

Oncologie thoracique

Post ESMO 2019

Dr Sophie Cousin

Institut Bergonié

Plan: 2 sujets abordés

A- Données de survie de l'Osimertinib en première ligne dans les carcinomes bronchiques non à petites cellules métastatiques avec mutation activatrice de l'EGFR (FLAURA)

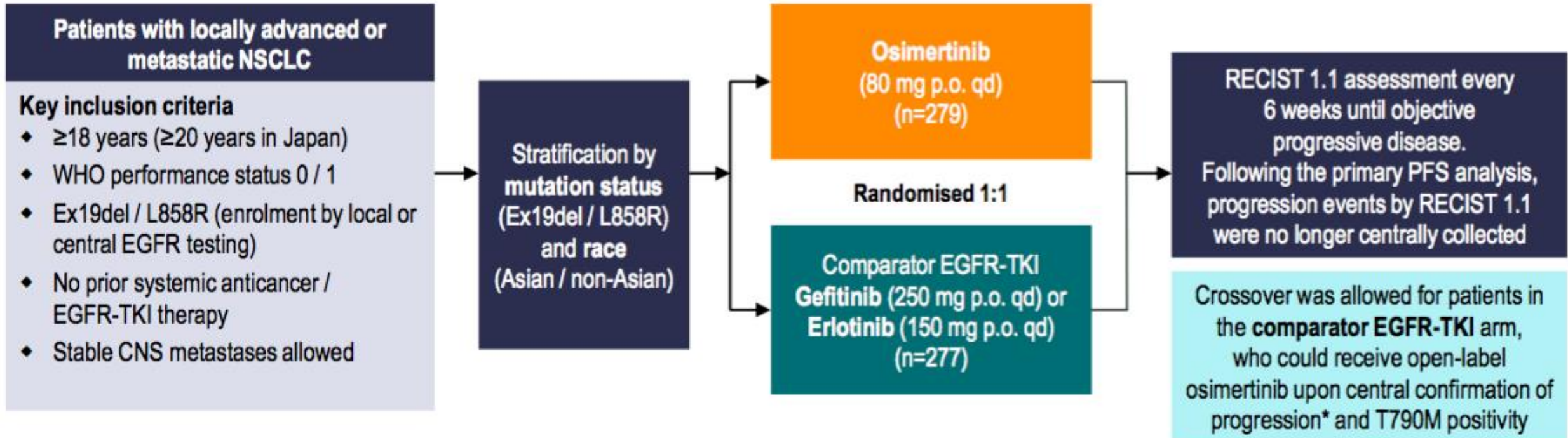
B- Données en première ligne dans les carcinomes bronchiques non à petites cellules métastatiques: Checkmate 227, IMpower110

Données de survie globale de l'étude FLAURA

OSIMERTINIB VS COMPARATOR EGFR-TKI AS FIRST-LINE TREATMENT FOR EGFR_m ADVANCED NSCLC (FLAURA): FINAL OVERALL SURVIVAL ANALYSIS

Suresh S Ramalingam¹, Jhanelle E Gray², Yuichiro Ohe³, Byoung Chul Cho⁴, Johan Vansteenkiste⁵, Caicun Zhou⁶, Thanyanan Reungwetwattana⁷, Ying Cheng⁸, Busayamas Chewaskulyong⁹, Riyaz Shah¹⁰, Ki Hyeong Lee¹¹, Parneet Cheema¹², Marcello Tiseo¹³, Thomas John¹⁴, Meng-Chih Lin¹⁵, Fumio Imamura¹⁶, Rachel Hodge¹⁷, Yuri Rukazenkov¹⁷, Jean-Charles Soria^{18,19}, David Planchard¹⁹

Design de l'étude:



Survie globale: Objectif secondaire

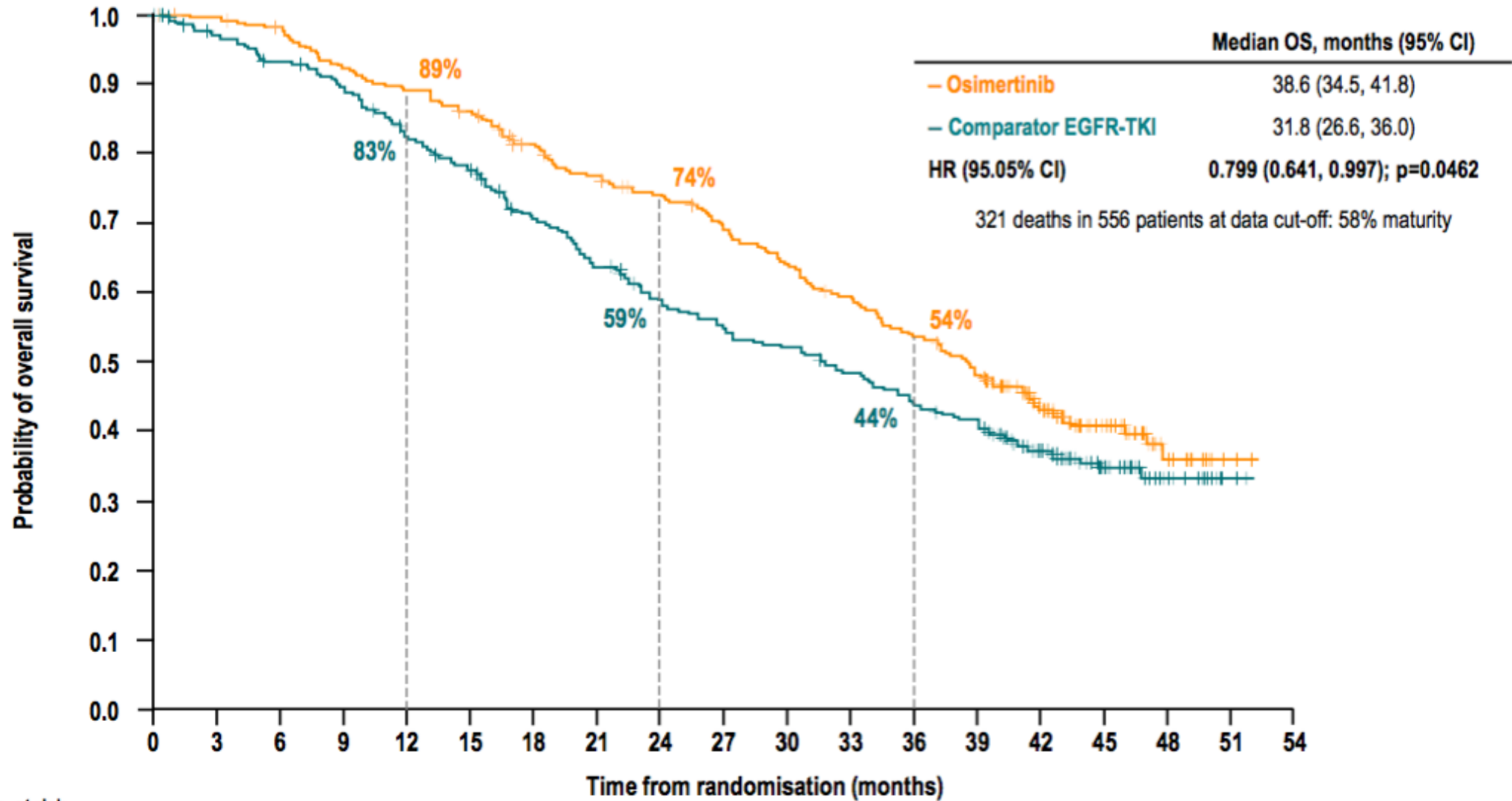
Objectifs I: PFS (pour rappel)

- PFS: **18.9** mois vs **10.2** mois,
- HR= **0.46** (0.37 - 0.57), **p< 0.001**

Caractéristiques des patients:

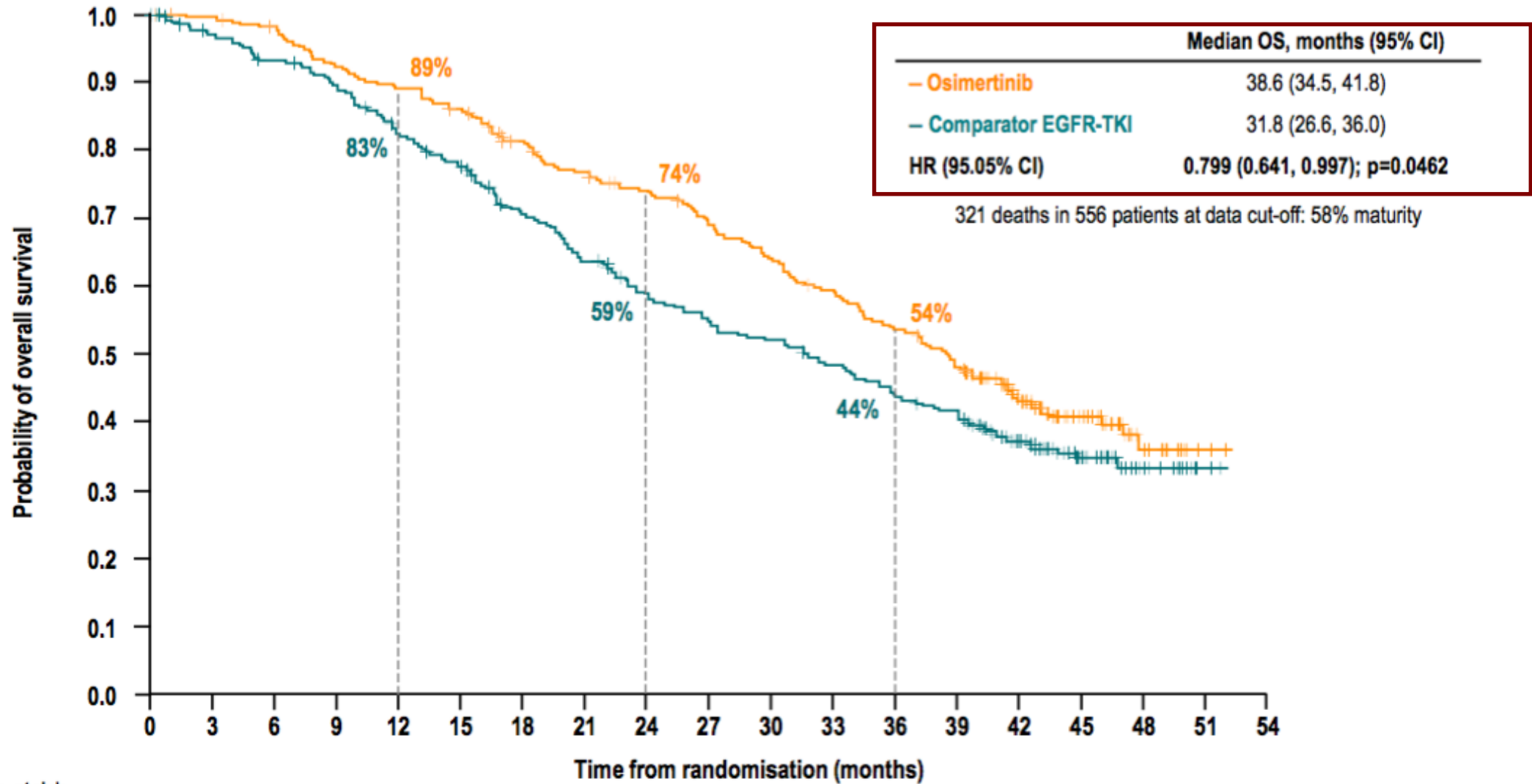
Characteristic, %	Osimertinib (n=279)	Comparator EGFR-TKI (n=277)
Sex: male / female	36 / 64	38 / 62
Age, median (range), years	64 (26–85)	64 (35–93)
Race: Asian / non-Asian	62 / 38	62 / 38
Smoking status: never / ever	65 / 35	63 / 37
CNS metastases at study entry	19	23
WHO performance status: 0 / 1	40 / 60	42 / 58
Overall disease classification: metastatic / advanced	95 / 5	95 / 5
Histology: adenocarcinoma / other	99 / 1	98 / 2
EGFR mutation at randomisation: Ex19del / L858R	63 / 37	63 / 37

Résultats de survie globale:



No. at risk	0	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54
Osimertinib	279	276	270	254	245	236	217	204	193	180	166	153	138	123	86	50	17	2	0
Comparator EGFR-TKI	277	263	252	239	219	205	182	165	148	138	131	121	110	101	72	40	17	2	0

