

VIEINNA

Overview of Treatment of Lung Cancer

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Where Are We With Survival in Lung Cancer Patients?

1 year	47%
3 years	21%
5 years	16%
7 years	14%

Median survival: 11 months
(*n* = 6907)

Results of Treatment of Small Cell Lung Cancer (SCLC)

	Limited disease	Extensive disease
Remission rates	50%–90%	50%–90%
Complete remissions	50%	20%
Median survival	12–15 months	6–9 months
Relapse-free survival	6%-10%	Rare

Strategies in the Treatment of Non-Small Cell Lung Cancer (NSCLC)

Stage	%	Surgery	Radiotherapy (RT)	Chemotherapy (CT)
I	14	yes	no	no
II	10	yes	no	no
IIIA	25	yes	yes, inoperability preoperative (Pancoast) postoperative (N2, and/or R1 or R2)	yes, combination with RT preoperative, adjuvant in clinical trials
IIIB	29	only selected cases	yes, primary after surgery	yes, preferentially preoperative in combination with RT
IV	22	no (except: palliation)	yes	yes

Survival After Resection of NSCLC ($n = 2202$)

Stage	n	1 year	3 years	5 years	Median survival (months)
I	773	88%	70%	60%	NA
II	434	80%	52%	43%	38
IIIA	553	65%	36%	25%	22
IIIB	442	53%	24%	19%	14

I vs. II, $p < .001$

II vs. IIIA, $p < .001$

IIIA vs. IIIB, $p < .001$

Radiotherapy in NSCLC

- **Definitive treatment**
 - 60–70 Gy in 6–8 weeks
 - 5-year survival: 5%–15%
 - Median survival: 15 months
- **Postoperative treatment**
 - 50–60 Gy in 5–7 weeks
 - Reduction of local relapses: 10%
- **Preoperative treatment**
 - Pancoast tumors
- **Palliative treatment**
 - 40–50 Gy for symptom control

Sequential and Concurrent CT/RT for Inoperable Locally Advanced NSCLC: Randomized Study—Results (Selection)

	<i>n</i>	MS (mo)	2-yrs-S (%)	Ref
RT	77	10	13*	<i>Dillman</i>
CT/RT	78	14	26	(1990)
RT	177	12	14*	<i>Le Chevalier</i>
CT/RT	176	11	21	(1992)
RT	149	11	19*	<i>Sause</i>
CT/RT	151	14	32	(1994)
RT	223	10	16	<i>Cullen</i>
CT/RT	112	12	20	(1999)
RT		12	13*	<i>Schaake-Koning</i>
+CT/RT	331**	13	26	(1992)
CT/RT con.		17*	35*	<i>Furuse</i>
CT/RT sequ.	320	13	27	(1999)

**p* < .05†Total *n* of patients enrolled (3-arm study)

+Cisplatin daily

Dillman (1990), *Le Chevalier* (1992), *Sause* (1994), *Cullen* (1999), *Schaake-Koning* (1992), *Furuse* (1999)

Chemotherapy in Stage III NSCLC

- **Polychemotherapy**
- **Surgery plus adjuvant chemotherapy**
- **Preoperative chemotherapy plus surgery**
- **Radiotherapy plus chemotherapy, sequential or simultaneous**

Clinical Practice Guidelines for Chemotherapy of Stage IV NSCLC

- Chemotherapy prolongs survival in patients with good performance status
- Chemotherapy should be platinum based
- Chemotherapy should be initiated early
- Chemotherapy should not exceed 8 cycles

Induction Chemotherapy in NSCLC

Rationale

- Higher efficacy of CT early in the natural history of disease
- Facilitation of subsequent local therapy
- Early eradication of distant micrometastases

