

Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

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SUPPLEMENTAL APPENDIX

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Supplement to: **Results of the Two Incidence Screens of the National Lung Screening Trial**
The National Lung Screening Trial Research Team.

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Rules Determining the Presence or Absence of Lung Cancer

Measures of diagnostic and predictive accuracy at T1 and T2 rounds were derived using data only from participants who had adequate screening exams in the respective rounds, and for whom lung cancer status was known. For each dichotomous (positive vs. negative) screening result, lung cancer was classified as present or not present at the time of the screen as follows. Lung cancer was considered to be present at the time of a screen if the lung cancer diagnosis was documented during the interval from the screen to either the next screen or within a one-year period following the screen, whichever came first. For positive screens, lung cancer was considered present at the time of the screen if a lung cancer diagnosis was documented during any period in which the participant had no further screening, but a sequence of diagnostic procedures prompted by the screen with no time gap between consecutive procedures greater than one year.

A screen was classified as having been done in the absence of lung cancer if none of the above criteria were satisfied and at least one of the following was satisfied:

1. The participant had a subsequent screen,
2. The participant received at least one screen-prompted diagnostic procedure (clinical evaluation at a minimum),
3. The participant died, the death was certified by the NLST Endpoint Verification Process and there was no documentation of a diagnosis of lung cancer,
4. The participant responded to a survey at least 300 days after the screen and reported that lung cancer had not been diagnosed, or
5. The participant had a documented diagnosis of lung cancer more than one year after the screen.

Screening results that could not be categorized as above were classified as having an unknown lung cancer status.

Supplemental Table S1: Screening Test Performance Characteristics by Screening Round and Trial Arm

Study Year	Arm	Performance Characteristic	N / Total	Estimate (%)	Confidence Interval (%)
T1	LDCT	Sensitivity	168/178	94.4	90.8 to 97.6
T1	LDCT	Specificity	17788/24516	72.6	72.0 to 73.1
T1	LDCT	PPV	168/6896	2.4	2.1 to 2.8
T1	LDCT	NPV	17788/17798	99.9	99.9 to 100.0
T1	CXR	Sensitivity	65/109	59.6	50.0 to 69.0
T1	CXR	Specificity	22521/23937	94.1	93.8 to 94.4
T1	CXR	PPV	65/1481	4.4	3.3 to 5.5
T1	CXR	NPV	22521/22565	99.8	99.7 to 99.9
T2	LDCT	Sensitivity	211/227	93.0	89.7 to 96.3
T2	LDCT	Specificity	19968/23806	83.9	83.4 to 84.3
T2	LDCT	PPV	211/4049	5.2	4.6 to 5.9
T2	LDCT	NPV	19968/19984	99.9	99.9 to 100.0
T2	CXR	Sensitivity	78/122	63.9	55.2 to 72.1
T2	CXR	Specificity	22067/23161	95.3	95.0 to 95.6
T2	CXR	PPV	78/1172	6.7	5.2 to 8.2
T2	CXR	NPV	22067/22111	99.8	99.7 to 99.9

Abbreviations: T1 = T1 screen; T2 = T2 screen; LDCT = low dose computed tomography; CXR = chest x-ray arm; PPV = positive predictive value; NPV = negative predictive value.

Note: 95% confidence intervals were calculated with a resampling method.

Supplemental Table S2a: T1 Lung Cancer Status by Trial Arm, Sex, Age, Race, and Ethnicity