Résultats de survie globale:



No. at risk	0	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54
Osimertinib	279	276	270	254	245	236	217	204	193	180	166	153	138	123	86	50	17	2	0
Comparator EGFR-TKI	277	263	252	239	219	205	182	165	148	138	131	121	110	101	72	40	17	2	0

Subgroup

Overall (n=556)
Log-rank (primary)
Unadjusted Cox PH

Sex

Male (n=206)
Female (n=350)

Age at screening

<65 years (n=298)
≥65 years (n=258)

Race

Asian (n=347)
Non-Asian (n=209)

Smoking history

Yes (n=199)
No (n=357)

CNS metastases at trial entry

Yes (n=116)
No (n=440)

WHO performance status

0 (n=228)
1 (n=327)

EGFR mutation at randomisation*

Ex19del (n=349)
L858R (n=207)

EGFR mutation by circulating tumour DNA†

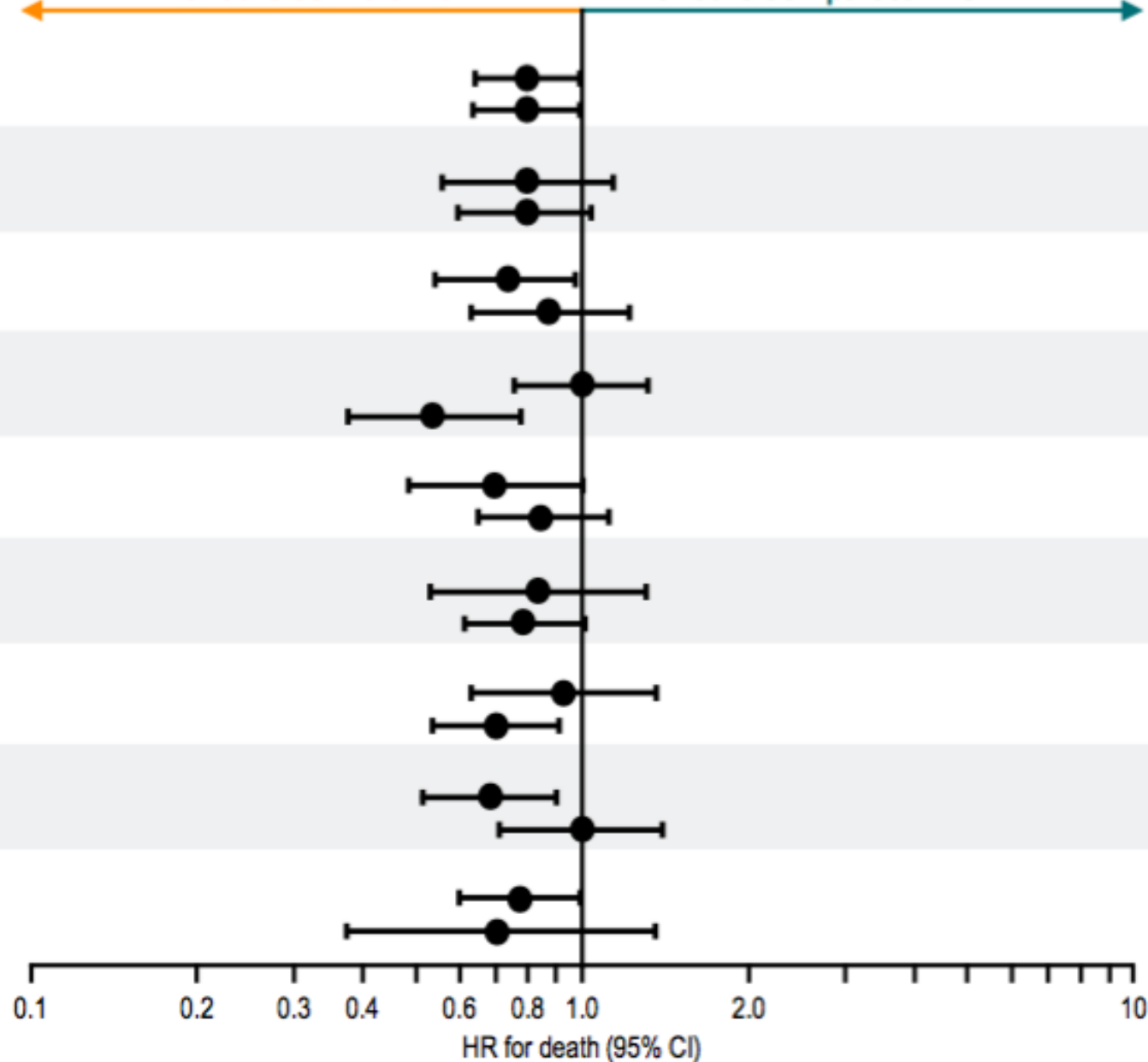
Positive (n=359)
Negative (n=124)

Favours osimertinib

Favours comparator EGFR-TKI

HR

95% CI



Subgroup

Overall (n=556)
Log-rank (primary)
Unadjusted Cox PH

Sex

Male (n=206)
Female (n=350)

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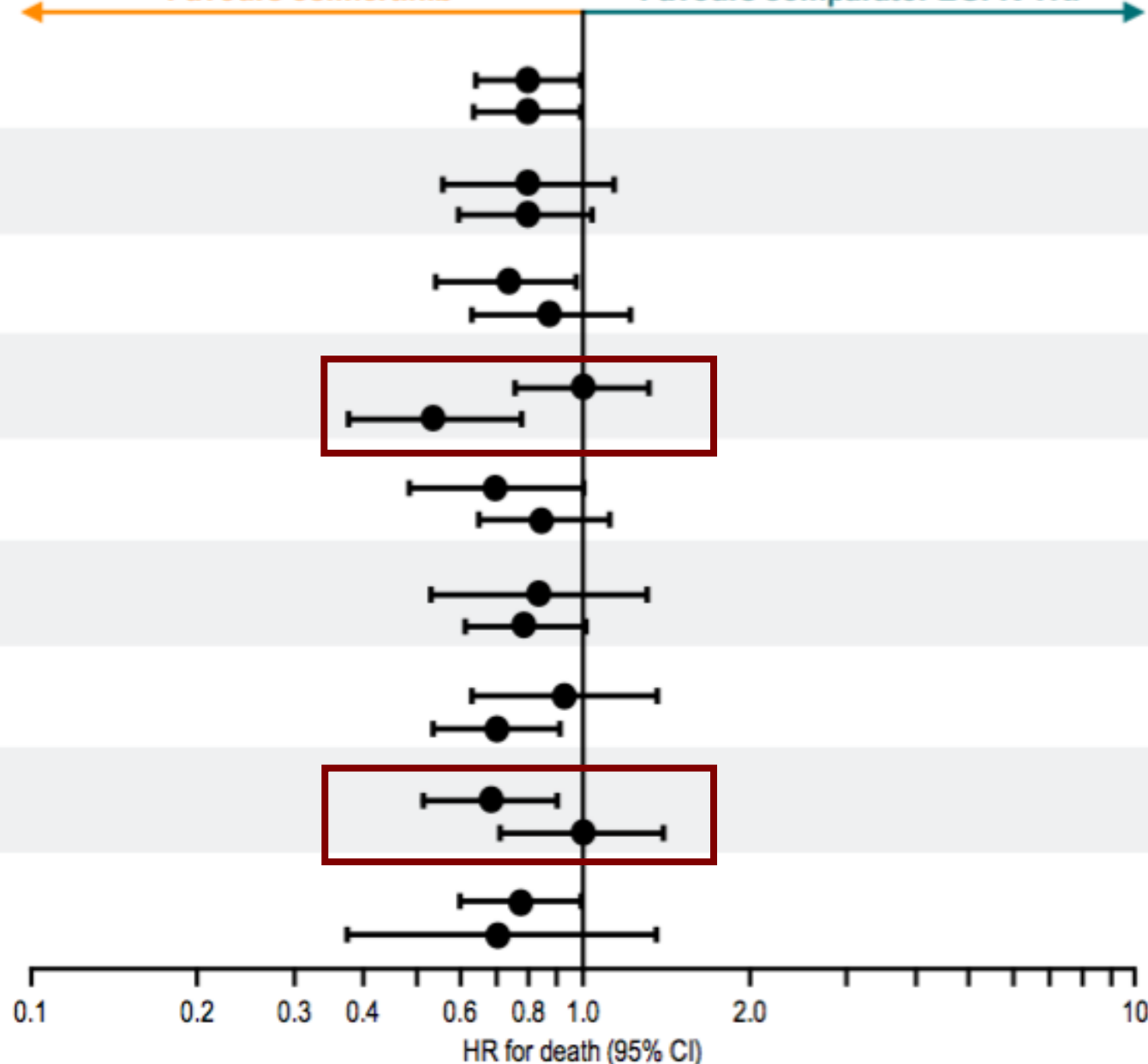
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Favours osimertinib

