

2024 대한심장혈관흉부외과학회 제56차 추계학술대회

2024. 10. 31 (Thu) - 11. 01 (Fri) 여수 엑스포 컨벤션센터

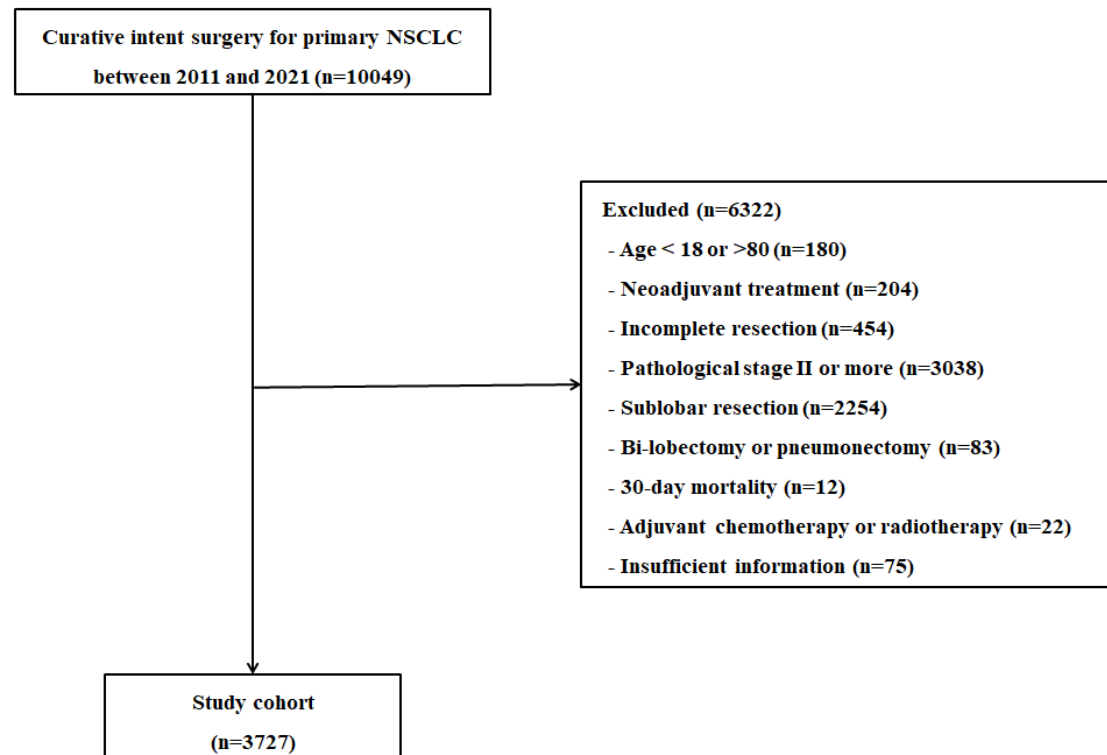


Prognostic Impact of resection margin distance in patients with completely resected stage I NSCLC after lobectomy

공지사항

- 소속기관이나 저자명이 드러나지 않도록 해주세요.
- 제목 슬라이드 포함 최대 6장, Font size 20 이상
- PPT 파일 작성 후 PDF로 전환해서 접수(필수)

- Unlike sublobar resection, the prognostic impact of margin distance has not been fully evaluated in patients who underwent lobectomy for stage I non-small cell lung cancer (NSCLC).
- We investigated the prognostic value of the resection margin distance and determine the cutoff value in these patients.