T1 Screens	Study Arm									
	LDCT					CXR				
	Eligible	Screened		Lung Cancer		Eligible	Screened		Lung Cancer	
	N	N	% of eligible	N	% of screened	N	N	% of eligible	N	% of screened
All	26,285	24,715	94.0	178	0.7	26,410	24,089	91.2	109	0.5
Sex										
Male	15,486	14,612	94.4	106	0.7	15,558	14,314	92.0	67	0.5
Female	10,799	10,103	93.6	72	0.7	10,852	9775	90.1	42	0.4
Age(years)										
≤ 54 ¹	1	1	100.0	0	0.0	4	3	75.0	0	0.0
55-59	11,308	10,572	93.5	39	0.4	11,339	10,295	90.8	27	0.3
60-64	8057	7611	94.5	64	0.8	8108	7393	91.2	39	0.5
65-69	4653	4411	94.8	48	1.1	4672	4312	92.3	27	0.6
70-74	2265	2119	93.6	27	1.3	2284	2084	91.2	16	0.8
≥ 75 ¹	1	1	100.0	0	0.0	3	2	66.7	0	0.0
Race										
White	23,895	22,620	94.7	164	0.7	23,992	22,039	91.9	100	0.5
Black or African-American	1176	1027	87.3	10	1.0	1154	991	85.9	6	0.6
Asian	551	514	93.3	1	0.2	530	492	92.8	2	0.4
American Indian or Alaskan Native	90	81	90.0	1	1.2	96	85	88.5	0	0.0
Native Hawaiian or Other Pacific Islander	87	71	81.6	0	0.0	101	89	88.1	0	0.0
More than one race	329	311	94.5	1	0.3	340	305	89.7	1	0.3
Refused	57	52	91.2	0	0.0	52	47	90.4	0	0.0
Unknown	100	39	39.0	1	2.6	145	41	28.3	0	0.0
Ethnicity										
Hispanic or Latino	468	436	93.2	1	0.2	451	407	90.2	2	0.5
Neither Hispanic nor Latino	25,662	24,186	94.2	176	0.7	25,732	23,573	91.6	107	0.5
Refused	5	5	100.0	0	0.0	1	0	0.0	0	0.0
Unknown	150	88	58.7	1	1.1	226	109	48.2	0	0.0

¹ Ineligible but included in analysis

Supplemental Table S2b: T2 Lung Cancer Status by Trial Arm, Sex, Age, Race, and Ethnicity

T2 Screens	Study Arm									
	LDCT					CXR				
	Eligible	Screened		Lung Cancer		Eligible	Screened		Lung Cancer	
	N	N	% of eligible	N	% of screened	N	N	% of eligible	N	% of screened
All	25,942	24,102	92.9	227	0.9	26,110	23,346	89.4	122	0.5
Sex										
Male	15,261	14,223	93.2	140	1.0	15,345	13,890	90.5	71	0.5
Female	10,681	9879	92.5	87	0.9	10,765	9456	87.8	51	0.5
Age (Years)										
≤ 54 ¹	1	1	100.0	0	0.0	4	3	75.0	0	0.0
55-59	11,221	10,376	92.5	69	0.7	11,262	9969	88.5	31	0.3
60-64	7941	7421	93.5	66	0.9	8012	7189	89.7	35	0.5
65-69	4571	4267	93.3	61	1.4	4600	4165	90.5	29	0.7
70-74	2207	2036	92.3	31	1.5	2229	2017	90.5	27	1.3
≥ 75 ¹	1	1	100.0	0	0.0	3	3	100.0	0	0.0
Race										
White	23,580	22,077	93.6	208	0.9	23,723	21,366	90.1	112	0.5
Black or African-American	1156	1000	86.5	12	1.2	1135	956	84.2	8	0.8
Asian	548	497	90.7	3	0.6	524	475	90.6	1	0.2
American Indian or Alaskan Native	89	73	82.0	2	2.7	95	83	87.4	0	0.0
Native Hawaiian or Other Pacific Islander	85	69	81.2	1	1.4	101	83	82.2	1	1.2
More than one race	328	296	90.2	1	0.3	337	293	86.9	0	0.0
Refused	57	51	89.5	0	0.0	52	45	86.5	0	0.0
Unknown	99	39	39.4	0	0.0	143	45	31.5	0	0.0
Hispanic ethnicity										
Hispanic or Latino	466	423	90.8	1	0.2	447	396	88.6	0	0.0
Neither Hispanic nor Latino	25,323	23,588	93.1	225	1.0	25,438	22,840	89.8	120	0.5
Refused	5	5	100.0	0	0.0	1	0	0.0	0	0.0
Unknown	148	86	58.1	1	1.2	224	110	49.1	2	1.8

