Supplemental Information

Multi-level Proteomics Identifies CT45

as a Chemosensitivity Mediator

and Immunotherapy Target in Ovarian Cancer

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Patient	PlatinumValue	Days to platinum resistance	Disease free days	Overall survival days	Status	Refractory
2	Resistant	-54	114	241	deceased	y
24	Sensitive	2584	2754	2903	deceased	n
8	Resistant	31	211	228	deceased	n
3	Resistant	-22	114	1489	deceased	y
13	Sensitive	382	573	1479	deceased	n
18	Sensitive	971	1133	1716	deceased	n
25	Sensitive	3100	3229	3229	alive	n
14	Sensitive	440	580	1106	deceased	n
5	Resistant	18	161	363	deceased	n
20	Sensitive	1111	1296	3046	alive	n
21	Sensitive	1271	1498	1573	deceased	n
11	Resistant	-37	391	567	deceased	n
23	Sensitive	2478	2603	2603	alive	n
16	Sensitive	462	663	1347	deceased	n
7	Resistant	20	210	345	deceased	n
17	Sensitive	864	1008	1528	deceased	n
4	Resistant	29	155	485	deceased	n
10	Resistant	104	366	922	deceased	n
12	Sensitive	366	552	973	deceased	n
6	Resistant	52	190	790	deceased	n
9	Resistant	134	335	1118	deceased	n
15	Sensitive	397	588	1078	deceased	n
22	Sensitive	1665	1804	1804	alive	n
19	Sensitive	1051	1188	1467	alive	n
1	Resistant	11	113	280	deceased	y

Table S1, related to Figure 1: Clinico-pathologic parameters for the resistant and sensitive patients analyzed by proteomics.

| | Chemotherapy Status | | | | P value | All |
| | Resistant | | Sensitive | | | |
	No.	%	No.	%		cases
Stage					1.00	
3	8	72.7	10	71.4		18
4	3	27.3	4	28.6		7
Primary Site					0.0850	
Fallopian Tube	4	36.4	6	42.8		10
Ovary	7	63.6	4	28.6		11
Peritoneum	0	0	4	28.6		4
Residual Disease					0.0531	
Larger than 1 cm	8	72.7	5	35.7		13
Smaller than 1 cm	2	18.2	9	64.3		11
Unknown	1	9.1	0	0		1
Grade					0.4867	
2	0	0	2	14.3		2
3	11	100	12	85.7		23
Chemo Type						
Adjuvant/1st line	11	100	14	100		
Chemo Class					1.00	
Platinum only	0	0	1	7.1		1
Taxane/Platinum	11	100	13	92.9		24
Progression free survival						
Median days (range)	190 (113-391)		1160.5 (552-3229)		< 0.0001	
Overall survival						
Median days (range)	448 (228-1489)		1550.5 (967-3229)		<0.0001	
Age						
Mean age (range)	60.0 (47-78)		67.1 (51-86)		0.0908	

Table S2, related to Figure 1: Clinico-pathologic parameters for the resistant and sensitive patient groups analyzed by proteomics.

	CT45 Status				
	0 (N=82)		1+ (N=42)		
	No.	%	No.	%	P value
Stage					0.72
3	56	68.29	30	71.43	
4	26	31.71	12	28.57	
Primary Site					0.41
Fallopian Tube	10	12.2	9	21.43	
Ovary	62	75.61	29	69.05	
Peritoneum	10	12.2	4	9.52	
Residual Disease					0.10
Larger than 1 cm	47	57.32	17	40.48	
Smaller than 1 cm	34	41.46	25	59.52	
Unknown	1	1.22	0	0	
Grade					0.59
1	1	1.22	0	0	
2	22	26.83	8	19.05	
3	59	71.95	34	80.95	
Chemo Type					0.67
Adjuvant/1st line	64	78.05	35	83.33	
Neoadjuvant	13	15.85	4	9.52	
None	5	6.1	3	7.14	
Chemo Class					0.19
Other	4	4.88	6	14.29	
Taxane/Platinum	73	89.02	33	78.57	
None	5	6.1	3	7.14	
Chemoresistance					0.005
resistant	46	56.1	10	23.81	
intermediate	11	13.41	9	21.43	
sensitive	19	23.17	18	42.86	
N/A	6	7.32	5	11.9	
Mean age (range)	62	(33-94)	58	(33-82)	0.13

Table S4, related to Figure 1: Clinico-pathologic parameters for patients with advanced FIGO stage III and IV serous-papillary ovarian cancer included in the TMA validation cohort. Tumors were stained for CT45 and the staining was scored 0-3.