

Prise en charge des cancers non à petites cellules (CBNPC) de stade IIIA-N2 : Le traitement multimodal.



Bernard Milleron
UF de Cancérologie Thoracique, Hôpital Tenon, Paris
IFCT, 10 rue de la Grange Batelière 75009 Paris

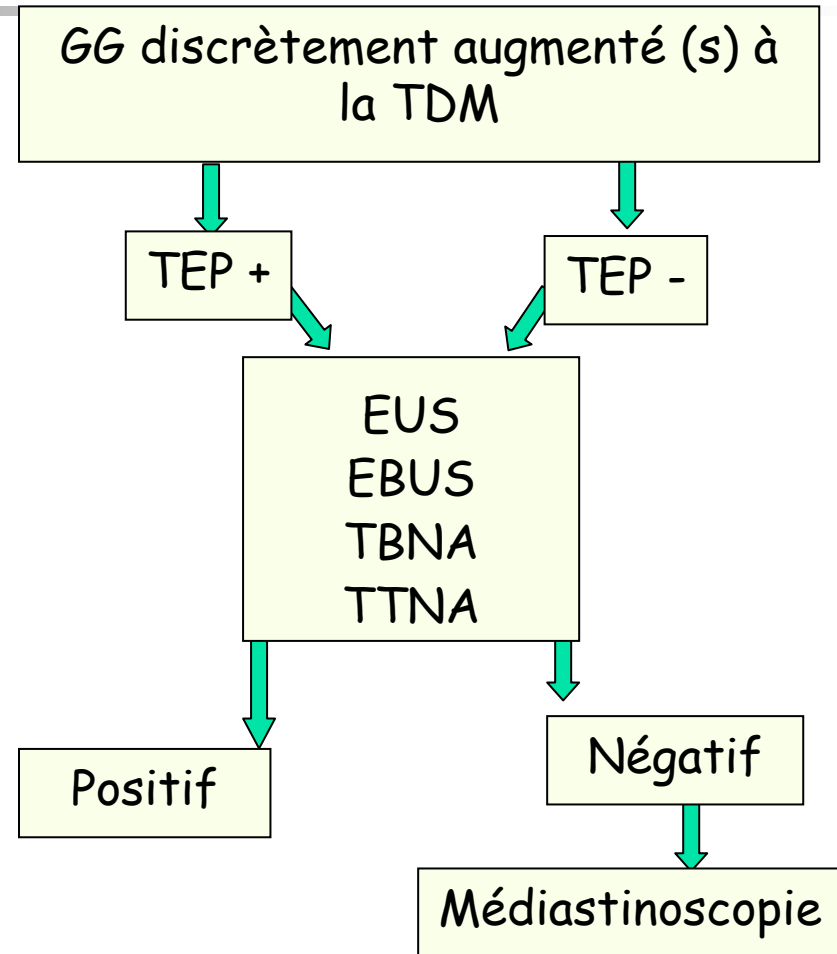
Cours du GOLF, Toulouse, Septembre 2009

Avant tout, savoir de quoi l'on parle

2. For patients with discrete mediastinal lymph node enlargement (and no distant metastases), invasive confirmation of the radiographic stage is recommended (regardless of whether a PET finding is positive or negative in the mediastinal nodes). Grade of recommendation, 1B

3. For patients with discrete mediastinal lymph node enlargement (and no distant metastases), many invasive techniques for confirmation of the N2,3 node status are suggested as reasonable approaches (mediastinoscopy, EUS-NA, TBNA, EBUS-NA, TTNA), given the appropriate experience and skill. Grade of recommendation, 1B

4. For patients with discrete mediastinal lymph node enlargement (and no distant metastases), a nonmalignant result from a needle technique (EUS-NA, TBNA, EBUS-NA, TTNA) should be further confirmed by mediastinoscopy (regardless of whether a PET finding is positive or negative in the mediastinal nodes). Grade of recommendation, 1C

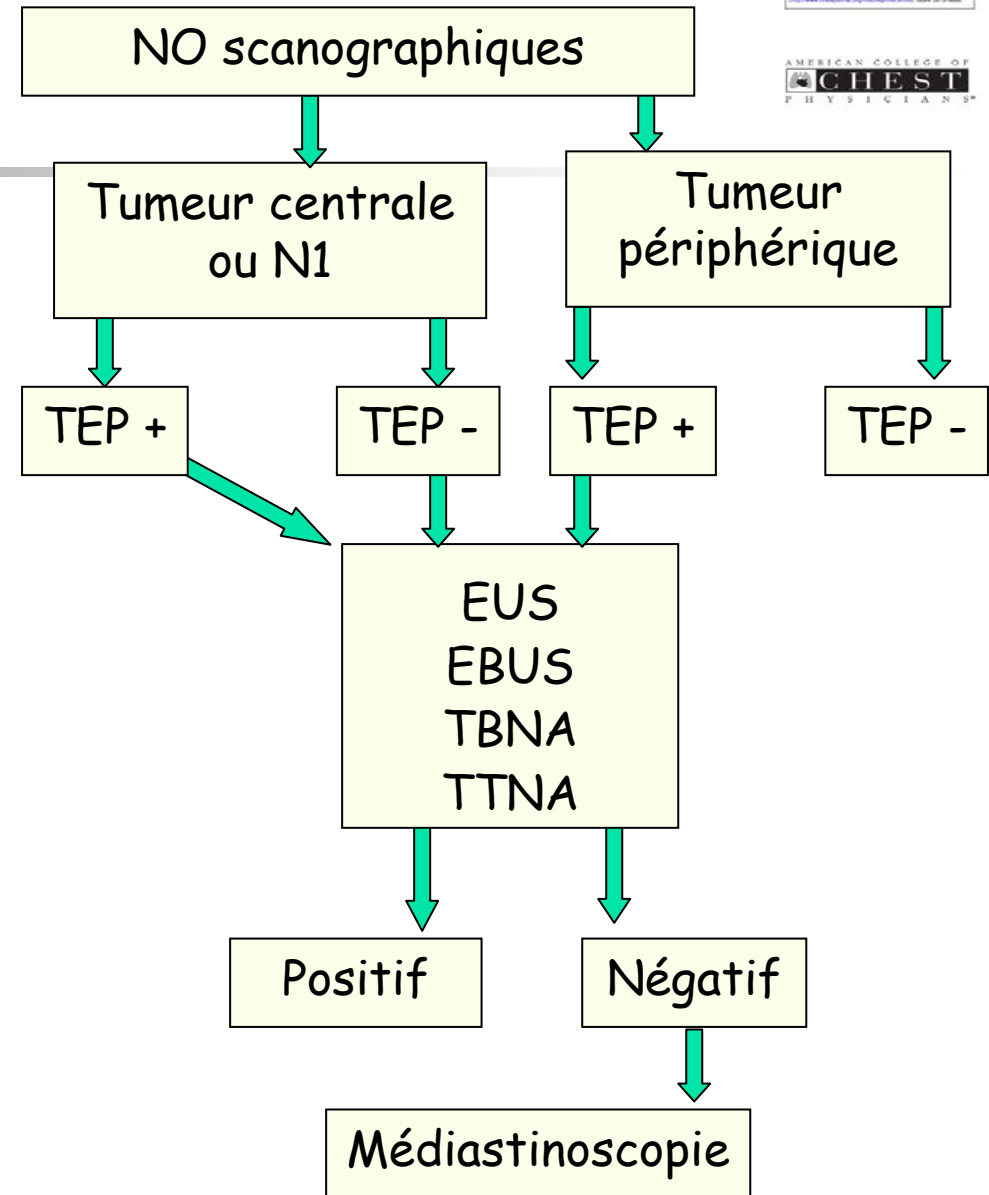


Avant tout, savoir de quoi l'on parle (2)

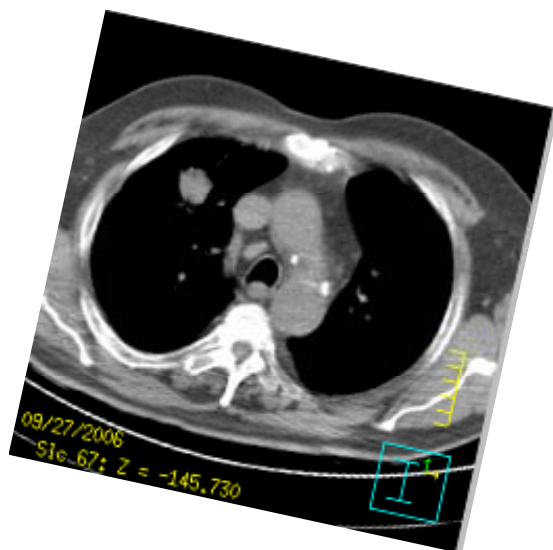
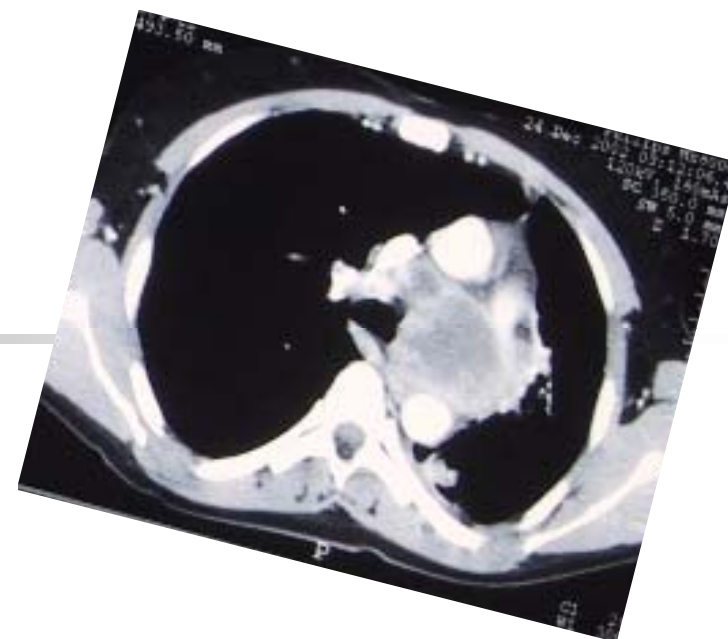
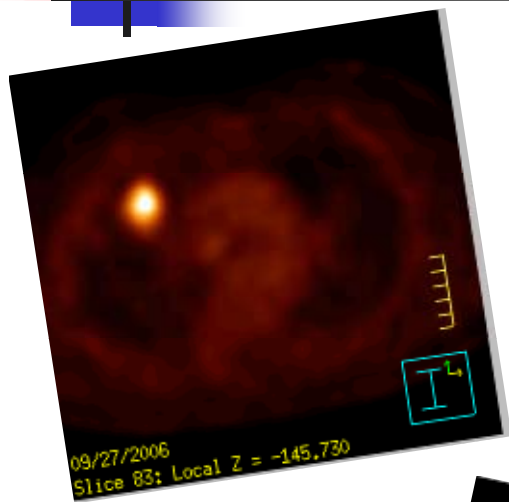
5. For patients with a radiographically normal mediastinum (by CT) and a central tumor or N1 lymph node enlargement (and no distant metastases), invasive confirmation of the radiographic stage is recommended (regardless of whether a PET finding is positive or negative in the mediastinal nodes). Grade of recommendation, 1C

6. For patients with a central tumor or N1 lymph node enlargement (and no distant metastases), invasive staging is recommended. In general, mediastinoscopy is suggested, but EUS-NA or EBUS-NA may be a reasonable alternative if nondiagnostic results are followed by mediastinoscopy. Grade of recommendation, 2C

7. For patients with a peripheral clinical stage I tumor in whom a PET scan shows uptake in mediastinal nodes (and not distant metastases), invasive staging is recom-

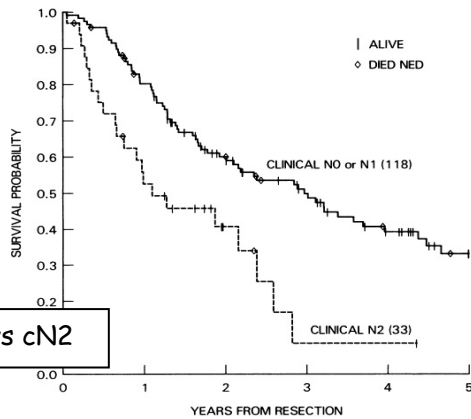


N2 ou N2s ?



Déjà il y a plus de 25 ans ...

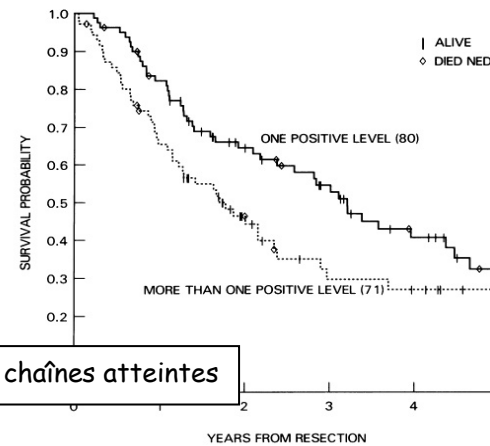
SURVIVAL FROM RESECTION OF N2 LUNG CANCER BY CLINICAL NODES



cN0,N1 vs cN2

FIG. 7. Survival from resection of N2 lung cancer by clinical nodes.

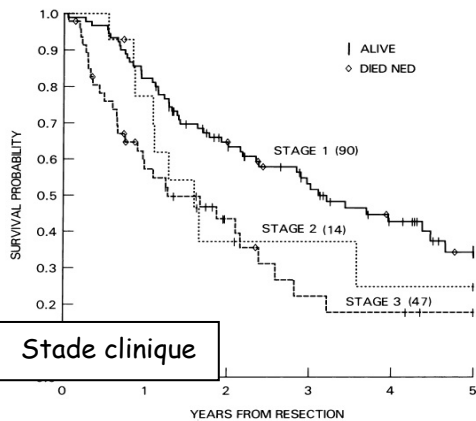
SURVIVAL FROM RESECTION OF N2 LUNG CANCER BY NUMBER OF POSITIVE LEVELS



Nombre de chaînes atteintes

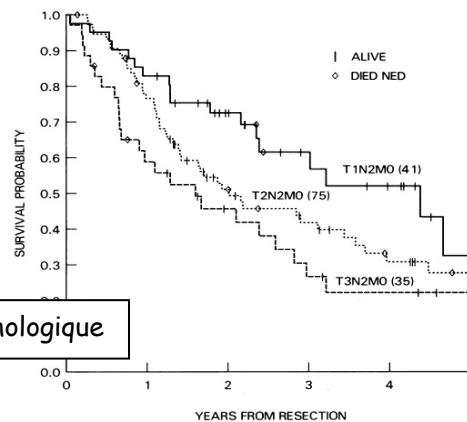
FIG. 9. Survival from resection of N2 lung cancer by number of positive levels.