¹ Ineligible but included in analysis

Supplemental Table S3a. Diagnostic Follow-up of T1 Positive Screens by Study Arm and Lung Cancer Diagnosis

Diagnostic Procedure ¹	Low Dose Computed Tomography Arm						Chest X-ray Arm					
	Confirmed lung cancer ²		No confirmed lung cancer ³		Total		Confirmed lung cancer ²		No confirmed lung cancer ³		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Any diagnostic follow-up	168	100.0	3698	56.3	3866	57.4	65	100.0	1013	72.8	1078	74.0
Clinical procedure	158	94.0	3032	46.1	3190	47.3	61	93.8	662	47.6	723	49.7
Imaging exam	155	92.3	2365	36.0	2520	37.4	64	98.5	904	65.0	968	66.5
CXR	51	30.4	562	8.6	613	9.1	28	43.1	353	25.4	381	26.2
Chest CT	111	66.1	1935	29.4	2046	30.4	59	90.8	686	49.3	745	51.2
FDG PET or FDG PET/CT	112	66.7	238	3.6	350	5.2	51	78.5	54	3.9	105	7.2
Percutaneous cytology or biopsy	47	28.0	27	0.4	74	1.1	27	41.5	10	0.7	37	2.5
Transthoracic	37	22.0	23	0.3	60	0.9	21	32.3	10	0.7	31	2.1
Extrathoracic	13	7.7	4	0.1	17	0.3	6	9.2	0	0.0	6	0.4
Bronchoscopy	103	61.3	75	1.1	178	2.6	37	56.9	19	1.4	56	3.8
Surgical procedure	145	86.3	52	0.8	197	2.9	43	66.2	8	0.6	51	3.5
Mediastinoscopy/mediastinotomy	26	15.5	6	0.1	32	0.5	10	15.4	2	0.1	12	0.8
Thoracoscopy	40	23.8	16	0.2	56	0.8	6	9.2	5	0.4	11	0.8
Thoracotomy	120	71.4	28	0.4	148	2.2	39	60.0	5	0.4	44	3.0
Other procedures	18	10.7	78	1.2	96	1.4	17	26.2	16	1.2	33	2.3
Total participants with positive screens with documented follow-up ⁴	168	100.0	6572	100.0	6740	100.0	65	100.0	1391	100.0	1456	100.0

¹ Numbers refer to the number of participants who received any procedure included in the diagnostic procedure category at least once.

² Confirmed lung cancers do not include the following participants diagnosed with lung cancer during the T1 study year: 32 participants not screened at T1, 10 with negative LDCT screens at T1 and 44 with negative CXR screens at T1.

³ 'No Confirmed Lung Cancer' includes participants with a negative or unknown lung cancer status.

⁴ This table excludes positive screenees for whom information on diagnostic follow-up procedures was incomplete (161 LDCT and 26 CXR).

Supplemental Table S3b. Diagnostic Follow-up of T2 Positive Screens by Study Arm and Lung Cancer Diagnosis

