

Supplementary Table 1

PMID	Publication_Year	Cancer type
34654724	2022	Ovarian cancer
32415208	2020	TNBC
35135840	2022	TNBC
34344433	2021	Breast cancer
35124274	2022	Breast cancer
35205706	2022	Adenocarcinoma and endometrioid type
32784045	2021	TNBC
34118960	2021	TNBC
25365225	2014	TNBC
33950403	2021	TNBC
35033381	2022	HGSOC
30845999	2019	TNBC
35977930	2022	HGSOC and LGSOC
27756881	2016	TNBC
29096610	2017	TNBC
34567703	2020	HGSOC and MMT
37776423	2023	Breast cancer
32601394	2020	Breast cancer and others
35892260	2022	Ovarian cancer
34651665	2021	Breast cancer
35501869	2022	HGSOC
36266675	2022	HGSOC
29854878	2018	TNBC
33899955	2021	Ovarian cancer
29348860	2017	Ovarian cancer
32253045	2020	HGSOC
32457491	2020	TNBC
29996940	2018	HGSOC
33762435	2021	TNBC
35053353	2022	Ovarian cancer
25653139	2015	Ovarian cancer
31105009	2020	HGSOC
31503345	2019	HGSOC
26968831	2016	TNBC
25527363	2015	Benign
33011162	2020	TNBC
30992305	2019	Breast cancer
34887943	2021	Ovarian cancer
35191515	2022	HGSOC
26259239	2015	Breast cancer
33213473	2020	HGSOC
28878359	2017	Fallopian tube
29891506	2018	HGSOC
31972357	2020	Breast cancer
29550289	2018	Ovarian cancer
25202979	2014	Ovarian cancer
33385163	2020	TNBC
26643275	2015	Benign
27612856	2016	Ovarian cancer
31756327	2020	Breast cancer
39592661	2024	Ovarian cancer
39276521	2024	TNBC
39374382	2024	TNBC
39417215	2024	Breast cancer
39285292	2024	Ovarian cancer
38878646	2024	Breast cancer
38970078	2024	TNBC
38861602	2024	TNBC and lung cancer
38287874	2024	Ovarian cancer

38532439	2024	Breast cancer
38399440	2024	TNBC

Supplementary Table 2

Sample Cancer Type: S129

Relevant Biomarkers

Genomic Alteration	Relevant Therapies (In this cancer type)	Relevant Therapies (In other cancer type)	Clinical Trials
Loss of Heterozygosity	bevacizumab + olaparib ^{1, 2} bevacizumab niraparib	None	2
NF1 deletion	None	None	11
TP53 p.(A159V) c.476C>T Allele Frequency: 98.64%	None	None	10
CDKN2A deletion	None	None	4
MTAP deletion	None	None	3
CDKN2B deletion	None	None	2

Public data sources included in relevant therapies: EMA¹, FDA², ESMO, NCCN

Prevalent cancer biomarkers without relevant evidence based on included data sources

PPP2R2A LOH, PTEN LOH, BRCA2 LOH, RAD51D LOH, CDK12 LOH, CHEK2 LOH

Tumor Mutational Burden (TMB)

4.8 Mutations / Megabase

Loss of Heterozygosity (LOH)

84 %

Genomic Instability Metric (GIM-Score)

19 - High

DNA Sequence Variants

Gene	Locus	Transcript	Variant ID	Coding	Amino Acid Change	Allele Frequency
TP53	chr17:7578454	NM_000546.6	COSM11148	c.476C>T	p.(A159V)	98.64%

Copy Number Variations

Gene	Locus	Copy Number
PPP2R2A	chr8:26149298	1
MTAP	chr9:21802646	0
CDKN2A	chr9:21968178	0
CDKN2B	chr9:22005728	0
PTEN	chr10:89623659	1
BRCA2	chr13:32890491	1
NFI	chr17:29422233	0
RAD51D	chr17:33427950	1
CDK12	chr17:37618286	1
CHEK2	chr22:29083868	1

DNA Sequence Variants

Gene	Locus	Transcript	Coding	Amino Acid Change	Allele Frequency	Variant Effect	Variant ID	ClinVar ¹
NFE2L2	chr2:178096165	NM_006164.5	c.1166A>G	p.(K389R)	57.98%	missense	.	
ADAMTS2	chr5:178540900	NM_014244.5	c.3604A>T	p.(M1202L)	67.33%	missense	.	
HLA-B	chr6:31325001	NM_005514.8	c.-66C>T	p.(?)	99.70%	unknown	.	
MYOM2	chr8:2092784	NM_003970.4	c.4277G>C	p.(G1426A)	56.06%	missense	.	
FGFR1	chr8:38285926	NM_001174067.1	c.485A>C	p.(D162A)	58.44%	missense	.	Uncertain significance
NUDT8	chr11:67395719	NM_001243750.2	c.409G>A	p.(D137N)	36.17%	missense	.	
MGA	chr15:41988472	NM_001164273.1	c.1264A>G	p.(I422V)	57.80%	missense	.	
CTCF	chr16:67655390	NM_006565.4	c.1253A>G	p.(Q418R)	62.89%	missense	.	
OR4D1	chr17:56232612	NM_012374.1	c.98T>C	p.(L33S)	99.20%	missense	.	
MAP2K7	chr19:7976417	NM_145185.4	c.1033G>A	p.(G345R)	51.05%	missense	.	
EBP	chrX:48382235	NM_006579.3	c.76C>T	p.(R26C)	57.47%	missense	.	
ATRX	chrX:76938546	NM_000489.6	c.2202G>T	p.(M734I)	56.58%	missense	.	

¹ Based on Clinvar version 20201121

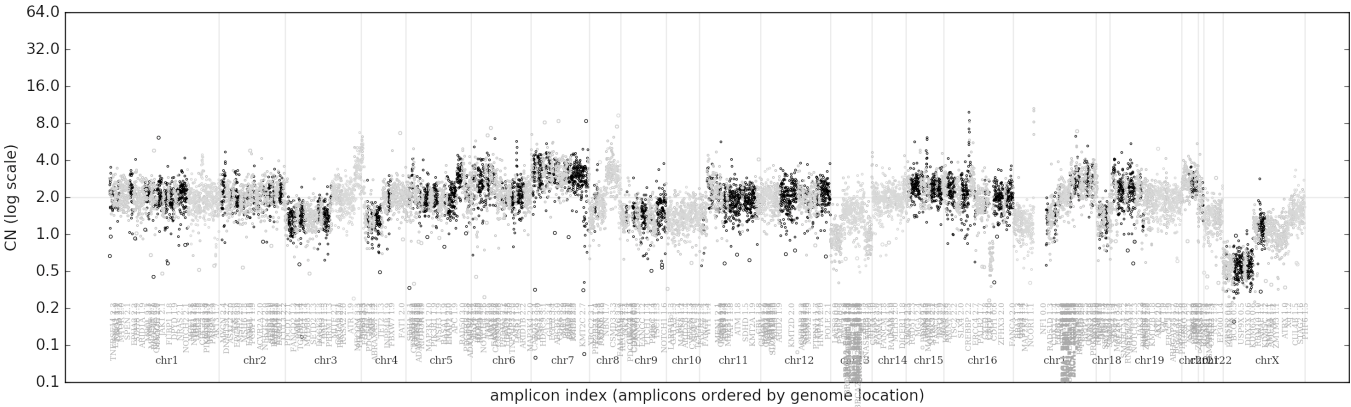
Copy Number Variations

Gene	Locus	Copy Number
FGFR3	chr4:1801456	5.51
LATS2	chr13:21548922	0.59
FGF9	chr13:22245989	0.58
PARP4	chr13:25000551	0.57
FLT3	chr13:28578185	0.64
KLF5	chr13:73633435	0.63
TPP2	chr13:103249399	0.63
CUL4A	chr13:113863977	0.64
CDH1	chr16:68771249	0.22
NCOR1	chr17:15935586	0.86
ZRSR2	chrX:15808582	0.12
EIF1AX	chrX:20148599	0.12
BCOR	chrX:39911340	0.07
USP9X	chrX:40982869	0.09
DDX3X	chrX:41193501	0.11
KDM6A	chrX:44732715	0.12
RBM10	chrX:47006798	0.71

Copy Number Variations (continued)

Gene	Locus	Copy Number
ARAF	chrX:47422311	0.75
KDM5C	chrX:53221892	0.89
AMER1	chrX:63409727	0.75
ZMYM3	chrX:70460753	0.78
ATRX	chrX:76763769	0.62

Copy number profile



Supplementary Table 3

PID	Issue	Histotype	Tumor Type	Primary/Relapse	Rhesus	Blood Group	CA125 at time of diagnosis	RFS months	RFS days	OS months	OS days	Status	Relapse status	BR	MSS/MSI	ER%	PR%	p53	HER2	Grade	Age Group	First line Chemotherapy
101	ascites	serous	Ovarian	Primary	negative	G	1249	17	505	22	677	Dead	No	30.6	MSS	0.8	negative	overexpression	positive	3	61-70	Carboplatin & Paclitaxel
102	ascites	serous	Ovarian	Relapse	positive	A	66.9	67	2048	81	2487	Dead	Yes	22.2	not applicable	0.8	negative	VUS	not applicable	2	81-90	Carboplatin & Paclitaxel
103	adnex	serous	Fallopian Tube	Primary	positive	AB	1957	27	833	32	978	Alive	No	30.5	MSS	0.4	negative	overexpression	negative	3	51-60	Carboplatin & Paclitaxel
103	epidid	serous	Fallopian Tube	Primary	positive	AB	1957	27	833	32	978	Alive	No	30.5	MSS	0.4	negative	overexpression	negative	3	51-60	Carboplatin & Paclitaxel
104	ascites	serous	Ovarian	Primary	negative	G	73	23	727	34	1042	Alive	Yes	38.7	MSS	0.9	negative	wildtype	heterogen positive	3	41-50	Carboplatin & Paclitaxel
104	omentum	serous	Ovarian	Primary	negative	G	73	23	727	34	1042	Alive	Yes	38.7	MSS	0.9	negative	wildtype	heterogen positive	3	41-50	Carboplatin & Paclitaxel
105	omentum	serous	Ovarian	Primary	positive	G	246	30	915	34	1037	Alive	No	21.9	MSS	0.8	negative	VUS	not applicable	3	71-80	Carboplatin & Paclitaxel
105	rectum	serous	Ovarian	Primary	positive	G	246	30	915	34	1037	Alive	No	21.9	MSS	0.8	negative	VUS	not applicable	3	71-80	Carboplatin & Paclitaxel
106	ascites	MMMT	Fallopian Tube	Primary	negative	B	164	13	421	36	1121	Dead	Yes	26	MSS	0	negative	negative	positive	3	71-80	Carboplatin & Epirubicin
107	omentum	serous	Fallopian Tube	Primary	negative	G	12247	17	544	32	390	Alive	Yes	26.1	not applicable	0.4	negative	not applicable	not applicable	3	61-70	Carboplatin & Paclitaxel
108	ovary	MMMT	Fallopian Tube	Primary	negative	G	119	1	57	14	452	Dead	Yes	20.5	MSS	0	negative	overexpression	positive	3	61-70	Carboplatin & Epirubicin
109	p-effusion	serous	Ovarian	Relapse	positive	B	324	4	124	27	842	Dead	Yes	22.1	not applicable	1	negative	overexpression	positive	3	51-60	Carboplatin & Paclitaxel
110	ascites	serous	Fallopian Tube	Primary	positive	A	547	26	784	29	309	Alive	No	26.3	MSS	0.5	negative	overexpression	positive	3	81-90	Carboplatin & Paclitaxel
111	vagina	serous	Ovarian	Relapse	positive	A	516	26	777	133	10210	Alive	No	38.7	MSS	0.9	0.65	wildtype	positive	1	71-80	Carboplatin & Paclitaxel
112	ascites	serous	Fallopian Tube	Primary	positive	G	1148	19	311	31	962	Alive	Yes	24.9	MSS	0.6	negative	overexpression	not applicable	3	61-70	Carboplatin & Paclitaxel
112	omentum	serous	Fallopian Tube	Primary	positive	G	1148	19	311	31	962	Alive	Yes	24.9	MSS	0.6	negative	overexpression	not applicable	3	61-70	Carboplatin & Paclitaxel
113	ascites	serous	Fallopian Tube	Primary	positive	AB	585	19	314	18	560	Dead	Yes	23.2	not applicable	0.1	0.65	overexpression	positive	3	71-80	Carboplatin & Paclitaxel
114	ascites	serous	Fallopian Tube	Relapse	positive	A	833	11	360	35	1072	Dead	Yes	30.1	MSS	0.7	0.1	overexpression	not applicable	3	71-80	Carboplatin & Paclitaxel
115	ascites	serous	Ovarian	Primary	negative	A	809	13	396	20	657	Dead	Yes	27.7	not applicable	0.99	negative	not applicable	not applicable	3	81-100	Carboplatin
116	ascites	MMMT	Ovarian	Primary	positive	A	NA	6	189	13	424	Dead	Yes	26.6	MSS	0.3	0.1	overexpression	positive	3	71-80	Carboplatin & Liposomal Doxorubicin
118	p-ascit	serous	Fallopian Tube	Primary	positive	A	459	26	858	43	1315	Alive	No	16.3	MSS	0.3	0.1	overexpression	positive	3	61-70	Carboplatin & Paclitaxel