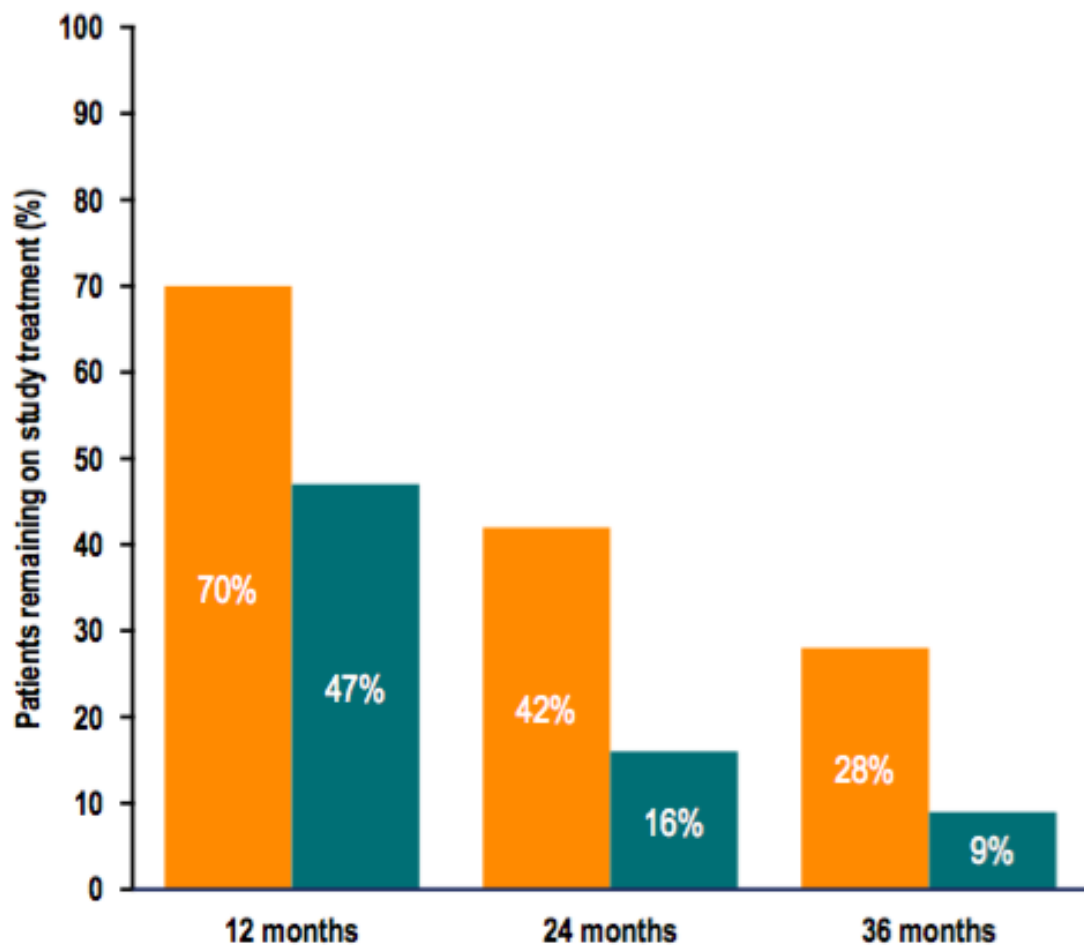
Favours comparator EGFR-TKI

HR

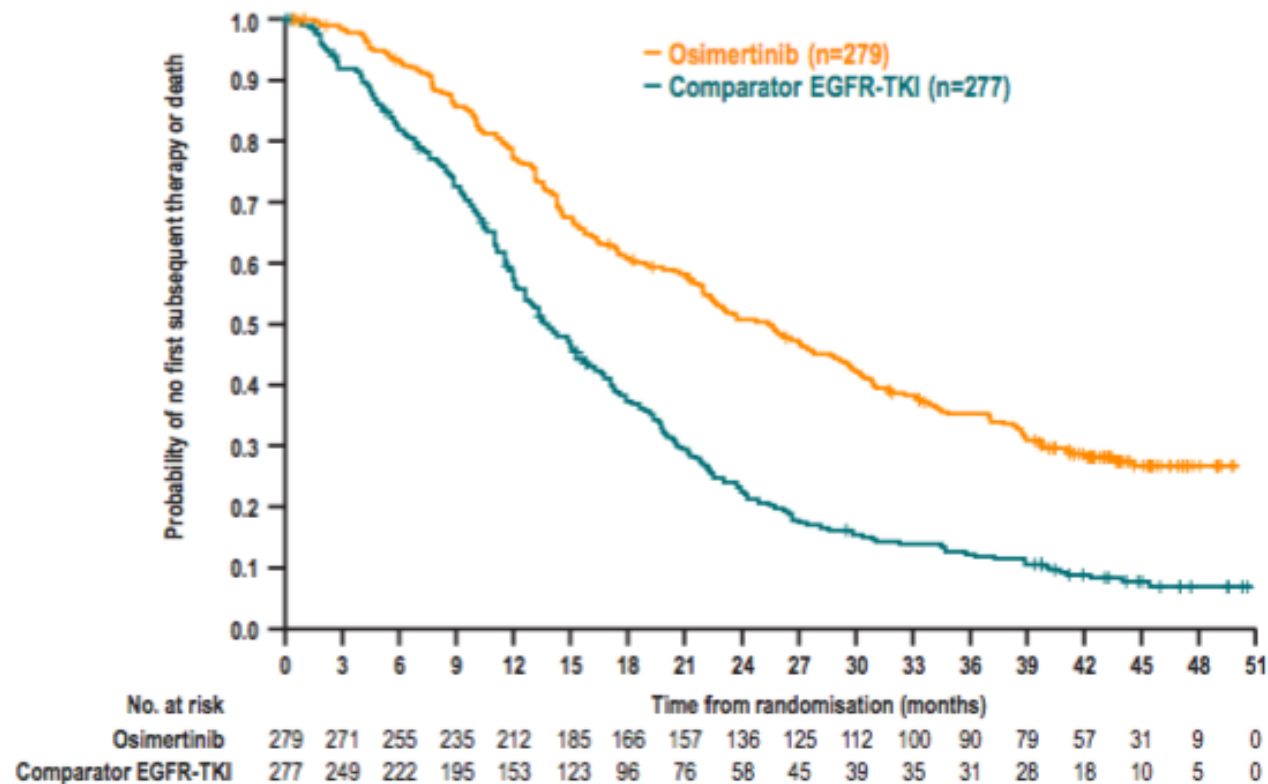
95% CI



Patients remaining on study treatment

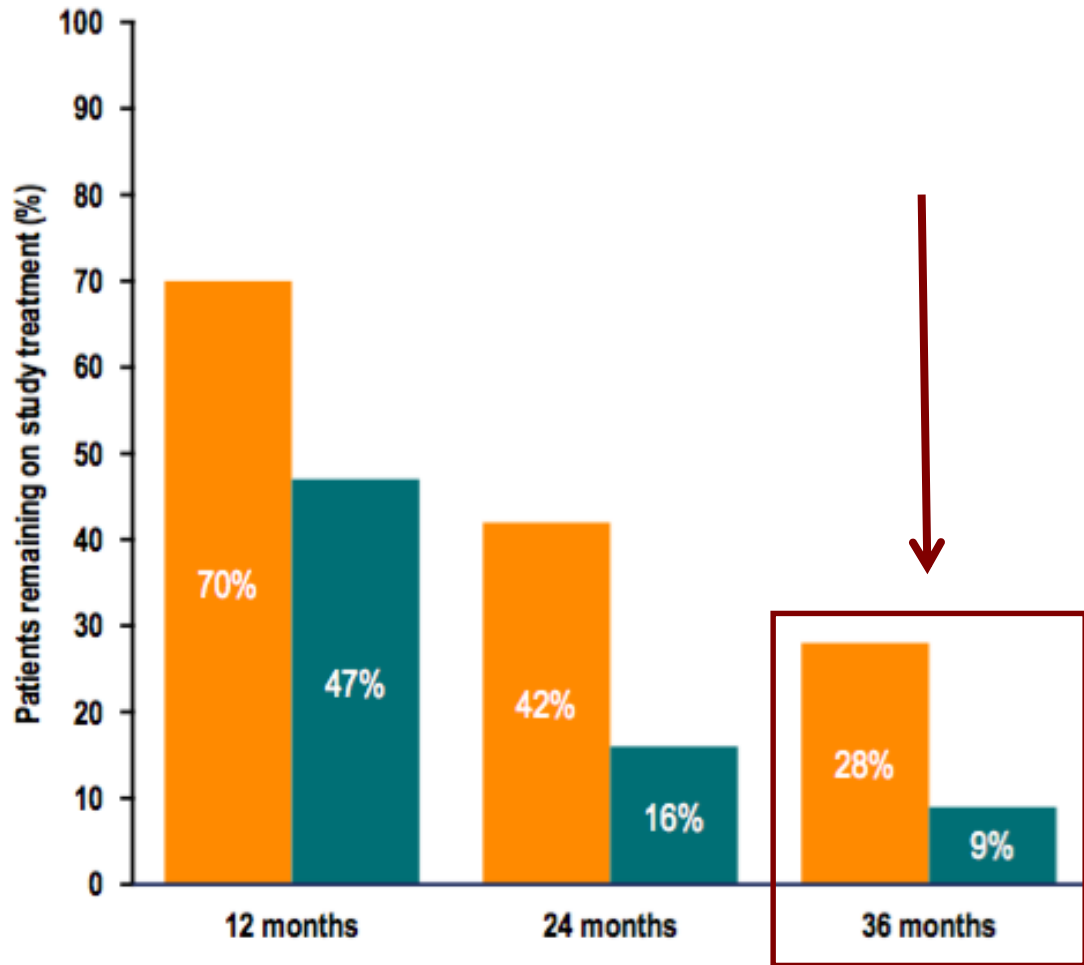


Time to first subsequent treatment*

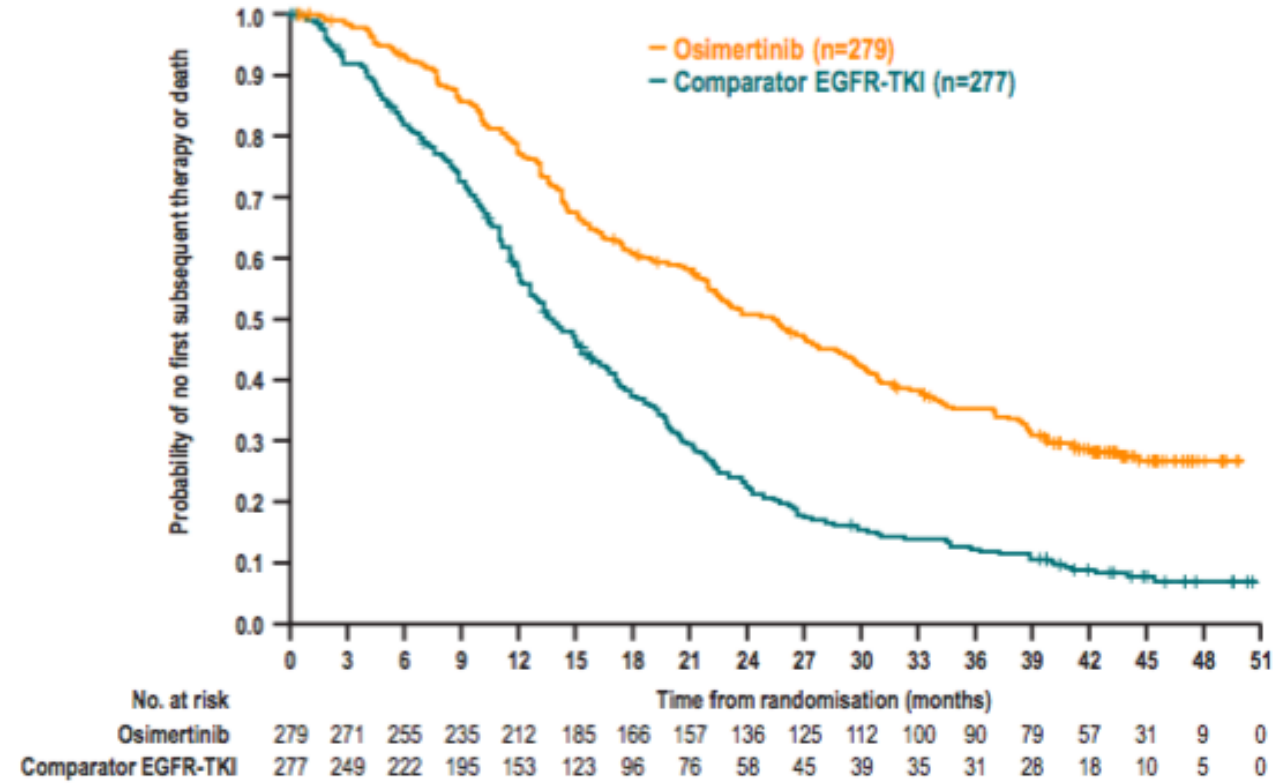


Time to first subsequent therapy or death	Events	Median, months (95% CI)
Osimertinib	194	25.5 (22.0, 29.1)
Comparator EGFR-TKI	242	13.7 (12.3, 15.7)
HR (95% CI)		0.478 (0.393, 0.581) p<0.0001

