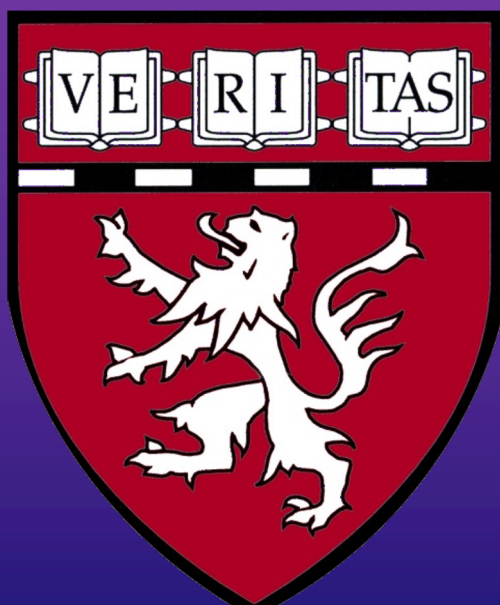




Stereotactic Body Radiation Therapy Versus Wedge Resection for Early-Stage Node-Negative Non-Small Cell Lung Cancer Tumors ≤8 mm: A National Analysis



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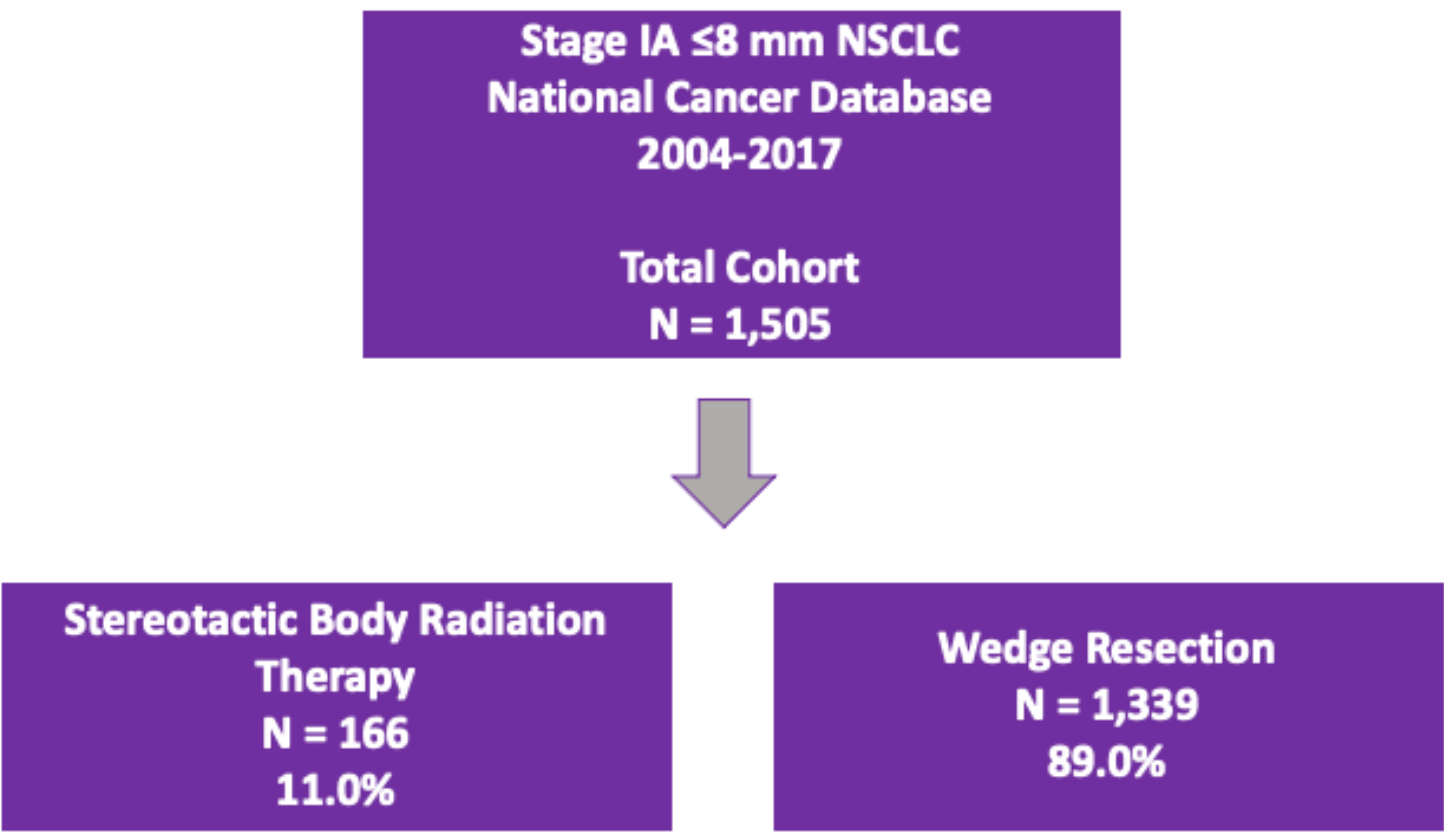
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INTRODUCTION

