

**Table S1:** Full QOL Results (Pre and Post RATS).

Scale	Score	Before RATS	After RATS	p-value
QLQ-LC30				
GLOBAL HEALTH STATUS / QOL				
Global Health Status / QOL (QL2)	Raw score	5.20 +/- 1.27	5.48 +/- 1.02	0.113
	Final Score	70.04 +/- 21.19	74.65 +/- 17.02	
FUNCTIONAL SCALES				
Physical Functioning (PF2)	Raw score	1.42 +/- 0.59	1.38 +/- 0.51	0.616
	Final Score	86.10 +/- 19.80	87.38 +/- 17.04	
Role functioning (RF2)	Raw score	1.41 +/- 0.67	1.37 +/- 0.61	0.664
	Final Score	86.17 +/- 22.34	87.59 +/- 20.40	
Emotional Functioning (EF)	Raw score	1.46 +/- 0.56	1.19 +/- 0.50	<0.001
	Final Score	84.75 +/- 18.74	93.79 +/- 16.71	
Cognitive Functioning (CF)	Raw score	1.24 +/- 0.58	1.19 +/- 0.52	0.359
	Final Score	91.84 +/- 19.31	93.62 +/- 17.22	
Social Functioning (SF)	Raw score	1.35 +/- 0.63	1.29 +/- 0.58	0.459
	Final Score	88.30 +/- 21.11	90.43 +/- 19.27	
SYMPTOM SCALES / ITEMS				
Fatigue (FA)	Raw score	1.50 +/- 0.67	1.35 +/- 0.49	0.110
	Final Score	16.55 +/- 22.21	11.82 +/- 16.45	
Nausea and Vomiting (NV)	Raw score	1.05 +/- 0.21	1.10 +/- 0.29	0.323
	Final Score	1.77 +/- 7.15	3.19 +/- 9.60	
Pain (PA)	Raw score	1.53 +/- 0.72	1.45 +/- 0.58	0.315
	Final Score	17.73 +/- 23.93	14.89 +/- 19.42	
Dyspnoea (DY)	Raw score	1.40 +/- 0.71	1.74 +/- 0.82	0.017
	Final Score	13.48 +/- 23.73	24.82 +/- 27.34	
Insomnia (SL)	Raw score	1.53 +/- 0.78	1.36 +/- 0.64	0.059
	Final Score	17.73 +/- 25.87	12.06 +/- 21.34	
Appetite loss (AP)	Raw score	1.21 +/- 0.62	1.21 +/- 0.51	1.000
	Final Score	7.09 +/- 20.78	7.09 +/- 16.93	
Constipation (CO)	Raw score	1.21 +/- 0.55	1.13 +/- 0.34	0.323
	Final Score	7.09 +/- 18.31	4.26 +/- 11.24	
Diarrhoea (DI)	Raw score	1.17 +/- 0.56	1.19 +/- 0.65	0.710
	Final Score	5.67 +/- 18.80	6.38 +/- 21.58	
Financial difficulties (FI)	Raw score	1.30 +/- 0.72	1.28 +/- 0.71	0.323
	Final Score	9.93 +/- 23.99	9.22 +/- 23.78	
QLQ – LC13				
SYMPTOM SCALES / ITEMS				
Dyspnoea (LCDY)	Raw Score	1.43 +/- 0.678	1.46 +/- 0.60	0.649
	Final Score	14.18 +/- 22.31	15.37 +/- 19.87	
Coughing (LCCO)	Raw score	1.66 +/- 0.64	1.57 +/- 0.62	0.351
	Final Score	21.99 +/- 21.17	19.15 +/- 20.55	
Haemoptysis (LCHA)	Raw score	1.04 +/- 0.29	1 +/- 0	0.323
	Final Score	1.42 +/- 9.72	0 +/- 0	
