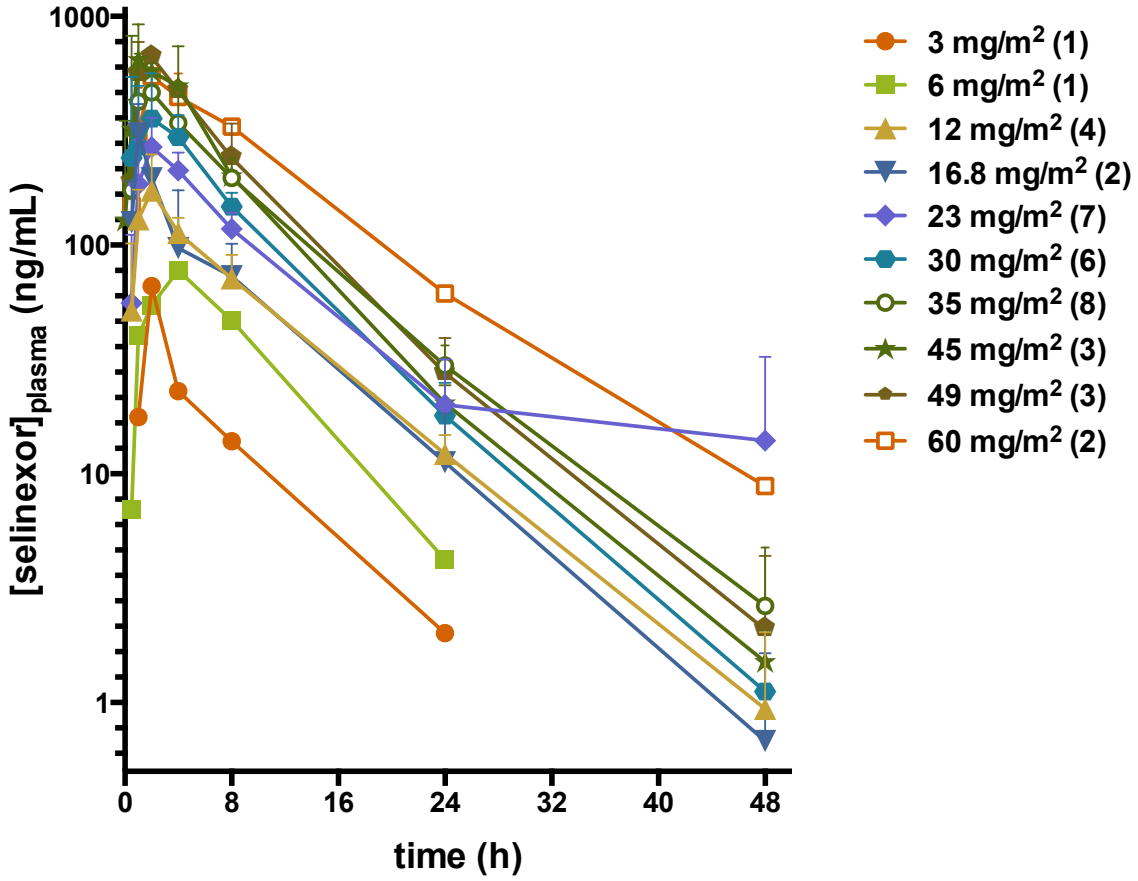
Table S1. Adverse events per NHL subtype.

