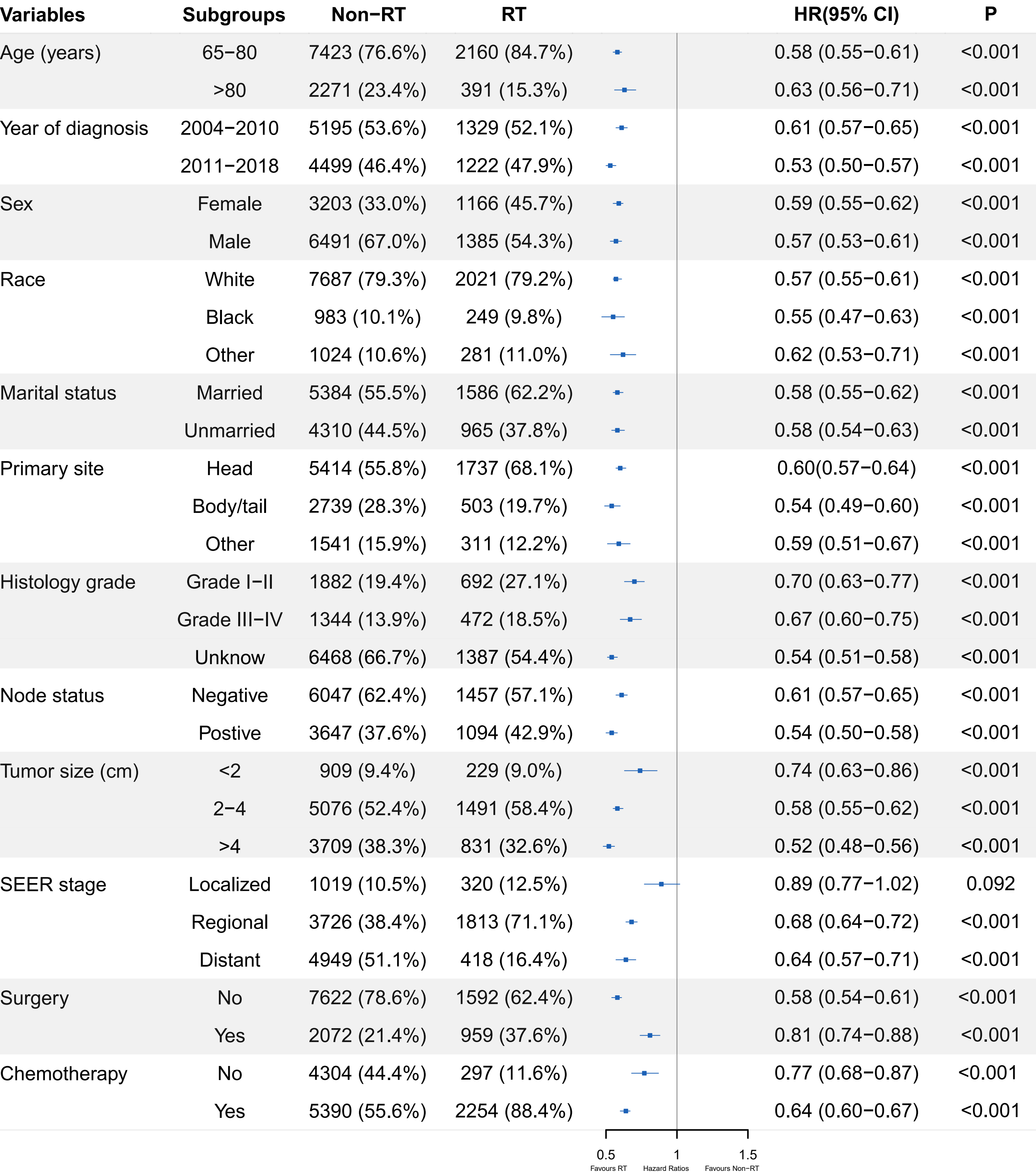


Supplement TABLE 1| Cox proportional hazards regression for overall survival and cancer-specific survival before propensity score matching.

