

Table S1. Cancer-specific survival, log-rank tests, and crude hazard ratios for each subgroup analysis.

Variable	Strata	Median Survival ¹ (95% CI)	1-Year Survival (95% CI)	2-Year Survival (95% CI)	5-Year Survival (95% CI)	Log-rank Test P-value	Crude Hazard Ratio (95% CI)
Age	<65 years	83.70 (70.78-NA)	0.857 (0.838-0.877)	0.715 (0.689-0.742)	0.561 (0.530-0.594)	<0.001	Ref (1.0)
	≥65 years	31.96 (29.65-34.42)	0.744 (0.730-0.759)	0.572 (0.556-0.589)	0.363 (0.345-0.383)		1.74 (1.57-1.92)
Sex	Male	31.00 (27.68-34.59)	0.746 (0.728-0.764)	0.564 (0.543-0.585)	0.378 (0.356-0.403)	<0.001	Ref (1.0)
	Female	45.50 (41.29-51.48)	0.797 (0.782-0.813)	0.649 (0.630-0.668)	0.448 (0.425-0.471)		0.81 (0.75-0.87)
Comorbidity	No	44.55 (40.34-52.70)	0.821 (0.805-0.838)	0.646 (0.625-0.668)	0.451 (0.426-0.478)	<0.001	Ref (1.0)
	Yes	33.24 (30.81-36.49)	0.737 (0.721-0.754)	0.581 (0.562-0.600)	0.388 (0.367-0.410)		1.24 (1.14-1.34)
Stage	IB	89.23 (77.19-NA)	0.900 (0.884-0.915)	0.797 (0.776-0.819)	0.577 (0.547-0.609)	<0.001	Ref (1.0)
	IIA	58.88 (44.65-74.93)	0.831 (0.802-0.860)	0.685 (0.650-0.723)	0.497 (0.455-0.542)		1.43 (1.24-1.64)
	IIB	41.06 (33.80-57.60)	0.788 (0.761-0.816)	0.628 (0.594-0.663)	0.443 (0.404-0.486)		1.70 (1.49-1.93)
	IIIA	18.84 (17.75-20.05)	0.645 (0.623-0.667)	0.423 (0.400-0.447)	0.246 (0.224-0.270)		2.98 (2.69-3.30)
Systemic therapy	No	34.59 (32.15-37.94)	0.738 (0.724-0.752)	0.585 (0.569-0.602)	0.397 (0.378-0.416)	<0.001	Ref (1.0)
	Yes	48.76 (42.71-60.92)	0.881 (0.863-0.900)	0.681 (0.654-0.710)	0.471 (0.438-0.505)		0.74 (0.67-0.81)
Surgery	No	18.64 (17.49-19.60)	0.642 (0.623-0.660)	0.418 (0.398-0.438)	0.197 (0.178-0.217)	<0.001	Ref (1.0)
	Yes	113.79 (113.00-NA)	0.928 (0.917-0.939)	0.834 (0.818-0.850)	0.662 (0.639-0.685)		0.24 (0.22-0.26)
Radiation therapy	No	55.33 (49.22-61.71)	0.795 (0.781-0.809)	0.665 (0.648-0.682)	0.487 (0.467-0.508)	<0.001	Ref (1.0)
	Yes	24.13 (22.98-25.78)	0.731 (0.710-0.753)	0.503 (0.479-0.529)	0.271 (0.245-0.299)		1.65 (1.52-1.78)
Systemic therapy in stage IB	No	89.23 (77.19-NA)	0.899 (0.883-0.915)	0.796 (0.775-0.818)	0.578 (0.547-0.611)	0.3	Ref (1.0)
	Yes	61.12 (34.68-NA)	0.926 (0.859-0.998)	0.823 (0.725-0.936)	0.545 (0.405-0.732)		1.27 (0.84-1.94)