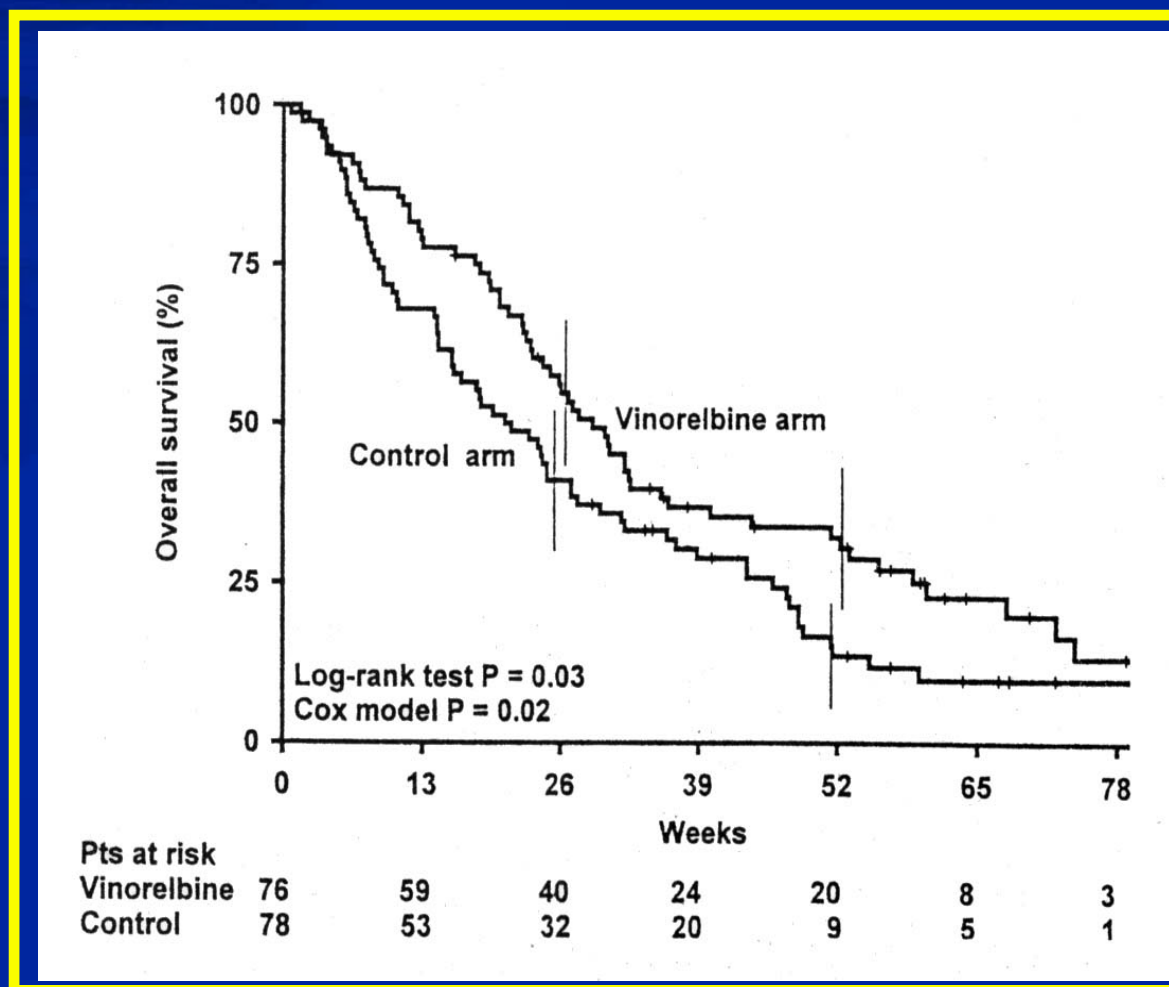
Induction Chemotherapy and Surgery for NSCLC

Author	Treatment	<i>n</i>	MS (mo)	Long-term S	<i>p</i> value
<i>Pass</i>	EP + surgery	13	28.7	42% (3-yr)	.095
	Surgery + radiation	14	15.6	18% (3-yr)	
<i>Rosell</i>	MIC, surgery + radiation	30	26	30% (3-yr)	<.001
	Surgery + radiation	30	8	0	
<i>Roth</i>	CEP + surgery	28	21	36% (5-yr)	.056
	Surgery alone	32	14	15% (5-yr)	
<i>Shepherd</i>	PV + surgery	16	--	40% (2-yr)	ns
	Radiation alone	15	--	40% (2-yr)	
<i>Elias</i>	EP, surgery + radiation	23	19	?	.64
	Surgery + radiation	24	23	?	

