

Supplementary Table 1. All 92 marker proteins included in Olink Target 96 Inflammation

UniProt	Protein target	Abbreviation
P00813	Adenosine deaminase	ADA
Q9Y653	Adhesion G-protein coupled receptor G1	ADGRG1
Q15389	Angiopoietin-1	ANGPT1
O15123	Angiopoietin-2	ANGPT2
P05089	Arginase-1	ARG1
Q16790	Carbonic anhydrase 9	CAIX
Q14790	Caspase-8	CASP-8
Q92583	C-C motif chemokine 17	CCL17
Q99731	C-C motif chemokine 19	CCL19
P78556	C-C motif chemokine 20	CCL20
P55773	C-C motif chemokine 23	CCL23
P10147	C-C motif chemokine 3	CCL3
P13236	C-C motif chemokine 4	CCL4
Q9BZW8	Natural killer cell receptor 2B4	CD244
P26842	CD27 antigen	CD27
P10747	T-cell-specific surface glycoprotein CD28	CD28
P01730	T-cell surface glycoprotein CD4	CD4
P25942	Tumor necrosis factor receptor superfamily member 5	CD40
P29965	CD40 ligand	CD40-L
P06127	T-cell surface glycoprotein CD5	CD5
P32970	CD70 antigen	CD70

Q01151	CD83 antigen	CD83
P01732	T-cell surface glycoprotein CD8 alpha chain	CD8A
O95727	Cytotoxic and regulatory T-cell molecule	CRTAM
P09603	Macrophage colony-stimulating factor 1	CSF-1
P78423	Fractalkine	CX3CL1
P09341	Growth-regulated alpha protein	CXCL1
P02778	C-X-C motif chemokine 10	CXCL10
O14625	C-X-C motif chemokine 11	CXCL11
P48061	Stromal cell-derived factor 1	CXCL12
O43927	C-X-C motif chemokine 13	CXCL13
P42830	C-X-C motif chemokine 5	CXCL5
Q07325	C-X-C motif chemokine 9	CXCL9
P07585	Decorin	DCN
P01133	Pro-epidermal growth factor	EGF
P48023	Tumor necrosis factor ligand superfamily member 6	FASLG
P09038	Fibroblast growth factor 2	FGF2
P09382	Galectin-1	Gal-1
O00182	Galectin-9	Gal-9
P12544	Granzyme A	GZMA
P10144	Granzyme B	GZMB
P20718	Granzyme H	GZMH
P14210	Hepatocyte growth factor	HGF
P09601	Heme oxygenase 1	HO-1
O75144	ICOS ligand	ICOSLG

P01579	Interferon gamma	IFN-gamma
P01583	Interleukin-1 alpha	IL-1 alpha
P22301	Interleukin-10	IL10
P29459_P29460	Interleukin-12	IL12
P42701	Interleukin-12 receptor subunit beta-1	IL12RB1
P35225	Interleukin-13	IL13
P40933	Interleukin-15	IL15
Q14116	Interleukin-18	IL18
P60568	Interleukin-2	IL2
O95760	Interleukin-33	IL33
P05112	Interleukin-4	IL4
P05113	Interleukin-5	IL5
P05231	Interleukin-6	IL6
P13232	Interleukin-7	IL7
P10145	Interleukin-8	IL8
P43629	Killer cell immunoglobulin-like receptor 3DL1	KIR3DL1
Q13241	Natural killer cells antigen CD94	KLRD1
P18627	Lymphocyte activation gene 3 protein	LAG3
Q9UQV4	Lysosome-associated membrane glycoprotein 3	LAMP3
P01137	Transforming growth factor beta-1	LAP TGF-beta-1
P13500	C-C motif chemokine 2	MCP-1
P80075	C-C motif chemokine 8	MCP-2

P80098	C-C motif chemokine 7	MCP-3
Q99616	C-C motif chemokine 13	MCP-4
Q29983_Q29980	MHC class I polypeptide-related sequence A	MIC-A/B
P39900	Macrophage metalloelastase	MMP12
P09237	Matrilysin	MMP7
Q8WXI7	Mucin-16	MUC-16
O76036	Natural cytotoxicity triggering receptor 1	NCR1
P29474	Nitric oxide synthase, endothelial	NOS3
Q15116	Programmed cell death protein 1	PDCD1
P01127	Platelet-derived growth factor subunit B	PDGF subunit B
Q9NZQ7	Programmed cell death 1 ligand 1	PD-L1
Q9BQ51	Programmed cell death 1 ligand 2	PD-L2
P49763	Placenta growth factor	PGF
P21246	Pleiotrophin	PTN
Q02763	Angiopoietin-1 receptor	TIE2
P01375	Tumor necrosis factor	TNF
Q9NP84	Tumor necrosis factor receptor superfamily member 12A	TNFRSF12A
O75509	Tumor necrosis factor receptor superfamily member 21	TNFRSF21
P43489	Tumor necrosis factor receptor superfamily member 4	TNFRSF4
Q07011	Tumor necrosis factor receptor superfamily member 9	TNFRSF9
O43557	Tumor necrosis factor ligand superfamily member 14	TNFSF14

