

Overall survival in elderly patients with small cell lung cancer (SCLC)

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Background

- Patients with small cell lung cancer (SCLC) with poor performance status (PS) may not benefit from chemotherapy
- Aim: Compare survival of treated PS 3-4 patients with untreated patients

Method

Retrospective study

Selection of data

- Patients diagnosed with small cell carcinoma
- 2010 - 2015 at Funen



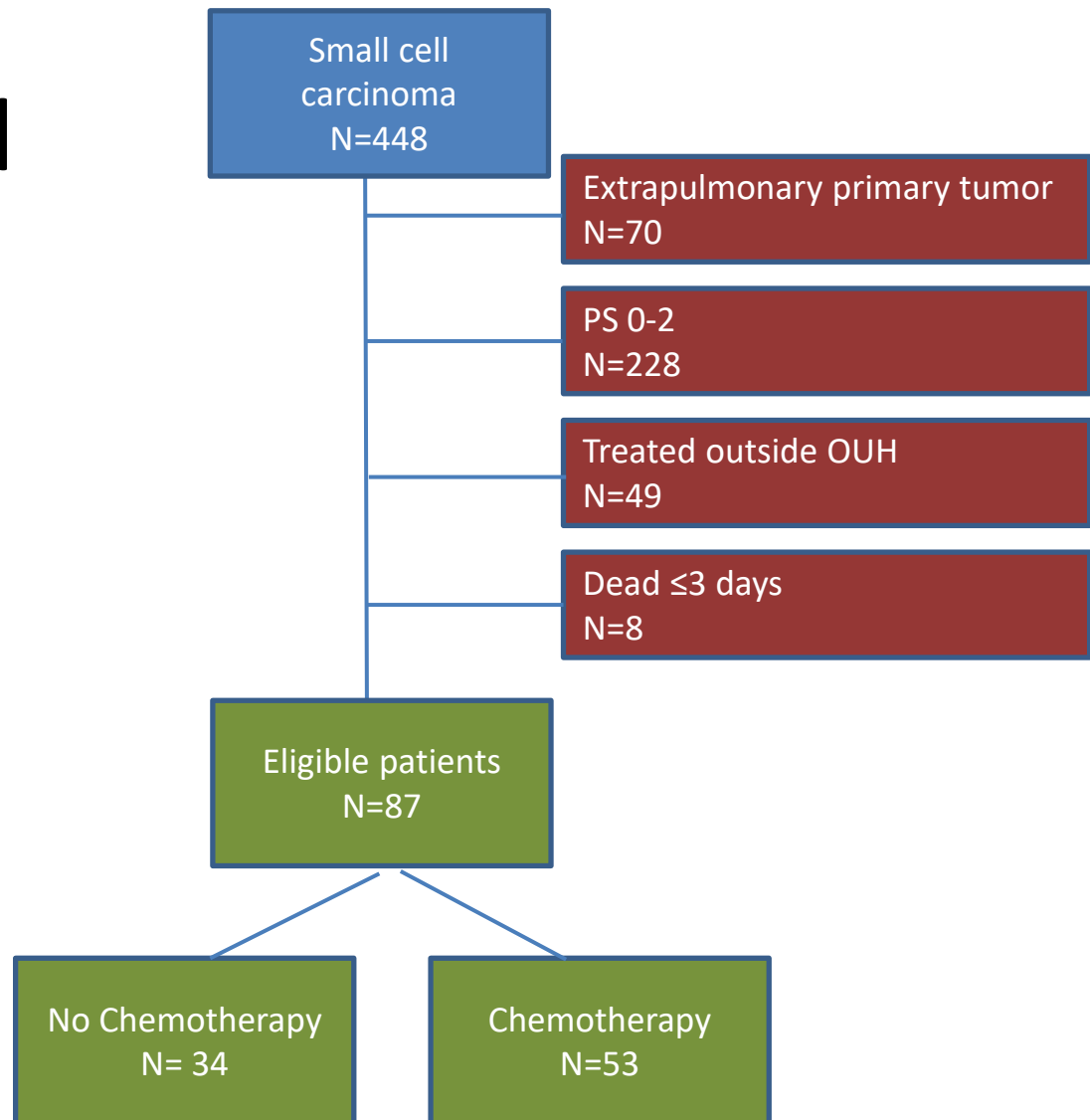
Review

- Medical records +pathology data
- Selected PS 3-4 for analyses

Exclusion criteria

- Death within 3 days from diagnosis
- PS 0-2
- Oncologic treatment outside OUH

Included and excluded patients



Data obtained

Age

Gender

Performance status

Comorbidity (Charlson)

Stage (Extensive disease/limited disease)

