

# **NCA Lung QPI report**

Patients diagnosed from 1st January 2022 to 31st December 2022 Extracted from eCASE on 25/08/2023

### **Background**

Definitions for the QPIs reported in this section are published by Health Improvement Scotland1, while further information on datasets and measurability used are available from Information Services Division2. Data for most QPIs are presented by Board of diagnosis; however QPIs 7 and 13a (surgical mortality) are presented by Hospital of Surgery. QPI 17 (clinical trials and research access) is withdrawn from QPI reporting and will be reported on a national basis. Please note that where QPI definitions have been amended, results are not compared with those from previous years.

#### **Governance and Risk**

QPI performance is overseen by the North Cancer Alliance and its constituent groups, with an assessment of clinical risk and action planning undertaken collaboratively and reporting at board and regional level. Actions will be overseen by the Pathway Boards and reported concurrently into the NCA governance groups and the Clinical Commentary committees at each North of Scotland health boards.

#### Further information is available here.

The data contained within this report was extracted from eCASE. Cancer audit is a dynamic process with patient data continually being revised and updated as more information becomes available. This means that apparently comparable reports for the same time period and cancer site may produce different figures if extracted at different times.

\*Where the number of cases per Board is between one and four, results have been excluded from charts and tables to minimise the risk of disclosure. However, all board results are included within the total for the North of Scotland.

QPIs v4.1, Date Effective From 1 Jan 2021 onwards - published May 2022 Measurability v4.3, Date Effective From 1 Jan 2021 onwards

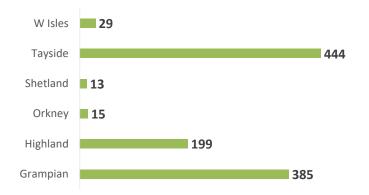
## **NCA Lung QPI Overview**



### **Patient overview**

Number of Patients in the NCA

1085



# QPI Performance overview (page 1 of 2)

		2022	vs Target	Num	Denom
MDT Discussion	QPI 1: Multi-Disciplinary Team (MDT) Meeting	98.0%	vs 95% 🗸	1063	1085
	QPI 2(i): Pathological diagnosis	79.2%	vs 80% 🔇	588	742
	QPI 2(ii): Pathological diagnosis of NSCLC - Tumour subtype identified	93.7%	vs 90% 🗸	517	552
Pathological diagnosis					
	QPI 2(iii): Pathological diagnosis of NSCLC - oncogenic mutation profiling undertaken	97.3%	vs 80% 🗸	283	291
	QPI 2(iv): Pathological diagnosis of NSCLC - PD-L1 testing undertaken	94.9%	vs 80% 🗸	373	393
PET CT	QPI 4: PET CT in patients being treated with curative intent	17.6%	vs 95% 🔀	36	204
Intrathoracic nodal staging	QPI 5: Invasive investigation of intrathoracic nodal staging	58.9%	vs 80% 🔀	43	73
Surgical resection	QPI 6(i): Surgical resection in NSCLC	21.6%	vs 20% 🗸	119	552
3. <b>3</b> . <b>3</b>	QPI 6(ii): Surgical resection in NSCLC - patients with stage I-II	75.2%	vs 60% 🗸	91	121
Lymph node assessment	QPI 7: Lymph node assessment	83.0%	vs 80% 🗸	44	53

# **NCA Lung QPI Overview**

	QPI Performance overview (Page 2 of 2)	2022	vs Target	Num	Denom
	QPI 11(i): SACT in NSCLC	51.9%	vs 35% 🕢	202	389
SACT in NSCLC	QPI 11(ii): SACT in NSCLC - Patients with stage IIIB & IV NSCLC that have an oncogenic driver mutation who receive targeted therapy	83.8%	vs 80% 🕢	31	37
	QPI 11(iii): SACT in NSCLC - Patients with stage IIIB & IV NSCLC with performance status 0-2 not undergoing surgery that are oncogene mutation negative who receive immunotherapy	45.6%	vs 40% 🗸	67	147
	QPI 12(i): Chemotherapy in SCLC - Chemotherapy ± radiotherapy	83.8%	vs 70% 🗸	67	80
Tuestments Chame 9	QPI 12(ii): Chemotherapy in SCLC - Palliative chemotherapy	80.9%	vs 50% 🗸	55	68
Treatments - Chemo & Radiotherapy	QPI 8: Radiotherapy in inoperable lung cancer		vs 35% 🗸	94	208
	QPI 9: Chemoradiotherapy in locally advanced NSCLC	84.2%	vs 50% 🗸	16	19
	QPI 10: Chemoradiotherapy in limited small stage small lung cancer	85.7%	vs 70% 🗸	6	7
	QPI 13(a): 30 Day Mortality following surgery	1.4%	vs < 5% 🗸	1	69
	QPI 13(a): 90 Day Mortality following surgery		vs < 5% 🕢	1	69
Mortality	QPI 13(b): 30 Day Mortality following radical radiotherapy	2.1%	vs < 5% 🕢	2	96
•	QPI 13(b): 90 Day Mortality following radical radiotherapy	8.4%	vs < 5% 🛭	8	95
	QPI 13(d): 30 day mortality following chemoradiotherapy	9.6%	vs < 5% 🔀	5	52
	QPI 13(d): 90 day mortality following chemoradiotherapy	15.7%	vs < 5% 🚫	8	51
SABR	QPI 14: SABR in inoperable stage I lung cancer	31.5%	vs 35% 🔀	34	108
Pre-treatment diagnosis	QPI 15(i): Pre-treatment diagnosis - surgical resection	70.2%	vs 75% 🚫	87	124
•	QPI 15(ii): Pre-treatment diagnosis - radical radiotherapy	56.8%	vs 75% 🔀	54	95
Brain Imaging	QPI 16: Brain Imaging	85.7%	vs 95% 🔇	48	56