Supplementary Table 4

Function Title	Hallmark Gene Set	Within the 95% confidence intervals of model predictions
Cell Proliferation & Growth	HALLMARK_MYC_TARGETS_V1	
	HALLMARK_MYC_TARGETS_V2	
	HALLMARK_E2F_TARGETS	
	HALLMARK_G2M_CHECKPOINT	HALLMARK_G2M_CHECKPOINT
	HALLMARK_MTORC1_SIGNALING	HALLMARK_MTORC1_SIGNALING
Tumor Suppression & Stress	HALLMARK_P53_PATHWAY	
	HALLMARK_TGF_BETA_SIGNALING	HALLMARK_TGF_BETA_SIGNALING
	HALLMARK_APOPTOSIS	HALLMARK_APOPTOSIS
	HALLMARK_DNA_REPAIR	HALLMARK_DNA_REPAIR
	HALLMARK_UNFOLDED_PROTEIN_RESPONSE	
Invasion, Metastasis & Microenvironment	HALLMARK_EPITHELIAL_MESENCHYMAL_TRANSITION (EMT)	
	HALLMARK_HYPOXIA	HALLMARK_HYPOXIA
	HALLMARK_ANGIOGENESIS	
	HALLMARK_INFLAMMATORY_RESPONSE	
	HALLMARK_IL6_JAK_STAT3_SIGNALING	
	HALLMARK_TNFA_SIGNALING_VIA_NFKB	HALLMARK_TNFA_SIGNALING_VIA_NFKB
	HALLMARK_WNT_BETA_CATENIN_SIGNALING	HALLMARK_WNT_BETA_CATENIN_SIGNALING
Immune Evasion & Immune Modulation	HALLMARK_INTERFERON_ALPHA_RESPONSE	HALLMARK_INTERFERON_ALPHA_RESPONSE
	HALLMARK_INTERFERON_GAMMA_RESPONSE	
	HALLMARK_COMPLEMENT	
	HALLMARK_ALLOGRAFT_REJECTION	
	HALLMARK_IL2_STAT5_SIGNALING	HALLMARK_IL2_STAT5_SIGNALING
Metabolic Reprogramming	HALLMARK_GLYCOLYSIS	HALLMARK_GLYCOLYSIS
	HALLMARK_OXIDATIVE_PHOSPHORYLATION	HALLMARK_OXIDATIVE_PHOSPHORYLATION
	HALLMARK_FATTY_ACID_METABOLISM	HALLMARK_FATTY_ACID_METABOLISM
	HALLMARK_ADIPOGENESIS	HALLMARK_ADIPOGENESIS
	HALLMARK_CHOLESTEROL_HOMEOSTASIS	
Cell Communication & Developmental Signaling	HALLMARK_REACTIVE_OXYGEN_SPECIES_PATHWAY	
	HALLMARK_NOTCH_SIGNALING	HALLMARK_NOTCH_SIGNALING
	HALLMARK_HEDGEHOG_SIGNALING	HALLMARK_HEDGEHOG_SIGNALING
	HALLMARK_KRAS_SIGNALING_UP	
	HALLMARK_KRAS_SIGNALING_DN	HALLMARK_KRAS_SIGNALING_DN

Supplementary Table 5

Condition	Cell types	PID	Number	Frequency
Ex vivo Control	B_cells	116_AS	12	1.892744479
Ex vivo Control	B_cells	112_AS	49	3.185955787
Ex vivo Control	Tumor_cells	116_AS	265	41.79810726
Ex vivo Control	Tumor_cells	112_AS	872	56.6970091
Ex vivo Control	Tumor_cells	102_AS	88	65.67164179
Ex vivo Control	Macrophages	116_AS	12	1.892744479
Ex vivo Control	Macrophages	112_AS	154	10.0130039
Ex vivo Control	Macrophages	102_AS	30	22.3880597
Ex vivo Control	Mesothelial_cells	102_AS	4	2.985074627
Ex vivo Control	Monocytes	116_AS	1	0.157728707
Ex vivo Control	Monocytes	112_AS	275	17.88036411
Ex vivo Control	Monocytes	102_AS	6	4.47761194
Ex vivo Control	NK_cells	116_AS	20	3.154574132
Ex vivo Control	NK_cells	112_AS	13	0.845253576
Ex vivo Control	T_cells	116_AS	324	51.10410095
Ex vivo Control	T_cells	112_AS	175	11.37841352
Ex vivo Control	T_cells	102_AS	6	4.47761194
Original	B_cells	116_AS	49	2.238465053
Original	B_cells	112_AS	82	3.410981697
Original	Tumor_cells	116_AS	1133	51.75879397
Original	Tumor_cells	112_AS	1434	59.65058236
Original	Tumor_cells	102_AS	456	89.23679061
Original	Macrophages	116_AS	7	0.319780722
Original	Macrophages	112_AS	150	6.239600666
Original	Macrophages	102_AS	16	3.13111546
Original	Mesothelial_cells	112_AS	22	0.915141431
Original	Mesothelial_cells	102_AS	19	3.718199609
Original	Monocytes	116_AS	45	2.055733212
Original	Monocytes	112_AS	295	12.27121464
Original	Monocytes	102_AS	16	3.13111546
Original	NK_cells	116_AS	127	5.801735952
Original	NK_cells	112_AS	63	2.62063228
Original	T_cells	116_AS	828	37.82549109
Original	T_cells	112_AS	358	14.89184692
Original	T_cells	102_AS	4	0.782778865

Supplementary Table 6

PID	compound	tissue	threshold	Histotype	Tumor_TYPE	Primary_Relapse	Rhesus	Blood_Group	Status
116 AS	Olaparib	ascites	Low response	MMMT	Ovarian	Primary	positive	A	Dead
116 AS	Carboplatinpaclitaxel	ascites	Low response	MMMT	Ovarian	Primary	positive	A	Dead
116 AS	Carboplatin	ascites	Low response	MMMT	Ovarian	Primary	positive	A	Dead
116 AS	Paclitaxel	ascites	Low response	MMMT	Ovarian	Primary	positive	A	Dead
114 AS	Olaparib	ascites	Low response	serous	Fallopian Tube	Relapse	positive	A	Dead
114 AS	Paclitaxel	ascites	Low response	serous	Fallopian Tube	Relapse	positive	A	Dead
114 AS	Carboplatinpaclitaxel	ascites	Low response	serous	Fallopian Tube	Relapse	positive	A	Dead
114 AS	Carboplatin	ascites	Low response	serous	Fallopian Tube	Relapse	positive	A	Dead
113 AS	Carboplatin	ascites	Intermediate response	serous	Fallopian Tube	Primary	positive	AB	Dead
113 AS	Carboplatinpaclitaxel	ascites	Intermediate response	serous	Fallopian Tube	Primary	positive	AB	Dead
113 AS	Olaparib	ascites	Intermediate response	serous	Fallopian Tube	Primary	positive	AB	Dead
113 AS	Paclitaxel	ascites	Low response	serous	Fallopian Tube	Primary	positive	AB	Dead
106 AS	Olaparib	ascites	Intermediate response	MMMT	Fallopian Tube	Primary	negative	B	Dead
106 AS	Paclitaxel	ascites	Intermediate response	MMMT	Fallopian Tube	Primary	negative	B	Dead
106 AS	Carboplatinpaclitaxel	ascites	Low response	MMMT	Fallopian Tube	Primary	negative	B	Dead
106 AS	Carboplatin	ascites	Low response	MMMT	Fallopian Tube	Primary	negative	B	Dead
115 AS	Carboplatinpaclitaxel	ascites	High response	serous	Ovarian	Primary	negative	A	Dead
115 AS	Olaparib	ascites	Intermediate response	serous	Ovarian	Primary	negative	A	Dead
115 AS	Carboplatin	ascites	Intermediate response	serous	Ovarian	Primary	negative	A	Dead
115 AS	Paclitaxel	ascites	Intermediate response	serous	Ovarian	Primary	negative	A	Dead
109 PE	Paclitaxel	pleural effusion	Low response	serous	Ovarian	Relapse	positive	B	Dead
109 PE	Carboplatin	pleural effusion	Low response	serous	Ovarian	Relapse	positive	B	Dead
109 PE	Carboplatinpaclitaxel	pleural effusion	Low response	serous	Ovarian	Relapse	positive	B	Dead
109 PE	Olaparib	pleural effusion	Low response	serous	Ovarian	Relapse	positive	B	Dead
118 AS	Carboplatin	peritoneal wash	Intermediate response	serous	Fallopian Tube	Primary	positive	A	Alive
118 AS	Carboplatinpaclitaxel	peritoneal wash	Low response	serous	Fallopian Tube	Primary	positive	A	Alive
118 AS	Olaparib	peritoneal wash	Low response	serous	Fallopian Tube	Primary	positive	A	Alive
118 AS	Paclitaxel	peritoneal wash	Low response	serous	Fallopian Tube	Primary	positive	A	Alive
101 AS	Carboplatin	ascites	High response	serous	Ovarian	Primary	negative	0	Dead
101 AS	Olaparib	ascites	High response	serous	Ovarian	Primary	negative	0	Dead
101 AS	Paclitaxel	ascites	High response	serous	Ovarian	Primary	negative	0	Dead
103 AD	Carboplatin	adnexa	High response	serous	Fallopian Tube	Primary	positive	AB	Alive
103 EP	Carboplatin	epiploic appendages	Intermediate response	serous	Fallopian Tube	Primary	positive	AB	Alive
103 AD	Paclitaxel	adnexa	Low response	serous	Fallopian Tube	Primary	positive	AB	Alive
103 EP	Paclitaxel	epiploic appendages	Low response	serous	Fallopian Tube	Primary	positive	AB	Alive
104 AS	Carboplatin	ascites	High response	serous	Ovarian	Primary	negative	0	Alive
104 AS	Olaparib	ascites	High response	serous	Ovarian	Primary	negative	0	Alive
104 OM	Paclitaxel	omentum	High response	serous	Ovarian	Primary	negative	0	Alive
104 OM	Carboplatinpaclitaxel	omentum	Intermediate response	serous	Ovarian	Primary	negative	0	Alive
104 AS	Paclitaxel	ascites	Low response	serous	Ovarian	Primary	negative	0	Alive
104 OM	Carboplatin	omentum	Low response	serous	Ovarian	Primary	negative	0	Alive
104 OM	Olaparib	omentum	NA	serous	Ovarian	Primary	negative	0	Alive
105 RE	Paclitaxel	rectum	High response	serous	Ovarian	Primary	positive	0	Alive
105 OM	Paclitaxel	omentum	Intermediate response	serous	Ovarian	Primary	positive	0	Alive
105 OM	Olaparib	omentum	Intermediate response	serous	Ovarian	Primary	positive	0	Alive
105 OM	Carboplatin	omentum	Intermediate response	serous	Ovarian	Primary	positive	0	Alive
105 RE	Olaparib	rectum	Low response	serous	Ovarian	Primary	positive	0	Alive
105 RE	Carboplatin	rectum	Low response	serous	Ovarian	Primary	positive	0	Alive
107 OM	Paclitaxel	omentum	Intermediate response	serous	Fallopian Tube	Primary	negative	0	Alive
107 OM	Olaparib	omentum	Intermediate response	serous	Fallopian Tube	Primary	negative	0	Alive
107 OM	Carboplatin	omentum	Intermediate response	serous	Fallopian Tube	Primary	negative	0	Alive
107 OM	Carboplatinpaclitaxel	omentum	Low response	serous	Fallopian Tube	Primary	negative	0	Alive
108 OV	Carboplatinpaclitaxel	ovary	Intermediate response	MMMT	Fallopian Tube	Primary	negative	0	Dead
108 OV	Paclitaxel	ovary	Low response	MMMT	Fallopian Tube	Primary	negative	0	Dead
108 OV	Carboplatin	ovary	Low response	MMMT	Fallopian Tube	Primary	negative	0	Dead
108 OV	Olaparib	ovary	Low response	MMMT	Fallopian Tube	Primary	negative	0	Dead
112 AS	Carboplatin	ascites	Low response	serous	Fallopian Tube	Primary	positive	0	Alive
112 OM	Carboplatin	omentum	Low response	serous	Fallopian Tube	Primary	positive	0	Alive
112 AS	Carboplatinpaclitaxel	omentum	Low response	serous	Fallopian Tube	Primary	positive	0	Alive
112 AS	Olaparib	ascites	Low response	serous	Fallopian Tube	Primary	positive	0	Alive
112 OM	Paclitaxel	omentum	Low response	serous	Fallopian Tube	Primary	positive	0	Alive
112 OM	Olaparib	omentum	Low response	serous	Fallopian Tube	Primary	positive	0	Alive
112 AS	Carboplatinpaclitaxel	ascites	Low response	serous	Fallopian Tube	Primary	positive	0	Alive
112 AS	Paclitaxel	ascites	Low response	serous	Fallopian Tube	Primary	positive	0	Alive
110 AS	Carboplatinpaclitaxel	ascites	Intermediate response	serous	Fallopian Tube	Primary	positive	A	Alive
110 AS	Carboplatin	ascites	Intermediate response	serous	Fallopian Tube	Primary	positive	A	Alive
110 AS	Olaparib	ascites	Intermediate response	serous	Fallopian Tube	Primary	positive	A	Alive
110 AS	Paclitaxel	ascites	Low response	serous	Fallopian Tube	Primary	positive	A	Alive
110 AS	Olaparib	vagina	Low response	serous	Ovarian	Relapse	positive	A	Alive
111 VA	Paclitaxel	vagina	Low response	serous	Ovarian	Relapse	positive	A	Alive
111 VA	Carboplatinpaclitaxel	vagina	Low response	serous	Ovarian	Relapse	positive	A	Alive
111 VA	Carboplatin	vagina	Low response	serous	Ovarian	Relapse	positive	A	Alive
102 AS	Olaparib	ascites	Intermediate response	serous	Ovarian	Relapse	positive	A	Dead
102 AS	Carboplatin	ascites	Low response	serous	Ovarian	Relapse	positive	A	Dead
102 AS	Paclitaxel	ascites	Low response	serous	Ovarian	Relapse	positive	A	Dead
102 AS	Carboplatinpaclitaxel	ascites	Low response	serous	Ovarian	Relapse	positive	A	Dead