Blood tests

Oncologic treatment

SCLC: Eligible patients PS 3-4

	Chemotherapy N= 53	No Chemotherapy N=34	<i>p-value</i>
Age (years)	68 (50; 85)	77 (58; 90)	<0.001
Gender Male	24 (45%)	14 (41%)	NS
Extensive Disease	43 (81%)	29 (85%)	NS
PS 4	6 (11%)	12 (35%)	0.02
Comorbidity index ≥ 2	15 (28%)	23 (68%)	0.001
P-White Blood Count $10^9/L$	8.9	9.8	NS
P-Albumin	36 (14; 47)	34 (22; 44)	0.02
Lactate Dehydrogenase	291 (149; 3200)	358 (220; 2385)	0.03

SCLC: Eligible patients PS 3-4 Treatment

	Chemotherapy N= 53	No Chemotherapy N=34
Carboplatin-Etoposide	47 (89%)	0
Etoposide	6 (11%)	0
Radiotherapy: Chest	22 (42%)	5 (15%)

SCLC: Eligible Patients PS 3-4 N=87

Risk of getting No Chemotherapy

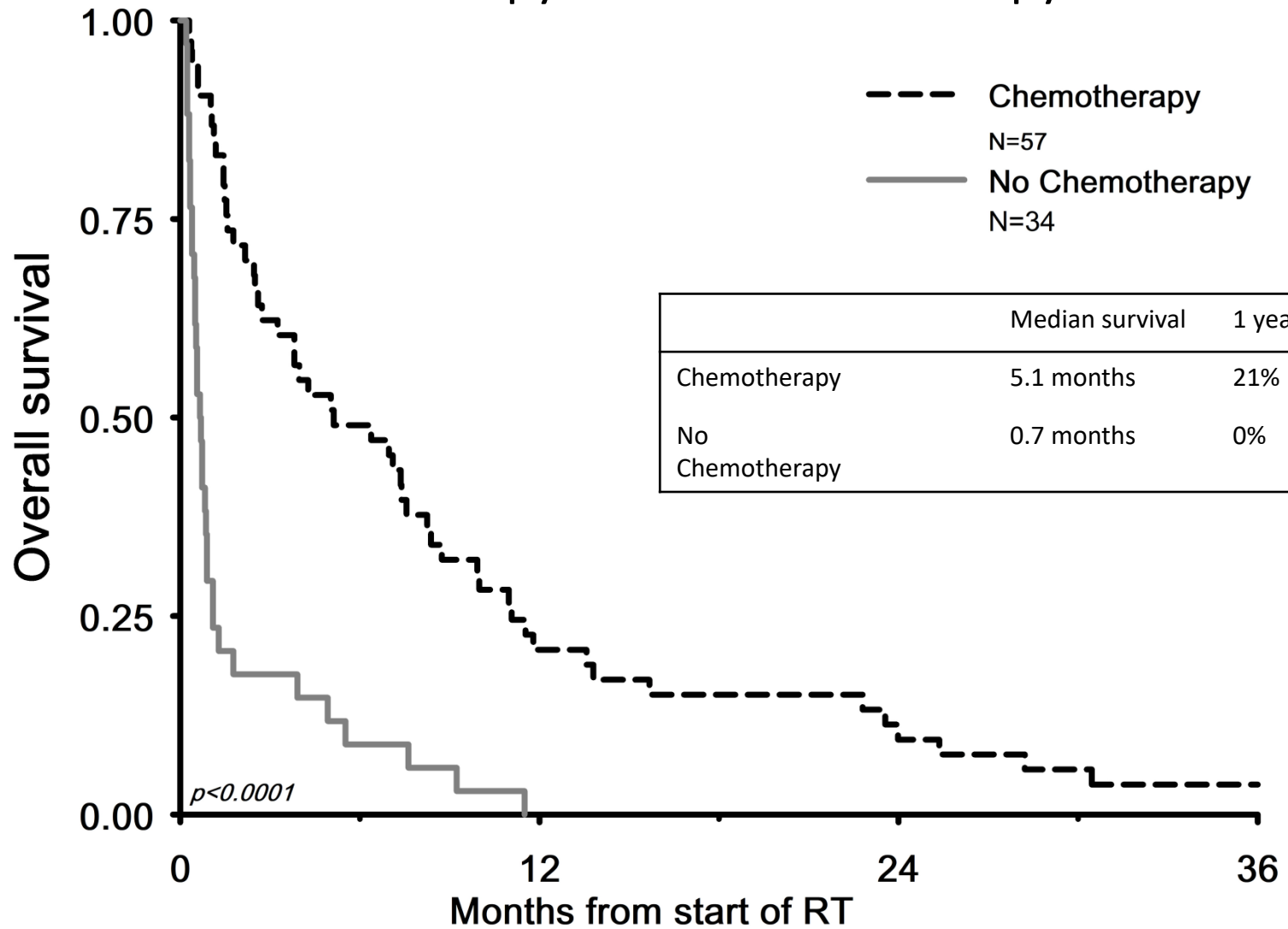
Logistic Regression Analysis

	OR (95% C.I.)	<i>p-value</i>
Comorbidity index ≥ 2	3.67 (1.39; 9.72)	<0.001
Age >70 years	3.50 (1.26; 9.49)	0.014
PS 4	3.22 (0.97; 10.73)	0.055
LDH >500		<i>NS*)</i>
P-Albumin <34		<i>NS*)</i>
Male Gender		<i>NS*)</i>
Extensive Disease		<i>NS*)</i>
White Blood Count $\geq 10^9/L$		<i>NS*)</i>