Patients remaining on study treatment



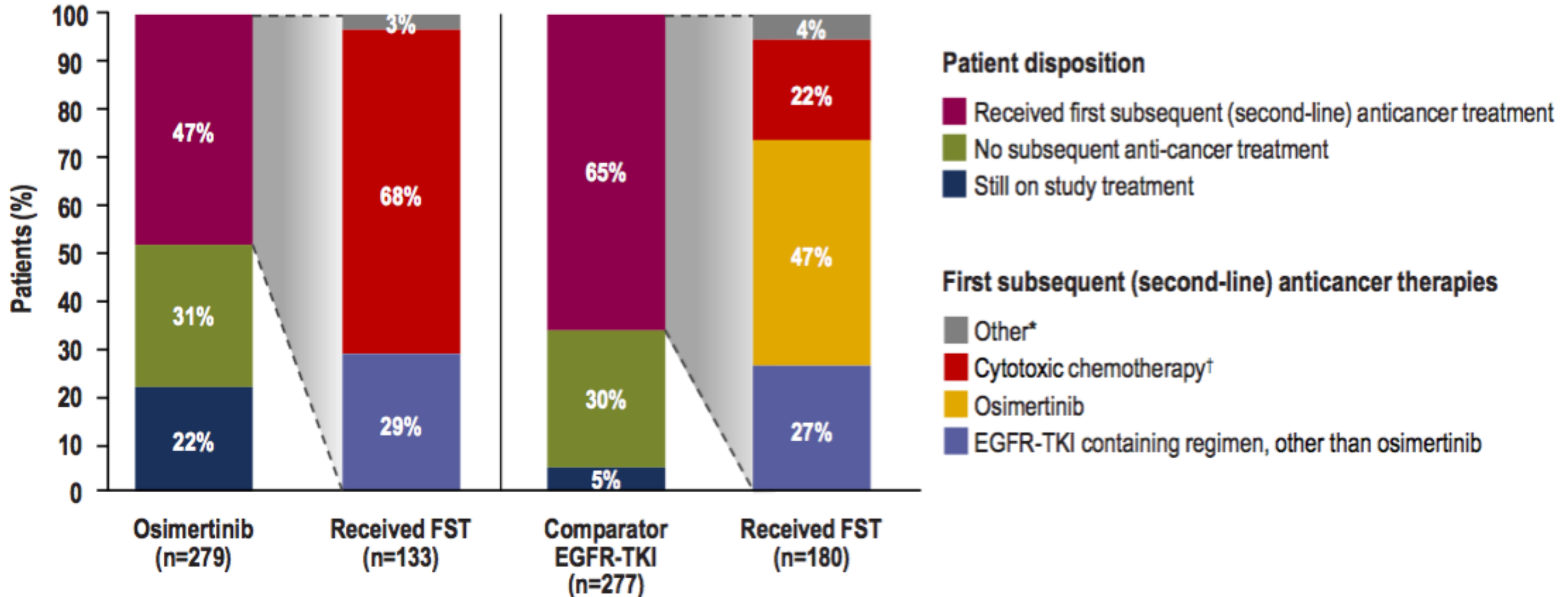
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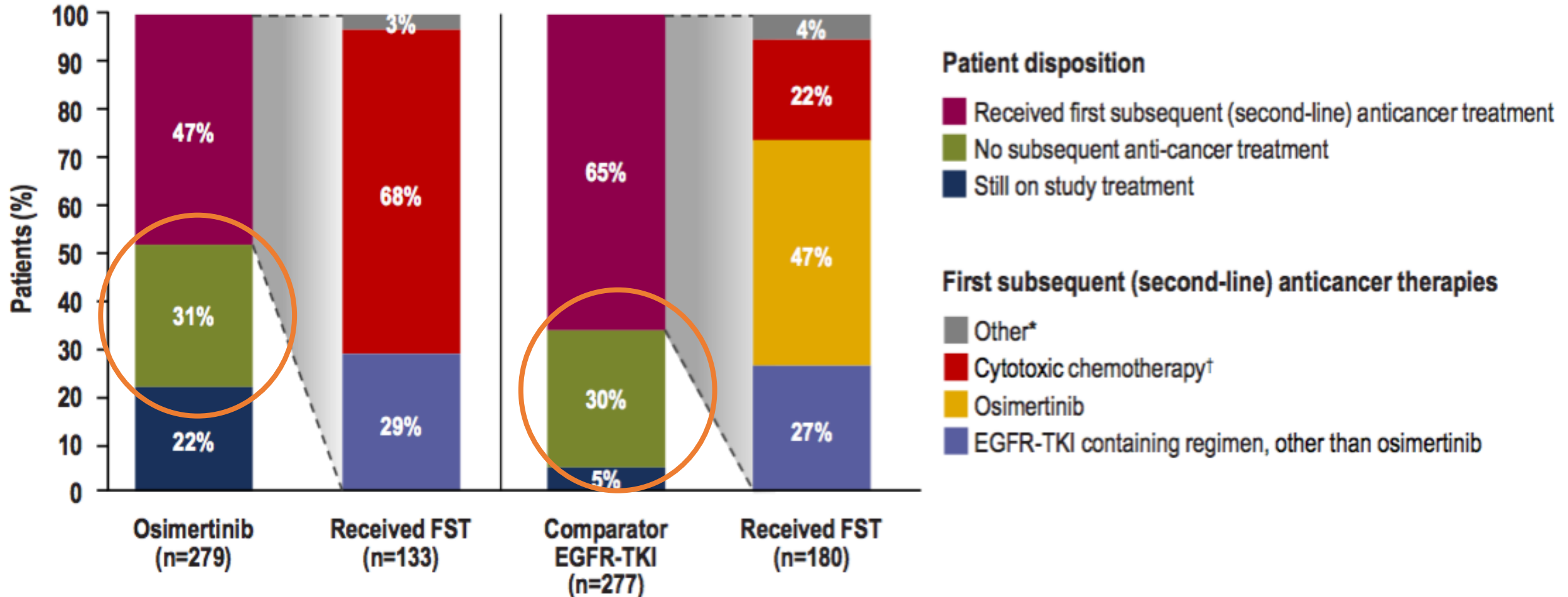
Deuxième ligne après progression:

31% dans le bras Osimertinib et **30%** dans le bras TKI G1 ne reçoivent pas de 2nd ligne.



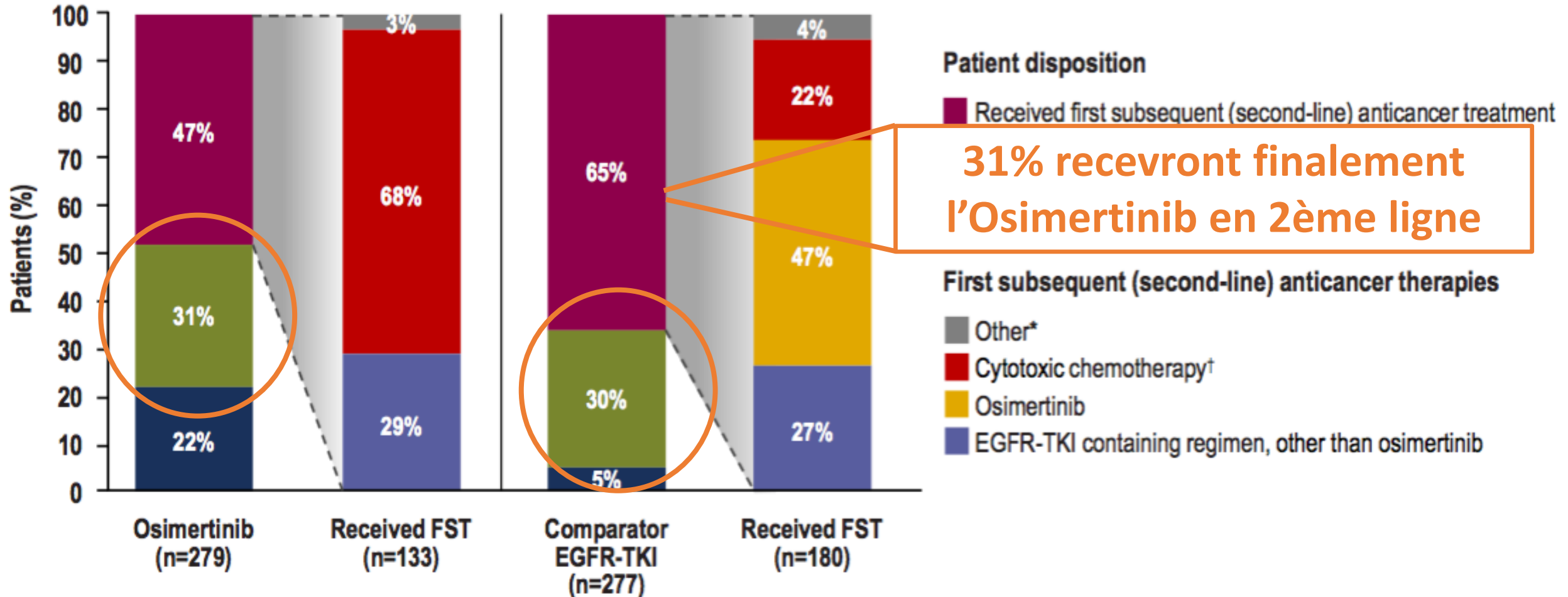
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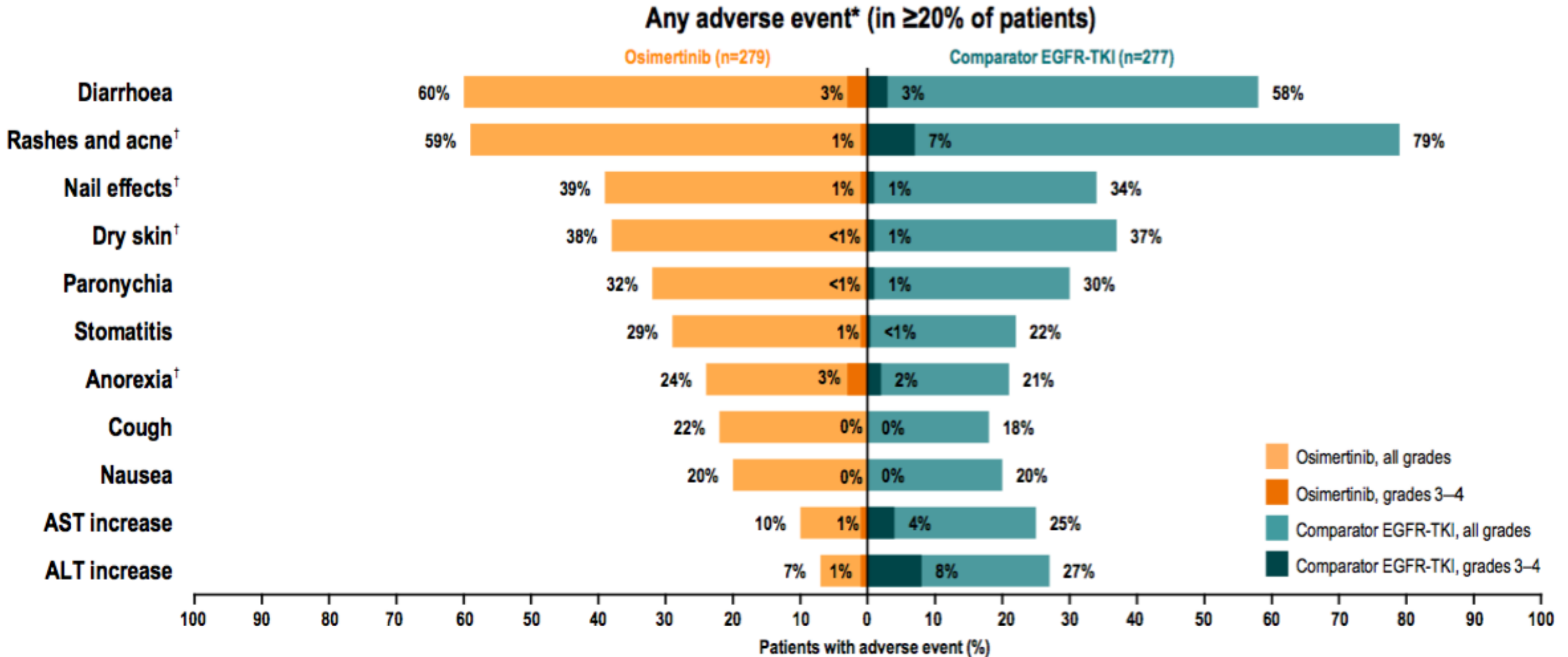
Deuxième ligne après progression:

31% dans le bras Osimertinib et **30%** dans le bras TKI G1 ne reçoivent pas de 2nd ligne.



Données de tolérance:

Temps médian d'exposition 20.7 mois vs 11.5 mois pour le bras standard
 $G_{\geq 3}$: **18%** pour l'Osimertinib vs **29%** pour bras standard



Conclusion

- 6,8 mois de survie en plus
- Moins de toxicités grade 3
- A 3 ans: toujours 28% des patients sous traitement versus 9%

Confirmation du statut de « standard » de l'Osimeertinib dans les carcinomes bronchiques non à petites cellules avancés ou métastatiques avec mutation activatrice de l'EGFR en première ligne

IO seul, Combo IO+IO ou Combo chimio + IO en première ligne
dans le mCBNPC?

