

Supplementary Table 2

A

Cell line ID	Patient Diagnosis	Patient age	Site from where cell line was made
OV78	Stage IV High Grade Serous Ovarian Carcinoma	63	Ascites
OV81	Stage IIIC High Grade Serous Ovarian Cancer	57	Ascites
OV82	Stage IIIC Low Grade Serous Ovarian Cancer	57	Ascites
OV84	Stage IIIC High Grade Serous Ovarian Cancer	74	Ascites
OV85	Stage IIIC High Grade Serous Ovarian Cancer	77	Ascites
OV93	Stage IIIC Low Grade Serous Ovarian Cancer	53	Ovarian tumor
OV145	Stage IIIC ovarian carcinosarcoma	82	Ovarian tumor
OV262	Stage IIIC High Grade Serous Ovarian Cancer	57	Omental tumor

B

Cell line	Characterization	BRCA1	BRCA2	Cisplatin treatment?
PEO-1	high-grade serous	wild-type	Y1655X	no
PEO-C4.2	high-grade serous	wild-type	reverse mutated (wild-type protein)	yes ( <i>in vitro</i> ) (4 passages)

C

PDX ID	Characterization	BRCA1 status	BRCA2 status
OV81	Stage IIIC High Grade Serous Ovarian Cancer	wild-type	wild-type
OV262	Stage IIIC High Grade Serous Ovarian Cancer	wild-type	N3124I
OV17	Stage IV High Grade Serous Ovarian Carcinoma	R762fs	wild-type

Supplementary Table 2 – **Patient-Derived cell lines characterization and genetic background.** A) Patient derived cell lines generated in the DiFeo lab and utilized for cell proliferation assays (Fig.2). Samples acquired from either solid tumor or ascites. B) Isogenic cell lines generated and characterized in the Taniguchi Lab. C) Patient-Derived Xenograft (PDX) tumor models and their genetic characterization utilized for *in vivo* target engagement and efficacy studies (Fig.6).