3

# **QPI 1: Multi-Disciplinary Team (MDT) Meeting**



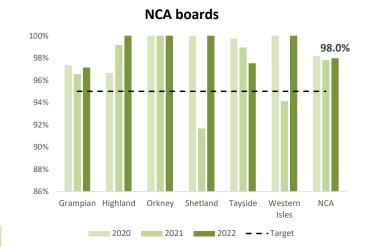
Patients with lung cancer should be discussed by a multidisciplinary team.

Description Proportion of patients with lung cancer who are discussed at the MDT meeting.

Number of patients with lung cancer discussed at the MDT meeting. Numerator

All patients with lung cancer. Denominator

Target	95%					
		2022	Num	Denom	2021	
2022	Grampian	97.1%	374	385	96.6%	
	Highland	100.0%	199	199	99.2%	
	Orkney	100.0%	15	15	100.0%	
	Shetland	100.0%	13	13	91.7%	
	Tayside	97.5%	433	444	98.9%	
	Western Isles	100.0%	29	29	94.1%	
	NCA	98.0%	1063	1085	97.8%	



Comments:

2020

97.3%

96.7%

100.0%

100.0%

99.7%

100.0% 98.2%

## QPI 2(i): Pathological diagnosis



Where possible patients should have a pathological diagnosis of lung cancer.

**Description** Proportion of patients who have a pathological diagnosis of lung cancer.

**Numerator** Number of patients with lung cancer who have a pathological diagnosis (including following surgical resection).

**Denominator** All patients with lung cancer. (Excluding patients who decline investigations or surgical resection and patients with performance status 3 or 4).

Target	80%					
		2022	Num	Denom	2021	2020
2022	Grampian	78.6%	206	262	78.3%	76.7%
	Highland	91.5%	130	142	85.2%	86.9%
	Orkney	54.5%	6	11	100.0%	50.0%
	Shetland	80.0%	8	10	66.7%	81.8%
	Tayside	74.0%	219	296	71.7%	71.8%
	Western Isles	90.5%	19	21	78.3%	92.9%
	NCA	79.2%	588	742	77.8%	77.3%

**Comments:** The NCA overall did not meet this QPI. This QPI has been audited; and where this has not been met has been due to patient specific reasons such as co-morbidities where biopsy for sampling were not possible or not best treatment.



# QPI 2(ii): Pathological diagnosis of NSCLC - Tumour subtype identified



Where possible patients should have a pathological diagnosis of lung cancer.

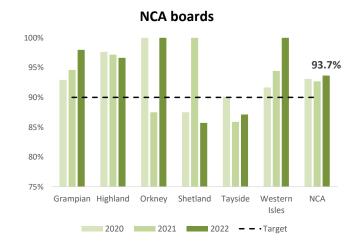
**Description** Proportion of patients with a pathological diagnosis of non small cell lung cancer (NSCLC) who have tumour subtype identified.

**Numerator** Number of patients with a pathological diagnosis of NSCLC who have a tumour subtype identified.

**Denominator** All patients with a pathological diagnosis of NSCLC.

Target	90%			
		2022	Num	Denom
2022	Grampian	98.0%	193	197
	Highland	96.6%	115	119
	Orkney	100.0%	6	6
	Shetland	85.7%	6	7
	Tayside	87.1%	176	202
	Western Isles	100.0%	21	21
	NCA	93.7%	517	552

<b>2020</b> 92.9%
92.9%
52.570
97.6%
100.0%
87.5%
90.1%
91.7%
93.1%



## QPI 2(iii): Pathological diagnosis of NSCLC - oncogenic mutation profiling undertaken



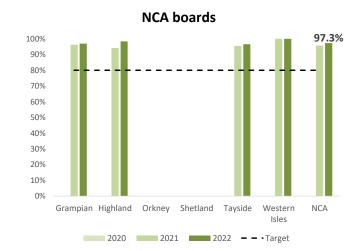
Where possible patients should have a pathological diagnosis of lung cancer.

**Description** Proportion of patients with a pathological diagnosis of non-squamous NSCLC who have oncogenic mutation profiling undertaken.

Numerator Number of patients with a pathological diagnosis of stage III - IV non-squamous NSCLC who have oncogenic mutation profiling undertaken.

