



Les traitements de seconde ligne des CBNPC, hors addiction oncogénique

PJ Souquet

CH Lyon Sud
Hospices Civils de Lyon



Liens d'intérêt



Amgen, Astellas, Astra Zénéca, Bayer, BMS, I.P. Bocuse, Boehringer-Ingelheim, Chugai, Daichy, P Fabre Oncologie, Lilly, Merck, Merrimack, MSD, Novartis, Pfizer, Roche, Sandoz, Taiho, Takéda

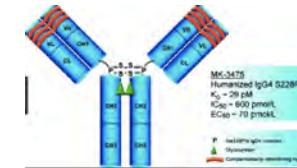
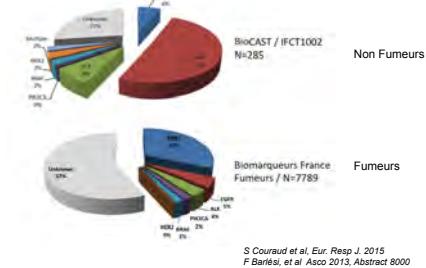
CBNPC de stade IV

Traitements de première lignes en 2018

15 – 20 %: thérapeutiques ciblées

15-20 % : Pembrolizumab (PDL-1 > 50 %)

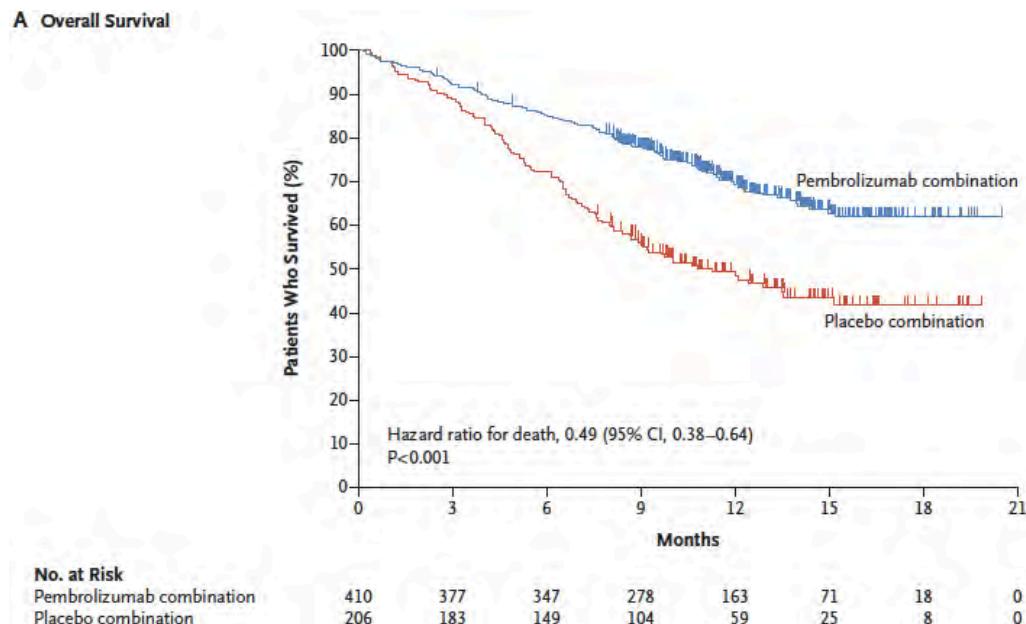
60-70 %: chimiothérapie



CBNPC de stade IV

Chimiothérapie
+
Pembrolizumab

Nouveau standard??



CBNPC de stade IV L2



Quel traitement après une première ligne d'IO ?

Chimiothérapie à base de sels de platine

Association IO + Chimiothérapie ??

Poursuite IO + Traitement local d'un site évolutif ??

Quel traitement après une association IO + CT???

Combo : PDL1 + Anti CTLA4? Ou autre association??

CT seule?