Diagnostic Procedure ¹	Low Dose Computed Tomography Arm						Chest X-ray Arm					
	Confirmed lung cancer ²		No confirmed lung cancer ³		Total		Confirmed lung cancer ²		No confirmed lung cancer ³		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Any diagnostic follow-up	211	100.0	2311	62.4	2522	64.5	78	100.0	879	82.1	957	83.3
Clinical procedure	198	93.8	1953	52.8	2151	55.0	70	89.7	588	54.9	658	57.3
Imaging exam	201	95.3	1808	48.8	2009	51.3	75	96.2	831	77.6	906	78.9
CXR	80	37.9	570	15.4	650	16.6	24	30.8	341	31.8	365	31.8
Chest CT	147	69.7	1461	39.5	1608	41.1	72	92.3	640	59.8	712	62.0
FDG PET or FDG PET/CT	156	73.9	237	6.4	393	10.0	63	80.8	50	4.7	113	9.8
Percutaneous cytology or biopsy	69	32.7	24	0.6	93	2.4	38	48.7	14	1.3	52	4.5
Transthoracic	54	25.6	20	0.5	74	1.9	31	39.7	12	1.1	43	3.7
Extrathoracic	20	9.5	4	0.1	24	0.6	9	11.5	4	0.4	13	1.1
Bronchoscopy	113	53.6	74	2.0	187	4.8	44	56.4	18	1.7	62	5.4
Surgical procedure	175	82.9	44	1.2	219	5.6	52	66.7	15	1.4	67	5.8
Mediastinoscopy/mediastinotomy	22	10.4	3	0.1	25	0.6	16	20.5	5	0.5	21	1.8
Thoracoscopy	74	35.1	22	0.6	96	2.5	14	17.9	6	0.6	20	1.7
Thoracotomy	138	65.4	26	0.7	164	4.2	38	48.7	6	0.6	44	3.8
Other procedures	29	13.7	34	0.9	63	1.6	13	16.7	21	2.0	34	3.0
Total participants with positive screens with documented follow-up ⁴	211	100.0	3702	100.0	3913	100.0	78	100.0	1071	100.0	1149	100.0

¹ Numbers refer to the number of participants who received any procedure included in the diagnostic procedure category at least once.

² Confirmed lung cancers do not include the following participants who were diagnosed with lung cancer during the T2 study year: 32 participants who were not screened at T2, 16 with negative LDCT screens at T2, and 44 with negative CXR screens at T2.

³ 'No Confirmed Lung Cancer' includes participants with a negative or unknown lung cancer status.

⁴ This table excludes positive screenees for whom information on diagnostic follow-up procedures was incomplete (141 LDCT and 25 CXR).

Supplemental Table S4: Maximum Diameter of Largest Nodule Observed on a Positive Screen by Stage of Non-Small Cell Lung Cancer¹

Maximum diameter of largest nodule on screening exam		LDCT														CXR													
		Stage of cancer														Stage of cancer													
		IA		IB		IIA		IIB		IIIA		IIIB		IV		IA		IB		IIA		IIB		IIIA		IIIB		IV	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Positive screen at T1 round	< 4 mm	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	6.3
	4-10 mm	32	37.2	6	33.3	3	30.0	4	66.7	5	45.5	0	0.0	3	23.1	3	15.0	1	11.1	0	0.0	1	50.0	0	0.0	0	0.0	4	25.0
	11-20 mm	43	50.0	7	38.9	5	50.0	1	16.7	3	27.3	3	37.5	4	30.8	11	55.0	1	11.1	2	50.0	0	0.0	1	16.7	0	0.0	4	25.0
	21-30 mm	6	7.0	5	27.8	1	10.0	0	0.0	1	9.1	3	37.5	4	30.8	5	25.0	1	11.1	1	25.0	1	50.0	3	50.0	1	100.0	2	12.5
	> 30 mm	3	3.5	0	0.0	0	0.0	0	0.0	1	9.1	2	25.0	2	15.4	0	0.0	4	44.4	0	0.0	0	0.0	2	33.3	0	0.0	3	18.8
	Largest Diameter Unknown	1	1.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	22.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	No Nodule Observed	1	1.2	0	0.0	1	10.0	1	16.7	1	9.1	0	0.0	0	0.0	1	5.0	0	0.0	1	25.0	0	0.0	0	0.0	0	0.0	2	12.5
	Total	86	100.0	18	100.0	10	100.0	6	100.0	11	100.0	8	100.0	13	100.0	20	100.0	9	100.0	4	100.0	2	100.0	6	100.0	1	100.0	16	100.0
Positive screen at T2 round	< 4 mm	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	10.0	0	0.0	0	0.0	0	0.0	1	11.1	0	0.0
	4-10 mm	42	38.2	7	25.0	4	66.7	1	50.0	5	38.5	2	15.4	4	28.6	6	23.1	0	0.0	1	16.7	0	0.0	1	11.1	0	0.0	5	45.5
	11-20 mm	49	44.5	10	35.7	2	33.3	1	50.0	5	38.5	5	38.5	4	28.6	11	42.3	2	20.0	0	0.0	0	0.0	2	22.2	1	11.1	2	18.2
	21-30 mm	12	10.9	4	14.3	0	0.0	0	0.0	1	7.7	1	7.7	2	14.3	7	26.9	2	20.0	4	66.7	0	0.0	3	33.3	1	11.1	2	18.2
	> 30 mm	4	3.6	6	21.4	0	0.0	0	0.0	1	7.7	3	23.1	4	28.6	0	0.0	0	0.0	0	0.0	0	0.0	1	11.1	1	11.1	0	0.0
	Largest Diameter Unknown	0	0.0	1	3.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	7.7	3	30.0	1	16.7	0	0.0	1	11.1	0	0.0	0	0.0
	No Nodule Observed	3	2.7	0	0.0	0	0.0	0	0.0	1	7.7	2	15.4	0	0.0	0	0.0	2	20.0	0	0.0	0	0.0	1	11.1	5	55.6	2	18.2
	Total	110	100.0	28	100.0	6	100.0	2	100.0	13	100.0	13	100.0	14	100.0	26	100.0	10	100.0	6	100.0	0	0.0	9	100.0	9	100.0	11	100.0

