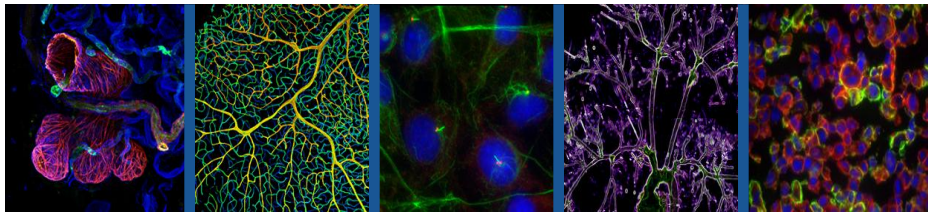
Maintenance ou pas de maintenance ?



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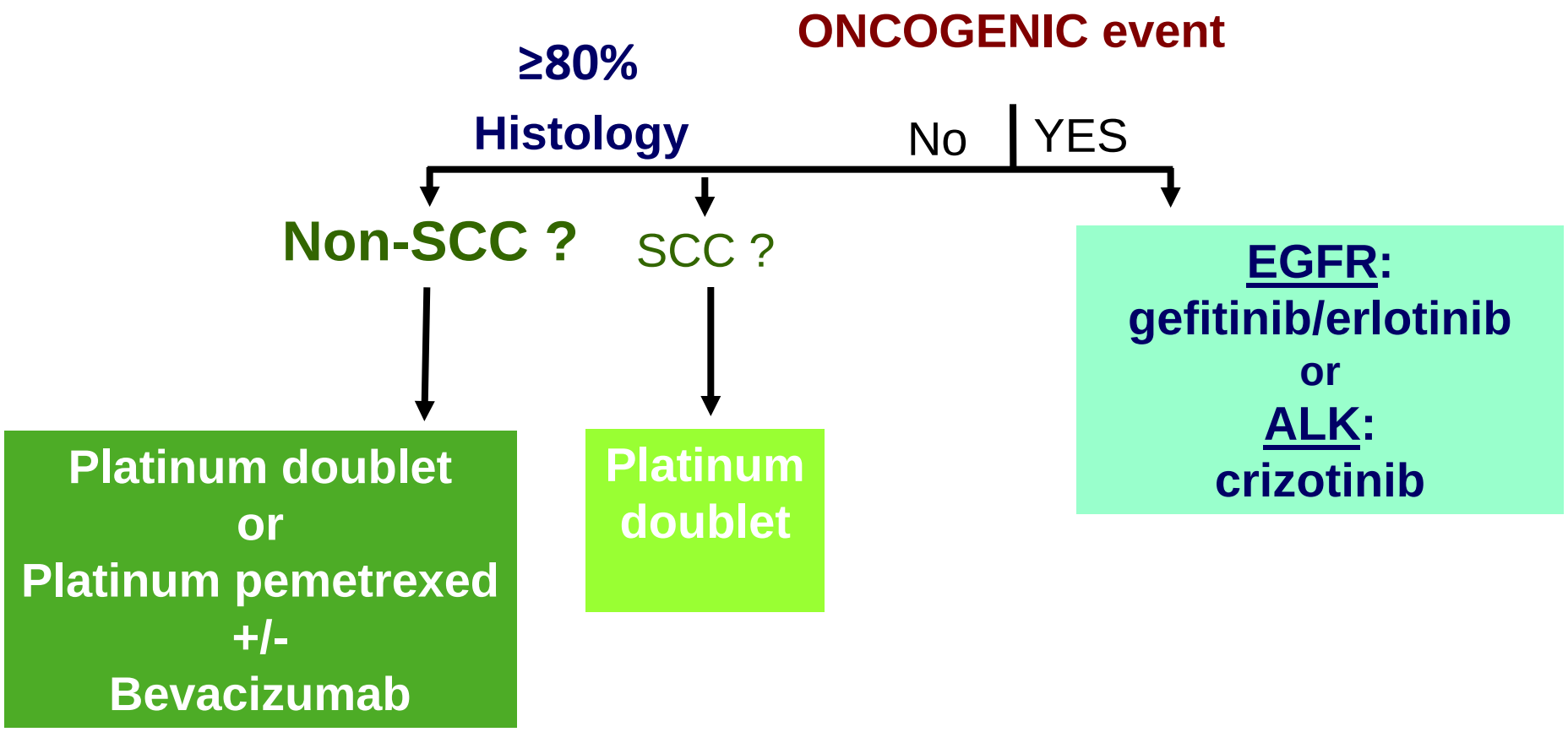
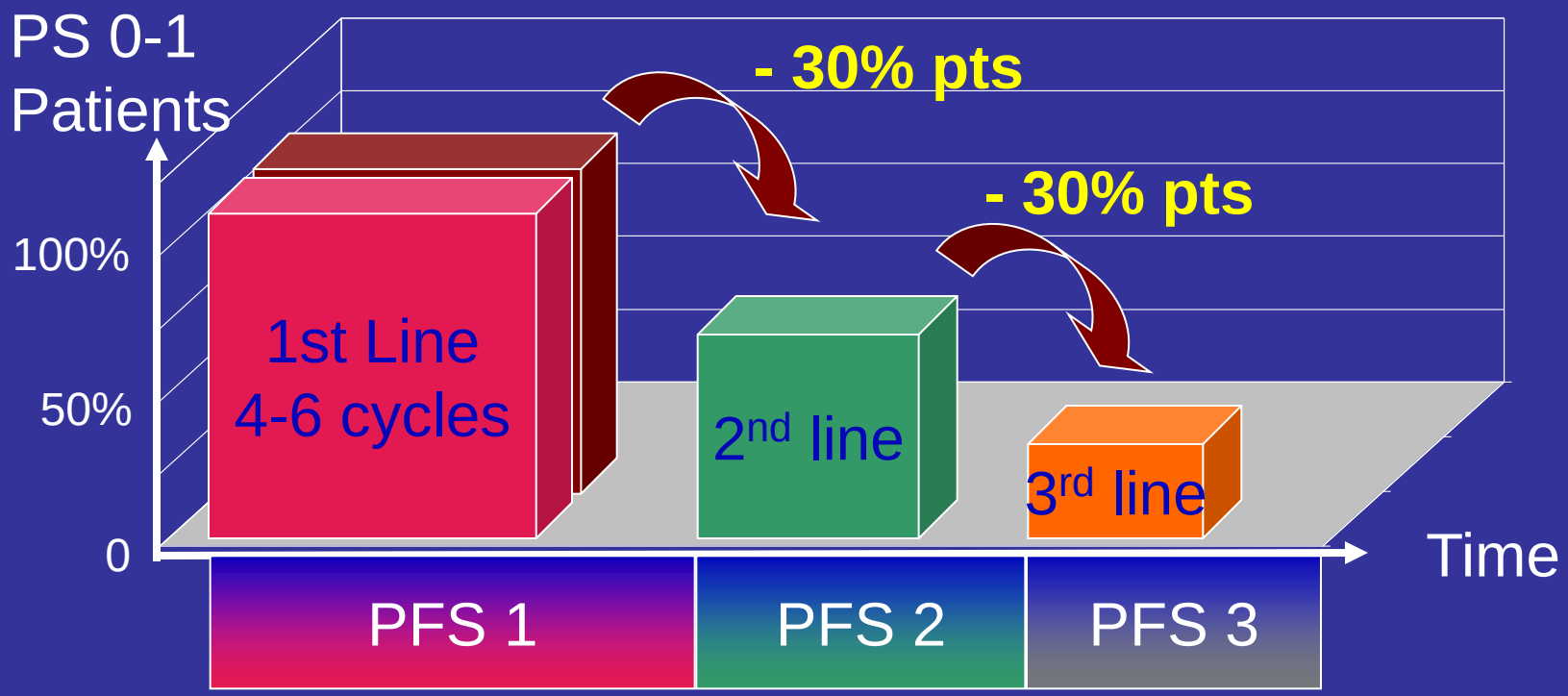
Therapeutic options in front-line are changing for NSCLC

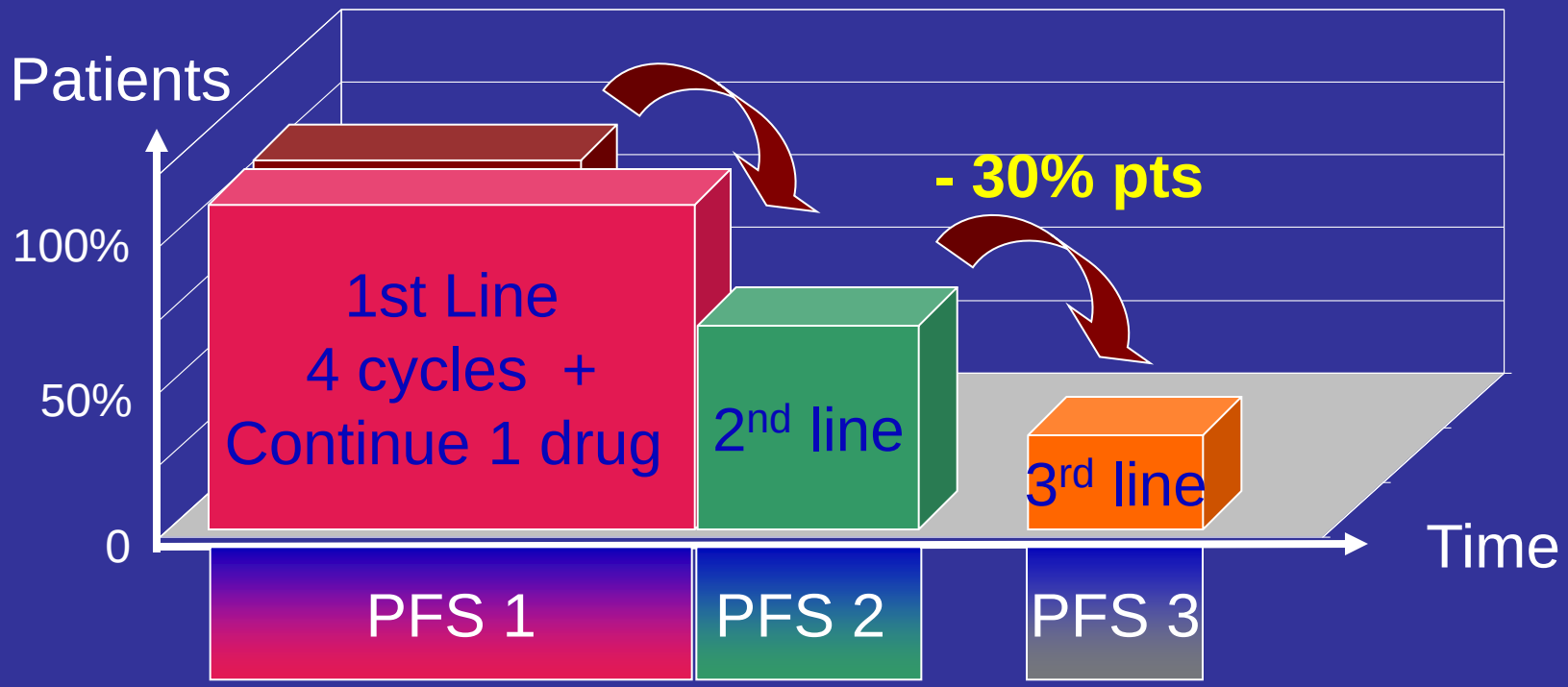


What we do



Each new line : 30% patients lost

Continuation Maintenance

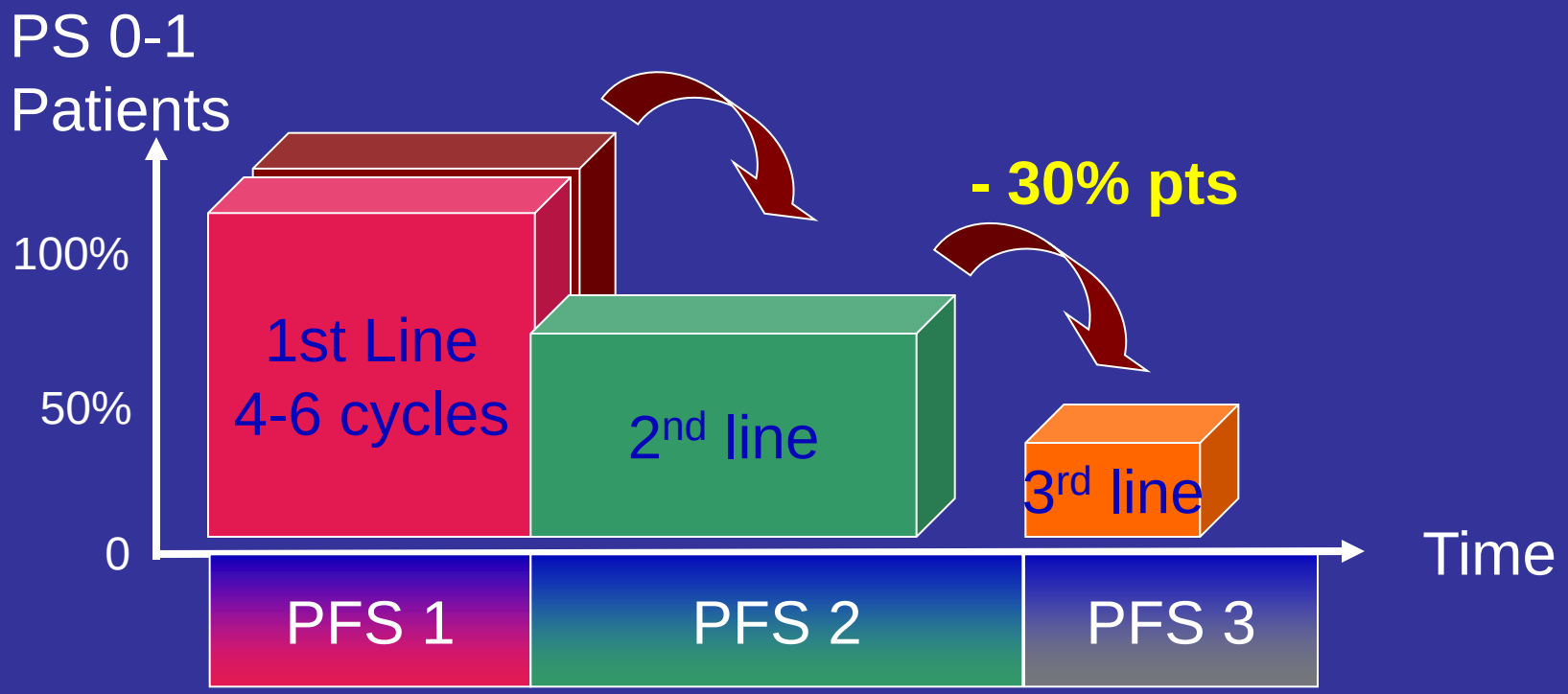


GOALS

- Increase PFS of the 1st line

-100% of patients receive maintenance ???

Switch Maintenance



GOALS

- Early second line: smaller tumor theory

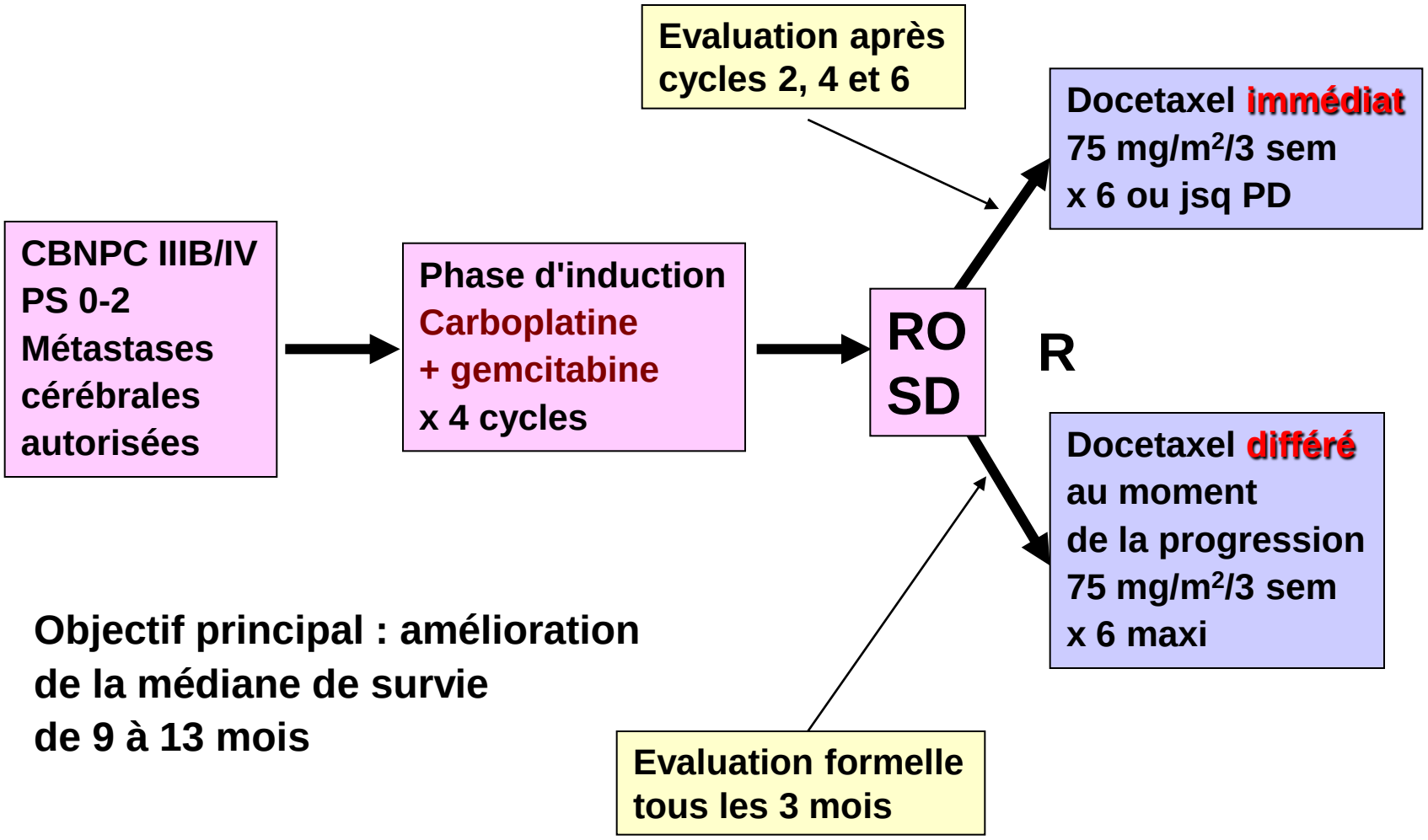
-100% of patients receive maintenance ???

Switch maintenance

	Study	Agent
Switch maintenance	Fidias	Docetaxel Control
	JMEN	Pemetrexed Control
	SATURN	Erlotonib Control
	ATLAS	Erltonib Control
	INFORM	Gefitinib Control

Switch maintenance par Docetaxel

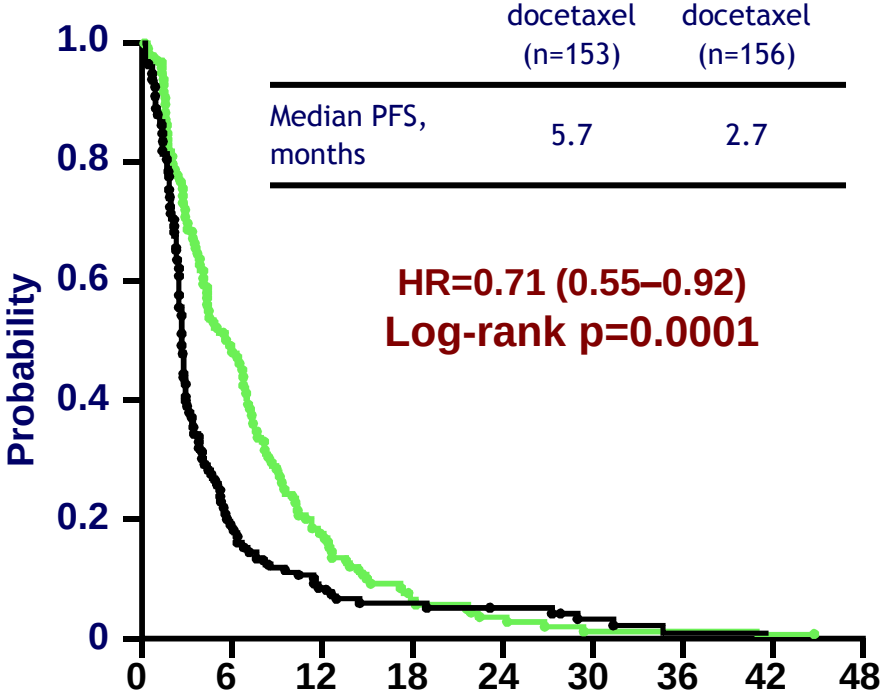
Early second line: smaller tumor theory



Fidias, JCO 2009

Docetaxel en maintenance

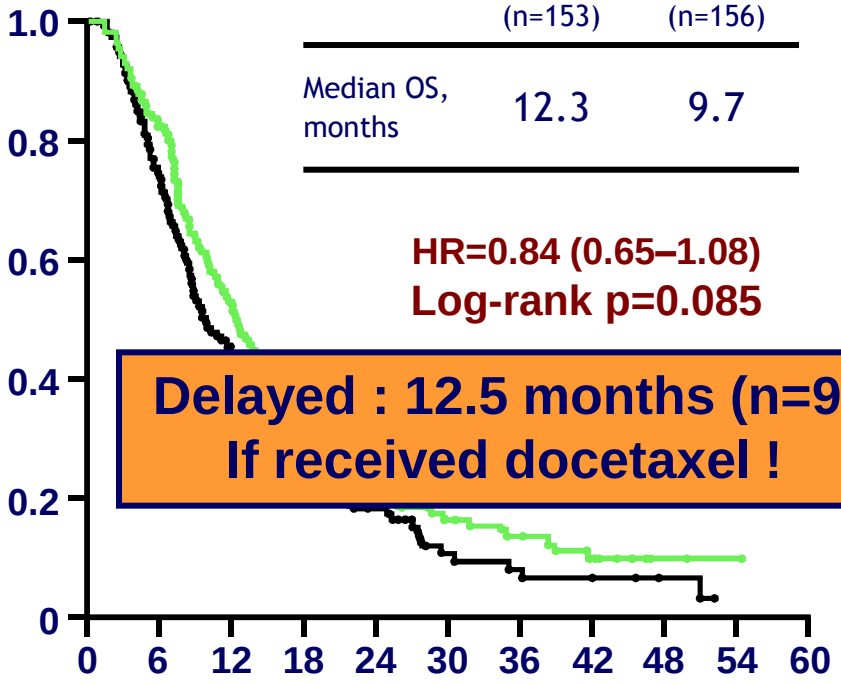
Survie sans progression



	Immediate docetaxel (n=153)	Delayed docetaxel (n=156)
Median PFS, months	5.7	2.7

HR=0.71 (0.55–0.92)
Log-rank p=0.0001

Survie



	Immediate docetaxel (n=153)	Delayed docetaxel (n=156)
Median OS, months	12.3	9.7

HR=0.84 (0.65–1.08)
Log-rank p=0.085

Delayed : 12.5 months (n=98)
If received docetaxel !