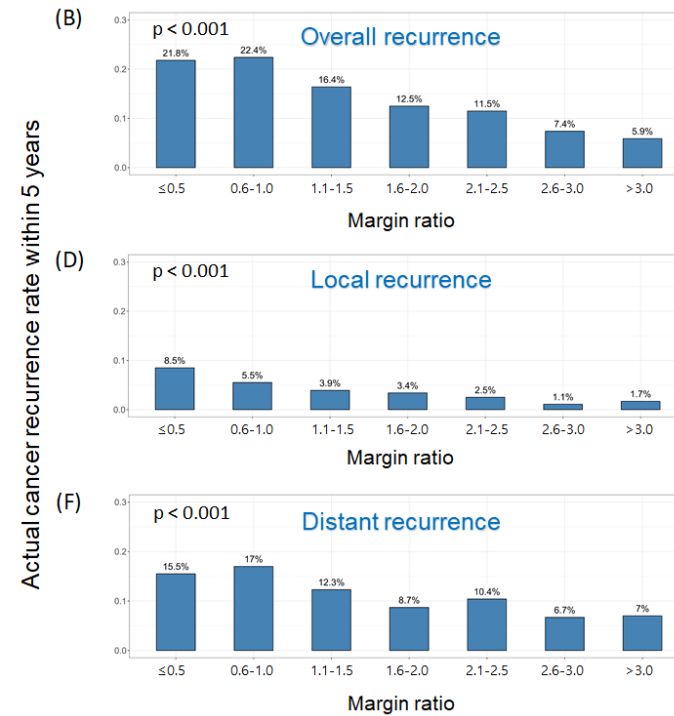
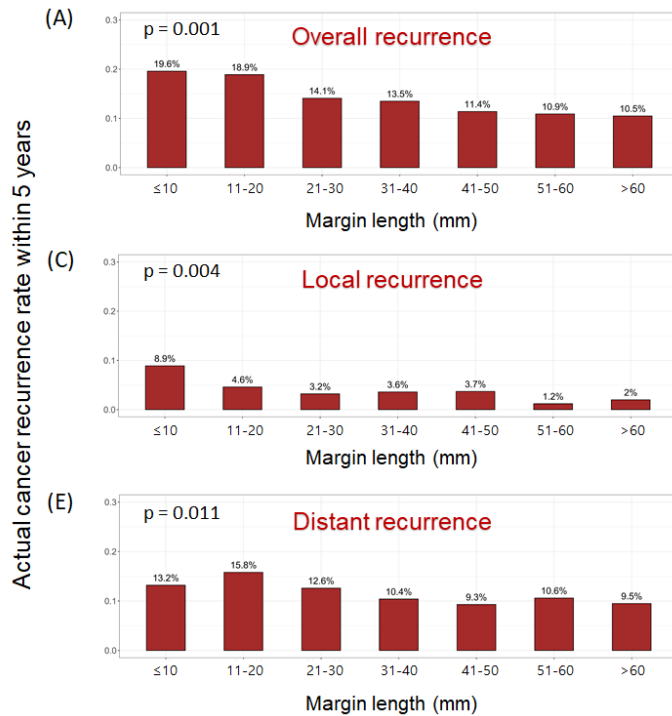


- Between 2011 and 2021, data of patients with completely resected stage I NSCLC after lobectomy were analyzed.
- The margin distance and ratio were defined as the distance from the primary tumor to the bronchial resection margin and the margin distance divided tumor size.
- The optimal cutoff value was selected using a maximally selected log-rank statistic.