Sore mouth (LCSM)	Raw score	1.04 +/- 0.20	1.02 +/- 0.15	0.323
	Final Score	1.42 +/- 6.80	0.71 +/- 4.86	
Dysphagia (LCDS)	Raw score	1.17 +/- 0.52	1.17 +/- 0.48	1.000
	Final Score	5.67 +/- 17.47	5.67 +/- 16.03	
Peripheral neuropathy (LCPN)	Raw score	1.21 +/- 0.59	1.19 +/- 0.58	0.569
	Final Score	7.09 +/- 19.58	6.38 +/- 19.21	
Alopecia (LCHR)	Raw score	1.23 +/- 0.56	1.15 +/- 0.47	0.044
	Final Score	7.80 +/- 18.67	4.96 +/- 15.51	
Pain in chest (LCPC)	Raw score	1.21 +/- 0.46	1.15 +/- 0.36	0.371
	Final Score	7.09 +/- 15.44	4.96 +/- 12.0	
Pain in arm or shoulder (LCPA)	Raw score	1.30 +/- 0.59	1.30 +/- 0.66	1.000
	Final Score	9.93 +/- 19.55	9.93 +/- 21.89	
Pain in other parts (LCPO)	Raw score	1.51 +/- 0.86	1.47 +/- 0.78	0.323
	Final Score	17.02 +/- 28.55	15.60 +/- 25.87	

**Table S2:** Full QOL Results ( RATS vs VATS vs Thoracotomy)

Scale	Score	Thoracotomy	VATS	RATS	p-value
QLQ-LC30					
GLOBAL HEALTH STATUS / QOL					
Global Health Status / QOL (QL2)	Raw score	5.00 +/- 1.58	4.97 +/- 1.43	5.43 +/- 1.06	0.176
	Final Score	66.67 +/- 26.35	66.24 +/- 23.76	73.76 +/- 17.63	
FUNCTIONAL SCALES					
Physical Functioning (PF2)	Raw score	1.78 +/- 0.75	1.72 +/- 0.68	1.42 +/- 0.51	0.020
	Final Score	73.94 +/- 25.11	75.95 +/- 22.63	86.10 +/- 16.90	
Role functioning (RF2)	Raw score	1.70 +/- 0.93	1.82 +/- 0.94	1.45 +/- 0.72	0.076
	Final Score	76.52 +/- 31.14	72.78 +/- 31.48	85.11 +/- 23.88	
Emotional Functioning (EF)	Raw score	1.61 +/- 0.68	1.66 +/- 0.80	1.22 +/- 0.51	0.003
	Final Score	79.76 +/- 22.60	77.99 +/- 26.56	92.79 +/- 17.02	
Cognitive Functioning (CF)	Raw score	1.45 +/- 0.52	1.58 +/- 0.65	1.22 +/- 0.52	0.007
	Final Score	84.92 +/- 17.40	80.77 +/- 21.67	92.55 +/- 17.31	
Social Functioning (SF)	Raw score	1.62 +/- 0.96	1.73 +/- 0.93	1.28 +/- 0.58	0.015
	Final Score	79.37 +/- 32.02	75.64 +/- 30.94	90.78 +/- 19.29	
SYMPTOM SCALES / ITEMS					
Fatigue (FA)	Raw score	2.28 +/- 0.78	2.02 +/- 0.90	1.46 +/- 0.57	<0.001
	Final Score	42.68 +/- 25.97	34.04 +/- 30.00	15.37 +/- 19.04	
Nausea and Vomiting (NV)	Raw score	1.20 +/- 0.37	1.20 +/- 0.42	1.13 +/- 0.32	0.540
	Final Score	6.82 +/- 12.24	6.75 +/- 14.00	4.26 +/- 10.69	
Pain (PA)	Raw score	1.64 +/- 0.54	1.72 +/- 0.87	1.49 +/- 0.59	0.264
	Final Score	21.21 +/- 17.95	23.84 +/- 28.95	16.31 +/- 19.81	