CBNPC de stade IV L2

CBNPC non épidermoide



Vérifier que toutes les altérations moléculaires ont été recherchées
Discuter une re-biopsie

PS : 0-2

PS : >2

- Nivolumab *
- Pembrolizumab (si PDL1>1%) *
- Pemetrexed
- Paclitaxel
- Bevacizumab
- Docétaxel
- Ecolinib
- Toute autre molécule après avis RCP
- Essais thérapeutiques

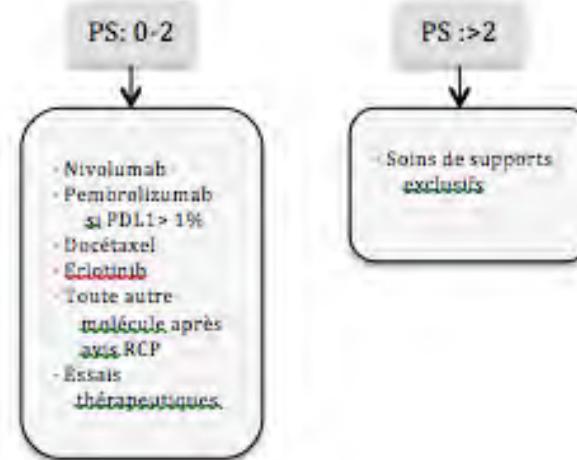
Soins de supports exclusifs.

* si immunothérapie non utilisée en première ligne.