¹ Table excludes all small cell lung cancers.

Supplemental Table S5a: First-Line Treatment Procedures by Screening Arm, Randomization Group and Stage of Cancer

First-line Treatment of T1 Lung Cancers ¹		Stage																Total	
		IA		IB		IIA		IIB		IIIA		IIIB		IV		Unknown			
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
LDCT	Surgery only	74	85.1	13	61.9	4	36.4	0	0.0	3	21.4	1	5.3	2	8.3	1	33.3	98	52.7
	Surgery and Chemotherapy	7	8.0	8	38.1	4	36.4	5	71.4	2	14.3	4	21.1	1	4.2	0	0.0	31	16.7
	Surgery and Radiotherapy	1	1.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	4.2	0	0.0	2	1.1
	Surgery, Chemotherapy, and Radiotherapy	2	2.3	0	0.0	3	27.3	1	14.3	2	14.3	1	5.3	1	4.2	0	0.0	10	5.4
	Chemotherapy only	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	15.8	8	33.3	0	0.0	11	5.9
	Chemotherapy and Radiotherapy	0	0.0	0	0.0	0	0.0	1	14.3	5	35.7	9	47.4	7	29.2	2	66.7	24	12.9
	Radiotherapy only	2	2.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	8.3	0	0.0	4	2.2
	Other Treatment	1	1.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5
	No Treatment ²	0	0.0	0	0.0	0	0.0	0	0.0	2	14.3	0	0.0	2	8.3	0	0.0	4	2.2
	Treatment data incomplete	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	5.3	0	0.0	0	0.0	1	0.5
Total	87	100.0	21	100.0	11	100.0	7	100.0	14	100.0	19	100.0	24	100.0	3	100.0	186	100.0	
CXR	Surgery only	25	80.6	7	63.6	2	28.6	0	0.0	0	0.0	0	0.0	3	5.8	0	0.0	37	27.8
	Surgery and Chemotherapy	5	16.1	4	36.4	2	28.6	2	40.0	1	7.1	1	8.3	1	1.9	0	0.0	16	12.0
	Surgery and Radiotherapy	0	0.0	0	0.0	1	14.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
	Surgery, Chemotherapy, and Radiotherapy	0	0.0	0	0.0	1	14.3	1	20.0	4	28.6	1	8.3	1	1.9	0	0.0	8	6.0
	Chemotherapy only	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	16.7	25	48.1	1	100.0	28	21.1
	Chemotherapy and Radiotherapy	1	3.2	0	0.0	1	14.3	2	40.0	8	57.1	7	58.3	8	15.4	0	0.0	27	20.3
	Radiotherapy only	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	9	17.3	0	0.0	9	6.8
	Other Treatment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.9	0	0.0	1	0.8
	No Treatment ²	0	0.0	0	0.0	0	0.0	0	0.0	1	7.1	1	8.3	4	7.7	0	0.0	6	4.5
	Treatment data incomplete	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	31	100.0	11	100.0	7	100.0	5	100.0	14	100.0	12	100.0	52	100.0	1	100.0	133	100.0	