**Denominator** All patients with a pathological diagnosis of stage III - IV non-squamous NSCLC.

	21 2020	
<b>2022</b> Num Denom <b>20</b> 2	21 2020	0
<b>2022</b> Grampian 97.0% 96 99 96.2	2% -	
Highland 98.4% 61 62 94.3	1% -	
Orkney	-	
Shetland	-	
Tayside 96.6% 112 116 95.5	5% -	
Western Isles 100.0% 8 8 100.0	- 0%	
NCA 97.3% 283 291 95.3	7% -	



# QPI 2(iv): Pathological diagnosis of NSCLC - PD-L1 testing undertaken



Where possible patients should have a pathological diagnosis of lung cancer.

**Description** Proportion of patients with a pathological diagnosis of NSCLC who have PD-L1 testing undertaken.

**Numerator** Number of patients with a pathological diagnosis of stage III - IV NSCLC who have PD-L1 testing undertaken.

**Denominator** All patients with a pathological diagnosis of stage III - IV NSCLC.

Target	80%			
		2022	Num	Denom
2022	Grampian	96.1%	123	128
	Highland	96.4%	81	84
	Orkney	-	-	-
	Shetland	-	-	-
	Tayside	92.5%	149	161
	Western Isles	100.0%	13	13
	NCA	94.9%	373	393

2021	2020
97.8%	97.7%
91.1%	83.5%
100.0%	-
-	100.0%
96.1%	89.4%
93.8%	83.3%
95.5%	91.1%



### **QPI 4: PET CT in patients being treated with curative intent**



Patients with lung cancer who are being treated with curative intent should have a PET CT Scan (Positron Emission Tomography –

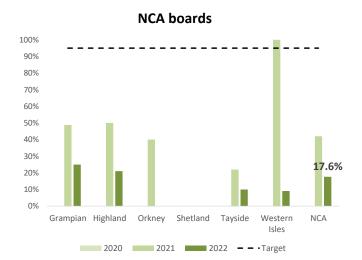
**Description** Proportion of patients with non small cell lung cancer (NSCLC) who receive curative treatment (radical radiotherapy, radical chemoradiotherapy or surgical resection) that undergo PET CT prior to start of treatment, where the report is available within 10 days of radiology request.

Numerator Number of patients with NSCLC who receive curative treatment (radical radiotherapy, radical chemoradiotherapy or surgical resection) that undergo PET CT prior to start of treatment where the report is available within 10 days of radiology request.

**Denominator** All patients with NSCLC who receive curative treatment (radical radiotherapy, radical chemoradiotherapy or surgical resection) that undergo PET CT prior to start of treatment.

Target	95%					
		2022	Num	Denom	2021	2020
2022	Grampian	25.0%	20	80	48.8%	-
	Highland	21.1%	8	38	50.0%	-
	Orkney	-	-	-	40.0%	-
	Shetland	-	-	-	-	-
	Tayside	10.0%	7	70	22.0%	-
	Western Isles	9.1%	1	11	100.0%	-
	NCA	17.6%	36	204	42.0%	-

**Comments:** The NCA as a whole failed to meet this target. The average time from request to PET CT throughout the North of Scotland Boards is 15 days, however in some cases delays were experienced due to festive holidays or patient illness. There are significant capacity challenges throughout the north of Scotland health boards in all areas of radiology which impacts the result of this ambitious target - where possible boards have implemented dedicated reporting slots for lung cancer patients.



Numerator

### QPI 5: Invasive investigation of intrathoracic nodal staging



#### Patients with non small cell lung cancer (NSCLC) with a possibility of mediastinal spread demonstrated on PET CT should undergo node

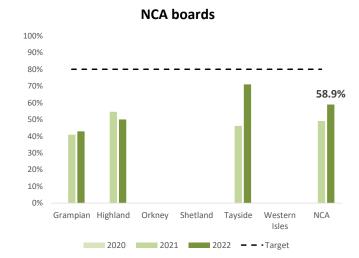
**Description** Proportion of patients with NSCLC undergoing treatment with curative intent who have a PET CT scan that shows enlarged or positive hilar / mediastinal / supraclavicular fossa (SCF) nodes, that have invasive nodal staging (assessment / sampling) performed and nodes sampled.

Number of patients with NSCLC undergoing treatment with curative intent who have a PET CT scan that shows enlarged or positive hilar (N1/N3), mediastinal (N2/N3) or SCF nodes (N3), that have invasive nodal staging (assessment / sampling) performed and nodes sampled.

**Denominator** All patients with NSCLC undergoing treatment with curative intent who have a PET CT scan that shows enlarged or positive hilar (N1/N3), mediastinal (N2/N3) or SCF nodes (N3).

Target	80%					
		2022	Num	Denom	2021	2020
2022	Grampian	42.9%	12	28	40.9%	-
	Highland	50.0%	5	10	54.5%	-
	Orkney	-	0	0	-	-
	Shetland	-	0	0	-	-
	Tayside	71.0%	22	31	46.2%	-
	Western Isles	-	-	-	-	-
	NCA	58.9%	43	73	49.0%	-

**Comments:** The NCA health boards overall have not met this QPI, however improvements have been made towards meeting this target. This QPI has been audited and discussed at local MDTs. A national discussion is being taken forward to regarding EBUS staging.



# **QPI 6(i): Surgical resection in NSCLC**



Patients with non small cell lung cancer (NSCLC) should undergo surgical resection.

