

AgeCare Radiotherapy

Outcome after radiotherapy in the elderly patients
with localized NSCLC

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NSCLC

Curative intended RT 1995-2017

1708 patients

RT primary treatment

No recurrent disease at time of treatment

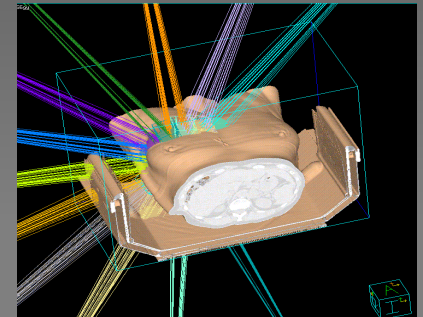
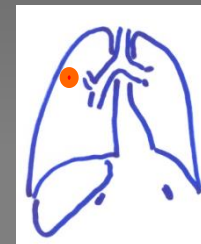
No distant metastases

Conventional Radiotherapy \pm chemotherapy

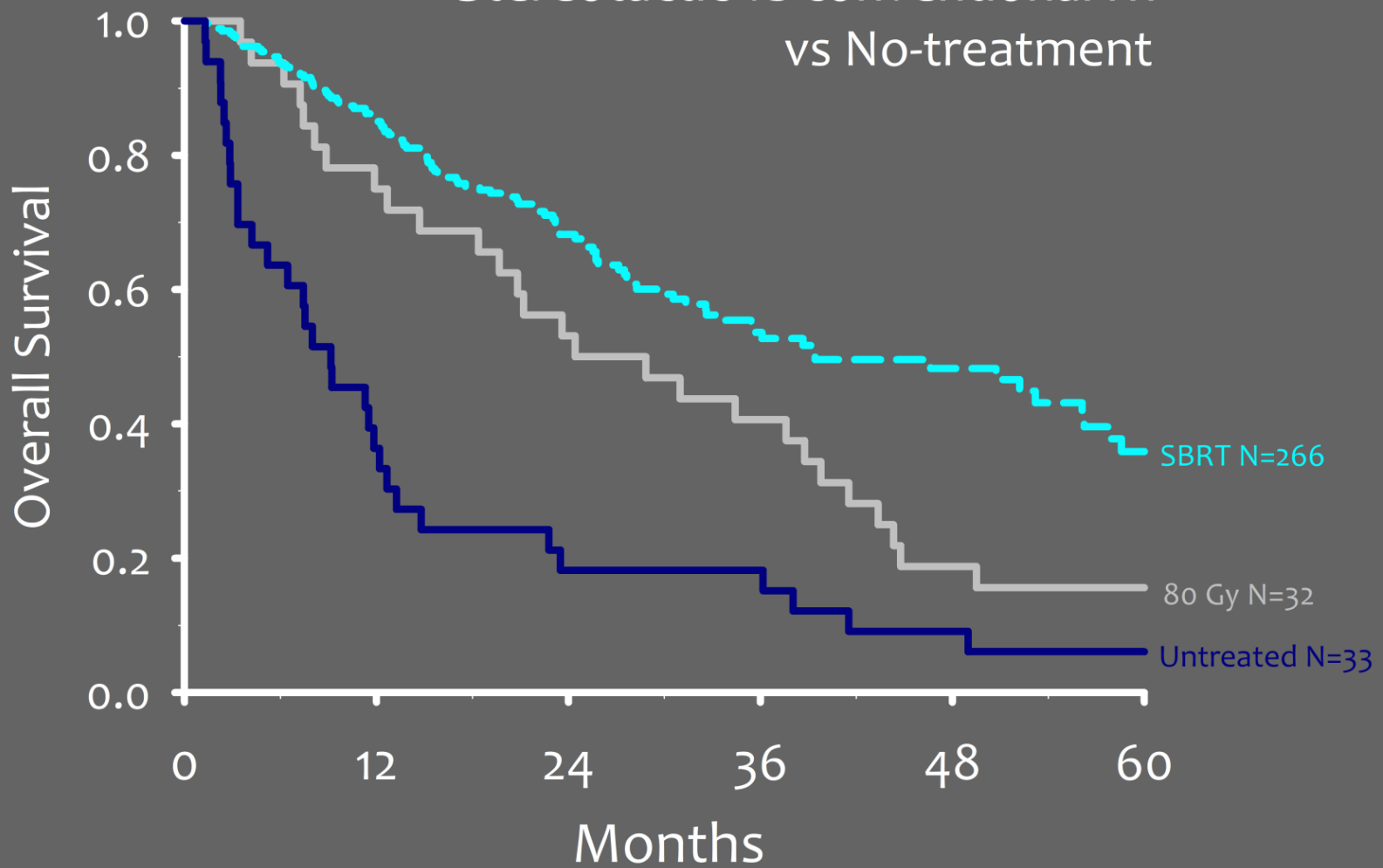
- N=945

Stereotactic BodyRadioTherapy (SBRT)