P50591	Tumor necrosis factor ligand superfamily member 10	TRAIL
O43508	Tumor necrosis factor ligand superfamily member 12	TWEAK
P15692	Vascular endothelial growth factor A	VEGFA
P35968	Vascular endothelial growth factor receptor 2	VEGFR-2

**Supplementary Table 2. Baseline Demographic and Disease Characteristics
(evaluable Population)**

Pathological complete response rate, n (%)	Evaluable Patients (N=16)
pathological complete response rate (tpCR) (ypT0/isypN0)	4 (25%)
Stage (cTNM classification)	
Stage II	2 (22.2%)
Stage III	2 (28.6%)
Nodal status	
Lymph Node Involvement–Positive	4 (28.6%)
Lymph Node Involvement–Negative	0
PDL1	
PDL1 CPS < 1	1 (14.3%)
PDL1 CPS ≥10	3 (75%)
ER	
ER+ < 10%	1 (50.0)
ER+≥10%	3 (21.4)
ER+≥10%且 PDL1 CPS ≥10	2 (66.7%)
HER2	
HER2 2+FISH-	3 (37.5)
HER2 1+	1 (12.5)
Ki-67 Scores	
> 20%	4(25.0)

≤20%

0

Data are No. (%) unless otherwise indicated. Age is median (range).

Abbreviations: ECOG PS, Eastern Cooperative Oncology Group performance status; HER2, human epidermal growth factor receptor 2; IHC, immunohistochemistry; FISH, fluorescence in situ hybridization; HR, hormone receptor; ER, estrogen receptor; PR, progesterone receptor; cTNM, clinical tumor–node–metastasis; PD-L1, programmed death-ligand 1; CPS, combined positive score.

Supplementary Table 3. Treatment-Emergent Adverse Events (ITT Population, N = 20)

AE	N=20					
	Any grade	n(%)	Grade 1-2	n(%)	≥Grade 3	n(%)
Treatment-Emergent Adverse Events (TEAEs)	20	(100)	15	(75.0)	5	(25.0)
Treatment discontinuation or delay due to adverse events (AEs)	1	(5.0)	0		1	(5.0)
Leukopenia	3	(15.0)	3	(15.0)	0	
Neutropenia	4	(20.0)	4	(20.0)	0	
Anemia	3	(15.0)	3	(15.0)	0	
ALT increased	12	(60.0)	11	(55.0)	1	(5.0)
AST increased	10	(50.0)	9	(45.0)	1	(5.0)
Hyperglycemia	6	(30.0)	6	(30.0)	0	
Elevated triglycerides	10	(50.0)	9	(45.0)	1	(5.0)

Abnormal urinalysis	5 (25.0)	4 (20.0)	1(5.0)
Nausea	11 (55.0)	11 (55.0)	0
Vomiting	3(15.0)	3(15.0)	0
Diarrhea	4 (20.0)	4 (20.0)	0
Constipation	12 (60.0)	12 (60.0)	0
Rash	11 (55.0)	11 (55.0)	0
Pruritus	14 (70.0)	14 (70.0)	0
Pain	8 (40.0)	8 (40.0)	0
Anorexia	5 (25.0)	5 (25.0)	0
Fatigue	8 (40.0)	8 (40.0)	0
Paresthesia	8 (40.0)	8 (40.0)	0
Urinary Tract Infection	7(35.0)	6(30.0)	1(5.0)
ADC related to adverse events			

Alopecia	18 (90.0)	18 (90.0)	0
Insomnia	5 (25.0)	5 (25.0)	0
Paresthesia	8 (40.0)	8 (40.0)	0
Allergic dermatitis	1(5.0)	1(5.0)	0
Immune-related to adverse events			
Hypothyroidism	4 (20.0)	4 (20.0)	0
Immune-mediated myocarditis	1(5.0)	0	1(5.0)
Hyperthyroidism	3 (15.0)	2 (10.0)	1(5.0)
Urticaria	1(5.0)	1(5.0)	0
Proteinuria	1(5.0)	1(5.0)	0

Events are summarized by worst grade (any grade, grade 1–2, and grade ≥ 3). Data are No. (%).

Abbreviations: TEAE, treatment-emergent adverse event; CTCAE, Common Terminology Criteria for Adverse Events; ADC, antibody–drug conjugate; irAE, immune-related adverse event.