CBNPC de stade IV L2



CBNPC épidermoides

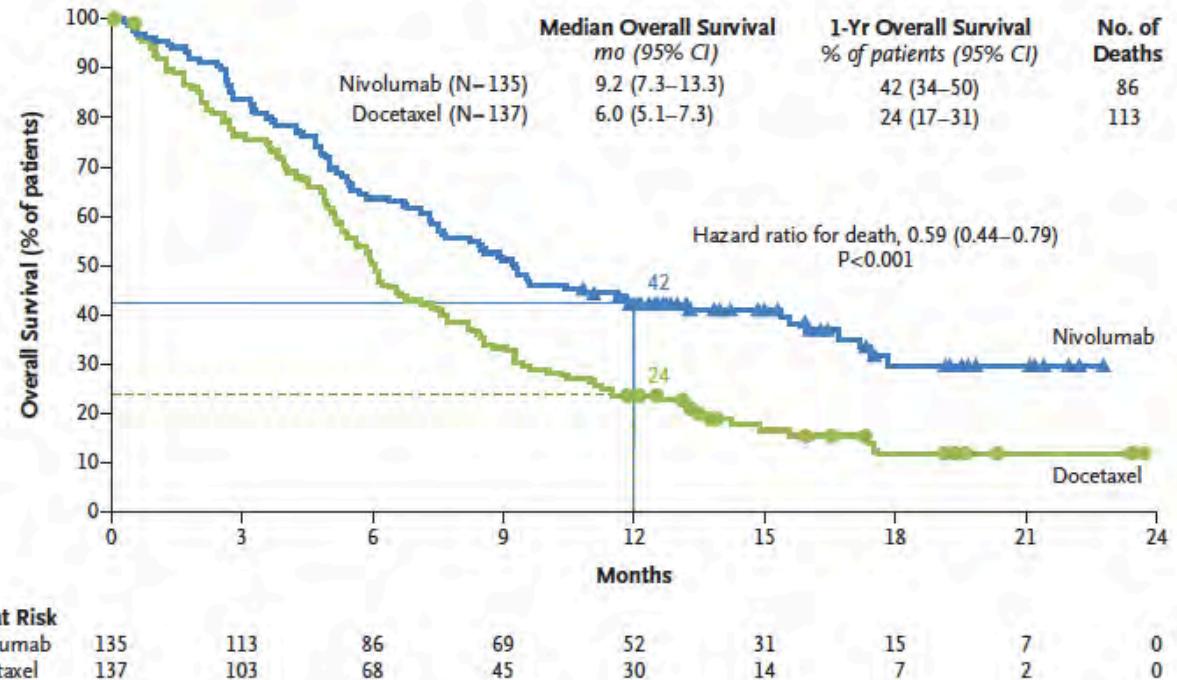


CBNPC de stade IV L2. Epi

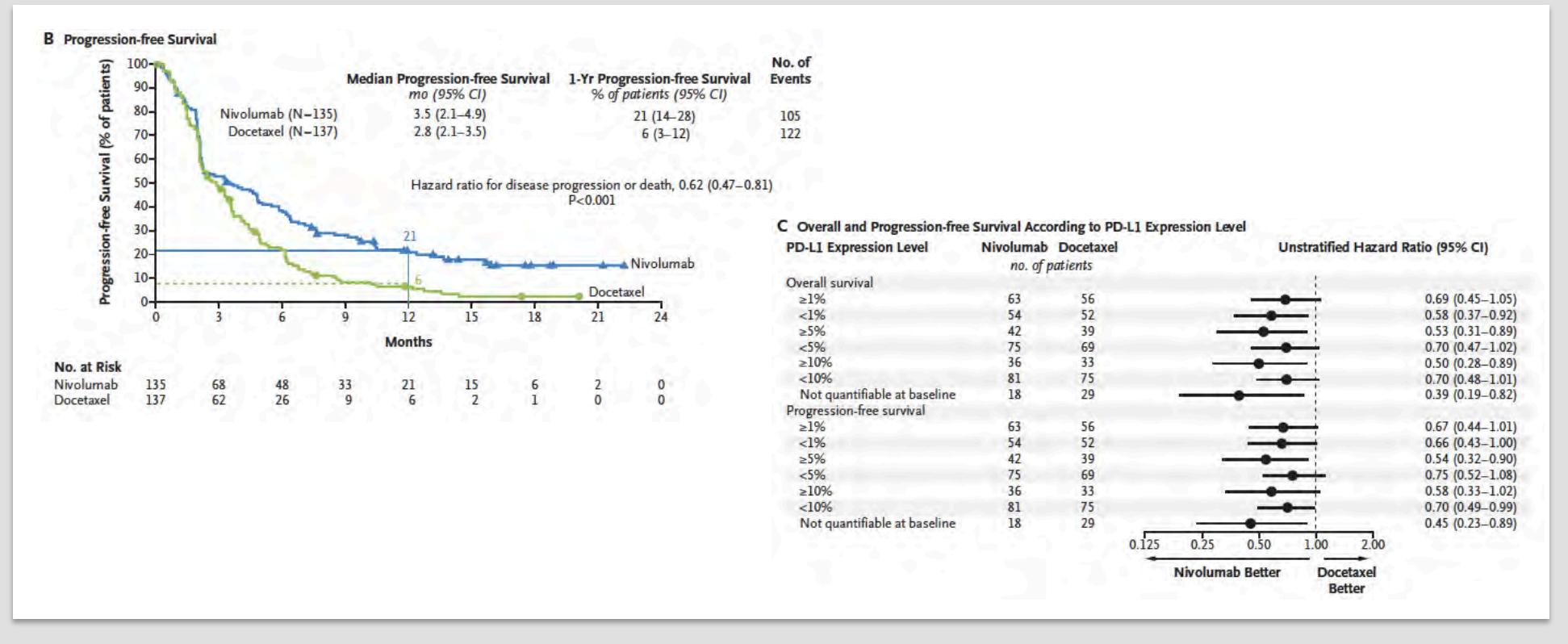
CBNPC
épidermoïde
Stade IV
Prétraité Sels de
platine
PS:0/1

Nivo.

Docé.