Relapse_status	MSS MSI	p53	p16	Grade	CA125_Category	events_per_image_Quartile	ADR	mean_Centroid_X_Quartile
Yes	MSS	overexpression	positive	3	NA	High	Low	Upper-Mid
Yes	MSS	overexpression	positive	3	NA	High	Low	Upper-Mid
Yes	MSS	overexpression	positive	3	NA	High	Low	Upper-Mid
Yes	MSS	overexpression	positive	3	NA	High	Low	Upper-Mid
Yes	MSS	overexpression	not applicable	3	Elevated ++	Lower-Mid	Lower-Mid	Lower-Mid
Yes	MSS	overexpression	not applicable	3	Elevated ++	Lower-Mid	Lower-Mid	Low
Yes	MSS	overexpression	not applicable	3	ADR	Low	Lower-Mid	Upper-Mid
Yes	MSS	overexpression	not applicable	3	Elevated ++	Low	Lower-Mid	Lower-Mid
Yes	not applicable	overexpression	positive	3	Elevated +	Upper-Mid	Upper-Mid	Lower-Mid
Yes	not applicable	overexpression	positive	3	Elevated +	Lower-Mid	Upper-Mid	Lower-Mid
Yes	not applicable	overexpression	positive	3	Elevated +	Lower-Mid	Upper-Mid	Upper-Mid
Yes	not applicable	overexpression	positive	3	Elevated +	Low	Upper-Mid	High
Yes	MSS	negative	positive	3	Elevated	Lower-Mid	Upper-Mid	High
Yes	MSS	negative	positive	3	Elevated	Low	Upper-Mid	High
Yes	MSS	negative	positive	3	Elevated	Upper-Mid	Upper-Mid	High
Yes	MSS	negative	positive	3	Elevated	Lower-Mid	Upper-Mid	High
Yes	not applicable	not applicable	not applicable	3	Elevated ++	High	High	Lower-Mid
Yes	not applicable	not applicable	not applicable	3	Elevated ++	High	High	Low
Yes	not applicable	not applicable	not applicable	3	Elevated ++	High	High	Low
Yes	not applicable	not applicable	not applicable	3	Elevated ++	High	High	Lower-Mid
Yes	not applicable	overexpression	positive	3	Elevated +	Lower-Mid	Low	High
Yes	not applicable	overexpression	positive	3	Elevated +	Upper-Mid	Low	High
Yes	not applicable	overexpression	positive	3	Elevated +	Lower-Mid	Low	High
Yes	not applicable	overexpression	positive	3	Elevated +	Lower-Mid	Low	Upper-Mid
No	MSS	overexpression	positive	3	Elevated +	Lower-Mid	Lower-Mid	Low
No	MSS	overexpression	positive	3	Elevated +	Upper-Mid	Lower-Mid	Low
No	MSS	overexpression	positive	3	Elevated +	Lower-Mid	Lower-Mid	Low
No	MSS	overexpression	positive	3	Elevated +++	Lower-Mid	High	Upper-Mid
No	MSS	overexpression	positive	3	Elevated +++	High	High	High
No	MSS	overexpression	positive	3	Elevated +++	Upper-Mid	High	High
No	MSS	overexpression	negative	3	Elevated +++	Lower-Mid	High	Low
No	MSS	overexpression	negative	3	Elevated +++	Low	Lower-Mid	Lower-Mid
No	MSS	overexpression	negative	3	Elevated +++	Upper-Mid	High	Lower-Mid
No	MSS	overexpression	negative	3	Elevated +++	Upper-Mid	Lower-Mid	Lower-Mid
Yes	MSS	wildtype	heterogen positive	3	Elevated	Low	High	High
Yes	MSS	wildtype	heterogen positive	3	Elevated	Low	High	Low
Yes	MSS	wildtype	heterogen positive	3	Elevated	Lower-Mid	Upper-Mid	Lower-Mid
Yes	MSS	wildtype	heterogen positive	3	Elevated	Low	Upper-Mid	Low
Yes	MSS	wildtype	heterogen positive	3	Elevated	Lower-Mid	High	High
Yes	MSS	wildtype	heterogen positive	3	Elevated	Low	Upper-Mid	Low
Yes	MSS	wildtype	heterogen positive	3	Elevated	NA	NA	Low
No	MSS	VUS	not applicable	3	Elevated +	Upper-Mid	High	Upper-Mid
No	MSS	VUS	not applicable	3	Elevated +	Upper-Mid	High	Low
No	MSS	VUS	not applicable	3	Elevated +	Upper-Mid	High	Low
No	MSS	VUS	not applicable	3	Elevated +	Low	High	Lower-Mid
No	MSS	VUS	not applicable	3	Elevated +	Low	High	Upper-Mid
No	MSS	VUS	not applicable	3	Elevated +	Low	High	Low
Yes	not applicable	not applicable	not applicable	3	Elevated +++	Low	Upper-Mid	Lower-Mid
Yes	not applicable	not applicable	not applicable	3	Elevated +++	Low	Upper-Mid	High
Yes	not applicable	not applicable	not applicable	3	Elevated +++	Upper-Mid	Upper-Mid	High
Yes	not applicable	not applicable	not applicable	3	Elevated +++	Low	Upper-Mid	Lower-Mid
Yes	MSS	overexpression	positive	3	Elevated	Low	Lower-Mid	Upper-Mid
Yes	MSS	overexpression	positive	3	Elevated	Low	Lower-Mid	High
Yes	MSS	overexpression	positive	3	Elevated	Upper-Mid	Lower-Mid	High
Yes	MSS	overexpression	positive	3	Elevated	Lower-Mid	Lower-Mid	High
Yes	MSS	overexpression	not applicable	3	Elevated +++	Low	Low	Lower-Mid
Yes	MSS	overexpression	not applicable	3	Elevated +++	Lower-Mid	Low	Low
Yes	MSS	overexpression	not applicable	3	Elevated +++	Lower-Mid	Low	Lower-Mid
Yes	MSS	overexpression	not applicable	3	Elevated +++	Low	Low	Low
Yes	MSS	overexpression	not applicable	3	Elevated +++	Upper-Mid	Low	Upper-Mid
Yes	MSS	overexpression	not applicable	3	Elevated +++	Upper-Mid	Low	Upper-Mid
Yes	MSS	overexpression	not applicable	3	Elevated +++	Low	Low	Low
Yes	MSS	overexpression	not applicable	3	Elevated +++	Upper-Mid	Low	Low
No	MSS	overexpression	positive	3	Elevated ++	High	Upper-Mid	Upper-Mid
No	MSS	overexpression	positive	3	Elevated ++	High	Upper-Mid	Lower-Mid
No	MSS	overexpression	positive	3	Elevated ++	High	Upper-Mid	Upper-Mid
No	MSS	overexpression	positive	3	Elevated ++	High	Upper-Mid	Upper-Mid
No	MSS	wildtype	positive	1	Elevated ++	Upper-Mid	Low	Lower-Mid
No	MSS	wildtype	positive	1	Elevated ++	Upper-Mid	Low	Upper-Mid
No	MSS	wildtype	positive	1	Elevated ++	Upper-Mid	Low	Lower-Mid
Yes	not applicable	VUS	not applicable	2	Elevated	High	Lower-Mid	High
Yes	not applicable	VUS	not applicable	2	Elevated	High	Lower-Mid	High
Yes	not applicable	VUS	not applicable	2	Elevated	High	Lower-Mid	Upper-Mid
Yes	not applicable	VUS	not applicable	2	Elevated	High	Lower-Mid	Lower-Mid

mean_Centroid_Y_Quartile	nucleus_area_mean_Quartile	nucleus_area_median_Quartile	mean_Nucleus_DAPI_mean_Quartile
Low	High	High	Lower-Mid
Low	High	High	Upper-Mid
Low	High	High	Lower-Mid
Low	High	High	Lower-Mid
Low	Low	Low	Lower-Mid
Upper-Mid	Low	Lower-Mid	Lower-Mid
Low	Lower-Mid	Lower-Mid	Low
Upper-Mid	Lower-Mid	Lower-Mid	Low
Upper-Mid	Upper-Mid	Upper-Mid	Low
Upper-Mid	High	Upper-Mid	Low
High	Upper-Mid	Upper-Mid	Low
Lower-Mid	High	Upper-Mid	Low
Lower-Mid	Upper-Mid	Upper-Mid	High
Low	Lower-Mid	Low	High
Low	Low	Low	Upper-Mid
Lower-Mid	High	High	High
High	Low	Low	Lower-Mid
High	Low	Low	Upper-Mid
Low	Low	Low	Lower-Mid
Lower-Mid	Low	Low	Upper-Mid
Upper-Mid	High	High	Low
Lower-Mid	Upper-Mid	Upper-Mid	Low
Low	Upper-Mid	High	Low
Lower-Mid	Low	Lower-Mid	Low
Lower-Mid	Lower-Mid	Lower-Mid	High
High	Upper-Mid	Upper-Mid	Upper-Mid
High	Upper-Mid	Upper-Mid	High
High	Lower-Mid	Low	High
Low	Low	Low	Lower-Mid
Low	Low	Low	Upper-Mid
Low	Lower-Mid	Low	Upper-Mid
High	High	High	Low
Upper-Mid	High	High	Lower-Mid
High	High	High	Low
High	High	High	Low
Lower-Mid	High	High	Lower-Mid
Lower-Mid	High	Upper-Mid	Low
Lower-Mid	Lower-Mid	Lower-Mid	Upper-Mid
Upper-Mid	Upper-Mid	Upper-Mid	Upper-Mid
Lower-Mid	High	High	Lower-Mid
Upper-Mid	Low	Lower-Mid	Upper-Mid
Lower-Mid	Lower-Mid	Upper-Mid	Lower-Mid
Upper-Mid	Low	Low	High
High	Low	Low	Upper-Mid
High	Low	Lower-Mid	High
Lower-Mid	Low	Low	Lower-Mid
Low	Low	Low	High
High	Low	Low	High
Low	Upper-Mid	Upper-Mid	Upper-Mid
Lower-Mid	Upper-Mid	High	Upper-Mid
Low	Upper-Mid	Upper-Mid	Upper-Mid
High	Lower-Mid	Lower-Mid	Lower-Mid
Upper-Mid	Upper-Mid	High	Upper-Mid
Upper-Mid	Lower-Mid	Lower-Mid	Lower-Mid
Upper-Mid	Upper-Mid	Lower-Mid	Low
High	Lower-Mid	Lower-Mid	Upper-Mid
High	Upper-Mid	Upper-Mid	Upper-Mid
High	Lower-Mid	Lower-Mid	Low
High	Upper-Mid	Upper-Mid	Upper-Mid
Low	Lower-Mid	Lower-Mid	High
Lower-Mid	Low	Lower-Mid	Low
Upper-Mid	Lower-Mid	Lower-Mid	Low
High	Lower-Mid	Low	High
High	Lower-Mid	Low	High
Low	Lower-Mid	Low	High
Upper-Mid	Upper-Mid	Lower-Mid	High
Lower-Mid	Low	Lower-Mid	High
Upper-Mid	Lower-Mid	Lower-Mid	High
Upper-Mid	Lower-Mid	Upper-Mid	High
Upper-Mid	Upper-Mid	Upper-Mid	High
Lower-Mid	High	High	Lower-Mid
Upper-Mid	High	Upper-Mid	Lower-Mid
Lower-Mid	High	High	Lower-Mid
Upper-Mid	High	Upper-Mid	Low