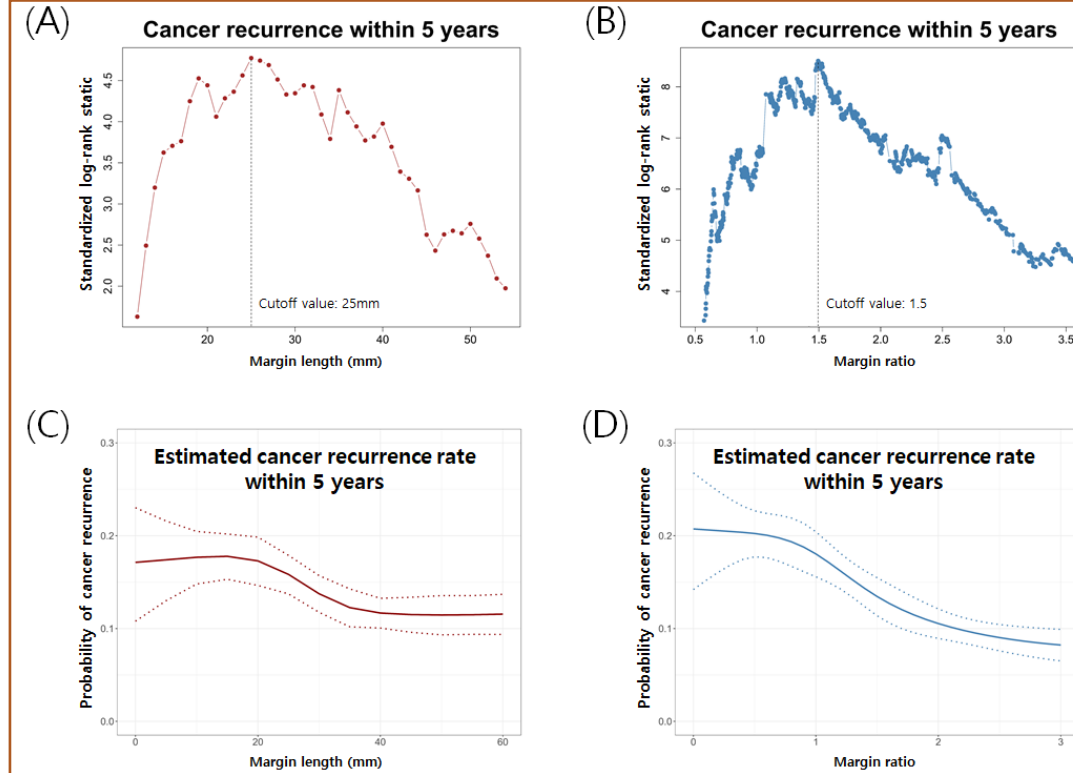
Variable	Value
Age (years), median (IQR)	62.8 ± 9.2
Sex	
Male	1866 (50.1%)
Female	1861 (49.9%)
Smoking history	
Yes	1594 (42.8%)
No	2133 (57.2%)
The number of comorbidities	
0	1420 (38.1)
1	1371 (36.8%)
≥ 2	936 (25.1%)
Surgical approach	
Minimal invasive surgery	3410 (91.5%)
Open thoracotomy	215 (5.8%)
Thoracotomy conversion	102 (2.7%)
Histologic structure, n (%)	
ADC	3197 (85.8%)
SqCC	400 (10.7%)
Others	130 (3.5%)

Variable	Value
Histologic grade	
I	329 (8.8%)
II	2316 (62.1%)
III	321 (8.6%)
Mucinous type	232 (6.2%)
Not available	529 (14.2%)
Pathological tumor size	22.6 ± 8.2
Margin length (from bronchus stump)	34.1 ± 16.9
Margin ratio (margin length/tumor size)	1.9 ± 2.5
The number of harvested LNs	25.3 ± 9.8
Lympho-vascular invasion	
Yes	583 (15.6%)
No	3144 (84.4%)
Pathological stage	
IA1	211 (5.7%)
IA2	1202 (32.3%)
IA3	1175 (31.5%)
IB	1139 (30.6%)