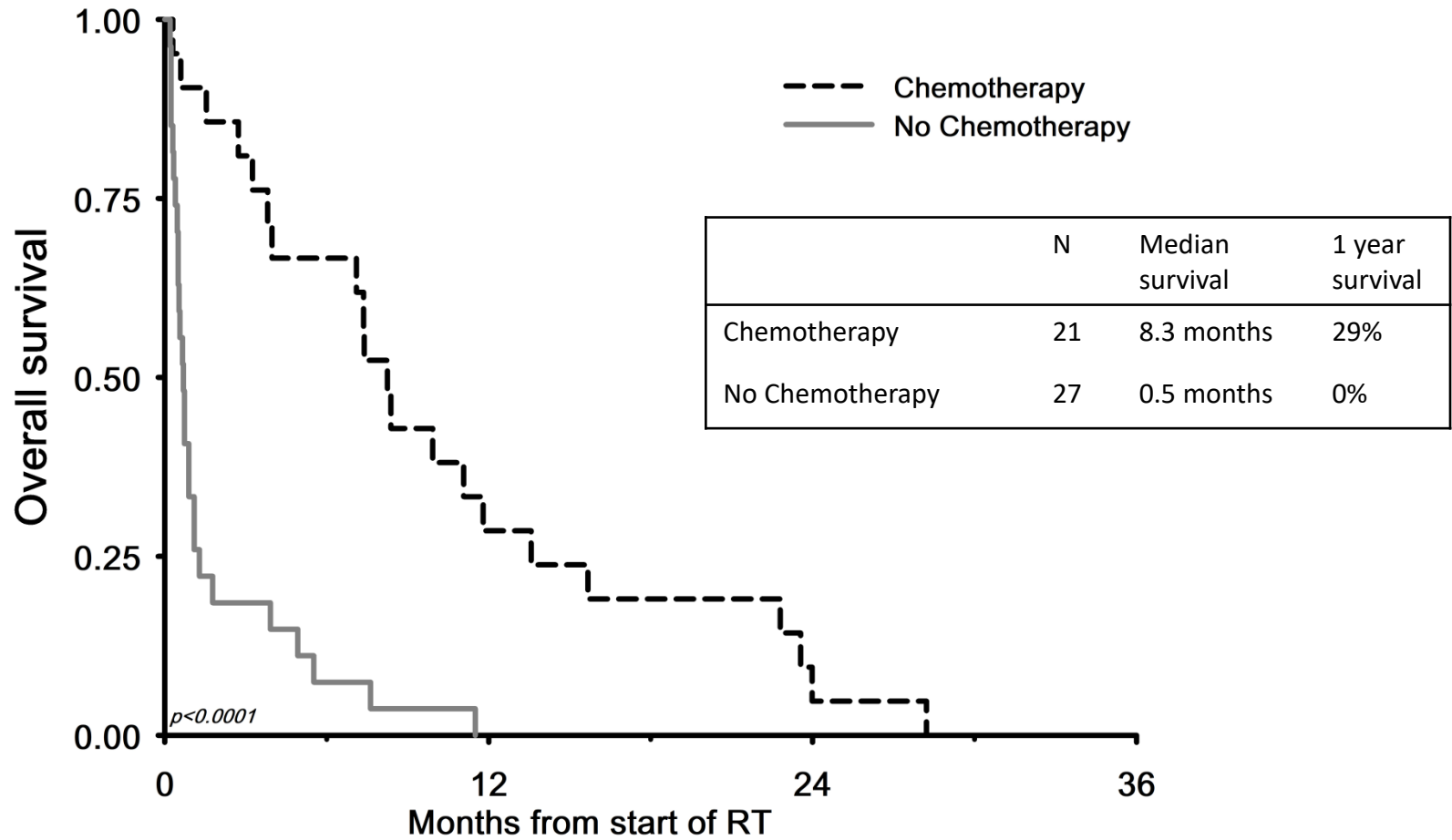
(* $p > 0.15$ Not in the final model)