mean_Nucleus_E.Cadherin_mean_Quartile	mean_Nucleus_cCASP3_mean_Quartile	cell_area_mean_Quartile	cell_area_median_Quartile
High	High	High	High
High	High	Upper-Mid	Upper-Mid
High	High	Upper-Mid	Upper-Mid
High	High	High	High
Upper-Mid	Upper-Mid	Lower-Mid	Lower-Mid
Upper-Mid	Upper-Mid	Lower-Mid	Lower-Mid
Low	Low	Upper-Mid	Upper-Mid
Upper-Mid	Upper-Mid	Upper-Mid	Upper-Mid
Low	Upper-Mid	High	Upper-Mid
Low	Upper-Mid	High	High
Lower-Mid	High	High	High
Low	Upper-Mid	High	High
High	High	High	High
High	High	Upper-Mid	Lower-Mid
Upper-Mid	Upper-Mid	Lower-Mid	Lower-Mid
High	High	High	High
Lower-Mid	High	Low	Low
Upper-Mid	High	Low	Lower-Mid
High	High	Low	Low
Upper-Mid	High	Low	Low
Lower-Mid	Upper-Mid	High	High
Upper-Mid	High	Upper-Mid	Upper-Mid
Upper-Mid	Upper-Mid	High	High
Upper-Mid	Lower-Mid	Upper-Mid	Upper-Mid
Upper-Mid	Upper-Mid	Low	Low
Lower-Mid	High	Lower-Mid	Lower-Mid
Low	High	Lower-Mid	Lower-Mid
Lower-Mid	High	Low	Low
Low	Low	Low	Low
Low	Lower-Mid	Low	Low
Low	Lower-Mid	Upper-Mid	Upper-Mid
High	High	High	High
High	Upper-Mid	High	High
Upper-Mid	Lower-Mid	High	High
Upper-Mid	Lower-Mid	High	High
Low	Low	High	High
Lower-Mid	Low	Upper-Mid	Upper-Mid
Lower-Mid	Low	Upper-Mid	Upper-Mid
Lower-Mid	Low	Upper-Mid	Upper-Mid
Low	Low	High	High
Upper-Mid	Lower-Mid	Lower-Mid	Lower-Mid
Lower-Mid	Low	Lower-Mid	Upper-Mid
Upper-Mid	Low	Lower-Mid	Lower-Mid
Upper-Mid	Lower-Mid	Low	Low
High	Lower-Mid	Lower-Mid	Lower-Mid
Low	Lower-Mid	Low	Lower-Mid
Lower-Mid	Low	Lower-Mid	Lower-Mid
Lower-Mid	Lower-Mid	Low	Lower-Mid
Lower-Mid	Low	Upper-Mid	Upper-Mid
Lower-Mid	Upper-Mid	Upper-Mid	Upper-Mid
Lower-Mid	Upper-Mid	Lower-Mid	Lower-Mid
Upper-Mid	Upper-Mid	Upper-Mid	Lower-Mid
Upper-Mid	High	High	High
Upper-Mid	High	Upper-Mid	Upper-Mid
Lower-Mid	Upper-Mid	Upper-Mid	Upper-Mid
Upper-Mid	Upper-Mid	Lower-Mid	Upper-Mid
Low	Low	Lower-Mid	Low
Lower-Mid	Low	Low	Low
Lower-Mid	Lower-Mid	Low	Low
Low	Low	Low	Low
Low	Lower-Mid	Low	Low
Low	Low	Lower-Mid	Lower-Mid
High	Upper-Mid	Lower-Mid	Low
High	Upper-Mid	Low	Low
High	Upper-Mid	Low	Low
High	Upper-Mid	Lower-Mid	Low
High	Lower-Mid	Lower-Mid	Lower-Mid
High	Lower-Mid	Lower-Mid	Lower-Mid
High	Upper-Mid	Lower-Mid	Lower-Mid
High	Lower-Mid	Upper-Mid	Upper-Mid
Low	Low	Upper-Mid	Upper-Mid
Low	Low	Upper-Mid	Upper-Mid
Lower-Mid	Low	High	Upper-Mid
Low	Lower-Mid	High	High

mean_Cell_E.Cadherin_mean_Quartile	mean_Cell_cCASP3_mean_Quartile	mean_Cytoplasm_E_Cadherin_mean_Quartile	mean_Cytoplasm_cCASP3_mean_Quartile
High	High	High	High
High	High	High	High
High	High	High	Upper-Mid
High	High	High	Upper-Mid
Upper-Mid	Upper-Mid	Upper-Mid	Upper-Mid
Upper-Mid	Upper-Mid	Upper-Mid	Upper-Mid
Low	Lower-Mid	Low	Lower-Mid
Upper-Mid	Upper-Mid	Upper-Mid	Upper-Mid
Low	Upper-Mid	Low	High
Low	High	Low	High
Lower-Mid	Upper-Mid	Lower-Mid	Upper-Mid
Low	Upper-Mid	Low	Upper-Mid
High	High	High	High
High	High	High	High
Upper-Mid	Upper-Mid	Upper-Mid	Upper-Mid
High	High	High	High
Upper-Mid	High	Upper-Mid	High
Upper-Mid	High	Upper-Mid	High
High	High	High	High
Upper-Mid	High	High	High
Lower-Mid	Upper-Mid	Lower-Mid	Lower-Mid
Lower-Mid	Upper-Mid	Low	Lower-Mid
Low	Lower-Mid	Low	Low
Lower-Mid	Lower-Mid	Lower-Mid	Low
Upper-Mid	High	Lower-Mid	High
Upper-Mid	High	Lower-Mid	High
Low	High	Low	High
Lower-Mid	High	Lower-Mid	High
Low	Low	Low	Low
Low	Lower-Mid	Low	Lower-Mid
Low	Lower-Mid	Low	Lower-Mid
High	High	High	High
High	Upper-Mid	High	High
Upper-Mid	Lower-Mid	Upper-Mid	Upper-Mid
Upper-Mid	Upper-Mid	Upper-Mid	Upper-Mid
Low	Low	Lower-Mid	Low
Upper-Mid	Low	Upper-Mid	Low
Upper-Mid	Low	Upper-Mid	Low
Low	Low	Low	Low
Upper-Mid	Low	High	Low
Lower-Mid	Low	Upper-Mid	Low
Lower-Mid	Low	Lower-Mid	Low
Upper-Mid	Lower-Mid	Upper-Mid	Lower-Mid
High	Upper-Mid	High	Upper-Mid
Low	Upper-Mid	Lower-Mid	Lower-Mid
Lower-Mid	Low	Lower-Mid	Low
Lower-Mid	Low	Lower-Mid	Lower-Mid
Upper-Mid	Lower-Mid	Lower-Mid	Lower-Mid
Lower-Mid	Upper-Mid	Lower-Mid	Upper-Mid
High	Lower-Mid	High	Upper-Mid
Lower-Mid	High	Low	High
Lower-Mid	High	Low	High
Low	Upper-Mid	Low	Upper-Mid
Low	Upper-Mid	Low	Upper-Mid
Low	Low	Low	Low
Lower-Mid	Low	Upper-Mid	Low
Lower-Mid	Lower-Mid	Lower-Mid	Lower-Mid
Lower-Mid	Low	Lower-Mid	Low
Lower-Mid	Lower-Mid	Lower-Mid	Lower-Mid
Low	Low	Lower-Mid	Low
Low	Lower-Mid	Low	Lower-Mid
Low	Low	Low	Low
High	Upper-Mid	Upper-Mid	Upper-Mid
High	Upper-Mid	High	Upper-Mid
High	Upper-Mid	High	Upper-Mid
High	Upper-Mid	High	Upper-Mid
High	Low	High	Low
Upper-Mid	Lower-Mid	Upper-Mid	Low
High	Lower-Mid	High	Lower-Mid
High	Lower-Mid	Upper-Mid	Lower-Mid
Lower-Mid	Low	Lower-Mid	Lower-Mid
Lower-Mid	Lower-Mid	Upper-Mid	Lower-Mid
Upper-Mid	Low	Upper-Mid	Lower-Mid
Low	Lower-Mid	Low	Lower-Mid

nucleus	cell area	ration	mean	Quartile	BMI	Quartile	ER%	Quartile	RFS	months	Quartile	RFS	days	Quartile	OS	months	Quartile	OS	days	Quartile
High					Upper-Mid		Low		Low			Low			Low			Low		
High					Upper-Mid		Low		Low			Low			Low			Low		
High					Upper-Mid		Low		Low			Low			Low			Low		
High					Upper-Mid		Low		Low			Low			Low			Low		
Low					High		Upper-Mid		Lower-Mid			Lower-Mid			Upper-Mid			Upper-Mid		
Lower-Mid					High		Upper-Mid		Lower-Mid			Lower-Mid			Upper-Mid			Upper-Mid		
Low					High		Upper-Mid		Lower-Mid			Lower-Mid			Upper-Mid			Upper-Mid		
Lower-Mid					High		Upper-Mid		Lower-Mid			Lower-Mid			Upper-Mid			Upper-Mid		
Lower-Mid					Lower-Mid		Low		Low			Lower-Mid			Low			Low		
Lower-Mid					Lower-Mid		Low		Low			Lower-Mid			Low			Low		
Low					Lower-Mid		Low		Low			Lower-Mid			Low			Low		
Lower-Mid					Lower-Mid		Low		Low			Lower-Mid			Low			Low		
Lower-Mid					Lower-Mid		Low		Lower-Mid			Lower-Mid			High			High		
Lower-Mid					Lower-Mid		Low		Lower-Mid			Lower-Mid			High			High		
Low					Lower-Mid		Low		Lower-Mid			Lower-Mid			High			High		
Upper-Mid					Lower-Mid		Low		Lower-Mid			Lower-Mid			High			High		
Low					Upper-Mid		High		Lower-Mid			Lower-Mid			Low			Low		
Lower-Mid					Upper-Mid		High		Lower-Mid			Lower-Mid			Low			Low		
Low					Upper-Mid		High		Lower-Mid			Lower-Mid			Low			Low		
Upper-Mid					Low		High		Low			Low			Lower-Mid			Lower-Mid		
Lower-Mid					Low		High		Low			Low			Lower-Mid			Lower-Mid		
Low					Low		High		Low			Low			Lower-Mid			Lower-Mid		
Low					Low		High		Low			Low			Lower-Mid			Lower-Mid		
High					Low		Low		High			High			High			High		
Upper-Mid					Low		Low		High			High			High			High		
High					Low		Low		High			High			High			High		
Upper-Mid					Low		Low		High			High			High			High		
Low					High		Upper-Mid		Lower-Mid			Lower-Mid			Low			Low		
Low					High		Upper-Mid		Lower-Mid			Lower-Mid			Low			Low		
Low					High		Upper-Mid		Lower-Mid			Lower-Mid			Low			Low		
High					High		Lower-Mid		High			High			Lower-Mid			Lower-Mid		
High					High		Lower-Mid		High			High			Lower-Mid			Lower-Mid		
Upper-Mid					High		Lower-Mid		High			High			Lower-Mid			Lower-Mid		
Upper-Mid					High		Lower-Mid		High			High			Lower-Mid			Lower-Mid		
High					High		Lower-Mid		High			High			Lower-Mid			Lower-Mid		
Upper-Mid					High		Upper-Mid		Upper-Mid			Upper-Mid			Upper-Mid			Upper-Mid		
Upper-Mid					High		Upper-Mid		Upper-Mid			Upper-Mid			Upper-Mid			Upper-Mid		
Low					High		Upper-Mid		Upper-Mid			Upper-Mid			Upper-Mid			Upper-Mid		
Lower-Mid					High		Upper-Mid		Upper-Mid			Upper-Mid			Upper-Mid			Upper-Mid		
High					High		Upper-Mid		Upper-Mid			Upper-Mid			Upper-Mid			Upper-Mid		
High					High		Upper-Mid		Upper-Mid			Upper-Mid			Upper-Mid			Upper-Mid		
Lower-Mid					High		Upper-Mid		Upper-Mid			Upper-Mid			Upper-Mid			Upper-Mid		
Lower-Mid					High		Upper-Mid		Upper-Mid			Upper-Mid			Upper-Mid			Upper-Mid		
Lower-Mid					High		Upper-Mid		Upper-Mid			Upper-Mid			Upper-Mid			Upper-Mid		
Low					Low		Upper-Mid		High			High			Upper-Mid			Upper-Mid		
Lower-Mid					Low		Upper-Mid		High			High			Upper-Mid			Upper-Mid		
Low					Low		Upper-Mid		High			High			Upper-Mid			Upper-Mid		
Low					Low		Upper-Mid		High			High			Upper-Mid			Upper-Mid		
Low					Low		Upper-Mid		High			High			Upper-Mid			Upper-Mid		
Upper-Mid					Upper-Mid		Lower-Mid		Lower-Mid			Upper-Mid			Lower-Mid			Upper-Mid		
Upper-Mid					Upper-Mid		Lower-Mid		Lower-Mid			Upper-Mid			Lower-Mid			Upper-Mid		
Upper-Mid					Upper-Mid		Lower-Mid		Lower-Mid			Upper-Mid			Lower-Mid			Upper-Mid		
High					Upper-Mid		Lower-Mid		Lower-Mid			Upper-Mid			Lower-Mid			Upper-Mid		
Lower-Mid					Low		Low		Low			Low			Low			Low		
Low					Low		Low		Low			Low			Low			Low		
High					Low		Low		Low			Low			Low			Low		
Lower-Mid					Low		Low		Low			Low			Low			Low		
High					Lower-Mid		Lower-Mid		Low			Low			Lower-Mid			Lower-Mid		
High					Lower-Mid		Lower-Mid		Low			Low			Lower-Mid			Lower-Mid		
High					Lower-Mid		Lower-Mid		Low			Low			Lower-Mid			Lower-Mid		
Upper-Mid					Lower-Mid		Lower-Mid		Low			Low			Lower-Mid			Lower-Mid		
High					Lower-Mid		Lower-Mid		Low			Low			Lower-Mid			Lower-Mid		
High					Lower-Mid		Lower-Mid		Low			Low			Lower-Mid			Lower-Mid		
Upper-Mid					Lower-Mid		Lower-Mid		Low			Low			Lower-Mid			Lower-Mid		
Upper-Mid					Lower-Mid		Lower-Mid		Low			Low			Lower-Mid			Lower-Mid		
Upper-Mid					Upper-Mid		Lower-Mid		Upper-Mid			Upper-Mid			Lower-Mid			Lower-Mid		
High					Upper-Mid		Lower-Mid		Upper-Mid			Upper-Mid			Lower-Mid			Lower-Mid		
High					Upper-Mid		Lower-Mid		Upper-Mid			Upper-Mid			Lower-Mid			Lower-Mid		
Upper-Mid					Upper-Mid		Lower-Mid		Upper-Mid			Upper-Mid			Lower-Mid			Lower-Mid		
Low					Upper-Mid		High		Upper-Mid			Upper-Mid			High			High		
Lower-Mid					Upper-Mid		High		Upper-Mid			Upper-Mid			High			High		
Lower-Mid					Upper-Mid		High		Upper-Mid			Upper-Mid			High			High		
Upper-Mid					Upper-Mid		High		Upper-Mid			Upper-Mid			High			High		
Upper-Mid					Low		Upper-Mid		High			High			High			High		
Upper-Mid					Low		Upper-Mid		High			High			High			High		
Upper-Mid					Low		Upper-Mid		High			High			High			High		
Lower-Mid					Low		Upper-Mid		High			High			High			High		