Systemic therapy in stage IIA	No	39.98 (34.29-50.60)	0.776 (0.739-0.815)	0.624 (0.581-0.671)	0.431 (0.382-0.486)	<0.001	Ref (1.0)
	Yes	113.00 (89.33-NA)	0.967 (0.942-0.993)	0.837 (0.784-0.893)	0.655 (0.583-0.736)		0.45 (0.34-0.60)
Systemic therapy in stage IIB	No	32.61 (27.16-39.12)	0.745 (0.712-0.779)	0.579 (0.540-0.621)	0.380 (0.336-0.429)	<0.001	Ref (1.0)
	Yes	NA (87.25-NA)	0.920 (0.883-0.958)	0.779 (0.721-0.843)	0.652 (0.579-0.734)		0.43 (0.33-0.57)
Systemic therapy in stage IIIA	No	12.56 (11.44-13.84)	0.514 (0.485-0.544)	0.302 (0.275-0.331)	0.161 (0.137-0.188)	<0.001	Ref (1.0)
	Yes	36.33 (32.12-41.46)	0.845 (0.819-0.872)	0.605 (0.570-0.643)	0.375 (0.336-0.419)		0.43 (0.38-0.48)
Surgery and systemic therapy	Surgery only	NA (113.29-NA)	0.922 (0.908-0.935)	0.844 (0.826-0.863)	0.684 (0.657-0.712)	0.004	Ref (1.0)
	Both	102.90 (87.26-NA)	0.944 (0.926-0.962)	0.807 (0.776-0.840)	0.607 (0.564-0.653)		1.27 (1.08-1.49)
Surgery and systemic therapy in stage IB	Surgery only	NA (113.29-NA)	0.969 (0.957-0.981)	0.916 (0.897-0.936)	0.766 (0.731-0.803)	0.001	Ref (1.0)
	Both	61.12 (38.07-NA)	0.941 (0.865-1.000)	0.873 (0.763-0.998)	0.576 (0.408-0.813)		2.40 (1.39-4.15)
Surgery and systemic therapy in stage IIA	Surgery only	94.59 (80.48-NA)	0.909 (0.872-0.947)	0.818 (0.768-0.871)	0.685 (0.620-0.757)	0.2	Ref (1.0)
	Both	113.00 (NA-NA)	0.975 (0.951-0.999)	0.871 (0.819-0.925)	0.709 (0.635-0.791)		0.79 (95% CI: 0.54-1.14)
Surgery and systemic therapy in stage IIB	Surgery only	83.31 (70.78-NA)	0.908 (0.877-0.941)	0.813 (0.768-0.860)	0.610 (0.546-0.681)	0.05	Ref (1.0)
	Both	NA (NA-NA)	0.957 (0.926-0.989)	0.832 (0.772-0.896)	0.713 (0.635-0.801)		0.69 (95% CI: 0.47-1.00)
Surgery and systemic therapy in stage IIIA	Surgery only	43.04 (31.69-76.04)	0.758 (0.701-0.820)	0.619 (0.554-0.693)	0.449 (0.377-0.534)	0.03	Ref (1.0)
	Both	58.82 (43.69-92.22)	0.918 (0.885-0.951)	0.747 (0.695-0.803)	0.500 (0.436-0.573)		0.75 (95% CI: 0.58-0.97)

Ref: reference group for the subgroup hazard ratio analysis; CI: confidence interval; NA: too few deaths to estimate confidence interval.

¹ Median survival in months.

Table S2. Mean healthcare resource utilization per patient per year, calculated from diagnosis, among eNSCLC patients with stage I or II disease.

Construct	Outcome	Year 1 (n=3185)	Year 2 (n=2382)	Year 3 (n=1750)	Year 4 (n=1230)	Year 5 (n=857)
Hospitalizations	No. of Hospitalizations	1.43	0.63	0.5	0.49	0.47
	No. of Days Hospitalized	13.24	7.46	6.15	5.12	5.35
Ambulatory Care Services	No. of Encounters	12.34	7.96	7.08	6.72	6.2
	No. of Emergency Encounters	1.8	1.47	1.37	1.19	1.27
	No. of Non-emergency Encounters	10.53	6.49	5.72	5.53	4.93
Cancer Physician Visits	No. of Visits	3.05	1.84	1.64	1.46	1.26
	No. of Medical Oncologist Visits	1.35	0.94	0.92	0.81	0.76
	No. of Radiation Oncologist Visits	1.41	0.71	0.56	0.52	0.41
	No. of General/Family Practitioner Visits	0.08	0.05	0.06	0.03	0.02
	No. of Other Cancer Physician Visits	0.21	0.13	0.1	0.1	0.07
Non-cancer Practitioner Visits	No. of Encounters	34.33	23.95	21.81	20.5	21.22
	No. of Claims	70.19	41.38	37.38	35.43	36.66
	Final Claims Assessment Amount	8502.06	3494.62	2964.74	2767.04	2859.98
Radiation Therapy	No. of Days of Therapy	4.51	0.95	0.81	0.7	0.7

Chemotherapy Cycles	No. of Cycles	0.96	0.49	0.49	0.47	0.47
----------------------------	----------------------	------	------	------	------	------

Table S3. Mean healthcare resource utilization per patient per year, calculated from diagnosis, among eNSCLC patients with stage IIIA disease.