Recurrence rate within 5 years

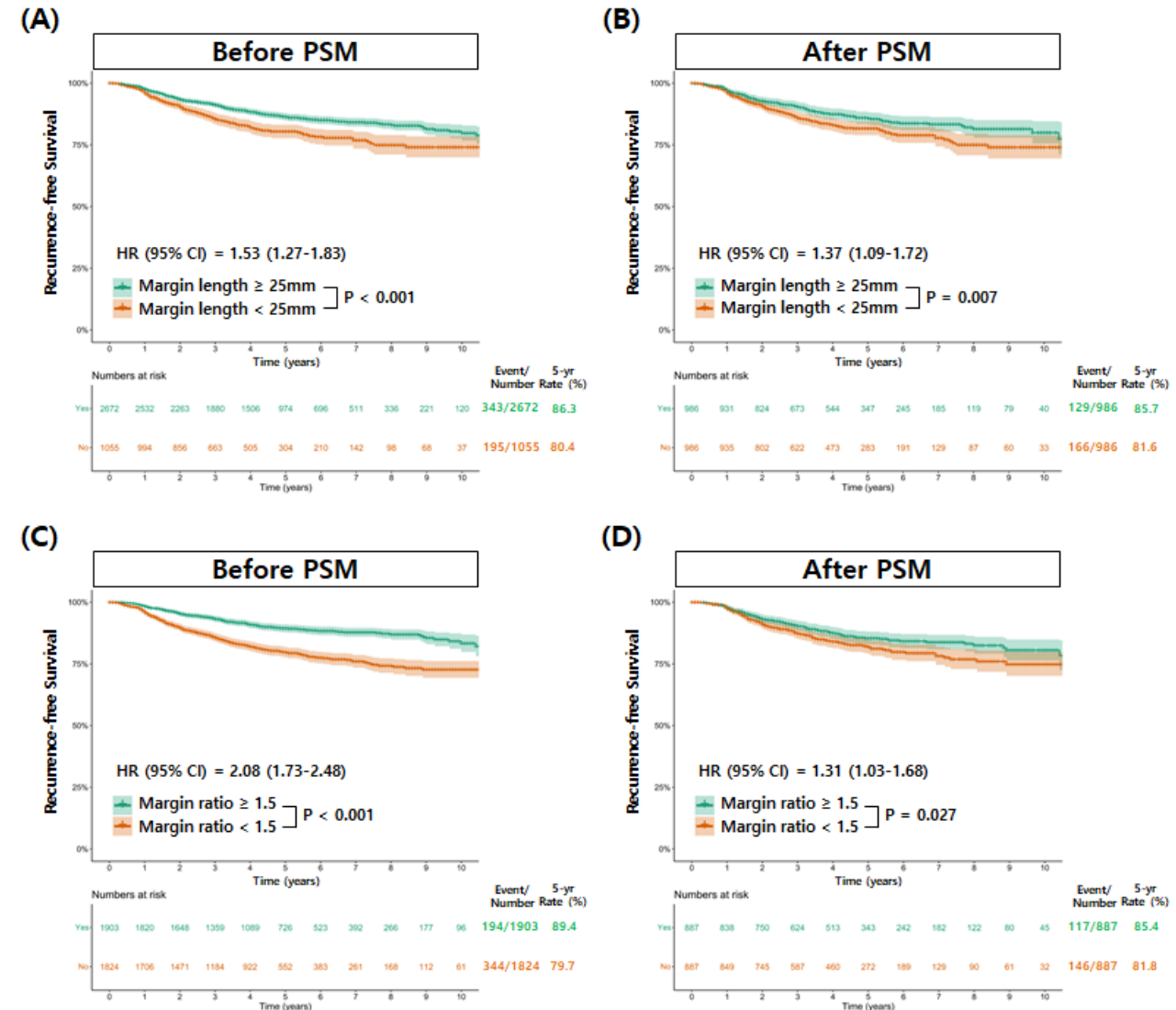


Optimal cutoffs for cancer recurrence within 5 years were determined using the maximally selected log-rank statistic: 25mm for margin distance and 1.5 for margin ratio.

Results

2024 대한심장혈관흉부외과학회
제56차 추계학술대회

Multivariate Analyses	Model 1 (including margin length)		Model 2 (including margin ratio)	
	HR (95% CI)	P-value	HR (95% CI)	P-value
Histologic grade				
II vs. I	4.02 (2.06–7.86)	<0.001	4.04 (3.07–7.90)	<0.001
III vs. I	6.02 (2.99–12.13)	<0.001	6.09 (3.02–12.28)	<0.001
Mucinous type vs. I	2.23 (0.98–5.08)	0.056	2.23 (0.98–5.08)	0.055
Not available vs. I	3.88 (1.93–7.81)	<0.001	3.97 (1.98–7.99)	<0.001
Lympho-vascular invasion				
Yes vs. no	1.97 (1.61–2.39)	<0.001	1.96 (1.61–2.38)	<0.001
Pathological stage				
IA2 vs. IA1	2.16 (0.94–4.96)	0.069	2.05 (0.90–4.71)	0.089
IA3 vs. IA1	3.09 (1.36–7.04)	0.007	2.64 (1.15–6.05)	0.022
IB vs. IA1	5.01 (2.21–11.35)	<0.001	4.15 (1.81–9.48)	<0.001
Margin length				
<25mm vs. ≥25mm	1.34 (1.11–1.61)	0.002		
Margin ratio				
<1.5 vs. ≥1.5			1.40 (1.14–1.71)	<0.001



- The margin distance has a significant prognostic impact in patients who underwent lobectomy for stage I NSCLC.
- Cutoff values of margin distance $\geq 25\text{mm}$ and margin ratio ≥ 1.5 could help clinicians enact proper treatment strategies and surveillance for these patients.