response_ Quartile
Lower-Mid
Lower-Mid
Low
Low
Lower-Mid
Lower-Mid
Low
Low
Upper-Mid
Upper-Mid
Upper-Mid
Upper-Mid
High
High
High
Upper-Mid
Lower-Mid
High
High
High
Upper-Mid
Upper-Mid
Low
Low
Low
Upper-Mid
Upper-Mid
Lower-Mid
Lower-Mid
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Lower-Mid
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Lower-Mid
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High
Upper-Mid
Upper-Mid
Lower-Mid
High
Upper-Mid
Upper-Mid
Lower-Mid
Upper-Mid
Upper-Mid
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Lower-Mid
Lower-Mid
Low
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Lower-Mid
Lower-Mid
Lower-Mid
Low
Upper-Mid
Lower-Mid
Low
Low

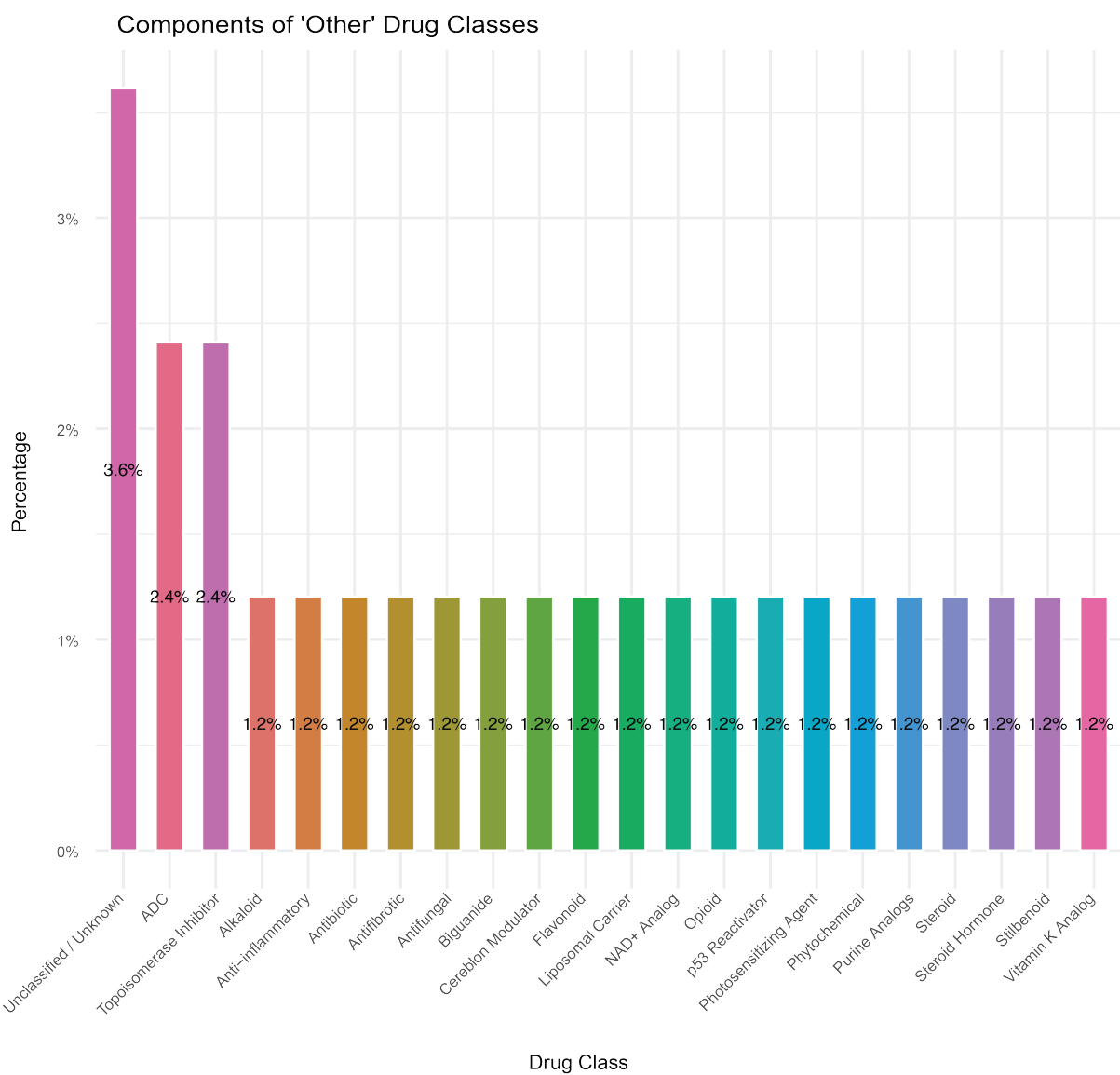
Supplementary Table 7

Cell types	Cell lines	Reference	Provider
Ovarian Cancer	Kuramochi	RRID: CVCL_1345	JCRB Cell Bank
	COV362	RRID:CVCL_2420	European Collection of Authenticated Cell Cultures (ECACC)
	COV318	RRID:CVCL_2419	European Collection of Authenticated Cell Cultures (ECACC)
	COV644	RRID:CVCL_2425	European Collection of Authenticated Cell Cultures (ECACC)
	CAOV3	RRID:CVCL_0201	Provided by Claudia Lengerke (colaboration)
	OAW42	RRID:CVCL_1615	Cell lines service GmbH
	OVCAR 3	RRID:CVCL_0465	Cell lines service GmbH
	OVCAR 4	RRID:CVCL_1627	Oncotest GmbH
	OVCAR 5	RRID:CVCL_1628	Oncotest GmbH
	OVCAR 8	RRID:CVCL_1629	Oncotest GmbH
	BG1	RRID:CVCL_6570	Oncotest GmbH
	SKOV3	RRID:CVCL_0532	ATCC
	ES 2	RRID:CVCL_3509	ATCC
	OVSCHO	RRID:CVCL_3114	JCRB Cell Bank
	A2780	RRID:CVCL_0134	ATCC
	Tyk nu	RRID:CVCL_1776	JCRB Cell Bank
	IGROV1	RRID:CVCL_1304	ATCC