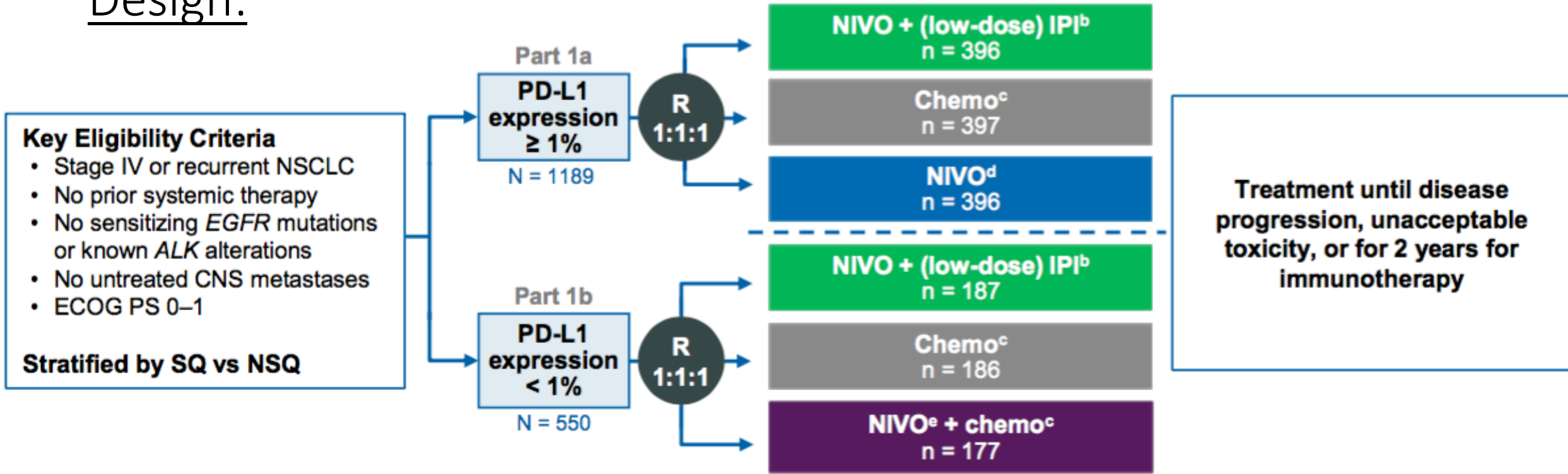
That is the question

Checkmate 227 part 1: données de survie globale si PD-L1 \geq 1+
du bras Ipilimumab+Nivolumab vs chimiothérapie

Nivolumab + Low-Dose Ipilimumab Versus Platinum-Doublet Chemotherapy as First-Line Treatment for Advanced Non-Small Cell Lung Cancer: CheckMate 227 Part 1 Final Analysis

Solange Peters,¹ Suresh Ramalingam,² Luis Paz-Ares,³ Reyes Bernabe Caro,⁴ Bogdan Zurawski,⁵
Sang-We Kim,⁶ Aurelia Alexandru,⁷ Lorena Lupinacci,⁸ Emmanuel de la Mora Jimenez,⁹
Hiroshi Sakai,¹⁰ István Albert,¹¹ Alain Vergnenegre,¹² Martin Reck,¹³ Hossein Borghaei,¹⁴
Julie R. Brahmer,¹⁵ Kenneth O'Byrne,¹⁶ William J. Geese,¹⁷ Prabhu Bhagavatheeswaran,¹⁷
Faith E. Nathan,¹⁷ Matthew D. Hellmann¹⁸

Design:



Independent co-primary endpoints: NIVO + IPI vs chemo

- PFS in high TMB (≥10 mut/Mb) population^f
- OS in PD-L1 ≥ 1% population^g

Secondary endpoints (PD-L1 hierarchy):

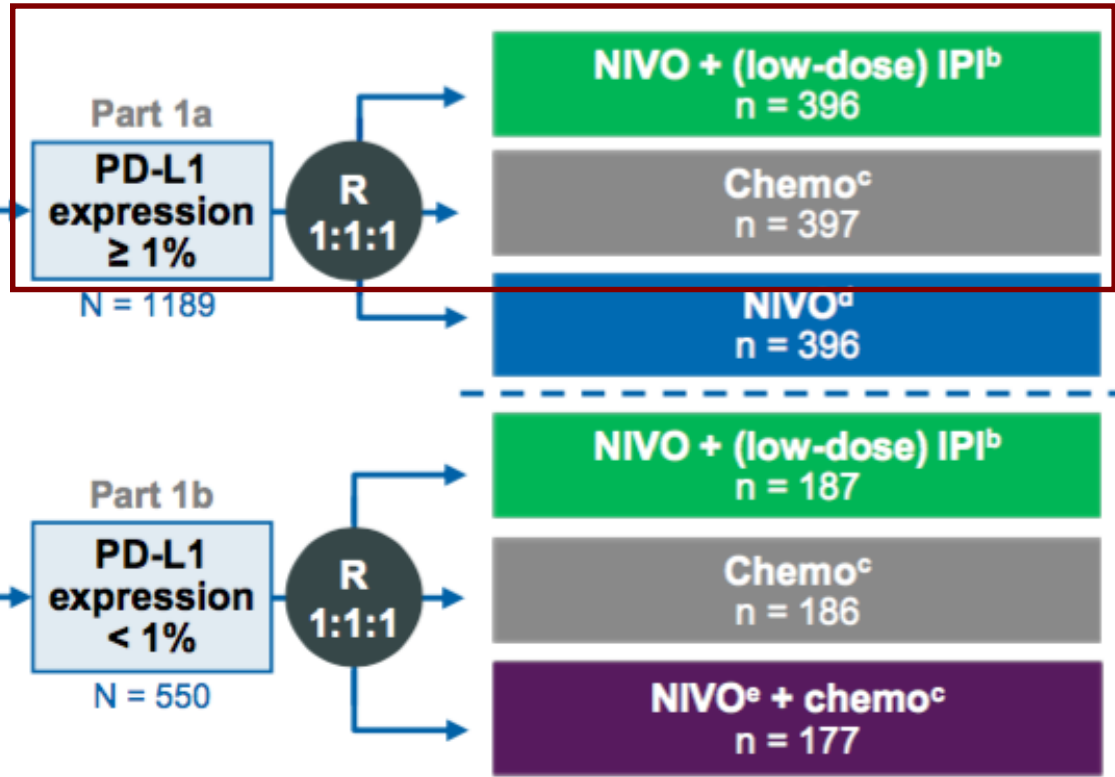
- PFS: **NIVO + chemo vs chemo** in PD-L1 < 1%
- OS: **NIVO + chemo vs chemo** in PD-L1 < 1%
- OS: **NIVO vs chemo** in PD-L1 ≥ 50%

Design:

Key Eligibility Criteria

- Stage IV or recurrent NSCLC
- No prior systemic therapy
- No sensitizing *EGFR* mutations or known *ALK* alterations
- No untreated CNS metastases
- ECOG PS 0–1

Stratified by SQ vs NSQ



Independent co-primary endpoints: NIVO + IPI vs chemo

- PFS in high TMB (≥ 10 mut/Mb) population^f
- OS in PD-L1 $\geq 1\%$ population^g

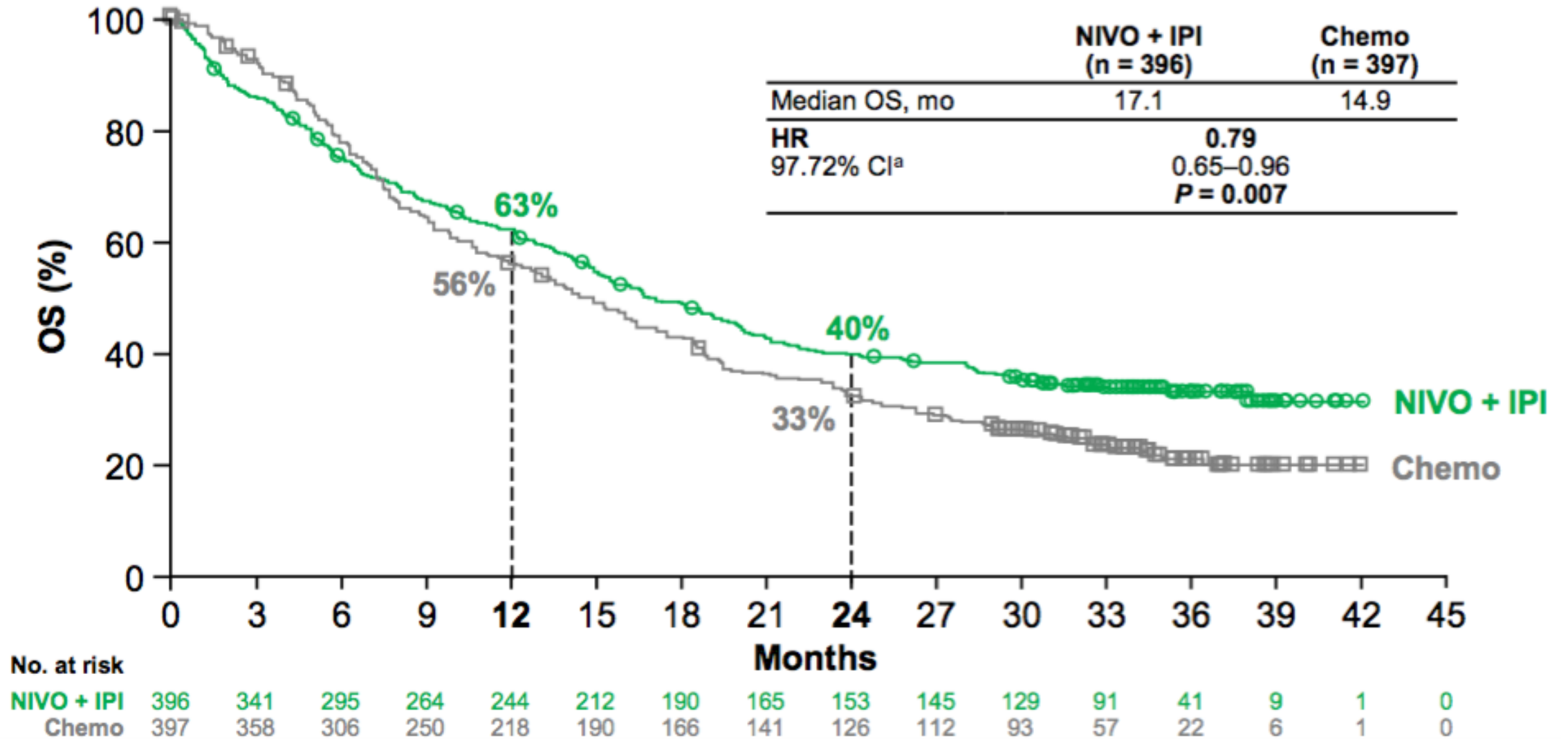
Secondary endpoints (PD-L1 hierarchy):

- PFS: **NIVO + chemo vs chemo** in PD-L1 $< 1\%$
- OS: **NIVO + chemo vs chemo** in PD-L1 $< 1\%$
- OS: **NIVO vs chemo** in PD-L1 $\geq 50\%$

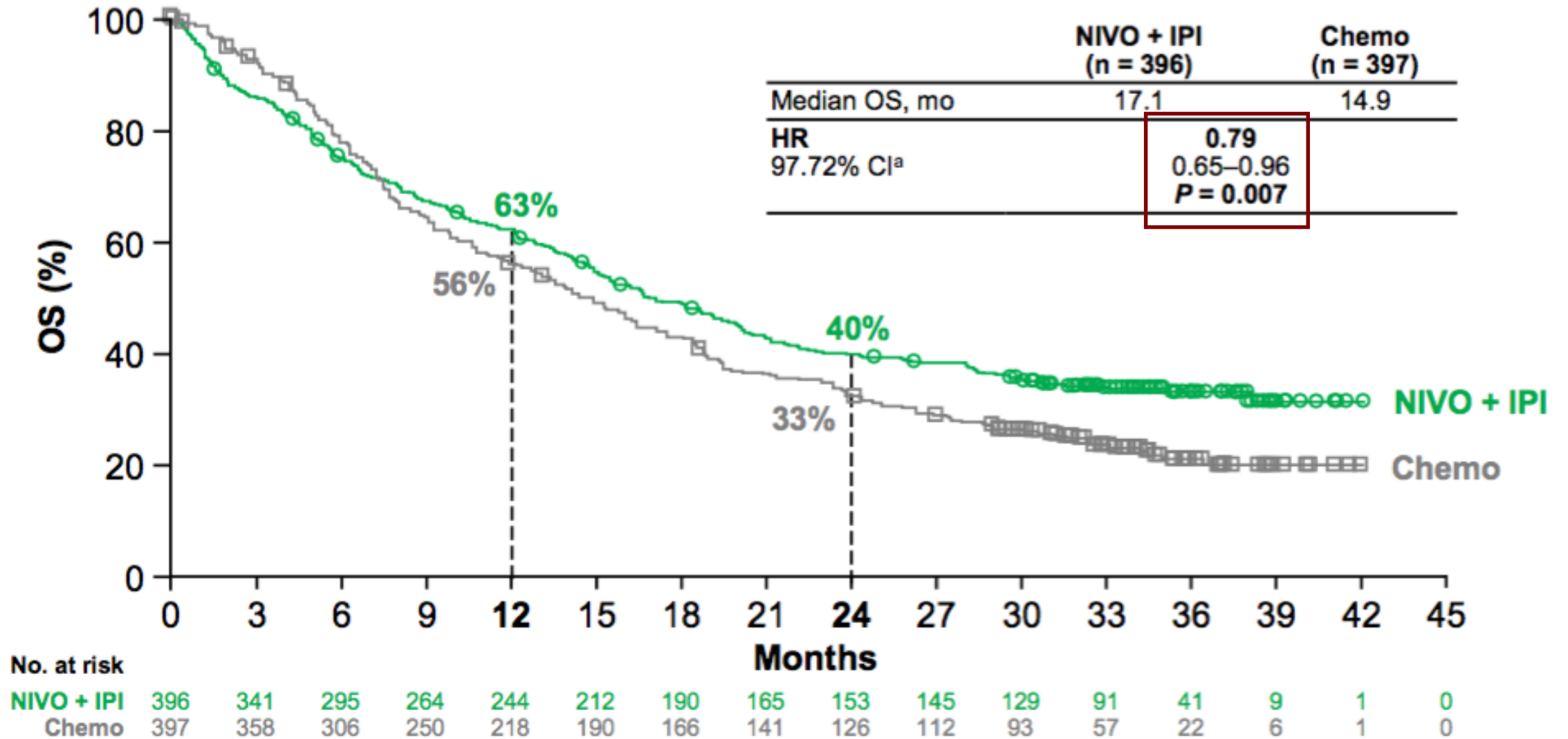
Caractéristiques des patients:

	All randomized (PD-L1 < 1% + PD-L1 ≥ 1%)		PD-L1 ≥ 1%
	NIVO + IPI (n = 583)	Chemo (n = 583)	NIVO (n = 396)
Median age, years (range)	64 (26–87)	64 (29–87)	64 (27–85)
Female, %	33	34	31
ECOG PS,^a % 0 / 1	35 / 65	33 / 66	36 / 64
Smoking status,^b % Current / former smoker Never smoker	85 14	86 13	86 13
Histology,^c % Squamous / non-squamous	28 / 72	28 / 72	30 / 70
Metastases, % Bone Liver CNS	28 21 11	26 22 9	27 23 11
Tumor PD-L1 expression, % < 1% ≥ 1% 1–49% ≥ 50%	32 68 33 35	32 68 35 33	NA 100 46 54
Tissue TMB, % Evaluable ≥ 10 mut/Mb < 10 mut/Mb	57 42 58	59 46 54	58 45 55

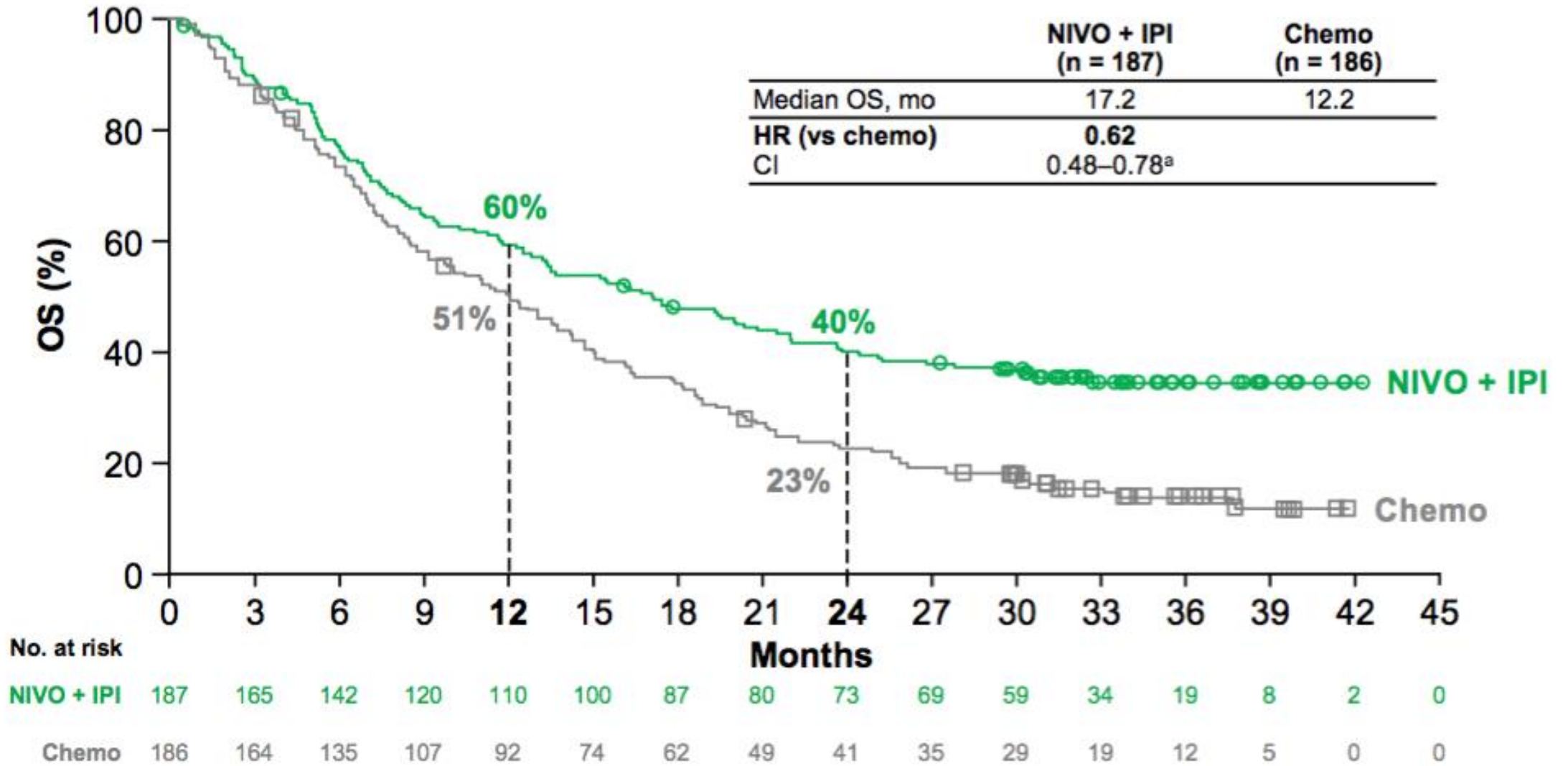
Données de survie globale: IPI+NIVO vs chimio si **PD-L1 ≥ 1%:**



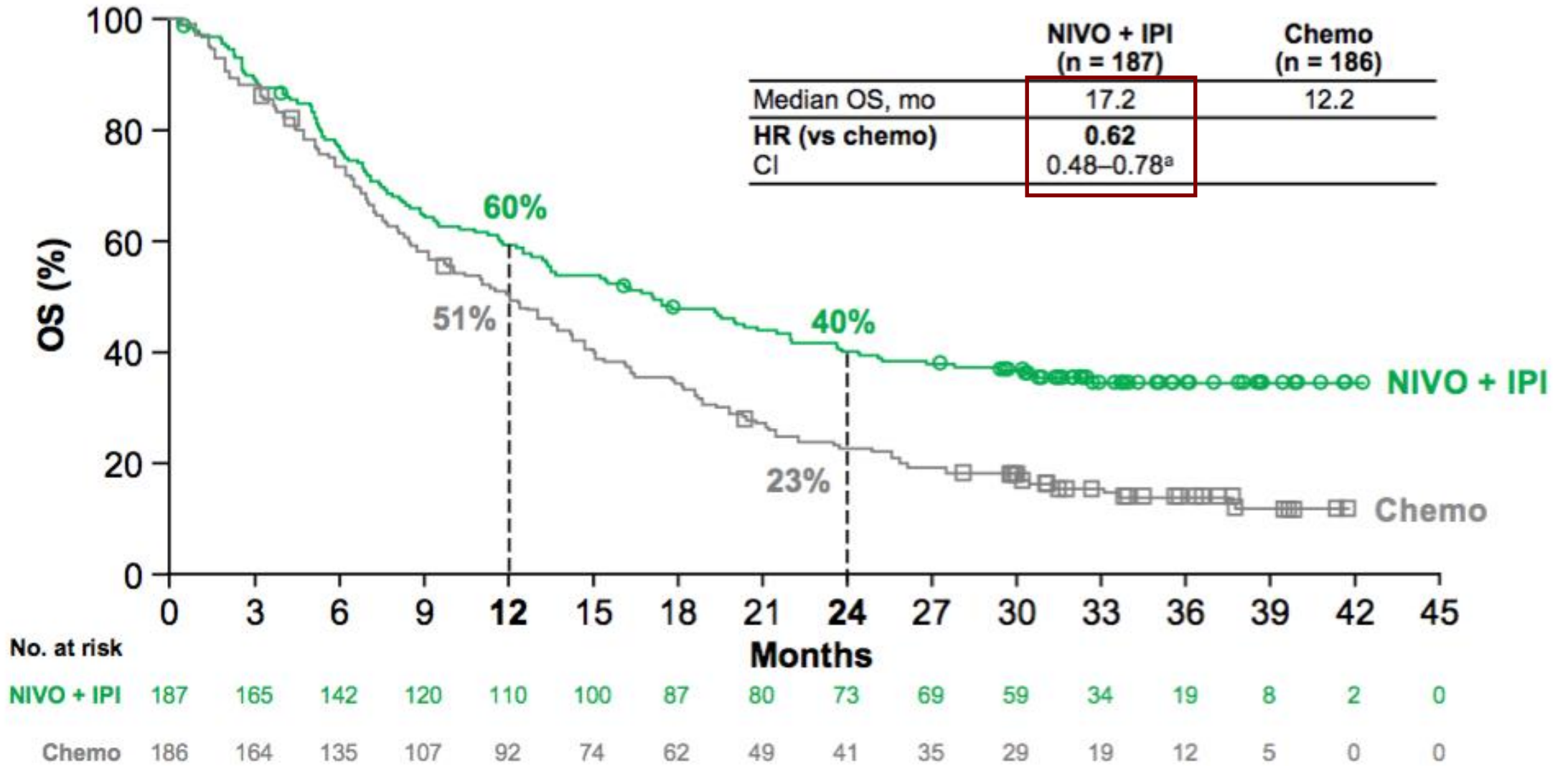
Données de survie globale: IPI+NIVO vs chimio si **PD-L1 ≥ 1%:**



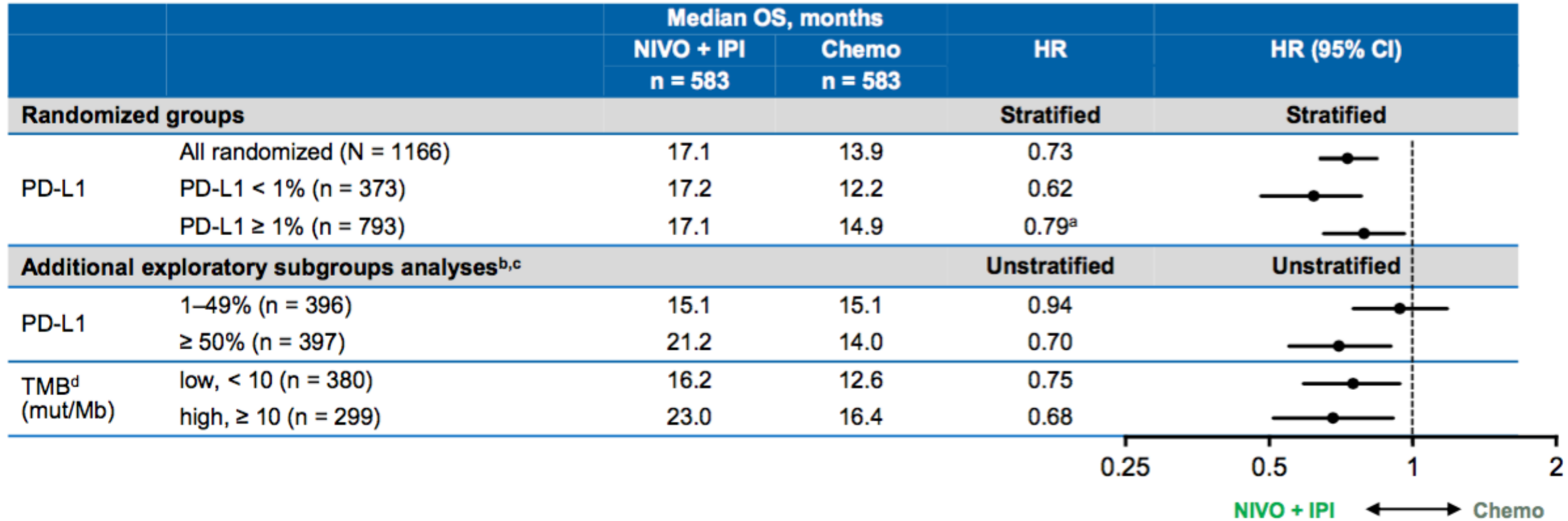
Données de survie globale: IPI+NIVO vs chimio si **PD-L1 ≤ 1%:**