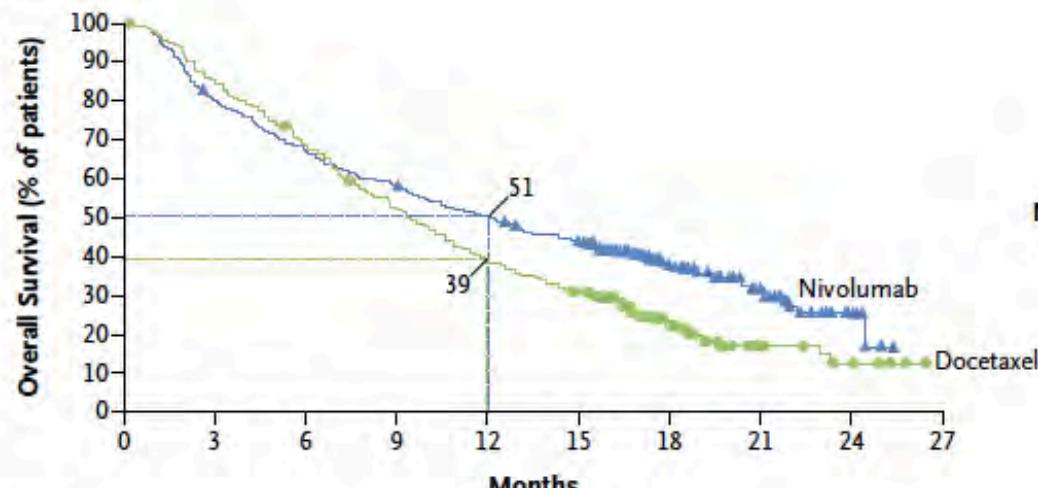


CBNPC de stade IV L2 Epi



CBNPC de stade IV L2 Non épi

A Overall Survival

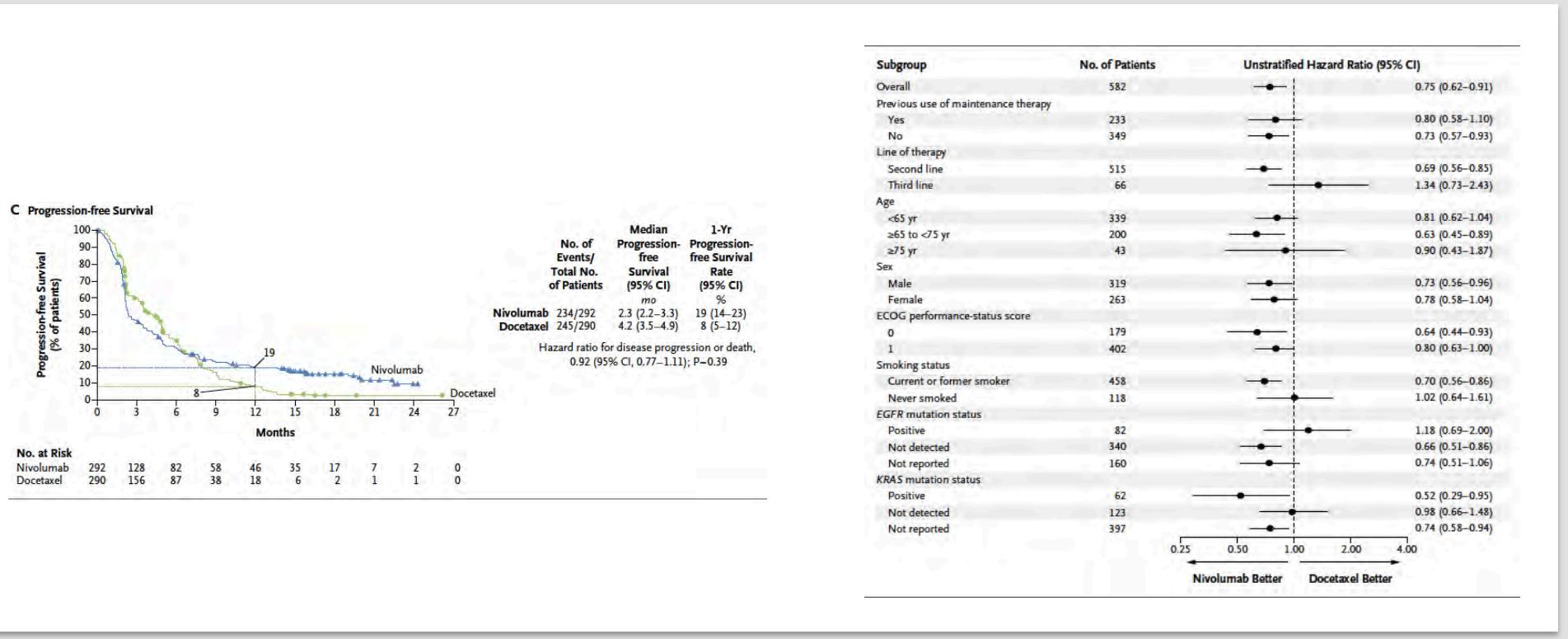


	No. of Deaths/ Total No. of Patients	Median Overall Survival (95% CI) mo	1-Yr Overall Survival Rate (95% CI) %
Nivolumab	190/292	12.2 (9.7–15.0)	51 (45–56)
Docetaxel	223/290	9.4 (8.1–10.7)	39 (33–45)
Hazard ratio for death, 0.73 (95% CI, 0.59–0.89) P=0.002			

No. at Risk

	0	3	6	9	12	15	18	21	24	27
Nivolumab	292	232	194	169	146	123	62	32	9	0
Docetaxel	290	244	194	150	111	88	34	10	5	0

CBNPC de stade IV L2 Non Epi.