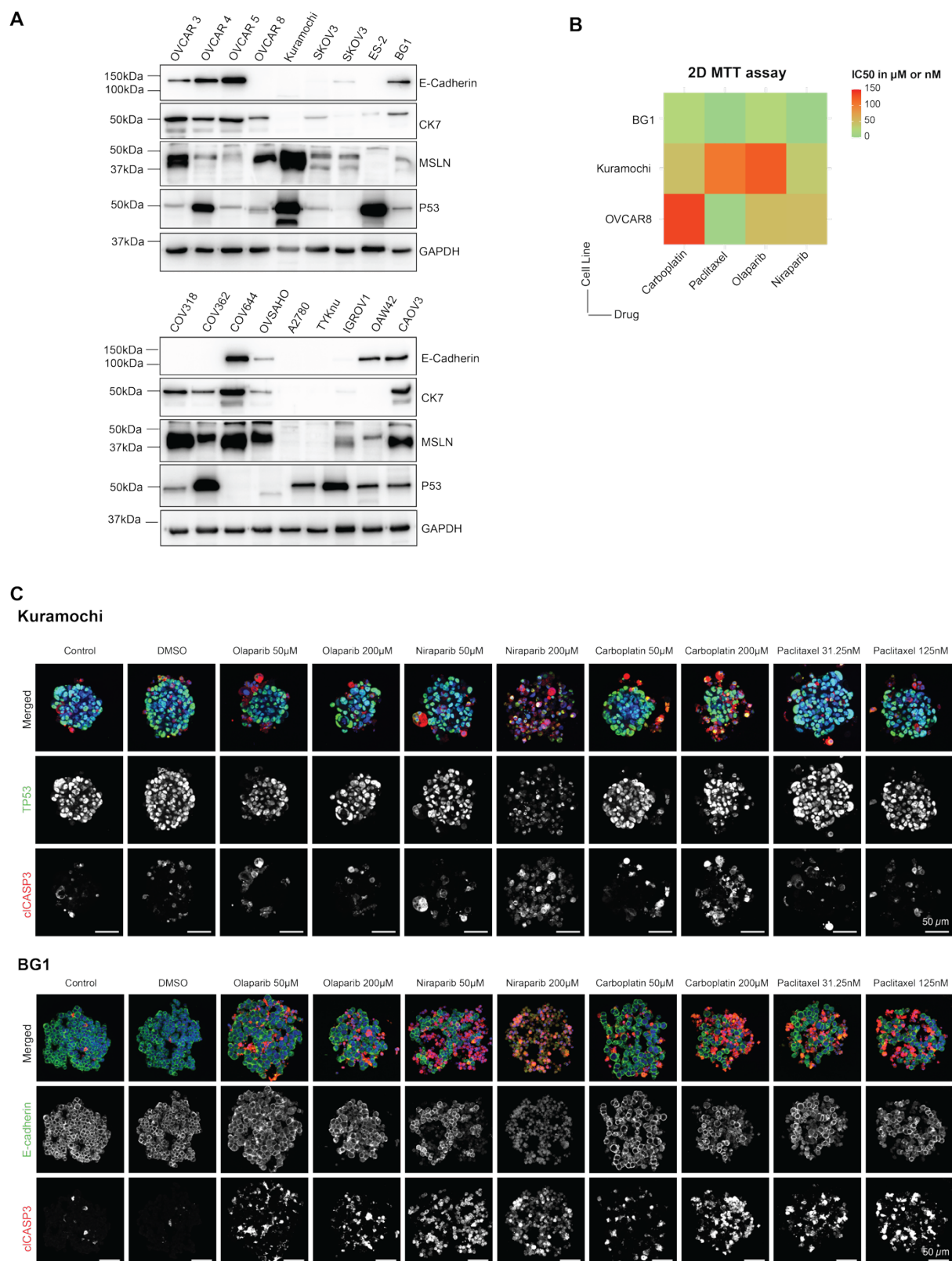
Supplementary Table 8

Target	Provider	Host species	Clone	Dilution	Application	Catalog number	Research Resource Identification
MSLN	Cell Signaling Technology	Rabbit	D9R5G	1-400 IF, 1-1000 WB	WB and IF	#99966	RRID:AB_2800323
Ki67	Cell Signaling Technology	Mouse	8D5	1-400 IF, 1-1000 WB	WB and IF	#9449	RRID:AB_2797703
CK7	Cell Signaling Technology	Rabbit	D1E4	1-400 IF, 1-1000 WB	WB and IF	#4465	RRID:AB_11178382
TP53	Santa Cruz Biotechnology	Mouse	DO-1	1-400 IF, 1-1000 WB	WB and IF	cs-126	RRID:AB_628082
Cleaved-Caspase 3	Cell Signaling Technology	Rabbit	-	1-400 IF, 1-1000 WB	WB and IF	#9661	RRID:AB_2341188
E-Cadherin	Cell Signaling Technology	Mouse	4A2	1-400 IF, 1-1000 WB	WB and IF	#14472	RRID:AB_2728770
HER3	Cell Signaling Technology	Rabbit	D22C5	1-400 IF, 1-1000 WB	WB and IF	#12708	RRID:AB_2721919
PAX8	Cell Signaling Technology	Rabbit	D2S2I	1-400 IF, 1-1000 WB	WB and IF	#59019	RRID:AB_2799553
Vimentin	ThermoFisher Scientific	Mouse	V9	1-400 IF, 1-1000 WB	WB and IF	MA5-11883	RRID:AB_10985392
EpCAM	Biolegend	Rat	W21090A	1-200	IF	624152	RRID:AB_3097236
EpCAM	Cell Signaling Technology	Mouse	VU1D9	1-400 IF, 1-1000 WB	WB and IF	#2929	RRID:AB_2098657
Secondary antibody anti-Mouse	ThermoFisher Scientific	Goat	-	1-500	IF	A-11001	RRID:AB_2534069
Secondary antibody anti-Rabbit	Cell Signaling Technology	Goat	-	1-500	IF	#4414	RRID:AB_10693544
Secondary antibody anti-Rabbit	Cell Signaling Technology	Goat	-	1-500	IF	#4413	RRID:AB_10694110
Secondary antibody anti-Rabbit	Cell Signaling Technology	Goat	-	1-500	IF	#4412	RRID:AB_1904025
Secondary antibody anti-Rat	ThermoFisher Scientific	Goat	-	1-500	IF	A-21434	RRID:AB_141733
CD8	Spring Bioscience	Rabbit	SP16	1:50	Sequential IHC	# M3161	RRID:AB_1660844
CD20	Dako	Mouse	L26	1:50	Sequential IHC	# M0755	RRID:AB_2282030
CD68	Abcam	Rabbit	SP251	1:1500	Sequential IHC	# ab192847	RRID:AB_3076701
PanCK	Abcam	Mouse	AE1/AE3 + 5D3	1:100	Sequential IHC	# ab86734	RRID:AB_10674321
ImmPRESS® Excel Amplified Polymer Staining Kit, Anti-Rabbit IgG, Peroxidase	Vector Laboratories	Horse	-	1:50	Sequential IHC	MP-7601	RRID:AB_2336533
Impress HRP anti-mouse IgG (Peroxidase) Polymer Detection kit	Vector Laboratories	Horse	-	1:50	Sequential IHC	MP-7402	RRID:AB_2336528
Impress HRP anti-rabbit IgG (Peroxidase) Polymer Detection kit	Vector Laboratories	Horse	-	1:50	Sequential IHC	MP-7401	RRID:AB_2336529

Supplementary figures

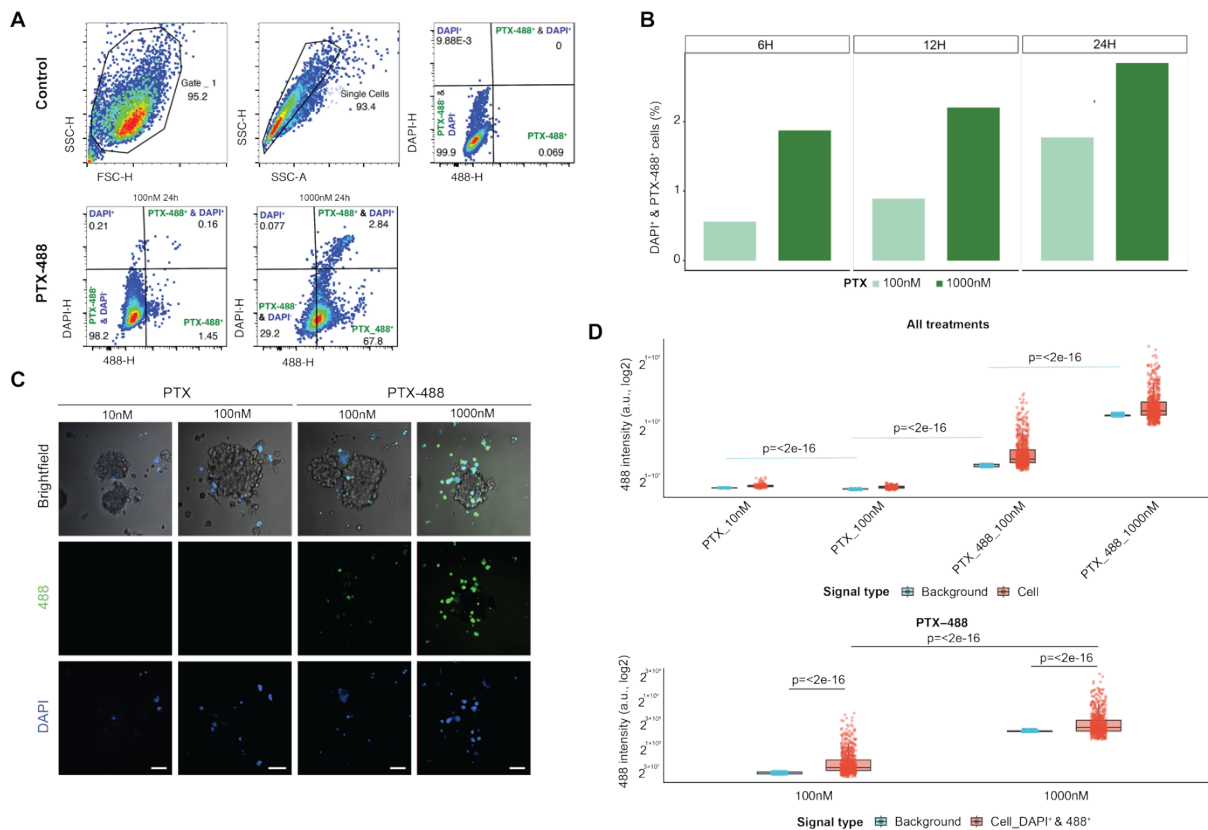


Supplementary Figure 1. Frequency of drugs with unknown class or with less than 2.5% representation in the studies using *ex vivo* drug testing.

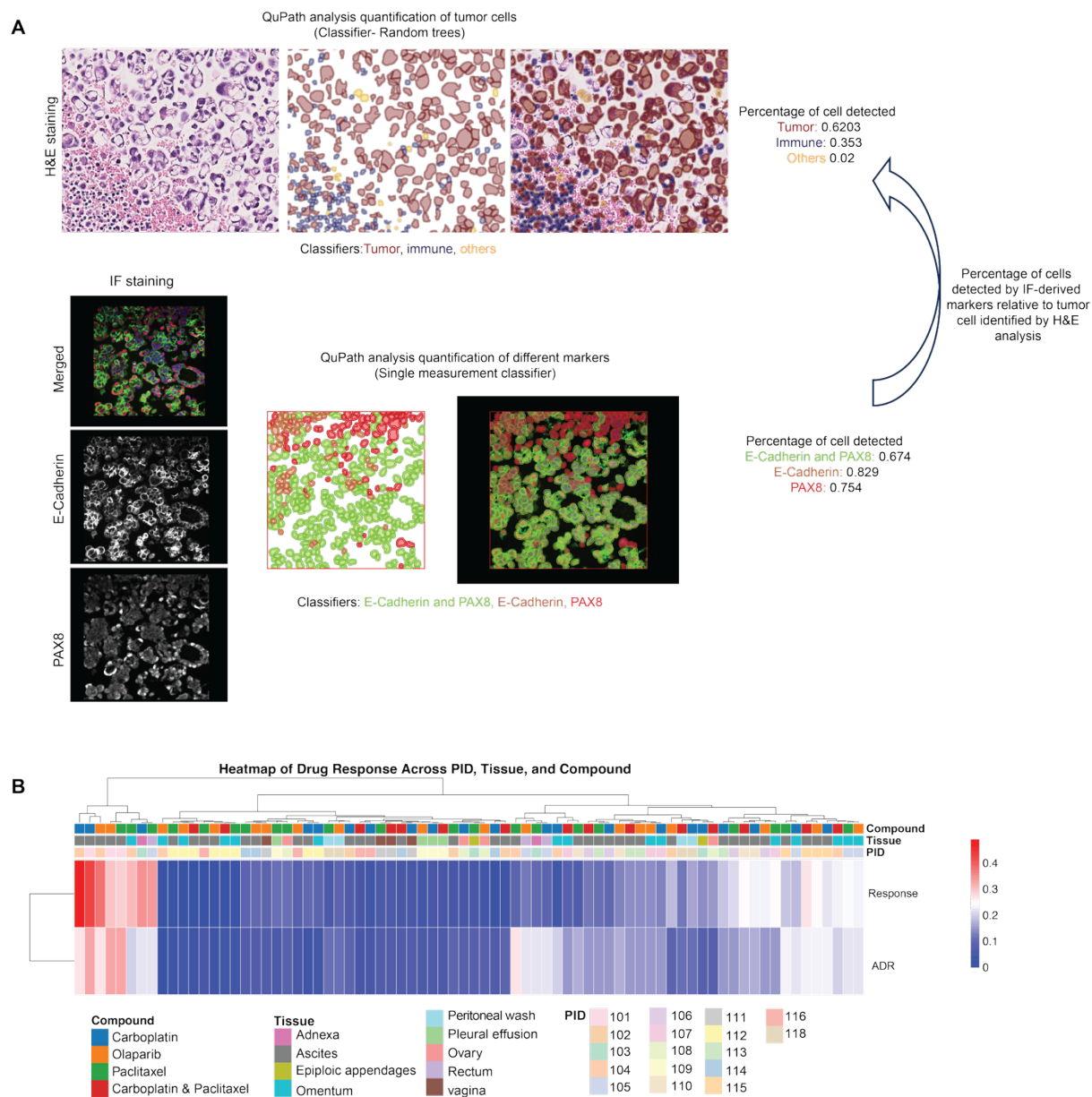


Supplementary Figure 2. (A) Representative Western blot for the characterization of protein expression among a panel of 18 EOC cell lines. **(B)** Heatmap for the IC₅₀ values for carboplatin, paclitaxel, and PARP inhibitors (olaparib and niraparib) in BG1, Kuramochi, and OVCAR8 cell lines, all determined by MTT assays (carboplatin, olaparib, niraparib 3.125-200