NHL subtype	CLL (n=7)			DLBCL (n=43)			FL (n=9)			Other (n=20)		
AE	Grade 1/2	Grade 3/4	Total	Grade 1/2	Grade 3/4	Total	Grade 1/2	Grade 3/4	Total	Grade 1/2	Grade 3/4	Total
Constitutional												
Fatigue	4 (57)		4 (57)	22 (51)	5 (12)	27 (63)	4 (44)	1 (11)	5 (56)	9 (45)	3 (15)	12 (60)
Weight loss	1 (14)		1 (14)	8 (19)	2 (5)	10 (23)	5 (56)		5 (56)	4 (20)		4 (20)
Gastrointestinal												
Nausea	3 (43)		3 (43)	31 (72)	1 (2)	32 (74)	8 (89)		8 (89)	9 (45)		9 (45)
Anorexia	2 (29)		2 (29)	27 (63)	1 (2)	28 (65)	4 (44)		4 (44)	11 (55)		11 (55)
Vomiting	1 (14)		1 (14)	18 (42)		18 (42)	4 (44)		4 (44)	6 (30)		6 (30)
Diarrhoea	3 (43)		3 (43)	12 (28)	2 (5)	14 (33)	5 (56)		5 (56)	5 (25)		5 (25)
Dysgeusia				10 (23)		10 (23)	2 (22)		2 (22)	3 (15)		3 (15)
Constipation				4 (9)		4 (9)				3 (15)	1 (5)	4 (20)
Hematologic												
Thrombocytopenia		2 (29)	2 (29)	6 (14)	21 (49)	27 (63)		8 (89)	8 (89)	5 (25)	6 (30)	11 (55)
Anaemia	1 (14)	2 (29)	3 (43)	6 (14)	11 (26)	17 (40)	2 (22)	3 (33)	5 (56)	3 (15)	5 (25)	8 (40)
Neutropenia				4 (9)	12 (28)	16 (37)	1 (11)	7 (78)	8 (89)	2 (10)	6 (30)	8 (40)
Leukopenia				1 (2)	7 (16)	8 (19)		4 (44)	4 (44)	2 (10)	2 (10)	4 (20)
Metabolic												
Hyponatraemia				10 (23)	3 (7)	13 (30)	2 (22)		2 (22)	2 (10)	6 (30)	8 (40)
Other												
Vision blurred	1 (14)		1 (14)	9 (21)	1 (2)	10 (23)	2 (22)		2 (22)	3 (15)	1 (5)	4 (20)
Dizziness				8 (19)		8 (19)	3 (33)		3 (33)	2 (10)		2 (10)
Muscular weakness	1 (14)		1 (14)	3 (7)		3 (7)	2 (22)		2 (22)	2 (10)	1 (5)	3 (15)

Table S2. Treatment-Related Serious Adverse Events (SAEs)

Disease type	Starting Dose (mg/m^2)	SAE Term	Grade	Onset Date	End Date
CTCL	30	Hyponatremia	3	18-Apr-14	23-Apr-13
CTCL	30	Cataracts	4	3-Mar-15	30-Apr-15
Richter's	35	Encephalitis	3	18-Nov-13	19-Nov-13
DLBCL	35	Serum amylase increased	3	20-Jan-14	23-Jan-14
DLBCL	35	Dehydration	3	2-Feb-14	13-Feb-14
DLBCL	35	Dehydration	3	10-Mar-14	24-Mar-14
DLBCL	35	Febrile neutropenia	3	18-Aug-14	22-Aug-14
DLBCL	35	Anemia	4	3-Dec-14	4-Dec-14
Richter's	60	Hyponatremia	3	22-Apr-14	26-Apr-14
DLBCL	70	Confusion	3	9-Jun-14	3-Jul-14
FL	70	Ejection fraction decreased	3	16-Aug-14	23-Aug-14

Figure S1. Selinexor pharmacokinetics.