SURVIVAL FROM RESECTION OF N2 LUNG CANCER BY CLINICAL STAGE



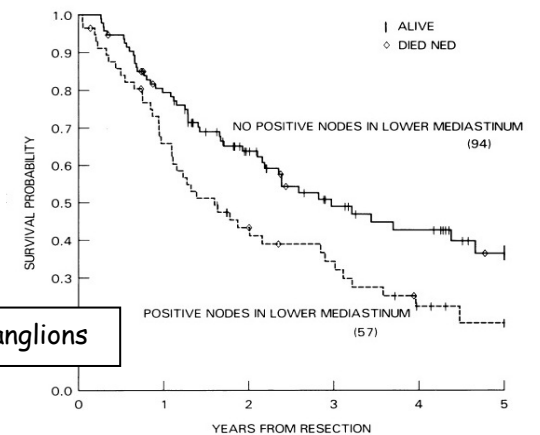
Stade clinique

SURVIVAL FROM RESECTION OF N2 LUNG CANCER BY PATHOLOGICAL STAGE



Stade pathologique

SURVIVAL FROM N2 LUNG CANCER BY LOCATION OF POSITIVE NODES



Siège des ganglions

Et plus récemment : influence du cN

Premier auteur	n	Survie à 5 ans (%)		p
		cN0-1	cN2	
Cybulsky et al	124	13.5	6.6	-
Martini et al	151 RC	34	9	0.002
Pearson et al	76 RC	41	15	0.019
Vansteenkiste et al	140	21.6	15	0.12
Watanabe et al	84 RC	33	20	ns

Vansteenkiste JF, Lung Cancer 1998; 19 : 3 – 13

Influence du type histologique

Premier auteur	n	Survie à 5 ans (%)		p
		Epidermoïdes	Non-épidermoïdes	
Cybulsky et al	124			NS
Frytak	101 RC	30	20	NS
Goldstraw	130	29.5	4.4	<0.01
Ishida	115	15	19	NS
Kirsh	136	28.5	10.4	0.02
Maggi	137			NS
Martini	151 RC	26	34	NS
Mountain	307	37	26	0.06
Naruke	242 RC	30.8	16	0.02
Patterson	35			NS
Pearson	79	18	7	NS
Régnard	254			NS
Roeslin	97			NS
Van Klaveren	48			0.02
Vansteenkiste	140	22.5	18.5	NS
Watanabe	84 RC	22	24	NS

Influence de l'extension tumorale

Premier auteur	n	Survie à 5 ans (%)			p
		T1	T2	T3	
Frytak et al	101 RC	46		12	0.01
Goldstraw	130	24.3	13.6	15.6	NS
Ishida	115	45	17	0	<0.05
Martini	151 RC	46	27	14	0.003
Mountain	307	38	32	29	0.02
Naruke	242 RC	33.2	16.8	16.3	0.05
Patterson	35	83	24	33	0.04
Régnard	254	44	25	12	<0.05
Roeslin	97				NS
Vansteenkiste	140	19.8	30.6	2	0.01
Watanabe	64 RC	40	30	10	0.06

Influence du nombre de ganglions envahis

Premier auteur	n	Survie à 5 ans (%)		p
		1 chaîne	> 1 chaîne	
Cybulsky et al	124			NS
Goldstraw	130	32	24	<0.05
Kirsh	136			NS
Maggi	137	25	26	NS
Martini	151 RC	44	24	0.005
Mountain	307	37	24	<0.01
Naruke	242 RC			(tendance)
Régnard	254	24	9	<0.10
Roeslin	97			NS
Thomas	163			NS
Vansteenkiste	140	19.5	22	NS
Watanabe	84 RC	35	5	NS

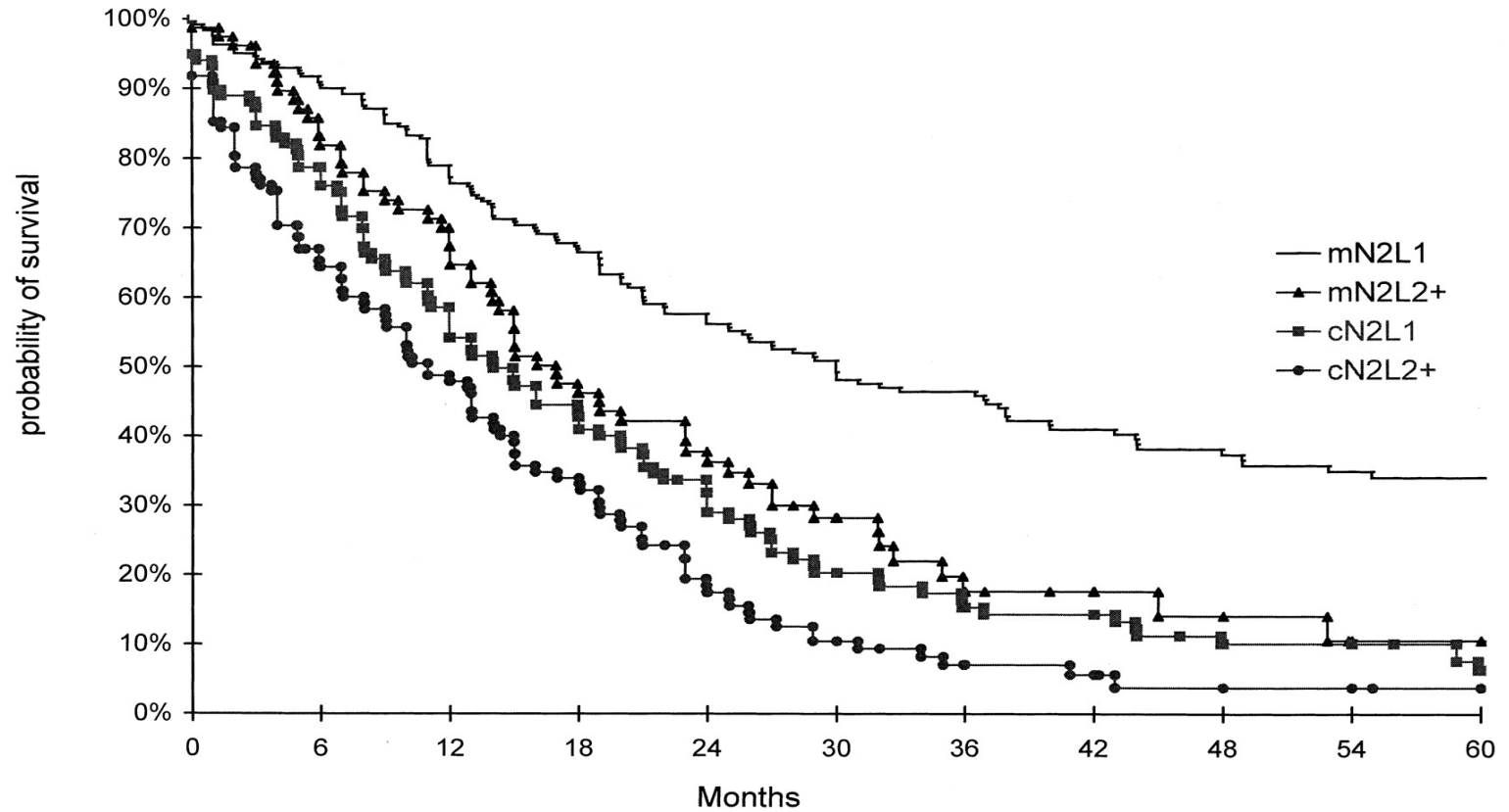
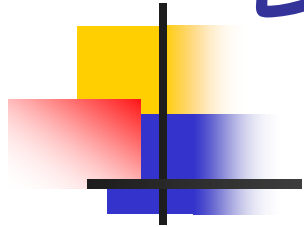
Influence de l'atteinte sous carénaire

Premier auteur	n	Survie à 5 ans (%)		p
		Pas de sous-carénaire	Sous-carénaire	
Goldstraw	130	22.5	27.1	NS
Kirsh	136	33	16	<0.07
Maggi	137	23.7	12.8	NS
Martini	151 RC	33	22	NS
Naruke	242 RC	-	-	tendance
Pearson	141	21	7	0.02
Régnard	254	34	18	<0.05
Thomas	163	-	-	<0.02
Vansteenkiste	140	33.8	18.4	0.09

Influence de la rupture capsulaire

Premier auteur	n	Survie à 5 ans (%)		p
		Rupture capsulaire	Pas de rupture capsulaire	
Cybulsky et al	124			NS
Goldstraw	130			0.07
Ishida	115	34.8	11.3	<0.01
Naruke	242 RC			NS
Roeslin	97			0.02
Suemasu	49	12.7	37.5	NS
Van Klaveren	48			0.05
Vansteenkiste et al	140	23.3	16.1	0.05

Le concept de « Minimal N2 »



AT RISK

—	244	181	113	78	48	34
▲	78	51	24	8	4	2
■	118	62	30	15	9	5
●	122	55	18	5	2	1

Andre, F. et al. J Clin Oncol; 18:2981-2989 2000

Et le Problème est encore plus complexe ...

Choix des examens

Radiographie standard

TEP-FDG

EBUS-EUS

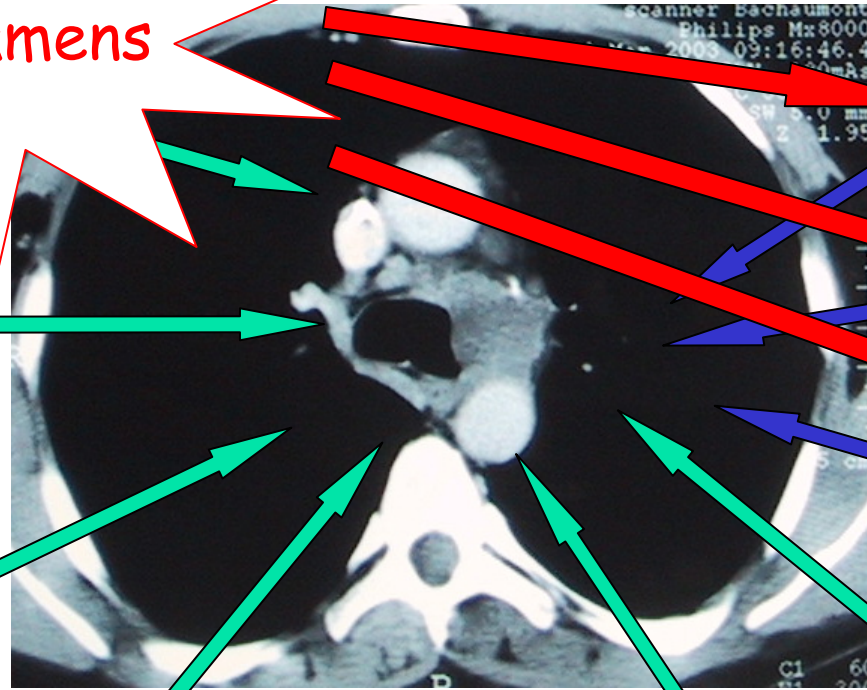
Médiastinoscopie

Nombre

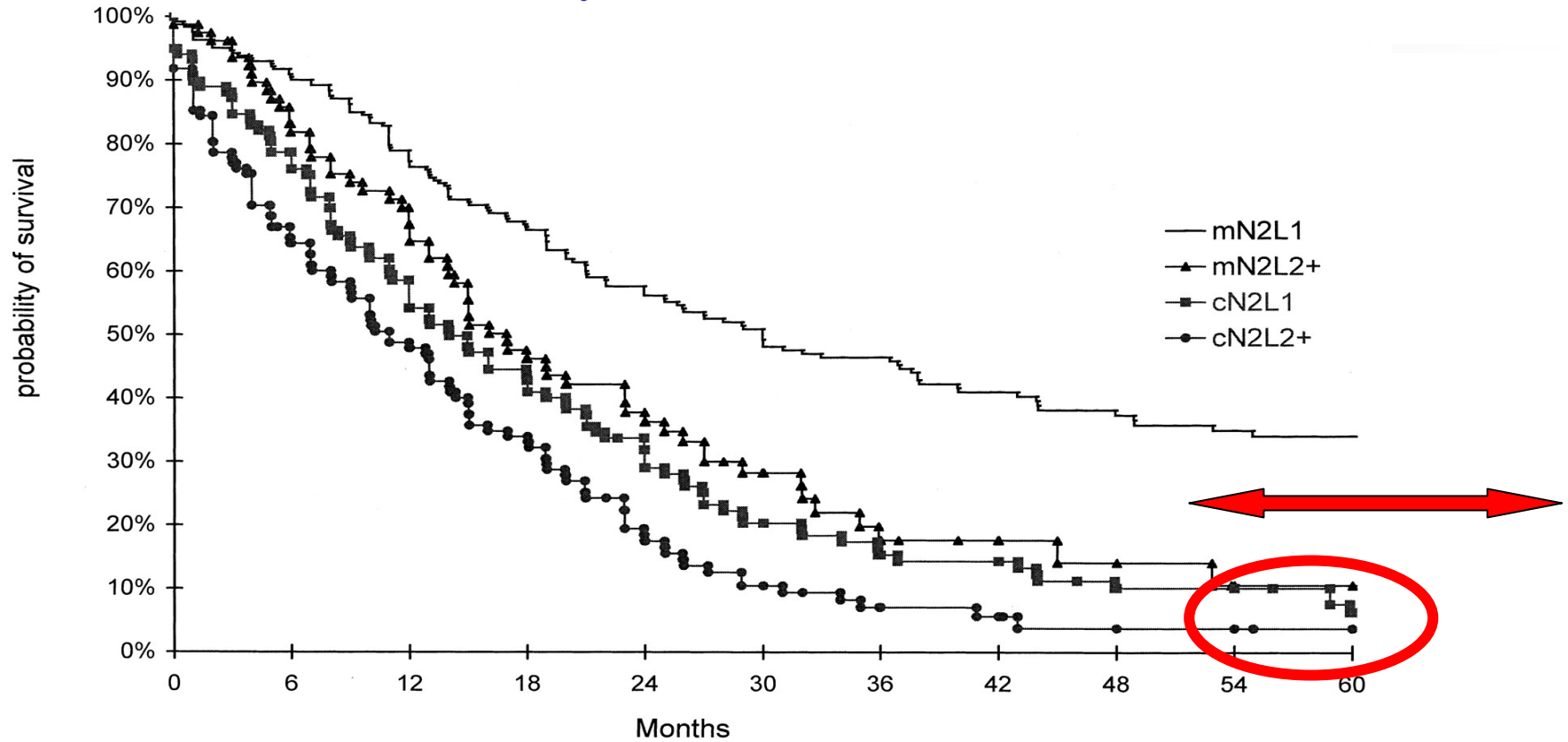
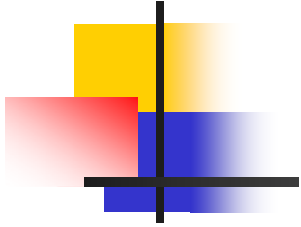
Siège

Stade clinique

Thoracotomie



Faut-il mettre la frontière entre les mN2 et les autres ?



AT RISK

—	244	181	113	78	48	34
▲	78	51	24	8	4	2
■	118	62	30	15	9	5
●	122	55	18	5	2	1

ACCP 2007 : oui

CHEST

Official publication of the American College of Chest Physicians

CHEST
ONLINE

**Diagnosis and Management of Lung Cancer
Executive Summary: ACCP Evidence-Based
Clinical Practice Guidelines (2nd Edition)**

W. Michael Alberts

Chest 2007;132:1-19
DOI 10.1378/chest.07-1860

The online version of this article, along with updated information
and services can be found online on the World Wide Web at:
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P H Y S I C I A N S[®]

1. In patients with NSCLC who have incidental (occult) N2 disease (IIIA2) found at surgical resection and in whom complete resection of the lymph nodes and primary tumor is technically possible, completion of the planned lung resection and mediastinal lymphadenectomy is recommended. Grade of recommendation, 2C

10. In NSCLC patients with N2 disease identified preoperatively (IIIA3), surgery alone is not recommended. Grade of recommendation, 1A

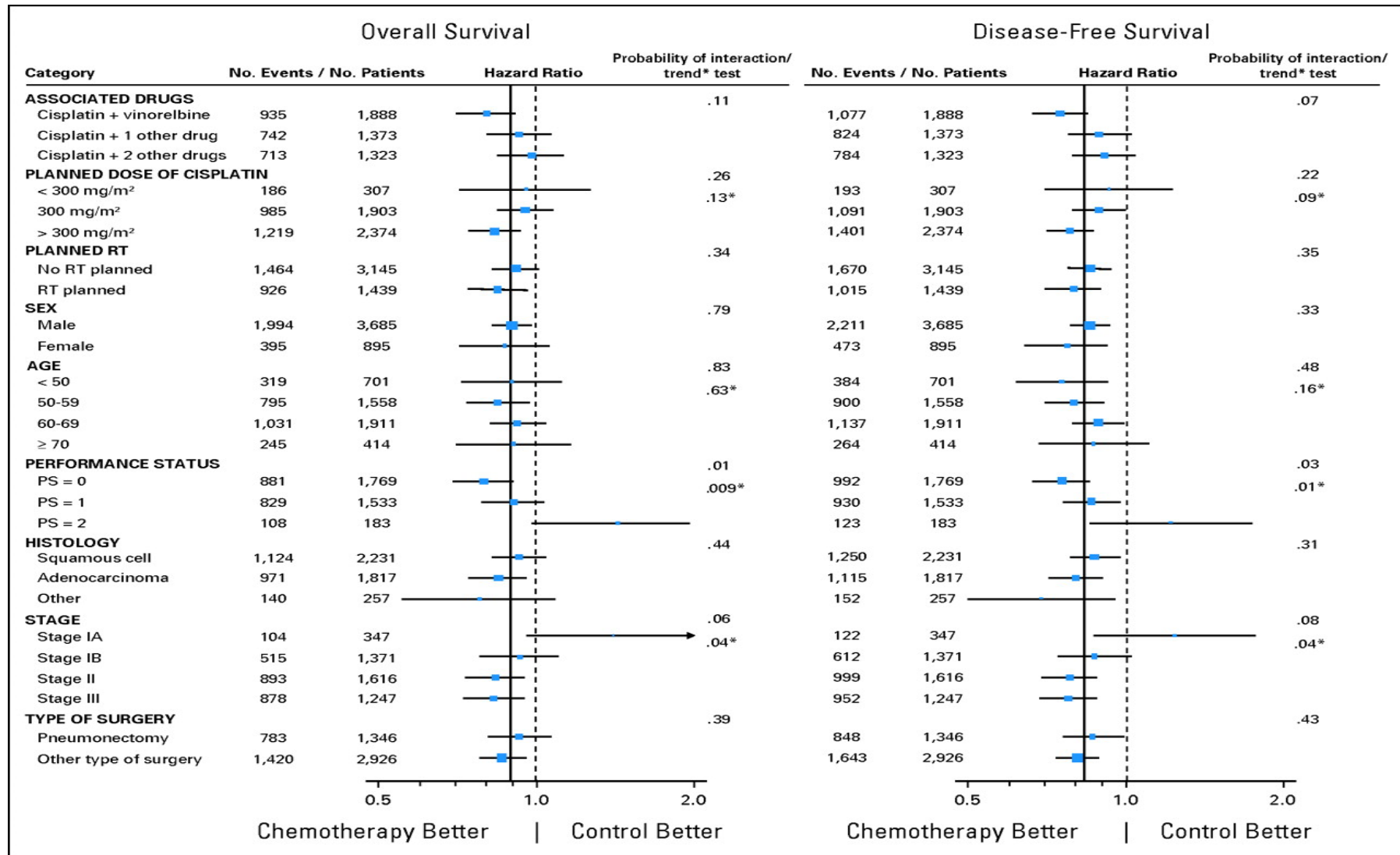
11. In NSCLC patients with N2 disease identified preoperatively (IIIA3), platinum-based combination chemoradiotherapy is recommended as primary treatment. Grade of recommendation, 1B

7. In NSCLC patients with N2 disease identified preoperatively (IIIA3), induction therapy followed by surgery is not recommended except as part of a clinical trial. Grade of recommendation, 1C

Cette attitude est-elle légitime pour les « minimal N2 » ?