- **Proportion des patients effectivement traités par docétaxel :**
  - **63% dans le bras "retardé"**
  - **95% dans le bras "immédiat"**
- **Survie des patients traités par docétaxel similaire dans les deux bras (12,5 mois)**

Fidias, JCO 2009

Maintenance par pemetrexed

JMEN study

"switch"

Stade IIIB-IV
PS 0-1
4 cycles
doublet/platine
sans pemetrexed

Stratification :
sexe, PS, stade
réponse/induction
platine, méta. cérébrale

Pas de stratification
sur l'histologie

RANDOMISATION

2 : 1

Pemetrexed 500 mg/m² / 3 semaines
+ B9-B12* + BSC

Placebo / 3 semaines
+ B9-B12* + BSC

Evaluation / 6 sem. dans les 2 bras

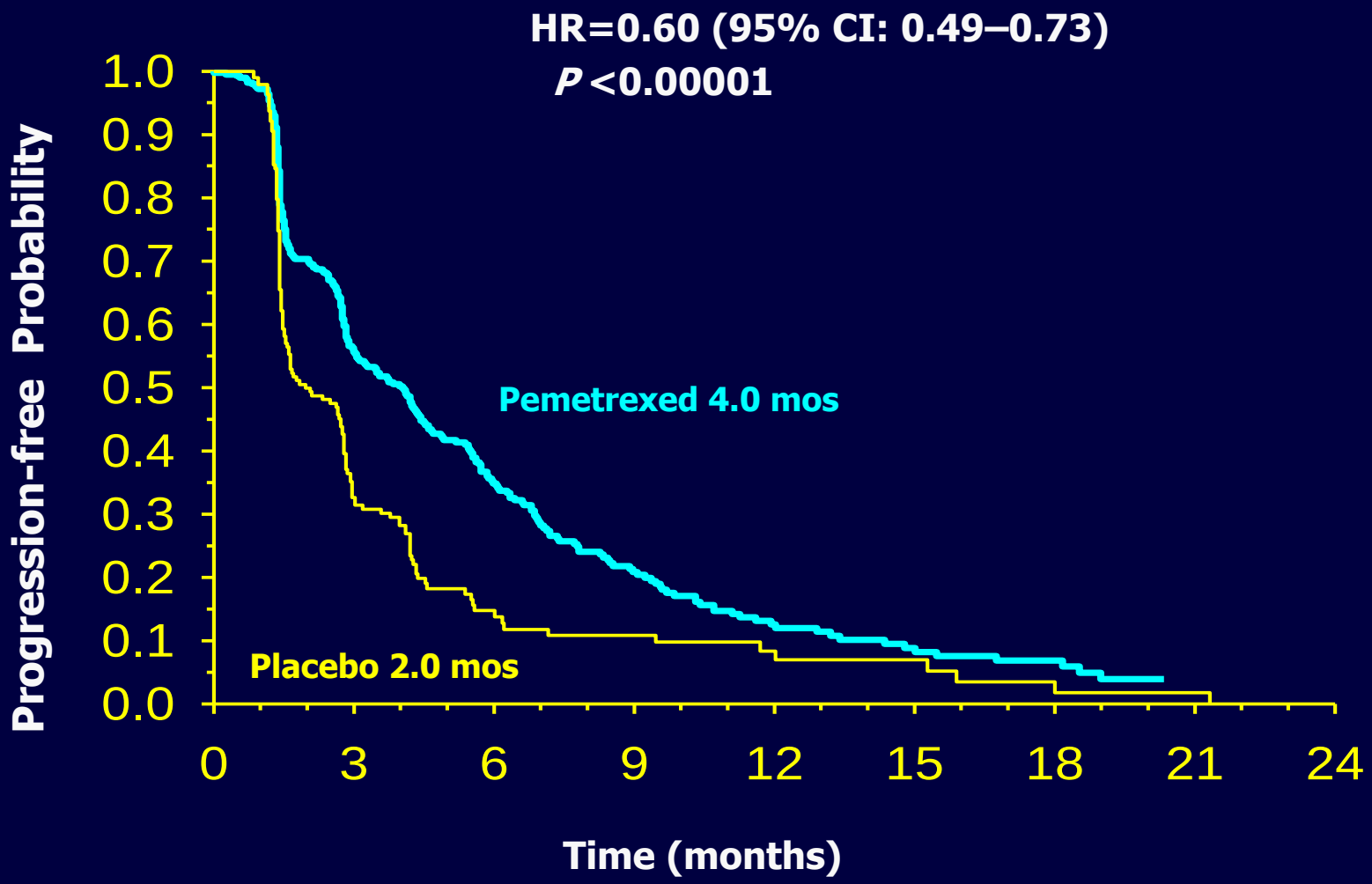
Critère principal de jugement :
survie sans progression

*** : B12 1000 mcg / 9 semaines**
+ acide folique 350-1000 mcg/j
+ dexaméthasone 4 mg x 2 de J-1 à J+1

Ciuleanu, Lancet 2009

Progression-free Survival

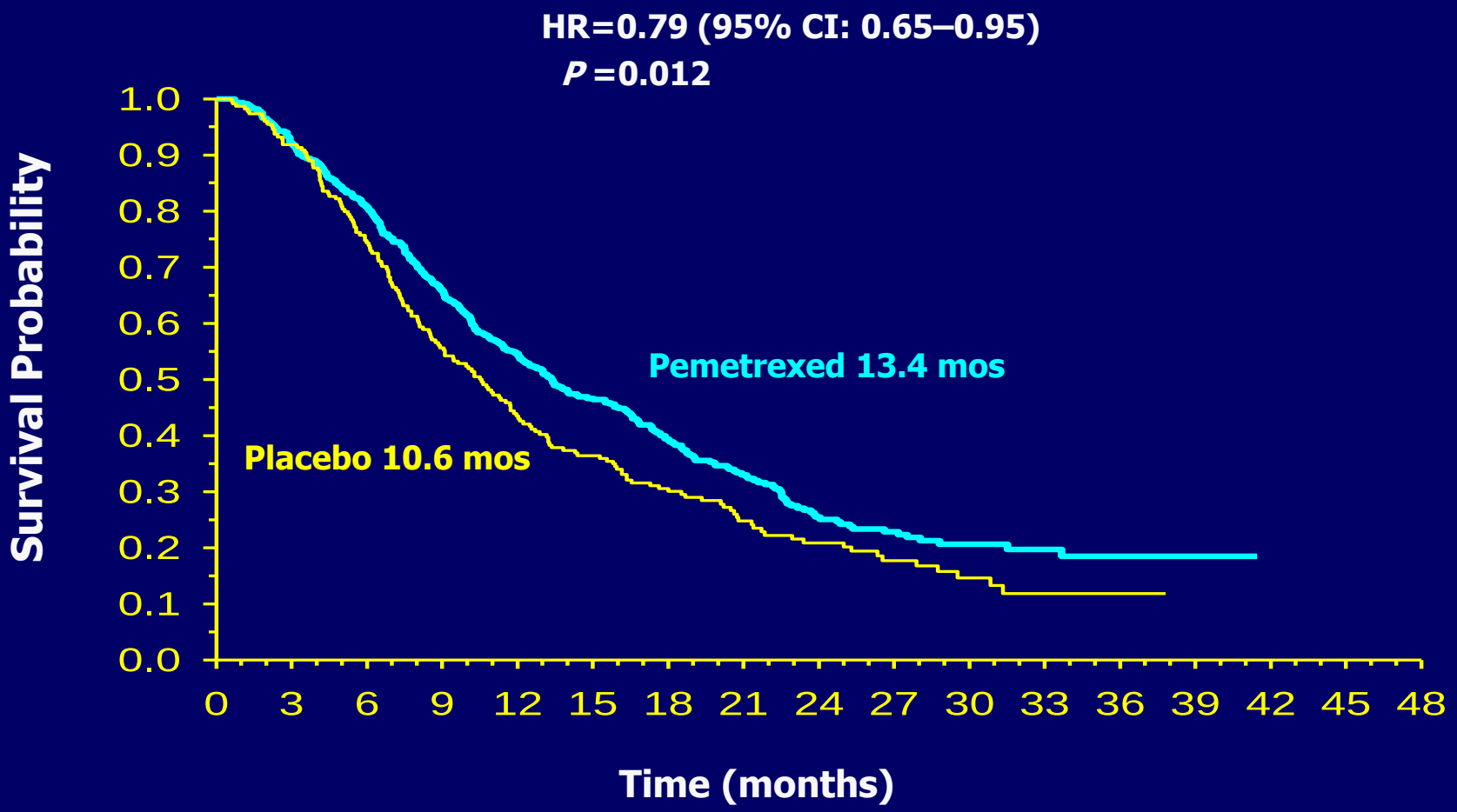
JMEN study



Ciuleanu, Lancet 2009

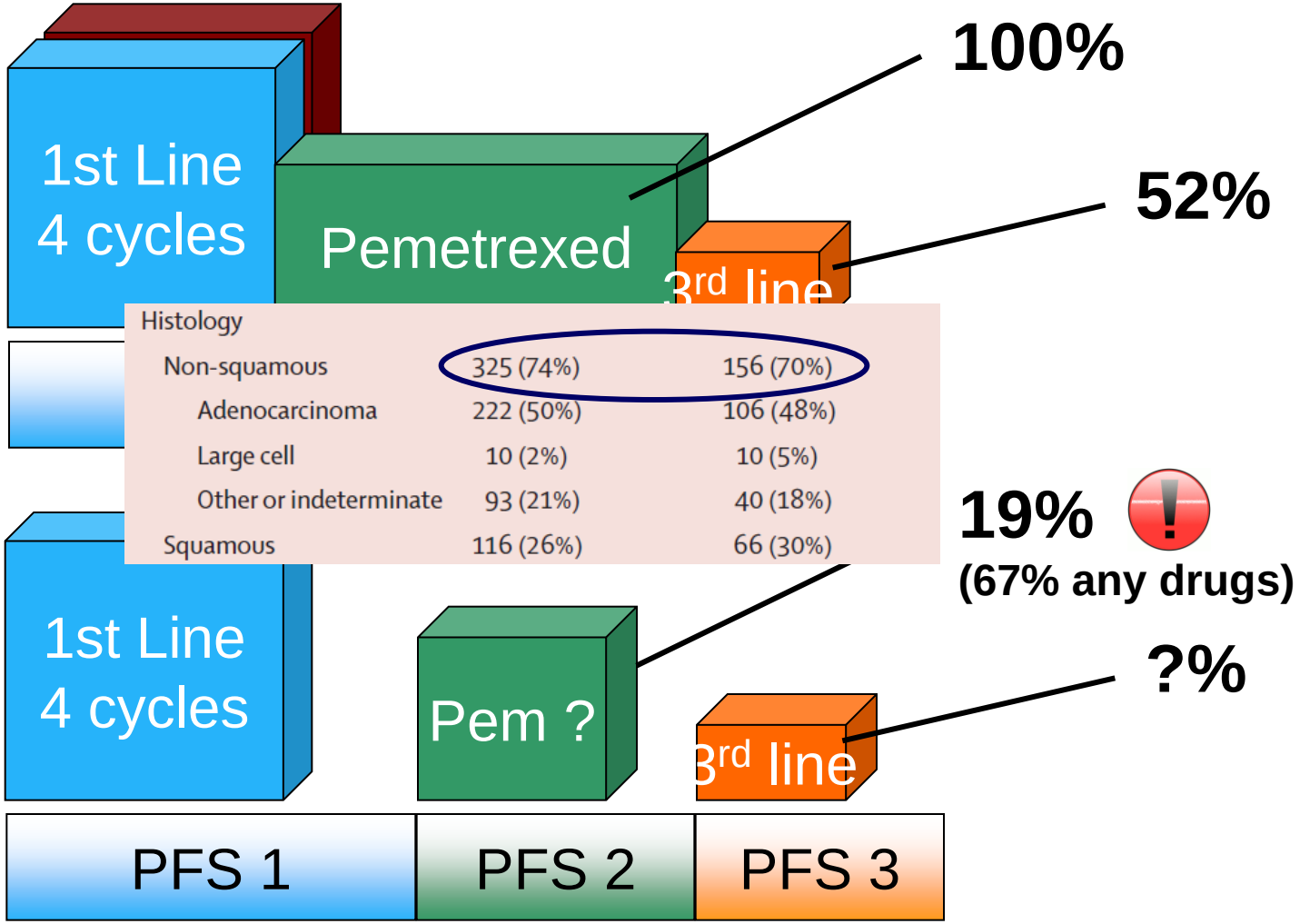
Overall Survival (ITT Population)

JMEN study



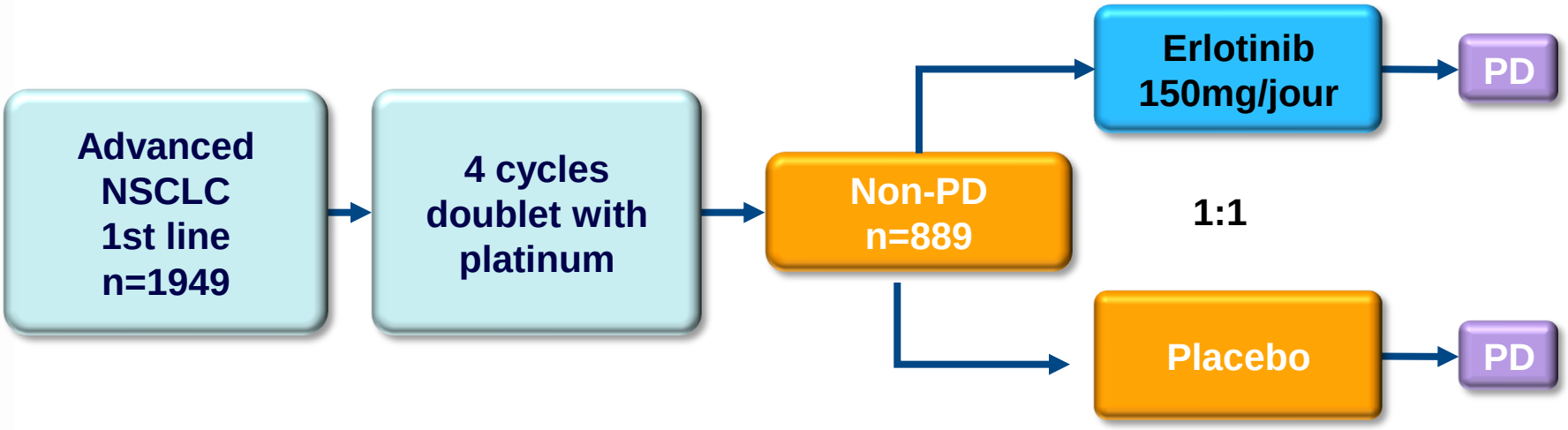
Ciuleanu, Lancet 2009

Switch maintenance // CUILEANU



Cuileanu *et al* Lancet 09

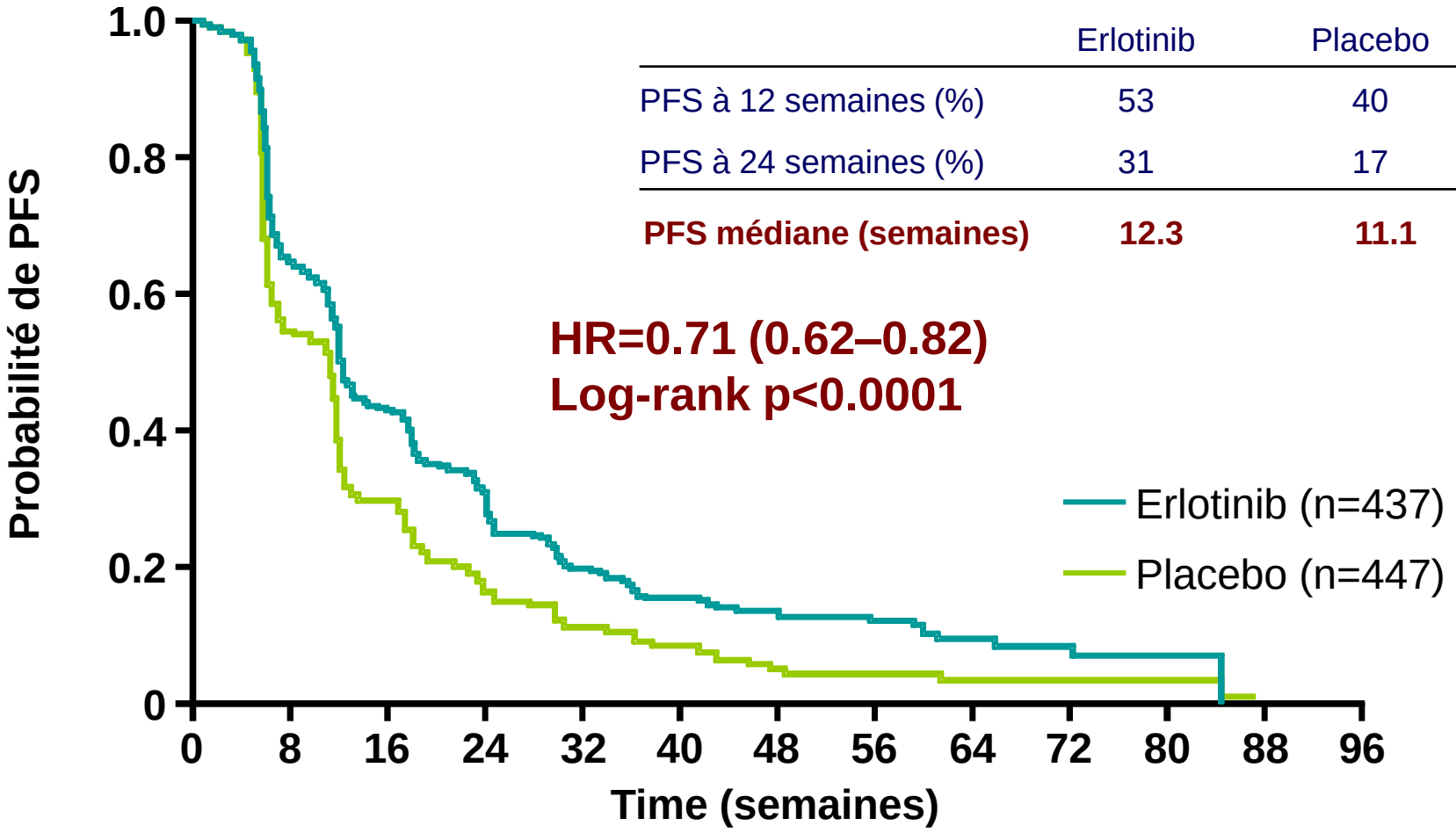
Maintenance : erlotinib (SATURN)



- **Primary objetive**
  - PFS
  - PFS in EGFR IHC +
- **84% caucasians, 26% women, 17% never smokers, 40% SCC**

Cappuzzo *et al* Lancet Oncol 10

PFS*: Population globale (ITT)

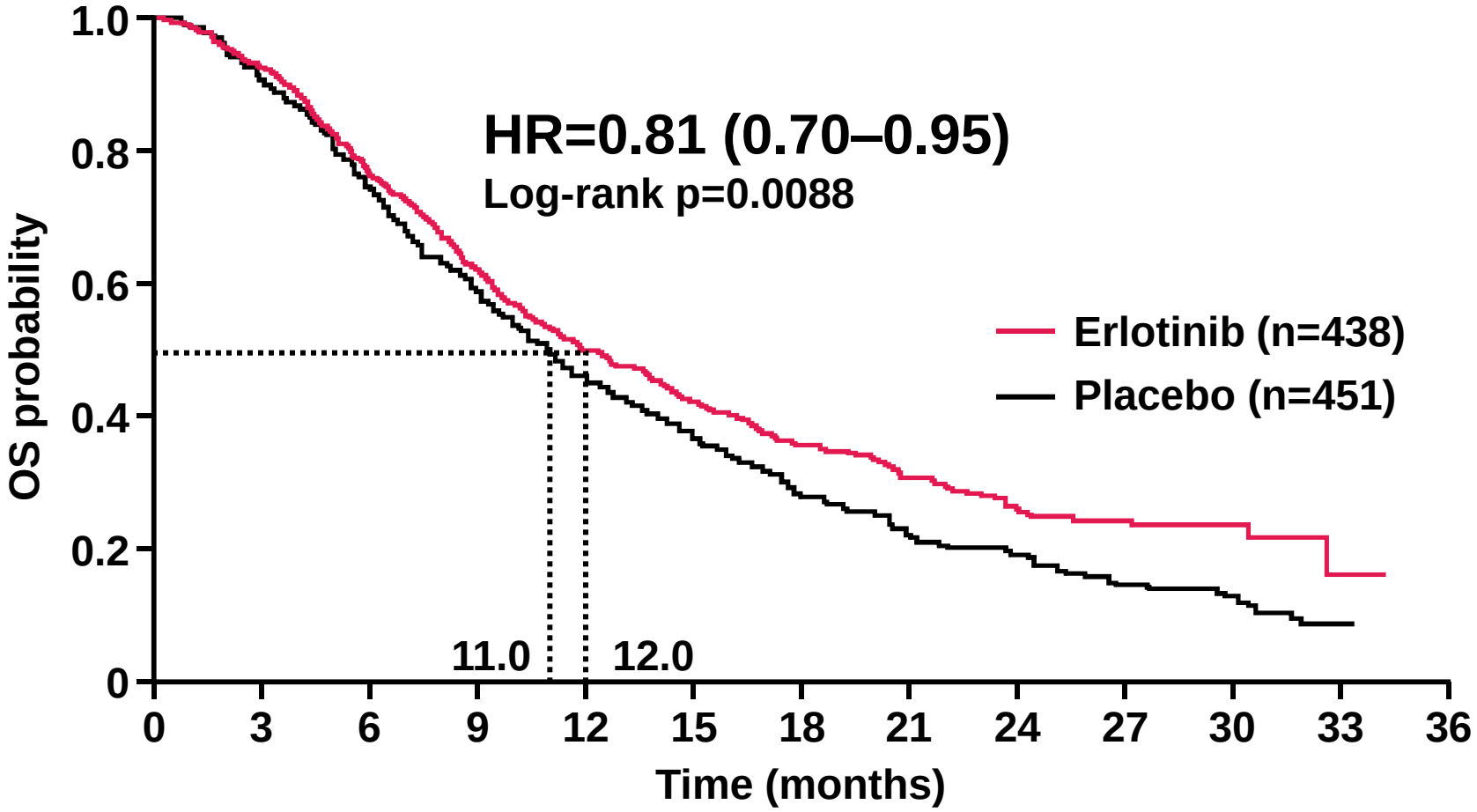


	Erlotinib	Placebo
PFS à 12 semaines (%)	53	40
PFS à 24 semaines (%)	31	17
PFS médiane (semaines)	**12.3**	**11.1**