- N=763
- 45-80 Gy /3-10 F



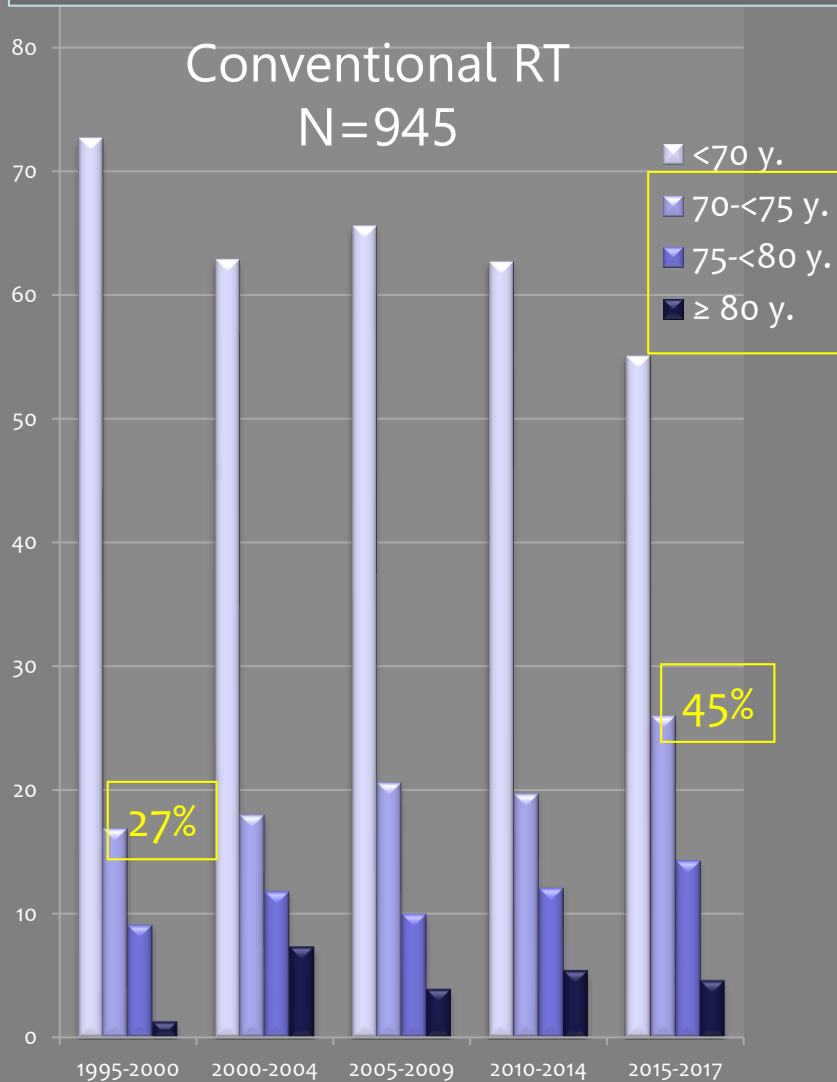
NSCLC T1-2 N0 Stereotactic vs conventional RT vs No-treatment



Analyses of data presented in:
Jeppesen et al. *Acta Oncol* 2013; 52: 1552 & Jeppesen et al. *Acta Oncol* 2018; 57: 219

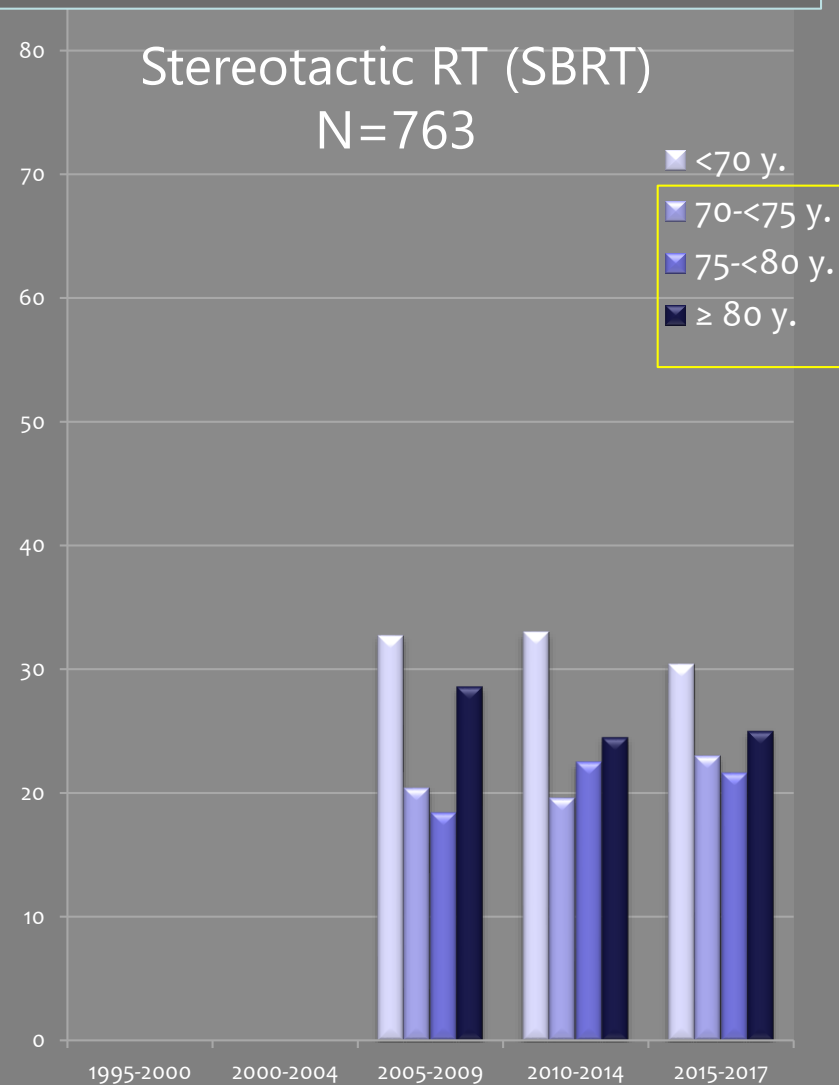
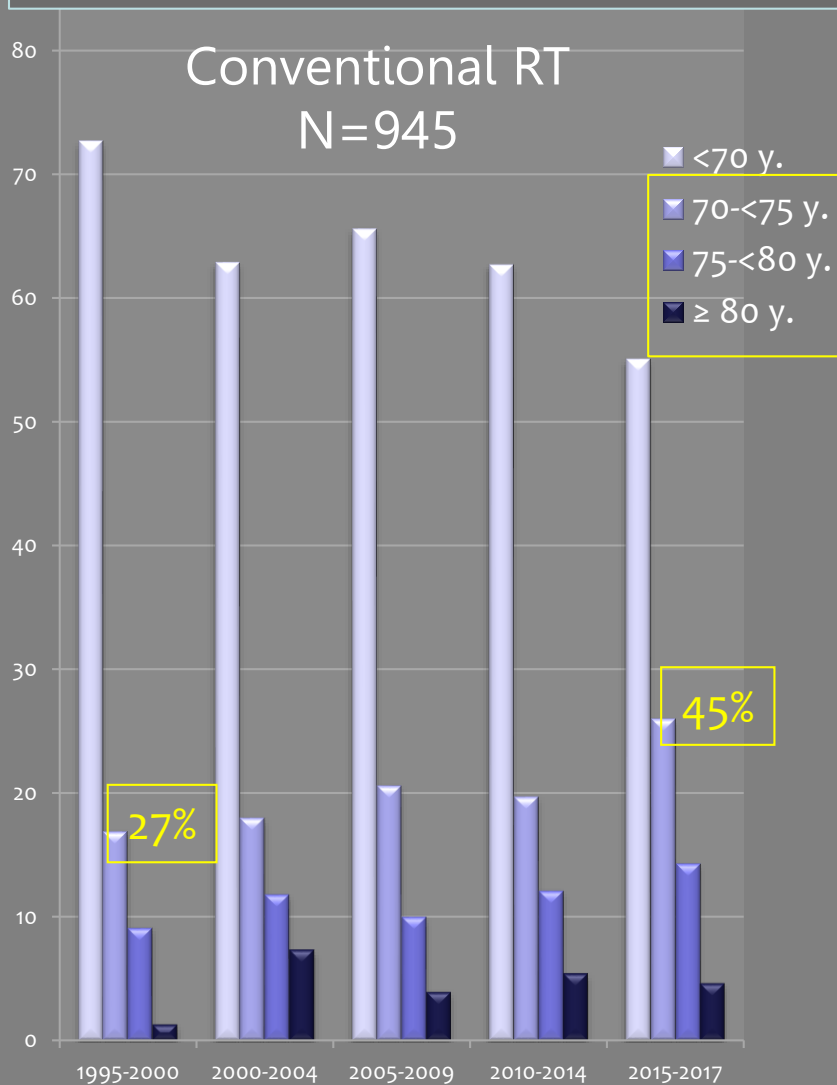
NSCLC 1995-2017 N=1708