Essais	N	Stades	Décès tox. (%)	Médiane de survie		% Survie à 5 ans		p
				Contrôle	Expérim	Contrôle	Expérim	
Intergroupe 0115	488	II,IIIA	-	37,9	38,8	33	39	0,56
Big Lung Trial	381	I, II, IIIA	-	24,7	27	-	-	ns
ALPI-EORTC	1209	I,II,IIIA	10 (C+RT)	48	55,2	-	-	0,58
IALT	1867	I, II, IIIA	7 (0,8)	44,4	50,8	40,4	44,5	<0,03
UFT	999	ADC I	0			85	88	0,04
Intergroupe JBR 10	482	IB, II	2 (0,8)	73	94	54	69	0,009
CALGB 9633	344	IB	0	78	95	57	59	0,37
ANITA 1	840	IB, II, IIIA	7 (2)	43,7	65,7	42,6	51,2	0,017
Roselli and al	140	IB	0	41,6	94,8	30	78	0,003

Cette attitude est-elle légitime pour les « minimal N2 » (2) ?



Et les autres ?

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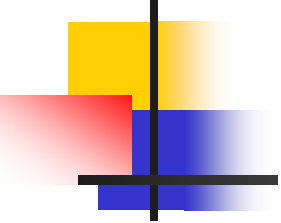
Trois attitudes possibles ?

- Radio-chimiothérapie concomitante et pas de place pour la chirurgie ?
- Chirurgie chaque fois qu'elle est possible suivie
 - d'une chimiothérapie
 - et/ou d'une radiothérapie adjuvante,
- Chirurgie chaque fois qu'elle est possible précédée
 - d'une chimiothérapie
 - ou d'une radio-chimiothérapie néo-adjuvante.

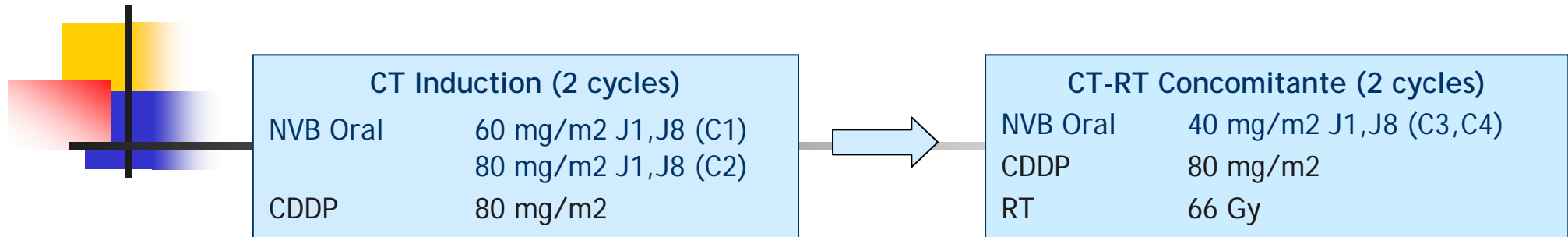
Chimio-radiothérapie pour tous ?

Chimio-radiothérapie séquentielle vs concomitante				
	Médiane (mois)	% 2 ans	% 4 ans	p
Furuse	13.3	27.4	8.9	0.03
	16.5	34.6	15.8	
RTOG 94-10	14.6	21	12	0.046
	17	34	21	
GLOT-GFPC (* 5 ans)	14.5	26	14.2*	0.24
	16.3	39.3	20.7*	

Peut-on améliorer ces résultats ?

- 
- Optimiser la radiothérapie ?
 - Dosimétrie
 - Fractionnement
 - RT conformationnelle
 - Associer une chimiothérapie d'induction ou de consolidation ?
 - Socinski 2001, Vokes 2002
 - SWOG 9504, GFPC-IFCT 0201
 - Utiliser de nouvelles drogues ou de nouveaux schémas ?

Cisplatine-Vinorelbine-RXT



Efficacité <i>n=56</i>	NVB ORAL + CDDP Induction	NVB ORAL + CDDP Concomitant
Dose intensité NVB Oral	86%	97%
Réponse objective	37%	54%
Contrôle de la maladie	87%	91%
Durée médiane de réponse	17,2 m	
Survie sans progression	12,5 m	
Survie médiane	23,4 m	
Neutropénie/ N Fébrile (%)	27.8/8.5	7.4/0

Radio-Chimiothérapie ou Chirurgie ?

ARTICLE |

Randomized Controlled Trial of Resection Versus Radiotherapy After Induction Chemotherapy in Stage IIIA-N2 Non-Small-Cell Lung Cancer

Jan P. van Meerbeek, Gijb W. P. M. Kramer, Paul E. Y. Van Schil, Catherine Lagrand, Egbert F. Smit, Franz Schramel, Vivianne C. Tjan-Heijnen, Bonne Biesma, Channa Debruyne, Nico van Zandwijk, Ted A. W. Splinter, Giuseppe Giaccone

On behalf of the European Organisation for Research and Treatment of Cancer-Lung Cancer Group

- Background** Induction chemotherapy before surgical resection increases survival compared with surgical resection alone in patients with stage IIIA-N2 non-small-cell lung cancer (NSCLC). We hypothesized that, following a response to induction chemotherapy, surgical resection would be superior to thoracic radiotherapy as locoregional therapy.
- Methods** Selected patients with histologic or cytologic proven stage IIIA-N2 NSCLC were given three cycles of platinum-based induction chemotherapy. Responding patients were subsequently randomly assigned to surgical resection or radiotherapy. Survival curves were estimated using Kaplan-Meier analyses from time of randomization.
- Results** Induction chemotherapy resulted in a response rate of 61% (95% confidence interval [CI] = 57% to 65%) among the 579 eligible patients. A total of 167 patients were allocated to resection and 165 to radiotherapy. Of the 164 (82%) patients who underwent surgery, 14% had an exploratory thoracotomy, 50% a radical resection, 42% a pathologic downstaging, and 5% a pathologic complete response; 4% died after surgery. Postoperative radiotherapy was administered to 62 (40%) of patients in the surgery arm. Among the 154 (93%) irradiated patients, overall compliance to the radiotherapy prescription was 55%, and grade 3/4 acute and late esophageal and pulmonary toxic effects occurred in 4% and 7%; one patient died of radiation pneumonitis. Median and 5-year overall survival for patients randomly assigned to resection versus radiotherapy were 16.4 versus 17.5 months and 15.7% versus 14%, respectively (hazard ratio = 1.06, 95% CI = 0.84 to 1.35). Rates of progression-free survival were also similar in both groups.
- Conclusion** In selected patients with pathologically proven stage IIIA-N2 NSCLC and a response to induction chemotherapy, surgical resection did not improve overall or progression-free survival compared with radiotherapy. In view of its low morbidity and mortality, radiotherapy should be considered the preferred locoregional treatment for these patients.

J Natl Cancer Inst 2007;99:442-50

An estimated 1.2 million new cases of lung cancer occur yearly worldwide, resulting in annual fatalities of 183 000 in Europe and 160 000 in the United States (1). Eighty percent of all lung cancers are non-small-cell lung cancer (NSCLC), and approximately 15% of patients with NSCLC are diagnosed with stage IIIA-N2 disease (2). This subgroup is heterogeneous, with lymph nodes that are only microscopically invaded to those that are radiologically visible with bulky ipsilateral mediastinal lymph node involvement (3). Surgical resection in selected patients results in 5-year survival rates of 7%–24% (4). Preoperative chemotherapy has been shown to increase 5-year survival to 17%–36% (5–7). The combination of platinum-based chemotherapy and thoracic

Departments of Respiratory Medicine and Thoracic Surgery, University Hospital Antwerp, Antwerp, Belgium (JPM, PEYS); European Organization for Research and Treatment of Cancer Data Center, Brussels, Belgium (CL, CD); Departments of Pulmonology and Medical Oncology, Vrije Universiteit Medical Center, Amsterdam, The Netherlands (EF, GG); Department of Pulmonology, Sint Antonius Ziekenhuis, Nieuwegein, The Netherlands (FS); Department of Medical Oncology, Radboud University Nijmegen Medical Center, Nijmegen, The Netherlands (VCH); Department of Pulmonology, Jeroen Bosch Ziekenhuis, 's-Hertogenbosch, The Netherlands (BB); Department of Thoracic Oncology, Netherlands Cancer Institute, Amsterdam, The Netherlands (NVZ); Departments of Pulmonology and Medical Oncology, Erasmus Medical Center, Rotterdam, The Netherlands (JPM, TAW).

Correspondence to: Jan P. van Meerbeek, MD, PhD, Department of Respiratory Medicine, 7K12E, University Hospital Ghent, De Pintelaan 185, 9000 Ghent, Belgium (e-mail: jan.vanmeerbeek@ugent.be).

Gijb W. P. M. Kramer is deceased.

See "Notes" following "References."

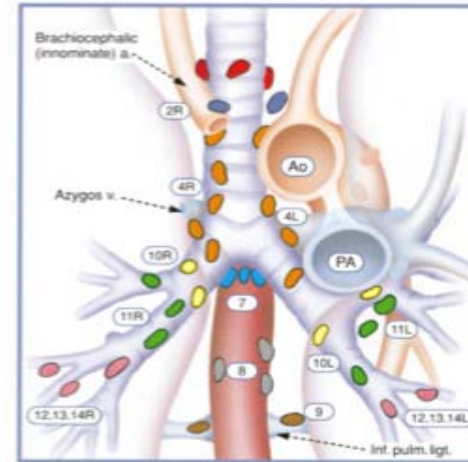
DOI: 10.1093/jco/kkx288

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Critères de sélection

- N2 histologiquement prouvés,
- Considérés comme non résécables :
 - Tout N2 envahi par non épidermoïde,
 - En cas d'épidermoïde :
 - N2 plus haut que 4R à droite,
 - N2 plus haut que 5-6 L à gauche
- Mesurables en uni-dimensionnel,
- PS 0-2



Superior Mediastinal Nodes

- 1 Highest Mediastinal
- 2 Upper Paratracheal
- 3 Pre-vascular and Retrotracheal
- 4 Lower Paratracheal (including Azygos Nodes)

N₁ = single digit, ipsilateral
N₂ = single digit, contralateral or supraclavicular

Aortic Nodes

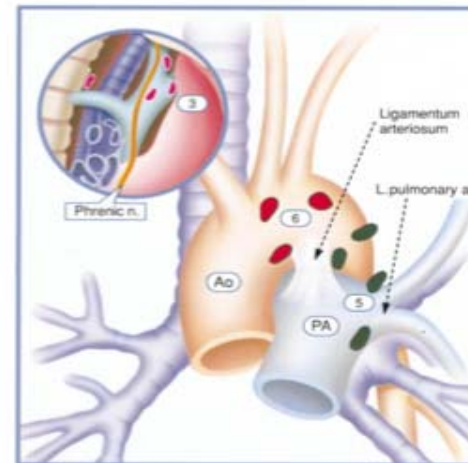
- 5 Subaortic (A-P window)
- 6 Para-aortic (ascending aorta or phrenic)

Inferior Mediastinal Nodes

- 7 Subcarinal
- 8 Paraesophageal (below carina)
- 9 Pulmonary Ligament

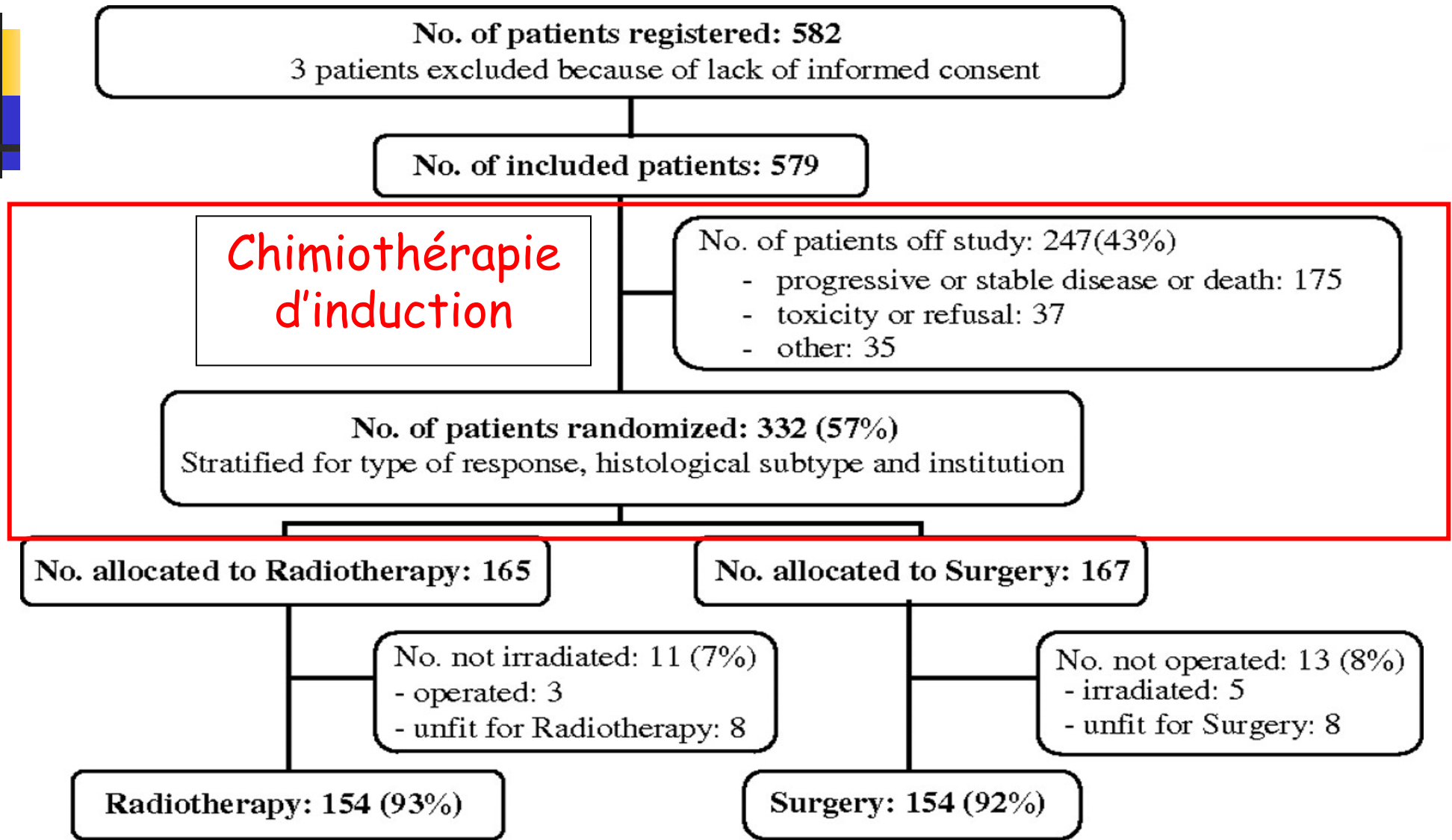
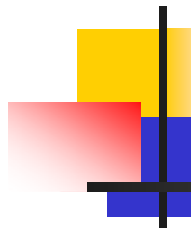
N₁ Nodes

- 10 Hilar
- 11 Interlobar
- 12 Lobar
- 13 Segmental
- 14 Subsegmental



Van Meerbeeck JP et al *J Natl Cancer Inst* 2007; 99 : 442-50

Schéma de l'essai



Caractéristiques des patients

	Radiothérapie (n = 165)	Chirurgie (n = 167)
Sexe m/f	127/38	119/48
Age	62 (33-76)	61 (29-78)
Histologie (% E/A/GC)	40/28/28	39/34/25
T1/T2/T3/T4 (%)	13/72/15/0	12/73/16/1
CR	8 (5)	12 (7)
PR	147 (89)	149 (89)
SD	8 (5)	4 (2)
P	2 (1)	2 (1)

Compliance à la chirurgie ...

