

S2 Table. Characteristic of the cohorts

	No. (%)
Breast	
Age, mean (yr)	54.6
Tumor size, mean (cm)	2.67
Sex	
Male	0
Female	1,073 (100)
Grade	
1	162 (15.1)
2	422 (39.3)
3	489 (45.6)
Histotype	
Invasive breast cancer-not otherwise specified	940 (87.6)
Invasive lobular cancer	27 (2.5)
Invasive micropapillary cancer	15 (1.4)
Papillary carcinoma	5 (0.5)
Medullary cancers	47 (4.3)
Metaplastic cancer	11 (1.0)
Mucinous cancer	9 (0.9)
Neuroendocrine cancer	6 (0.6)
Others ^{a)}	13 (1.2)
Molecular subtype	
Luminal A	487 (45.3)
Luminal B	322 (30.0)
HER2-OE	106 (9.9)
BLBC	66 (6.2)
5NP	82 (7.6)
Unknown	100 (9.3)

Pulmonary	
Age, mean (yr)	64.4
Tumor size, mean (cm)	3.99
Sex	
Male	208 (64.0)
Female	105 (32.3)
Unknown	12 (3.7)
Histotype	
Adenocarcinoma (AD)	194 (59.7)
Squamous cell carcinoma (SCC)	109 (33.5)
Adenosquamous carcinoma	9 (2.8)
Large cell lung cancer (LCC)	8 (2.5)
Lymphoepithelioma-like carcinoma (LELC)	2 (0.6)
Small cell lung cancer (SCLC)	2 (0.6)
Large cell neuroendocrine cancer (LCNEC)	1 (0.3)
Stage	
I	113 (34.8)
II	68 (20.9)
III	87 (26.8)
IV	44 (13.5)
Unknown	13 (4.0)
Smoking status	
Ex-smoker	136 (41.8)
Non-smoker	119 (36.6)
Smoker	37 (11.4)
Unknown	33 (10.2)
Ovarian	
Age, mean (yr)	50.7
Tumor size, mean (cm)	10.33

Histotype	
Serous adenocarcinoma	32 (32.0)
Endometrial carcinoma	30 (30.0)
Clear cell carcinoma	24 (24.0)
Others ^{b)}	14 (14.0)
Laterality	
Left	42 (38.9)
Right	34 (31.5)
Bilateral	32 (29.6)
FIGO staging	
I	60 (54.1)
II	35 (31.5)
III	15 (13.5)
IV	1 (0.9)
Gastric	
Age, mean (yr)	66.7
Sex	
Male	85 (64.9)
Female	46 (35.1)
Histotype	
Non-diffused	81 (61.8)
Diffused	50 (38.2)
Stage	
I	14 (10.7)
II	17 (13.0)
III	52 (39.7)
IV	46 (35.1)
Unknown	2 (1.5)
Colorectal	

Age, mean (cm)	68
Sex	
Male	86 (41.5)
Female	119 (57.5)
Unknown	2 (1.0)
Stage	
I	22 (10.6)
II	90 (43.5)
III	69 (33.3)
IV	22 (10.6)
Unknown	2 (1.0)

HER2-OE, HER2-overexpressed; BLBC, basal-like breast cancer; 5NP, quintuple negative; FIGO, International Federation of Gynecology and Obstetrics. ^{a)}Other miscellaneous histotypes included tubular cancer, tubular-lobular cancer and signet cell carcinoma, ^{b)}Other ovarian histotypes included mixed cell types with endometrial/mucinous/serous/papillary and clear cell carcinoma, signet ring cell carcinoma.