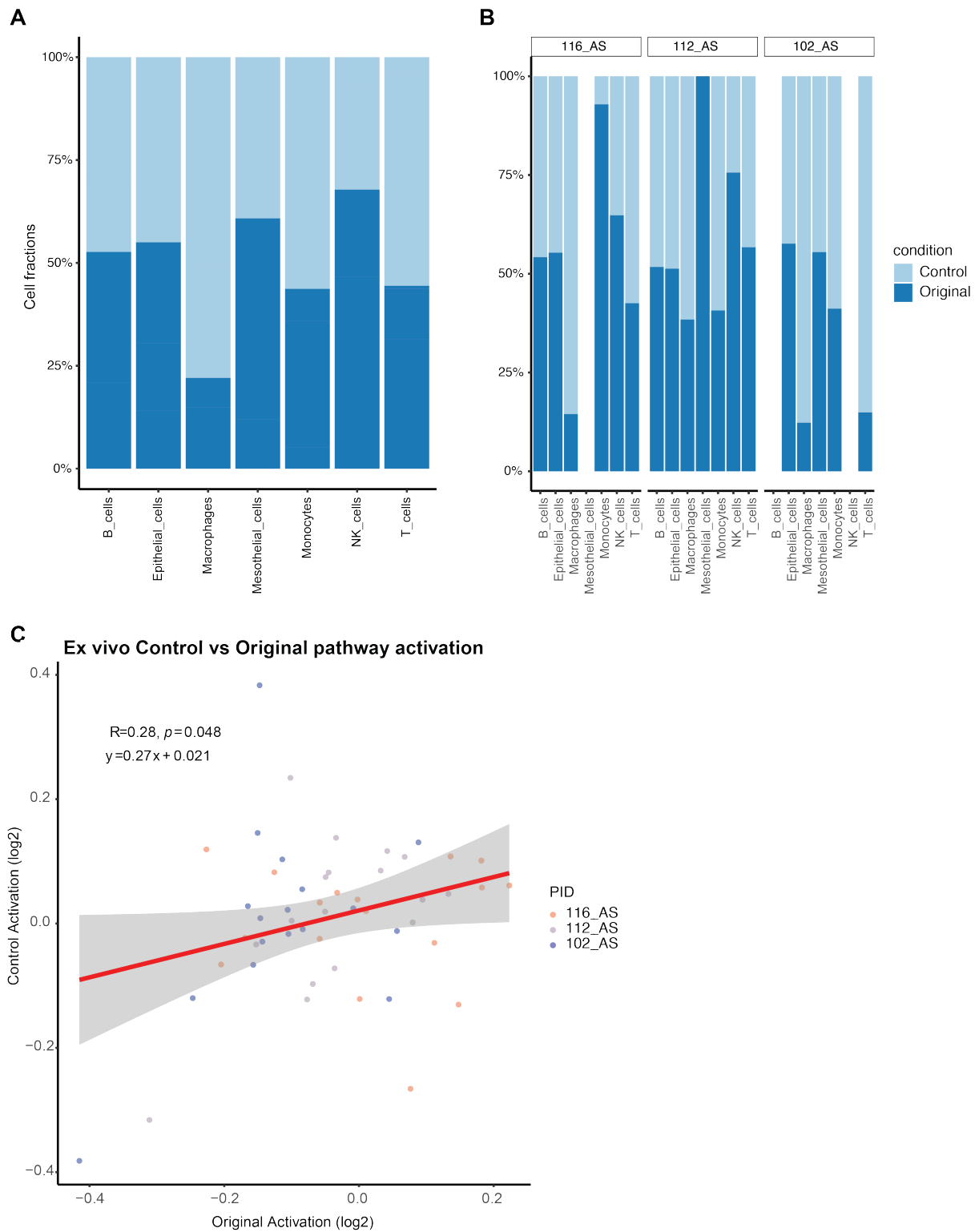
μM , paclitaxel 1 to 150 nM) in 2D cultures. **(C)** Representative confocal IF images of Kuramochi and BG1 cells after exposure to a range of concentrations of PARPi (olaparib, niraparib), carboplatin, and paclitaxel.



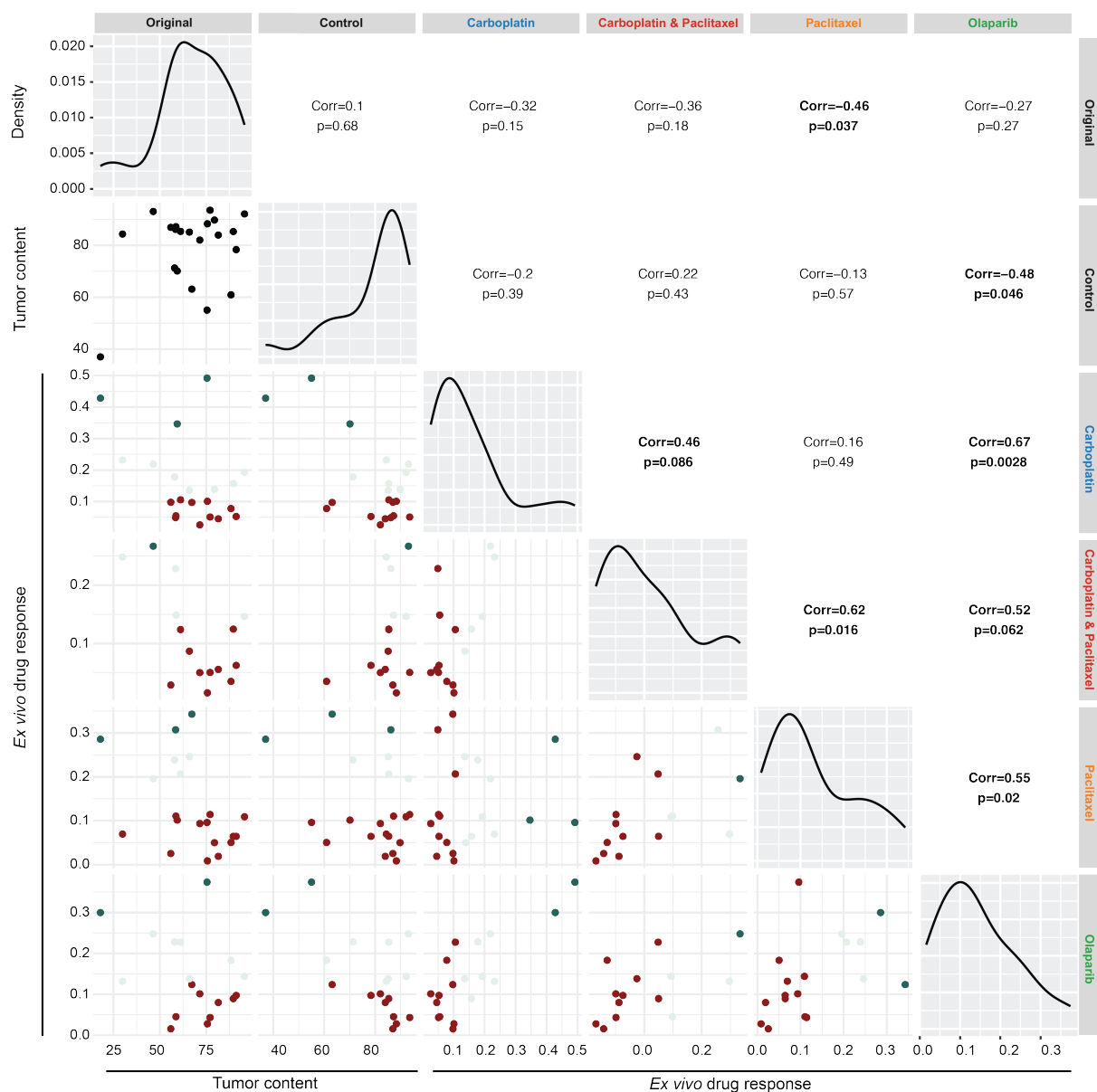
Supplementary Figure 3. (A) Flow cytometry gating strategy used to identify dead cells (DAPI⁺) and paclitaxel-488-positive (PTX-488⁺) cell populations. **(B)** Bar plot showing a dose- and time-dependent increase in the percentage of dead cells (DAPI⁺) that are also PTX-488⁺ following drug exposure. **(C)** Representative live-cell confocal fluorescence images showing both background fluorescence and cellular PTX-488 signal within agarose. **(D)** Quantification of 488 fluorescence intensity showing a concentration-dependent increase in background signal (top). Fluorescence intensity in DAPI⁺ and PTX-488⁺ double positive cells showing a concentration-dependent increase that is significantly higher than background levels (bottom).



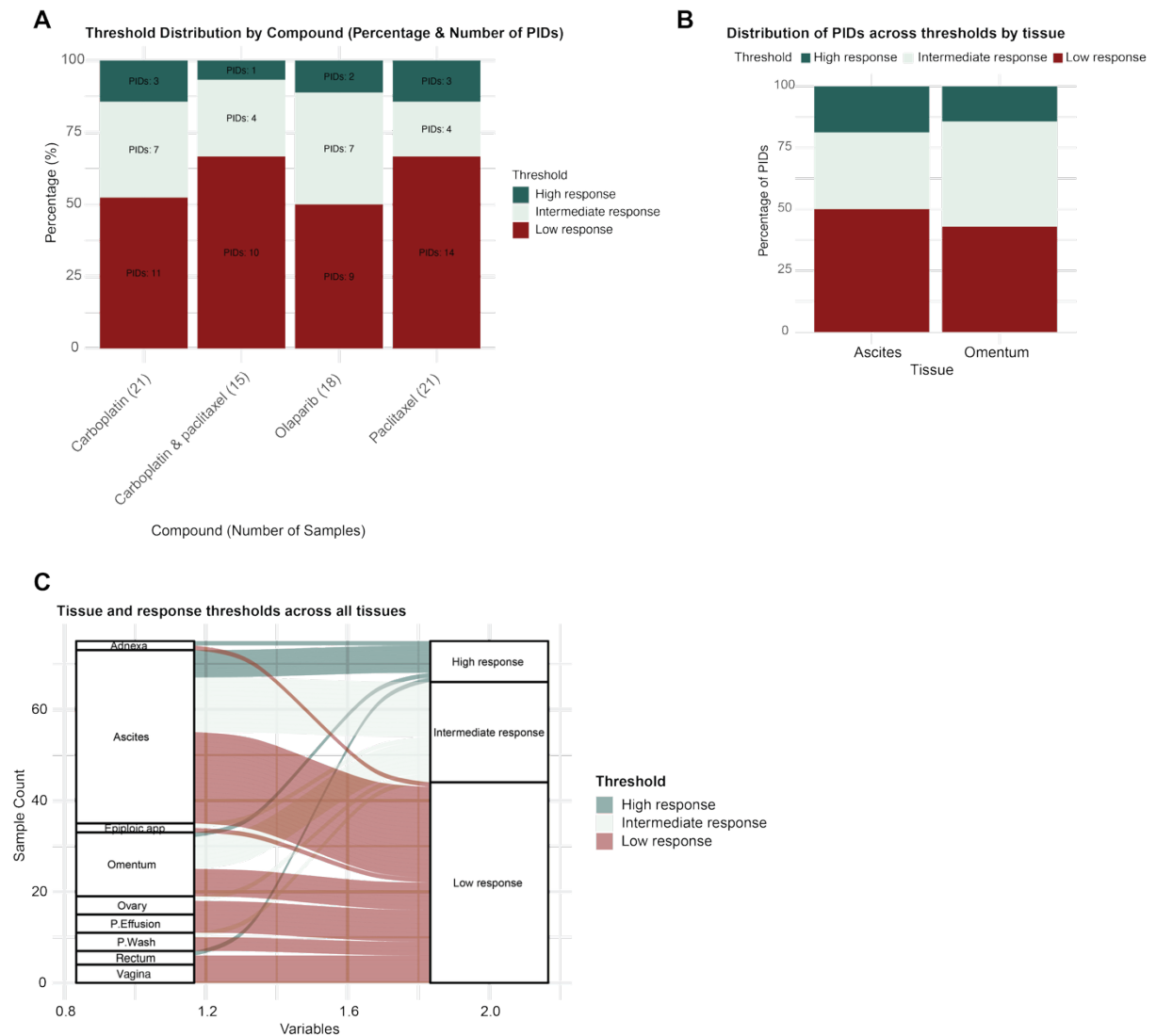
Supplementary Figure 4. (A) Schematic representation of the workflow for tumor cell quantification using QuPath analysis and a random forest classifier for H&E images, and a single-measurement classifier on IF images, stained with different markers identifying tumor cells in the patient sample 102_AS. **(B)** Heatmap for the individual responses to single compounds and combinations, average drug response (ADR) across 21 samples from 17 patients.