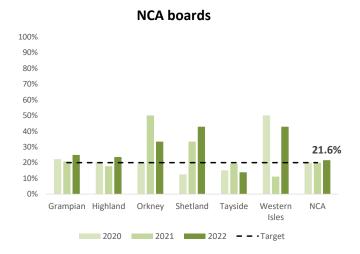
**Description** Proportion of patients who undergo surgical resection for NSCLC.

**Numerator** Number of patients with non small cell lung cancer (NSCLC) who undergo surgical resection.

**Denominator** All patients with non small cell lung cancer (NSCLC).

Target	20%					
		2022	Num	Denom	2021	2020
2022	Grampian	24.9%	49	197	20.8%	22.2%
	Highland	23.5%	28	119	17.7%	20.5%
	Orkney	33.3%	2	6	50.0%	20.0%
	Shetland	42.9%	3	7	33.3%	12.5%
	Tayside	13.9%	28	202	19.4%	15.1%
	Western Isles	42.9%	9	21	11.1%	50.0%
	NCA	21.6%	119	552	19.9%	19.9%

**Comments:** The NCA met this target overall, but in individual boards where the target was missed an audit of cases revealed that often this was patient choice for alternative therapies.



# QPI 6(ii): Surgical resection in NSCLC - patients with stage I-II



Patients with non small cell lung cancer (NSCLC) should undergo surgical resection.

**Description** Proportion of patients with stage I-II NSCLC who undergo surgical resection.

**Numerator** Number of patients with stage I-II (T1aN0- T2bN1, or T3N0) NSCLC, who undergo surgical resection.

**Denominator** All patients with stage I-II (T1aN0-T2bN1,or T3N0) NSCLC.

Target	60%					
		2022	Num	Denom	2021	2020
2022	Grampian	76.7%	33	43	67.3%	70.0%
	Highland	83.9%	26	31	77.8%	75.0%
	Orkney	-	0	0	-	-
	Shetland	-	-	-	-	-
	Tayside	62.2%	23	37	71.1%	73.1%
	Western Isles	85.7%	6	7	-	80.0%
	NCA	75.2%	91	121	71.5%	72.3%



## **QPI 7: Lymph node assessment**



In patients with non small cell lung cancer (NSCLC) undergoing surgery, adequate assessment of lymph nodes should be made.

**Description** Proportion of patients with NSCLC undergoing surgery who have adequate sampling of lymph nodes (at least 1 node from at least 3 N2 stations)

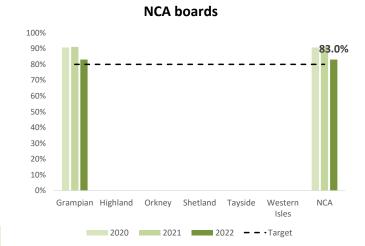
performed at time of resection or at previous mediastinoscopy.

Numerator Number of patients with NSCLC undergoing surgical resection by lobectomy or pneumonectomy that have at least 1 node from at least 3 N2 stations

sampled at time of resection or at previous mediastinoscopy.

**Denominator** All patients with NSCLC undergoing surgical resection by lobectomy or pneumonectomy.

Target	80%					
		2022	Num	Denom	2021	2020
2022	Grampian	83.0%	44	53	91.1%	90.7%
	Highland	-	0	0	-	-
	Orkney	-	0	0	-	-
	Shetland	-	0	0	-	-
	Tayside	-	0	0	-	-
	Western Isles	-	0	0	-	-
	NCA	83.0%	44	53	91.1%	90.7%



# **QPI 8: Radiotherapy in inoperable lung cancer**



Patients with lung cancer not undergoing surgery should receive radiotherapy ± chemotherapy, or stereotactic ablative radiotherapy

**Description** Proportion of patients with stage I - IIIA lung cancer not undergoing surgery who receive radiotherapy with radical intent (54Gy or greater) ±

chemotherapy, or SABR.

Number of patients with stage I - IIIAe lung cancer not undergoing surgery who receive radical radiotherapy (> 54Gy) ± chemotherapy, or SABR.

**Denominator** All patients with stage I - IIIA lung cancer not undergoing surgery.

Target	35%					
		2022	Num	Denom	2021	2020
2022	Grampian	37.1%	23	62	37.8%	33.8%
	Highland	36.0%	9	25	44.7%	41.4%
	Orkney	-	-	-	-	-
	Shetland	-	-	-	-	-
	Tayside	53.4%	62	116	50.5%	53.9%
	Western Isles	-	0	0	60.0%	-
	NCA	45.2%	94	208	45.6%	42.6%



## **QPI 9: Chemoradiotherapy in locally advanced NSCLC**



### Patients with locally advanced non small cell lung cancer (NSCLC) not undergoing surgery should receive potentially curative

**Description** Proportion of patients with stage IIIA NSCLCg, with performance status 0-1 not undergoing surgery who receive radical radiotherapy, to 54Gy or greater,

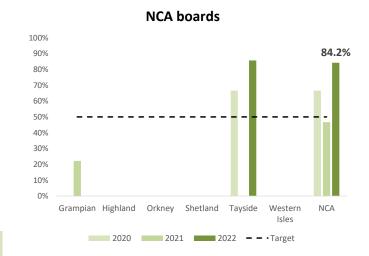
and concurrent or sequential chemotherapy.

