora crassa	I-14	61434	307	987	15176	961108339	0.32	80113	34553
Neurospora crassa	I-15	51509	477	1774	19857	300047490	0.28	226787	35212
Neurospora crassa	I-16	51482	447	1719	19797	224444987	0.25	188049	33867
Neurospora crassa	I-17	59793	295	967	18886	100201096	0.31	79095	35148
Neurospora crassa	I-18	40468	297	978	16596	1005517316	0.32	76260	32388
Neurospora crassa	I-19	51483	478	1689	16217	2411381709	0.42	181297	34548
Neurospora crassa	I-20	59399	406	1440	15823	155697775	0.42	129888	34138
Neurospora crassa	I-21	87755	351	1012	16130	1072216569	0.39	69430	36047
Neurospora crassa	I-22	60325	291	933	14875	915344297	0.28	68845	34010
Neurospora crassa	I-23	60325	289	954	14901	87951208	0.32	68404	34018
Neurospora crassa	I-24	55612	283	909	13148	842405183	0.41	75798	33053
DMG0	J-1	49092	280	853	13951	68290818	0.36	51769	32279
DMG0	J-2	51294	276	886	14926	76077339	0.39	54444	32614
DMG0	J-3	83972	373	1379	14703	1233164025	0.44	207404	32645
DMG0	J-4	104061	424	1335	14821	1212468134	0.36	134484	33896
DMG0	J-5	121124	413	1439	18833	212984746	0.34	217988	33227
DMG0	J-6	107579	409	1390	18527	2983838820	0.34	159441	33308
DMG0	J-7	45721	265	858	14997	680593479	0.35	59522	34096
DMG0	J-8	52094	309	937	15801	821121879	0.37	70281	35009
DMG0	J-9	41232	260	857	18302	67171792	0.34	64873	37001
DMG0	J-10	47181	264	815	15258	9171607070	0.33	65006	35019
DMG0	J-11	96095	379	1305	19881	1993032990	0.32	144303	35612
DMG0	J-12	96136	366	1277	19749	1880810944	0.34	145429	34617
DMG0	J-13	96460	283	915	14599	84241880	0.40	68444	34626
DMG0	J-14	51750	268	888	15065	77617193	0.42	60559	33714
DMG0	J-15	71054	349	1051	18350	1313012904	0.36	117932	33861
DMG0	J-16	81206	253	878	14460	137051514	0.33	18535	32787
DMG0	J-17	90180	388	1164	18020	1743181111	0.35	141223	34614
DMG0	J-18	91022	371	1335	18035	1877834454	0.36	148763	33565
DMG0	J-19	121425	422	1487	19727	230549466	0.30	194468	33566
DMG0	J-20	110449	402	1433	18298	2115475012	0.31	168828	34286
DMG0	J-21	84500	301	1038	16442	1030004105	0.35	83124	35810
DMG0	J-22	61880	293	962	16544	979761514	0.34	78524	34277
DMG0	J-23	48264	266	870	13205	61733302	0.42	53045	31666
DMG0	J-24	37073	256	755	14259	138621508	0.41	44175	32687
DMG0	K-1	56795	290	929	13513	767495560	0.46	69150	31884
DMG0	K-2	51864	276	899	14665	781216746	0.41	65972	31423
DMG0	K-3	59009	294	945	12987	766480170	0.35	63004	30595
DMG0	K-4	51116	301	891	18224	819104468	0.24	70377	29451
DMG0	K-5	76881	338	1093	14297	1088809091	0.42	77475	30912
DMG0	K-6	64433	315	989	14307	521838024	0.38	69471	34861
DMG0	K-7	61400	307	1009	13762	9333068449	0.33	78411	35015
DMG0	K-8	68957	309	1014	15964	1088462562	0.31	79282	36114
DMG0	K-9	68984	307	1017	15461	1013877259	0.37	78284	34123
DMG0	K-10	65033	294	949	16116	978461615	0.33	78463	34104
DMG0	K-11	62738	290	970	14953	1037091840	0.32	77273	35566
DMG0	K-12	62654	291	952	16291	1024817051	0.33	79851	34449
DMG0	K-13	62773	296	965	14924	936749626	0.33	73617	34872
DMG0	K-14	62773	296	965	14924	936749626	0.33	73617	34872
DMG0	K-15	99794	430	1694	20958	2095482266	0.27	174432	32962
DMG0	K-16	63274	316	1499	21939	127575057	0.24	116620	35566
DMG0	K-17	61382	305	963	15159	920601771	0.36	75862	33103