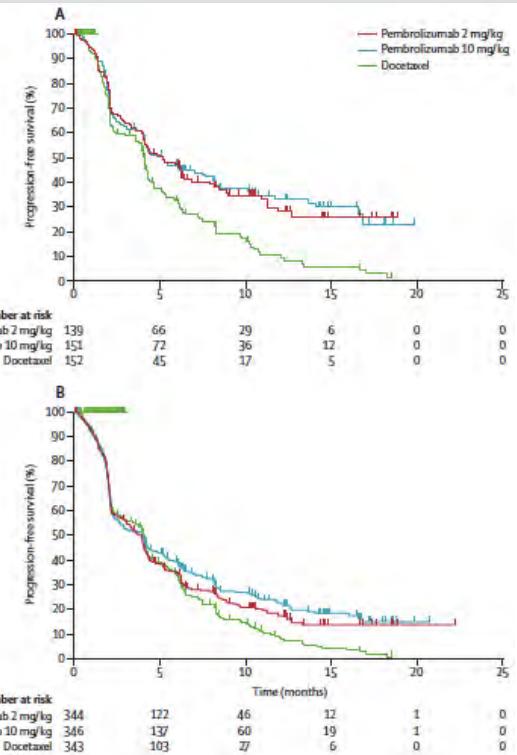
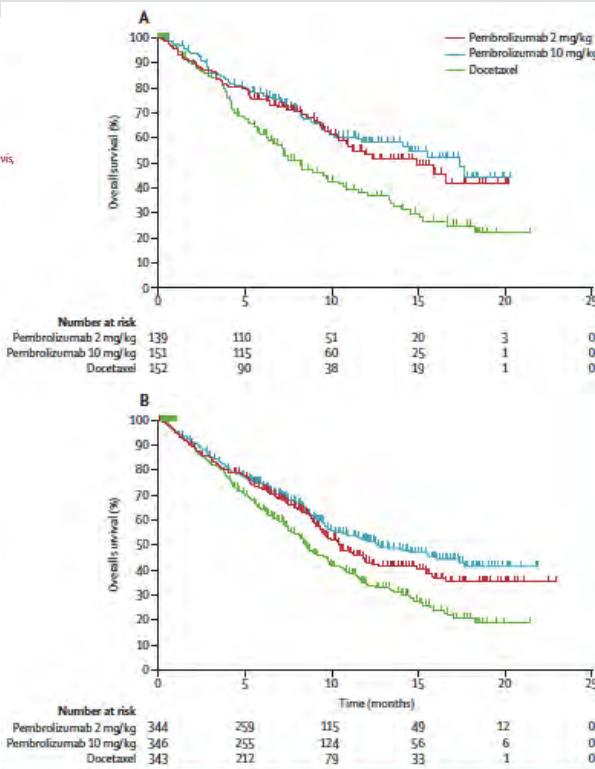


CBNPC de stade IV L2

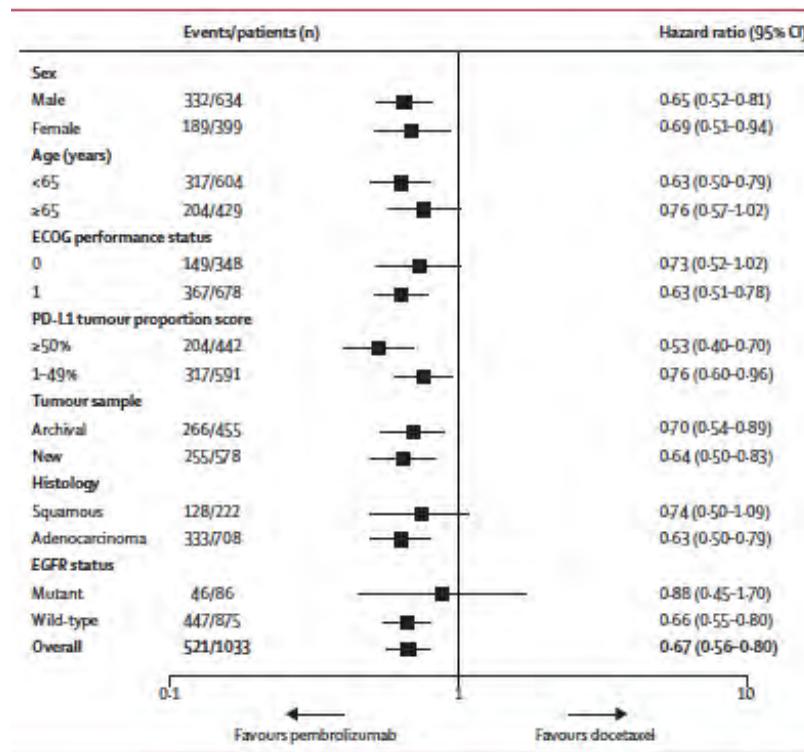
Pembrolizumab versus docetaxel for previously treated, PD-L1-positive, advanced non-small-cell lung cancer (KEYNOTE-010): a randomised controlled trial

