

## Supplementary information

### High-throughput screening of FDA-approved drugs identifies colchicine as a potential therapeutic agent for atypical teratoid/rhabdoid tumor (AT/RT)

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**Table S1** List of hit compounds

NO.	FDA COMPOUNDS (10 UM)	FDA ITEM NAME	% INHIBITION OF AT/RT CELL VIABILITY	
			BT-12 CELLS	BT-16 CELLS
1	S1011	Afatinib (BIBW2992)	85.76	93.19
2	S1013	Bortezomib (Velcade)	96.29	94.57
3	S1045	Trichostatin A (TSA)	93.42	94.35
4	S1057	Obatoclox	94.13	92.99
5	S1085	Belinostat	94.15	88.94
6	S1090	Abexinostat	90.57	87.24
7	S1095	Dacinostat	94.13	95.13
8	S1096	Quisinostat	95.37	91.92
9	S1111	Foretinib (GSK1363089)	95.37	94.37
10	S1122	Mocetinostat (MGCD0103)	95.04	91.39
11	S1129	SRT1720 HCl	94.36	95.23
12	S1130	YM155 (Sepantronium Bromide)	95.31	95.31
13	S1134	AT9283	94.13	95.62
14	S1157	Delanzomib (CEP-18770)	94.40	94.24
15	S1172	JNJ-26854165 (Serdemetan)	92.95	95.52
16	S1194	CUDC-101	94.49	90.14
17	S1208	Doxorubicin (Adriamycin)	93.55	88.74
18	S1223	Epirubicin Hydrochloride	93.77	89.23
19	S1228	Idarubicin HCl	93.55	89.35
20	S1231	Topotecan HCl	93.55	92.50
21	S1241	Vincristine	88.43	86.69
22	S1249	JNJ-7706621	95.20	92.08
23	S1288	Camptothecin	96.21	94.28
24	S1392	Pelitinib (EKB-569)	93.17	91.90
25	S1452	Ispinesib (SB-715992)	95.72	94.92
26	S1454	PHA-680632	81.61	89.52
27	S1515	Pracinostat (SB939)	91.28	87.70
28	S1529	Hesperadin	93.60	94.01
29	S1680	Disulfiram (Antabuse)	84.72	89.17
30	S1718	Adefovir Dipivoxil (Preveon, Hepsera)	90.91	85.32
31	S1759	Pitavastatin calcium (Livalo)	93.52	93.59
32	S1786	Verteporfin (Visudyne)	92.65	88.93
33	S1787	Teniposide (Vumon)	89.26	89.63
34	S1792	Simvastatin (Zocor)	86.65	94.06
35	S1909	Fluvastatin sodium (Lescol)	80.61	92.89
36	S1917	Crystal violet	87.88	92.89
37	S2061	Lovastatin (Mevacor)	83.65	93.87
38	S2077	Atorvastatin calcium (Lipitor)	90.05	92.85

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			BT-12 CELLS	BT-16 CELLS
39	S2170	Givinostat	92.35	93.58
40	S2181	Ixazomib Citrate (MLN9708)	95.39	95.12
41	S2198	SGI-1776	94.75	95.08
42	S2235	Volasertib (BI 6727)	89.22	88.38
43	S2243	Degrasyn (WP1130)	93.60	94.12
44	S2284	Colchicine	88.93	91.60
45	S2341	(-)-Parthenolide	94.75	94.87
46	S2485	Mitoxantrone Hydrochloride	94.65	91.15
47	S2528	Ciclopirox (Penlac)	87.21	86.61
48	S2619	MG-132	81.50	93.15
49	S2625	Fostamatinib (R788)	85.59	94.73
50	S2718	TAK-901	94.40	94.54
51	S2749	BGT226 maleate (NVP-BGT226 maleate)	94.29	94.65
52	S2759	Fimepinostat (CUDC-907)	94.52	94.76
53	S2768	Dinaciclub (SCH727965)	94.78	89.42
54	S2775	Nocodazole	80.59	90.91
55	S2779	M344	91.43	90.37
56	S2817	Torin 2	93.26	94.22
57	S2853	Carfilzomib (PR-171)	93.58	92.52
58	S2913	BAY 11-7082	94.63	93.15
59	S3019	Ciclopirox ethanolamine	86.09	87.04
60	S3035	Daunorubicin HCl (Daunomycin HCl)	94.29	89.17
61	S3067	Chlorhexidine 2HCl	95.38	88.16
62	S3606	Fangchinoline	93.49	82.35
63	S3608	Demethylzeylasteral (T-96)	92.50	94.14
64	S3646	Thimerosal	95.12	94.13
65	S4016	Ouabain	94.92	91.76
66	S4075	Pyrrithione zinc	94.28	91.30
67	S4151	Penfluridol	95.89	94.92
68	S4172	Cetylpyridinium Chloride	94.27	95.01
69	S4223	Mevastatin	80.78	94.00
70	S4236	Proflavine Hemisulfate	94.91	93.52
71	S4242	Cetrimonium Bromide	91.56	82.01
72	S4269	Vinorelbine Tartrate	86.73	91.10
73	S4290	Digoxin	93.86	91.21
74	S4302	Alexidine HCl	95.18	94.40
75	S4323	Emetine	95.82	92.90
76	S4355	Thonzonium Bromide	95.53	94.79

NO.	FDA COMPOUNDS (10 UM)	FDA ITEM NAME	% INHIBITION OF AT/RT CELL VIABILITY	
			BT-12 CELLS	BT-16 CELLS
77	S4505	Vinblastine sulfate	87.84	87.91
78	S4610	Mebendazole	85.96	87.69
79	S5002	Fingolimod (FTY720) HCl	94.41	93.68
80	S7046	Brefeldin A	95.90	94.10
81	S7049	Oprozomib (ONX 0912)	94.95	93.61
82	S7083	Ceritinib (LDK378)	93.93	93.27
83	S7130	PR-619	94.18	88.67
84	S7158	abemaciclib mesylate (LY2835219)	80.56	88.74
85	S7172	ONX-0914 (PR-957)	95.14	93.85
86	S7199	DBcQ	95.33	91.32
87	S7204	Fosbretabulin (Combretastatin A4 Phosphate (CA4P)) Disodium	87.61	90.42
88	S7252	selinexor(KPT-330)	89.19	88.46
89	S7285	NMS-873	94.85	93.85
90	S7297	Osimertinib (AZD9291)	93.44	92.86
91	S7417	Puromycin 2HCl	94.66	93.82
92	S7429	MI-2 (MALT1 inhibitor)	93.28	95.30
93	S7551	Piperlongumine	95.04	92.05
94	S7635	Lomitapide	94.29	94.09
95	S7654	Defactinib (VS-6063)	93.48	90.14
96	S7810	Afatinib (BIBW2992) Dimaleate	85.82	90.18
97	S7977	Napabucasin(BBI608)	94.56	92.43
98	S7998	Entrectinib (RXDX-101)	93.74	86.32
99	S8043	Scriptaid	81.21	83.13
100	S8078	Bardoxolone Methyl	93.97	91.63
101	S8144	Halofuginone	93.03	94.68
102	S8146	Mitomycin C	94.09	92.92
103	S8324	ZK756326 2HCl	83.20	89.72