Proportion of patients in age groups Radiotherapy ± Chemotherapy



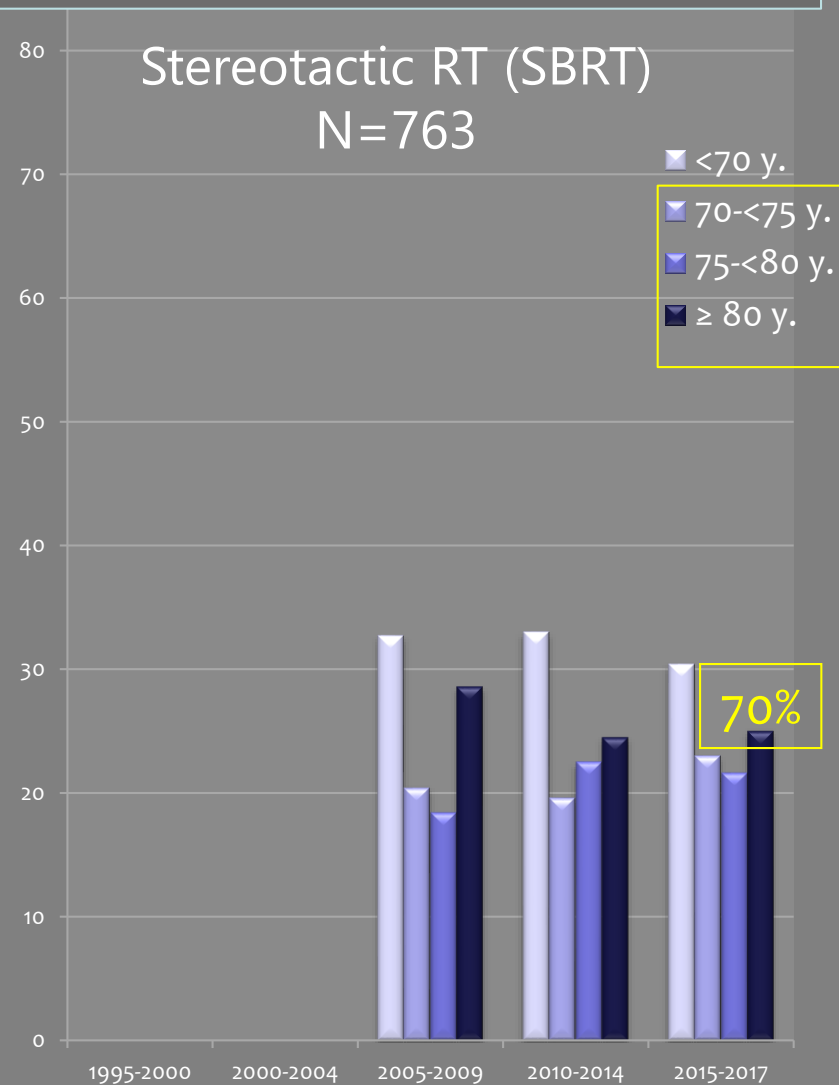
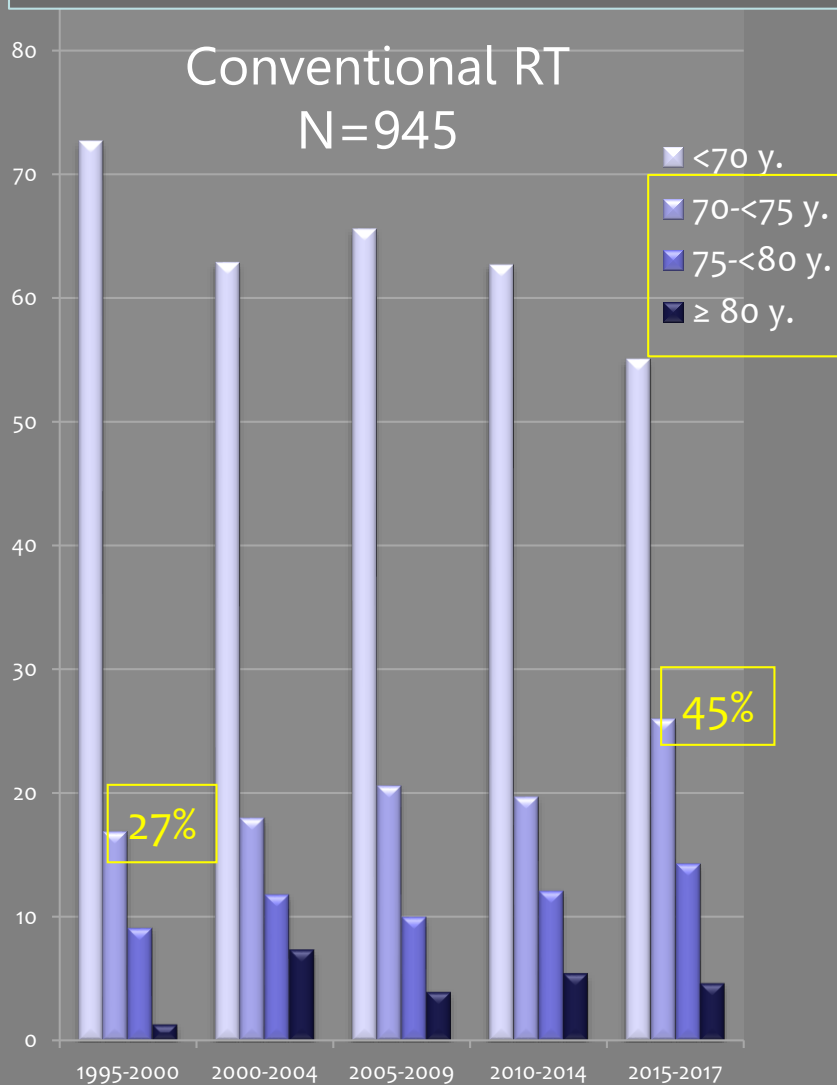
NSCLC 1995-2017 *N*=1708