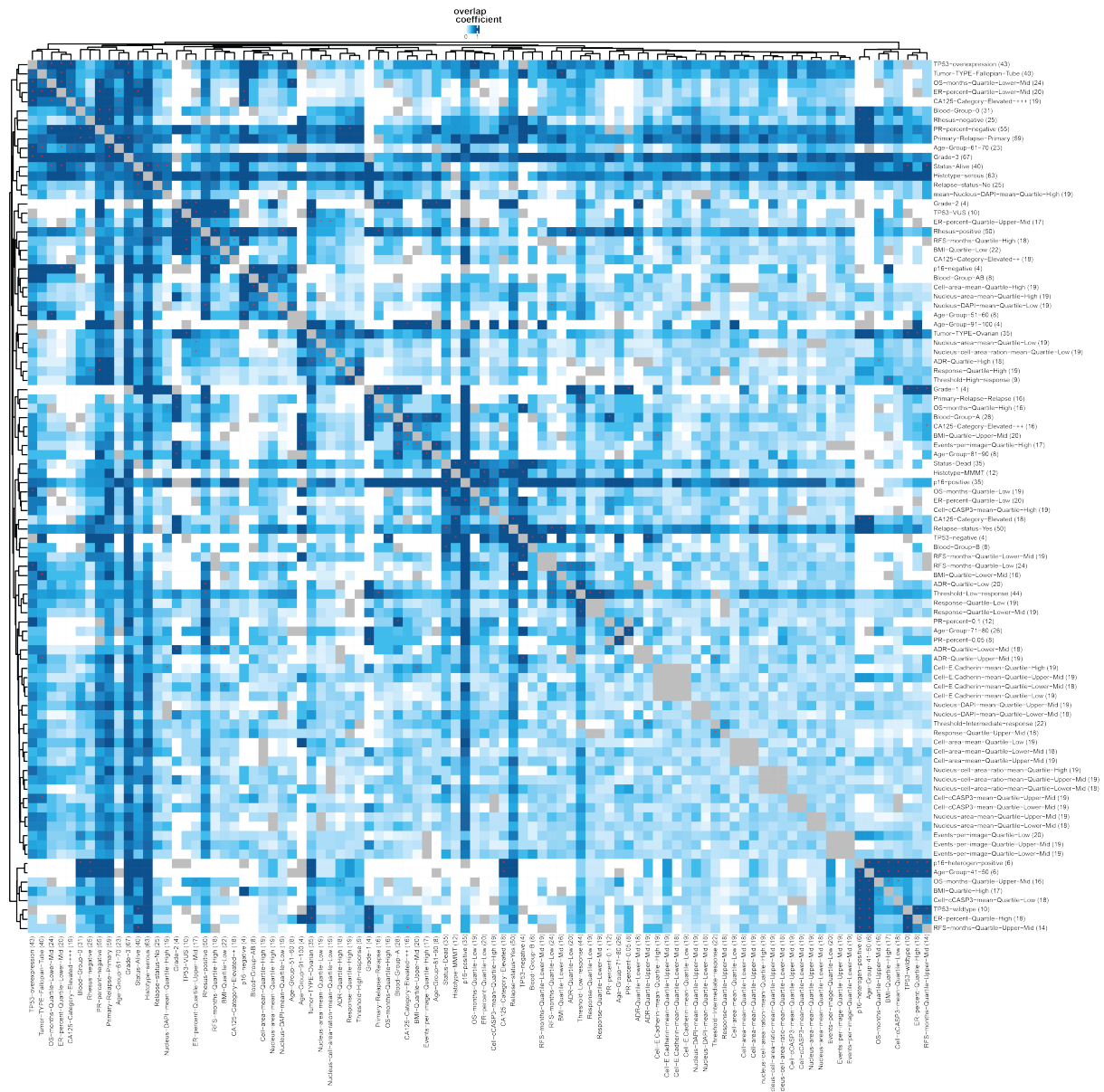
Supplementary Figure 6. (A) Barplot showing the frequency of major cell types across three matched patient samples in original tumors and ex vivo controls (control). (B) Bar plot for cell type frequencies displayed separately for each patient sample. (C) Scatterplot showing a significant correlation of pathway activation ($n=32$), with 17 pathways falling within the 95% confidence interval (Supplementary Table 7), for original and matched ex vivo control tumor cell samples.



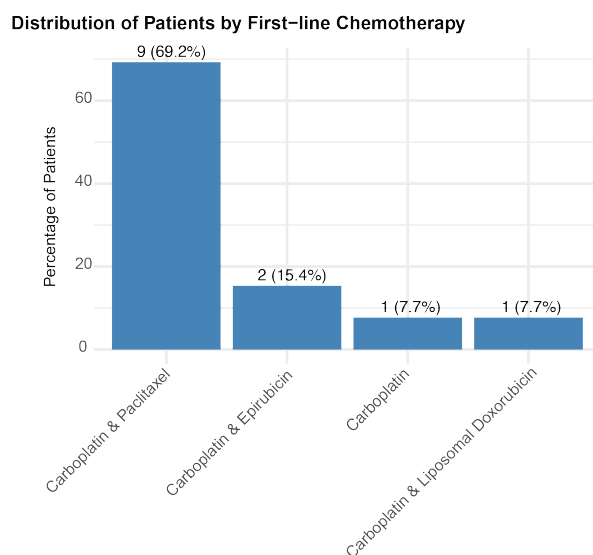
Supplementary Figure 7. Correlation matrix of tumor content and *ex vivo* drug responses. Tumor content in original and *ex vivo* control samples was determined as the percentage of EpCAM- or E-cadherin-positive cells. *Ex vivo* drug responses to carboplatin, paclitaxel, olaparib, and the carboplatin & paclitaxel combination were quantified as the proportion of tumor cells (EpCAM- or E-cadherin-positive cells) also positive for cleaved caspase-3. Pairwise correlations are shown with Spearman correlation coefficients (Corr) and p-values. Significant correlations are highlighted in bold. The color on the scatter plots refers to the different thresholds of *ex vivo* drug response: red- low response, light green- intermediate response, and dark green- high response.



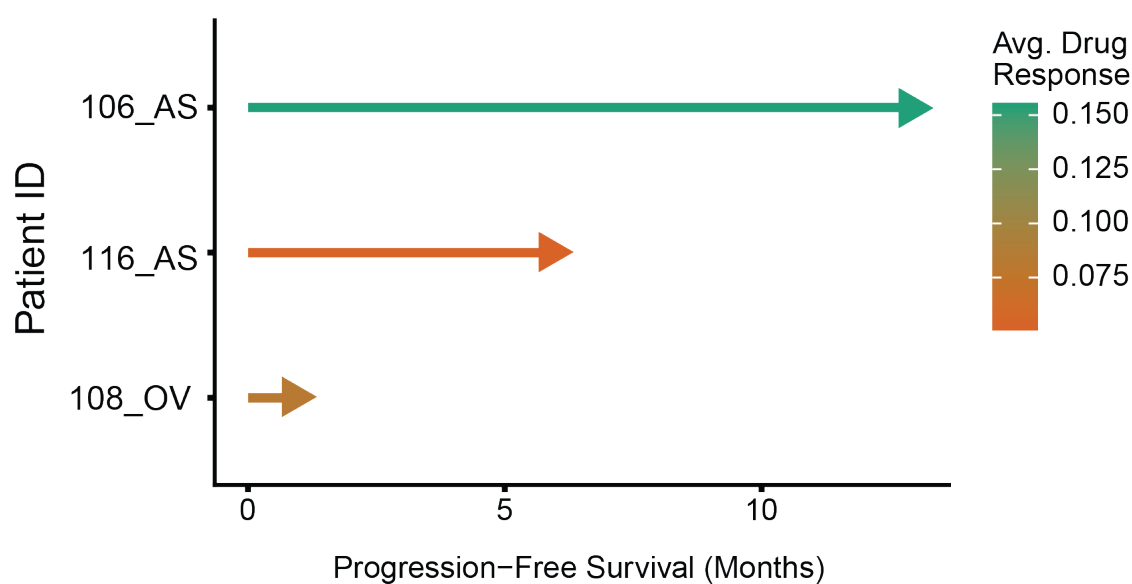
Supplementary Figure 8. (A) Distribution of response thresholds by compound and patient sample. **(B)** Stacked barplot showing *ex vivo* drug responses by threshold categories in ascites and omentum samples, revealing no significant differences between the two sampling sites. **(C)** Alluvial plot illustrating the distribution of response thresholds across all samples in the cohort.



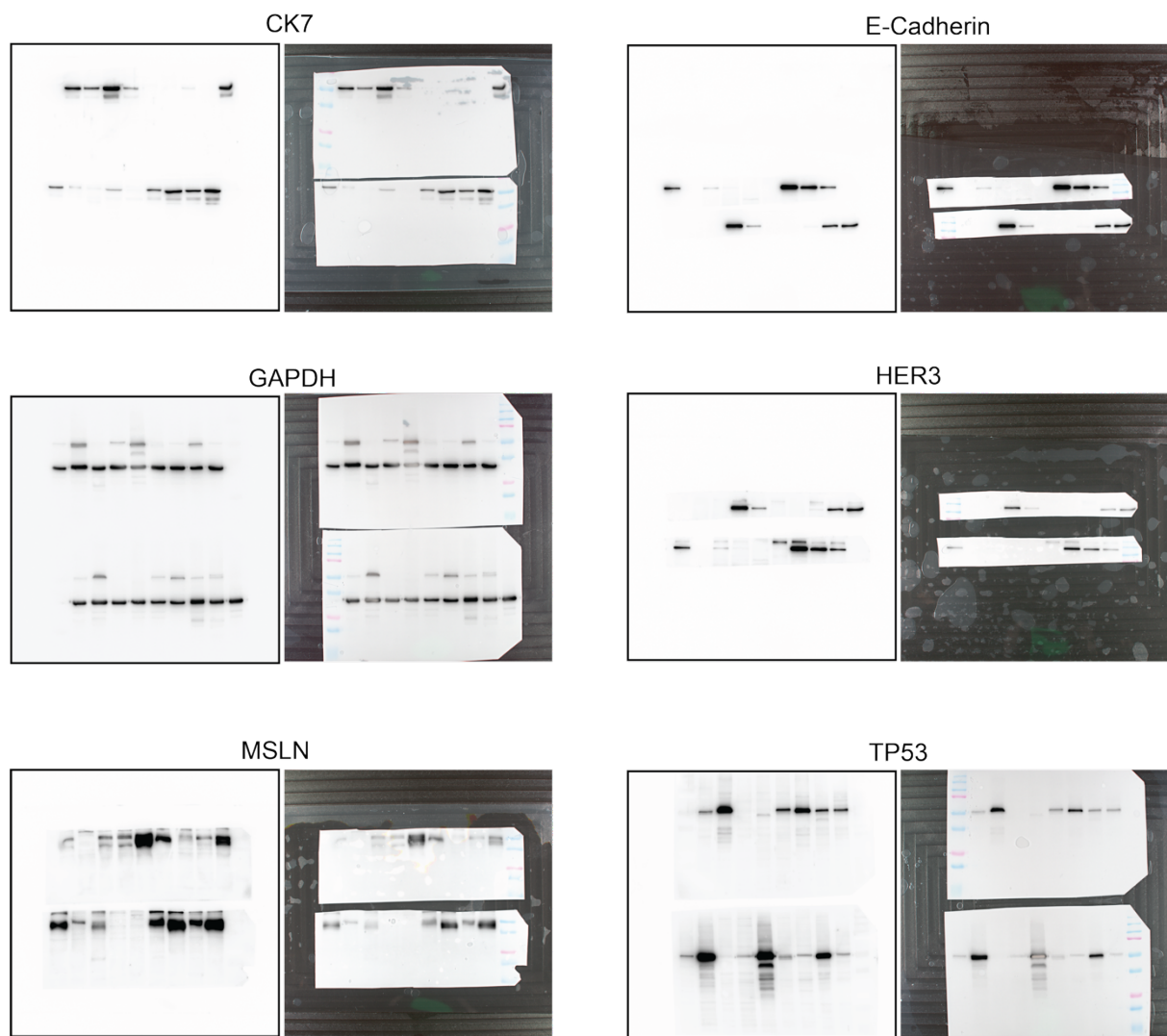
Supplementary Figure 9. Heatmap showing the similarity of groups based on clinical features and ex vivo-related measures using the overlap coefficient. Significant overlaps based on permutation testing are represented by * (FDR<0.05).



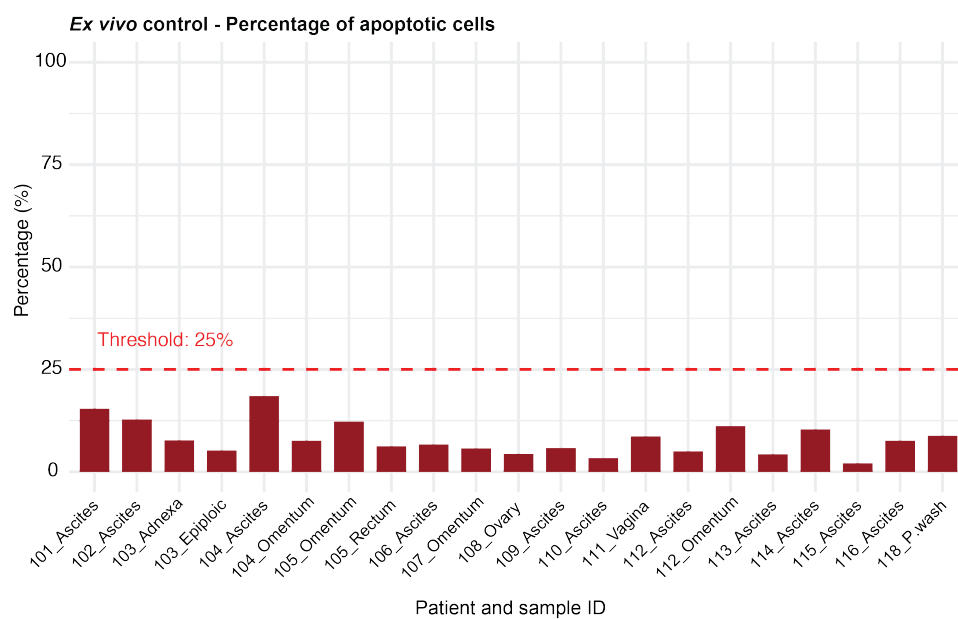
Supplementary Figure 10. Bar plot showing the number of patient samples where *ex vivo* tested treatments matched the clinically administered treatments.



Supplementary Figure 11. Lollipop plot showing the average drug response (Avg. Drug Response) and the progression free survival for MMT cases.



Supplementary Figure 12. Original Western blot images visualizing the entire membrane with a standard molecular weight ladder and staining for the different antibodies.



Supplementary Figure 13. Barplot showing the percentage of cell viability in all the patient samples tested. The QC threshold of apoptotic cells was defined at 25% on *ex vivo* control samples.