Numerator Number of patients with stage IIIA NSCLC, with performance status 0-1, not undergoing surgery who receive chemoradiotherapy (radiotherapy > 54Gy

and concurrent or sequential chemotherapy).

**Denominator** All patients with stage IIIA NSCLC, with performance status 0-1, not undergoing surgery who receive radical radiotherapy > 54Gy.

Target	50%					
		2022	Num	Denom	2021	2020
2022	Grampian	-	-	-	22.2%	-
	Highland	-	-	-	-	-
	Orkney	-	0	0	-	-
	Shetland	-	0	0	-	-
	Tayside	85.7%	12	14	-	66.7%
	Western Isles	-	0	0	-	-
	NCA	84.2%	16	19	46.7%	66.7%



## **QPI 10: Chemoradiotherapy in limited small stage small lung cancer**



#### Patients with limited stage small cell lung cancer (SCLC) should receive platinum-based chemotherapy and (concurrent or sequential)

**Description** Proportion of patients with limited stage {stage I – IIIA(Patients with Tx N0-N1M0 disease will be included within the measurement of this QPI)} SCLC

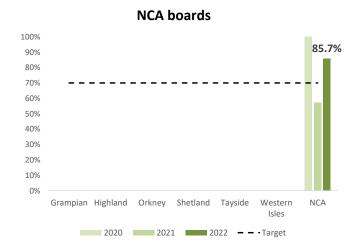
treated with radical intent who receive both platinum-based chemotherapy, and radiotherapy to 40Gy or greater.

Number of patients with stage I - IIIA SCLC, performance status 0 or 1 who receive chemoradiotherapy (radiotherapy > 40Gy and concurrent or

sequential platinum-based chemotherapy).

**Denominator** All patients with stage I – IIIAh SCLC, performance status 0 or 1.

Target	70%					
		2022	Num	Denom	2021	2020
2022	Grampian	-	-	-	-	-
	Highland	-	-	-	-	-
	Orkney	-	0	0	-	-
	Shetland	-	0	0	-	-
	Tayside	-	-	-	-	-
	Western Isles	-	0	0	-	-
	NCA	85.7%	6	7	57.1%	100.0%



# **QPI 11(i): SACT in NSCLC**



Patients with non small cell lung cancer (NSCLC) should receive systemic anti cancer therapy, where appropriate.

**Description** Proportion of patients with NSCLC not undergoing surgery who receive chemotherapy, targeted therapy, or immunotherapy where appropriate.

(i): Patients with NSCLC who receive systemic anti cancer therapy (SACT)

**Numerator** Number of patients with NSCLC not undergoing surgery who receive SACT.

**Denominator** All patients with NSCLC not undergoing surgery.

Target	35%					
		2022	Num	Denom	2021	2020
2022	Grampian	47.7%	63	132	42.4%	-
	Highland	58.8%	47	80	46.2%	-
	Orkney	-	-	-	-	-
	Shetland	-	-	-	-	-
	Tayside	52.7%	87	165	45.7%	-
	Western Isles	66.7%	4	6	33.3%	-
	NCA	51.9%	202	389	44.1%	-



### QPI 11(ii): SACT in NSCLC



#### Patients with non small cell lung cancer (NSCLC) should receive systemic anti cancer therapy, where appropriate.

**Description** Proportion of patients with NSCLC not undergoing surgery who receive chemotherapy, targeted therapy, or immunotherapy where appropriate. (ii):

Patients with stage IIIB - IV NSCLC that have an oncogenic driver mutation who receive targeted therapy.

Number of patients with stage IIIB – IVi NSCLC, with performance status 0-2 not undergoing surgery that have an oncogenic driver mutation who receive

targeted therapy.

**Denominator** All patients with stage IIIB – IVi NSCLC, with performance status 0-2 not undergoing surgery that have an oncogenic driver mutation.

Target	80%					
		2022	Num	Denom	2021	2020
2022	Grampian	86.7%	13	15	100.0%	-
	Highland	100.0%	8	8	83.3%	-
	Orkney	-	0	0	-	-
	Shetland	-	0	0	-	-
	Tayside	71.4%	10	14	90.0%	-
	Western Isles	-	0	0	-	-
	NCA	83.8%	31	37	88.9%	-



### QPI 11(iii): SACT in NSCLC



Patients with non small cell lung cancer (NSCLC) should receive systemic anti cancer therapy, where appropriate.

**Description** Proportion of patients with NSCLC not undergoing surgery who receive chemotherapy, targeted therapy, or immunotherapy where appropriate. (iii):

Patients with stage IIIB – IV NSCLC with performance status 0-2 not undergoing surgery that are oncogene mutation negative who receive

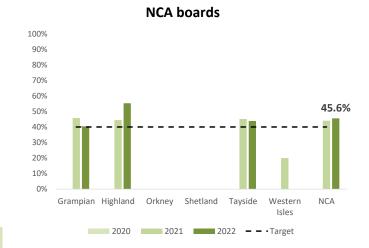
2020

Numerator Number of patients with stage IIIB – IV NSCLC, with performance status 0-2 not undergoing surgery that are oncogene mutation negative who receive

immunotherapy.