***PFS : mesuré à partir du moment de la randomisation, évaluations toutes les 6 semaines**

Capuzzo et al, lancet onco 2010

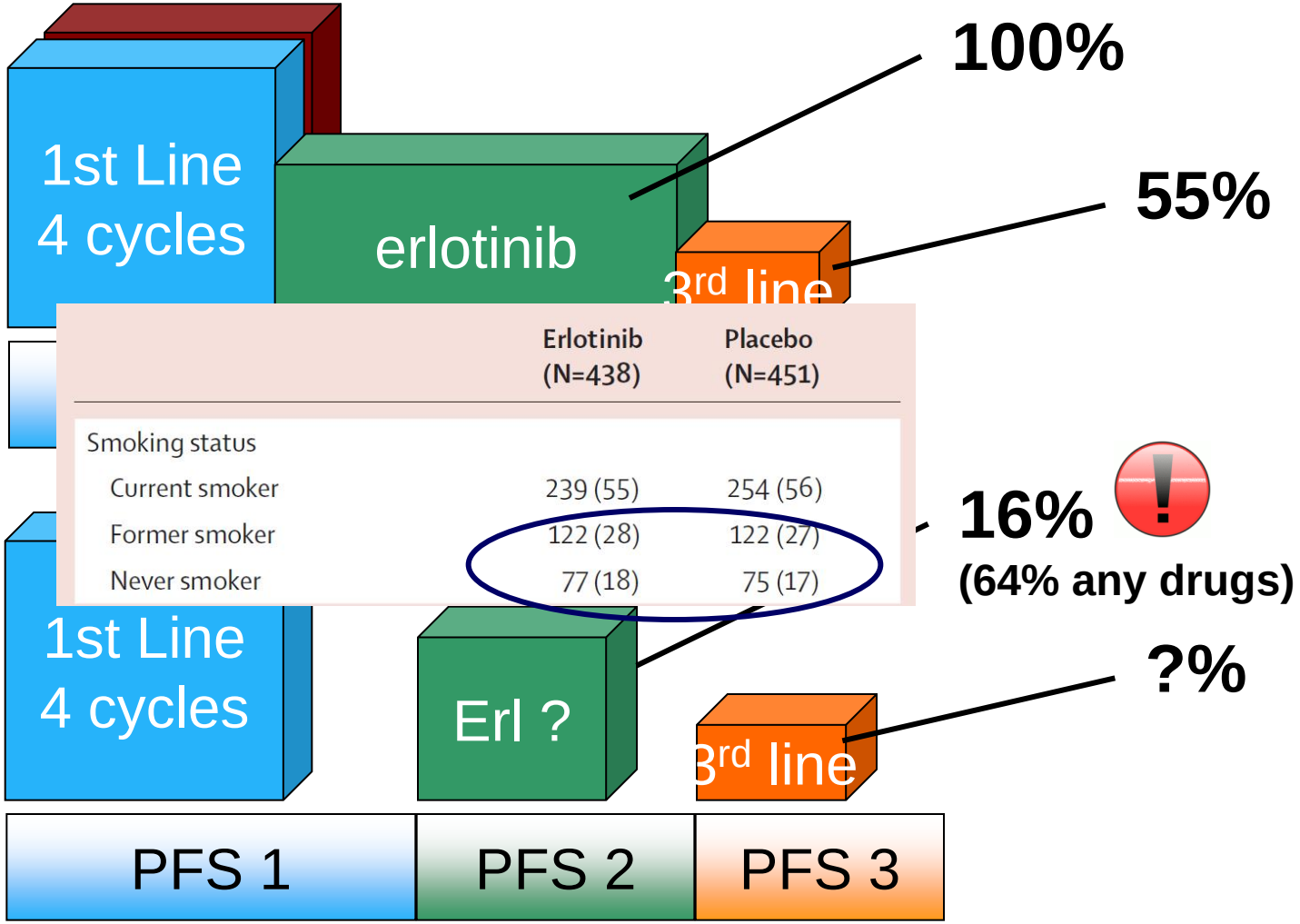
OS*: all patients (ITT)



*OS is measured from time of randomisation into the maintenance phase;
ITT = intent-to-treat population

Capuzzo et al, lancet onco 2010

Switch maintenance // CAPPUZZO



Cappuzzo *et al* Lancet Oncol 10

Continuation maintenance

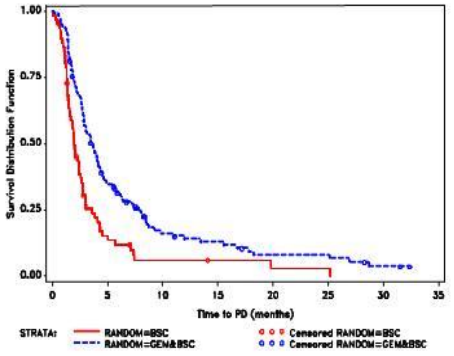
	Study	Agent
Continuation maintenance	Brodowicz	Gemcitabine Control
	IFCT-GFPC 0502	Gemcitabine Erlotinib Control
	PARAMOUNT	Pemetrexed Control
	AVAIL	Bevacizumab Control

Gemcitabine en maintenance

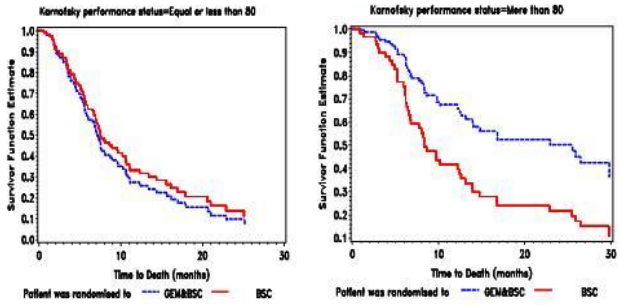
Induction: CDDP + Gemzar
Randomisation: Gemzar vs BSC

	Gemcitabine	Observation	*p*
Median number of 4 initial cycle CT			
N	142	73	
TTP/début traitement	**6,6 mois**	5 mois	*0,01*
TTP/ randomisation	**3,6 mois**	2 mois	*0,01*
Survie/début traitement	13 mois	11 mois	*0,195*
Survie/début traitement PS 0-1	**25,3 mois**	12,2 mois	*< 0,05*

Time to Disease Progression: Post-randomization Period



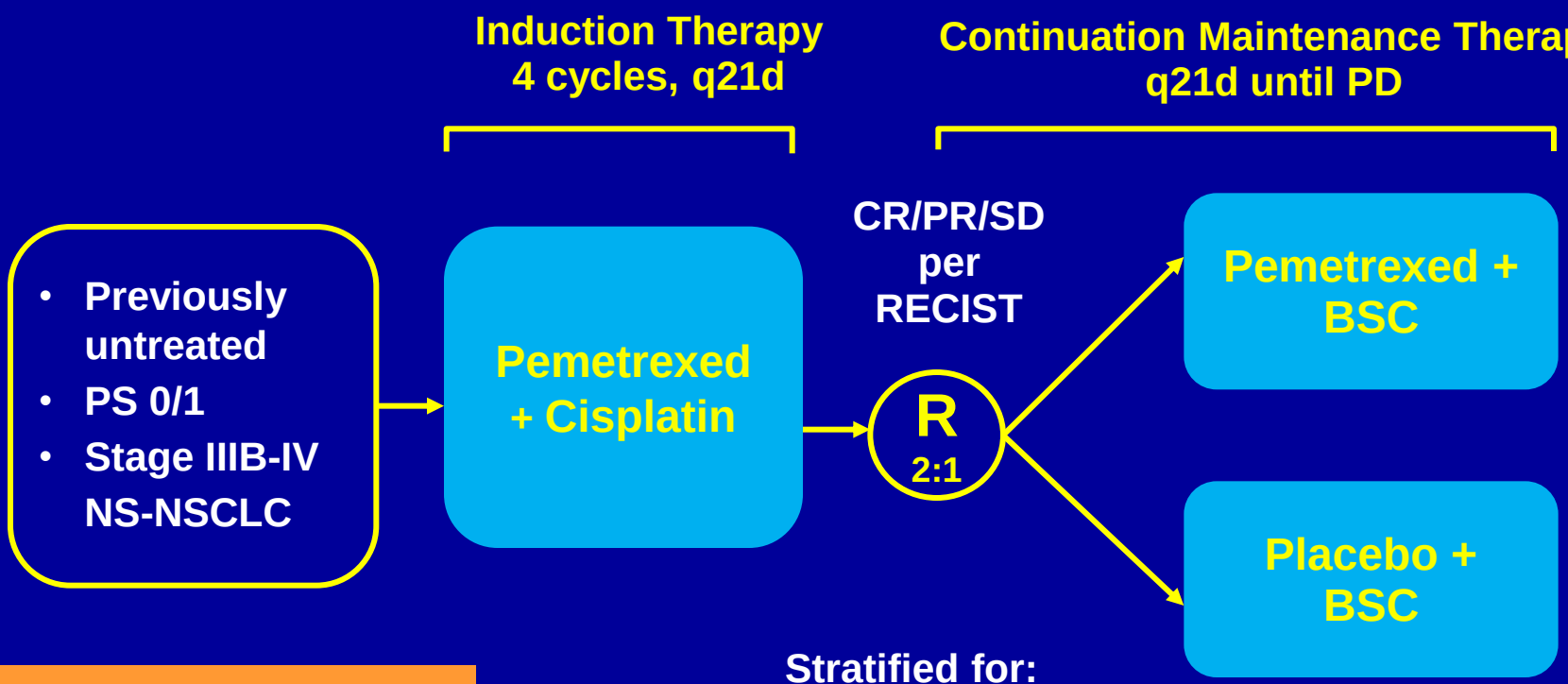
Overall survival. Post-randomization period



Brodowicz, Lung Cancer 2006

PARAMOUNT: Study Design

- Randomized, placebo-controlled, double-blind phase III study
- Pemetrexed 500 mg/m^2; Cisplatin 75 mg/m^2
- Folic acid and vitamin B_{12} administered to both arms



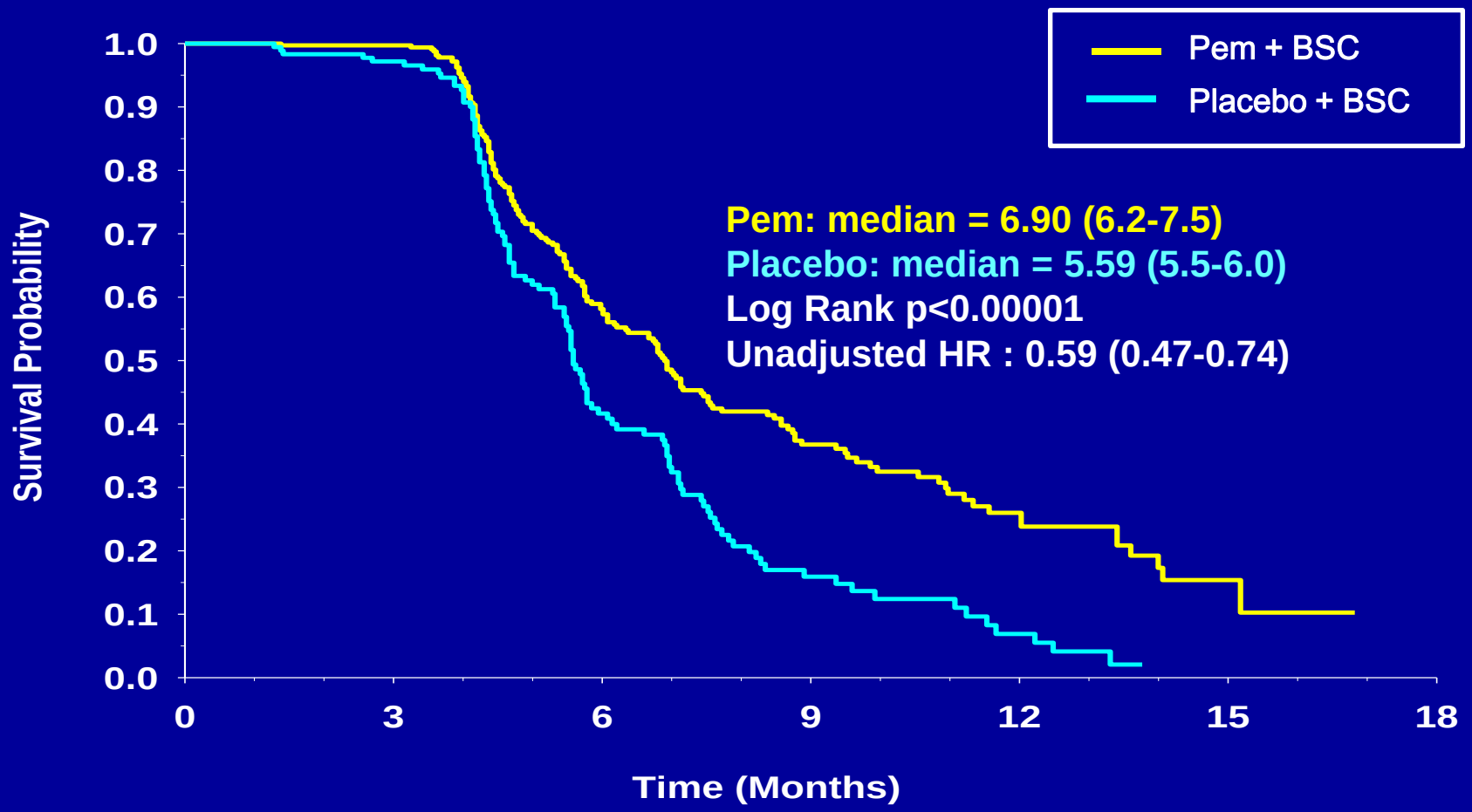
Primary endpoint: PFS

Stratified for:

- PS (0 vs 1)
- Disease stage (IIIB vs IV) prior to induction
- Response to induction (CR/PR vs SD)

L. Paz-Ares et al, lancet onco 2012

PARAMOUNT: Investigator Assessed PFS (from Induction)