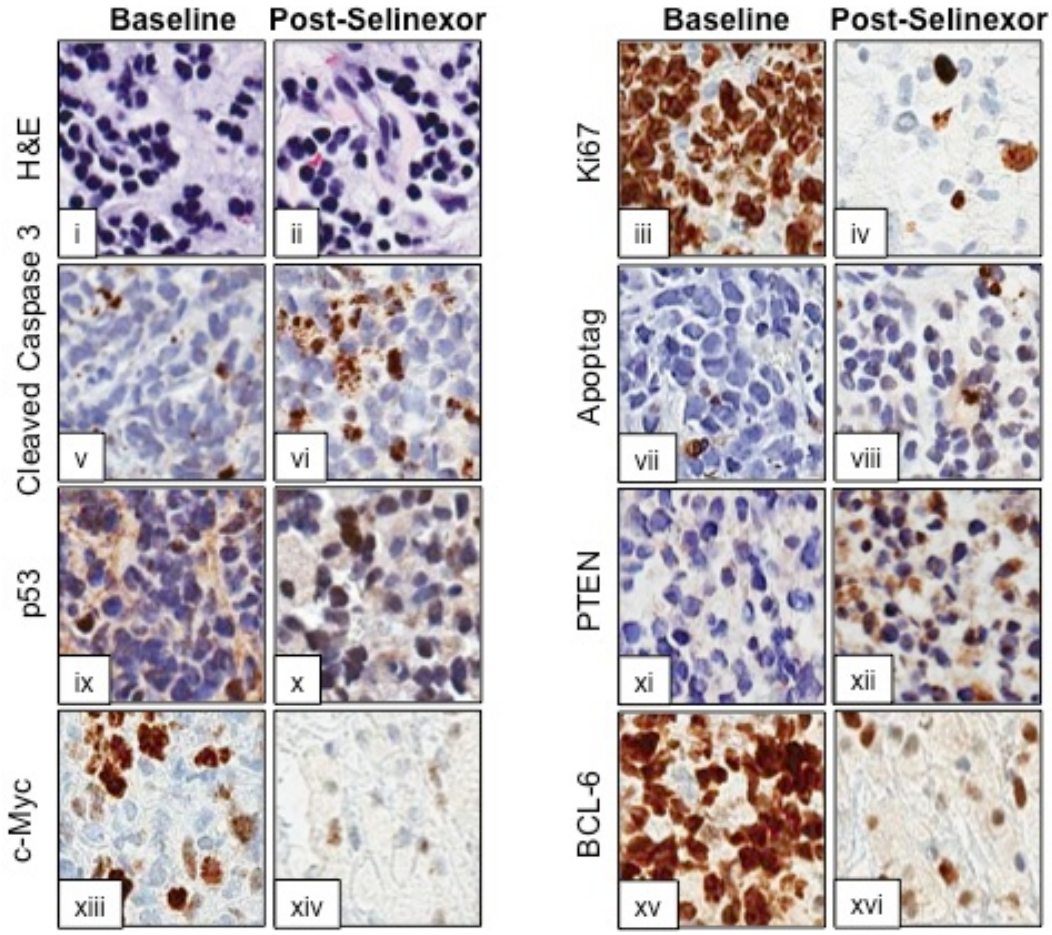


Selinexor plasma concentration over a 48 hr time course after the first dose of selinexor, depicted as a function of selinexor dose. Average and std error are shown for each time point and dose, based upon the number of patients listed in the graph legend.

Table S3. Selinexor pharmacokinetics

Selinexor dose (mg/m²)		3	6	12	16.8	23	30	35	45	49	60	Dose proportionality (r^2)
Dose 1	No. of patients	1	1	3	2	6	6	8	3	3	2	
	C_{max} (ng/mL)	66	78	193 ± 80	245 ± 68	291 ± 78	467 ± 147	517 ± 193	791 ± 87	701 ± 56	547 ± 171	0.69
	T_{max} (hr)	2.0	4.0	2.7 ± 1.2	1.0 ± 1.7	1.7 ± 0.5	2.6 ± 1.5	1.8 ± 1.2	1.8 ± 1.5	1.7 ± 0.6	2.0 ± 0.6	0.03
	$AUC_{0\text{-}8\,hr}$ (hr*ng/mL)	209	442	924 ± 135	1154 ± 197	1468 ± 278	1892 ± 490	2521 ± 837	3039 ± 608	3406 ± 436	3119 ± 721	0.76
	$AUC_{0\text{-}48\,hr}$ (hr*ng/mL)	337	851	1781 ± 105	2078 ± 201	3043 ± 599	3129 ± 670	4691 ± 1215	5810 ± 897	5844 ± 1475	7568 ± 304	0.78
	$t_{½}$ (hr)	5.7	4.7	7.0 ± 0.5	5.8 ± 1.2	8.7 ± 3.2	5.3 ± 2.2	6.5 ± 1.4	5.5 ± 0.4	5.5 ± 1.3	7.8 ± 1.8	<0.0001
	V_d (L/kg)	1954	1279	1824 ± 209	1818 ± 107	2783 ± 996	2041 ± 589	2013 ± 626	1722 ± 358	1848 ± 388	2409 ± 707	0.006
Dose 5, 7 or 8	No. of patients	1	1	3	1	3	5	5	1	2	1	
	Dose number	8	7	7	7	5	7	5	5	5	5	
	C_{max} (ng/mL)	72	158	169 ± 72	185	386 ± 192	393 ± 142	511 ± 105	746	537 ± 1	577	0.62
	T_{max} (hr)	2	1	4.7 ± 3.1	4	1.3 ± 0.6	2.8 ± 1.1	3.2 ± 1.1	1.0	2.5 ± 2.1	2	0.01
	$AUC_{0\text{-}8\,hr}$ (hr*ng/mL)	250	550	809 ± 340	1253	1488 ± 451	1876 ± 543	2210 ± 483	2948	3059 ± 417	3429	0.80

