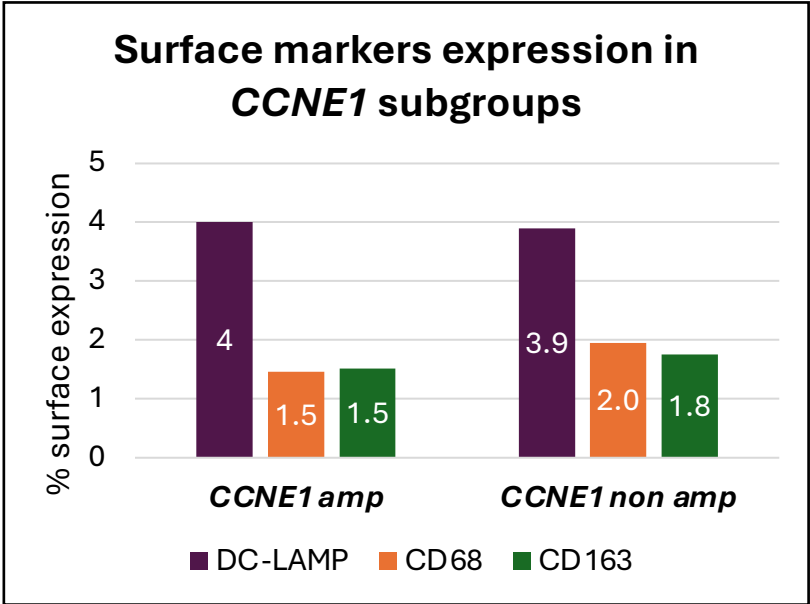
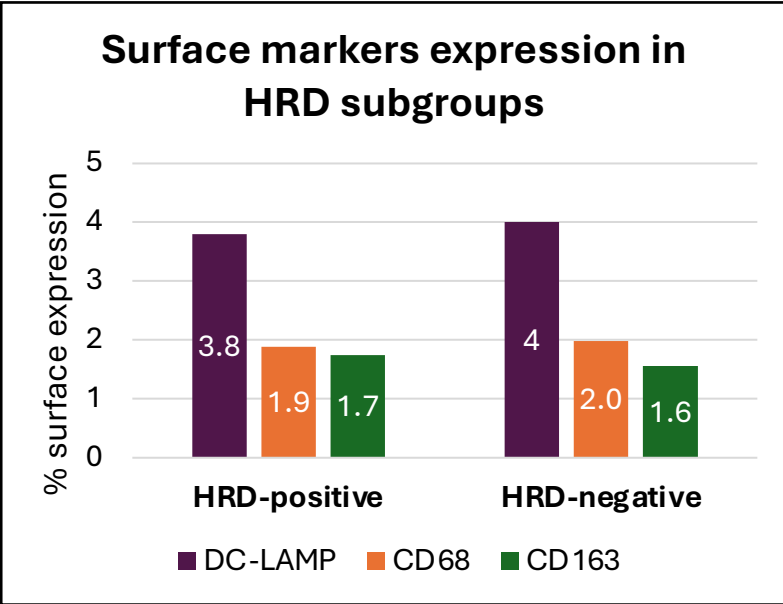
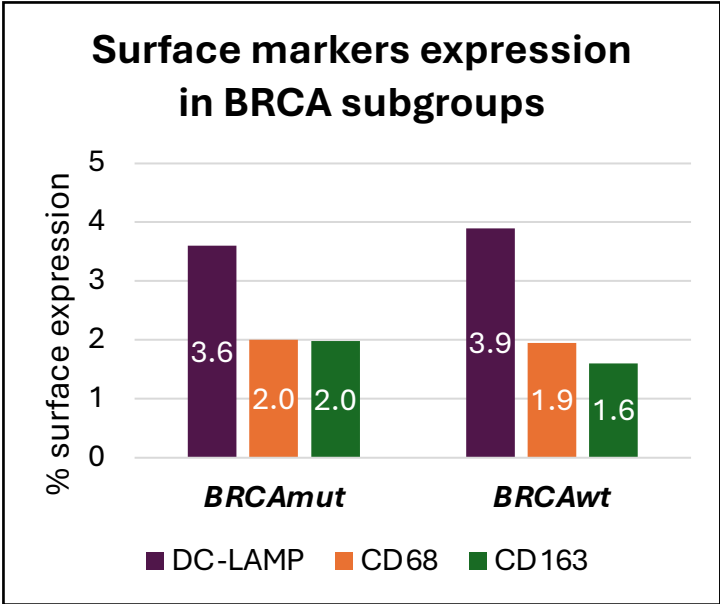