332 Randomisés

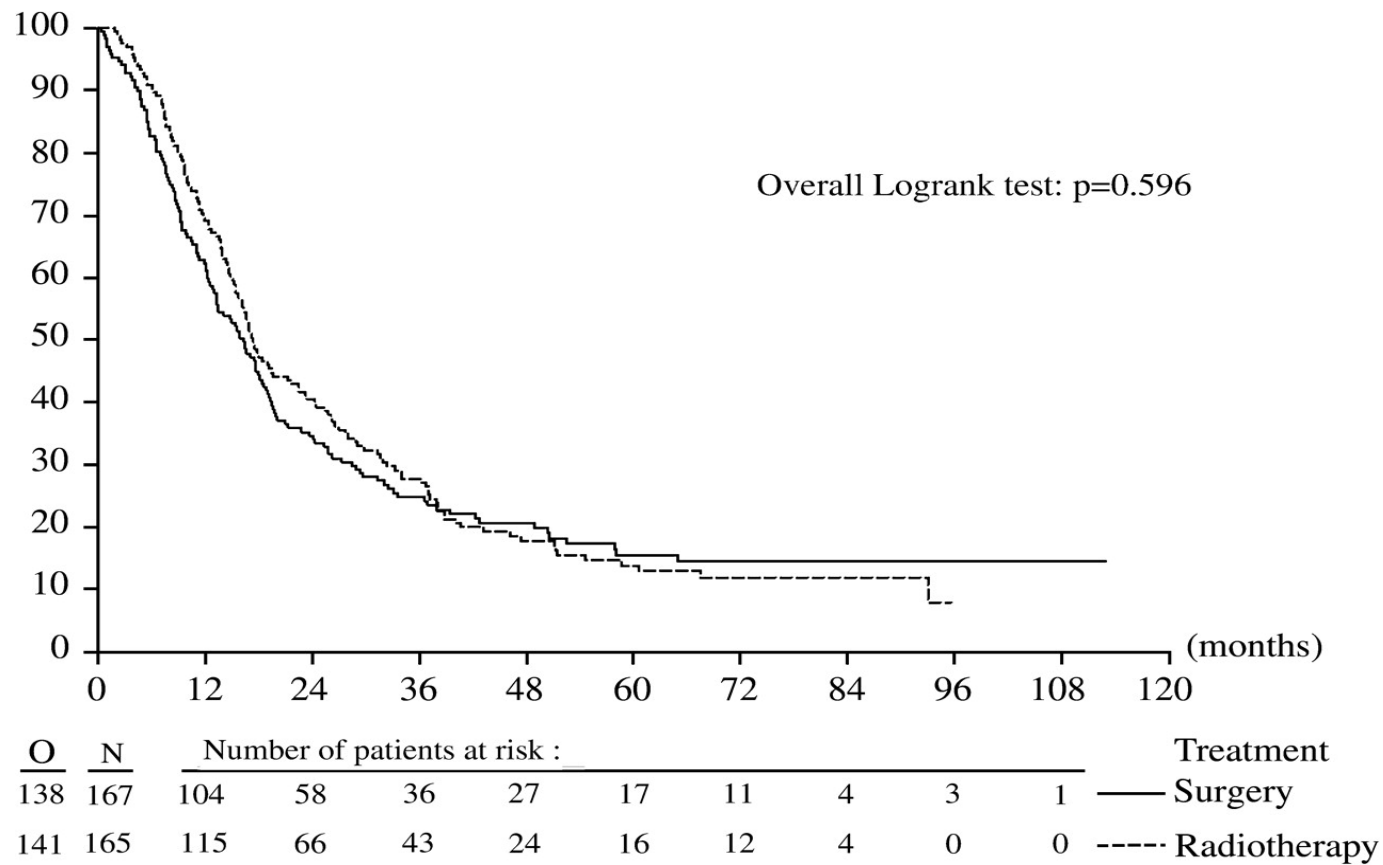
167 pour la chirurgie

154 opérés

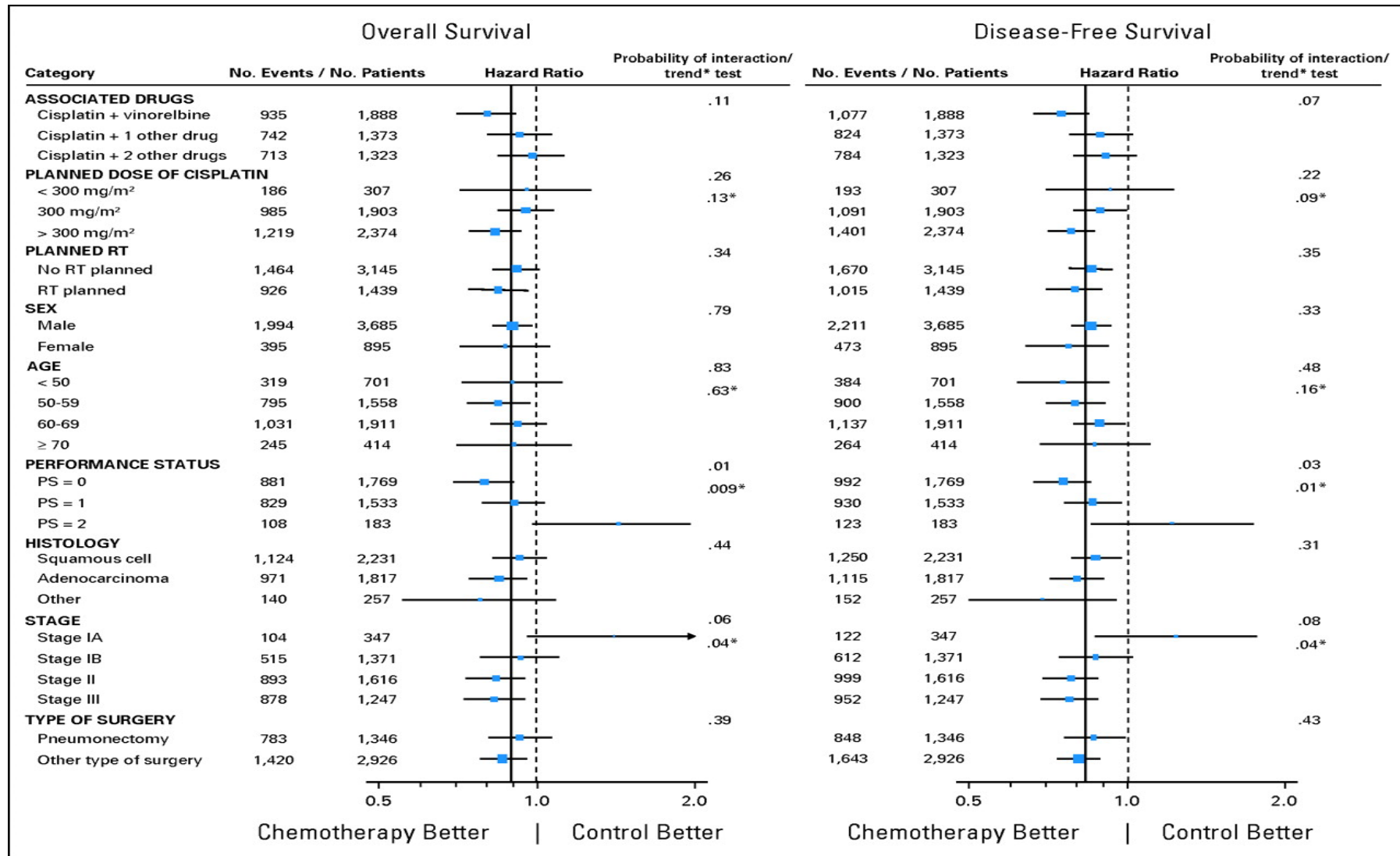
130 thoracotomies non
exploratrices
(dont 72 pneumonectomies)

77 résections
complètes

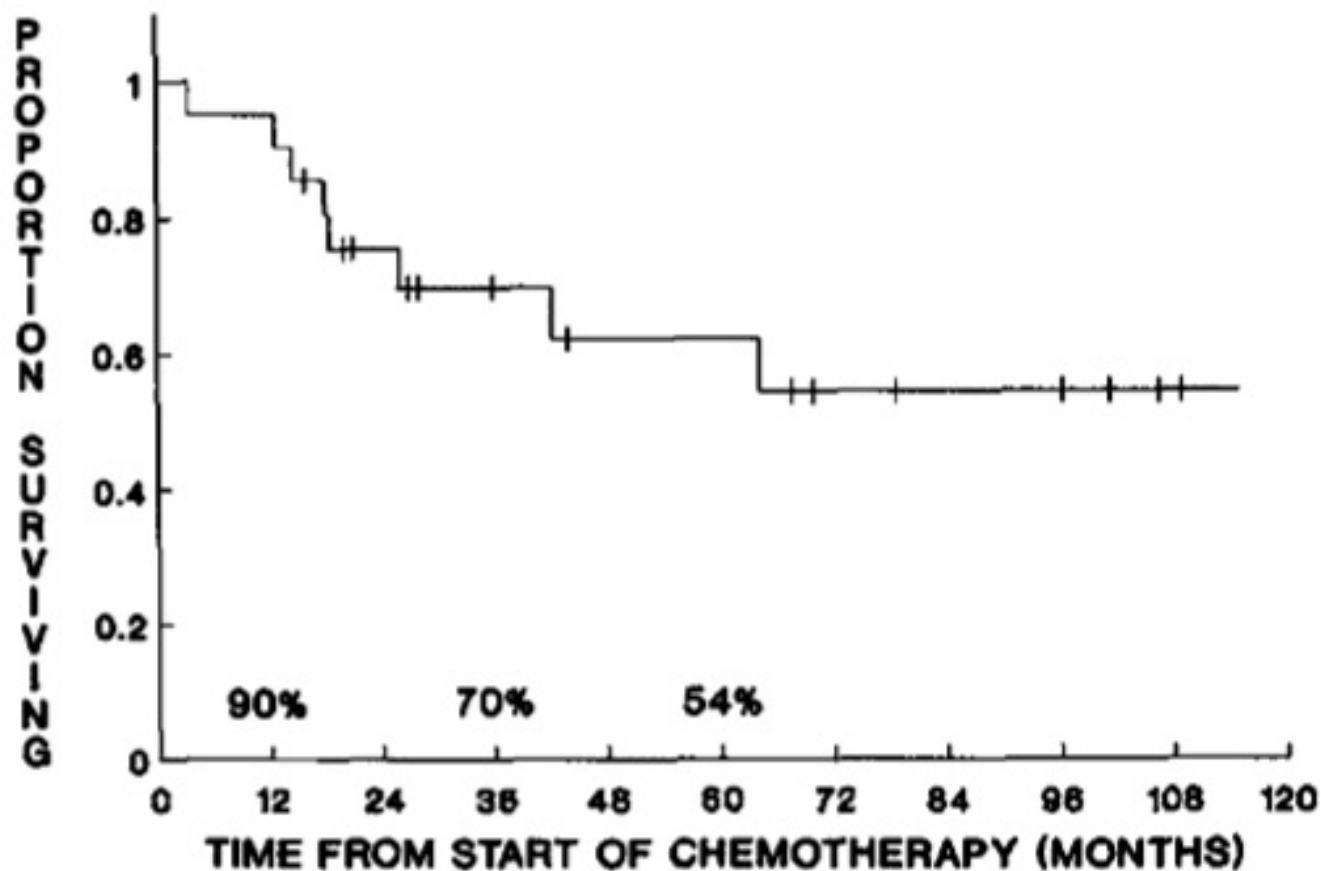
Pas de démonstration d'un gain de survie



Chirurgie et Chimiothérapie adjuvante ?



Retour sur la chimiothérapie néo-adjuvante ?

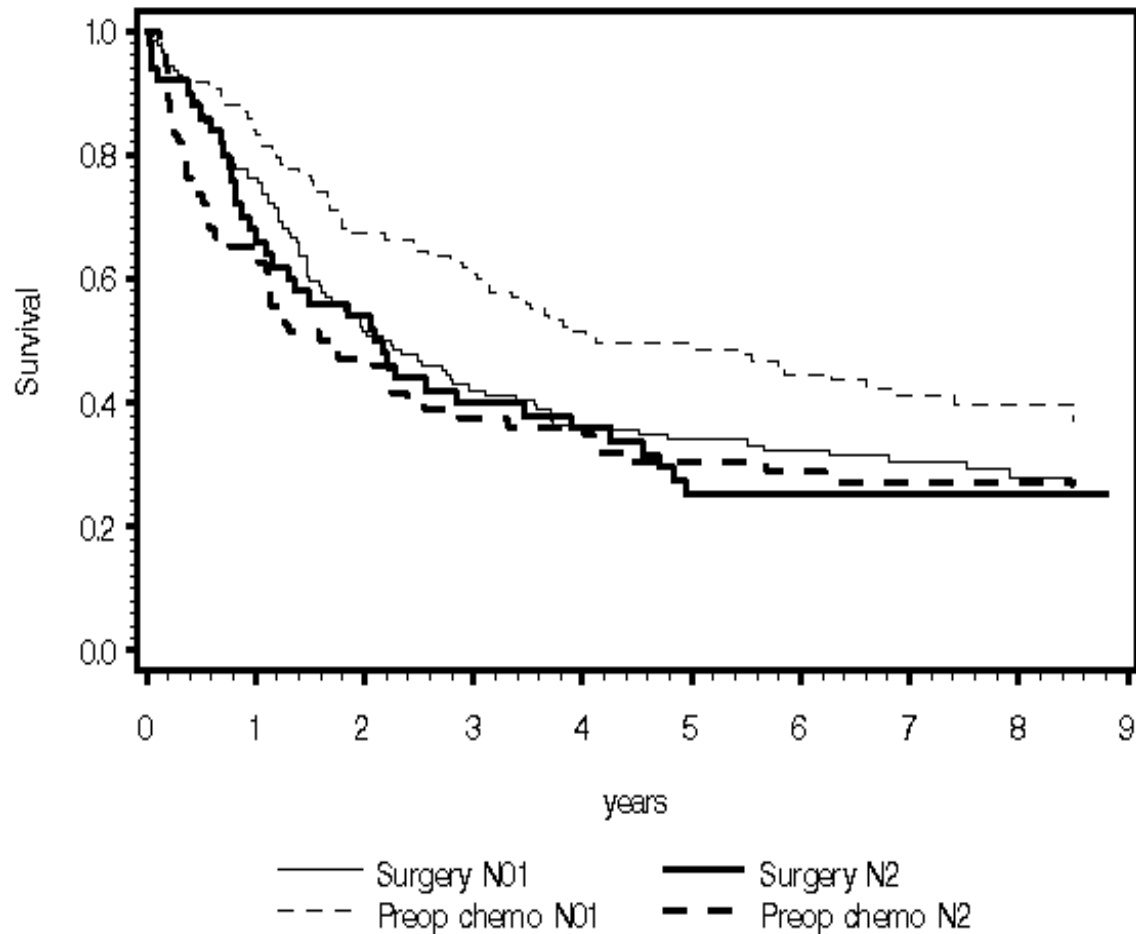


La chimiothérapie néo-adjuvante apporte-t-elle quelque chose à la chirurgie ?

	Rosell		Roth	
		P		P
N	30/30		28/32	
CT	MTC : 6mg/m ² IFO : 3 g /m ² DDP : 50 mg /m ²		CPM : 500mg/m ² , D1 DDP : 100 mg /m ² , D1 VP16 : 100 mg /m ² , D1-3	
REP (%)	60		35	
Médiane de survie	26/8	0.01	21/14	0.056

*N Engl J Med 1994; 330: 153-158
Lung Cancer 1998; 21: 1-6*

La chimiothérapie néo-adjuvante apporte-t-elle quelque chose à la chirurgie (2) ?