- Over the past decade, an increasing number of small non-small-cell lung cancer (NSCLC) tumors are being discovered either incidentally or through lung cancer screening.
- Objective:** To evaluate the overall survival of patients with early-stage N0 NSCLC tumors ≤8 mm who undergo stereotactic body radiation therapy (SBRT) versus wedge resection.

METHODS



- Statistical analyses:** Kaplan-Meier analysis, multivariable Cox proportional hazard analysis, propensity score matched analysis

RESULTS

TABLE 1. Patient demographics including characteristics, co-morbidities & histology

	SBRT (N = 166)	Wedge Resection (N = 1,339)	P-value
Age(years), IQR	71.0 (66.0, 78.0)	68.0 (61.0, 73.0)	<0.01
Sex			
Male	70 (42.2%)	502 (37.5%)	0.24
Female	96 (57.8%)	837 (62.5%)	
Race			
White	153 (92.2%)	1156 (86.3%)	0.04
Black	10 (6.0%)	117 (8.7%)	
Other	1 (0.6%)	53 (4.0%)	
Unknown	2 (1.2%)	13 (1.0%)	
CDCC Score			
0	86 (51.8%)	603 (45.0%)	0.09
1	43 (25.9%)	481 (35.9%)	
2	27 (16.3%)	187 (14.0%)	
3+	10 (6.0%)	68 (5.1%)	
Histology			
Squamous Cell Carcinoma	57 (34.3%)	261 (19.5%)	<0.01
Adenocarcinoma	109 (65.7%)	1,078 (80.5%)	
Facility type			
Community Cancer Program	7 (4.2%)	52 (3.9%)	0.31
Comprehensive Community Cancer Program	68 (41.0%)	471 (35.2%)	
Academic/Research Program	60 (36.1%)	582 (43.5%)	
Integrated Network Cancer Program	31 (18.7%)	225 (16.8%)	

RESULTS

FIGURE 1. Overall survival of patients with stage IA NSCLC tumors ≤8 mm NSCLC, stratified by stereotactic body radiation therapy (SBRT) versus wedge resection.