Proportion of patients in age groups Radiotherapy ± Chemotherapy



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Proportion of patients in age groups Radiotherapy ± Chemotherapy

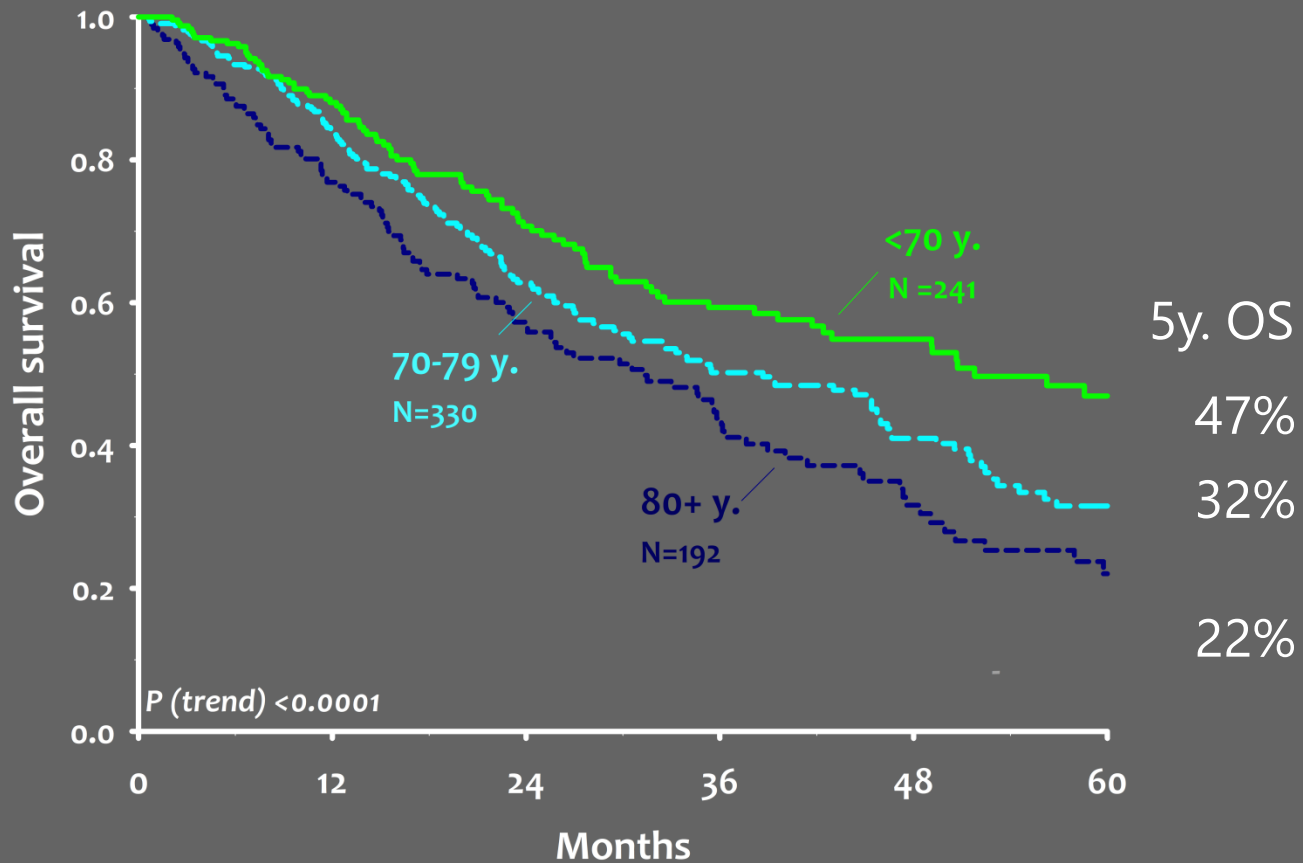


SBRT

Age Groups - Performance Staus

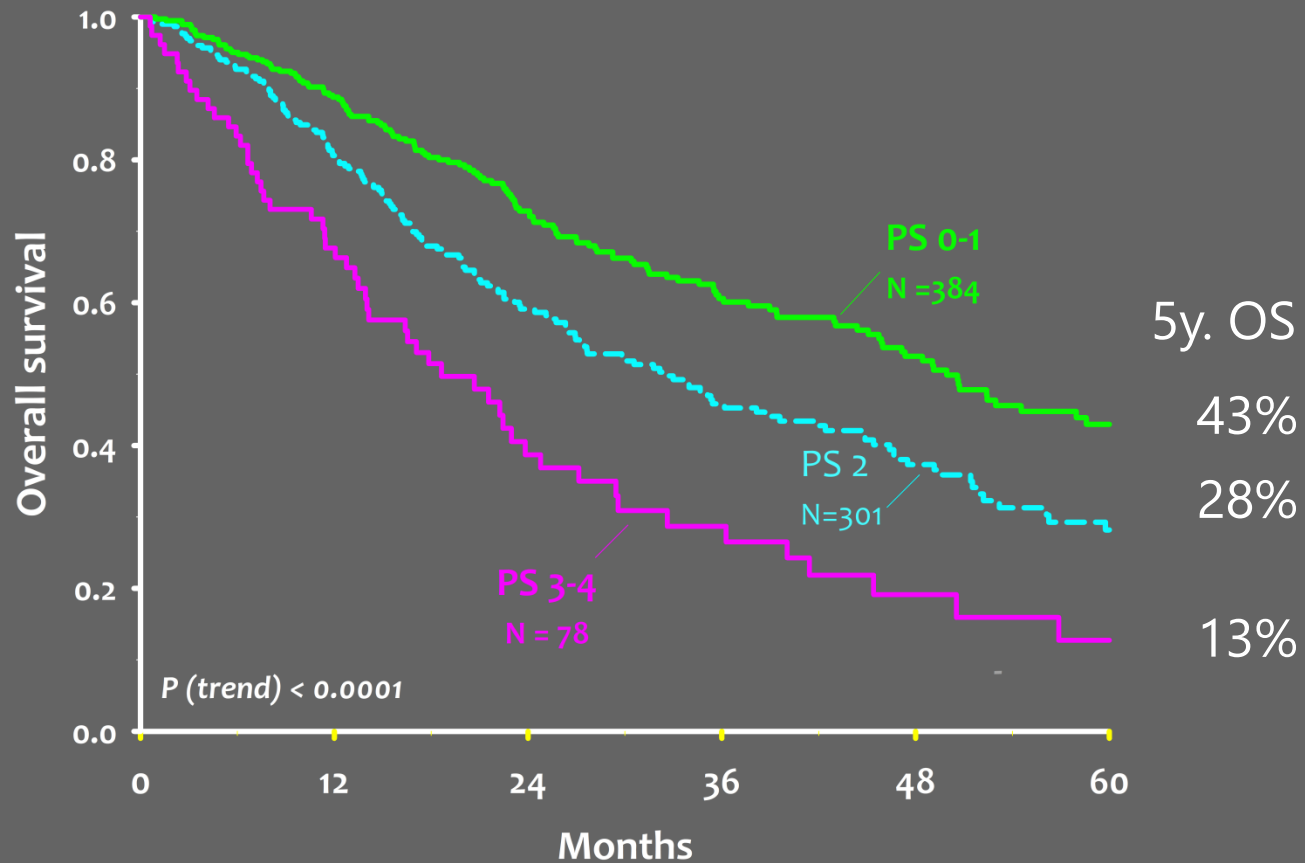
Age	<70	70-79	≥80	N=763
PS 0-1	55.2%	47.0%	50.0%	384
PS 2	37.3%	41.2%	39.1%	301
PS 3-4	7.5%	11.8%	10.9%	78