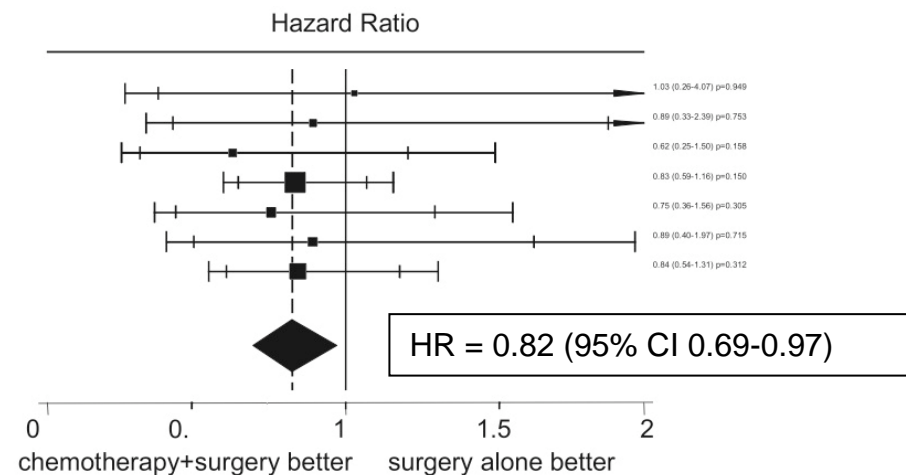
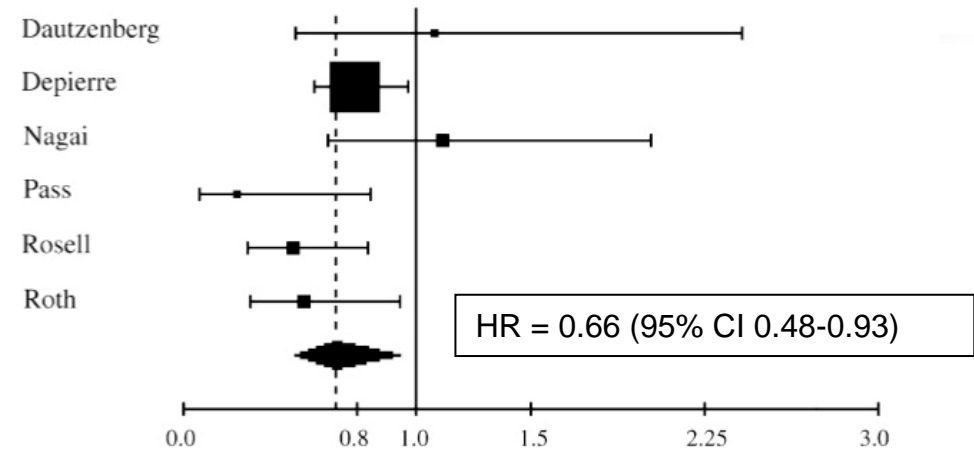


La chimiothérapie néo-adjuvante apporte-t-elle quelque chose à la chirurgie (3) ?

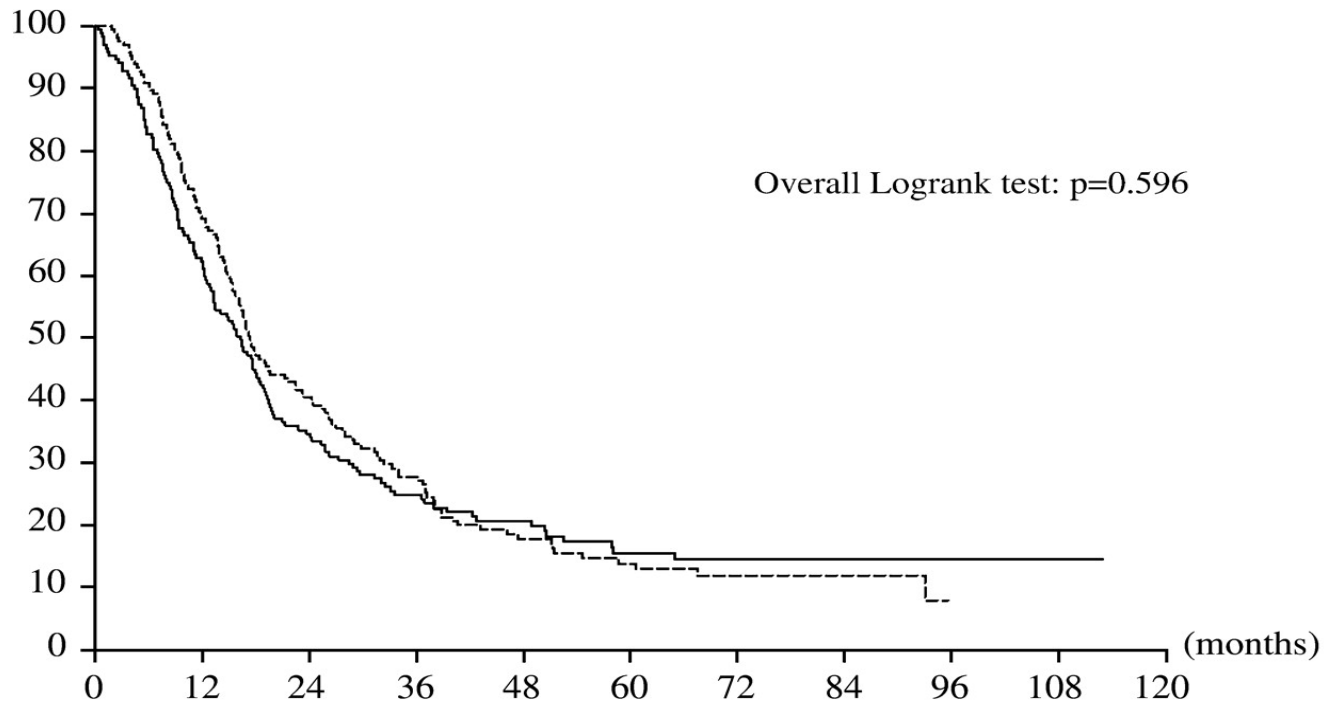
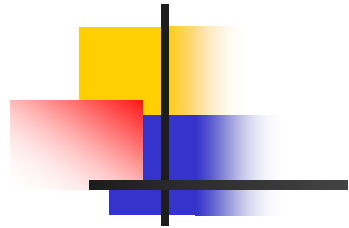
Berghman s T et al	Trials	Burdett S et al
	Dautzenberg, 1990	
	Pass, 1992,	
	Rosell, 1999	
	Roth, 1998	
	Depierre, 2002	
	Nagai, 2003	
	Sorensen, 2006	
	SWOG S9900, 2006	

Berghmans T et al, Lung cancer 2005; 49 : 13-23

Burdett S et al, 2006; 1 : 611-621



Retour à l'étude de Van Meerbeeck: Pas de démonstration d'un gain de survie apporté par la chirurgie mais ...

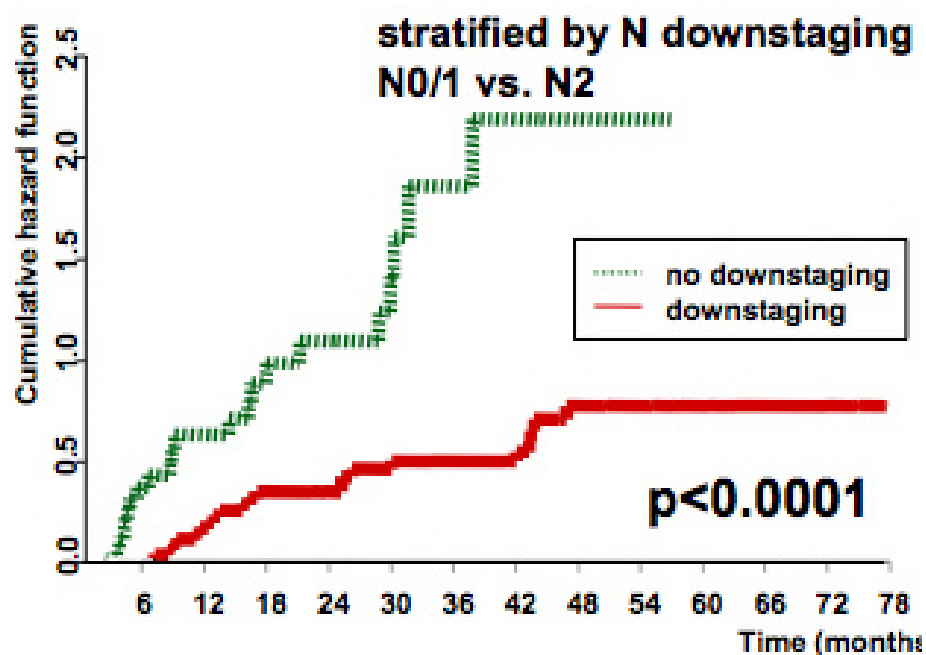


Prognostic factors :

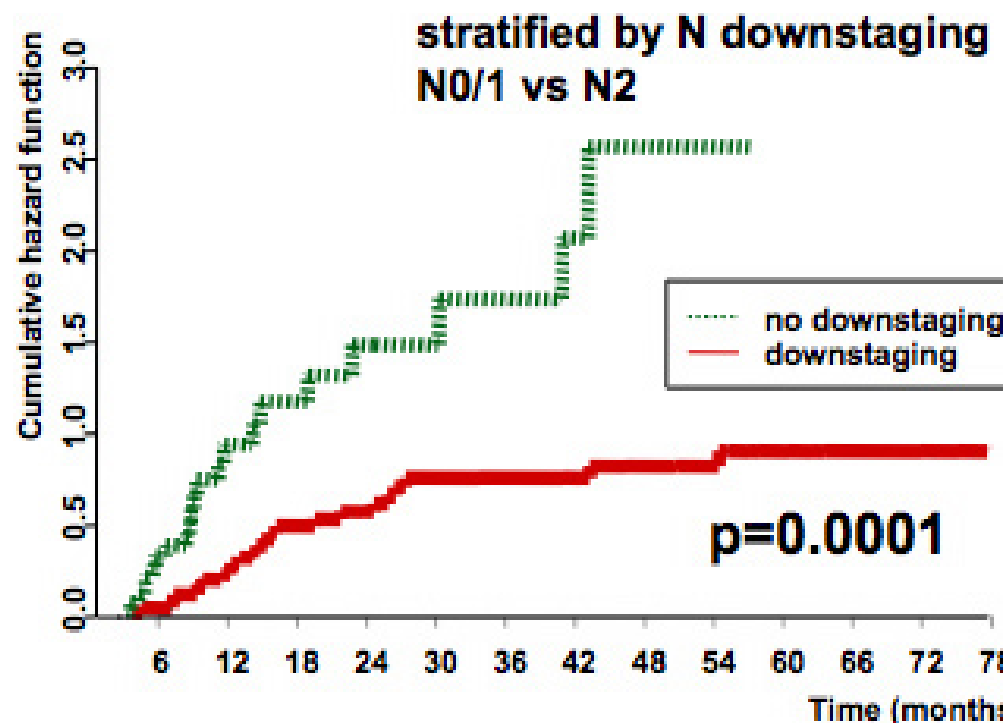
- Extent and type of resection (HR 0.59 , 95% CI 0.40-0.87)
- Patients with lobectomy, complete resection and mediastinal clearance had a statistically significantly better outcome

O	N	Number of patients at risk :										Treatment
138	167	104	58	36	27	17	11	4	3	1	—	Surgery
141	165	115	66	43	24	16	12	4	0	0	- - - -	Radiotherapy

Et retour aux phases 2



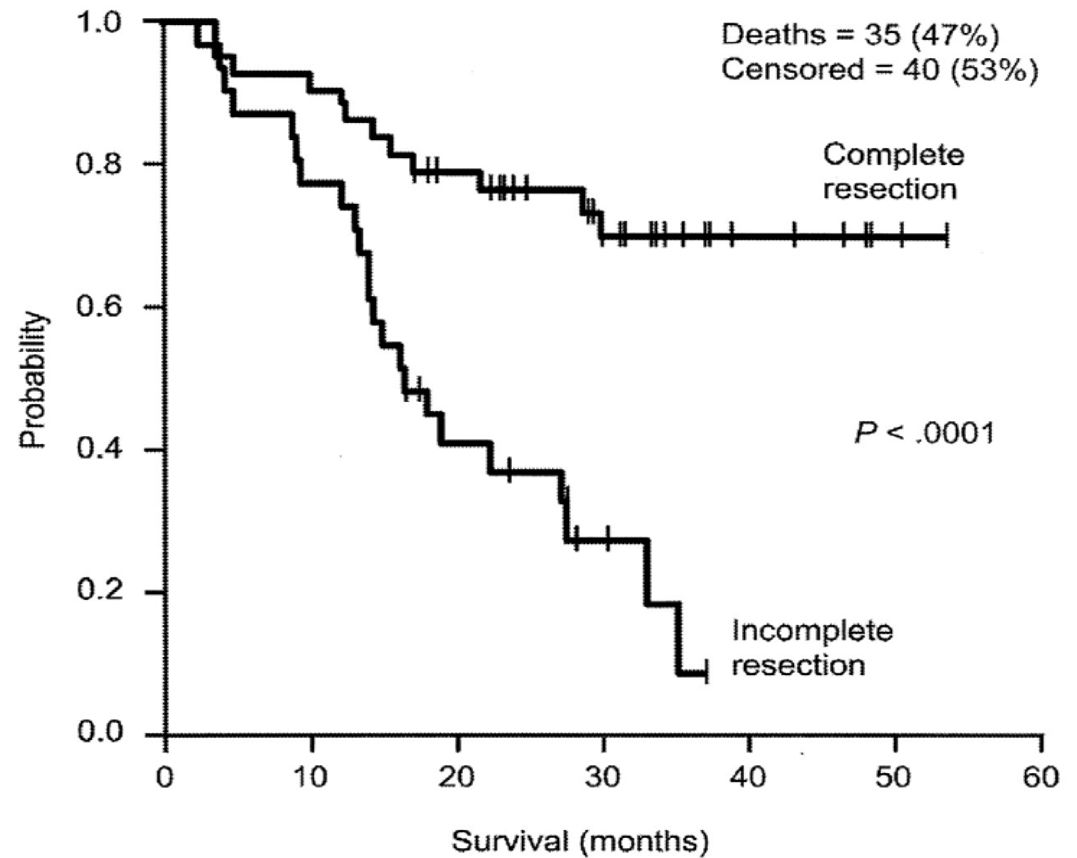
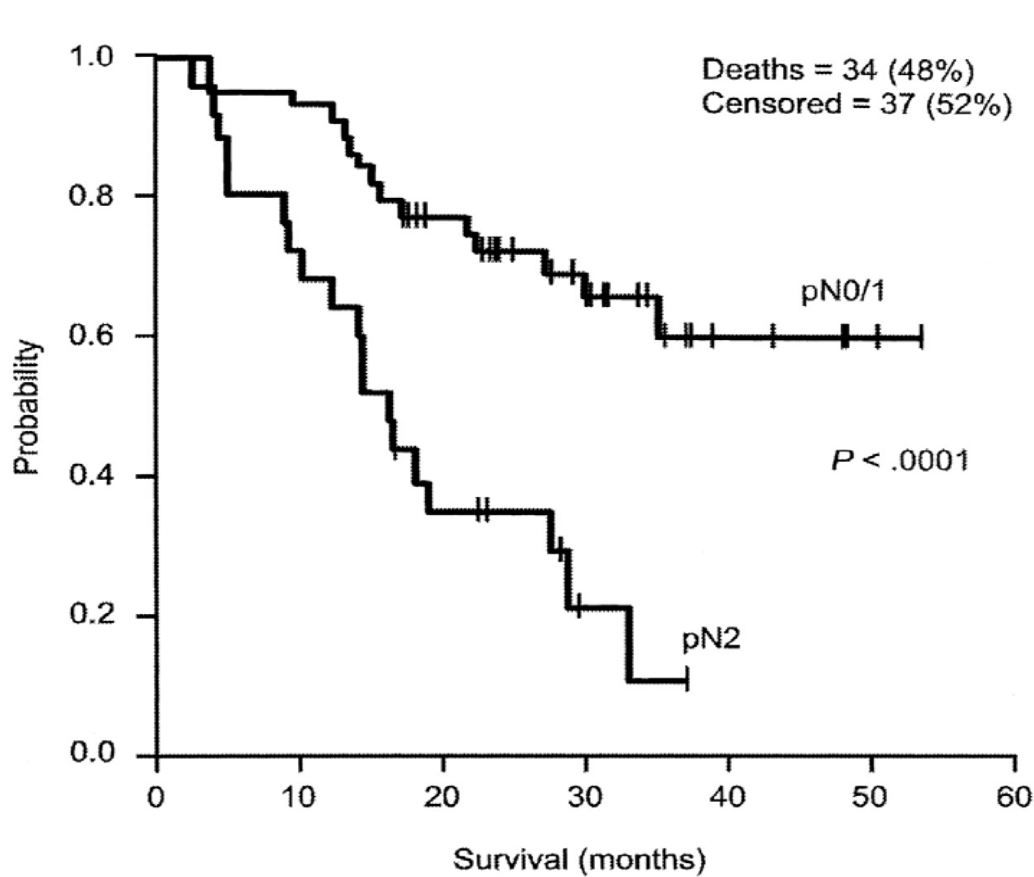
Récidive locale



Métastases

Betticher et al, J Clin Oncol 21:1752-1759.