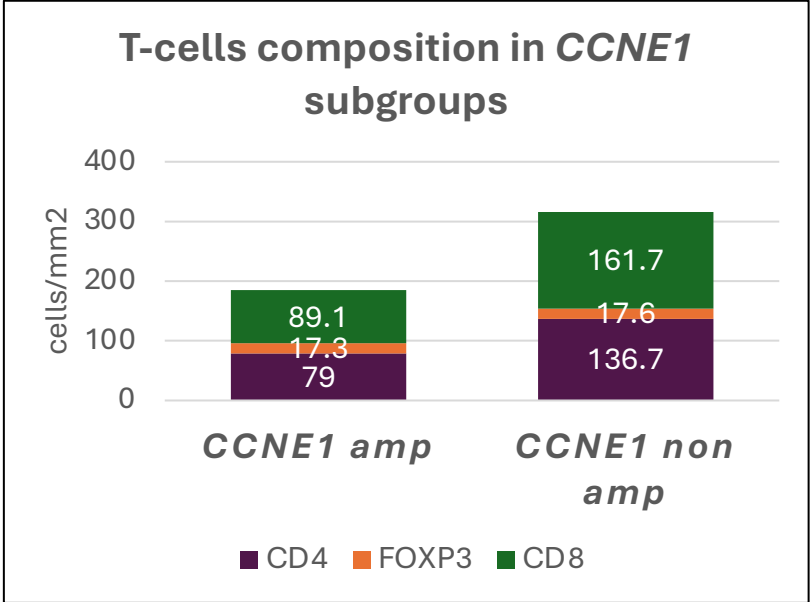
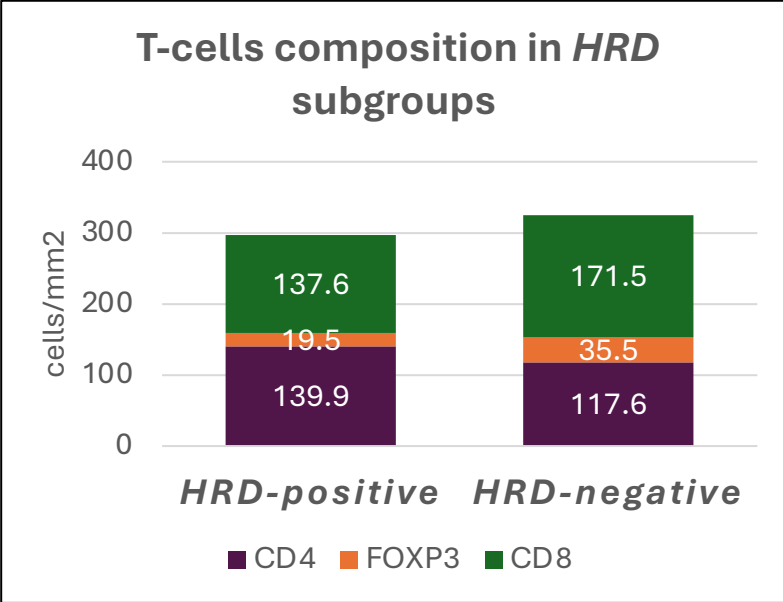
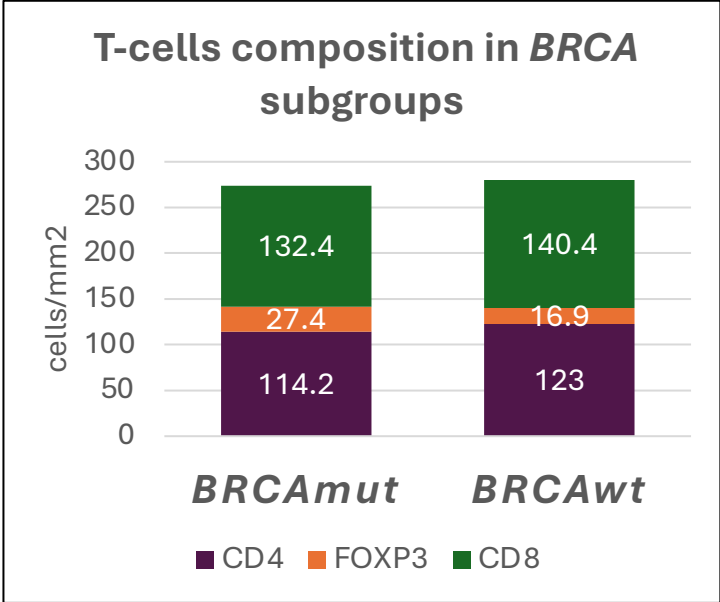