Roy S Herbst, Paul Baas, Dong-Wan Kim, Enriqueta Felip, José L Pérez-Gracia, Ji-Youn Han, Julian Molina, Joo-Hang Kim, Catherine Dubois Arvis, Myung-Ju Ahn, Margarita Majem, Mary J Fidler, Gilberto de Castro Jr, Marcelo Garrido, Gregory M Lubiniecki, Yue Shentu, Ellie Im, Marisa Dolled-Filhart, Edward B Garon

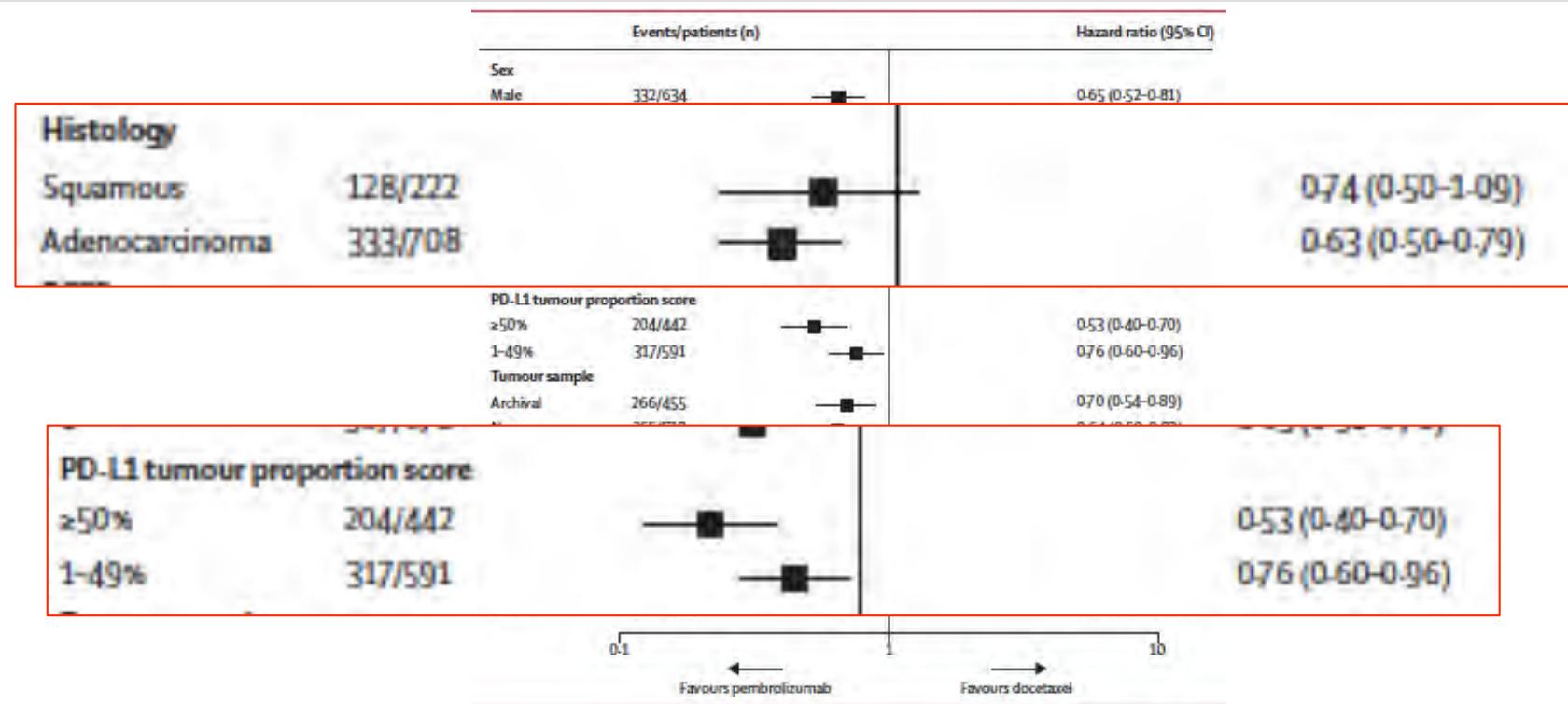
CBNPC toute histologie
L1 par sels de platine
PS: 0/1
1034 patients
PDL1 > 0%