Retour aux phases 2 (2)

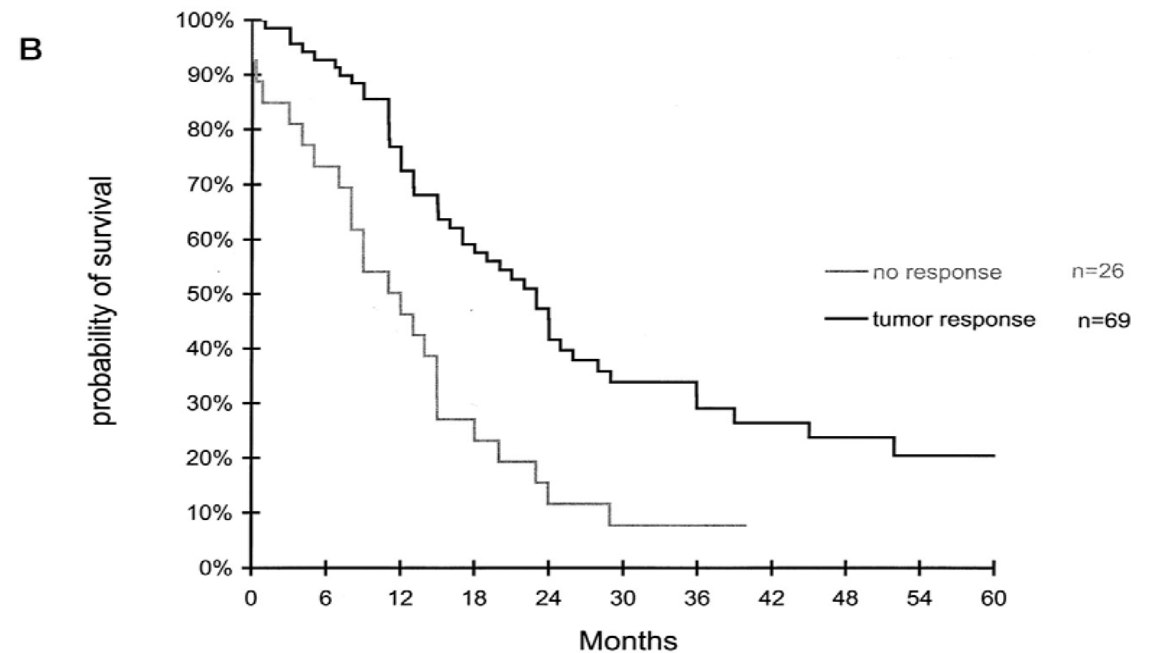
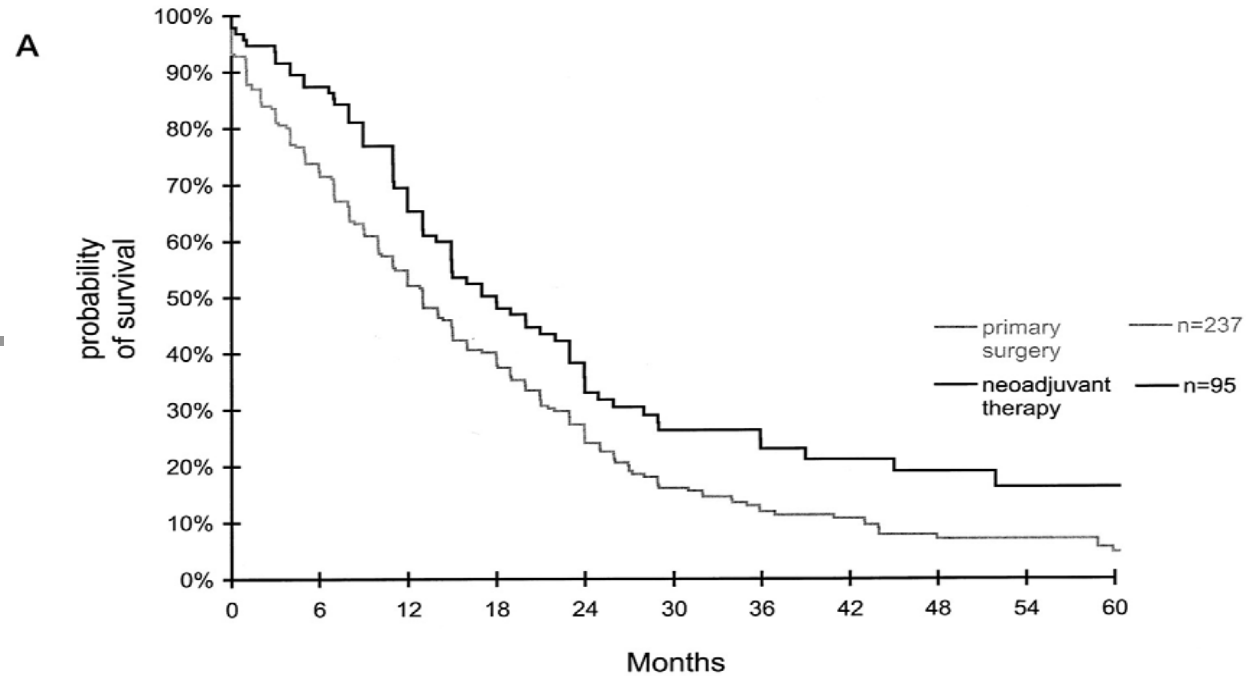


Betticher, D. C. et al. *J Clin Oncol*; 21:1752-1759 2003



- La chimiothérapie pré-opératoire est utile,
- et permet de sélectionner les malades si elle est faite en pré-opératoire ...

Andre, F. et al. *J Clin Oncol*; 18:2981-2989 2000



Et la radio-chimiothérapie pré-opératoire ?

	CT+RT	CT	p
Réponse (%)	67	44	0.02
Résection (%)	52	31	0.03
SSP (% à 3 ans)	40	21	0.04

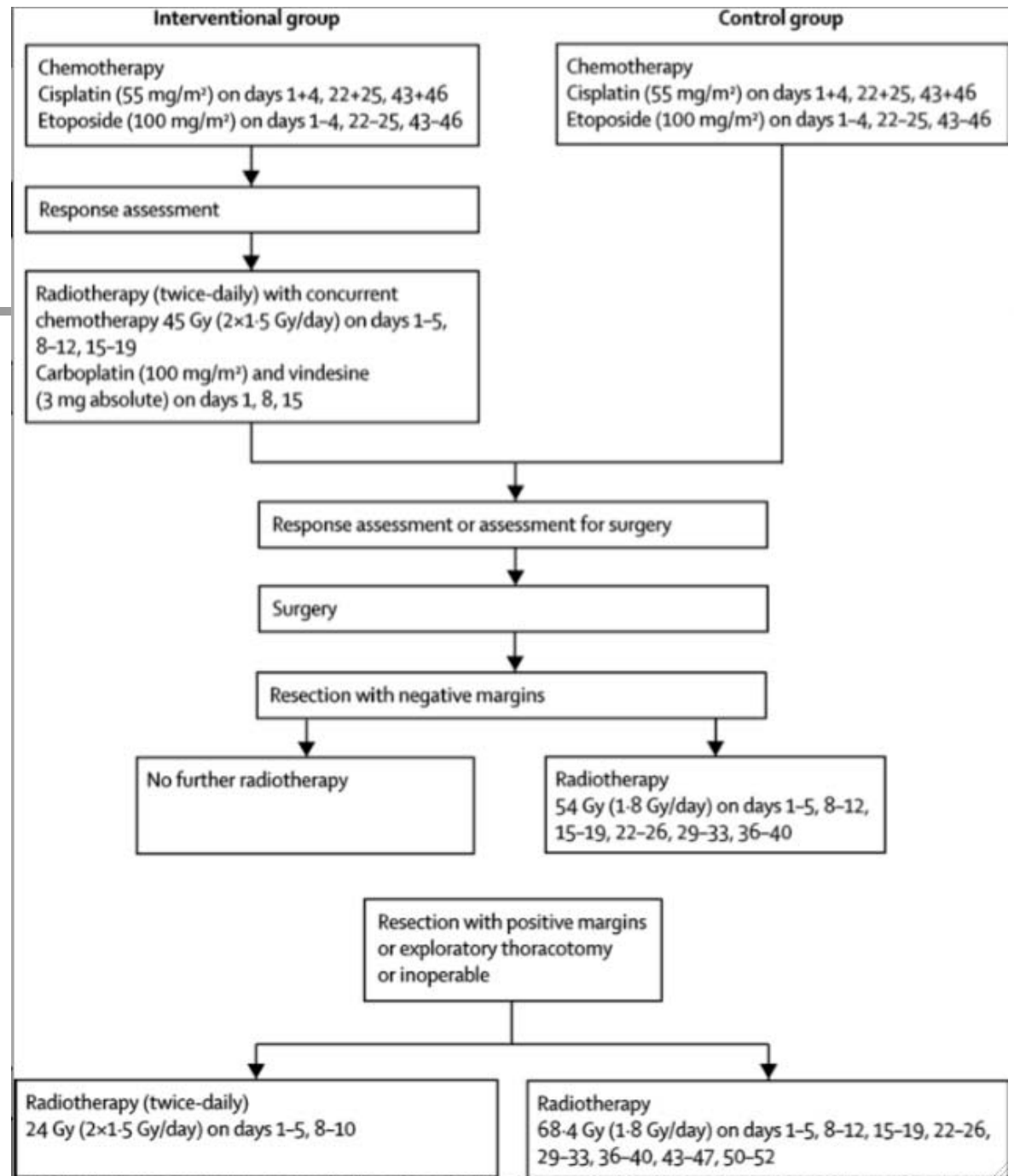
- La chimio-radiothérapie pré-opératoire fait-elle mieux que la chimiothérapie exclusive ?
- Après chimio-radiothérapie exclusive la chirurgie fait-elle mieux qu'un complément de RT ?

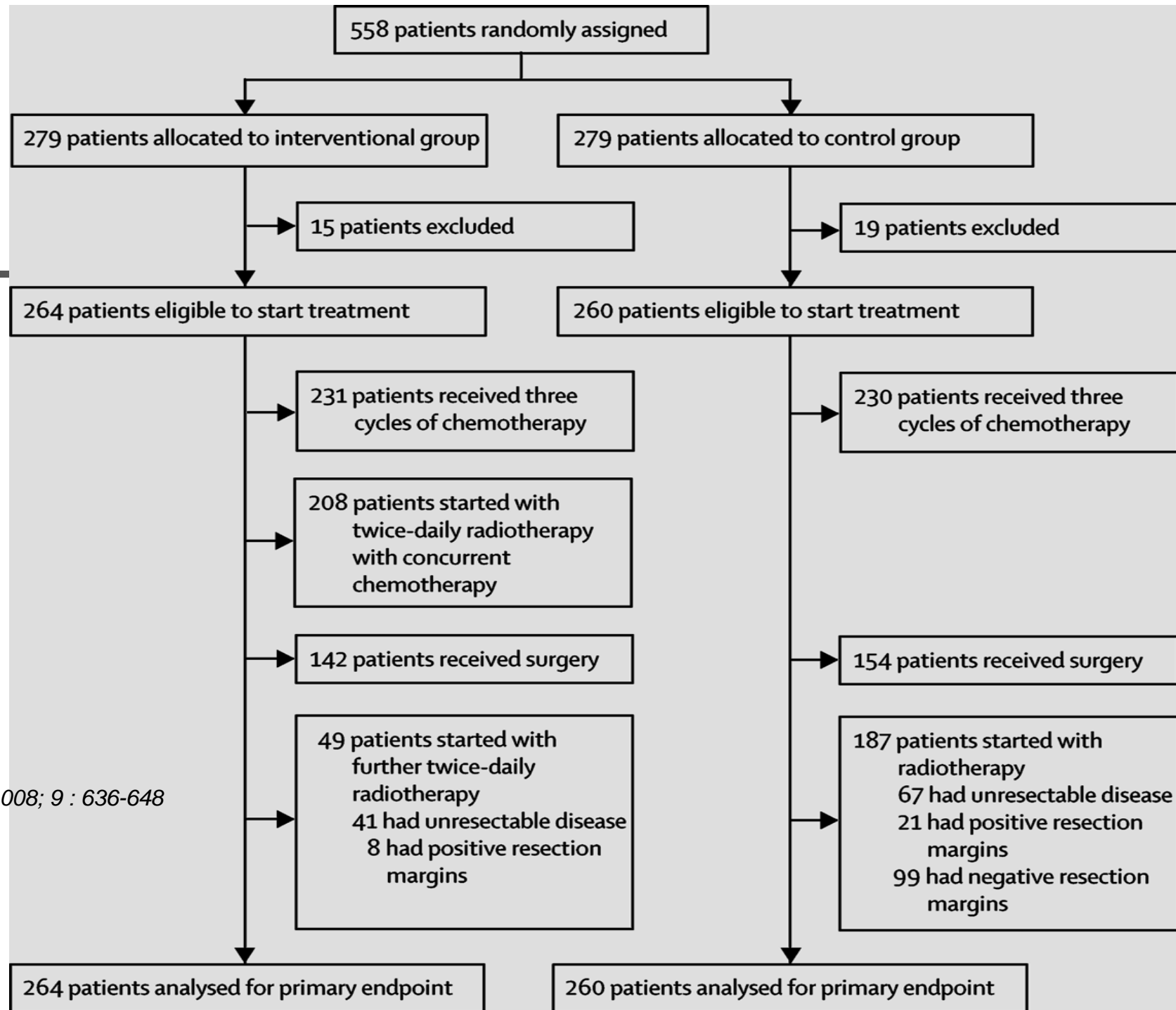
Fleck J et al, Proc Am Soc Clin Oncol 1993; 12 : 333



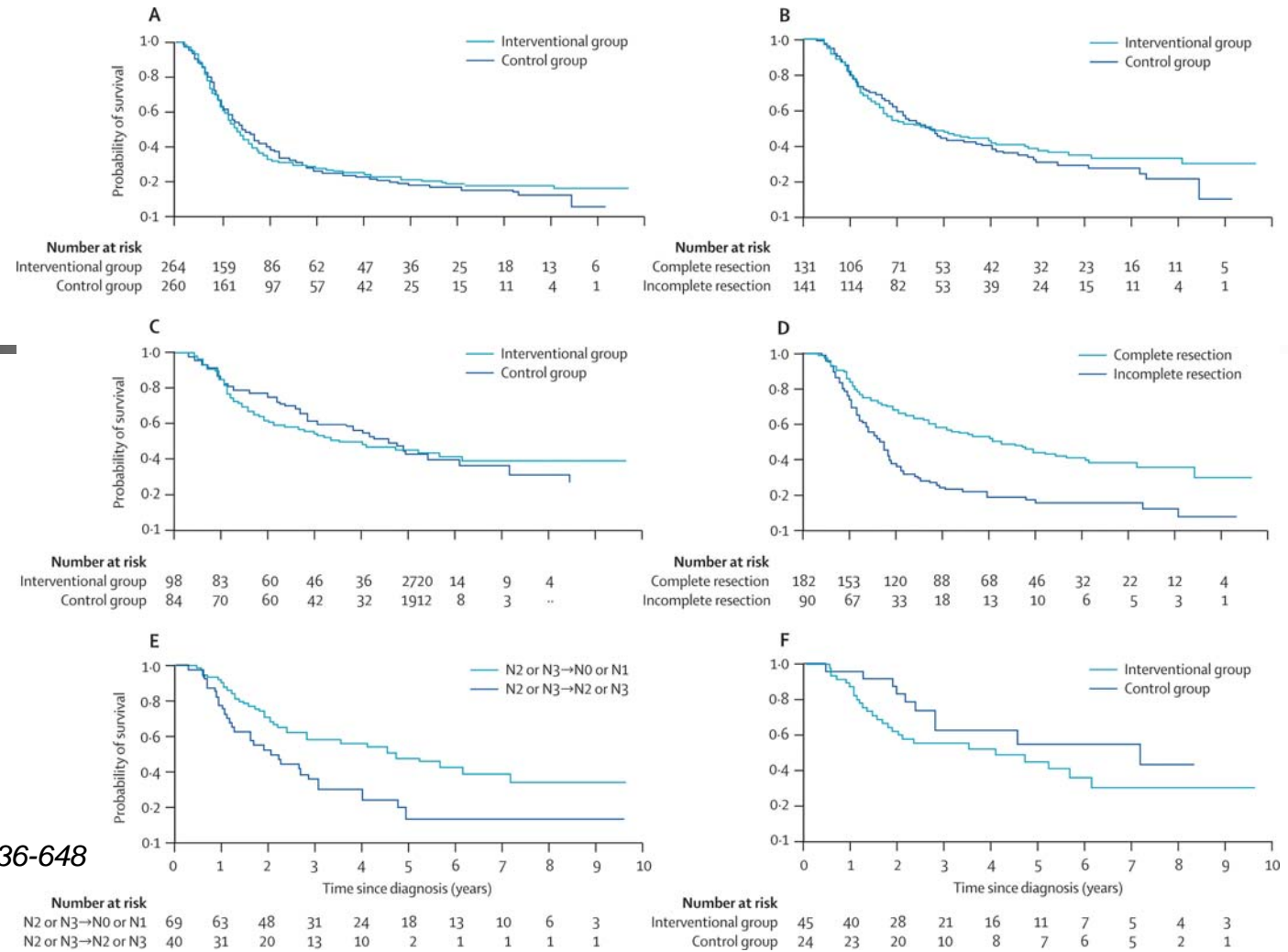
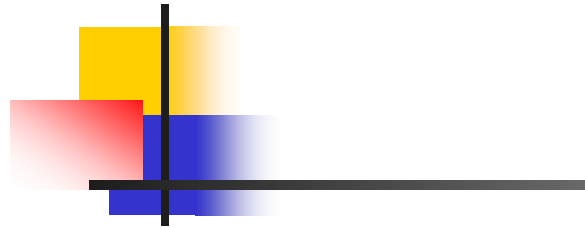
Répartition par stades		
T3 N0-1	27 (10)	23 (0)
T1-3 N2	55 (21)	70 (27)
T4 N0-1	78 (30)	81 (31)
T4 N2	45 (17)	32 (12)
T1-3 N3	44 (17)	44 (17)
T4 N3	15 (6)	10 (4)

Thomas et al, Lancet Oncol 2008; 9 : 636-648







Thomas et al, *Lancet Oncol* 2008; 9 : 636-648



Thomas et al, Lancet Oncol 2008; 9 : 636-648

- (A) Eligible patients (n=524) according to treatment group.
- (B) Patients undergoing tumour resection (n=272) according to treatment group
- (C) Patients with complete resection (n=182) according to treatment group
- (D) Patients undergoing tumour resection (n=272) according to complete or incomplete resection
- (E) Patients with complete resection and initial N2N3 disease (n=109) according to mediastinal downstaging (N2N3 to N0N1 vs N2N3 to N2N3)
- (F) Patients with complete resection and successful downstaging of initial N2N3 disease (n=69) according to treatment group.

