

Table S3. Clinico-pathological characteristics of patients included in this study (Fig. 7g and S7i)

Patient ID	Sex	Age(y)	Diagnosis	ER	PR	HER2	Ki67	Histological classification	T stage	N stage	M stage	TNM
BC1	F	57	breast cancer	-	-	+	20%	HER2	2	1	0	IIB
BC2	F	71	breast cancer	-	-	+	30%	HER2	2	2	0	IIIA
BC3	F	69	breast cancer	-	-	+	30%	HER2	1	0	0	IA
BC4	F	48	breast cancer	-	-	+	40%	HER2	1	1	0	IIA
BC5	F	52	breast cancer	-	-	+	20%	HER2	2	0	0	IIA
BC6	F	59	breast cancer	-	-	+	60%	HER2	1	0	0	IA
BC7	F	62	breast cancer	-	-	+	20%	HER2	2	0	0	IIA
BC8	F	38	breast cancer	-	-	+	20%	HER2	4	0	0	IIIB
BC9	F	53	breast cancer	-	-	+	70%	HER2	1	0	0	IA
BC10	F	57	breast cancer	-	-	+	30%	HER2	2	1	0	IIB
BC11	F	67	breast cancer	-	-	+	40%	HER2	1	2	0	IIIA
BC12	F	61	breast cancer	-	-	+	80%	HER2	2	2	0	IIIA
BC13	F	57	breast cancer	-	-	+	20%	HER2	1	1	0	IIA
BC14	F	54	breast cancer	-	-	+	10%	HER2	2	0	0	IIA
BC15	F	51	breast cancer	-	-	+	80%	HER2	1	0	0	IA
BC16	F	57	breast cancer	-	-	+	15%	HER2	1	0	0	IA
BC17	F	62	breast cancer	-	-	+	30%	HER2	2	1	0	IIB
BC18	F	57	breast cancer	-	-	+	40%	HER2	1	1	0	IIA
BC19	F	62	breast cancer	-	-	+	15%	HER2	1	1	0	IIA
BC20	F	64	breast cancer	-	-	+	20%	HER2	2	0	0	IIA
BC21	F	48	breast cancer	+	+	-	10%	Luminal A	3	1	0	IIIA
BC22	F	62	breast cancer	+	-	-	5%	Luminal A	1	0	0	IA
BC23	F	90	breast cancer	+	+	-	5%	Luminal A	2	0	0	IIA
BC24	F	65	breast cancer	+	+	-	10%	Luminal A	2	0	0	IIA
BC25	F	69	breast cancer	+	+	-	5%	Luminal A	1	0	0	IA
BC26	F	64	breast cancer	+	-	-	5%	Luminal A	2	0	0	IIA
BC27	F	79	breast cancer	+	+	-	10%	Luminal A	1	0	0	IA
BC28	F	33	breast cancer	+	+	-	10%	Luminal A	1	2	0	IIIA
BC29	F	72	breast cancer	+	+	-	5%	Luminal A	2	0	0	IIA
BC30	F	55	breast cancer	+	+	-	0%	Luminal A	1	1	0	IIA
BC31	F	49	breast cancer	+	+	-	10%	Luminal A	1	1	0	IIA
BC32	F	46	breast cancer	+	-	-	15%	Luminal A	1	0	0	IA
BC33	F	48	breast cancer	+	+	-	10%	Luminal A	1	1	0	IIA
BC34	F	50	breast cancer	+	+	-	15%	Luminal A	1	0	0	IA
BC35	F	53	breast cancer	+	+	-	5%	Luminal A	1	1	0	IIA