CBNPC de stade IV L2



CBNPC de stade IV L2



CBNPC de stade IV L2



Phase III OAK study design

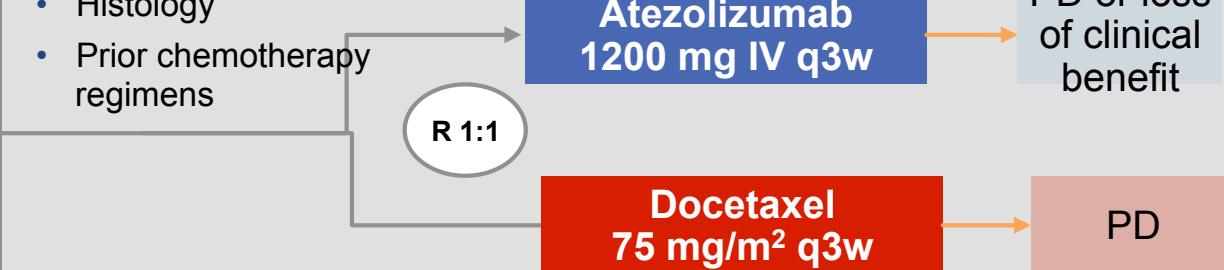
Locally Advanced or Metastatic NSCLC

- 1–2 prior lines of chemo including at least 1 platinum based
- Any PD-L1 status