IFCT 0101

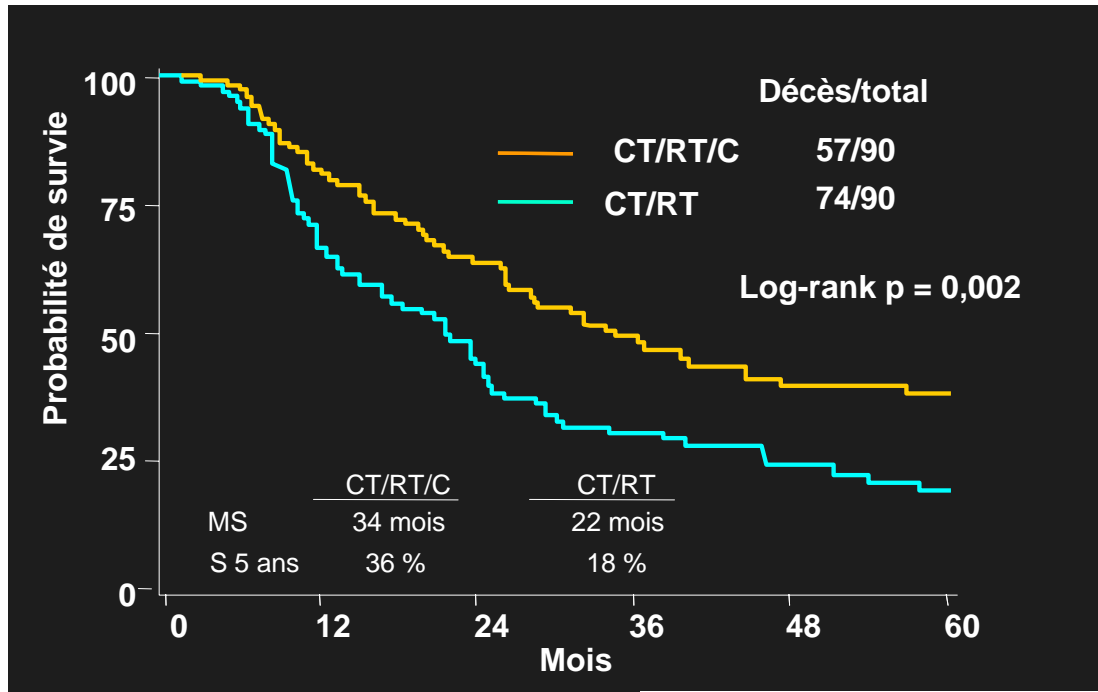
SEMAINES :	1	2	3	4	5	6	7	8	9	10	11-14
Cisplatine	80			80			80				
Gemzar	1250	1250		1250	1250		1250	1250			
Cisplatine	80			80			80				
Navelbine	25	25	25	15	15		15	15			
<i>Radiothérapie 46 Gy en 4,5 sem</i>											
Carboplatine	200			40	40	40	40	40			
Taxol	AUC6			AUC2	AUC2	AUC2	AUC2	AUC2			
<i>Radiothérapie 46 Gy en 4,5 sem</i>											
										B I L A N	C H I R U R G I E

Soumis à Lung cancer

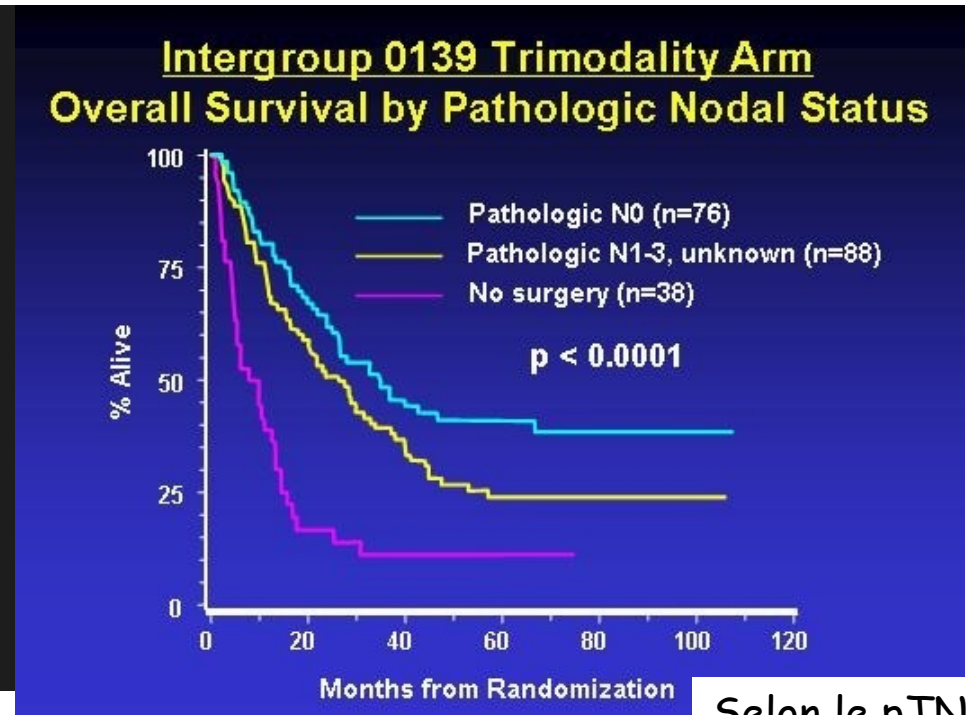
IFCT 0101 (2)

	Total	A (GEM)	B (NAV)	C (TAX)
Vivants à la 22ème semaine	45	14	16	15
Décès avant l'intervention	0	0	0	0
Toxicité grade 4 (hors hématologie)	4	1	3	0
Décès entre l'intervention et la 22ème semaine	1	0	1	0
Nombre de patients « bons pour le critère de jugement »	40	12	15	13
% de patients « bons pour ce critère »	87%	86%	88%	87%

La chirurgie est elle utile après CT-RT : Intergroup 0139



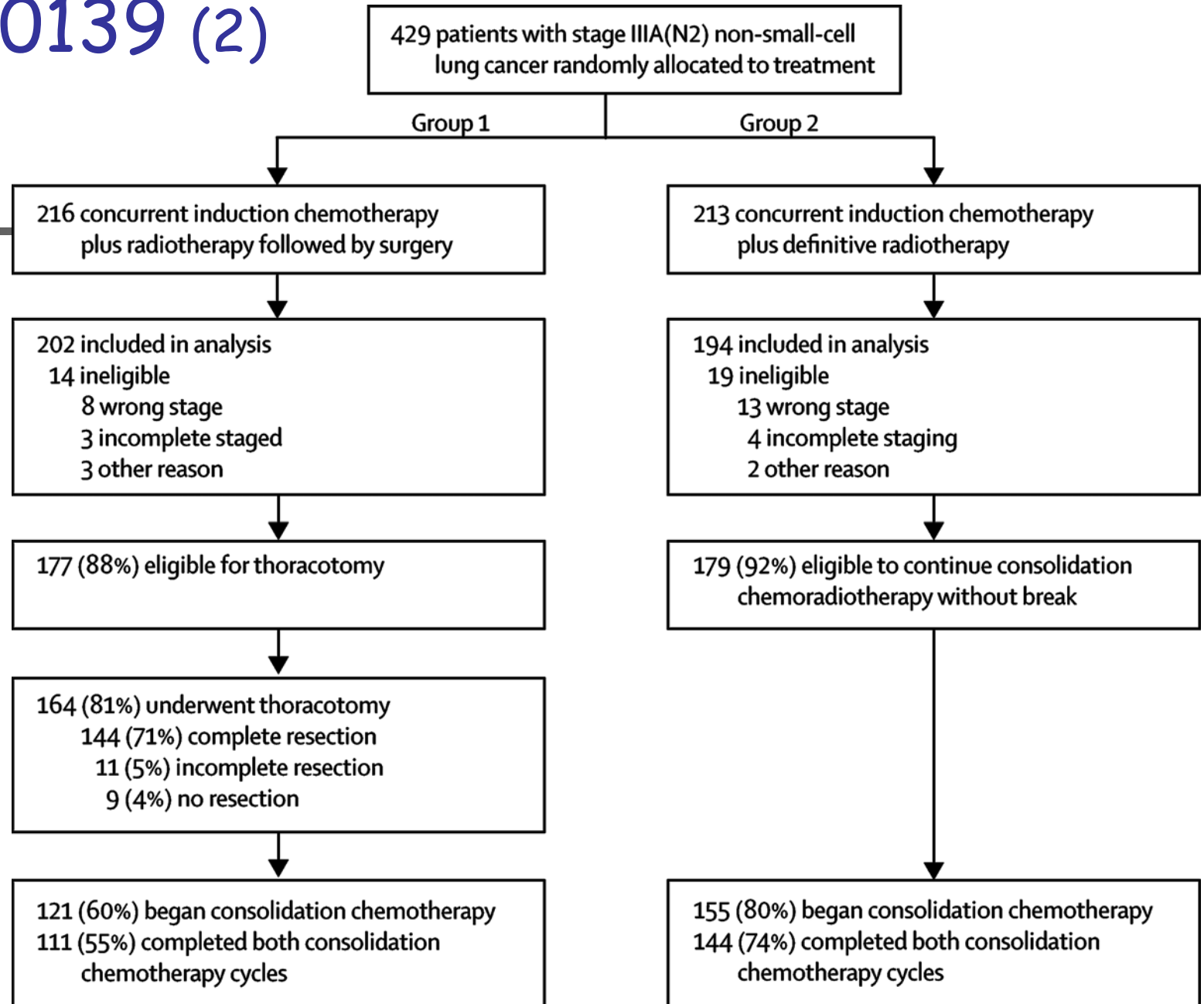
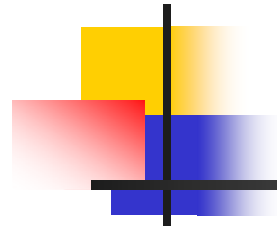
Sous-groupe des lobectomies



Selon le pTNM

ASCO 2005 - D'après K. Albain et al., abstract 7014 actualisé

InterGroup 0139 (2)

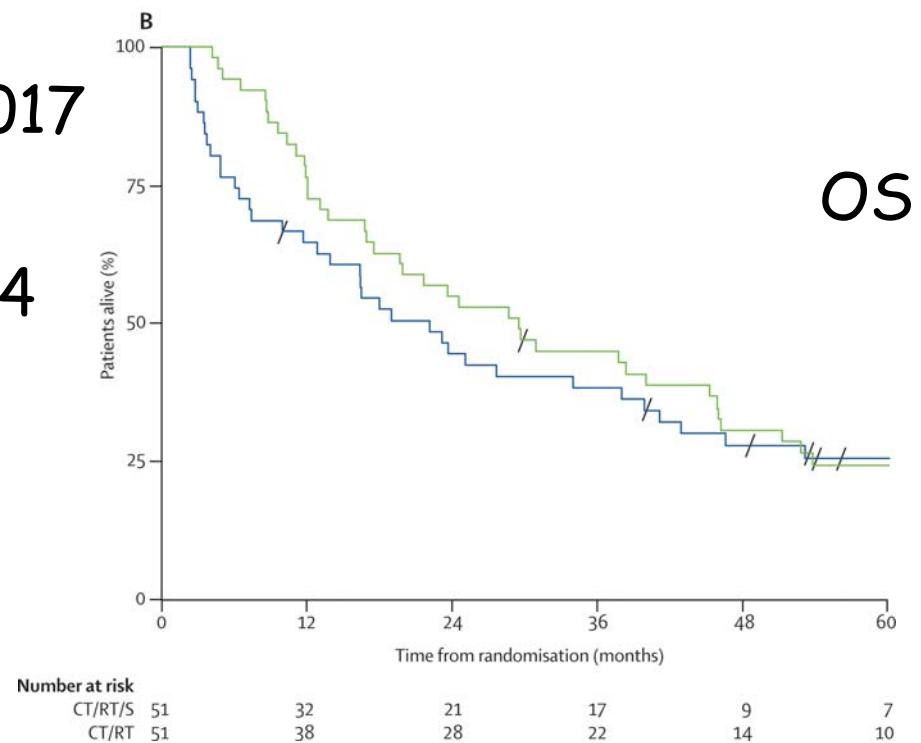
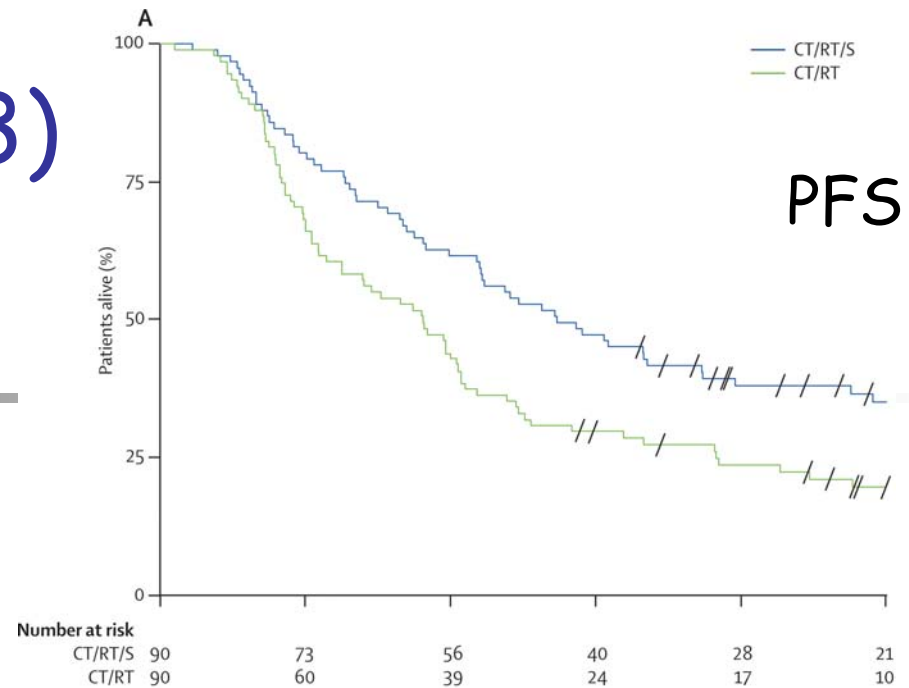


InterGroup 0139 (3)