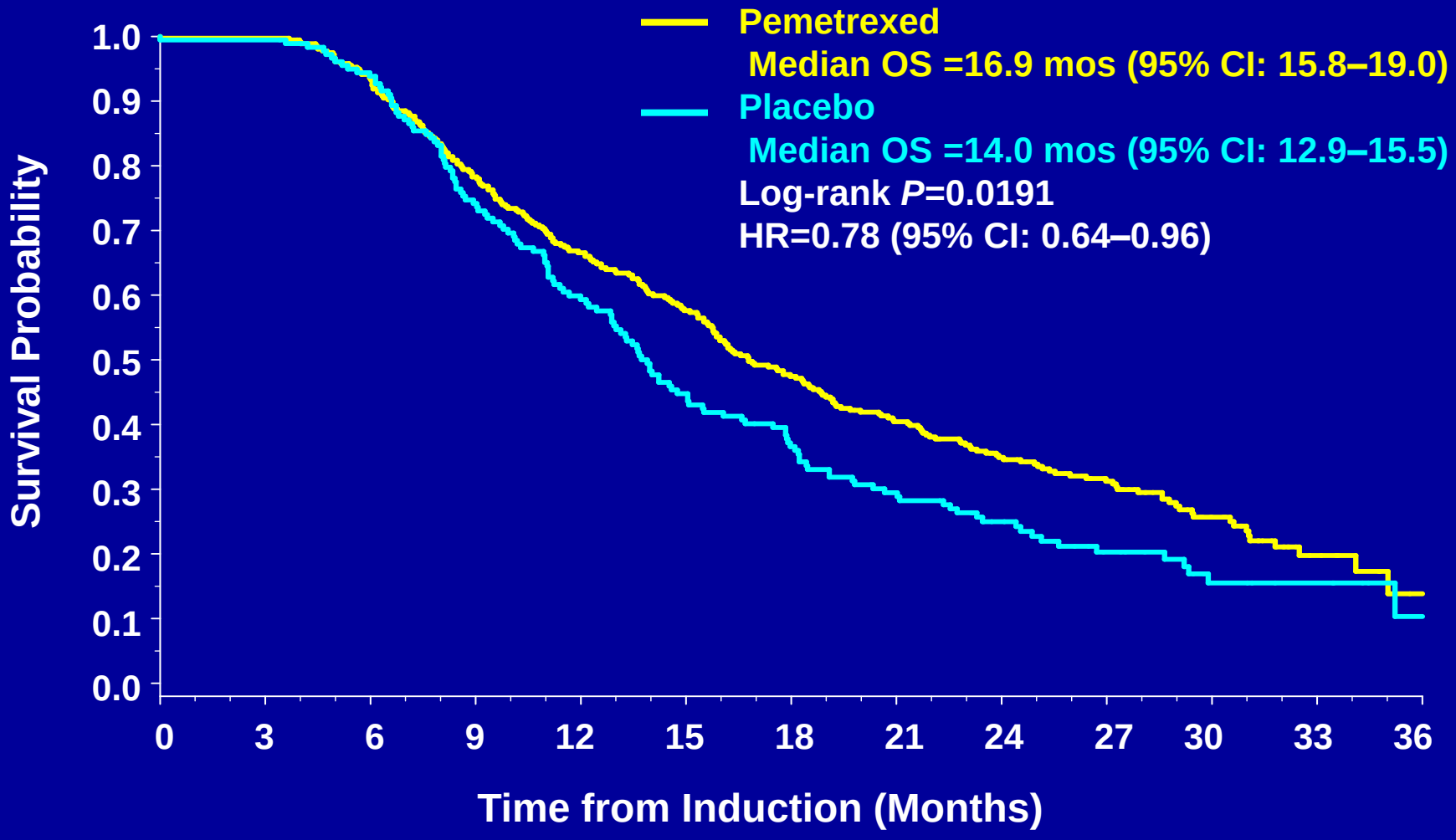


Patients at Risk

Pem + BSC	N=359	320	141	59	24	4	0
Placebo + BSC	N=180	157	51	14	5	0	0

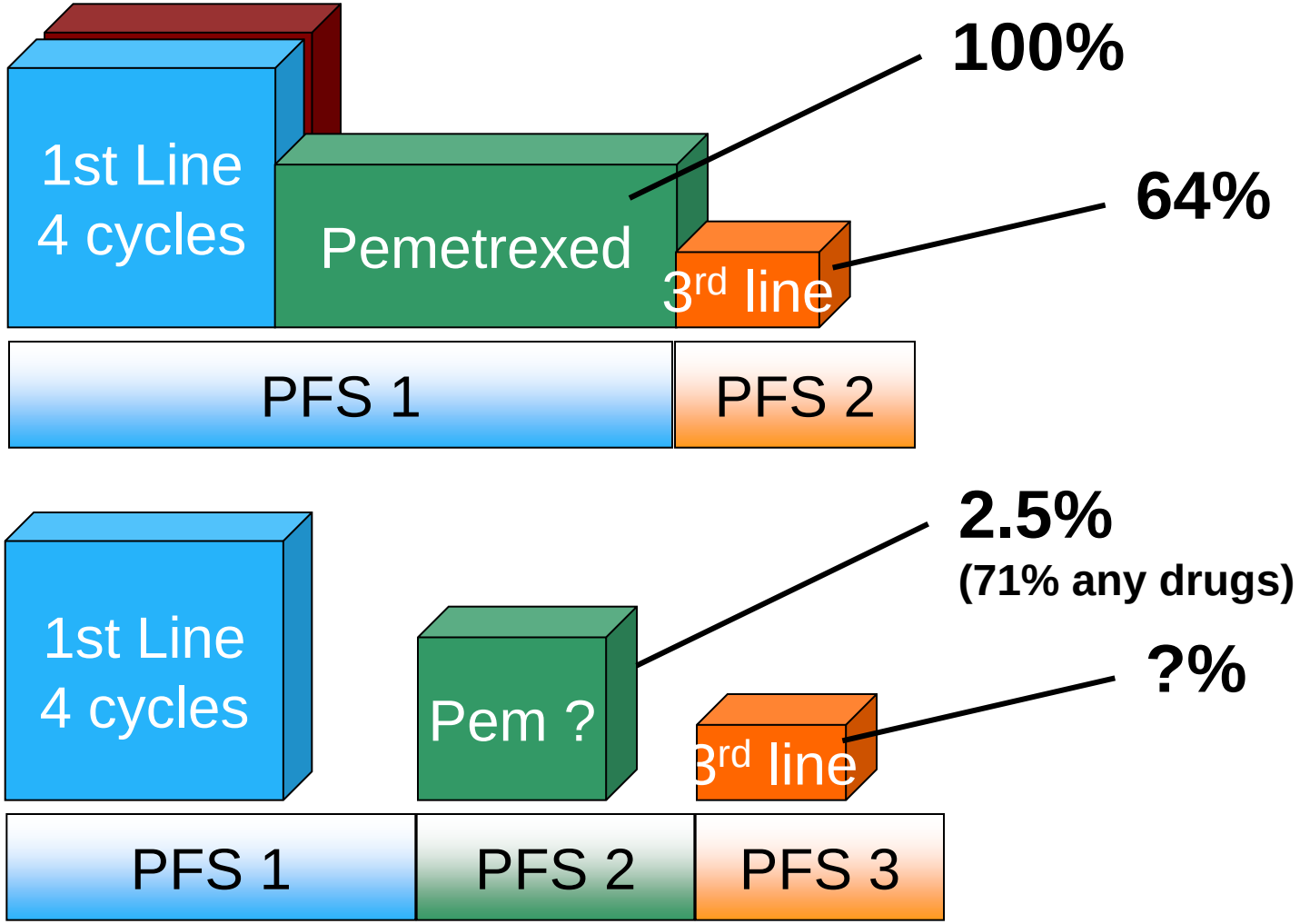
L. Paz-Ares et al, lancet onco 2012

PARAMOUNT: Final OS from Induction



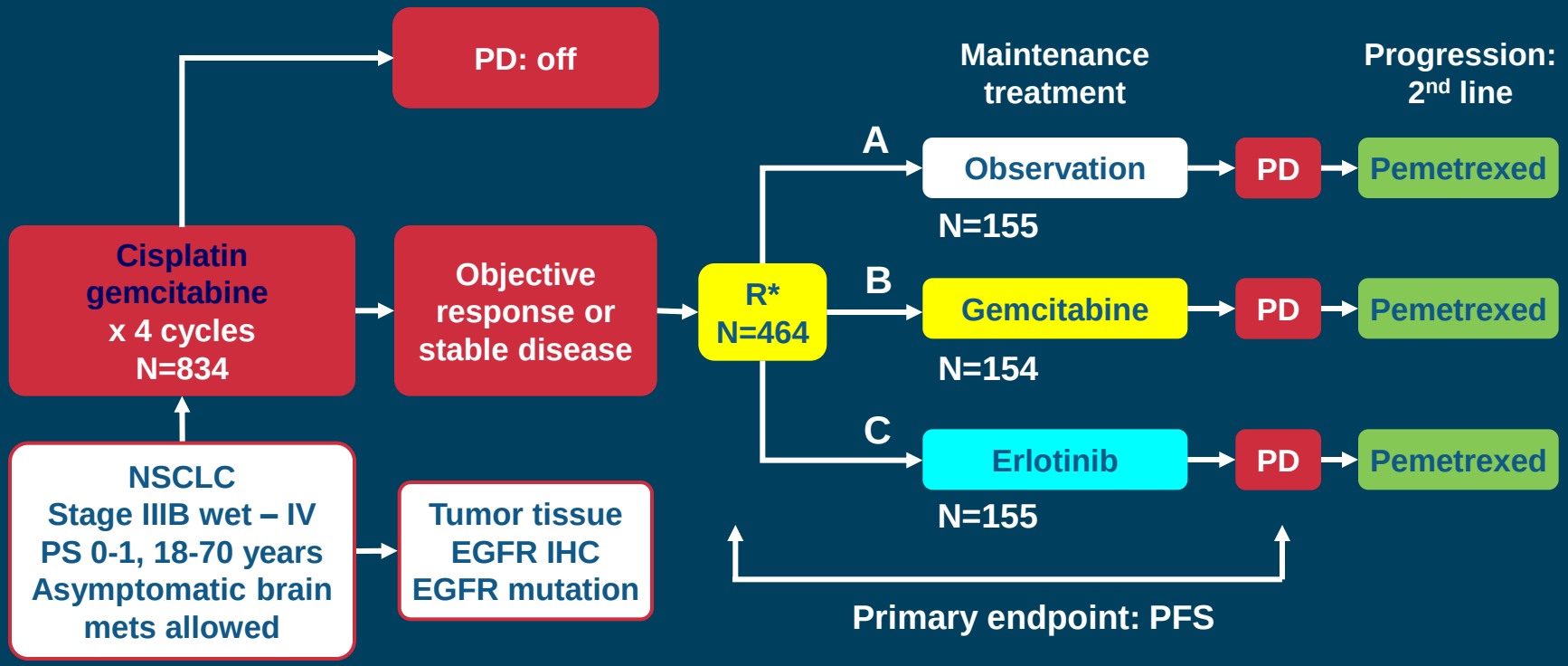
L. Paz-Ares et al, lancet onco 2012

Pemetrexed maintenance



L. Paz-Ares et al, lancet onco 2012

IFCT-GFPC 0502 study design
Maintenance Gemcitabine or Erlotinib



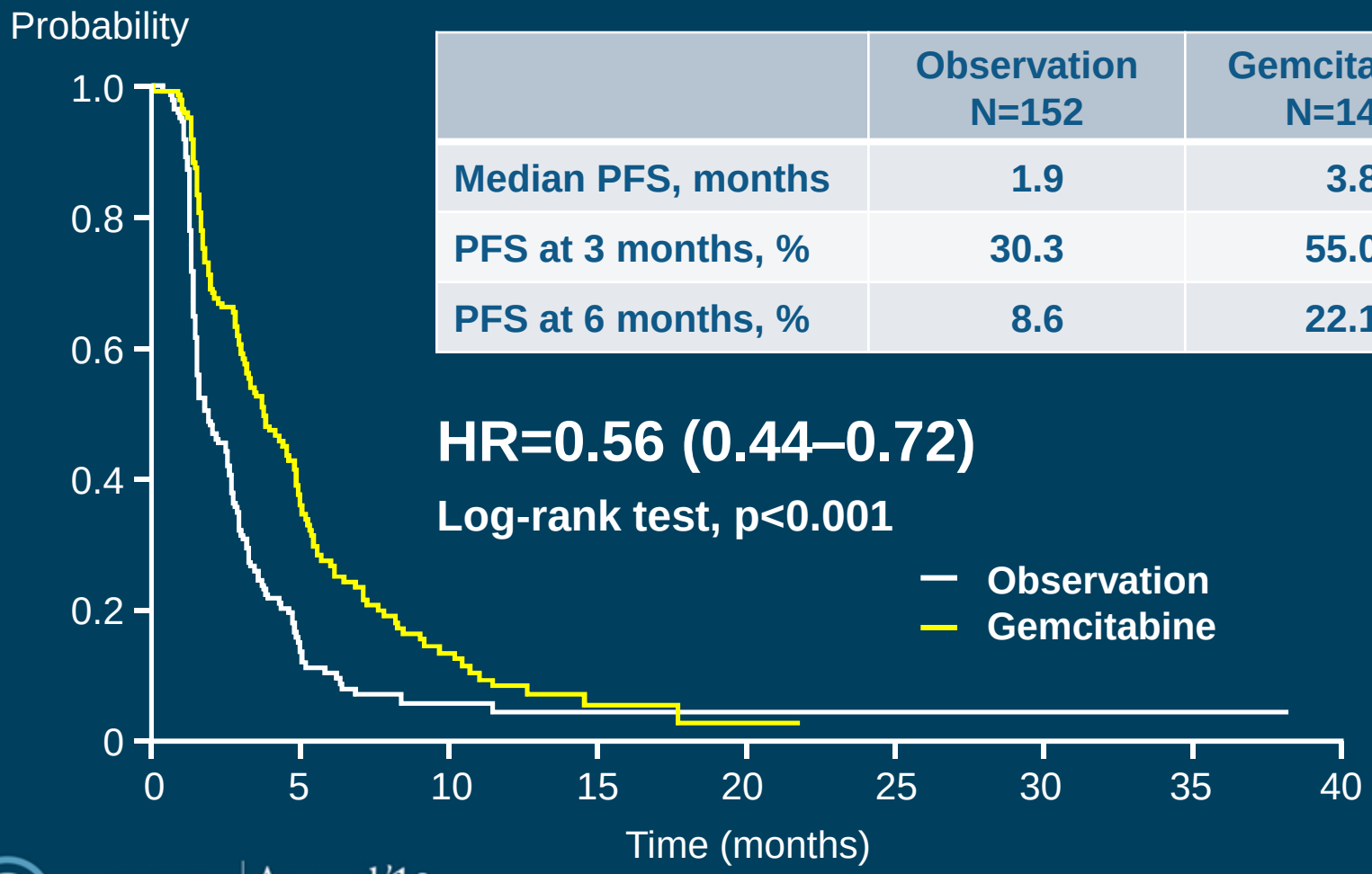
*Stratification factors:

- gender
- histology: adenocarcinoma vs other histology
- smoking status: non-smokers vs current/former smokers
- center
- response vs stabilization to induction chemotherapy

ASCO Annual '10 Meeting

Perol.M et al, JCO 2012

PFS by independent review
Gemcitabine versus observation



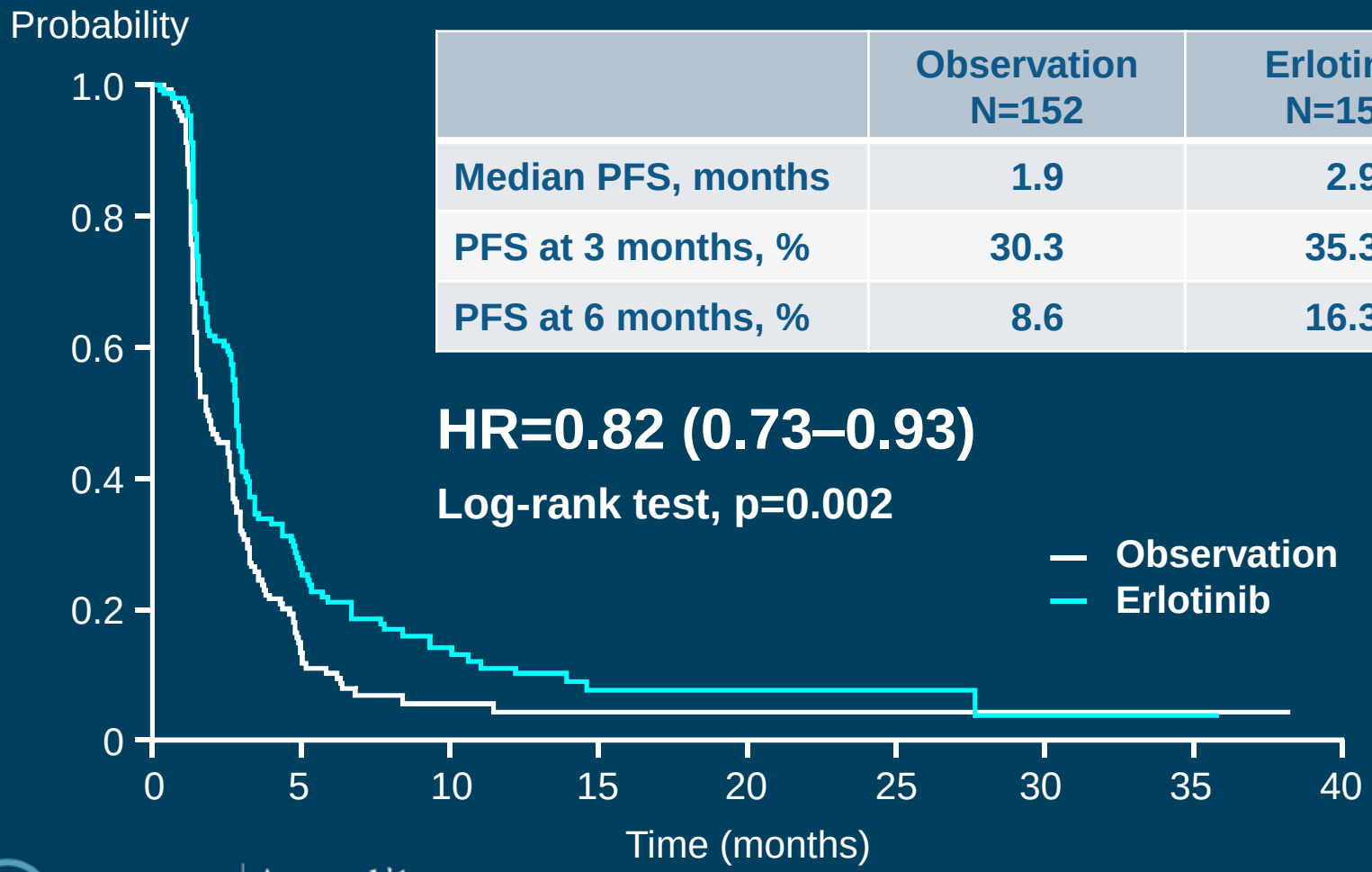
	Observation N=152	Gemcitabine N=149
Median PFS, months	1.9	3.8
PFS at 3 months, %	30.3	55.0
PFS at 6 months, %	8.6	22.1

ASCO Annual '10 Meeting

PFS is measured from time of randomization into the maintenance phase

Perol.M et al, JCO 2012

PFS by independent review
Erlotinib versus observation



	Observation N=152	Erlotinib N=153
Median PFS, months	1.9	2.9
PFS at 3 months, %	30.3	35.3
PFS at 6 months, %	8.6	16.3

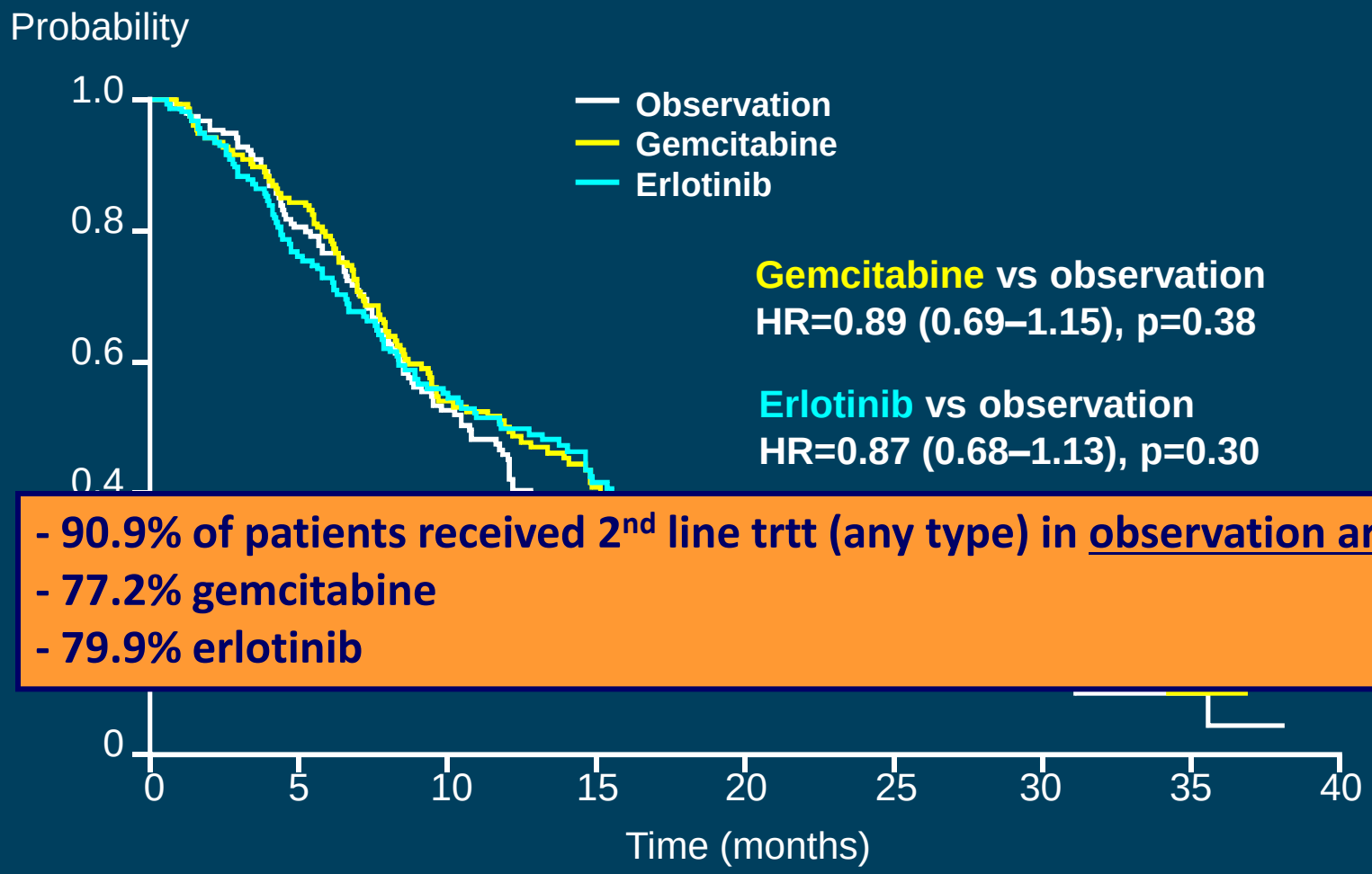
HR=0.82 (0.73–0.93)

Log-rank test, p=0.002

ASCO Annual '10 Meeting

PFS is measured from time of randomisation into the maintenance phase

Overall survival



Gemcitabine vs observation
HR=0.89 (0.69–1.15), p=0.38

Erlotinib vs observation
HR=0.87 (0.68–1.13), p=0.30

- 90.9% of patients received 2nd line trtt (any type) in observation arm
- 77.2% gemcitabine
- 79.9% erlotinib

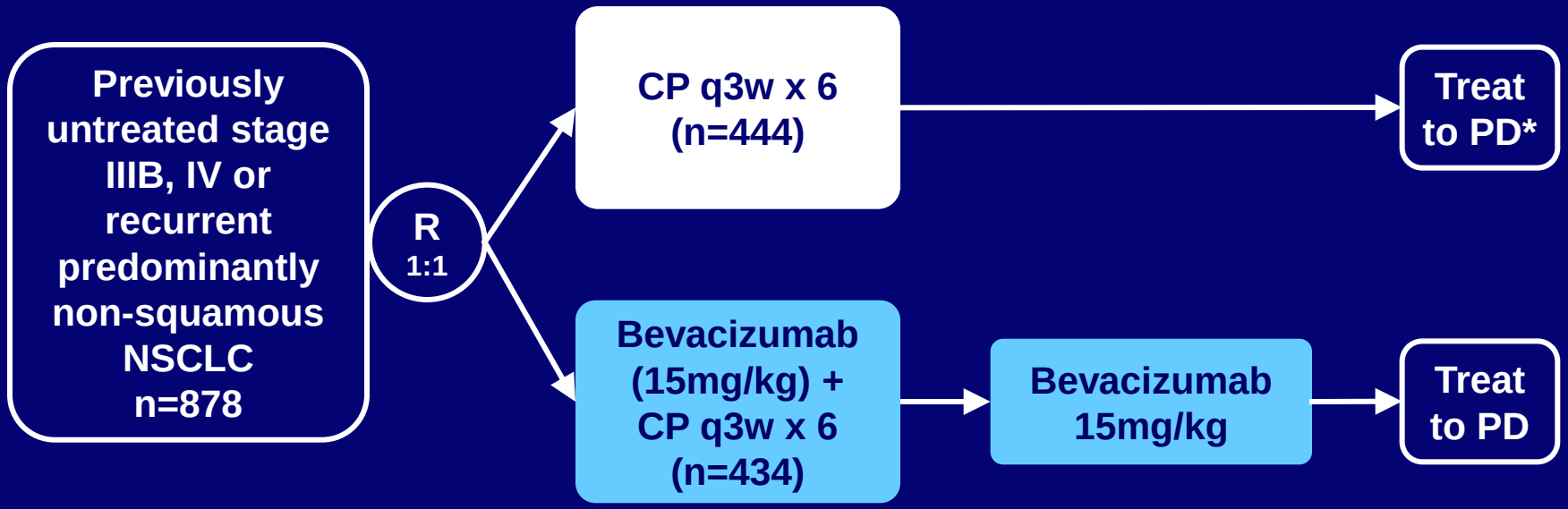
ASCO Annual '10 Meeting

Median follow-up: 21.6 months

324 deaths / 464 randomized patients (69.6%)

Perol,M et al. JCO 2012

E4599: bevacizumab pivotal phase III trial



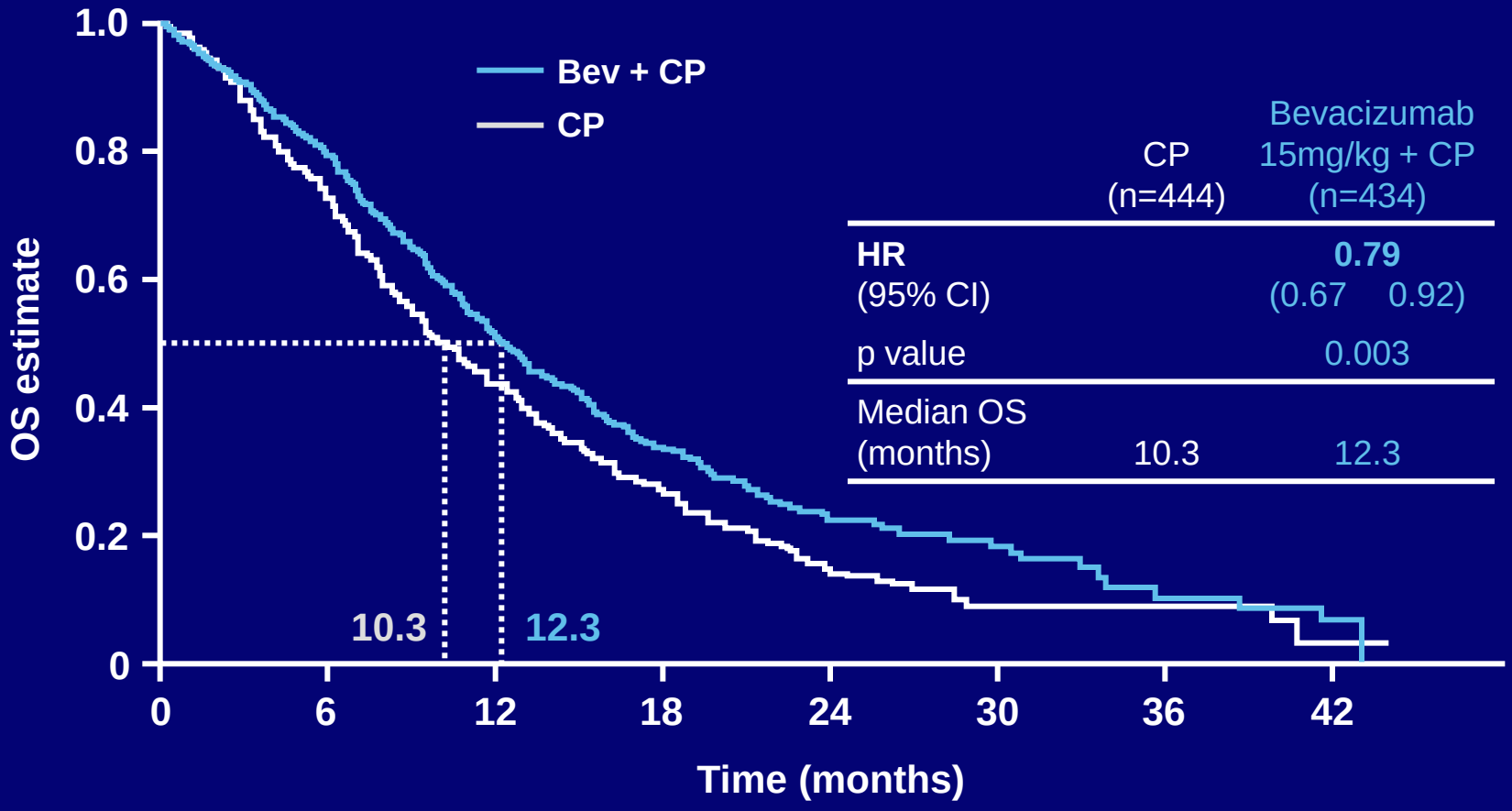
- Primary endpoint
  - overall survival (OS)

*No crossover permitted; CP = carboplatin/paclitaxel

Sandler, et al. NEJM 2006

OS extended beyond historical benchmark of 1 year

E4599 overall patient population

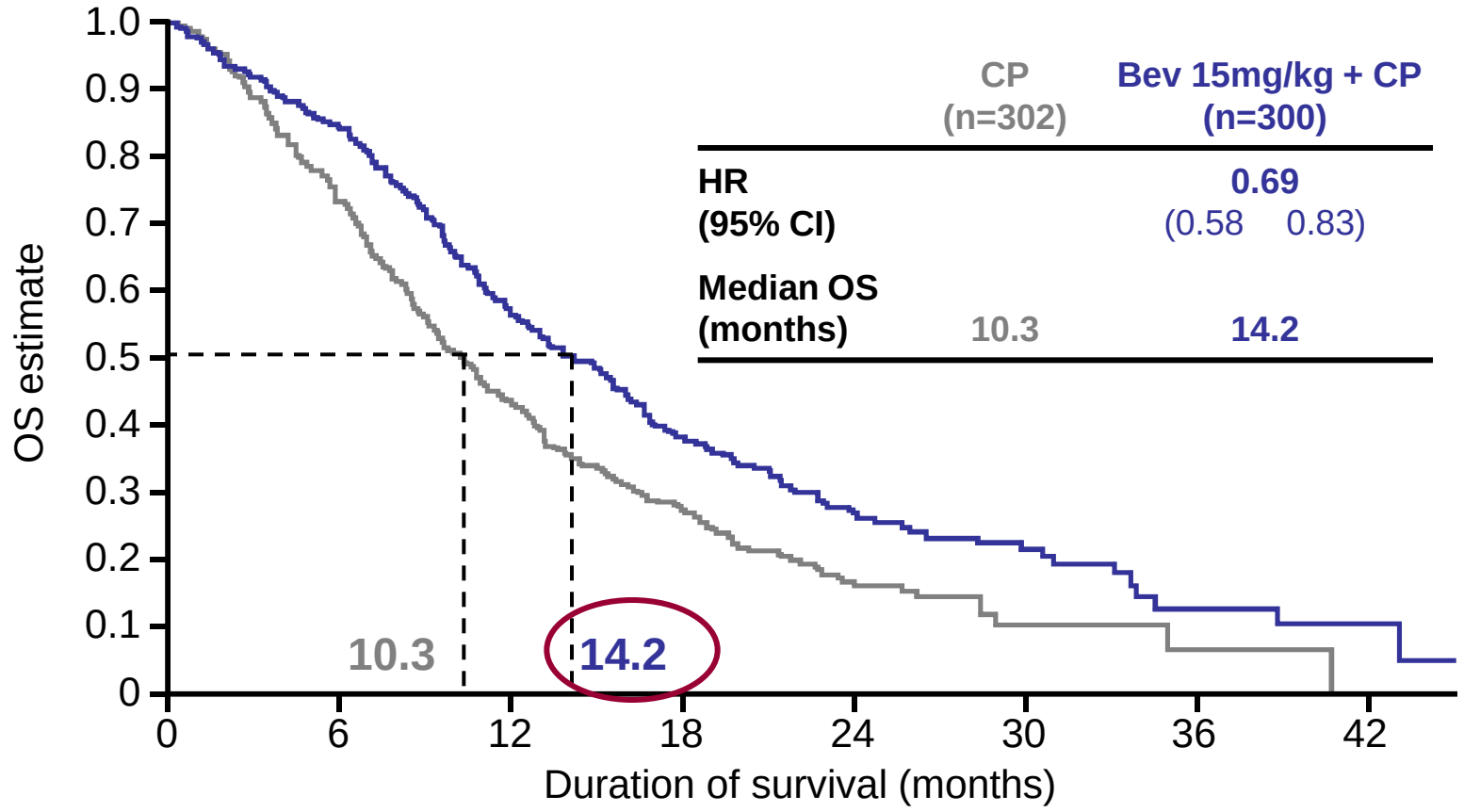


	CP (n=444)	Bevacizumab 15mg/kg + CP (n=434)
HR (95% CI)		**0.79** (0.67 0.92)
p value		0.003
Median OS (months)	10.3	12.3