**Denominator** All patients with stage IIIB – IV NSCLC, with performance status 0-2 not undergoing surgery that are oncogene mutation negative.

Target	40%					
		2022	Num	Denom	2021	
2022	Grampian	40.4%	19	47	45.8%	
	Highland	55.3%	21	38	44.4%	
	Orkney	-	-	-	-	
	Shetland	-	-	-	-	
	Tayside	43.9%	25	57	45.2%	
	Western Isles	-	-	-	20.0%	
	NCA	45.6%	67	147	44.0%	



# QPI 12(i): Chemotherapy in SCLC - Chemotherapy ± radiotherapy



Patients with small cell lung cancer (SCLC) should receive chemotherapy. (v4.3).

**Description** Proportion of patients with SCLC who receive first line chemotherapy ± radiotherapy.

**Numerator** Number of patients with SCLC who receive first line chemotherapy ± radiotherapy.

**Denominator** All patients with SCLC.

Target	70%					
		2022	Num	Denom	2021	2020
2022	Grampian	90.0%	27	30	74.2%	74.4%
	Highland	87.5%	14	16	95.2%	84.0%
	Orkney	-	0	0	-	-
	Shetland	-	-	-	-	-
	Tayside	75.0%	24	32	75.0%	72.7%
	Western Isles	-	-	-	-	-
	NCA	83.8%	67	80	81.5%	76.4%



# QPI 12(ii): Chemotherapy in SCLC - Palliative chemotherapy



Patients with small cell lung cancer (SCLC) should receive chemotherapy (v4.3).

**Description** Proportion of patients with SCLC not undergoing treatment with curative intent who receive palliative chemotherapy.

**Numerator** Number of patients with SCLC not undergoing treatment with curative intent who receive palliative chemotherapy.

**Denominator** All patients with SCLC not undergoing treatment with curative intent.

Target	50%			
		2022	Num	Denom
2022	Grampian	87.5%	21	24
	Highland	86.7%	13	15
	Orkney	-	0	0
	Shetland	-	-	-
	Tayside	70.4%	19	27
	Western Isles	-	-	-
	NCA	80.9%	55	68

2020
71.0%
78.9%
-
-
60.0%
-
70.1%



# QPI 13(a): 30 Day Mortality following surgery



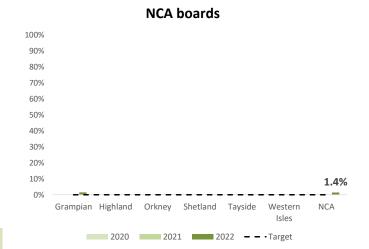
Mortality following treatment for lung cancer (surgery).

**Description** Proportion of patients with lung cancer who receive treatment with curative intent who die within 30 or 90 days of treatment.

Numerator Number of patients with lung cancer who receive treatment with curative intent (surgery) who die within 30 / 90 days of treatment.

**Denominator** All patients lung cancer who receive surgery.

Target	< 5%					
		2022	Num	Denom	2021	2020
2022	Grampian	1.5%	1	68	-	-
	Highland	-	0	0	-	-
	Orkney	-	0	0	-	-
	Shetland	-	0	0	-	-
	Tayside	-	-	-	-	-
	Western Isles	-	0	0	-	-
	NCA	1.4%	1	69	-	-



# QPI 13(a): 90 Day Mortality following surgery



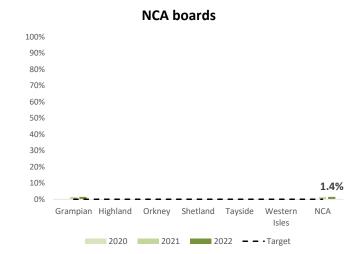
Mortality following treatment for lung cancer (surgery).

**Description** Proportion of patients with lung cancer who receive treatment with curative intent who die within 30 or 90 days of treatment.

Numerator Number of patients with lung cancer who receive treatment with curative intent (surgery) who die within 30 / 90 days of treatment.

**Denominator** All patients lung cancer who receive surgery.

Target	< 5%					
		2022	Num	Denom	2021	2020
2022	Grampian	1.5%	1	68	1.3%	-
	Highland	-	0	0	-	-
	Orkney	-	0	0	-	-
	Shetland	-	0	0	-	-
	Tayside	-	-	-	-	-
	Western Isles	-	0	0	-	-
	NCA	1.4%	1	69	1.3%	-



# QPI 13(b): 30 Day Mortality following radical radiotherapy



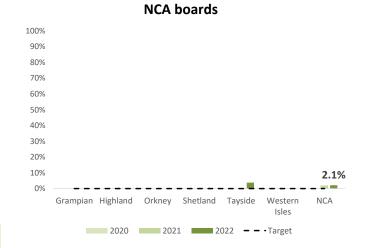
Mortality following treatment for lung cancer (radical radiotherapy).

**Description** Proportion of patients with lung cancer who receive treatment with curative intent who die within 30 or 90 days of treatment.