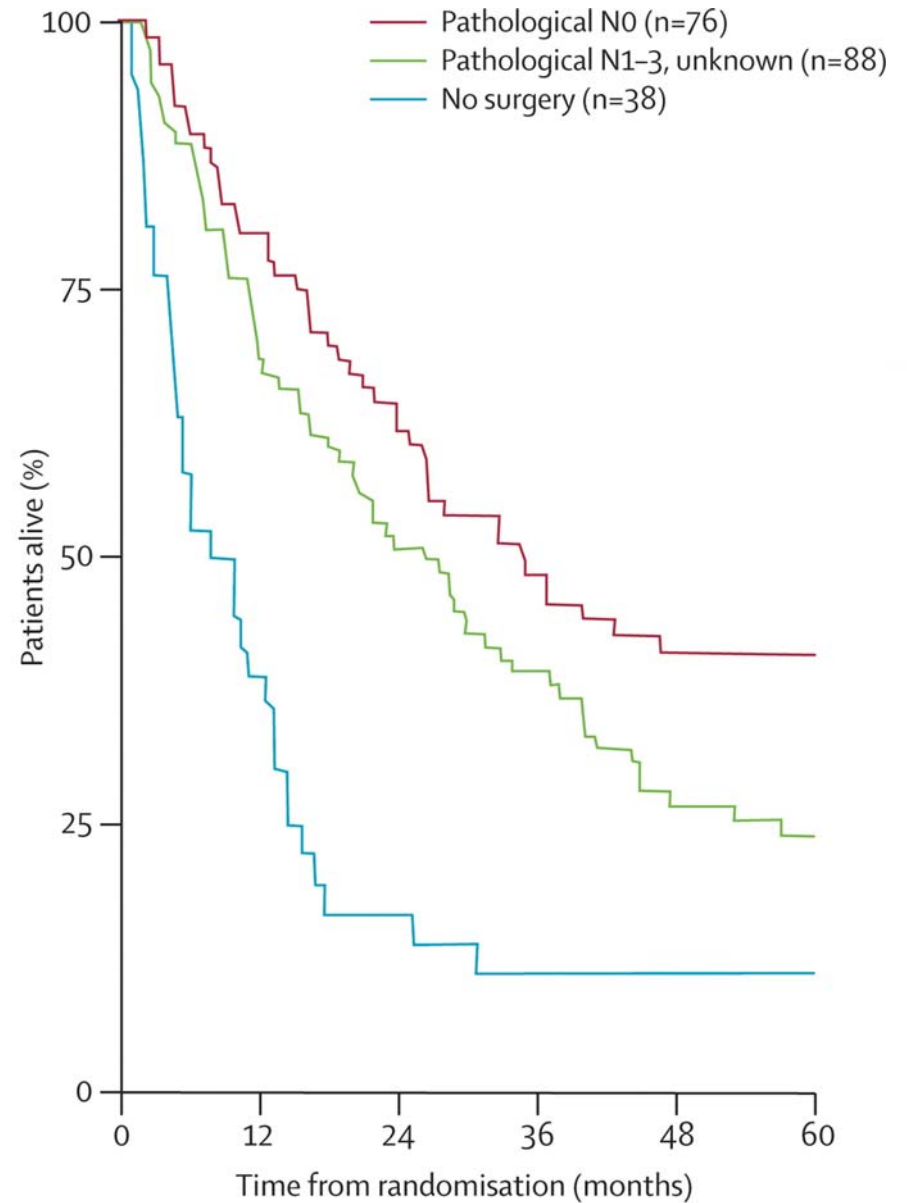


- PFS :
 - HR 0.77 (0.62-0.96), p = 0.017
- OS :
 - HR 0.87 (0.70-1.10), p = 0.24

Albain K, Lancet 2009; 374 : 379-386



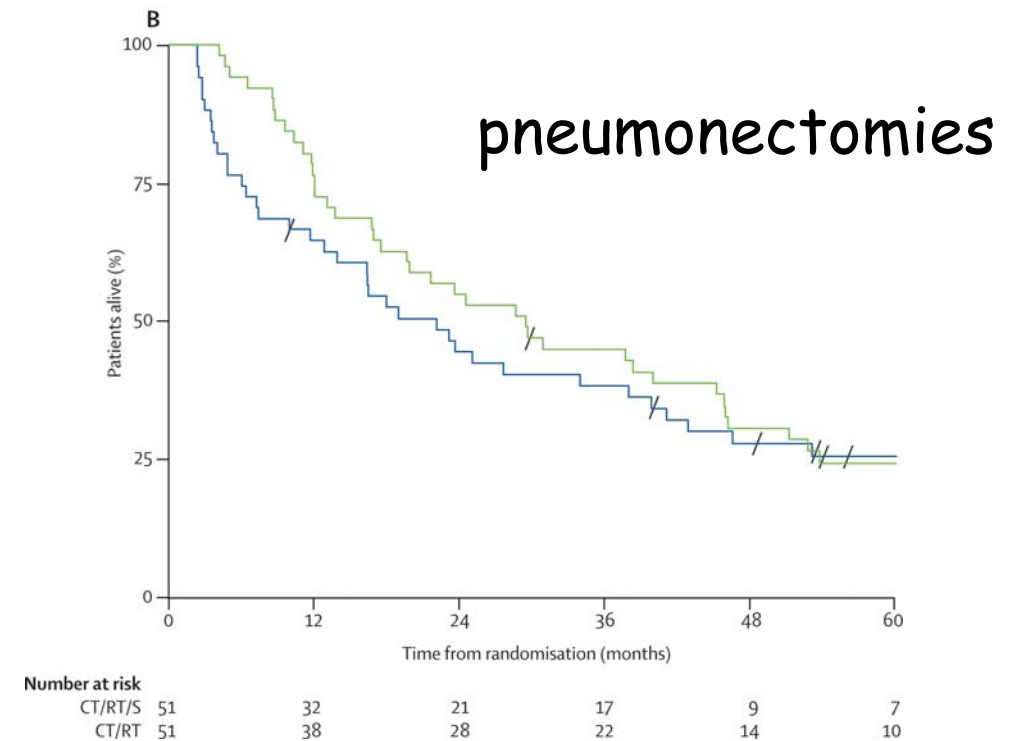
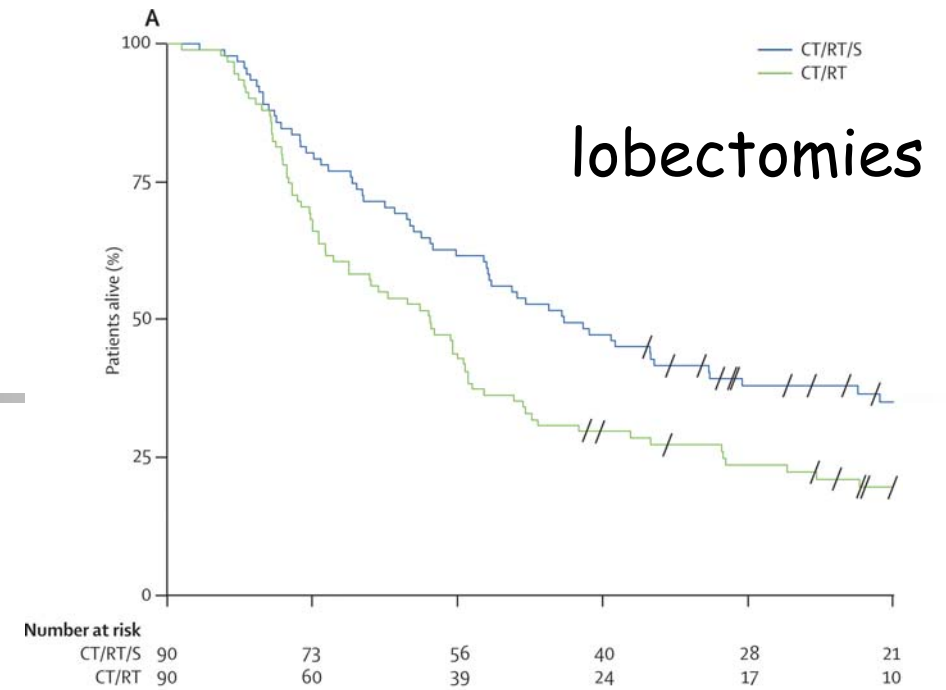
InterGroup 0139 (4)



Albain K, Lancet 2009; 374 : 379-386

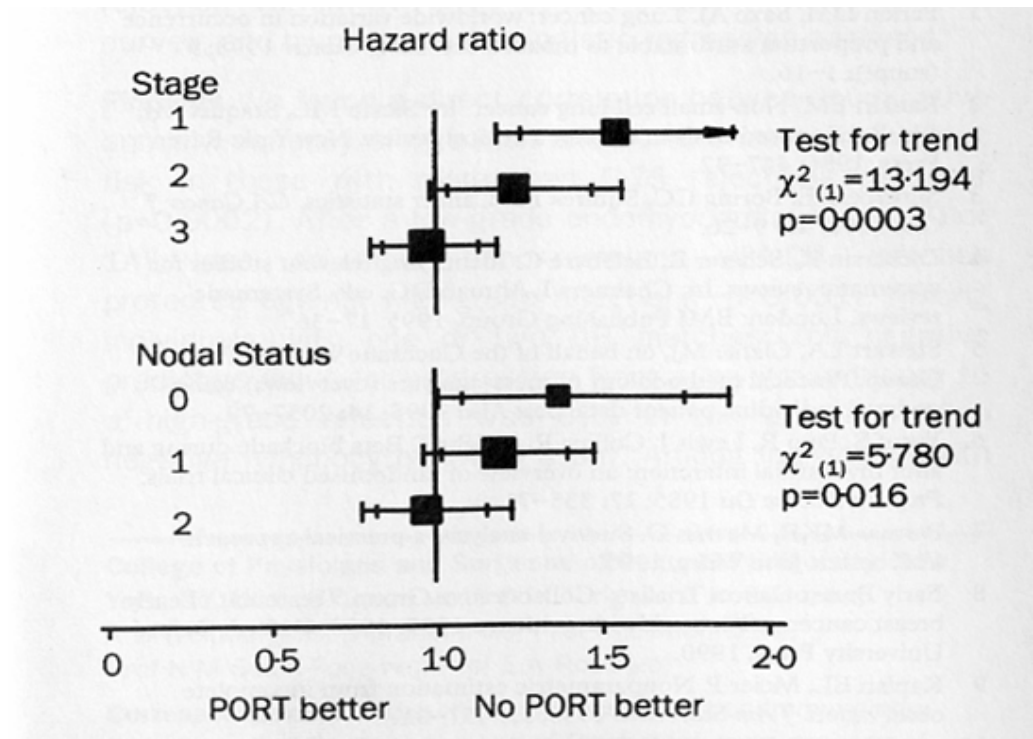
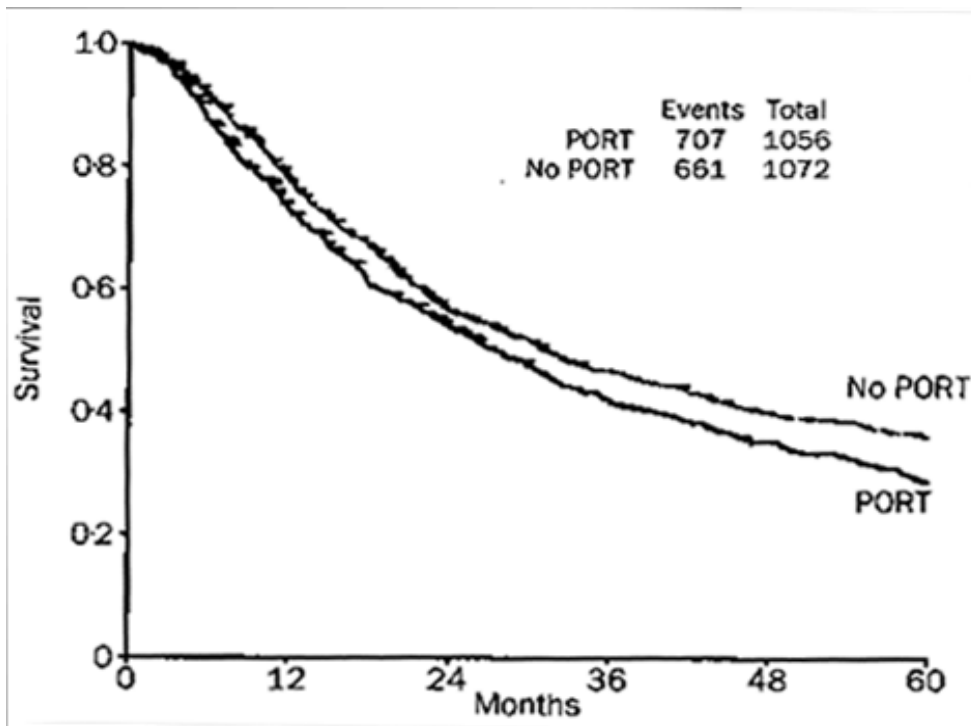
Number at risk		0	12	24	36	48	60
N0	76	61	47	34	24	19	
N1-3	88	61	44	33	20	15	
No surgery	38	14	6	4	4	3	

InterGroup 0139 (5)

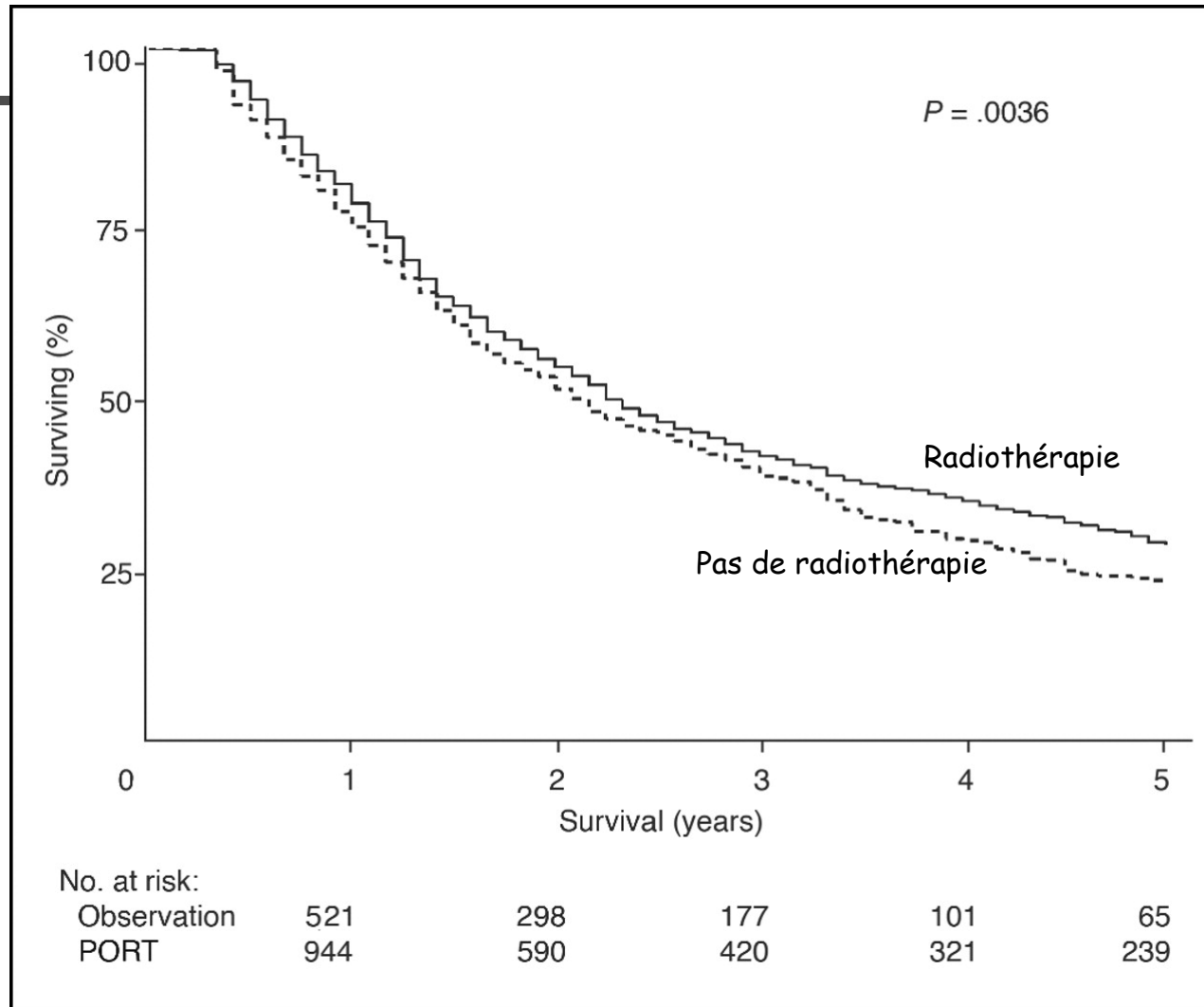


Albain K, Lancet 2009; 374 : 379-386

Et la Radiothérapie post-opératoire ?



Et la Radiothérapie post-opératoire (2) ?



Lally, B. E. et al. *J Clin Oncol*; 24:2998-3006 2006

IFCT 0503 (LungArt)

CBNPC N2 prouvé

Chimiothérapie pré-opératoire

Chirurgie

Chimiothérapie post-opératoire

Randomisation

Contrôle

RT conformationnelle
post-opératoire

Conclusion



C N2 (histologiquement prouvé (s))

■ c N0 ou N1 (minimal N2)

- Chirurgie
- Chimiothérapie adjuvante
- Radiothérapie adjuvante ? (IFCT 0503)

■ Radio-chimiothérapie :

- N2 multi-sites prouvés
- Pas de réponse au traitement d'induction
- Pneumonectomie

■ Traitement néo-adjuvant et chirurgie :

- Peu de ganglions envahis
- Réponse au traitement d'induction
- Lobectomie possible