SBRT By Age Groups

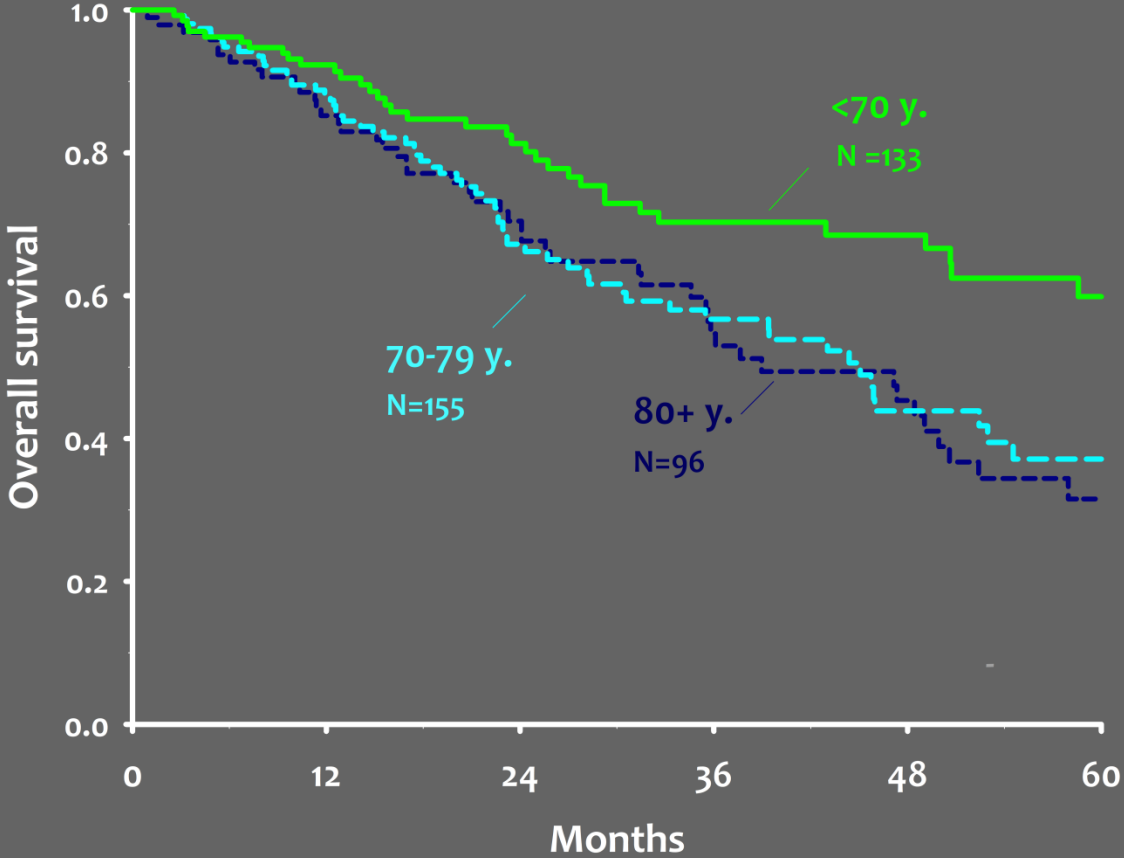


NSCLC SBRT By Performance Status

All ages



SBRT NSCLC PS 0-1



SBRT PS 0-1

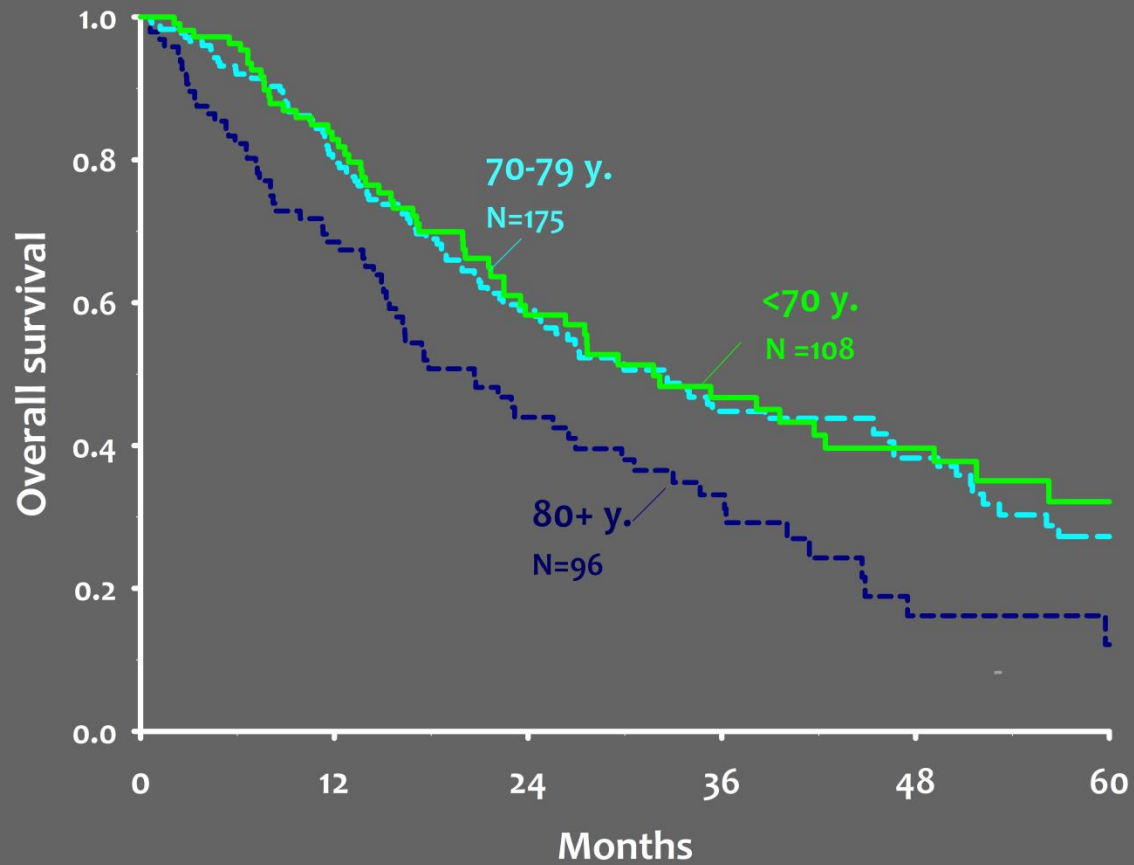
Overall Survival

Cox -analysis

	OR	(95% C.I.)	P-value
Age ≥ 70	1.63	(1.14; 2.33)	0.007
Non-adeno	1.50	(1.10; 2.06)	0.011
Male gender	1.31	(0.95; 1.80)	0.097
Stage II+			NS*)
Smoking			NS*)
BMI <18.5			NS*)
FEV1 <50%			NS*)