Supplementary Figure 1: Immunoprofiling for T-cells and surface according to *BRCA* subgroups, HRD subgroups and *CCNE1* subgroups.



Supplementary Table 1: Primary antibodies used in the multiplex panels for the detection of the the different immune populations

Antibody	Clone	Dilution	Pretreatment	Detection	Company
Cytokeratin	AE1/AE3	1/1000	CC1	Cy5	Dako
CD3	–	1/200	CC1	R6G	Dako
CD4	SP35	1/50,	CC1	Cy5	Abcam
CD8	SP16	1/50,	CC1	TS FAM	Spring Bioscience
FOXP3	SP97	1/100	CC1	R6G	Spring Bioscience
CD20	–	1/200	CC1	TS FAM	Dako
CD68	PG-M1	1/50,	CC1	Yellow	Dako
CD163	16D6	1/100	CC1	Purple	Diagnostic BioSystem
DC-LAMP	–	1/50,	CC1	DAB	Hozel

Supplementary Table 2: immunoprofiling for CD8, FOXP3 and DC-LAMP of BRCA mutated and BRCA wild-type patients

	BRCA Mut (N=32)	BRCA WT (N=109)	p value
CD8⁺ (cells/mm²)			0.822
- N	25	89	
- Median (Q1, Q3)	129.6 (39.2, 314.4)	114.9 (45.6, 239.2)	
ieCD8⁺ (cells/mm²)			0.778
- N	23	88	
- Median (Q1, Q3)	30.6 (17.1, 108.6)	27.6 (9.8, 73.6)	
sCD8⁺ (cells/mm²)			0.455
- N	23	88	
- Median (Q1, Q3)	88.7 (22.3, 211.0)	79.8 (34.3, 274.3)	
FOXP3⁺ (cells/mm²)			0.464
- N	25	84	
- Median (Q1, Q3)	27.4 (10.4, 70.7)	16.9 (5.1, 45.0)	
DC-LAMP (% of positive surface)			0.694
- N	26	87	
- Median (Q1, Q3)	3.6 (1.8, 6.4)	3.9 (1.6, 6.6)	

Supplementary Table 3: Immunoprofiling for CD8, FOXP3 and DC-LAMP of HRD-positive versus HRD-negative and GIS-intermediate patients

	HRD-positive (N=67)	HRD-negative (N=48)	Intermediate-GIS (N=21)	p value
CD8⁺ (cells/mm²)				0.962
- N	53	38	17	
- Median (Q1, Q3)	107.6 (39.2, 277.2)	131.9 (47.5, 334.0)	134.5 (48.7, 344.6)	
ieCD8⁺ (cells/mm²)				0.660
- N	51	38	16	
- Median (Q1, Q3)	27.4 (16.3, 90.9)	35.0 (9.9, 82.0)	26.4 (13.8, 64.0)	
sCD8⁺ (cells/mm²)				0.879
- N	51	38	16	
- Median (Q1, Q3)	88.7 (37.8, 235.7)	94.9 (42.5, 348.8)	60.3 (19.0, 209.5)	
FOXP3⁺ (cells/mm²)				0.962
- N	51	36	17	
- Median (Q1, Q3)	20.0 (6.4, 50.7)	19.5 (8.0, 41.3)	35.5 (9.2, 54.0)	
DC-LAMP (% of positive surface)				0.707
- N	53	38	17	
- Median (Q1, Q3)	3.8 (1.7, 6.0)	4.0 (1.3, 6.8)	4.7 (1.7, 8.7)	

Supplementary Table 4: Immunoprofiling for CD8, FOXP3 and DC-LAMP of CCNE1-amplified versus CCNE1-normal patients

	CCNE1 not amplified (N=118)	CCNE1 amplification (N=24)	p value
CD8⁺ (cells/mm²)			0.092
- N	93	21	
- Median (Q1, Q3)	129.6 (47.5, 297.3)	78.2 (41.4, 134.5)	
ieCD8⁺ (cells/mm²)			0.498
- N	90	21	
- Median (Q1, Q3)	28.6 (10.1, 87.4)	26.0 (15.9, 44.8)	
sCD8⁺ (cells/mm²)			0.034
- N	90	21	
- Median (Q1, Q3)	91.9 (36.4, 284.1)	64.3 (19.3, 113.0)	
FOXP3⁺ (cells/mm²)			0.845
- N	88	21	
- Median (Q1, Q3)	17.6 (4.4, 46.2)	17.3 (9.6, 47.7)	
DC-LAMP (% of positive surface)			0.775
- N	92	21	
- Median (Q1, Q3)	3.9 (1.7, 6.5)	4.0 (1.4, 5.6)	