Dyspnoea (DY)	Raw score	2.27 +/- 0.98	2.10 +/- 0.90	1.77 +/- 0.81	0.046
	Final Score	42.42 +/- 32.82	36.71 +/- 30	25.53 +/- 27.11	
Insomnia (SL)	Raw score	1.82 +/- 1.10	1.75 +/- 0.99	1.45 +/- 0.77	0.164
	Final Score	27.27 +/- 36.57	24.89 +/- 33.11	14.89 +/- 25.83	
Appetite loss (AP)	Raw score	1.41 +/- 0.80	1.70 +/- 1.03	1.32 +/- 0.63	0.058
	Final Score	13.64 +/- 26.55	23.21 +/- 34.32	10.64 +/- 20.97	
Constipation (CO)	Raw score	1.50 +/- 0.86	1.49 +/- 0.78	1.21 +/- 0.51	0.088
	Final Score	16.67 +/- 28.64	16.46 +/- 26.08	7.09 +/- 16.93	
Diarrhoea (DI)	Raw score	1.38 +/- 0.80	1.18 +/- 0.48	1.23 +/- 0.70	0.403
	Final Score	12.70 +/- 26.82	5.98 +/- 15.89	7.80 +/- 23.27	
Financial difficulties (FI)	Raw score	1.24 +/- 0.70	1.19 +/- 0.54	1.26 +/- 0.71	0.863
	Final Score	7.94 +/- 23.34	6.49 +/- 17.97	8.51 +/- 23.54	
QLQ-LC13					
SYMPTOM SCALES / ITEMS					
Dyspnoea (LCDY)	Raw score	1.72 +/- 0.77	1.79 +/- 0.78	1.49 +/- 0.59	0.086
	Final Score	23.98 +/- 25.73	26.29 +/- 25.97	16.31 +/- 19.64	
Coughing (LCCO)	Raw score	2.10 +/- 0.83	1.85 +/- 0.82	1.6 +/- 0.65	0.036
	Final Score	36.51 +/- 27.70	28.44 +/- 27.23	19.86 +/- 21.6	
Haemoptysis (LCHA)	Raw score	1 +/- 0	1.03 +/- 0.23	1 +/- 0	0.639
	Final Score	0 +/- 0	0.89 +/- 7.70	0 +/- 0	
Sore mouth (LCSM)	Raw score	1.19 +/- 0.51	1.24 +/- 0.59	1.02 +/- 0.15	0.047
	Final Score	6.35 +/- 17.06	8.11 +/- 19.75	0.71 +/- 4.86	
Dysphagia (LCDS)	Raw score	1.01 +/- 0.30	1.19 +/- 0.48	1.19 +/- 0.50	0.699
	Final Score	3.17 +/- 10.03	6.22 +/- 16.16	6.38 +/- 16.5	
Peripheral neuropathy (LCPN)	Raw score	1.24 +/- 0.44	1.45 +/- 0.81	1.19 +/- 0.58	0.105
	Final Score	7.94 +/- 14.55	15.11 +/- 27.01	6.38 +/- 19.21	
Alopecia (LCHR)	Raw score	1.24 +/- 0.70	1.11 +/- 0.39	1.17 +/- 0.48	0.492
	Final Score	7.94 +/- 23.34	3.56 +/- 12.94	5.67 +/- 16.03	
Pain in chest (LCPC)	Raw score	1.52 +/- 0.51	1.29 +/- 0.63	1.19 +/- 0.40	0.073
	Final Score	17.46 +/- 17.06	9.78 +/- 21.06	6.38 +/- 13.26	
Pain in arm or shoulder (LCPA)	Raw score	1.52 +/- 0.75	1.47 +/- 0.86	1.4 +/- 0.80	0.837
	Final Score	17.46 +/- 24.99	15.77 +/- 28.79	13.48 +/- 26.61	
Pain in other parts (LCPO)	Raw score	1.75 +/- 1.02	1.93 +/- 1	1.62 +/- 0.95	0.233
	Final Score	25.00 +/- 33.98	31.02 +/- 33.25	20.57 +/- 31.51	