N=384 – Number of events 158 (* p >0.35, not included in final model)

SBRT NSCLC PS 2-4



SBRT PS 2-4

Overall Survival

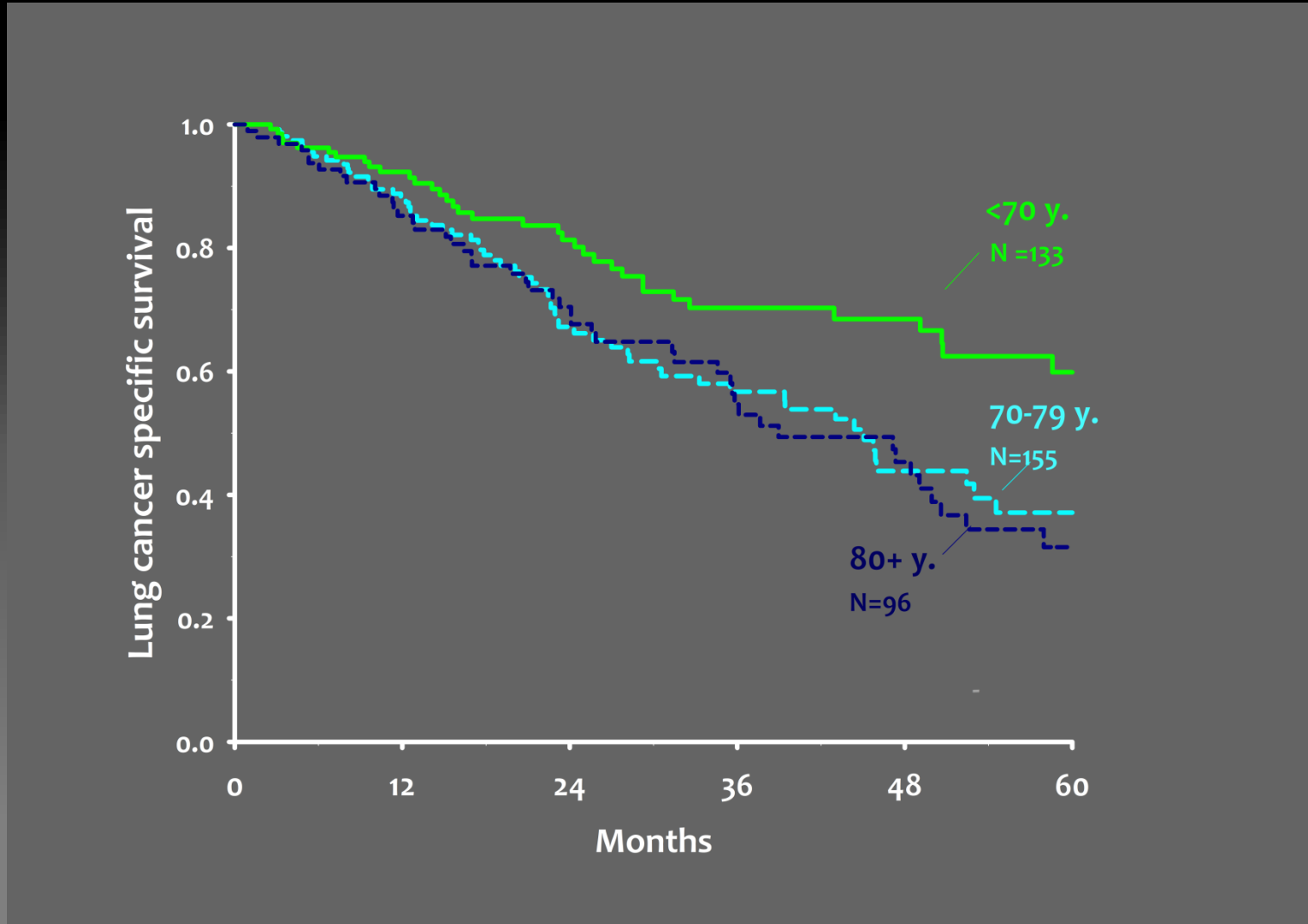
Cox -analysis

	OR	(95% C.I.)	P-value
PS 4	1.72	(1.26; 2.35)	0.0006
Age ≥80	1.63	(1.20; 2.21)	0.0016
Smoking	1.58	(1.08; 2.31)	0.018
Stage II+	1.28	(0.97; 1.67)	0.077
Male gender	1.26	(0.96; 1.65)	0.095
Non-adeno			NS ^{*)}
BMI <18.5			NS ^{*)}
FEV1 <50%			NS ^{*)}

N=379 – Number of events 222 (* p >0.15, not included in final model)