Numerator Number of patients with lung cancer who receive treatment with curative intent (radical radiotherapy) who die within 30 / 90 days of treatment.

**Denominator** All patients lung cancer who receive radical radiotherapy.

Target	< 5%					
		2022	Num	Denom	2021	2020
2022	Grampian	0.0%	0	30	-	-
	Highland	0.0%	0	11	-	-
	Orkney	-	0	0	-	-
	Shetland	-	0	0	-	-
	Tayside	3.8%	2	53	-	-
	Western Isles	-	-	-	-	-
	NCA	2.1%	2	96	1.8%	-



## **QPI 13(b): 90 Day Mortality following radical radiotherapy**



Mortality following treatment for lung cancer (radical radiotherapy).

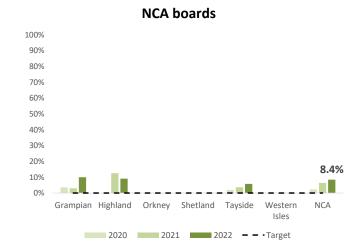
**Description** Proportion of patients with lung cancer who receive treatment with curative intent who die within 30 or 90 days of treatment.

Numerator Number of patients with lung cancer who receive treatment with curative intent (radical radiotherapy) who die within 30 / 90 days of treatment.

**Denominator** All patients lung cancer who receive radical radiotherapy.

Target	< 5%					
		2022	Num	Denom	2021	2020
2022	Grampian	10.0%	3	30	2.9%	3.6%
	Highland	9.1%	1	11	12.5%	-
	Orkney	-	0	0	-	-
	Shetland	-	0	0	-	-
	Tayside	5.8%	3	52	3.7%	2.0%
	Western Isles	-	-	-	-	-
	NCA	8.4%	8	95	6.4%	2.3%

**Comments:** Overall the NCA health boards did not meet this target. Cases have been review at a local level as part of standard governance procedures.



## QPI 13(d): 30 day mortality following chemoradiotherapy



Mortality following treatment for lung cancer (chemoradiotherapy).

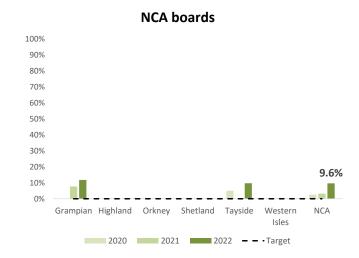
**Description** Proportion of patients with lung cancer who receive treatment with curative intent who die within 30 or 90 days of treatment.

Numerator Number of patients with lung cancer who receive treatment with curative intent (chemoradiotherapy) who die within 30 / 90 days of treatment.

**Denominator** All patients lung cancer who receive chemoradiotherapy.

Target	< 5%					
		2022	Num	Denom	2021	2020
2022	Grampian	11.8%	2	17	7.7%	-
	Highland	-	-	-	-	-
	Orkney	-	0	0	-	-
	Shetland	-	0	0	-	-
	Tayside	9.7%	3	31	-	5.0%
	Western Isles	-	0	0	-	-
	NCA	9.6%	5	52	3.2%	2.6%

**Comments:** Overall the NCA health boards did not meet this target. Cases have been review at a local level as part of standard governance procedures.



# QPI 13(d): 90 day mortality following chemoradiotherapy



Mortality following treatment for lung cancer (chemoradiotherapy).

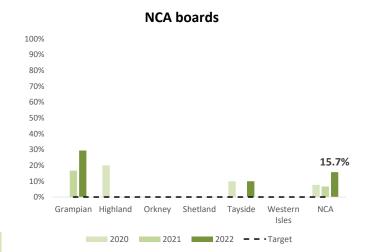
**Description** Proportion of patients with lung cancer who receive treatment with curative intent who die within 30 or 90 days of treatment.

Numerator Number of patients with lung cancer who receive treatment with curative intent (chemoradiotherapy) who die within 30 / 90 days of treatment.

**Denominator** All patients lung cancer who receive chemoradiotherapy.

Target	< 5%					
		2022	Num	Denom	2021	2020
2022	Grampian	29.4%	5	17	16.7%	-
	Highland	-	-	-	-	20.0%
	Orkney	-	0	0	-	-
	Shetland	-	0	0	-	-
	Tayside	10.0%	3	30	-	10.0%
	Western Isles	-	0	0	-	-
	NCA	15.7%	8	51	6.7%	7.7%

**Comments:** Overall the NCA health boards did not meet this target. Cases have been review at a local level as part of standard governance procedures.



## **QPI 14: SABR in inoperable stage I lung cancer**



Patients with inoperable stage I lung cancer should receive stereotactic ablative radiotherapy (SABR).

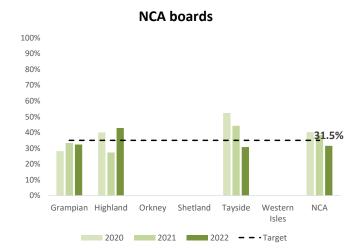
**Description** Proportion of patients with stage I lung cancer not undergoing surgery who receive SABR.