Données de survie globale: IPI+NIVO vs chimio si **PD-L1 ≤ 1%:**

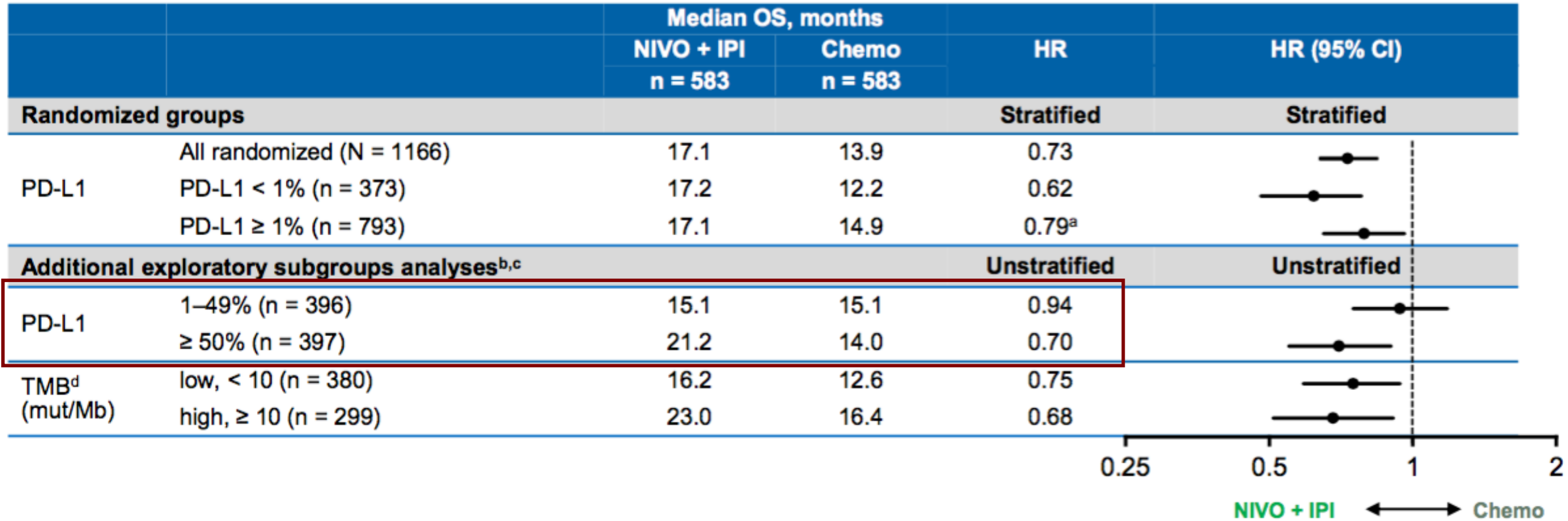


Analyses par sous groupes:



Le bénéfice en survie globale observé chez les PD-L1_≥ 1% est enrichi par les PD-L1_≥ 50%

Analyses par sous groupes:



Le bénéfice en survie globale observé chez les PD-L1_{≥ 1%} est enrichi par les PD-L1_{≥ 50%}

A propos de la toxicité:

TRAE, ^a %	NIVO + IPI (n = 576)		Chemo (n = 570)		NIVO ^b (n = 391)	
	Any grade	Grade 3–4	Any grade	Grade 3–4	Any grade	Grade 3–4
Any TRAE	77	33	82	36	66	19
TRAE leading to discontinuation^c	18	12	9	5	12	7
Most frequent TRAEs (≥ 15%)						
Diarrhea	17	2	10	1	12	< 1
Rash	17	2	5	0	11	1
Fatigue	14	2	19	1	11	< 1
Decreased appetite	13	1	20	1	7	0
Nausea	10	< 1	36	2	6	< 1
Anemia	4	1	33	12	3	< 1
Constipation	4	0	15	< 1	2	0
Neutropenia	< 1	0	17	10	< 1	0
Treatment-related deaths^d	1		1		< 1	

Toxicité du combo IO non négligeable: 33% de toxicités de haut grade pour NIVO+IPI vs 36% pour le bras chimio (19% dans le bras NIVO)

A propos de la toxicité:

TRAE, ^a %	NIVO + IPI (n = 576)		Chemo (n = 570)		NIVO ^b (n = 391)	
	Any grade	Grade 3–4	Any grade	Grade 3–4	Any grade	Grade 3–4
Any TRAE	77	33	82	36	66	19
TRAE leading to discontinuation^c	18	12	9	5	12	7
Most frequent TRAEs (≥ 15%)						
Diarrhea	17	2	10	1	12	< 1
Rash	17	2	5	0	11	1
Fatigue	14	2	19	1	11	< 1
Decreased appetite	13	1	20	1	7	0
Nausea	10	< 1	36	2	6	< 1
Anemia	4	1	33	12	3	< 1
Constipation	4	0	15	< 1	2	0
Neutropenia	< 1	0	17	10	< 1	0
Treatment-related deaths^d	1		1		< 1	

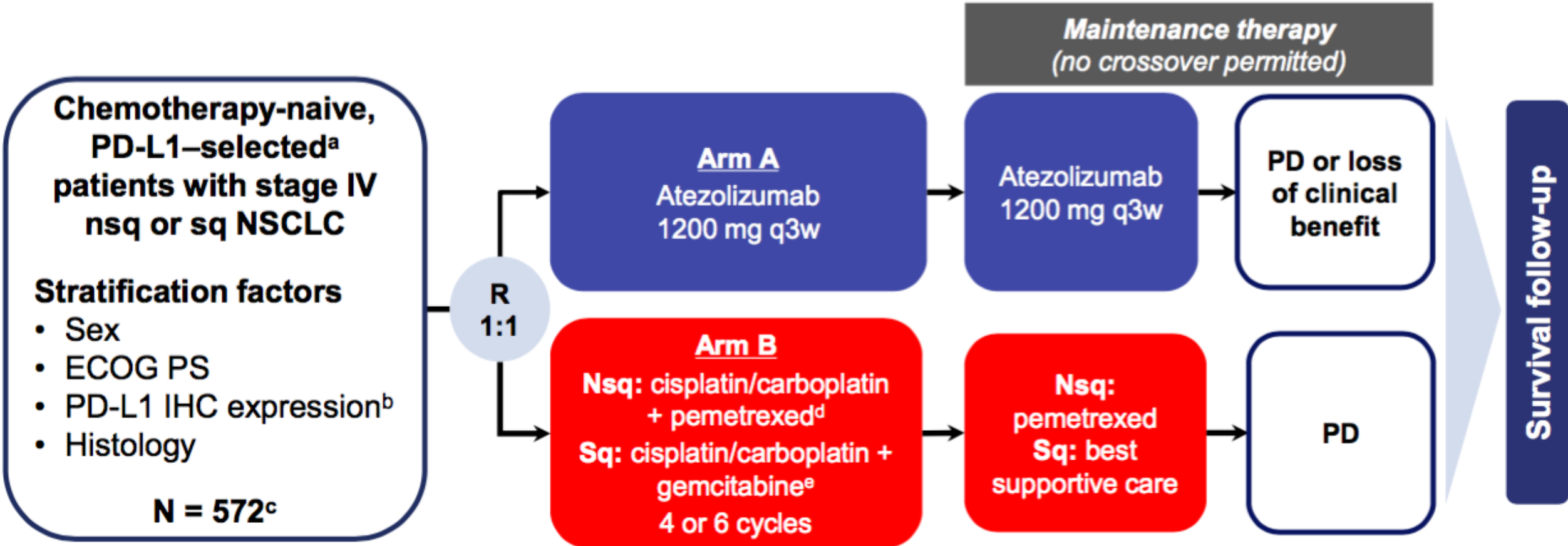
Toxicité du combo IO non négligeable: 33% de toxicités de haut grade pour NIVO+IPI vs 36% pour le bras chimio (19% dans le bras NIVO)

IMpower110

IMpower110: Interim OS Analysis of a Phase III Study of Atezolizumab (atezo) vs Platinum-Based Chemotherapy (chemo) as 1L Treatment (tx) in PD-L1–selected NSCLC

David R Spigel,¹ Filippo De Marinis,² Giuseppe Giaccone,³ Niels Reinmuth,⁴ Alain Vergnenegre,⁵ Carlos Henrique Barrios,⁶ Masahiro Morise,⁷ Enriqueta Felip,⁸ Zoran Andric,⁹ Sarayut Geater,¹⁰ Mustafa Özgüroğlu,¹¹ Simonetta Mocchi,¹² Mark McClelland,¹² Ida Enquist,¹² Kim Komatsubara,¹² Yu Deng,¹² Hiroshi Kuriki,¹² Xiaohui Wen,¹² Jacek Jassem,¹³ Roy S Herbst¹⁴

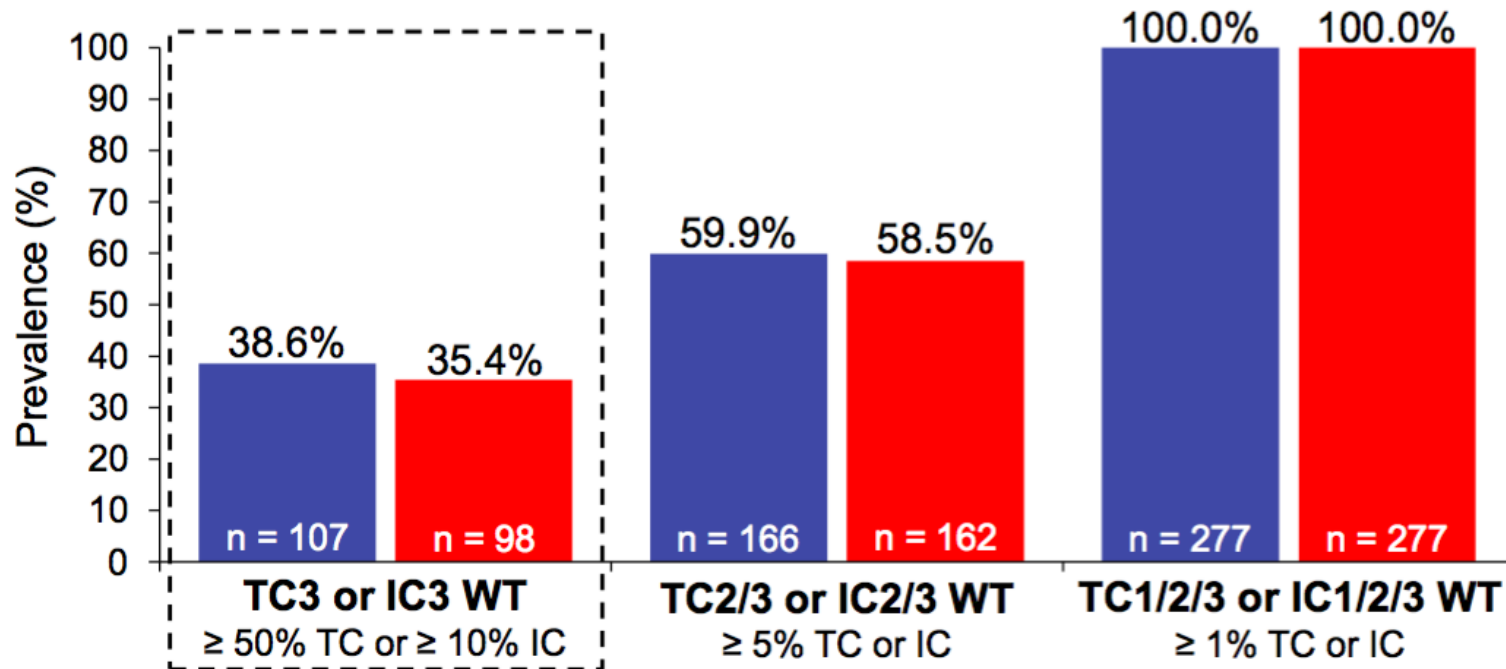
Design:



Objectif primaire: Survie globale des tumeurs WT (sans addiction oncogénique)

