

Online Supplementary material

**Table 1. Localisations and proportion female participants of screen-detected lung cancers in round 2, round 3 and round 4**

	Round 2		p-value <sup>1</sup>	Round 3		p-value <sup>2</sup>	Round 4	
	n	%	0.91	n	%	0.66	n	%
<b>Localisation</b>								
<b>Right lobes</b>	37	63.8		48	62.3		31	67.4
<b>Left lobes</b>	21	34.5		29	37.7		15	32.6
<b>Total</b>	58	100		77	100		46	100
<b>Females</b>	10	17.2		10	13.0		7	15.2

<sup>1</sup>p-value: comparison between localization of screen-detected lung cancers of round 2 vs. round 4

<sup>2</sup>p-value: comparison between localization of screen-detected lung cancers of round 3 vs. round 4

**Table 2. Stage distributions of interval cancers detected in the 2.5 years interval between the third and fourth screening round**

Interval cancers	Detected in the first 24 months	Detected in the last six months	p-value
<b>Stage</b>	n (%)	n (%)	0.77
<b>Ia</b>	2 (16.7)	1 (6.2)	
<b>Ib</b>	-	1 (6.2)	
<b>IIa</b>	-	1 (6.2)	
<b>IIb</b>	2 (16.7)	1 (6.2)	
<b>IIIa</b>	-	2 (12.5)	
<b>IIIb</b>	1 (98.3)	3 (18.8)	
<b>IV</b>	7 (58.3)	7 (43.8)	
<b>Total</b>	12 (100)	16 (100)	

**Table 3. Histology of interval cancers detected in the 2.5 years interval between the third and fourth screening round**

Interval cancers	Detected in the first 24 months	Detected in the last six months	p-value
	n (%)	n (%)	0.32
<b>Histology</b>			
Adenocarcinoma	4 (33.3)	5 (31.2)	
Squamous-cell carcinoma	1 (8.3)	4 (25.0)	
Large cell carcinoma	2 (16.7)	1 (6.2)	
SCLC	-	3 (18.8)	
Others	2 (16.7)	-	
No diagnosis possible	1 (8.3)	2 (12.5)	
NSCLC, not specified	1 (8.3)	1 (6.2)	
Large cell neuro-endocrine tumor	1 (8.3)	-	
<b>Total</b>	12 (100)	16 (100)	

**Table 4. Proportion of female participants and current smokers in the participants with interval cancers detected in the 2.5 years interval between the third and fourth screening round**

	First 24 months	Last 6 months	p-value
<b>Female , n (%)</b>	3 (25.0%)	1 (6.2%)	0.29
<b>Current smokers, n (%)</b>	10 (83.3%)	2 (16.7%)	0.22