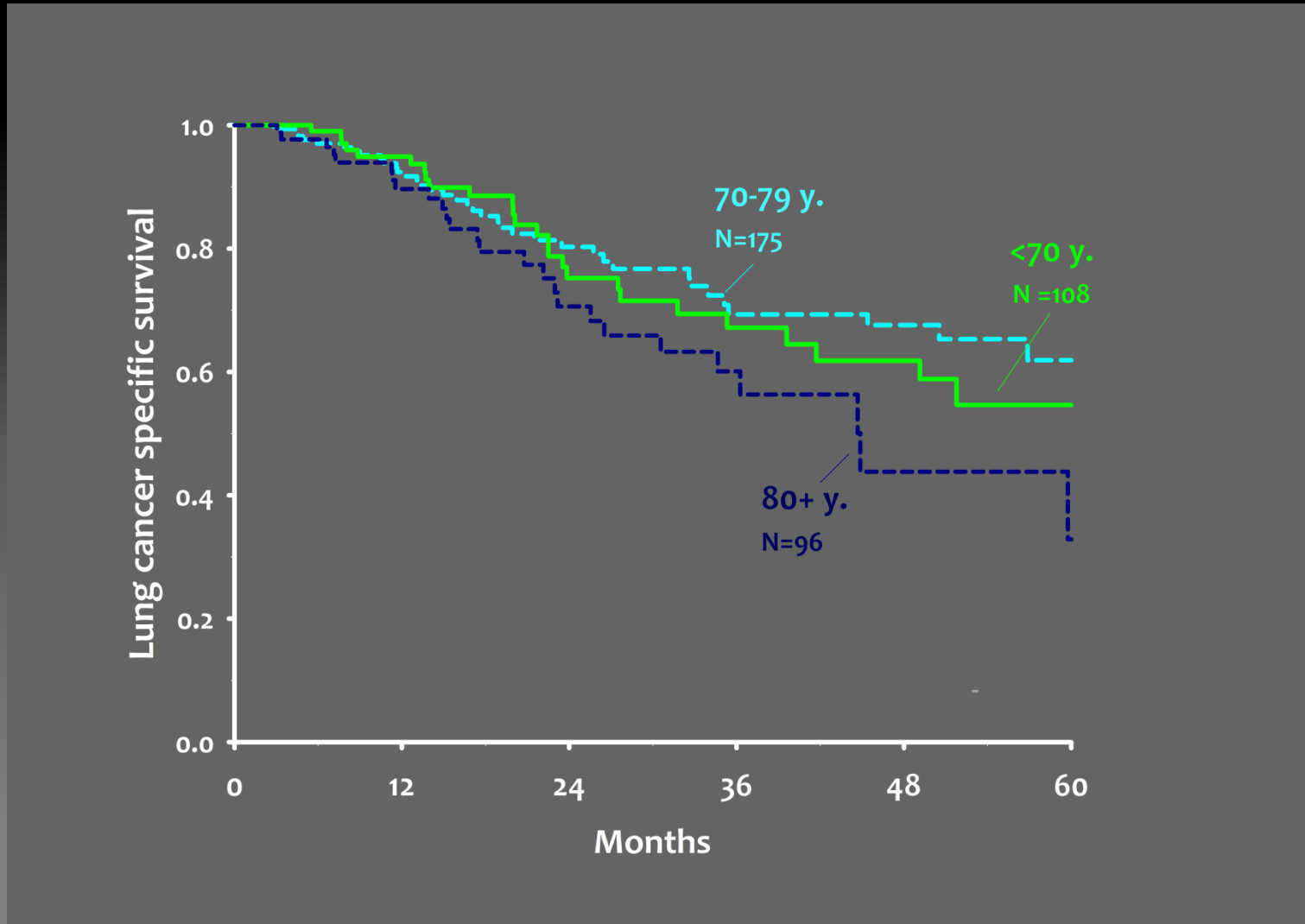
SBRT NSCLC PS 0-1 By Age Groups

Lung Cancer Specific Survival



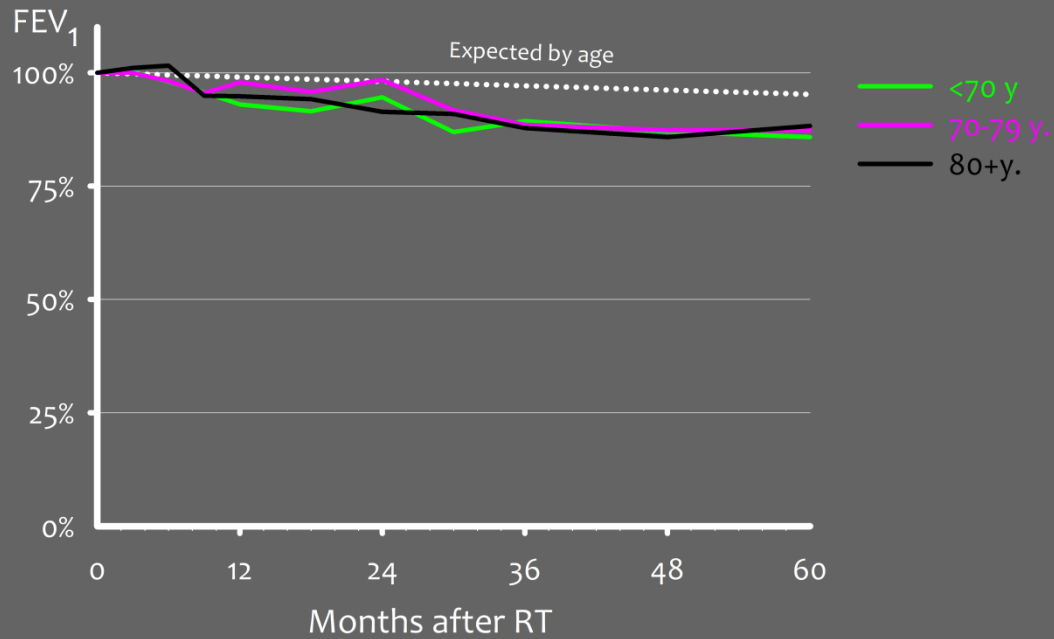
SBRT NSCLC PS 2-4 By Age Groups

Lung cancer specific Survival



NSCLC LUNG FUNCTION AFTER SBRT

Mean in pct. of initial value \pm 95% C.I.



DATA NOT CORRECTED FOR RELAPSE

Conclusion

SBRT in the elderly

SBRT: 'Age Friendly Treatment': ~70% of patients ≥ 70 years old

Prognosis is best for patients < 70 years old,
and worst for patients ≥ 80 years old -
- still better than no treatment

SBRT: 'Used independtly of performance status -
- prognosis is best for patients PS 0-1

The relative decline in lung funktion - independent of age