

Table S1. Tumor response to chemotherapy drugs in TCGA serous ovarian cancer samples.

Response	High (All drug)	Low (All drug)	High (Platinum)	Low (Platinum)
CR*	78	154	74	141
PR	29	17	26	16
PD	20	12	19	11
SD	16	12	14	9
Unknown	58	70	32	57

*CR, complete response; PR, partial reponse; SD, stable disease; PD, progressive disease.

Table S3. SOV-P20 and its correlation with serous ovarian cancer.

Gene Symbol	Relation to serous ovarian cancer	PMID
FSTL3>THOP1	-	-
DHRS7>DLG3	-	-
PDE4B>FOXJ1	-	-
TEX261>PYCR1	-	-
IGFBP6>PLAGL2	IGFBP family impact on serous ovarian cancer; PLAGL2 axis mediated ARAP1-AS1 to promote tumorigenesis in ovarian cancer by promoting cell proliferation, migration, and invasion.	33282953; 34149172
NPC1>PIR	-	-
LY96>SLC1A5	-	-
CPVL>SETD4	-	-
PLXNC1>EPHA1	-	-
ITGB8>THAP3	ITGB8 expression increased with DNA amplification in patients with high-grade serous ovarian cancer, significantly reducing overall and progression-free survival.	30531684
ZHX3>NUP160	-	-
TCF15>HPCA	-	-
AFAP1>LAMP3	Epithelial ovarian cancer; high expression of LAMP3 was significantly associated with poor survival outcomes.	29526252
SOX1>LCE2B	SOX1 methylation in patients with ovarian cancer; the higher the risk of recurrence, the shorter the survival time.	18942711
CSF2>ADAM20	-	-
ALOX12P2>ATP2C2	-	-
TMEM47>SCRIB	SCRIB as a prognostic biomarker in ovarian cancer.	32564009
TEX261>FOXJ1	-	-
CST6>SLC1A5	SLC1A5 expression was associated with a worse prognosis in FIGO stage I–II epithelial ovarian cancer.	28609484
GPRC5B>CXCL11	High-expression CXCL11 serous ovarian cancer had a worse prognosis.	30858874

Table S4. Existing models for predicting serous ovarian cancer prognosis.

Study	Data source	Gene signature	PMID
Buttarelli, 2020	Clinical Trials	MEG3	32295169
Zhang, 2020	Clinical Trials	MAP3K3	32269720
Liu, 2020.	GEO	5-gene	33281878
Zheng, 2020	TCGA	11-gene	33271935
Liu, 2018	GEO	7-gene	30585265
Pan, 2020	TCGA	6-gene	33193589
Zhang, 2020	TCGA	8-gene	32880385
Liu, 2016	TCGA	5-gene	27478834
Zhang, 2018	TCGA	2-gene	29456732
Zhou, 2019	TCGA	3-gene	31579405
Wang, 2019	TCGA; GEO	6-gene	31423184
An, 2018	TCGA; GEO	8-gene	30410611
Wang, 2019	TCGA; GEO	5-gene	30569721
Yang, 2021	TCGA; GEO	7-gene	34966691
Wang, 2020	TCGA; GEO	8-gene	32186777
Zhang, 2021	TCGA; GEO	17-gene-pairs	33543590
Shen, 2019	TCGA; GEO	129-gene	30594555
Yang, 2016	TCGA	19-gene	27059002
Willis, 2016	TCGA; HAS	32-gene	26886260
Wang, 2017	TCGA; GEO	10-gene	27846619
Sabatier, 2011	TCGA	7-gene	21654678
Millstein, 2020	GEO	101-gene	32473302
Lin, 2021	TCGA; GEO	35-gene-pairs	33680950
Zhang, 2019	TCGA; GEO	20-gene-pairs	31695415