Construct	Outcome	Year 1 (n=1941)	Year 2 (n=1142)	Year 3 (n=647)	Year 4 (n=438)	Year 5 (n=272)
Hospitalizations	No. of Hospitalizations	1.31	0.77	0.54	0.48	0.41
	No. of Days Hospitalized	13.98	9.94	6.55	5.64	3.95
Ambulatory Care Services	No. of Encounters	11.17	6.79	6.49	5.66	6
	No. of Emergency Encounters	2.28	1.7	1.31	1.21	1.1
	No. of Non-emergency Encounters	8.89	5.09	5.18	4.45	4.9
Cancer Physician Visits	No. of Visits	7.35	4.13	3.65	3.21	3.19
	No. of Medical Oncologist Visits	3.56	2.65	2.58	2.28	2.41
	No. of Radiation Oncologist Visits	3.24	1.11	0.84	0.74	0.56
	No. of General/Family Practitioner Visits	0.22	0.13	0.05	0.06	0.06
	No. of Other Cancer Physician Visits	0.32	0.24	0.17	0.13	0.17
Non-cancer Practitioner Visits	No. of Encounters	32.46	23.83	20.56	18.4	19.42
	No. of Claims	64.7	42.79	35.87	32.86	33.4

	Final Claims Assessment Amount	6623.45	3376.97	2793.49	2585.1	2770.37
Radiation Therapy	No. of Days of Therapy	13.65	1.68	1.21	0.99	0.39
Chemotherapy Cycles	No. of Cycles	2.98	1.39	1.23	1.22	1

Table S4. Mean healthcare resource utilization per patient per year, calculated from diagnosis, among eNSCLC patients who received systemic therapy.

Construct	Outcome	Year 1 (n=1210)	Year 2 (n=986)	Year 3 (n=674)	Year 4 (n=470)	Year 5 (n=318)
Hospitalizations	No. of Hospitalizations	1.47	0.67	0.48	0.4	0.36
	No. of Days Hospitalized	11.16	7.5	5.63	4.19	3.75
Ambulatory Care Services	No. of Encounters	13.29	7.5	6.45	5.54	5.22
	No. of Emergency Encounters	2.33	1.61	1.21	0.94	0.88
	No. of Non-emergency Encounters	10.96	5.88	5.24	4.6	4.34
Cancer Physician Visits	No. of Visits	12.06	4.93	3.84	3.31	2.82
	No. of Medical Oncologist Visits	7.4	3.42	2.88	2.39	2.13
	No. of Radiation Oncologist Visits	3.74	1.07	0.77	0.72	0.55
	No. of General/Family Practitioner Visits	0.39	0.16	0.05	0.06	0.04
	No. of Other Cancer Physician Visits	0.52	0.28	0.13	0.14	0.1
Non-cancer Practitioner Visits	No. of Encounters	31.49	21.98	19.32	17.5	18.87

	No. of Claims	65.68	39.82	33.69	30.61	32.43
	Final Claims Assessment Amount	8162.62	3340.85	2692.73	2403.21	2578.78
Radiation Therapy	No. of Days of Therapy	18.63	1.73	1.23	1.19	0.55
Chemotherapy Cycles	No. of Cycles	7.2	1.81	1.37	1.37	0.97

Table S5. Mean healthcare resource utilization per patient per year, calculated from diagnosis, among eNSCLC patients who did not receive systemic therapy.

Construct	Outcome	Year 1 (n=3916)	Year 2 (n=2538)	Year 3 (n=1723)	Year 4 (n=1198)	Year 5 (n=811)
Hospitalizations	No. of Hospitalizations	1.36	0.68	0.52	0.53	0.5
	No. of Days Hospitalized	14.25	8.56	6.5	5.67	5.51
Ambulatory Care Services	No. of Encounters	11.46	7.61	7.11	6.8	6.52
	No. of Emergency Encounters	1.87	1.52	1.41	1.3	1.36
	No. of Non-emergency Encounters	9.59	6.1	5.7	5.5	5.15
Cancer Physician Visits	No. of Visits	2.4	1.67	1.53	1.38	1.3
	No. of Medical Oncologist Visits	0.58	0.75	0.78	0.73	0.77
	No. of Radiation Oncologist Visits	1.59	0.75	0.58	0.52	0.41
	No. of General/Family Practitioner Visits	0.06	0.05	0.06	0.03	0.02

	No. of Other Cancer Physician Visits	0.17	0.12	0.11	0.1	0.09
Non-cancer Practitioner Visits	No. of Encounters	34.28	24.66	22.32	20.91	21.54
	No. of Claims	68.86	42.62	38.26	36.38	37.22
	Final Claims Assessment Amount	7675.79	3501.43	3006.84	2843.26	2940.19
Radiation Therapy	No. of Days of Therapy	4.67	0.97	0.79	0.62	0.65
Chemotherapy Cycles	No. of Cycles	0.03	0.38	0.43	0.4	0.45