Sandler, et al. N Engl J Med 2006

Unprecedented OS benefit in bevacizumab-treated patients with adenocarcinoma histology

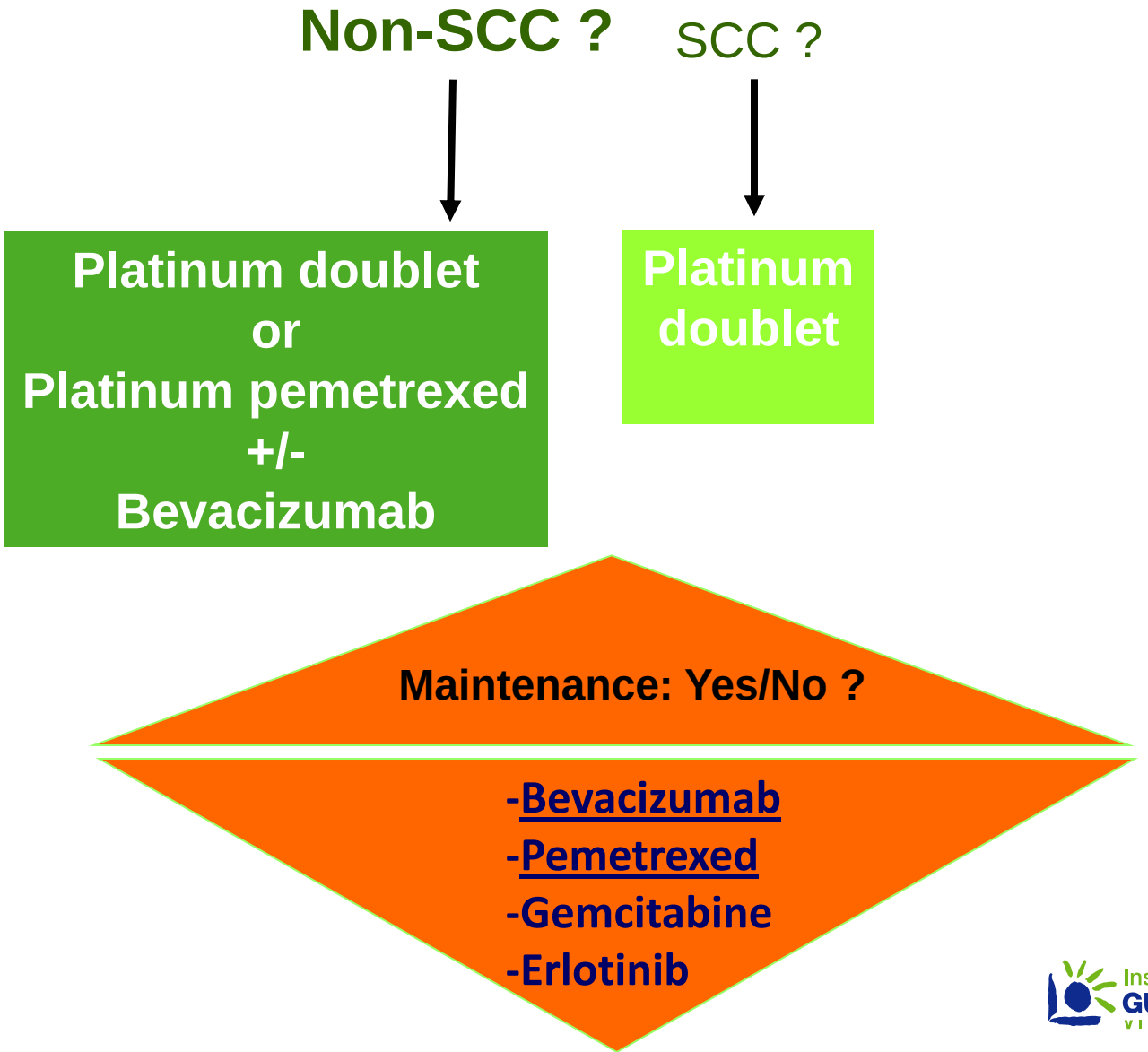
- Bevacizumab-based therapy extends OS to 14.2 months (increase of 3.9 months vs CP)
  → **31% reduction in the risk of death**



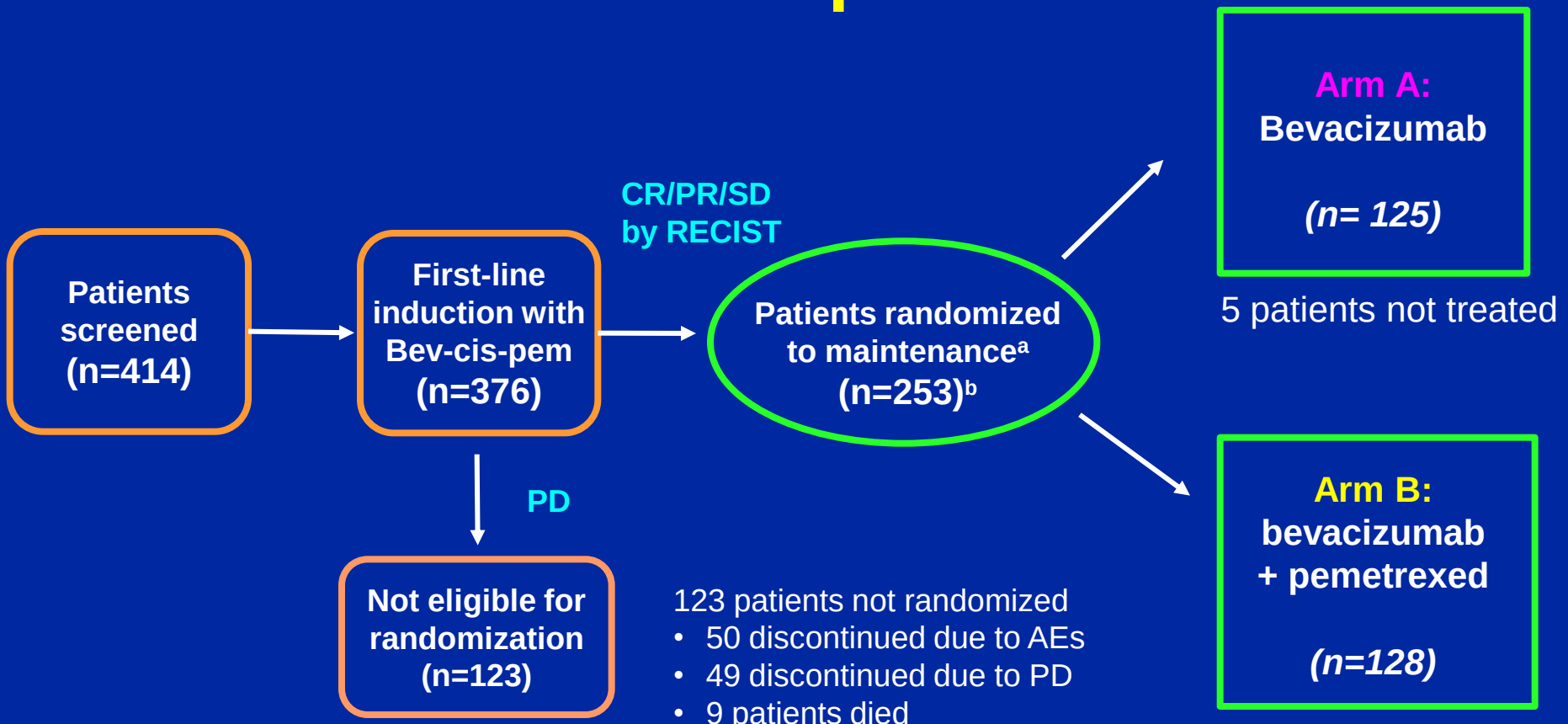
Note: pre-planned subgroup analysis in E4599

Sandler, et al. JTO 2010

Therapeutic options for continuation maintenance treatment



AVAPERL: Patient disposition

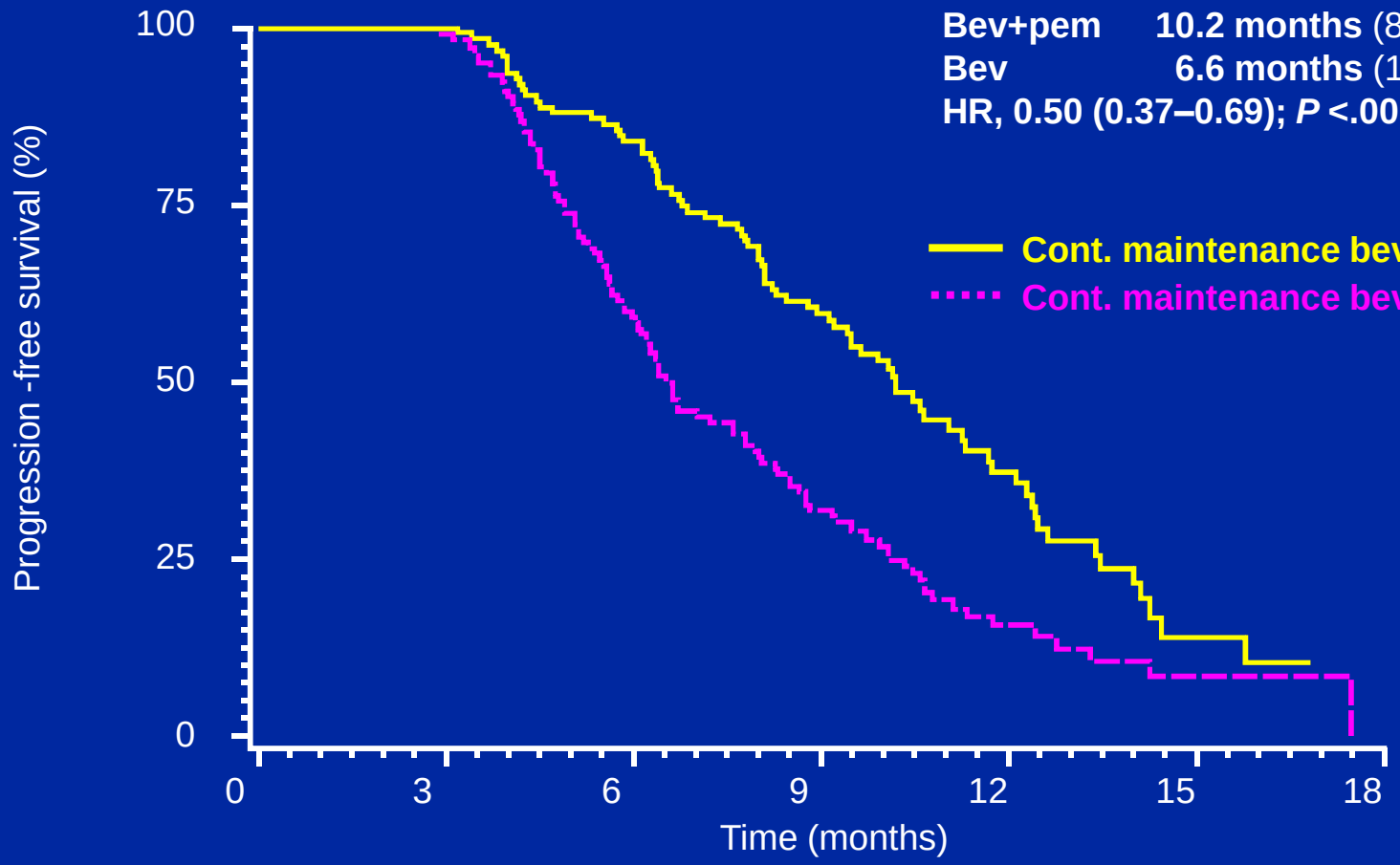


[a] RECIST-related end points measured from the preinduction phase.
[b] Intent-to-treat population

Median follow-up time for this analysis: 11 months

F. Barlesi et al, ESMO 2011

AVAPERL: PFS from induction[a]



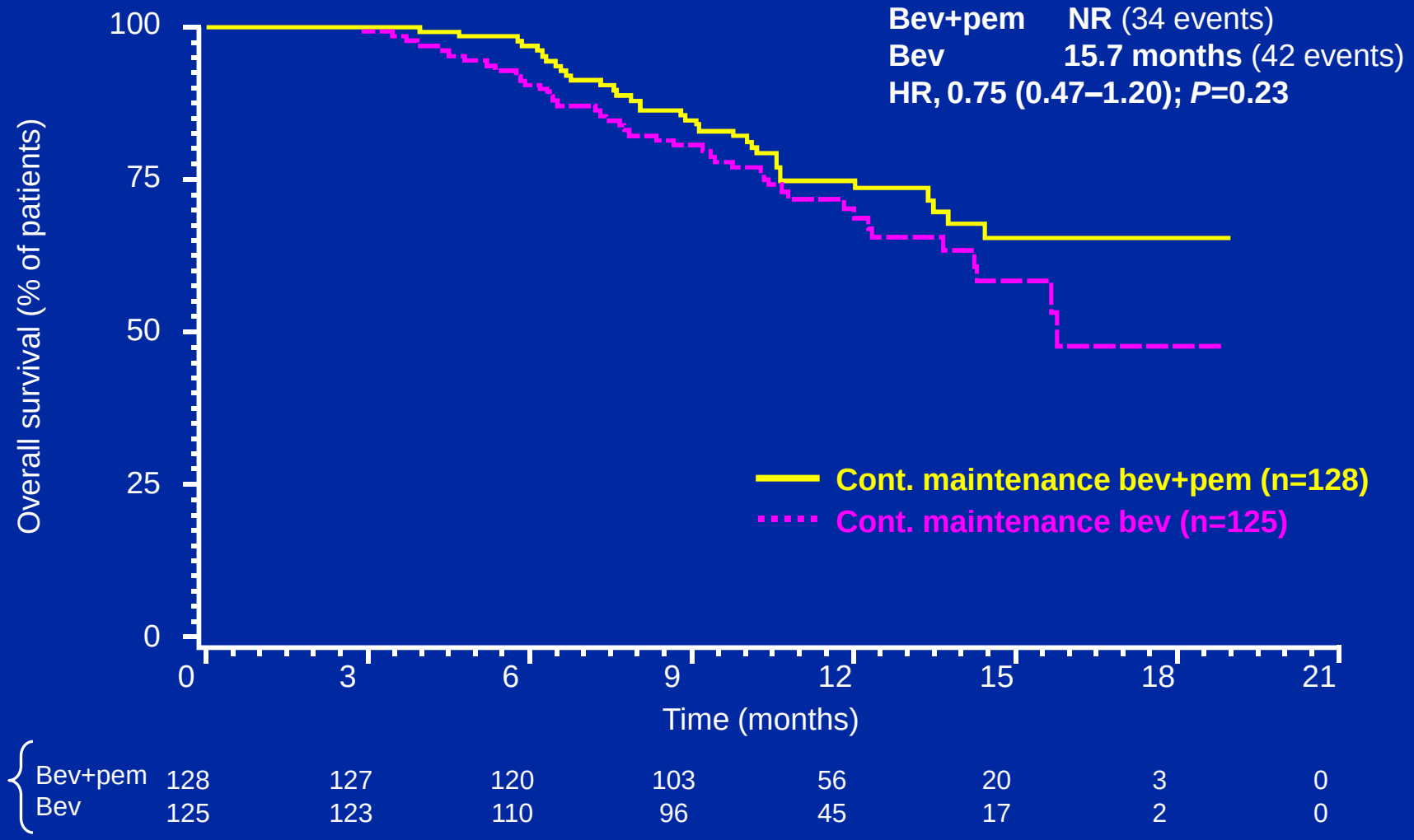
Pts at risk							
Bev+pem	128	126	103	66	25	4	0
Bev	125	122	73	38	12	2	0

[a] Randomized pts, Intent-to-treat population

Bev, bevacizumab; HR, hazard ratio; Pem, pemetrexed; pts, patients.

F. Barlesi et al, ESMO 2011

AVAPERL: OS from induction[a]

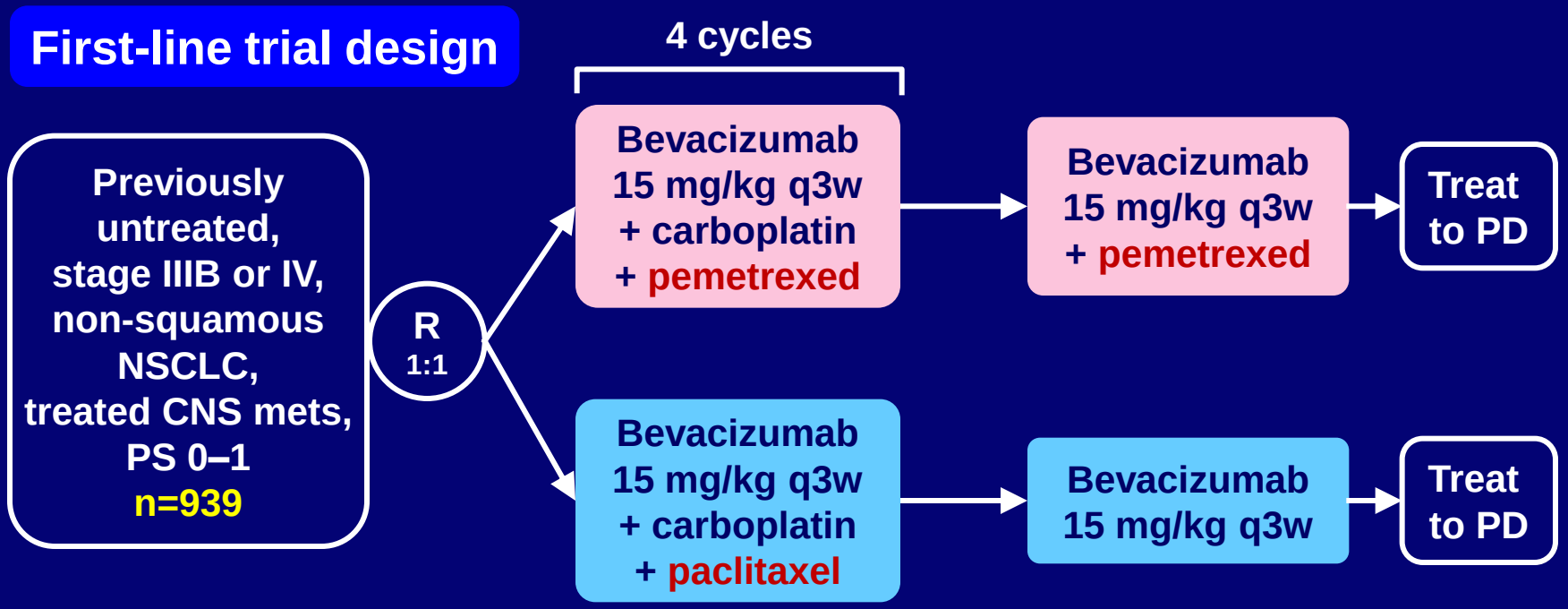


[a] Randomized pts, Intent-to-treat population

Median follow-up time: 11 months (8 months, excluding induction).
30% of events at the time of analysis for overall survival.
bev, bevacizumab; HR, hazard ratio; NR, not reached; pem, pemetrexed; pts, patients.

F. Barlesi et al, ESMO 2011

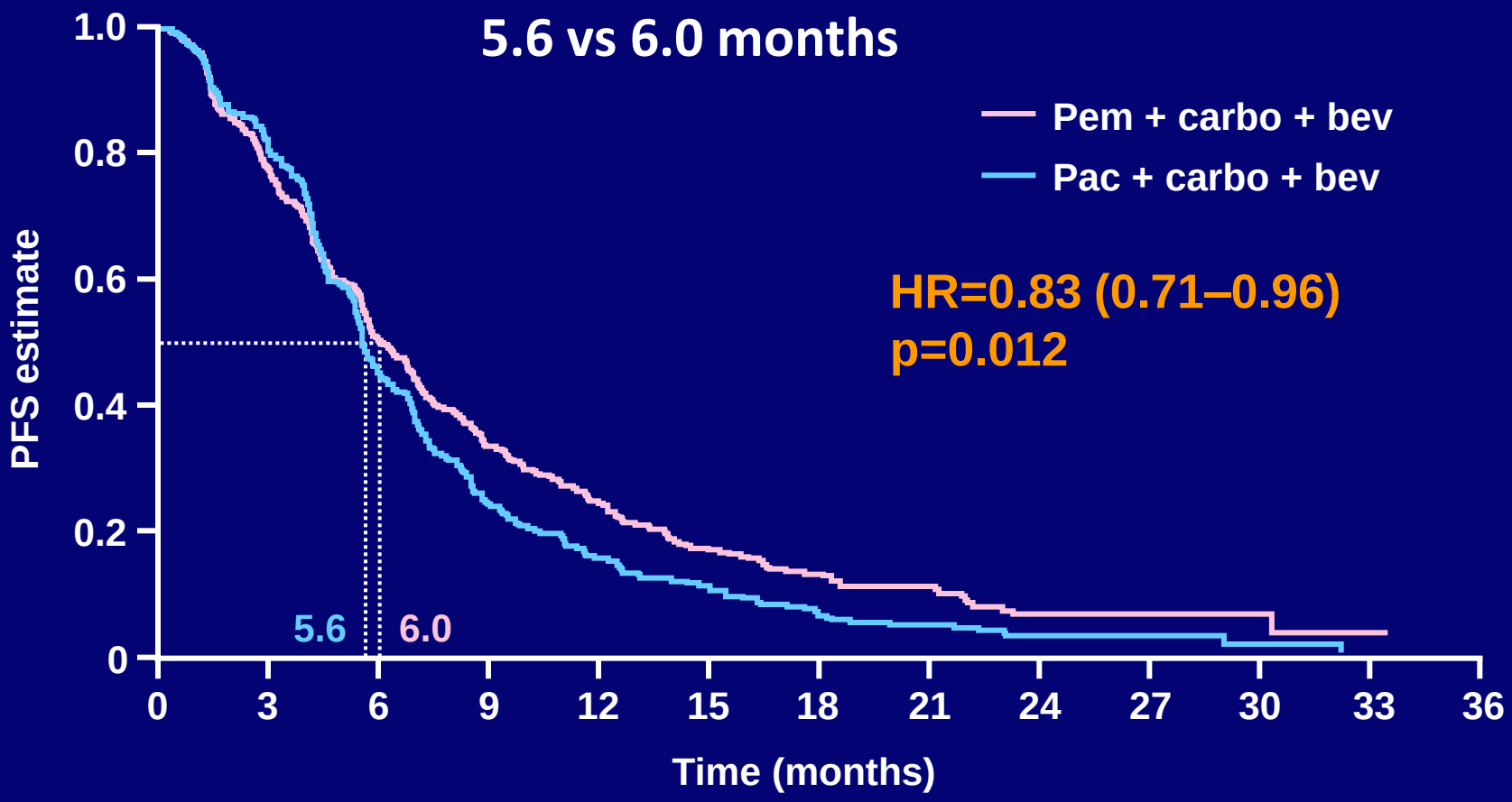
POINTBREAK phase III trial



- Primary endpoint
  - OS
- Secondary endpoints
  - ORR and DCR
  - PFS and TTP
  - safety and QoL