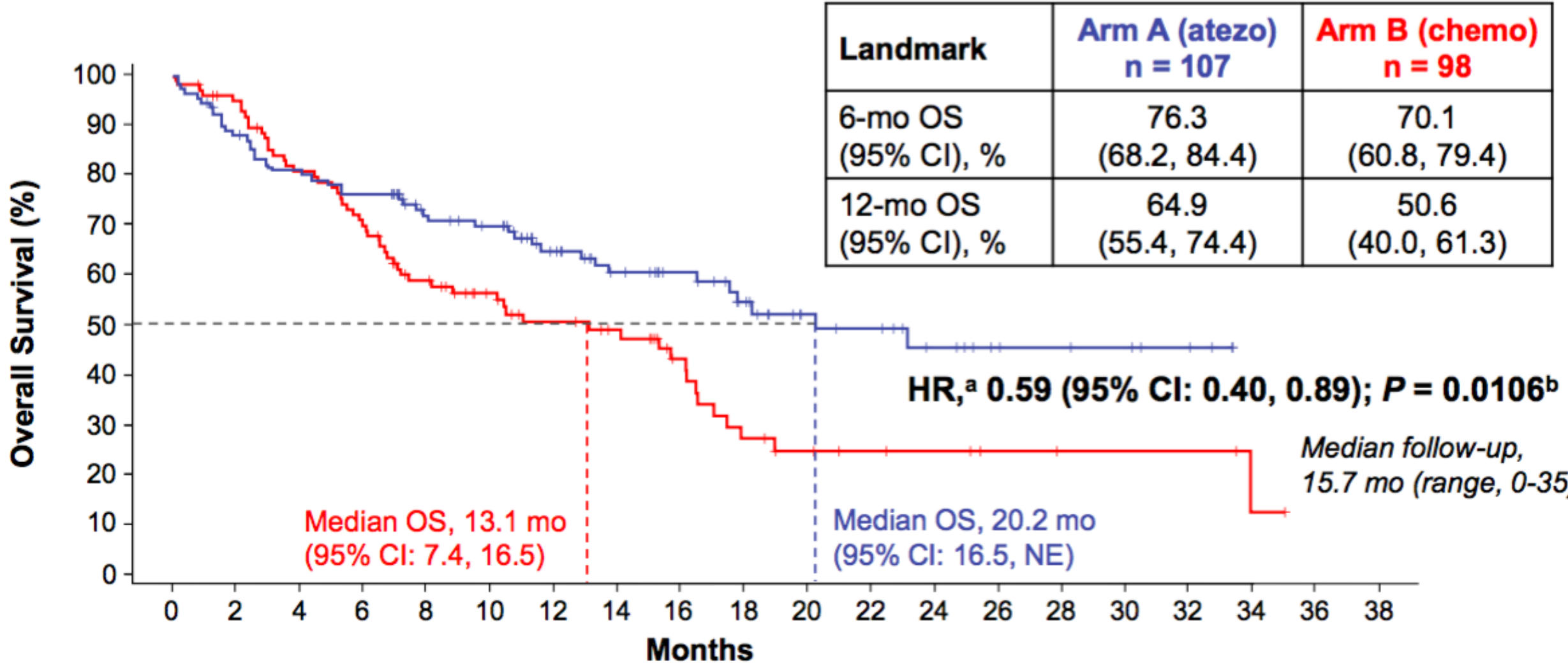
Caractéristiques des patients:

Characteristic	TC1/2/3 or IC1/2/3 WT		TC3 or IC3 WT	
	Arm A (atezo) n = 277	Arm B (chemo) n = 277	Arm A (atezo) n = 107	Arm B (chemo) n = 98
n (%)				
Age < 65 y	143 (51.6)	134 (48.4)	59 (55.1)	43 (43.9)
Male	196 (70.8)	193 (69.7)	79 (73.8)	64 (65.3)
White	227 (81.9)	240 (86.6)	87 (81.3)	82 (83.7)
Asian	45 (16.2)	30 (10.8)	20 (18.7)	15 (15.3)
Never used tobacco	37 (13.4)	35 (12.6)	9 (8.4)	15 (15.3)
Non-squamous histology	192 (69.3)	193 (69.7)	80 (74.8)	75 (76.5)
ECOG PS 0	97 (35.0)	102 (36.8)	35 (32.7)	38 (38.8)

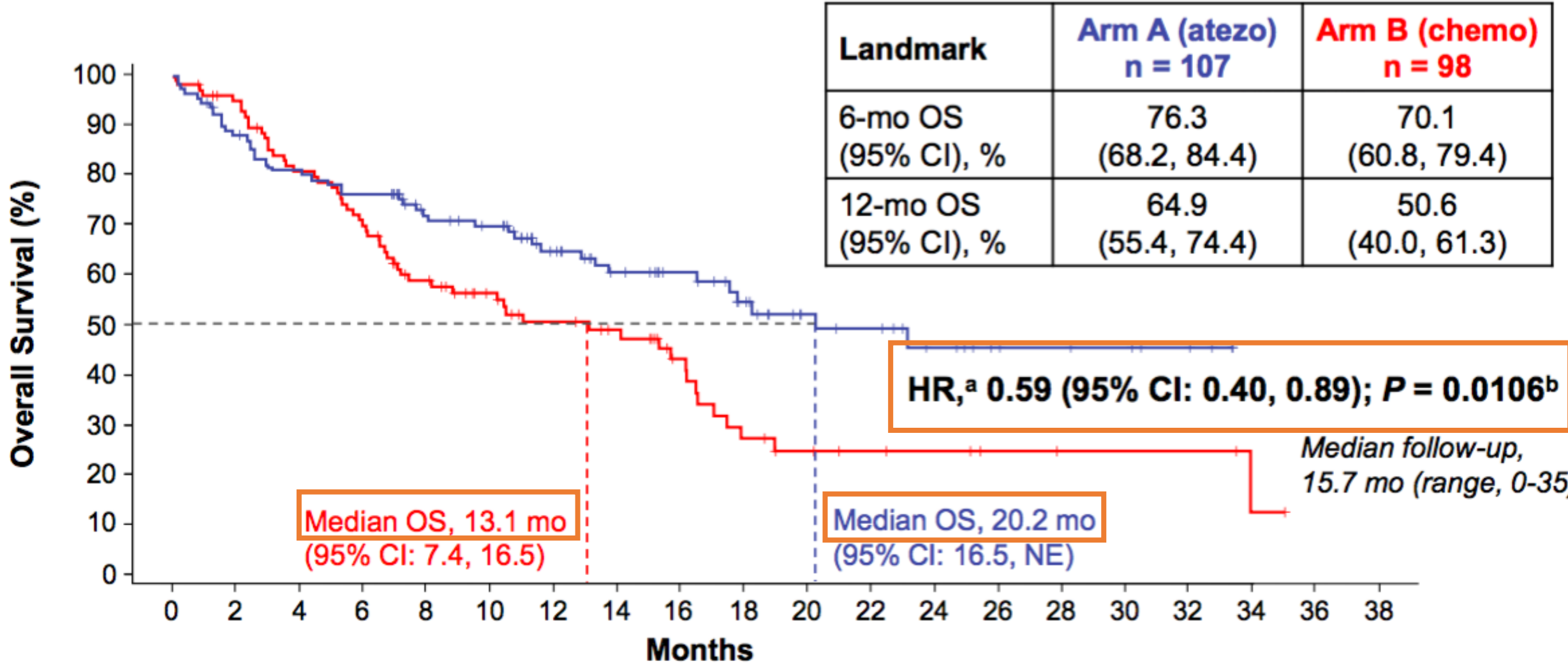


Prévalence de l'expression de PD-L1

Données de survie globale si TC3 ou IC3



Données de survie globale si TC3 ou IC3

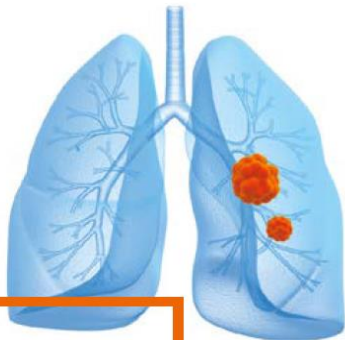
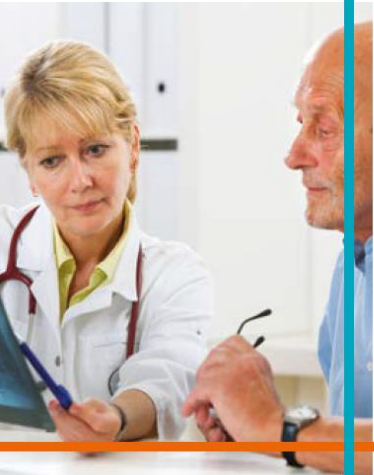


Conclusion

A- Confirmation de la place de l'Osimertinib comme standard en première ligne dans les mCBNPC mutés EGFR (Chez les non asiatiques...)

B- Choix de la première ligne dans le carcinome bronchique non à petites cellules avancé sans addiction??? **Pas si facile**

- Immunothérapie seule (Pembrolizumab/Atezolizumab) dans les > 50% ou TC3/IC3? → Quid des Hyperprogressseurs?
- PD-L1 < 1%: Nivo+Ipi fait match égal avec le combo chimio +IO → toxicités différentes, quid du prix?
- PD-L1 entre 1 et 49%: seul le combo IO + chimio a démontré une différence statistiquement significative → Pas vraiment de match



Guide multidisciplinaire de bonnes pratiques pour la prise en charge des petits prélèvements de tumeurs broncho-pulmonaires

Avec la participation de H. BEGUERET, G. BRAS, N. BRAZZALOTTO, F. CHOMY, L. DIGUE, A. HOUSIANGOU, F. LAURENT, J-P. MERLIO et I. SOUBEYRAN



But: optimisation de la réalisation et de l'utilisation des petits prélèvements tumoraux et donc améliorer la prise en charge des patients

Onglet pour chaque professionnel

Messages clairs communs

Merci de votre attention

Données comparées aux données d'anti PD1/PD-L1 en monothérapie si PD-L1 $\geq 50\%$ et 1-49%

Trial	N ^a	Population	IMP	PDL1 Stratum	OS HR (95%CI)	TRAEs G3/4 ^a	% discontinuation ^a
CM227 ¹	1,166	All histologies	Nivo-Ipi	$\geq 50\%$	0.70 (0.55-0.90)	33%	12%
				1-49%	0.94 (0.75-1.18)		
			Nivo	$\geq 1\%$	0.88 (0.75-1.04)	19.4%	7.4%
KN024 ²	305	All histologies	Pembro	$\geq 50\%$	0.63 (0.47-0.86)	26.6%	7.1%
KN042 ³	1,274	All histologies	Pembro	$\geq 50\%$ 1-49%	0.69 (0.56-0.85) 0.92 (0.77-1.11)	18%	9%
IMP110 ⁴	572	All histologies	Atezo	TC3 or IC3	0.59 (0.40-0.89)	12.9%	6.3%

Données comparées aux données pembro+ chimio si PD-L1 $\geq 50\%$ et 1-49%:

Trial	N ^a	Population	IMP	PDL1 Stratum	OS HR (95%CI)	TRAEs G3/4 ^a	% discontinuation ^a
CM227 ¹	1,166	All histologies	Nivo-Ipi	$\geq 50\%$	0.70 (0.55-0.90)	33%	12%
				1-49%	0.94 (0.75-1.18)		

			Nivo	$\geq 1\%$	0.88 (0.75-1.04)	19.4%	7.2%
KN189 ⁴	616	Non-squamous	Pembro + Plat-Pem	$\geq 50\%$	0.42 (0.26-0.68)	NR	11.9%
				1-49%	0.55 (0.34-0.90)		
KN407 ⁵	559	Squamous	Pembro + Carbo-Tax / (nab)Tax	$\geq 50\%$	0.64 (0.37-1.10)	NR	12.2%
				1-49%	0.57 (0.36-0.90)		

Données comparées aux données de Pembro+ chimio si PD-L1 < 1%:

Trial	N ^a	Population	IMP	PDL1 Stratum	OS HR (95%CI)	TRAEs G3/4 ^a	% discontinuation ^a
CM227 ¹	1,166	All histologies	Nivo-Ipi	<1%	0.62 (0.48-0.78)	33%	12%
			Nivo-Chemo ^b	<1%	0.78 (0.60-1.02)	56%	7.6%
KN189 ²	616	Non-squamous	Pembro + Plat/Pem	<1%	0.59 (0.38-0.92)	NR	11.9%
KN407 ³	559	Squamous	Pembro + Carbo-Tax / (nab)Tax	<1%	0.61 (0.38-0.98)	NR	12.2%