DMG0	K-18	63475	302	982	17317	1118233262	0.32	86204	35986
DMG0	K-19	91851	383	1140	16471	1945319456	0.41	131880	34199
DMG0	K-20	81713	387	1442	15817	1294076069	0.43	114215	35407
DMG0	K-21								
DMG0	K-22	56416	282	912	15416	88973280	0.29	66665	34941
DMG0	K-23	49149	267	814	16139	793194202	0.33	62221	33467
DMG0	K-24	47195	264	849	11290	793310566	0.36	57138	33861
DMG0	L-1	48401	265	833	13311	619431486	0.38	73932	31237
DMG0	L-2	51053	284	803	13862	743887074	0.38	64938	29451
DMG0	L-3	78144	356	1199	9974	881184615	0.58	85769	31136
DMG0	L-4	47867	310	1031	10391	70253262	0.55	73448	31532
DMG0	L-5	131002	442	1902	19020	257542524	0.32	209759	32518
DMG0	L-6	88849	336	1142	13814	1059378091	0.47	99949	34565
DMG0	L-7	69126	313	1055	14511	975846740	0.34	68478	34578
DMG0	L-8	84022	371	1201	13730	1156087075	0.36	99882	32184
DMG0	L-9	61207	302	965	14276	871912143	0.36	74893	32264
DMG0	L-10	63114	318	1000	13352	843550508	0.41	69073	30611
DMG0	L-11	34568	258	871	14484	449093131	0.26	51722	29818
DMG0	L-12	55905	300	1070	14632	118149962	0.36	78315	29796
DMG0	L-13	64668	318	1081	18862	1181945760	0.29	104211	32655
DMG0	L-14	71888	335	1064	17714	1348405518	0.38	105883	32470
DMG0	L-15	52999	280	911	14673	776731214	0.34	64949	32512
DMG0	L-16	54468	291	1047	13870	917146672	0.34	69018	31673
DMG0	L-17	51184	267	875	15276	184117978	0.38	64728	34578
DMG0	L-18	54609	271	890	15971	872931438	0.36	71328	33119
DMG0	L-19	47157	262	870	15002	113861488	0.42	54716	35086
DMG0	L-20	51807	273	885	13517	688612656	0.44	53380	31274
DMG0	L-21	74497	348	1208	13964	820821133	0.46	93279	33550
DMG0	L-22	44175	261	888	13351	108887955	0.43	57993	33596
DMG0	L-23	58499	290	941	15152	887527295	0.35	74704	32610
DMG0	L-24	46836	262	845	14543	817761957	0.41	53523	34884
DMG0	M-1	53652	291	926	11396	606973620	0.45	64223	28611
DMG0	M-2	58882	384	148	15887	67471399	0.36	72158	29527
DMG0	M-3	201024	389	1379	17255	1743151983	0.34	147486	31488
DMG0	M-4	89693	344	1265	17432	1214897174	0.31	113089	32269
DMG0	M-5	91865	371	1288	18399	1717827670	0.35	137385	33815
DMG0	M-6	77814	381	1384	18353	1429223697	0.32	121799	34742
DMG0	M-7								
DMG0	M-8	52185	280	898	16065	844715967	0.28	88933	35595
DMG0	M-9	43654	284	887	14278	911718613	0.37	70586	34679
DMG0	M-10	54416	276	907	16720	91605110	0.34	75476	33995
DMG0	M-11	89096	359	1169	13751	121399440	0.38	93707	32172
DMG0	M-12	56144	279	915	11382	85841796	0.31	67396	31296
DMG0	M-13	64791	305	993	15611	1011417070	0.46	75880	32951
DMG0	M-14	72238	321	1075	11970	1020314448	0.45	77853	32143
DMG0	M-15	201024	389	1371	21490	2272067008	0.28	179065	35735
DMG0	M-16	64930	347	1033	10388	1238449479	0.27	108007	35220
DMG0	M-17	51573	344	891	14907	108824554	0.39	59124	31657
DMG0	M-18	48117	262	868	13525	65079269	0.44	54838	32684
DMG0	M-19	63528	384	807	14626	612212993	0.40	74724	31159
DMG0	M-20	48861	264	866	15616	76289727	0.32	76274	31579
DMG0	M-21								
DMG0	M-22	40956	287	1211	19377	79358184	0.29	66260	33564
DMG0	M-23	51979	303	940	16213	903821244	0.31	70130	32975
DMG0	M-24	44830	254	808	13996	6174010213	0.32	49824	33317
DMG0	N-1	99754	390	1347	13547	1811318615	0.36	142775	22449
DMG0	N-2	57883	282	875	13826	767667608	0.31	70151	31971