BC36	F	71	breast cancer	+	+	-	5%	Luminal A	1	2	0	IIIA
BC37	F	63	breast cancer	+	-	-	10%	Luminal A	2	0	0	IIA
BC38	F	71	breast cancer	+	+	-	10%	Luminal A	2	1	0	IIB
BC39	F	75	breast cancer	+	+	-	5%	Luminal A	0	1	0	IIA
BC40	F	50	breast cancer	+	-	-	5%	Luminal A	0	2	0	IIIA
BC41	F	68	breast cancer	+	+	+	20%	Luminal B	2	2	0	IIIA
BC42	F	65	breast cancer	+	-	-	15%	Luminal B	1	0	0	IA
BC43	F	46	breast cancer	+	+	+	30%	Luminal B	1	0	0	IA
BC44	F	64	breast cancer	+	-	+	10%	Luminal B	1	1	0	IIA
BC45	F	71	breast cancer	+	-	+	5%	Luminal B	1	0	0	IA
BC46	F	49	breast cancer	+	+	+	20%	Luminal B	2	2	0	IIIA
BC47	F	56	breast cancer	+	+	-	80%	Luminal B	2	2	0	IIIA
BC48	F	67	breast cancer	+	-	+	10%	Luminal B	2	1	0	IIB
BC49	F	38	breast cancer	+	+	-	15%	Luminal B	2	1	0	IIB
BC50	F	66	breast cancer	+	+	+	40%	Luminal B	2	2	0	IIIA
BC51	F	55	breast cancer	+	+	-	30%	Luminal B	1	0	0	IA
BC52	F	54	breast cancer	+	+	-	20%	Luminal B	1	0	0	IA
BC53	F	68	breast cancer	+	+	+	20%	Luminal B	1	0	0	IA
BC54	F	75	breast cancer	+	-	-	30%	Luminal B	2	0	0	IIA
BC55	F	63	breast cancer	+	+	+	20%	Luminal B	1	0	0	IA
BC56	F	72	breast cancer	+	-	+	20%	Luminal B	2	0	0	IIA
BC57	F	65	breast cancer	+	+	-	50%	Luminal B	2	0	0	IIA
BC58	F	36	breast cancer	+	-	+	30%	Luminal B	1	1	0	IIA
BC59	F	50	breast cancer	+	+	-	40%	Luminal B	2	1	0	IIB
BC60	F	53	breast cancer	+	+	+	15%	Luminal B	2	2	0	IIIA
BC61	F	53	breast cancer	-	-	-	20%	TNBC	1	1	0	IIA
BC62	F	40	breast cancer	-	-	-	70%	TNBC	1	0	0	IA
BC63	F	44	breast cancer	-	-	-	40%	TNBC	1	3	0	IV
BC64	F	51	breast cancer	-	-	-	70%	TNBC	2	0	1	IIA
BC65	F	50	breast cancer	-	-	-	70%	TNBC	2	0	0	IIA
BC66	F	51	breast cancer	-	-	-	15%	TNBC	1	0	0	IA
BC67	F	62	breast cancer	-	-	-	30%	TNBC	1	0	0	IA
BC68	F	38	breast cancer	-	-	-	10%	TNBC	1	1	0	IIA
BC69	F	35	breast cancer	-	-	-	70%	TNBC	2	0	0	IIA
BC70	F	74	breast cancer	-	-	-	30%	TNBC	2	0	0	IIA
BC71	F	52	breast cancer	-	-	-	60%	TNBC	1	1	0	IIA
BC72	F	32	breast cancer	-	-	-	40%	TNBC	1	0	0	IA
BC73	F	76	breast cancer	-	-	-	5%	TNBC	3	3	0	IIIC

BC74	F	64	breast cancer	-	-	-	60%	TNBC	2	3	0	IIIC
BC75	F	81	breast cancer	-	-	-	40%	TNBC	2	2	0	IIIA
BC76	F	30	breast cancer	-	-	-	90%	TNBC	2	2	0	IIIA
BC77	F	50	breast cancer	-	-	-	40%	TNBC	2	0	0	IIA
BC78	F	63	breast cancer	-	-	-	70%	TNBC	1	1	0	IIA
BC79	F	38	breast cancer	-	-	-	80%	TNBC	1	0	0	IA
BC80	F	64	breast cancer	-	-	-	30%	TNBC	0	1	0	IIA
BN1	F	57	breast fibroadenoma									
BN2	F	37	breast fibroadenoma									
BN3	F	46	breast fibroadenoma									
BN4	F	41	breast fibroadenoma									
BN5	F	33	breast fibroadenoma									
BN6	F	45	breast fibroadenoma									
BN7	F	51	breast fibroadenoma									
BN8	F	57	breast fibroadenoma									
BN9	F	52	breast fibroadenoma									
BN10	F	56	breast fibroadenoma									
BN11	F	54	breast fibroadenoma									
BN12	F	43	breast fibroadenoma									
BN13	F	81	breast fibroadenoma									
BN14	F	62	breast fibroadenoma									
BN15	F	43	breast fibroadenoma									
BN16	F	60	breast fibroadenoma									
BN17	F	59	breast fibroadenoma									
BN18	F	60	breast fibroadenoma									
BN19	F	28	breast fibroadenoma									
BN20	F	26	breast fibroadenoma									