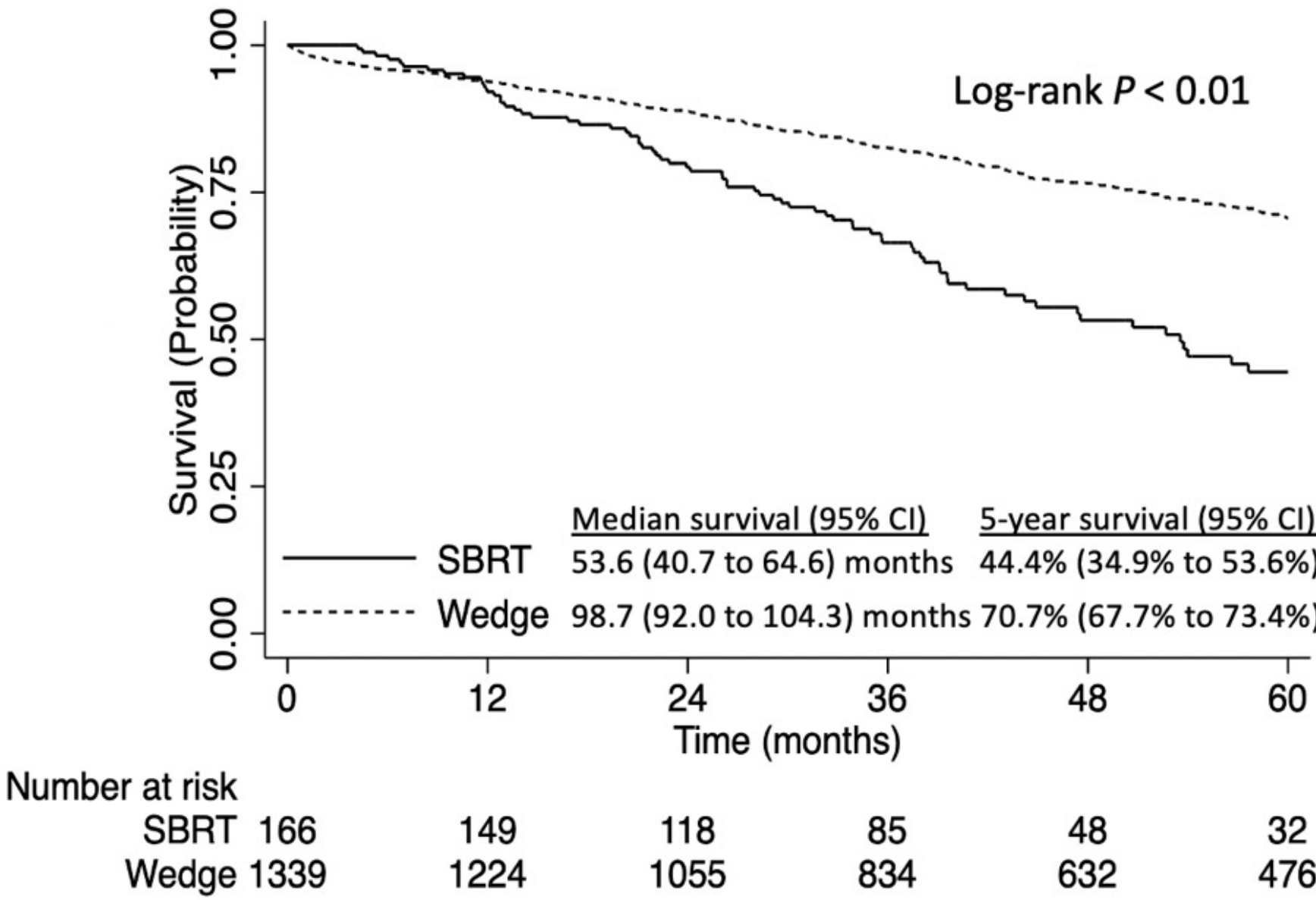


FIGURE 2. Overall survival of patients with stage IA NSCLC tumors ≤8 mm NSCLC who have no comorbidities, stratified by stereotactic body radiation therapy (SBRT) versus wedge resection