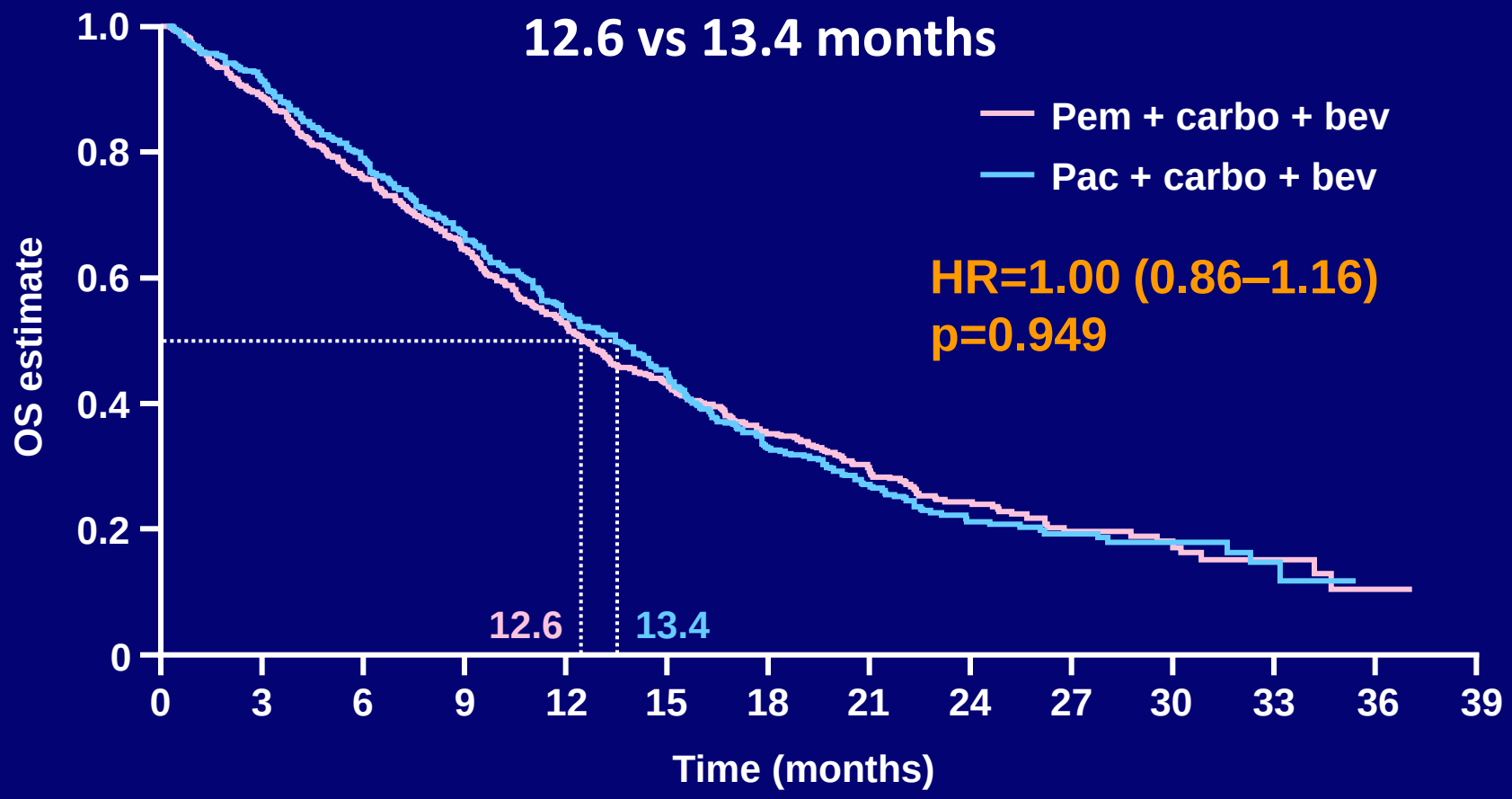
Patel, et al. IASLC 2012 (Chicago)

PFS: ITT population



Patel, et al. IASLC 2012 (Chicago)

OS (primary endpoint) – ITT population



Patel, et al. IASLC 2012 (Chicago)

Benefits of maintenance...PFS

Trial	Drug	Median PFS Control	Median PFS Maintenance	HR
Continuation Maintenance				
Brodowicz	GMZ	2	3.6	0.69 (0.56-0.86)
IFCT-GFPC	GMZ	1.9	3.8	0.56 (0.44-0.72)
Belani	GMZ	7.7*	7.4*	1.09 (0.81-1.45)
Sandler	Beva	4.5	6.5	0.66 (0.57-0.77)
Paz-Ares	PEM	2.6	3.9	0.64 (0.51-0.81)
Barlesi	PEM/BEV	3.7	7.4	0.48 (0.35-0.66)
Switch Maintenance (CT)				
Westeel	VNR	3	5	0.77 (0.55-1.07)
Fidias	TXT	2.7	5.7	0.71 (0.55-0.92)
Ciuleanu	PEM	2.0	4.0	0.60 (0.49-0.73)
Switch Maintenance (TKI)				
Saturn	ERL	2.55	2.83	0.71 (0.62-0.82)
Atlas	ERL	3.7	4.6	0.72 (0.59-0.88)
IFCT-GFPC	ERL	1.9	2.9	0.69 (0.54-0.88)

Benefits of maintenance...OS

Trial	Drug	Median OS Control Arm	Median OS Experim. Arm	HR (95% CI)
Continuation Maintenance				
Brodowicz	GMZ	8.1	10.2	0.84 (0.52-1.38)
IFCT-GFPC	GMZ	10.8	12.1	0.89 (0.69-1.15)
Belani	GMZ	9.3	8	0.97 (0.72-1.30)
Sandler	Beva	10.3	12.3	**0.79 (0.67-0.92)**
Paz-Ares	PEM	11.1	13.9	**0.78 (0.61-0.98)**
Barlesi	PEM/BEV	15.7	NR	0.75 (0.47-1.20)
Switch Maintenance (CT)				
Westeel	VNR	12.3	12.3	1.08 (0.79-1.48)
Fidias	TXT	9.7	12.3	0.84 (0.65-1.08)
Ciuleanu	PEM	10.6	13.4	**0.79 (0.65-0.95)**
Switch Maintenance (TKI)				
Saturn	ERL	11.0	12.0	**0.81 (0.70-0.95)**
Atlas	ERL	10.8	11.4	0.87 (0.68-1.13)
IFCT-GFPC	ERL	13.9	15.9	0.90 (0.74-1.09)

Benefits of double maintenance ?

Trial	Drug	Median PFS Control	Median PFS 2Xmaintenance	HR
Maintenance Pemetrexed-Bevacizumab				
AVAPERL	P-B	3.7 10.2	7.4 (Maintenace) 6.6 (induction)	0.48 (0.35–0.66) 0.50 (0.37–0.69)
POINT BREAK	P-B	6.9 5.6	8.6 (Maintenance) 6.0 (ITT)	0.83 (0.71–0.96)
Maintenance Erlotinib-Bevacizumab				
ATLAS	VNR	3.9	4.9 (maintenance)	0.72 (0.59-0.88)

Trial	Drug	Median OS Control	Median OS 2Xmaintenance	HR
Maintenance Pemetrexed-Bevacizumab				
AVAPERL	P-B	15.7	NR (Maintenance)	0.75 (0.47–1.20)
POINT BREAK	P-B	13.4 15.7	12.6 (ITT) 17.7(Maintenance)	1.00 (0.86–1.16)
Maintenance Erlotinib-Bevacizumab				
ATLAS	VNR	13.9	15.9 (maintenace)	0.90 (0.74–1.09)

Befinit in quality of life ?

Trial	Drug	PRO studied	Symptoms control	Significant difference
Continuation Maintenance				
Brodowicz	GMZ	LCSS	LCSS	Non
IFCT-GFPC	GMZ	LCSS	LCSS	?
Belani	GMZ	?	?	?
Paz				
Bar				
Swi				
Westeel	VNR	Non	Non	NA
Fidias	TXT	LCSS	ASBI	Non
Ciuleanu	PEM	LCSS*	TWIST*	Non* (pain, hemoptysis)
Switch Maintenance (TKI)				
Saturn	ERL	FACT-L	NA	Non
Atlas	ERL	Non	Non	NA
IFCT-GFPC	ERL	LCSS	LCSS	?

Quality-of-life analysis has not demonstrated even minimal benefit for either of the two strategies

** Méthodologie non valide (utilisation de quelques items du score)*

Safety, Resource Use in PARAMOUNT

- **Grade 3 to 4 drug-related toxicities**
  - ✓ **Anemia** (4.5% versus 0.6%; $p = 0.016$)
  - ✓ **Fatigue** (4.2% versus 0.6%; $p = 0.016$)
  - ✓ **Neutropenia** (3.6% versus 0.0%; $p < 0.006$)
- **Patients on maintenance pemetrexed required more**
  - ✓ **Transfusions** (13.4% versus 5.0%; $p = 0.003$)
  - ✓ **GCSF** (5.3% versus 0.0%; $p < 0.001$)
  - ✓ **Anti-infectives** (25.3% versus 16.7%; $p = 0.028$)
  - ✓ **Hospitalizations** because of study drug (8.4% versus 3.3%, $p = 0.028$)

Gridelli et al, JTO 2013

JMEN study : Toxicity

	Pemetrexed	Placebo
≥ 1 SAE	4,3%	0
≥ 1 AE grade 3/4	14,3%	3,6%
Fatigue grade 3/4	4,3%	0,5%
Anémie grade 3/4*	2,7%	0,5%
Neutropénie grade 3/4*	2,7%	0
≥ 1 hospitalisation	15,4%	14%

* : surveillance NFP / 3 semaines

Ciuleanu, Lancet 2009

IFCT-GFPC 0502 study design

Maintenance Gemcitabine or Erlotinib

Drug-related adverse events

	Observation N=155	Gemcitabine N=154	Erlotinib N=155
≥ 1 drug-related grade 3/4 AE, %	2.6	27.9	15.5
Grade 3/4 AE			
Grade 3/4 anemia, %	0.6	2.6	1.3
Grade 3/4 neutropenia, %	0.6	20.8	0.6
Grade 3/4 thrombopenia, %	0	6.5	0
Grade 3/4 rash, %	0	0	9.0
Grade 3/4 diarrhea, %	0	0.6	0.6
Grade 3/4 anorexia, %	0.6	0.6	1.3
Grade 3/4 asthenia, %	0	1.3	2.6
Drug-related deaths	0	2*	0

*: 1 death due to bacterial pneumonia,
1 death caused by pneumonia and renal failure

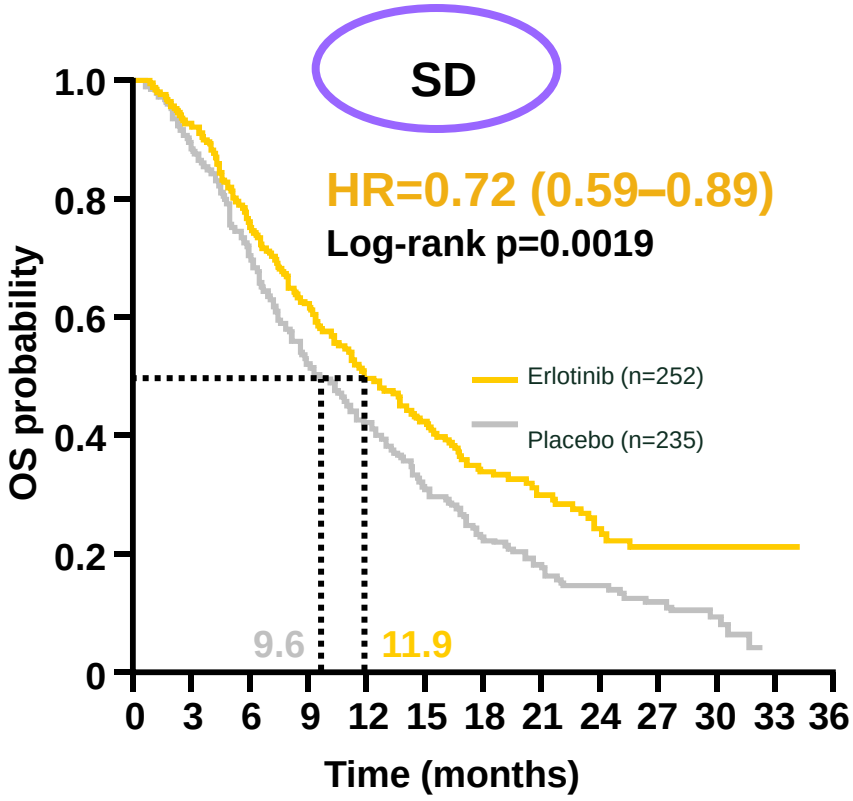
If this approach is valid,

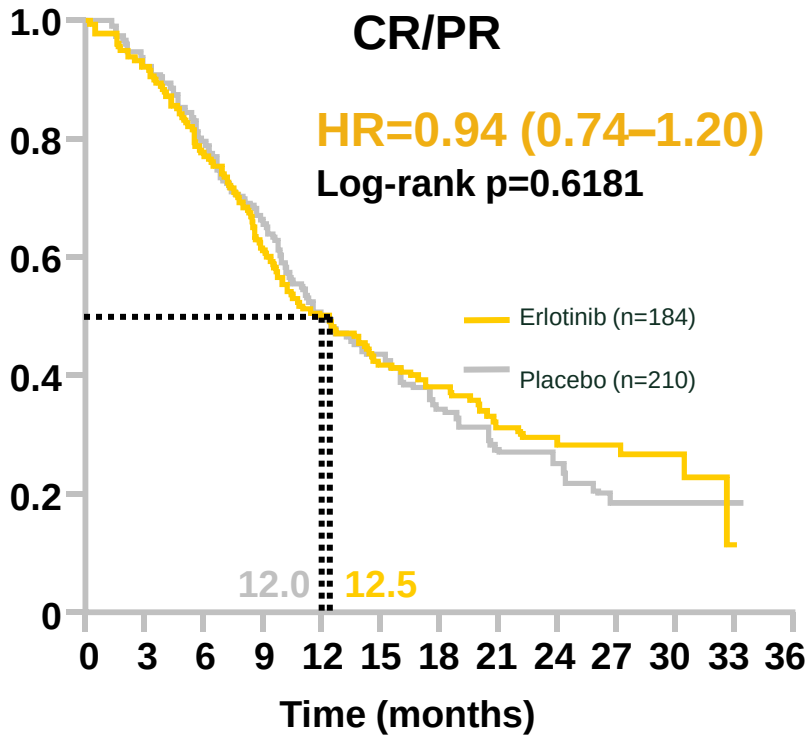
Who actually benefits ?

Benefits of maintenance and response status

Switch par erlotinib

- **Erlotinib (SATURN)**

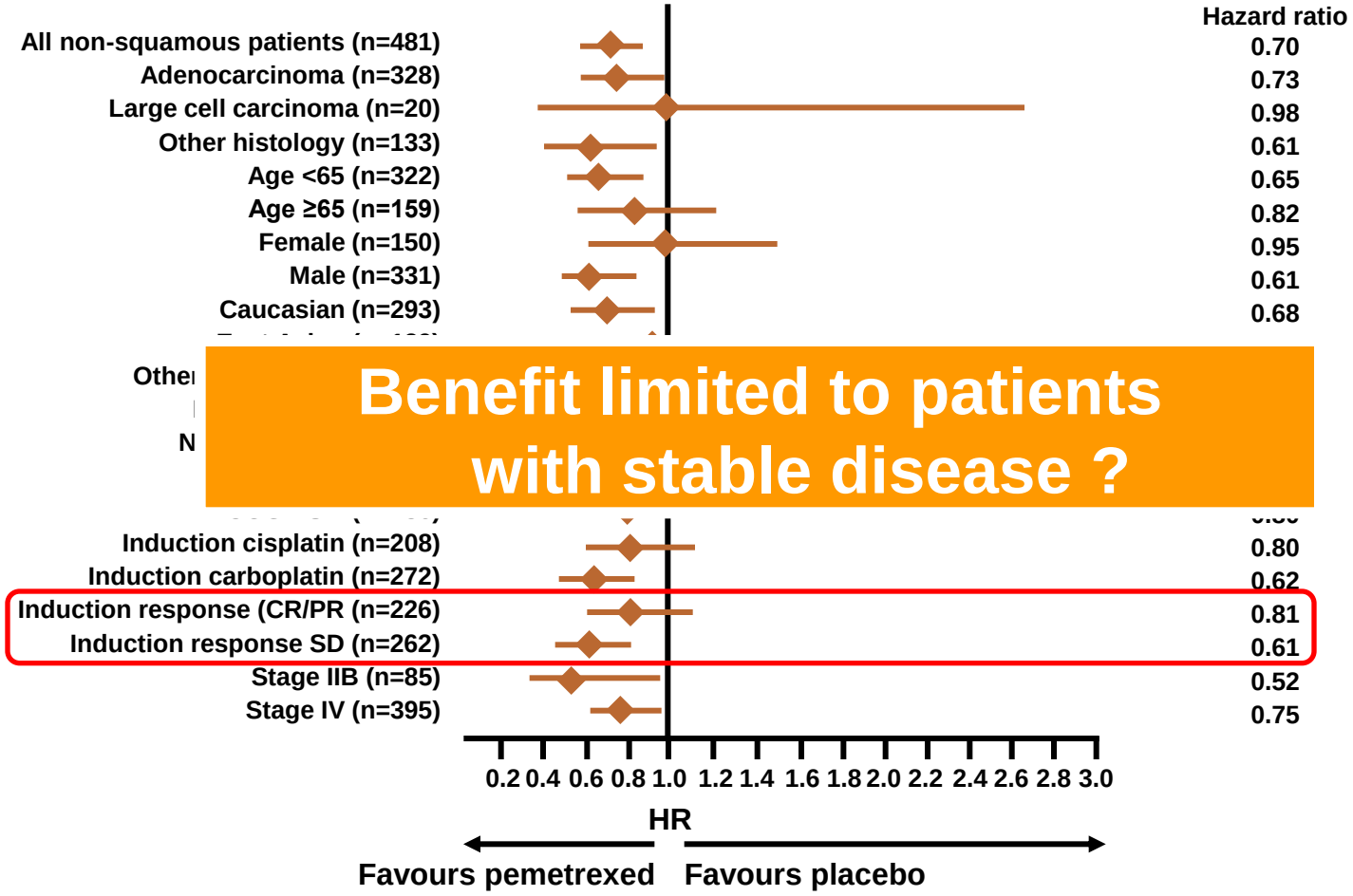




Cappuzzo et al, Lancet Oncol 2010

Benefits of maintenance and response status

- **Switch Pemetrexed (JMEN)**



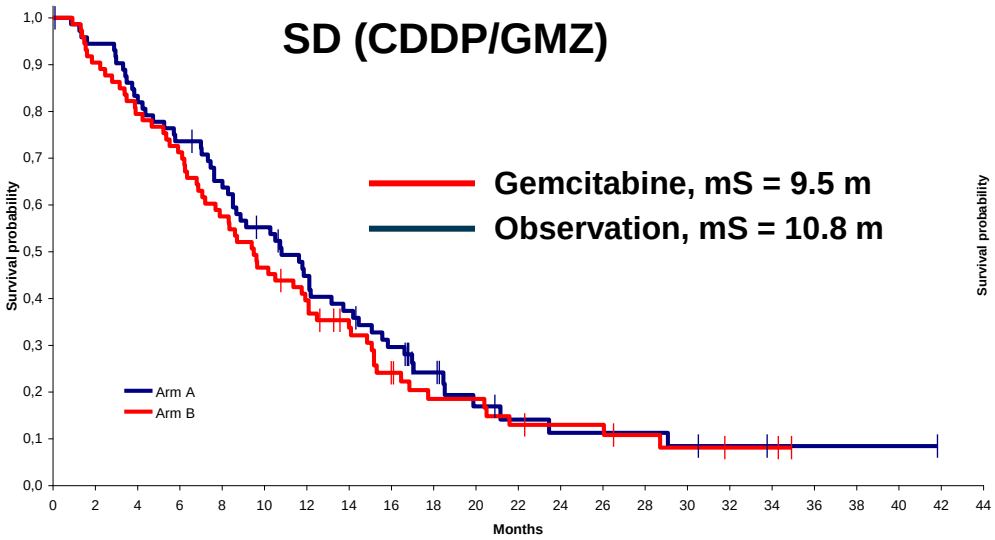
Benefit limited to patients with stable disease ?

Belani et al, ASCO 2009

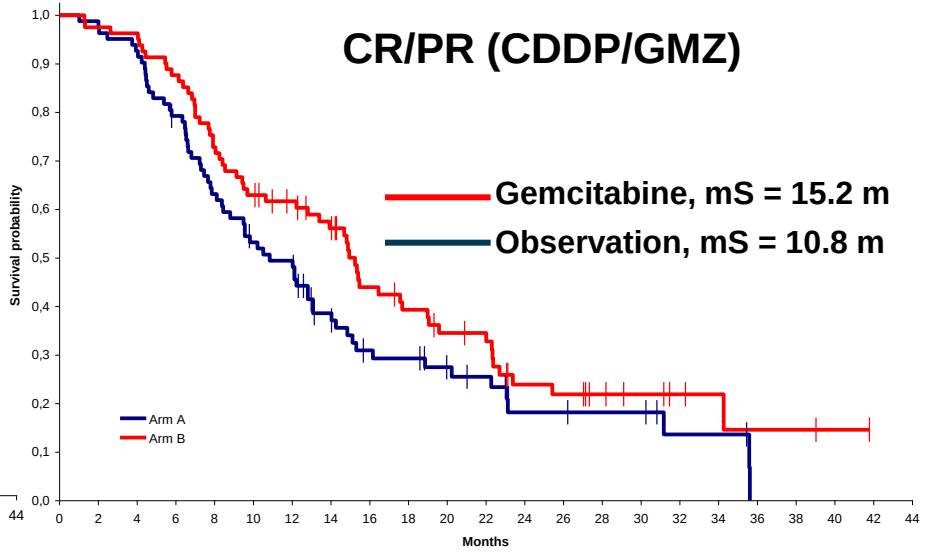
Benefits of maintenance and response status

Maintenance par Gemcitabine

- **Gemcitabine (IFCT-GFPC0502)**



HR = 1,13 (0,79-1,62)

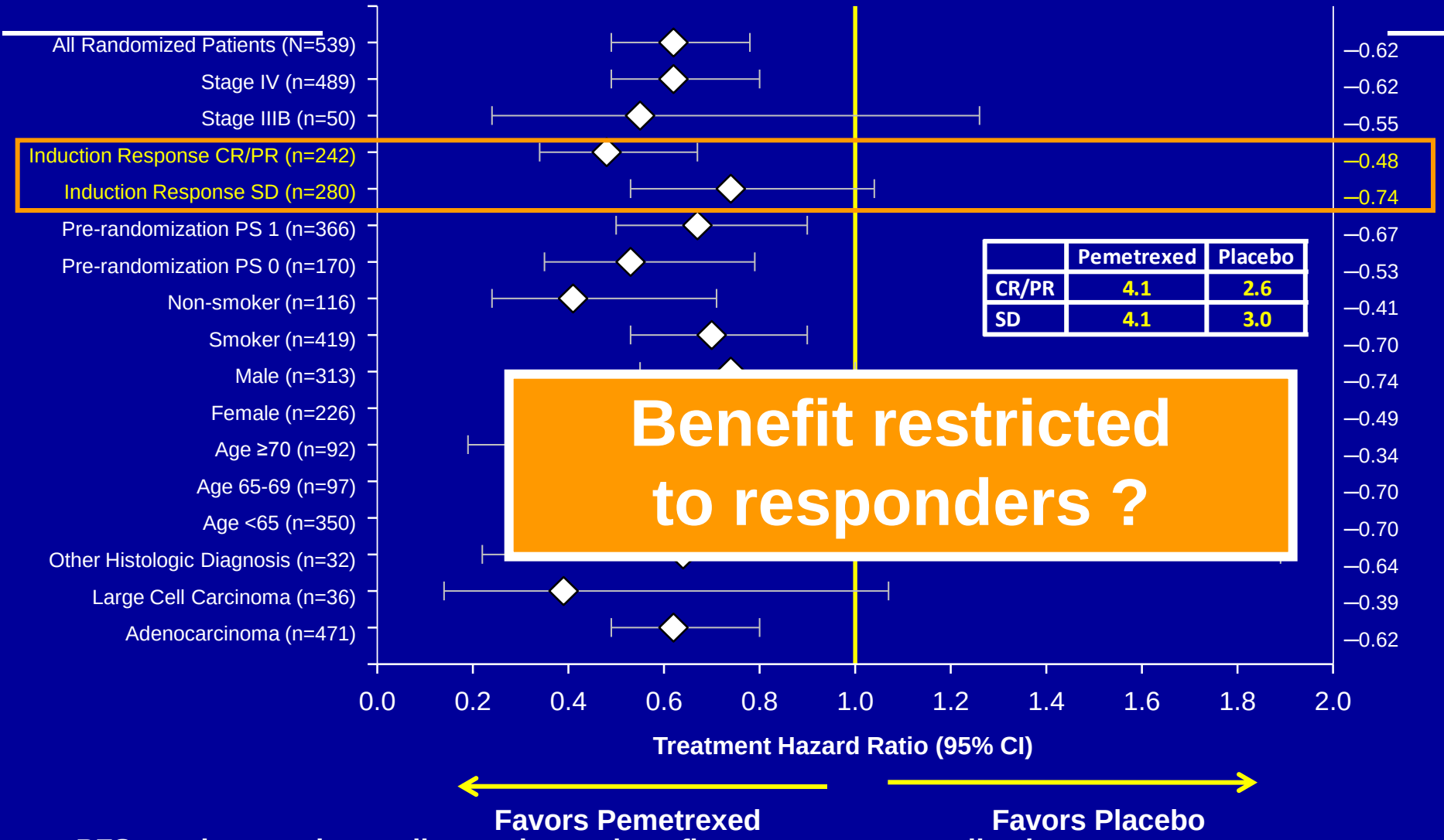


HR = 0,72 (0,51-1,04)

Perol et al, ESMO 2010

PARAMOUNT: Subgroup PFS Hazard Ratios

Maintenance par Pemetrexed



	Pemetrexed	Placebo
CR/PR	4.1	2.6
SD	4.1	3.0

Benefit restricted to responders ?