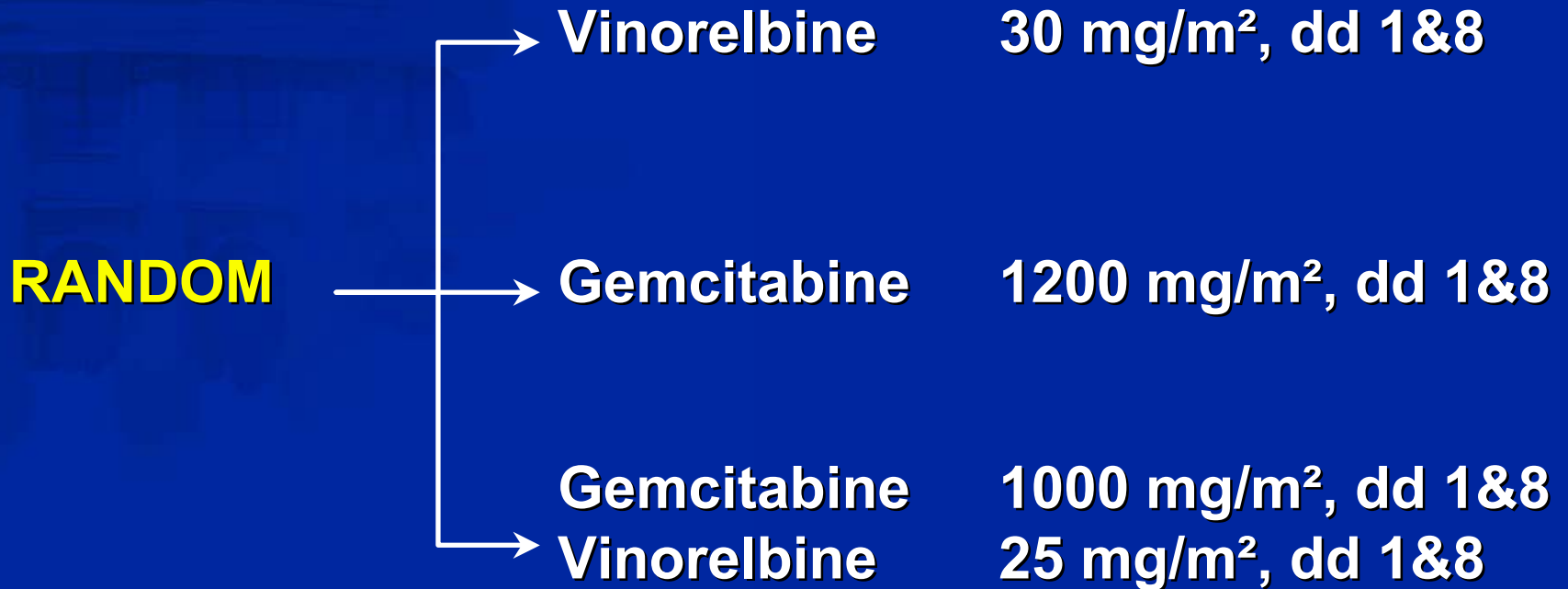
Second-Line Chemotherapy for NSCLC: Phase 2 Study Results in Platinum-Treated Patients

	Docetaxel	Gemcitabine
<i>n</i>	80	83
Dose/schedule	100 mg/m ² , q3w	1000 mg/m ² , 1,8,15 q4w
Partial response	13 (16%)	16 (19.3%)
Stable disease	n.r.	26 (31%)
Median survival	7 mo	n.r.
1-yr survival	25%	n.r.
Ref.	<i>Gandara (2000)</i>	<i>Crino (1999)</i>