A.


Baseline
Post-Selinexor
H&E
i
ii
Cleaved Caspase 3
v
vi
p53
ix
x
c-Myc
xiii
xiv
Baseline
Post-Selinexor
Ki67
iii
iv
Apoptag
vii
viii
PTEN
xi
xii
BCL-6
xv
xvi

B.

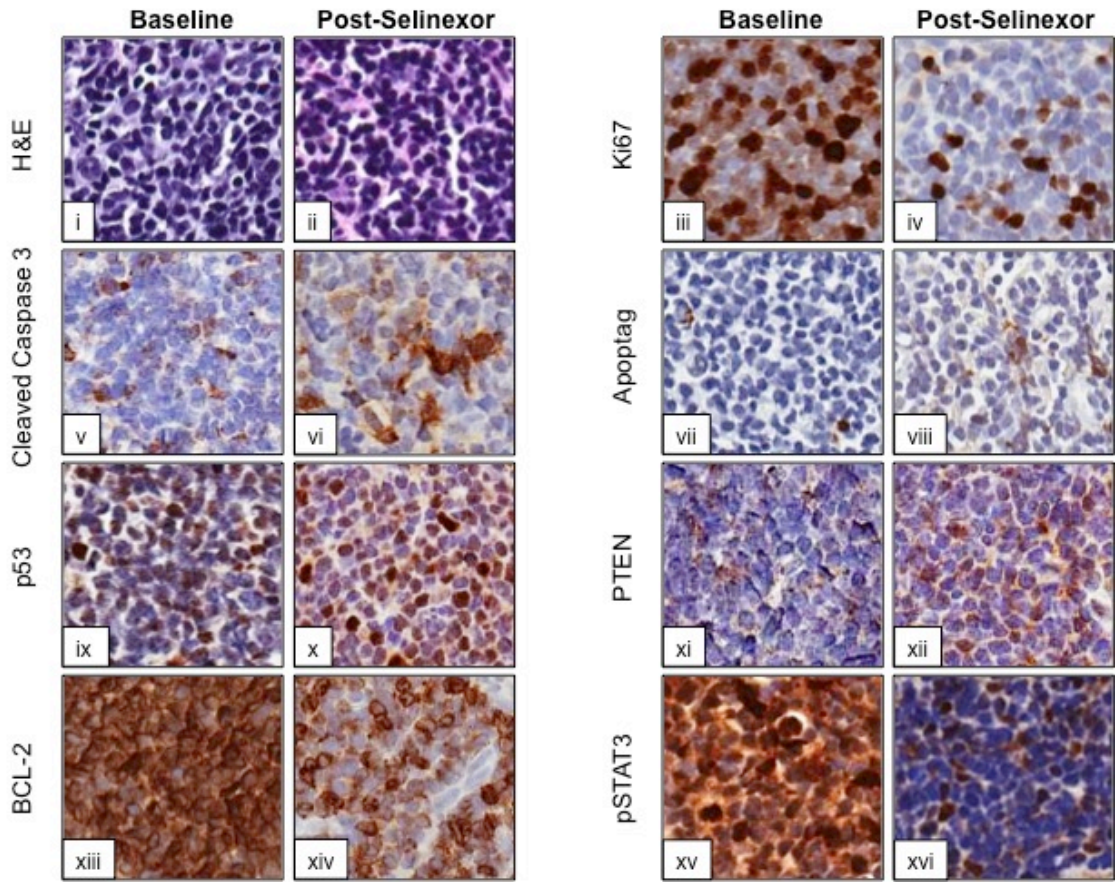
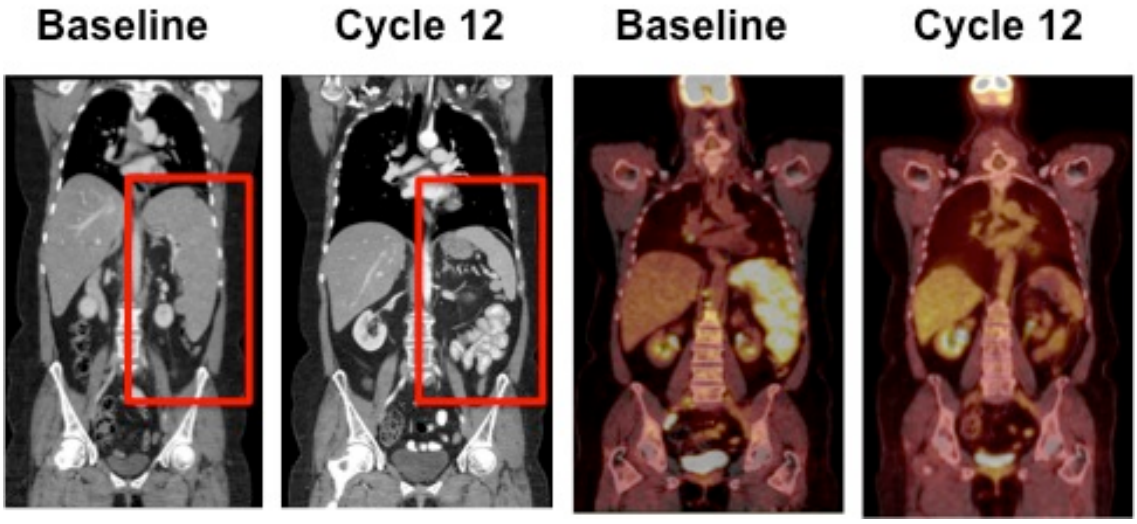