Variables	Subgroups	Overall survival				Cancer-specific survival			
		Univariate analysis		Multivariate analysis		Univariate analysis		Multivariate analysis	
		Hazard ratio (95% CI)	P-value	Hazard ratio (95% CI)	P-value	Hazard ratio (95% CI)	P-value	Hazard ratio (95% CI)	P-value
Age (year)	65-80	Ref				Ref			
	>80	1.485 (1.419-1.554)	<0.001	0.994 (0.926-1.068)	0.875	1.468 (1.402-1.538)	<0.001	0.986 (0.916-1.061)	0.702
Year of diagnosis	2004-2010	Ref				Ref			
	2011-2018	0.928 (0.893-0.965)	<0.001	1.054 (0.978-1.136)	0.171	0.929 (0.893-0.967)	<0.001	1.061 (0.982-1.146)	0.131
Sex	Female	Ref				Ref			
	Male	0.981 (0.945-1.019)	0.321			0.968 (0.931-1.006)	0.098		
Race	White	Ref				Ref			
	Black	1.154 (1.084-1.229)	<0.001	1.138 (1.068-1.214)	<0.001	1.126 (1.055-1.201)	<0.001	1.106 (1.036-1.182)	0.003
	Other	1.020 (0.958-1.085)	0.539	1.031 (0.969-1.098)	0.328	1.017 (0.954-1.084)	0.604	1.030 (0.966-1.098)	0.364
Marital status	Married	Ref				Ref			
	Unmarried	1.225 (1.179-1.272)	<0.001	1.028 (0.988-1.070)	0.166	1.224 (1.177-1.272)	<0.001	1.029 (0.988-1.072)	0.165
Primary site	Head	Ref				Ref			
	Body/tail	1.236 (1.183-1.292)	<0.001	0.987 (0.942-1.034)	0.591	1.251 (1.195-1.308)	<0.001	0.991 (0.945-1.040)	0.713

	Other	1.277 (1.210-1.347)	<0.001	0.988 (0.935-1.044)	0.667	1.301 (1.232-1.374)	<0.001	0.999 (0.944-1.057)	0.967
Histology grade	Grade I-II	Ref				Ref			
	Grade III-IV	1.366 (1.280-1.458)	<0.001	1.336 (1.252-1.427)	<0.001	1.383 (1.293-1.479)	<0.001	1.343 (1.256-1.437)	<0.001
	Unknow	2.080 (1.980-2.186)	<0.001	1.124 (1.061-1.190)	<0.001	2.148 (2.041-2.261)	<0.001	1.129 (1.065-1.198)	<0.001
Node status	Negative	Ref				Ref			
	Positive	0.873 (0.840-0.907)	<0.001	1.147 (1.100-1.195)	<0.001	0.876 (0.842-0.912)	<0.001	1.159 (1.111-1.210)	<0.001
Tumor size (cm)	<2	Ref				Ref			
	2-4	1.456 (1.358-1.561)	<0.001	1.336 (1.244-1.434)	<0.001	1.482 (1.378-1.593)	<0.001	1.345 (1.250-1.448)	<0.001
	>4	1.883 (1.753-2.024)	<0.001	1.527 (1.415-1.648)	<0.001	1.933 (1.795-2.082)	<0.001	1.536 (1.420-1.662)	<0.001
SEER stage	Localized	Ref				Ref			
	Regional	1.024 (0.959-1.095)	0.475	1.383 (1.287-1.485)	<0.001	1.045 (0.975-1.119)	0.211	1.414 (1.313-1.523)	<0.001
	Distant	2.284 (2.137-2.442)	<0.001	2.155 (2.001-2.320)	<0.001	2.386 (2.227-2.557)	<0.001	2.220 (2.057-2.397)	<0.001
Surgery	No	Ref				Ref			
	Yes	0.314 (0.299-0.330)	<0.001	0.368 (0.346-0.392)	<0.001	0.297 (0.282-0.312)	<0.001	0.348 (0.326-0.372)	<0.001
Radiation	No	Ref				Ref			
	Yes	0.577 (0.550-0.604)	<0.001	0.862 (0.819-0.908)	<0.001	0.576 (0.548-0.604)	<0.001	0.867 (0.823-0.914)	<0.001
Chemotherapy	No	Ref				Ref			
	Yes	0.492 (0.473-0.512)	<0.001	0.456 (0.436-0.476)	<0.001	0.493 (0.474-0.513)	<0.001	0.450 (0.431-0.471)	<0.001

