

Supplementary Table S11. Demographics and tumor type of the 1,229 line chemotherapy, anti-PD-(L)1, and chemotherapy + anti-PD-(L)1 validation cohort

Variable	Statistic	Overall n (%)	Chemo n (%)	anti-PD-(L)1 n (%)	Chemo + anti- PD-(L)1 n (%)
Age (yrs)	n median (IQR)	1,229 64 (56-72)	797 64 (55-71)	240 64 (58-73)	192 64 (57.5-72)
Sex	n (%)				
	Female	630 (51.3%)	411 (51.6%)	123 (51.2%)	96 (50.0%)
	Male	599 (48.7%)	386 (48.4%)	117 (48.7%)	96 (50.0%)
Race	n (%)				
	Asian	19 (1.5%)	14 (1.8%)	2 (0.8%)	3 (1.6%)
	Black or African American	112 (9.1%)	77 (9.7%)	18 (7.5%)	17 (8.9%)
	Other	22 (1.8%)	12 (1.5%)	6 (2.5%)	4 (2.1%)
	Unknown, Missing, or Not Reported	349 (28.4%)	226 (28.4%)	67 (27.9%)	56 (29.2%)
	White or Caucasian	727 (59.2%)	468 (58.7%)	147 (61.2%)	112 (58.3%)
Ethnicity	n (%)				
	Hispanic or Latino	22 (1.8%)	15 (1.9%)	1 (0.4%)	6 (3.1%)
	Not Hispanic or Latino	779 (63.4%)	511 (64.1%)	152 (63.3%)	116 (60.4%)
	Unknown, Missing, or Not Reported	428 (34.8%)	271 (34.0%)	87 (36.2%)	70 (36.5%)
Type of Therapy	n (%)				
	Chemo	797 (64.8%)	797 (100%)	0 (0%)	0 (0%)
	anti-PD-(L)1	240 (19.5%)	0 (0%)	240 (100.0%)	0 (0%)
	Chemo + anti-PD-(L)1	192 (15.6%)	0 (0%)	0 (0%)	192 (100%)
IRS Group	n (%)				
	Ultralow (UL)	345 (28.1%)	246 (30.9%)	46 (19.2%)	53 (27.6%)
	Intermediate Low (UL)	494 (40.2%)	332 (41.7%)	85 (35.4%)	77 (40.1%)
	High (H)	390 (31.7%)	219 (27.5%)	109 (45.4%)	62 (32.3%)
Line of Therapy	n (%)				
	1	916 (74.5%)	602 (75.5%)	168 (70.0%)	146 (76.0%)
	2	214 (17.4%)	129 (16.2%)	55 (22.9%)	30 (15.6%)
	3+	99 (8.1%)	66 (8.3%)	17 (7.1%)	16 (8.3%)
Primary Tumor Type	n (%)				
	Triple Negative Breast Cancer	276 (22.5%)	224 (28.1%)	13 (5.4%)	39 (20.3%)
	Esophagogastric Cancer	275 (22.4%)	229 (28.7%)	23 (9.6%)	23 (12.0%)
	Head and Neck Cancer	154 (12.5%)	110 (13.8%)	38 (15.8%)	6 (3.1%)
	Non-Small Cell Lung Cancer	422 (34.3%)	191 (24.0%)	144 (60.0%)	87 (45.3%)
	Small Cell Lung Cancer	102 (8.3%)	43 (5.4%)	22 (9.2%)	37 (19.3%)

Demographics and tumor types for all 1,229 included therapy lines (from 1,013 patients) in the chemotherapy (chemo), anti-PD-(L)1, or chemo + anti-PD-(L)1 validation cohort including age (in years), sex, self reported race, self reported ethnicity, the included line of systemic therapy, the type of therapy and IRS group (3 group classifier). The StrataNGS CGP assigned primary tumor type for each patient is provided. n= sample size, %= percentage, IQR = interquartile range.