Figure S2. Immunohistochemistry for markers of proliferation, apoptosis and XPO1 cargos

Liver tumor biopsy from a patient with DLBCL obtained 8 days prior (baseline) and 5 weeks after selinexor treatment. The patient was treated with 60 mg/m^2 and showed a best response of PR with an overall 52% reduction in target lesion size from baseline. Comparative IHC analysis was performed on tumor sections for H&E (i&ii), markers of proliferation (Ki67-iii&iv), apoptosis (cleaved caspase 3-v&vi; Apoptag-vii&viii), XPO1 cargo proteins (p53-ix&x; PTEN (xi&xii) and key growth and survival factors (c-Myc-xiii&xiv, Bcl-6-xv&xvi). B. Lymph node tumor biopsy from a patient with FL obtained 3 days prior (baseline) and 5 weeks after selinexor treatment. The patient was treated

with 49 mg/m^2 and showed a best response of PR with a 79% reduction in target lesion size from baseline. Comparative IHC analysis was performed on tumor sections for H&E (i,ii) markers of proliferation (Ki67-iii,iv), apoptosis (cleaved caspase 3-v,vi), XPO1 cargo proteins (p53-ix,x; PTEN-xi, xii) and key factors involved in growth and survival (Bcl-2-xiii,xiv; STAT3 P-S727-xv,xvi).

Figure S3. Scans of a patient with relapsed DLBCL treated with selinexor.



A 51-year old, female with Stage IV relapsed DLBCL treated with 4 prior therapeutic regimens (R-CHOP, etoposide/cyclophosphamide, SCT and panobinostat, respectively) was administered 35 mg/m^2 selinexor twice weekly. She showed a 74% reduction in tumor volume by MRI within 2 cycles and was declared a CR and PET-CT negative after 12 cycles of selinexor. As of the close of study, the patient was alive and disease free, having received selinexor for over 35 months.