- **PFS results were internally consistent; benefit was seen across all subgroups**
- **CR/PR and SD subgroups benefited from pemetrexed maintenance (median PFS=4.1 mos for both)**

Paz-Ares et al. WCLC 2011 abstr 482

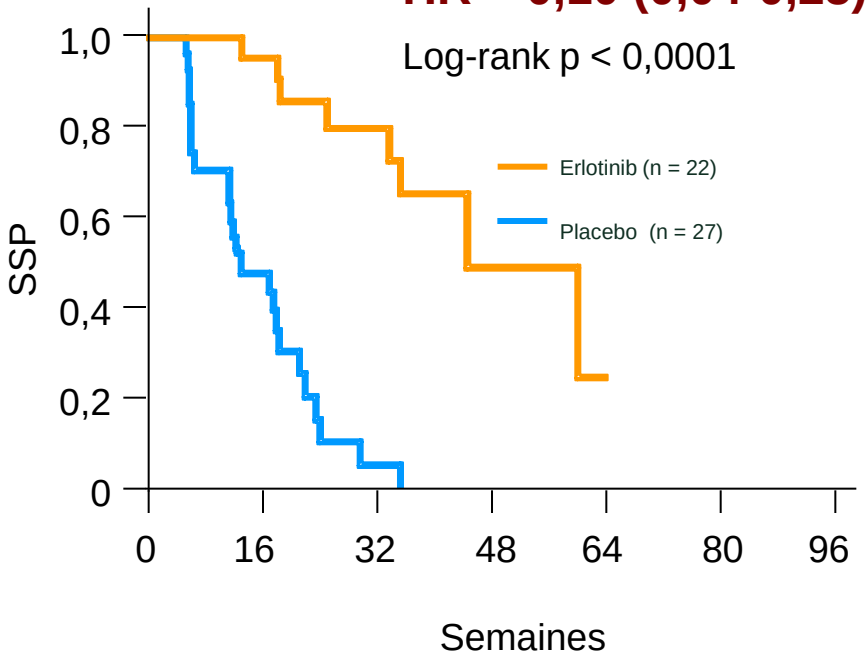
Et les biomarqueurs ??

Saturn

Mutation EGFR

HR = 0,10 (0,04-0,25)

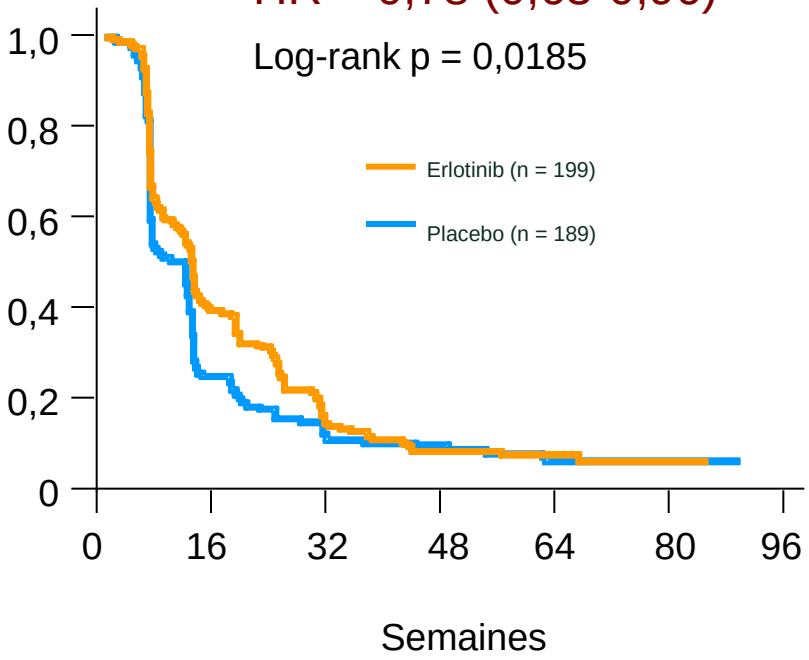
Log-rank p < 0,0001



EGFR *wild-type*

HR = 0,78 (0,63-0,96)

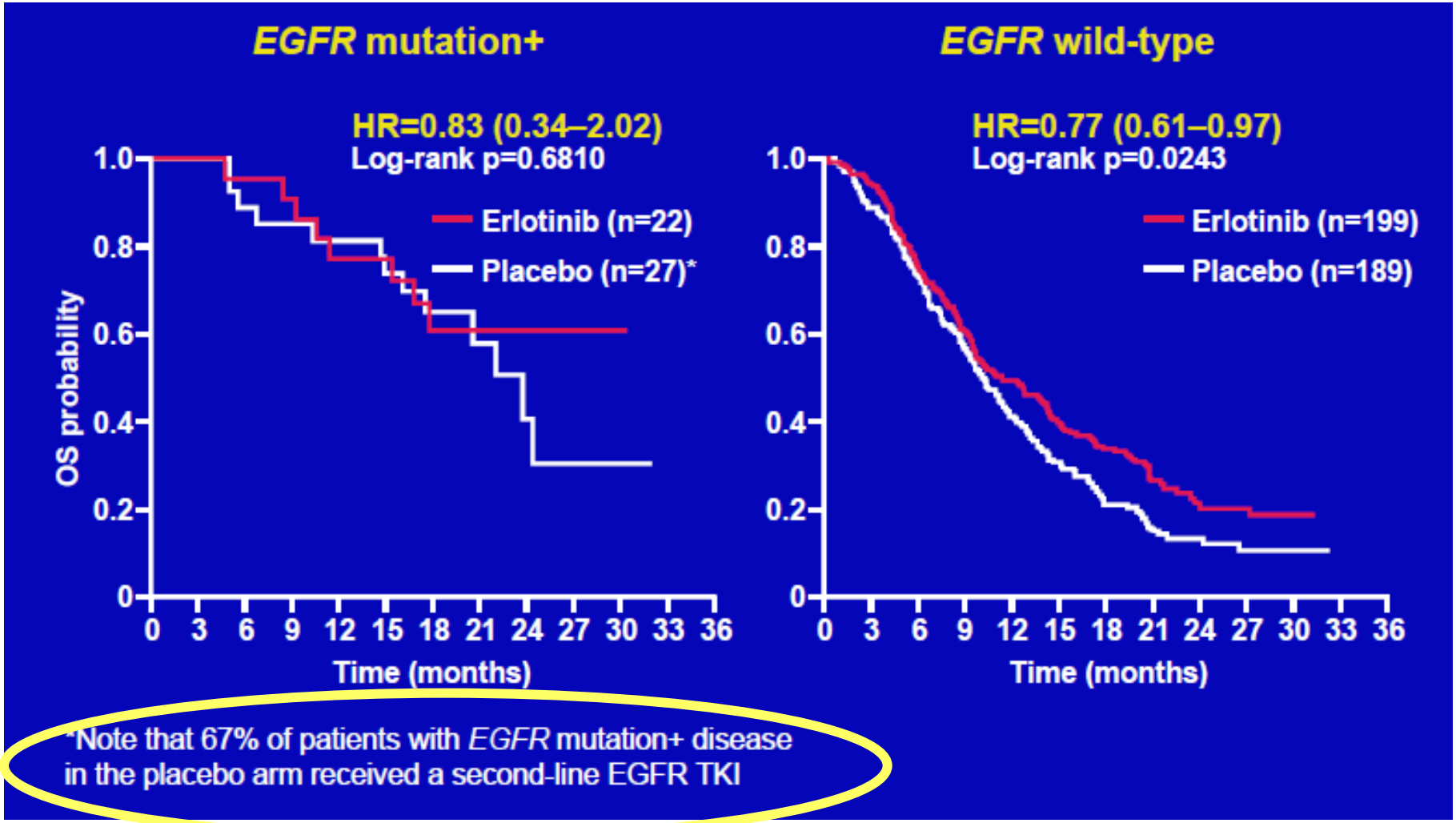
Log-rank p = 0,0185



Interaction : p < 0,001

Brugger W et al, ASCO 2009

Saturn : analyse de la survie selon le statut mutationnel EGFR...



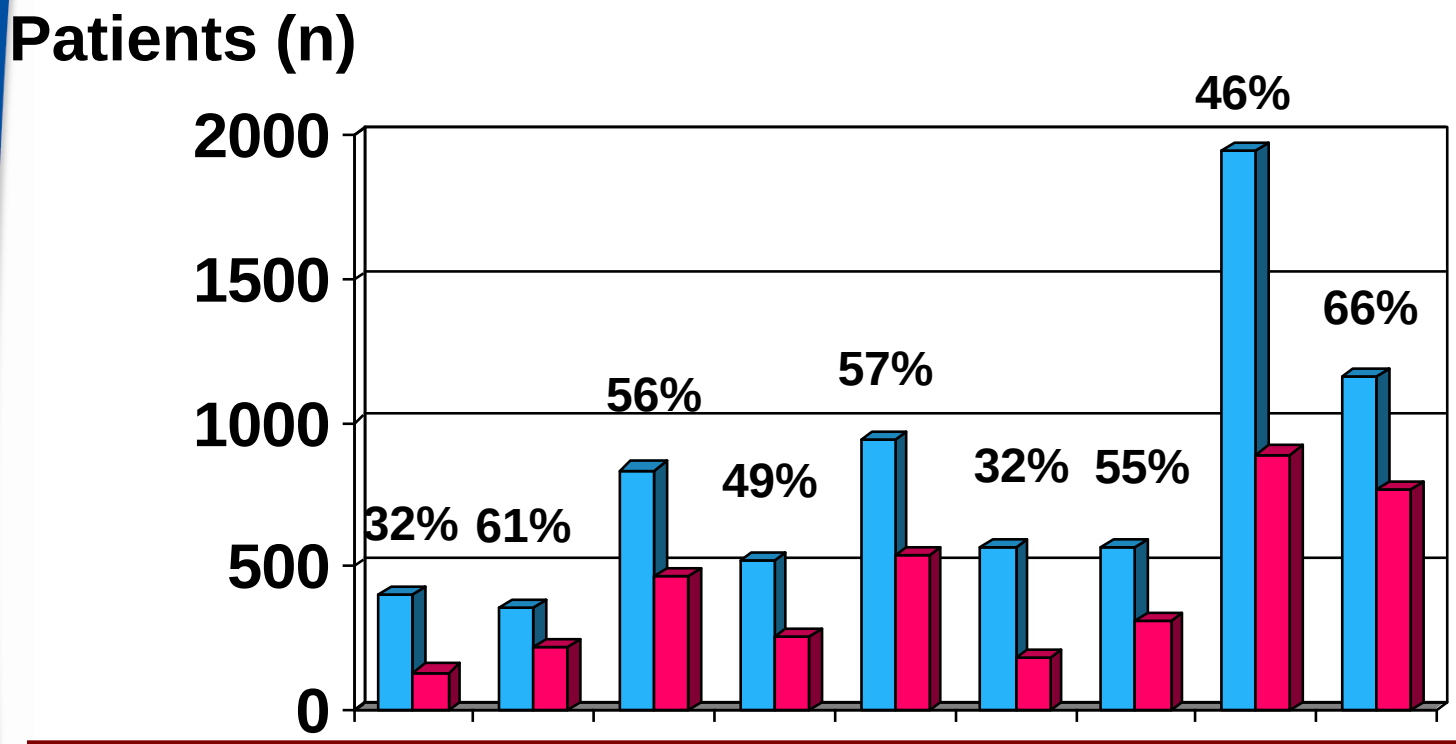
Brugger, WCLC 2009

PFS and OS in EGFR Mut/ALK+ pts

Study	n	Drugs	HR PFS (95% CI)	HR OS (95% CI)
NEJ 002	228	Gefitinib Pacli/carbo	0.32 (0.23-0.43) ; p<0.001	0.88 (0.63-1.24) ; p=0.483
SIGNAL	96/ 309	Gefitinib Gem/Cis	0.54 (0.26-1.10) ; p=0.086	1.04 (0.49-2.18)
EURTAC	173	Erlotinib Gem-doc Cis-carbo	0.34 (0.23−0.49); p<0·0001	1.36 (0.73-1.36) ; p=0.71
WJTOG 3505	177	Gefitinib Doc/Cis	0.52 (0.37-0.71) ; p<0.0001	1.18 (0.76-1.82) ; p=0.44
iPass	261/ 1217	Gefitinib Pacli/carbo	0.48 (0.36–0.64) ; p<0.001	1.00 (0.76- 1.33) ; p=0.99
OPTIMAL	165	Erlotinib Gem/carbo	0.16 (0.10-0.26) ; p<0.0001	1.04 (0.69- 1.58) ; p=0.69
PROFILE 7	347	Crizotinib Pem & Doc	0.49 (0.37–0.64) : p<0.001	1.02 (0.68- 1.54) ; p=0.53

Yang ASCO 12, Mitsudomi ASCO 12, Mok NEJM 07,
Rosell ESMO 12, Han JCO 12, Zhou ASCO 12, Inoue ASCO 11

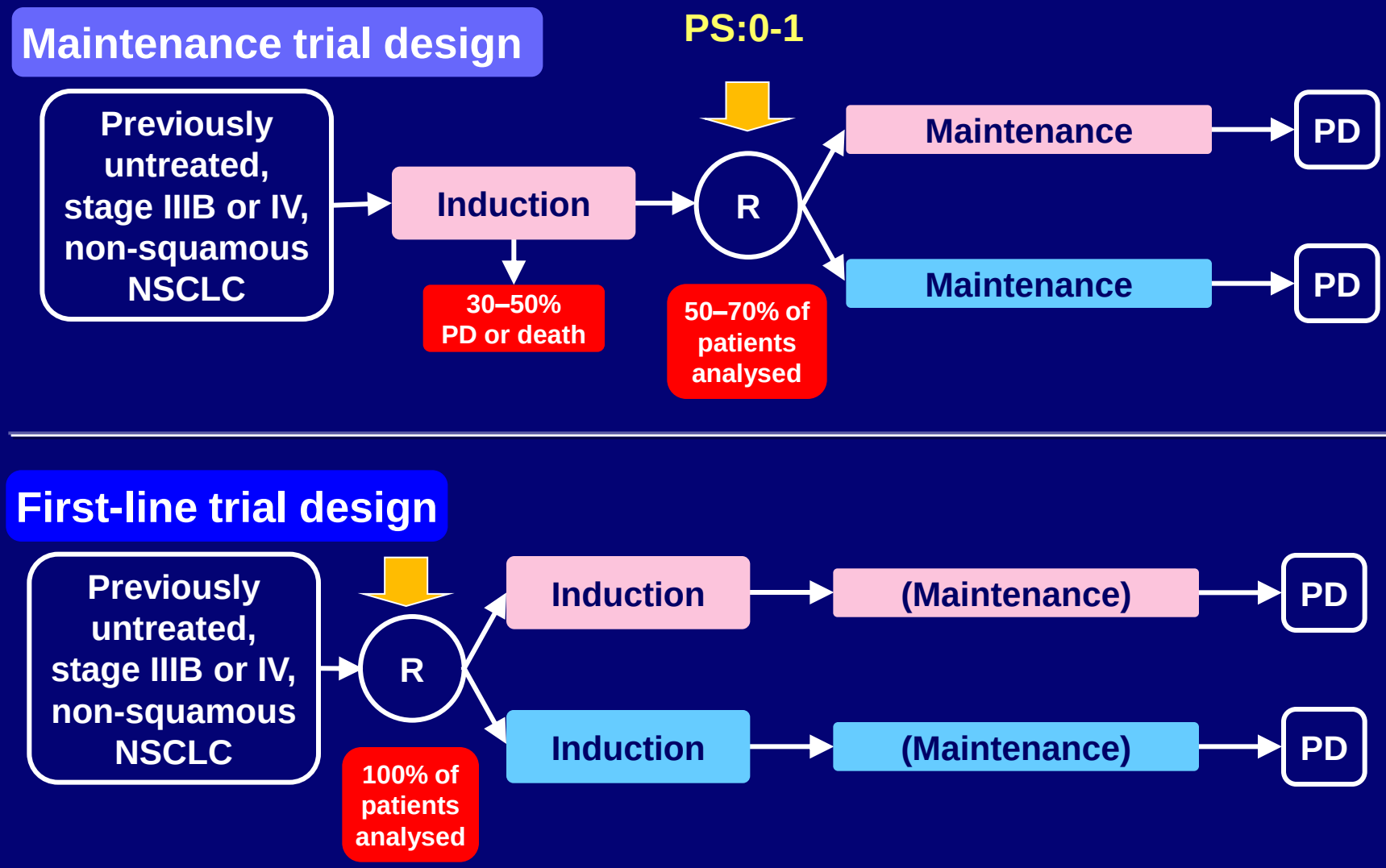
100% of the patients get maintenance ?



- Only non progressive patients (~50%) get maintenance

Belani, 2003, Westeel, 2005; Brodowicz, 2006 Fidias, 2009Miller, 2009Belani, 2010, Cappuzzo, 2010, Gaafar, 2010, Perol E, 2010

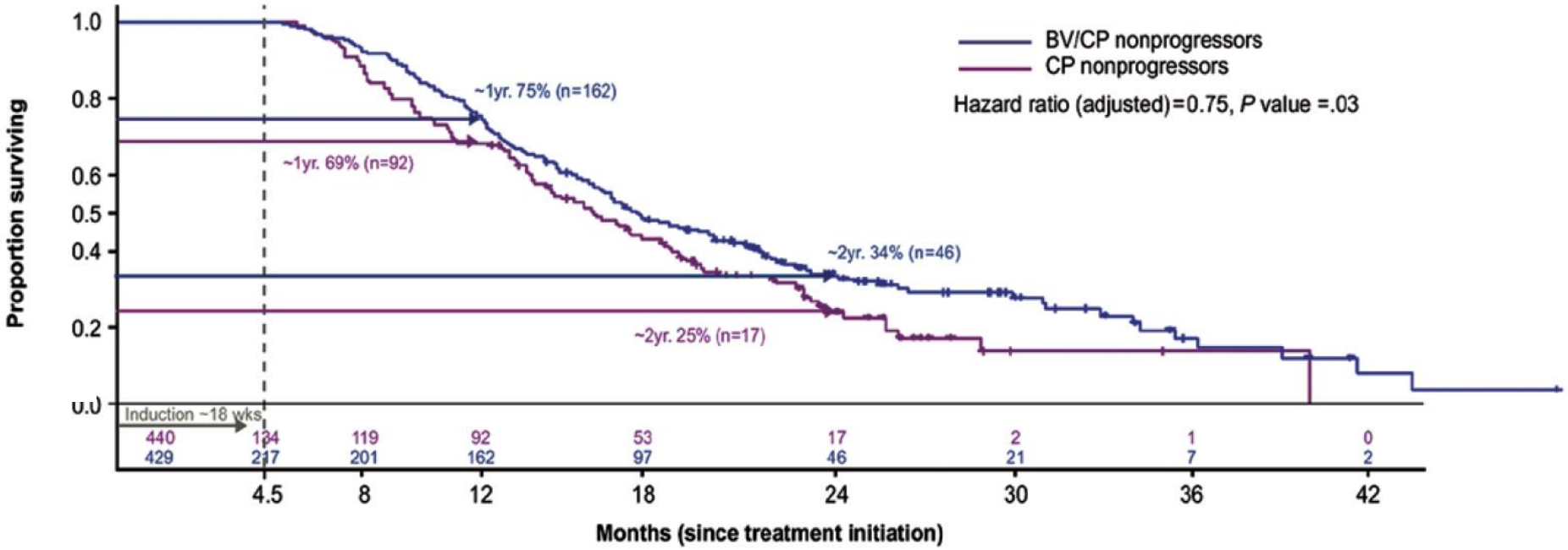
Benefit for the whole population ?
True first-line vs maintenance trials



Bevacizumab Maintenance ECOG 4599 Study

51% (bev) vs 30%

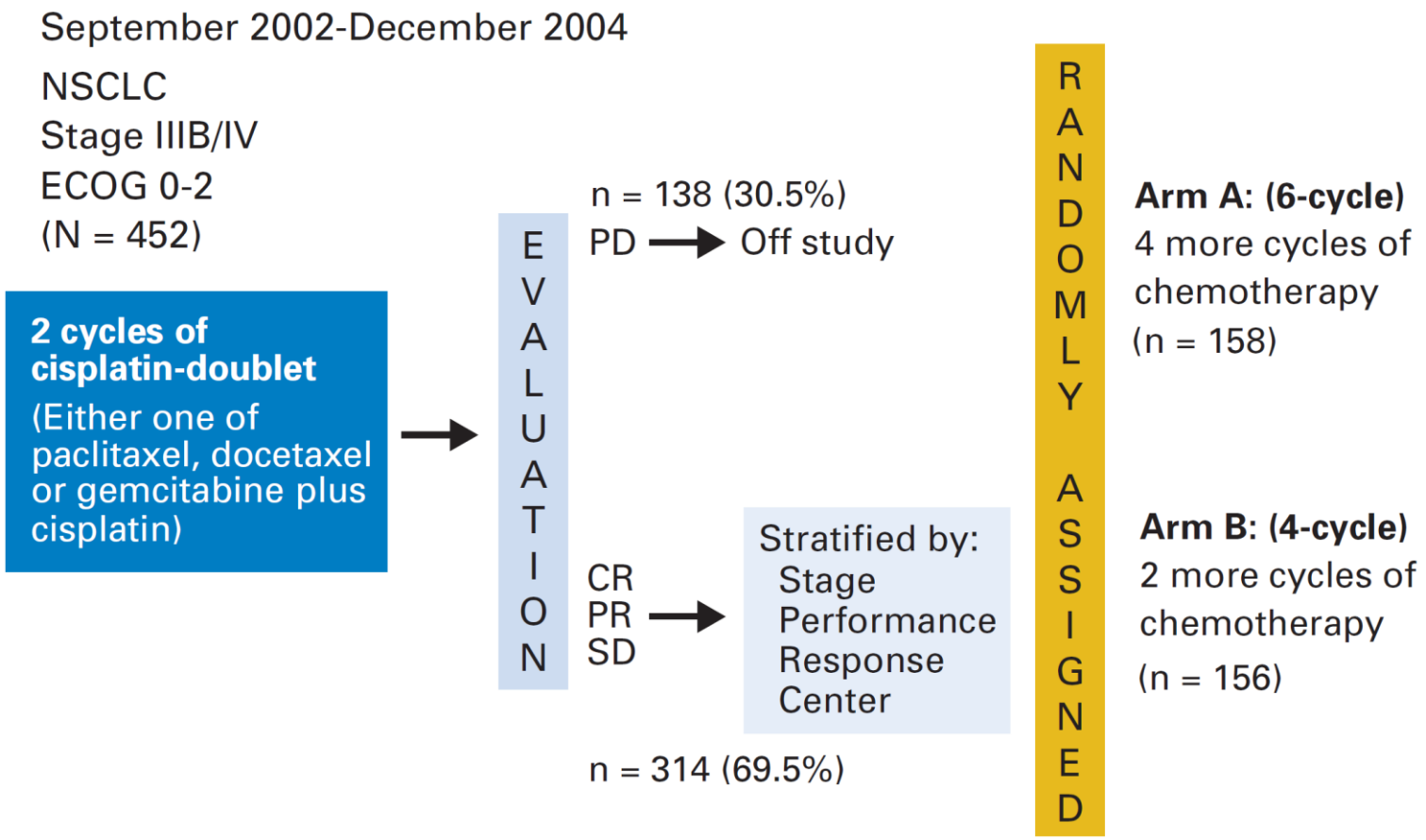
Median OS from start 17.0 versus 15.8 months



Median post induction OS 12.8 versus 11.4 months

Ariel Lopez-Chavez et al, JTO 2012

Are four cycles of platinum-based chemotherapy truly adequate ?