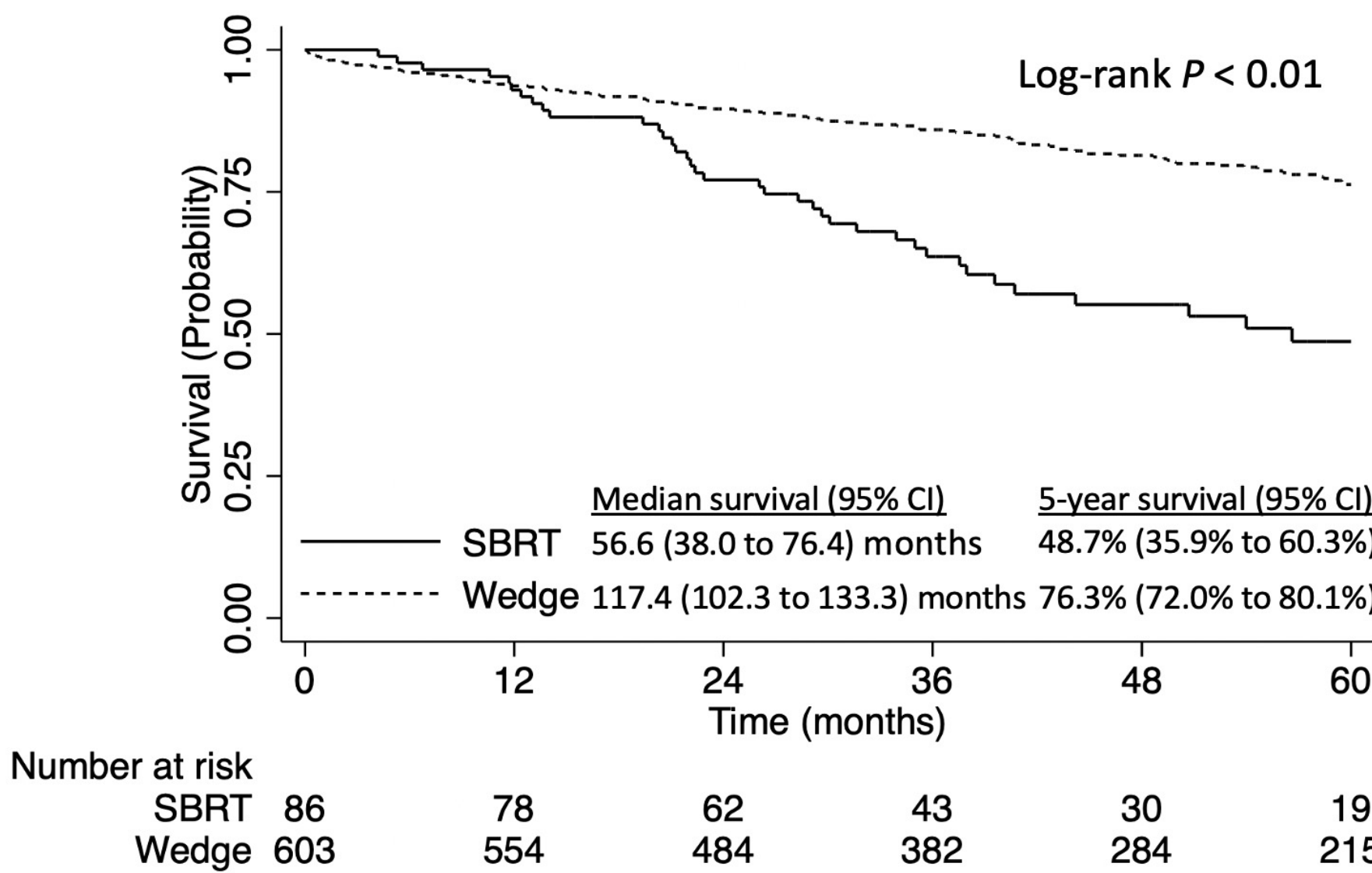


TABLE 2. Cox proportional hazards model multivariate analysis

VARIABLE	aHR (95% CI)	P-value
Overall Cohort: Wedge resection v SBRT	0.54 (0.42-0.72)	<0.01
No-comorbidities: Wedge resection v SBRT	0.51 (0.34-0.76)	<0.01

RESULTS

FIGURE 3: Overall survival of patients with stage IA NSCLC tumors ≤8 mm NSCLC, stratified by stereotactic body radiation therapy (SBRT) versus wedge resection: propensity score-matched analysis