Vinorelbine vs. Best Supportive Care in Elderly Patients With Advanced NSCLC



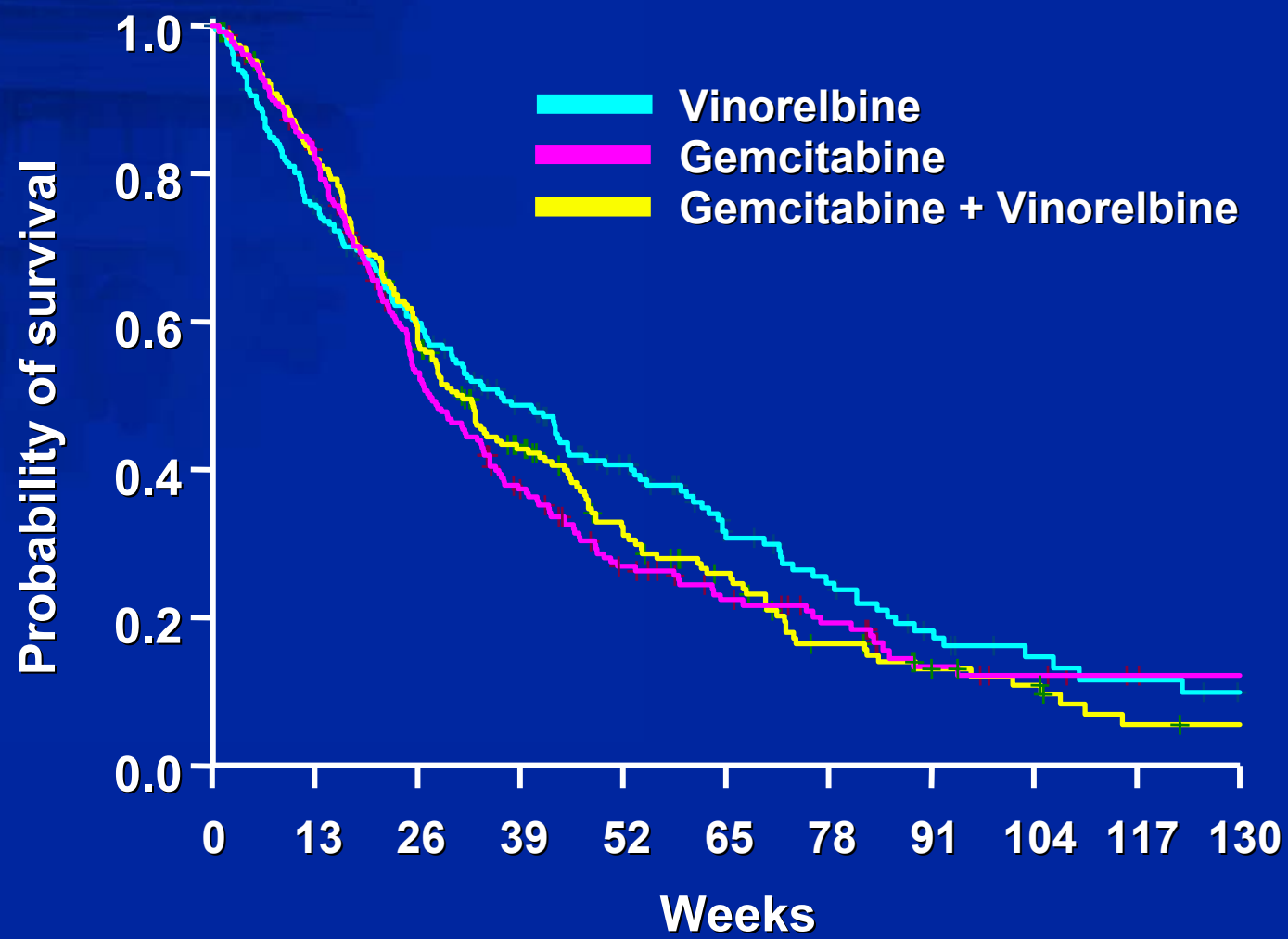
MILES: Study Design



Stratified by center, PS, stage

All cycles given every 3 weeks, for a maximum of 6 times

Chemotherapy in the Elderly Patients for Advanced NSCLC—MILES: Overall Survival



Newer Drugs in Combination for Advanced NSCLC—ECOG 1594: Efficacy

	PAC / CIS 135 (24h) / 75 mg/m ²	GEM / CIS 1000 (1.8, 15) / 100 mg/m ²	DOC / CIS 75 / 75 mg/m ²	PAC / CARBO 225 / AUC6 mg/m ²
<i>n</i>	303	301	304	299
OR	21.3%	21.0%	17.3%	15.3%
MS	7.8 mo	8.8 mo	7.4 mo	8.2 mo
TTP	3.5 mo	4.5 mo*	3.6 mo	3.3 mo
1-yr S	31%	36%	31%	35%

* $p = .002$