¹ Table includes first-line treatment that occurred within six months of diagnosis.

² 'No treatment' includes participants who received no treatment at all or who received first-line treatment greater than 6 months following diagnosis.

Supplemental Table S5b: First-Line Treatment Procedures by Screening Arm, Randomization Group and Stage of Cancer

First-line Treatment of T2 Lung Cancers ¹		Stage																Total	
		IA		IB		IIA		IIB		IIIA		IIIB		IV		Unknown			
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
LDCT	Surgery only	103	88.8	13	41.9	0	0.0	2	40.0	2	13.3	5	25.0	2	5.7	3	42.9	130	54.9
	Surgery and Chemotherapy	4	3.4	15	48.4	6	75.0	1	20.0	3	20.0	3	15.0	2	5.7	0	0.0	34	14.3
	Surgery and Radiotherapy	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.4
	Surgery, Chemotherapy, and Radiotherapy	2	1.7	0	0.0	0	0.0	1	20.0	4	26.7	2	10.0	1	2.9	0	0.0	10	4.2
	Chemotherapy only	0	0.0	1	3.2	0	0.0	0	0.0	1	6.7	4	20.0	14	40.0	0	0.0	20	8.4
	Chemotherapy and Radiotherapy	1	0.9	0	0.0	2	25.0	0	0.0	5	33.3	4	20.0	3	8.6	1	14.3	16	6.8
	Radiotherapy only	1	0.9	1	3.2	0	0.0	0	0.0	0	0.0	0	0.0	1	2.9	0	0.0	3	1.3
	Other Treatment	2	1.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.9	1	14.3	4	1.7
	No Treatment ²	2	1.7	1	3.2	0	0.0	0	0.0	0	0.0	2	10.0	9	25.7	2	28.6	16	6.8
	Treatment data incomplete	0	0.0	0	0.0	0	0.0	1	20.0	0	0.0	0	0.0	2	5.7	0	0.0	3	1.3
Total	116	100.0	31	100.0	8	100.0	5	100.0	15	100.0	20	100.0	35	100.0	7	100.0	237	100.0	
CXR	Surgery only	24	68.6	4	30.8	2	22.2	0	0.0	1	5.6	1	4.8	4	9.1	0	0.0	36	25.0
	Surgery and Chemotherapy	2	5.7	5	38.5	3	33.3	0	0.0	4	22.2	2	9.5	1	2.3	0	0.0	17	11.8
	Surgery and Radiotherapy	1	2.9	0	0.0	2	22.2	1	33.3	0	0.0	0	0.0	0	0.0	0	0.0	4	2.8
	Surgery, Chemotherapy, and Radiotherapy	1	2.9	1	7.7	0	0.0	0	0.0	0	0.0	2	9.5	2	4.5	0	0.0	6	4.2
	Chemotherapy only	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	9.5	15	34.1	0	0.0	17	11.8
	Chemotherapy and Radiotherapy	0	0.0	2	15.4	2	22.2	1	33.3	12	66.7	12	57.1	12	27.3	0	0.0	41	28.5
	Radiotherapy only	4	11.4	0	0.0	0	0.0	0	0.0	1	5.6	0	0.0	4	9.1	1	100.0	10	6.9
	Other Treatment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	4.8	1	2.3	0	0.0	2	1.4
	No Treatment ²	3	8.6	1	7.7	0	0.0	1	33.3	0	0.0	1	4.8	5	11.4	0	0.0	11	7.6
	Treatment data incomplete	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	35	100.0	13	100.0	9	100.0	3	100.0	18	100.0	21	100.0	44	100.0	1	100.0	144	100.0	

¹ Table includes first-line treatment that occurred within six months of diagnosis.