SCLC PS 3-4

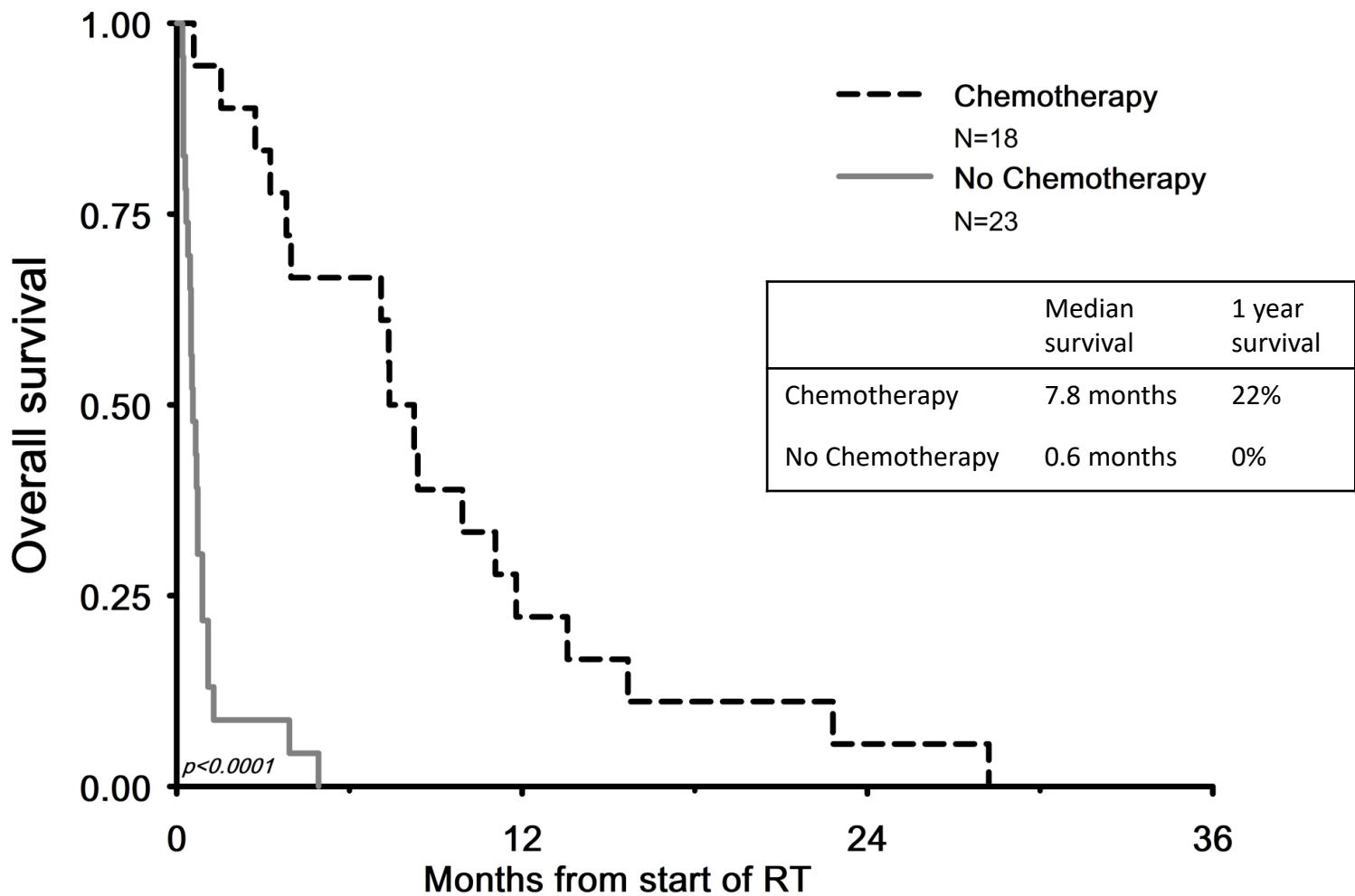
Chemotherapy vs. No. Chemotherapy



SCLC PS 3-4, Age ≥70 Years



SCLC PS 3-4, age ≥70 years, Extensive Disease



Cox Multivariate Analysis: Overall Survival

PS 3-4. N=87

	HR (HR 95% CI)	p-value
No chemotherapy	6.95 (3.65; 13.23)	<0.0001
Extended disease	3.00 (1.63; 5.49)	0.0003
PS = 4	2.04 (1.13; 3.68)	0.017
White Blood Count >10 ⁹ /L	1.79 (1.11; 2.88)	0.018
Charlson CI ≥2	0.66 (0.37;1.04)	0.07
Male	0.70 (0.41;1.04)	0.13
Age ≥70 years	0.80 (0.50;1.26)	0.33

Non significant factors left out of the final model:
Albumin, LDH

Conclusion

SCLC PS 3-4

- The risk of not receiving chemotherapy - associated with age ≥ 70 y.+ Charlson CI ≥ 2
- Chemotherapy associated with increased survival in all patients including patients ≥ 70 years with extensive disease