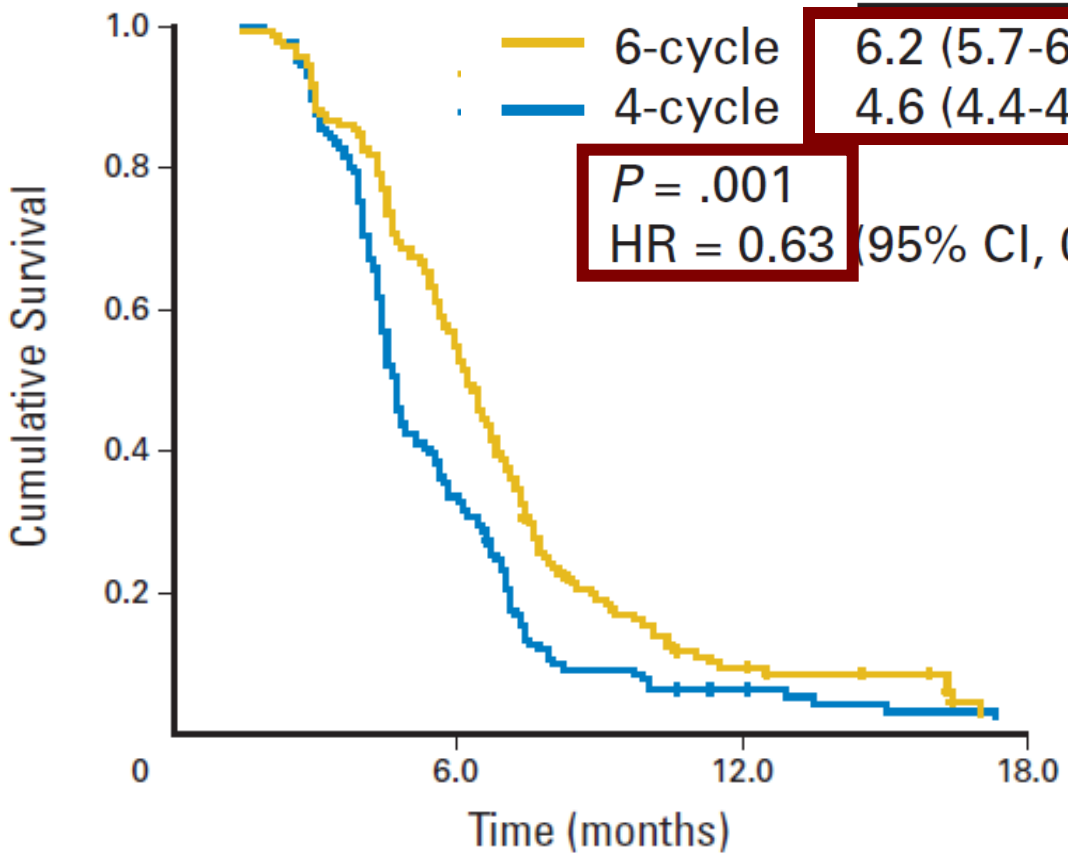


Park *et al* JCO 07

PFS: 4 vs 6 cycles of cisplatin-based chemotherapy

	MST (mo)	6-month	1-year
6-cycle	6.2 (5.7-6.7)	52.4%	8.7%
4-cycle	4.6 (4.4-4.8)	31.9%	5.0%

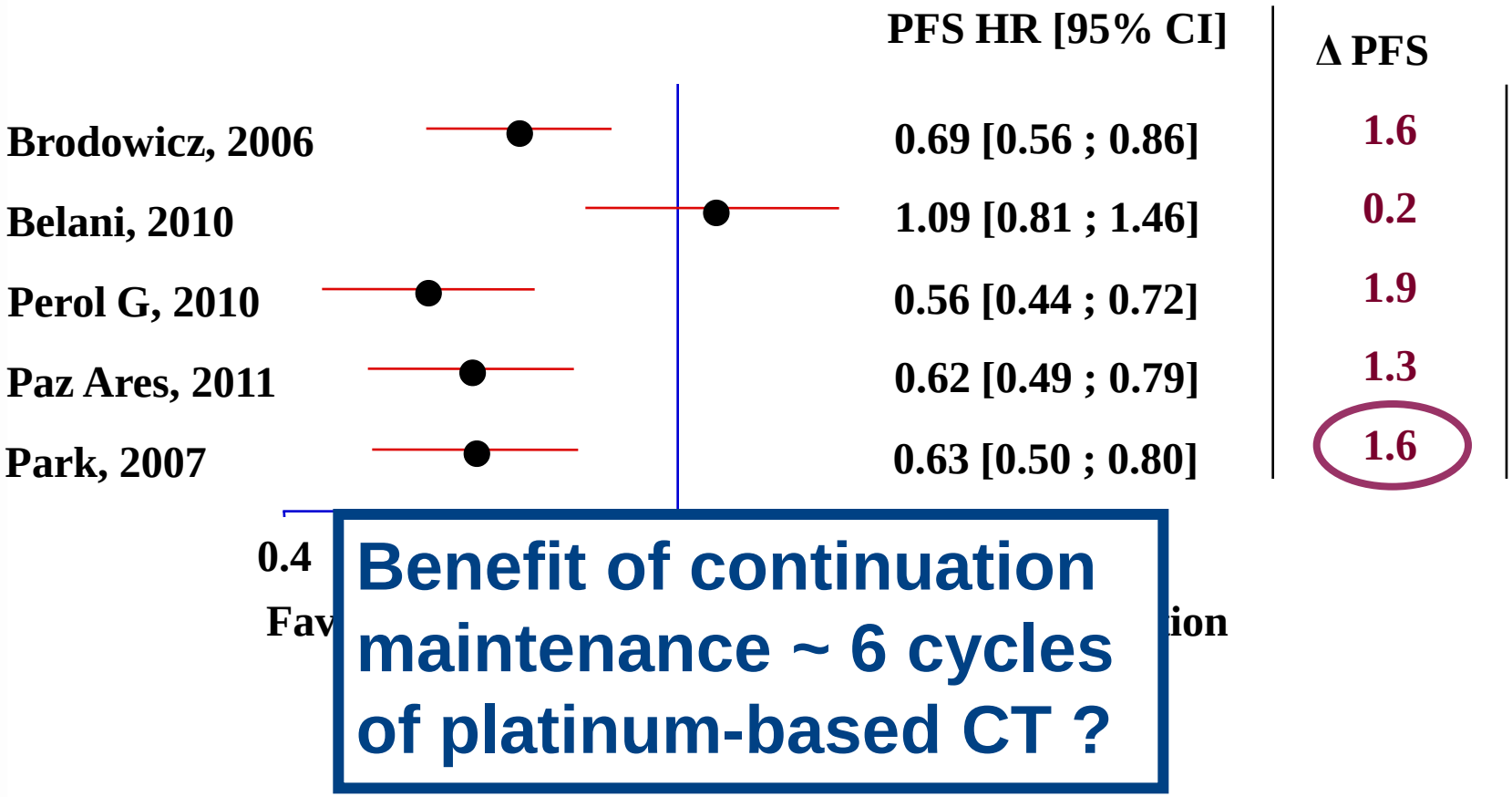
P = .001
HR = 0.63 (95% CI, 0.50 to 0.80)



Non progressive Patients after 2 cycles

Park *et al* JCO 07

⇢ PFS benefit 4 (+maintenance) vs 6 cycles



Benefit of continuation maintenance ~ 6 cycles of platinum-based CT ?

Adapted from Des Guetz, ESMO 11 with Park *et al* JCO 07

Did the control group perform adequately ?

Control Arm therapy at progression

Study	Agent	Crossover (%)	Any Agent (%)
Fidias	Docetaxel	62	62
JMEN	Pemetrexed	18	67
SATURN	Erlotonib	21	72
ATL			
Bela			
IFCT			
	Erlotinib		
PARAMOUNT	Pemetrexed	N/A*	64
INFORM	Gefitinib	30 (includes erlotinib)	67

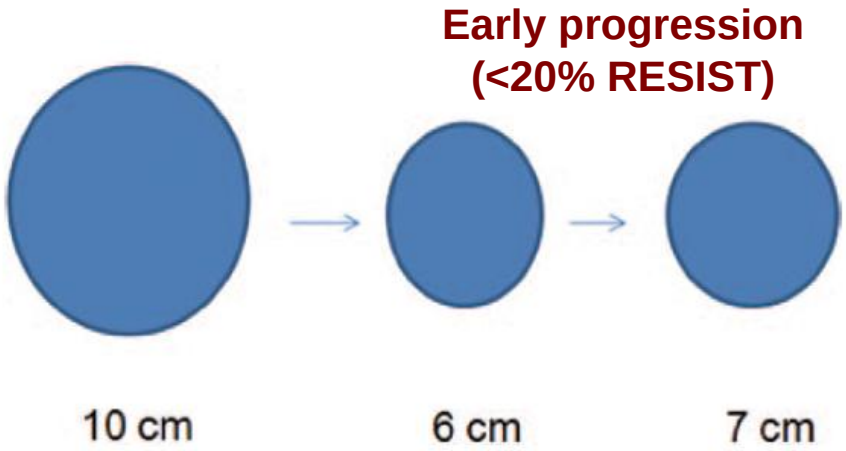
18-62% received the active drug in the control arm

Serious design flaw...

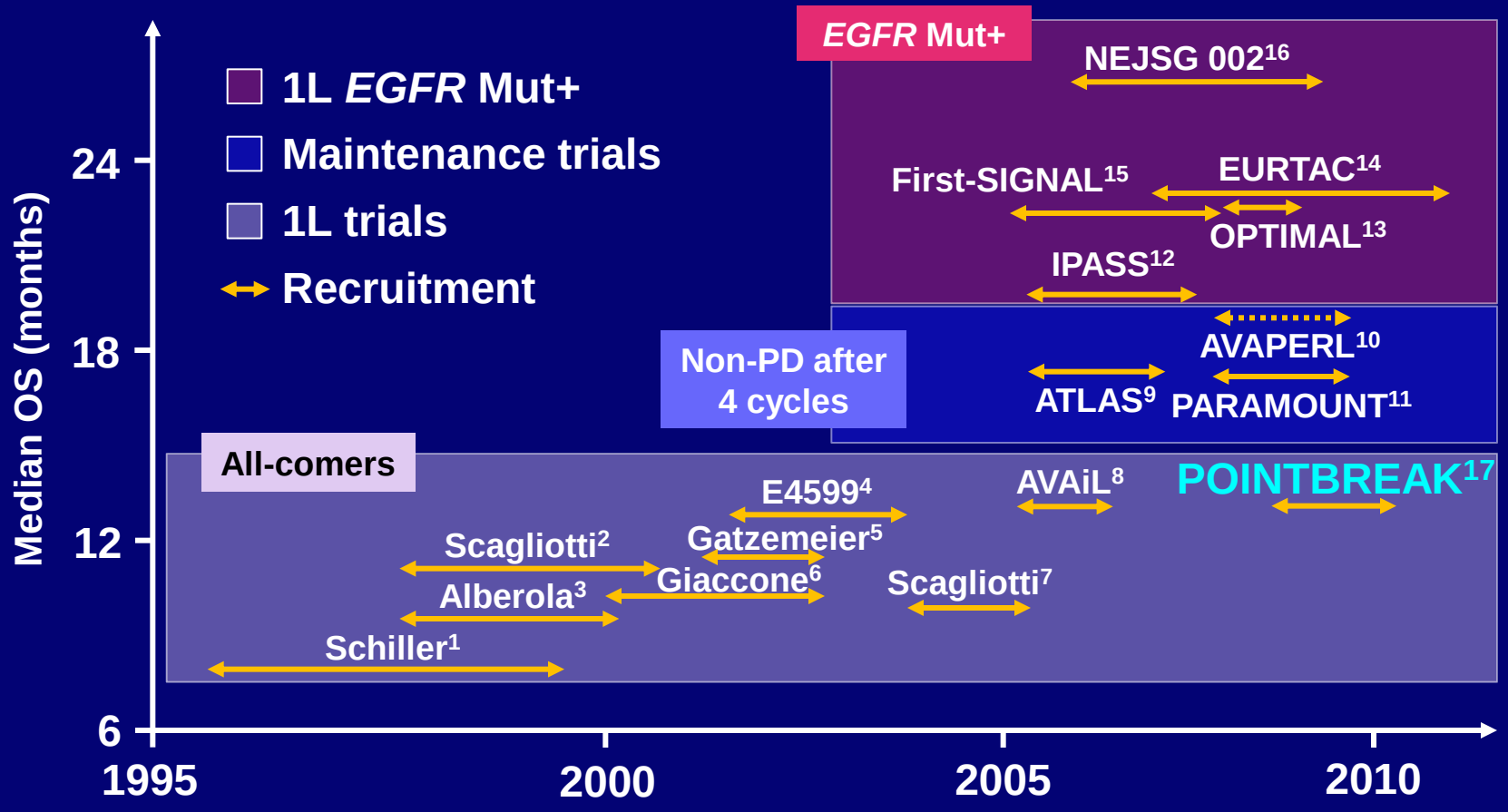
⇢ Why did control patients (PS 0-1) not receive Second-Line Therapy (~30%) ???

- No data regarding why patients on the control arm did not receive additional therapy
- This point is fundamental particularly in patient with stable disease (=sometimes early progression)

This issue is critical



Different population



chiller, et al. NEJM 2002; 2. Scagliotti, et al. JCO 2002; 3. Alberola, et al. JCO 2003; 4. Sandler, et al. NEJM 2006; 5. Gatzemeier, et al. JCO 2007
6. Giaccone, et al. JCO 2004; 7. Scagliotti, et al. Clin Cancer Res 2005; 8. Reck, et al. Ann Oncol 2010; 9. Kabbinavar, et al. ASCO 2010
10. Barlesi, et al. EMCC 2011; 11. Paz-Ares, et al. ASCO 2012; 12. Fukuoka, et al. JCO 2011; 13. Zhou, et al. ASCO 2012
14. de Marinis, et al. EMCC 2011; 15. Han, et al. JCO 2012; 16. Maemondo NEJM 2010; 17. Patel, et al. IASLC 2012 (Chicago)

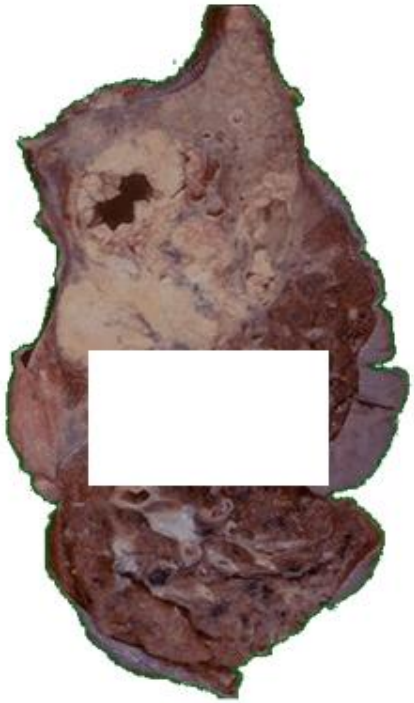
Extra-costs (€)*?

Trial	Drug	By cycle	Absolute gain in survival (m)
Continuation Maintenance			
Brodowicz	**GMZ**	**220**	**2.1**
IFCT-GFPC	**GMZ**	**220**	**1.3**
Belani	**GMZ**	**220**	**-1.3**
Paz-Ares	**PEM**	**2500**	**2.8**
Barlesi	**PEM (BEV)**	**2500**	**NA**
Switch Maintenance (Cx)			
Westeel	**VNR**	**50**	**0**
Fidias	**TXT**	**1200**	**2.6**
Ciuleanu	**PEM**	**2500**	**2.8**
Switch Maintenance (TKI)			
Saturn	**ERL**	**2300**	**1.0**
Atlas	**ERL (BEV)**	**2300**	**0.6**
IFCT-GFPC	**ERL**	**2300**	**2.0**

** Coût moyen calculé pour un homme avec une surface corporelle de 1.70m²*

Courtaisy of F.Barlesi

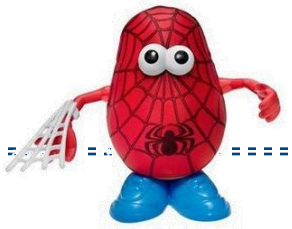
NSCLC = NSCLC ?



KRAS
EGFR
EML4-ALK
HER2
BRAF
FGFR1
PIK3CA
P53
C-MET
PDGFRA
PI3KCA
PTEN
MCL1
DDR2

Molecular Analysis in maintenance trials

Trial	maintenance	EGFRmut	KRASmut
Belani, 2010	Gemcitabine	0	0
Perol G, 2010	Gemcitabine or erlotinib	7% (188 échantillons)	ongoing
Paz Ares, 2011	Pemetrexed	0	0
Cappuzzo 2010	Erlotinib	50%	55%
Gaafar, 2010	Gefitinib	0	0
Zhang, 2011	Gefitinib	27%	0



Alors maintenance or not ?

- Bénéfice potentiel sur survie globale (peu études positives)

- Ne concerne ~50% des patients
-Non progressif à 4 cycles de traitement

-Peu d'arguments pour switch maintenance
-sauf stable "early progression"

- Limite design des études actuelles maintenance

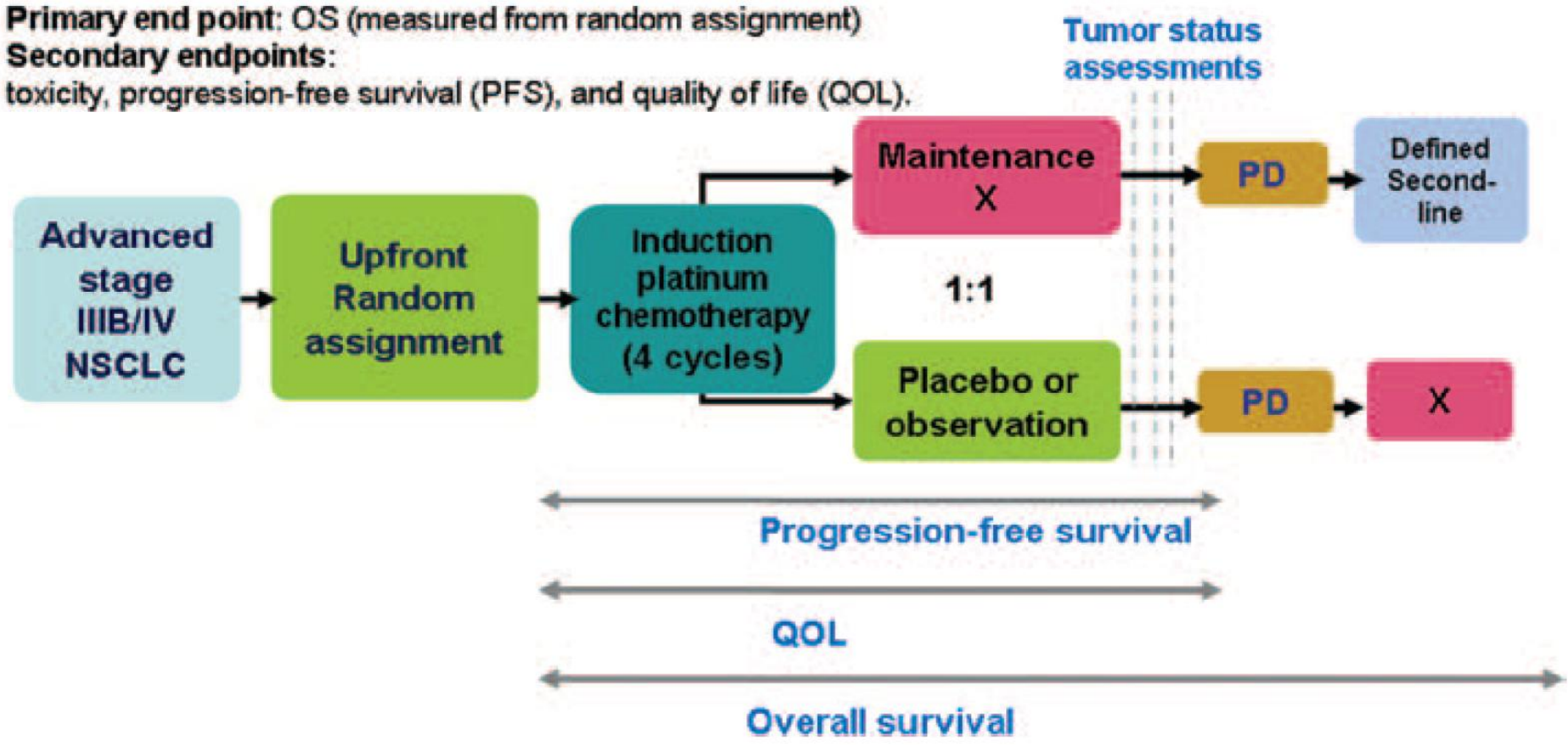
- Majoration toxicités
-Bénéfices / risques
-Qualité vie patients (peu de données, pas bénéfice démontré) ?

- Coûts traitements...

- Maintenance après 4 vs 6 cycles bithérapie sel de platine ?

- Nécessité d'études basées sur profils moléculaire, réponse tumorale

Which study might answer the question of maintenance ?



- Randomization should be performed before any therapy is started,
- Evaluation of quality of life should be mandatory
- Clear documentation as why if patient does not received second-line therapy
- An economic analysis is also indicated

Martin J. Edelman,

Maintenance doit rester une option
Et les vacances pour tous...

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