² 'No treatment' includes participants who received no treatment at all or who received first-line treatment greater than 6 months following diagnosis.

Supplemental Table S6: Histology of Lung Cancers by Screening Round, Trial Arm and Screening Result

T1 screening round ¹	LDCT Screen Result								CXR Screen Result							
	Positive		Negative		No screen		Total		Positive		Negative		No screen		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
BAC	29	17.3	0	0.0	1	12.5	30	16.1	0	0.0	0	0.0	3	12.5	3	2.3
Adenocarcinoma	64	38.1	2	20.0	2	25.0	68	36.6	26	40.6	14	32.6	3	12.5	43	32.8
Squamous cell	34	20.2	3	30.0	2	25.0	39	21.0	19	29.7	7	16.3	4	16.7	30	22.9
Large cell	9	5.4	0	0.0	1	12.5	10	5.4	3	4.7	2	4.7	3	12.5	8	6.1
NSCLC, other or NOS ²	17	10.1	1	10.0	0	0.0	18	9.7	8	12.5	10	23.3	8	33.3	26	19.8
Small cell	15	8.9	4	40.0	2	25.0	21	11.3	7	10.9	10	23.3	3	12.5	20	15.3
Carcinoid	0	0.0	0	0.0	0	0.0	0	0.0	1	1.6	0	0.0	0	0.0	1	0.8
Unknown	0	-	0	-	0	-	0	-	1	-	1	-	0	-	2	-
Total	168	100.0	10	100.0	8	100.0	186	100.0	65	100.0	44	100.0	24	100.0	133	100.0
T2 screening round ¹																
BAC	28	13.3	1	6.3	0	0.0	29	12.3	5	6.6	1	2.3	1	4.5	7	4.9
Adenocarcinoma	76	36.2	2	12.5	4	44.4	82	34.9	33	43.4	8	18.2	6	27.3	47	33.1
Squamous cell	55	26.2	4	25.0	2	22.2	61	26.0	19	25.0	10	22.7	5	22.7	34	23.9
Large cell	5	2.4	0	0.0	0	0.0	5	2.1	1	1.3	3	6.8	0	0.0	4	2.8
NSCLC, other or NOS ³	24	11.4	2	12.5	2	22.2	28	11.9	12	15.8	11	25.0	2	9.1	25	17.6
Small cell	19	9.0	7	43.8	1	11.1	27	11.5	6	7.9	11	25.0	8	36.4	25	17.6
Carcinoid	3	1.4	0	0.0	0	0.0	3	1.3	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	1	-	0	-	1	-	2	-	2	-	0	-	0	-	2	-
Total	211	100.0	16	100.0	10	100.0	237	100.0	78	100.0	44	100.0	22	100.0	144	100.0

Abbreviations: LDCT = low dose computed tomography, CXR = chest x-ray, NSCLC = non-small cell lung cancer, NOS = not otherwise specified.

¹ Percentages are calculated using a denominator that equals the number of cancers of known histology.

² At the T1 Screening Round, 'NSCLC, other or NOS' includes: 6 adenosquamous carcinomas, 7 unclassified carcinomas, and 31 coded only as 'non-small cell carcinoma'.

³ 'NSCLC, other or NOS' includes: 7 adenosquamous carcinomas, 1 sarcomatoid carcinoma, 8 unclassified carcinomas, and 37 coded only as 'non-small cell carcinoma'.

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