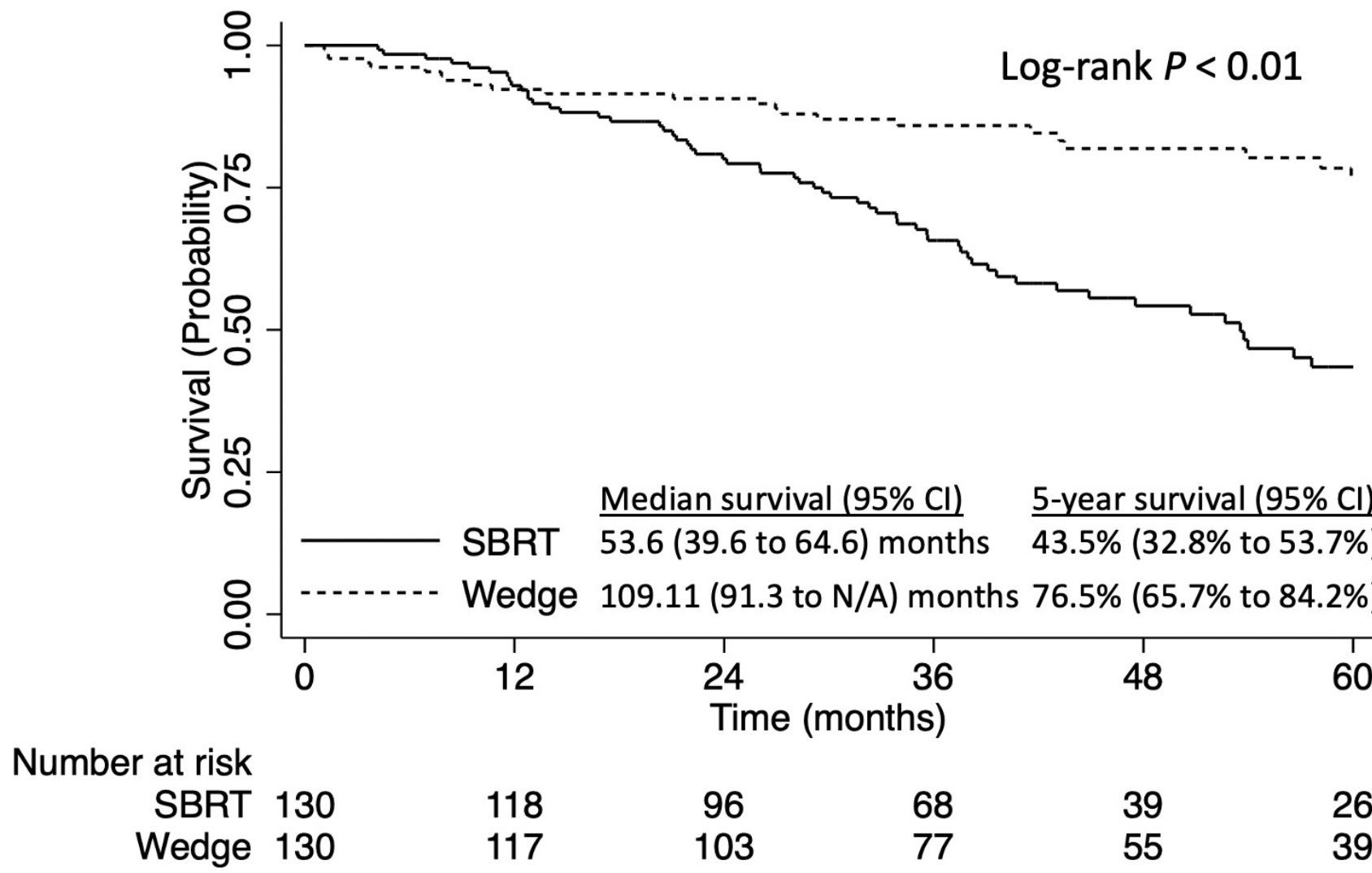
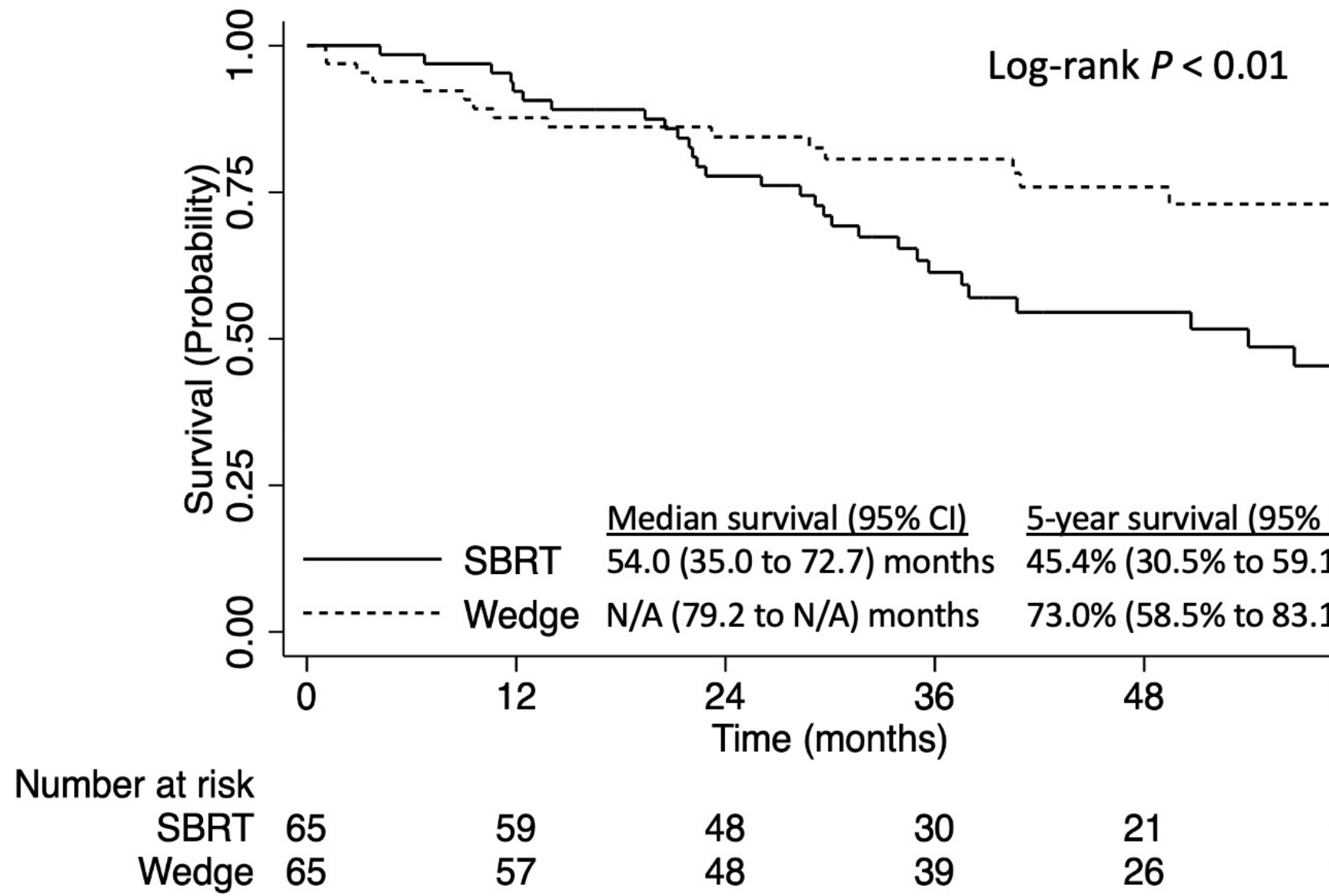


FIGURE 4: Overall survival of patients with stage IA NSCLC tumors ≤8 mm NSCLC who have no comorbidities, stratified by stereotactic body radiation therapy (SBRT) versus wedge resection: propensity score-matched analysis.



CONCLUSIONS

- Patients with NSCLC ≤8 mm undergoing wedge resection experienced improved survival when compared to SBRT

NO FINANCIAL DISCLOSURES