

Table 2: Multinomial logistic regression analysis for patient features and at what point in the lung cancer pathway was the patient assessed clustered by NHS Trusts (n=80,113)

	At what point was patient assessed (n=80,113)						Adjusted Relative risk ratio‡
	After diagnosis n=(34149)	%	Before/at diagnosis n=(42155)	%	Missing n=(3809)	%	Before/at diagnosis vs After diagnosis
Year							
2007	2345	7	3047	7	824	22	1†
2008	4977	15	5861	14	1397	37	0.87 (0.69 - 1.11)
2009	7968	23	9071	22	637	17	0.83 (0.63 - 1.08)
2010	9180	27	11167	26	594	16	0.87 (0.66 - 1.16)
2011	9679	28	13009	31	357	9	0.94 (0.71 - 1.24)
Sex							
Female	14963	44	18678	44	1628	43	1
Male	19186	56	23477	56	2181	57	0.97 (0.95 - 1.00)
Age							
<65	8801	26	11869	28	1045	27	1
65-75	11265	33	14584	35	1269	33	0.98 (0.93 - 1.02)
>75	14083	41	15702	37	1495	39	0.93 (0.88 - 0.98)
Performance status							
0	5236	15	8391	20	691	18	1†
1	9991	29	13951	33	795	21	0.97 (0.85 - 1.10)
2	6713	20	8203	19	525	14	0.93 (0.79 - 1.09)
3	5904	17	5957	14	393	10	0.83 (0.69 - 1.01)
4	1524	4	1460	3	114	3	0.83 (0.65 - 1.07)
Missing	4781	14	4193	10	1291	34	0.68 (0.56 - 0.82)
Stage							
IA-IB	3103	9	5308	13	368	10	1†
IIA-IIB	1811	5	2705	6	176	5	0.90 (0.83 - 0.97)
IIIA	3058	9	4250	10	282	7	0.94 (0.88 - 1.01)
IIIB	4063	12	4857	12	402	11	0.88 (0.80 - 0.96)
IV	13409	39	14987	36	1083	28	0.84 (0.78 - 0.90)
SCLC-Limited	1161	3	1692	4	80	2	1.00 (0.90 - 1.12)
SCLC-Extensive	2496	7	3142	7	154	4	0.91 (0.81 - 1.02)
Stage Unknown	5048	15	5214	12	1264	33	0.81 (0.71 - 0.92)
Charlson Index							
0	11281	33	13586	32	1265	33	1†
1	6799	20	8591	20	772	20	1.09 (1.03 - 1.15)
2-3	5997	18	7253	17	642	17	1.09 (1.03 - 1.16)
4+	10072	29	12725	30	1130	30	1.31 (1.22 - 1.41)
Townsend Quintile							
1 (Most affluent)	5379	16	6296	15	578	15	1
2	6369	19	7534	18	603	16	1.01 (0.93 - 1.11)
3	6780	20	8237	20	653	17	1.04 (0.94 - 1.15)
4	7204	21	8919	21	855	22	1.06 (0.93 - 1.20)
5 (Least affluent)	7729	23	10428	25	1083	28	1.20 (1.00 - 1.43)
Missing	688	2	741	2	37	1	1.07 (0.90 - 1.29)
Route of Referral							
Referred from GP	15995	47	22678	54	1736	46	1†
Emergency Admission	4910	14	4144	10	414	11	0.61 (0.52 - 0.71)
Referred from Consultant	7389	21	8522	20	642	17	0.76 (0.67 - 0.87)
Following A&E admission	2779	8	2216	5	315	8	0.57 (0.49 - 0.68)
Others	1954	6	3028	7	324	9	1.11 (0.79 - 1.56)
Missing	1122	3	1567	4	378	10	1.01 (0.73 - 1.38)
Treatment							
No treatment	12801	37	12906	31	1498	39	1†
Surgery	3565	10	7401	18	649	17	1.74 (1.54 - 1.96)
Chemo & radiotherapy	4119	12	5222	12	285	7	1.10 (0.95 - 1.27)
Chemo Only	7203	21	9126	22	762	20	1.12 (1.03 - 1.22)
Radiotherapy only	6461	19	7500	18	615	16	1.07 (0.98 - 1.17)
Trust Size (Annual)							
<175 pts	13240	39	16461	39	1064	28	1†
>=175 - <265 pts	10849	32	14072	33	1586	42	1.02 (0.67 - 1.55)
>= 265 pts	10060	29	11622	28	1159	30	0.85 (0.58 - 1.23)
Caseload							
<=150 cases	7860	23	10450	25	363	10	1
>150 - <=250 cases	18637	55	22109	52	2751	72	0.92 (0.58 - 1.45)
>250 cases	7652	22	9596	23	695	18	1.02 (0.60 - 1.73)
LCNS dealing with >50% work⁶							
Majority work 7 band	29245	86	35128	83	2569	67	1
Majority work 6 band	3842	11	5674	13	854	22	1.24 (0.75 - 2.05)
Majority work 8 band	1062	3	1353	3	386	10	0.99 (0.31 - 3.12)
LCNS Band							
All 7 band	16442	48	17775	42	1296	34	1
6,7&8 Bands	15121	44	18664	44	2023	53	1.17 (0.82 - 1.66)
7,8 Bands	2586	8	5716	14	490	13	2.09 (1.18 - 3.71)

Baseline group patients assessed after diagnosis

‡ Relative risk ratio adjusted for Trust/LCNS feature, year and patient features

† Significant p value for trends/likelihood ratio test (p<0.05)

⁶ Not Adjusted for other LCNS Band Variable