**Numerator** All patients with stage I lung cancer not undergoing surgery who receive SABR.

**Denominator** All patients with stage I lung cancer not undergoing surgery.

Target	35%					
		2022	Num	Denom	2021	2020
2022	Grampian	32.4%	11	34	33.3%	28.1%
	Highland	42.9%	3	7	27.3%	40.0%
	Orkney	-	0	0	-	-
	Shetland	-	-	-	-	-
	Tayside	30.8%	20	65	44.2%	52.4%
	Western Isles	-	0	0	-	-
	NCA	31.5%	34	108	38.4%	40.2%

**Comments:** The NCA as a whole narrowly missed this QPI target. Audits have been undertaken locally which highlights that in some cases patients were not deemed suitable/fit for SABR and proceeded with alternative treatment options.



## QPI 15(i): Pre-treatment diagnosis - surgical resection



Patients should have a cytological / histological diagnosis prior to definitive treatment (surgery).

**Description** Proportion of patients who receive curative treatment that have a cytological/histological diagnosis prior to radical radiotherapy( frozen section is

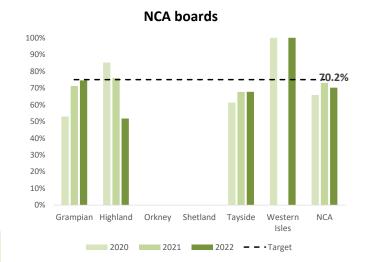
included within the definition of pre-operative histology).

Number of patients who receive curative treatment (surgical resection) that have a cytological/histological diagnosis prior to treatment.

**Denominator** All patients with lung cancer who receive curative treatment (surgical resection).

Target	75%					
		2022	Num	Denom	2021	2020
2022	Grampian	74.5%	38	51	71.2%	52.9%
	Highland	51.7%	15	29	76.0%	85.2%
	Orkney	-	-	-	-	-
	Shetland	-	-	-	-	-
	Tayside	67.7%	21	31	67.6%	61.3%
	Western Isles	100.0%	8	8	-	100.0%
	NCA	70.2%	87	124	73.0%	65.8%

**Comments:** The NCA as a whole narrowly missed this QPI target. Cases have been audited at a board level, and where the target was not reached this was due to patient specific reasons such as not amenable to biopsy or biopsy was inconclusive.



### QPI 15(ii): Pre-treatment diagnosis - radical radiotherapy



Patients should have a cytological / histological diagnosis prior to definitive treatment (radical radiotherapy).

**Description** Proportion of patients who receive curative treatment that have a cytological/histological diagnosis prior to radical radiotherapy( frozen section is

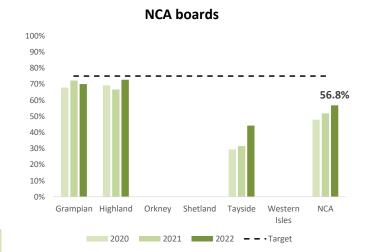
included within the definition of pre-operative histology).

**Numerator** All patients who receive curative treatment (radical radiotherapy) that have a cytological/histological diagnosis prior to treatment.

**Denominator** All patients who receive curative treatment (radical radiotherapy).

Target	75%						
		2022	Num	Denom	2021	2	020
2022	Grampian	70.0%	21	30	72.2%	6	7.9%
	Highland	72.7%	8	11	66.7%	6	9.2%
	Orkney	-	0	0	-		-
	Shetland	-	0	0	-		-
	Tayside	44.2%	23	52	31.5%	2	9.4%
	Western Isles	-	-	-	-		-
	NCA	56.8%	54	95	51.8%	4	7.9%

**Comments:** Overall the NCA failed to meet this QPI target, the QPI has been audited locally; and it was found that where boards did not meet the target there were patient specific reasons as to why sampling was not attempted, or why attempted sampling was unsuccessful.



### **QPI 16: Brain Imaging**



#### Patients with N2 disease who are undergoing curative treatment should have brain imaging performed prior to commencing definitive

**Description** Proportion of patients with N2 disease who receive curative treatment (radical radiotherapy, radical chemoradiotherapy or surgical resection) that undergo contrast enhanced CT or contrast enhanced MRI prior to start of definitive treatment.

Numerator Number of patients with N2 disease who receive curative treatment (radical radiotherapy, radical chemoradiotherapy or surgical resection) that undergo contrast enhanced CT or contrast enhanced MRI prior to start of definitive treatment.

**Denominator** All patients with N2 disease who receive curative treatment (radical radiotherapy, radical chemoradiotherapy or surgical resection).

Target	95%					
		2022	Num	Denom	2021	2020
2022	Grampian	94.1%	16	17	80.0%	60.0%
	Highland	85.7%	6	7	40.0%	-
	Orkney	-	0	0	-	-
	Shetland	-	0	0	-	-
	Tayside	85.2%	23	27	90.9%	71.4%
	Western Isles	60.0%	3	5	-	-
	NCA	85.7%	48	56	75.8%	68.6%

90%
80%
70%
60%
40%
30%
20%
Grampian Highland Orkney Shetland Tayside Western Isles
2020 2021 2022 - - Target

**NCA** boards

**Comments:** The NCA as a whole have failed to meet this target however an overall improvement can be noted. Overall there patient cohort is small numbers and where the target was not met it has been audited at board level.