Supplementary Figure 1 Subgroup analysis of RT or non-RT for OS in elderly patients with PDAC before PSM



Supplementary Figure 2 Subgroup analysis of RT or non-RT for CSS in elderly patients with PDAC before PSM

Variables	Subgroups	Non-RT	RT		HR(95% CI)	P
Age (years)	65–80	7423 (76.6%)	2160 (84.7%)		0.58 (0.55–0.61)	<0.001
	>80	2271 (23.4%)	391 (15.3%)		0.64 (0.57–0.72)	<0.001
Year of diagnosis	2004–2010	5195 (53.6%)	1329 (52.1%)		0.6 (0.56–0.64)	<0.001
	2011–2018	4499 (46.4%)	1222 (47.9%)		0.54 (0.5–0.58)	<0.001
Sex	Female	3203 (33.0%)	1166 (45.7%)		0.59 (0.55–0.63)	<0.001
	Male	6491 (67.0%)	1385 (54.3%)		0.57 (0.53–0.61)	<0.001
Race	White	7687 (79.3%)	2021 (79.2%)		0.57 (0.54–0.6)	<0.001
	Black	983 (10.1%)	249 (9.8%)		0.55 (0.47–0.65)	<0.001
	Other	1024 (10.6%)	281 (11.0%)		0.63 (0.54–0.73)	<0.001
Marital status	Married	5384 (55.5%)	1586 (62.2%)		0.58 (0.54–0.62)	<0.001
	Unmarried	4310 (44.5%)	965 (37.8%)		0.58 (0.54–0.63)	<0.001
Primary site	Head	5414 (55.8%)	1737 (68.1%)		0.6 (0.57–0.64)	<0.001
	Body/tail	2739 (28.3%)	503 (19.7%)		0.53 (0.48–0.59)	<0.001
	Other	1541 (15.9%)	311 (12.2%)		0.59 (0.52–0.67)	<0.001
Histology grade	Grade I–II	1882 (19.4%)	692 (27.1%)		0.71 (0.65–0.79)	<0.001
	Grade III–IV	1344 (13.9%)	472 (18.5%)		0.66 (0.59–0.74)	<0.001
	Unknow	6468 (66.7%)	1387 (54.4%)		0.54 (0.51–0.58)	<0.001
Node status	Negative	6047 (62.4%)	1457 (57.1%)		0.61 (0.57–0.65)	<0.001
	Postive	3647 (37.6%)	1094 (42.9%)		0.53 (0.49–0.57)	<0.001
Tumor size (cm)	<2	909 (9.4%)	229 (9.0%)		0.75 (0.63–0.88)	0.001
	2–4	5076 (52.4%)	1491 (58.4%)		0.59 (0.55–0.63)	<0.001
	>4	3709 (38.3%)	831 (32.6%)		0.51 (0.47–0.56)	<0.001
SEER stage	Localized	1019 (10.5%)	320 (12.5%)		0.91 (0.79–1.05)	0.215
	Regional	3726 (38.4%)	1813 (71.1%)		0.68 (0.64–0.73)	<0.001
	Distant	4949 (51.1%)	418 (16.4%)		0.63 (0.57–0.7)	<0.001
Surgery	No	7622 (78.6%)	1592 (62.4%)		0.58 (0.54–0.61)	<0.001
	Yes	2072 (21.4%)	959 (37.6%)		0.82 (0.75–0.9)	<0.001
Chemotherapy	No	4304 (44.4%)	297 (11.6%)		0.78 (0.69–0.88)	<0.001
	Yes	5390 (55.6%)	2254 (88.4%)		0.63 (0.6–0.67)	<0.001

0.5

1

1.5

Favours RT

Hazard Ratios

Favours Non-RT