Supplementary Tables

Table S1. Clinical and pathological characteristics of advanced HGSOC patients.

Characteristic	No. of Patients (%)
Total patients	100
Age at diagnosis (y):	
Median: 61	
Mean: 60	100
Range: 27-79	
Age groups (y)	
≤ 60	48 (48)
> 60	52 (52)
FIGO stage [a]	
IIIB	23 (23)
IIIC	52 (52)
IV	25 (25)
Histological grade	
G1/2	0 (0)
G3	100 (100)
Histological subtype	
Serous	100 (100)
Other	0 (0)
OC	
Unilateral	64 (64)
Bilateral	36 (36)
Surgery	
Surgical staging	52 (52)
Cytoreductive surgery	48 (48)
Peritoneal carcinomatosis	
Yes	43 (43)
No	57 (57)
BMI	
≤ 25	59 (59)
> 25	41 (41)
Smoker	
Yes	23 (23)
No	77 (77)

[a] AJCC Cancer Staging Manual 8th staging.

Abbreviations: BMI, Body Mass Index; FIGO, International Federation of Gynecology and Obstetrics.

Table S2. Characteristics of ELISAs for sPD-L1, sPD-1, pan-sBTN3As, sBTN3A1, sBTN2A1, and sBTLA.

	PD-L1	PD-1	pan-BTN3As*	BTN3A1*	BTN2A1	BTLA
Coating Ab	α-PD-L1 1.8 + α PD-L1 2.1	α-PD-1 6.4	α-BTN3A S148	α-BTN3A1 S240	α-BTN2A1 8.16	α-BTLA 75.2
Detection Ab (biotinylated)	A-PD-L1 1.3.1	α-PD-1 3.1	α-BTN3A 103.2	α-BTN3A 103.2	α-BTN2A1 4.15 + α-BTN2A1 5.28	α-BTLA 7.1 + α-BTLA 8.2
Detection limit (pg/ml)	20	50	100	100	30	200

* Three isoforms of BTN3A are identified (A1, A2, A3). Among available monoclonal antibodies to BTN3A, one is specific for A1 (α-BTN3A1 S240). Coating with α-BTN3A1 S240 allows specific assay of the A1 isoform, whereas the couple of antibodies α-BTN3A S148 and α-BTN3A 103.2 allows simultaneous detection of all 3 forms (Pan-BTN3A assay). It is however noteworthy that BTN3A concentrations obtained with the Pan-BTN3A assay are only indicative since the range used in the assay is pure BTN3A1. BTN3A concentrations should therefore be expressed as pg/ml « equivalent BTN3A1».

Table S3. Univariate and multivariate analysis of biomarkers and other factors for PFS in the validation cohort.

Factor/biomarker	Univariate Cox Regression		Multivariable Cox Regression	
	HR (95% CI)	*p*-Value	HR (95% CI)	*p*-Value
Age at diagnosis (>60 *vs* ≤60 years)	5.64 (2.03-15.6)	0.0009	8.12 (2.24-29.5)	0.0015
BMI (>25 *vs* ≤25)	33.1 (4.14-265)	0.001	-	NS
Peritoneal carcinomatosis (Yes *vs* No)	12.7 (3.65-44.2)	0.0001	48.9 (6.98-343)	0.0001
sPD-L1 (>0.42 *vs* ≤0.42 ng/mL)	4.30 (1.55-11.9)	0.005	4.47 (1.30-15.3)	0.02
sPD-1 (>2.48 *vs* ≤2.48 ng/mL)	26.5 (3.29-213)	0.0021	-	NS
sBTN3A1 (>4.75 *vs* ≤4.75 ng/mL)	34.1 (4.18-277)	0.001	-	NS
pan-sBTN3As (>13.06 *vs* ≤13.06 ng/mL)	4.30 (1.46-12.7)	0.008	-	NS
sBTN2A1 (>5.59 *vs* ≤5.59 ng/mL)	5.86 (1.93-17.8)	0.002	-	NS
sBTLA (>2.78 *vs* ≤2.78 ng/mL)	6.14 (2.04–18.5)	0.0013	-	NS

Abbreviations: BMI, Body Mass Index; HR, Hazard Ratio; NS, Not Significant.

Figure S1. Receiver Operating Characteristics (ROC) curve analysis of age at diagnosis, BMI and plasma levels of PD-L1, PD-1, BTN3A1, pan-BTN3As, BTN2A1, BTLA.

For each parameter, ROC curves were plotted for sensitivity and specificity of survival classification. The figure shows the optimal values of specificity and sensitivity for optimal threshold values (*Youden index* associated criterion). AUC, Area Under the Curve. P<0.05.