N = 1,225 enrolled^a

Stratification factors

- PD-L1 expression
- Histology
- Prior chemotherapy regimens

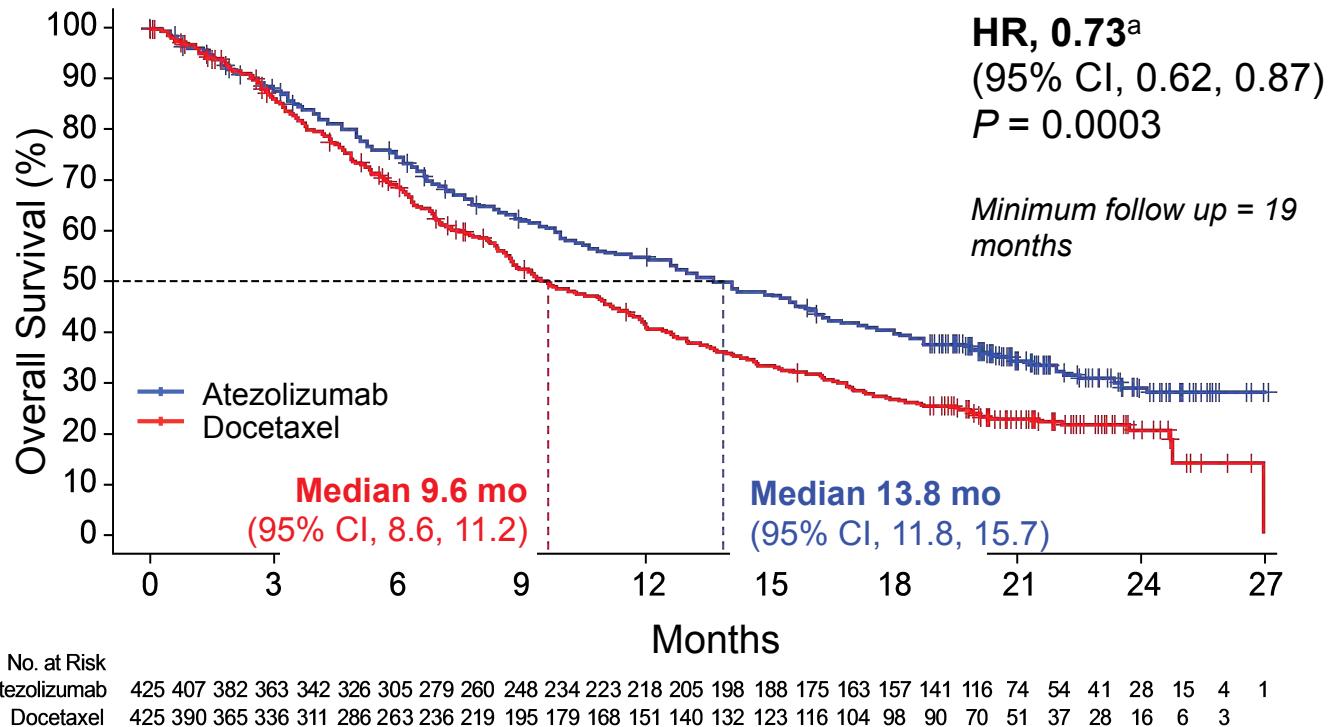


Primary Endpoints (first 850 enrolled patients):

- OS in the ITT population
- OS in patients with PD-L1 expression on ≥ 1% TC or IC

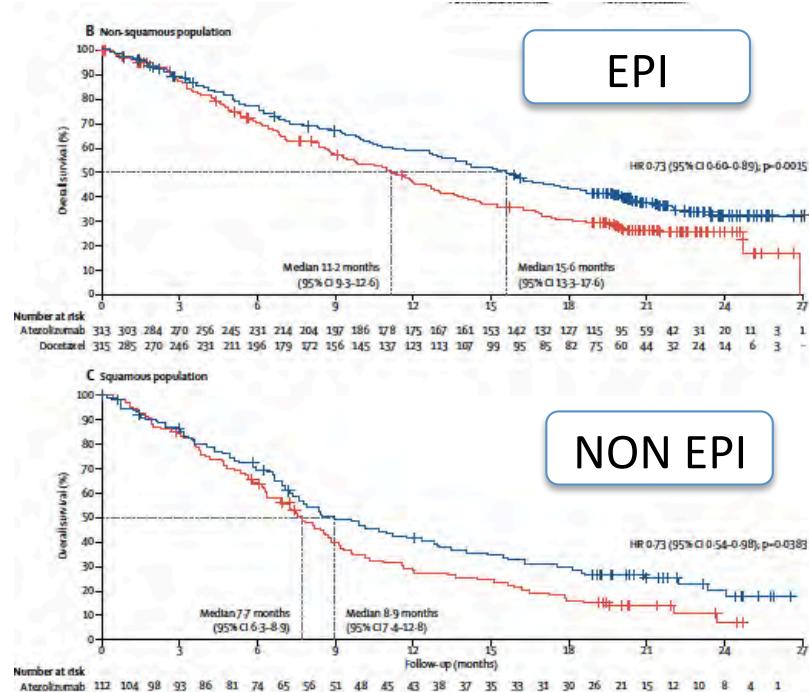
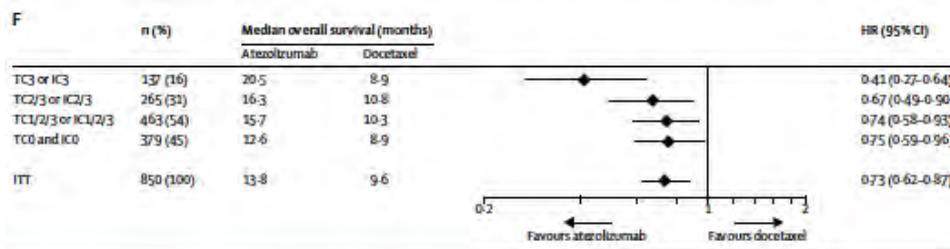
Secondary Endpoints: ORR, PFS, DoR, Safety

CBNPC de stade IV L2



CBNPC de stade IV L2

Efficacité pour tout niveau d'expression de PDL1 TC et IC



CBNPC de stade IV L2

CBNPC de stade IIIB/IV
Progression après 1 ère ligne à base de sel de platine
Analyse des patients (PD-L1+):
N=529
($\geq 1\%$ cellules tumorales)
patients:
N=792

Stratification:

- Tumeurs PD-L1+ vs PD-L1-
- Epidermoïde vs non-épidermoïde

R
1:1

Avelumab
10 mg/kg / 2 sem
PD-L1+: n=264
Tous patients: n=396

Traitement jusqu'à progression, toxicité ou retrait du consentement

Docetaxel
75 mg/m² / 3 sem
PD-L1+: n=265
Tous patients : n=396

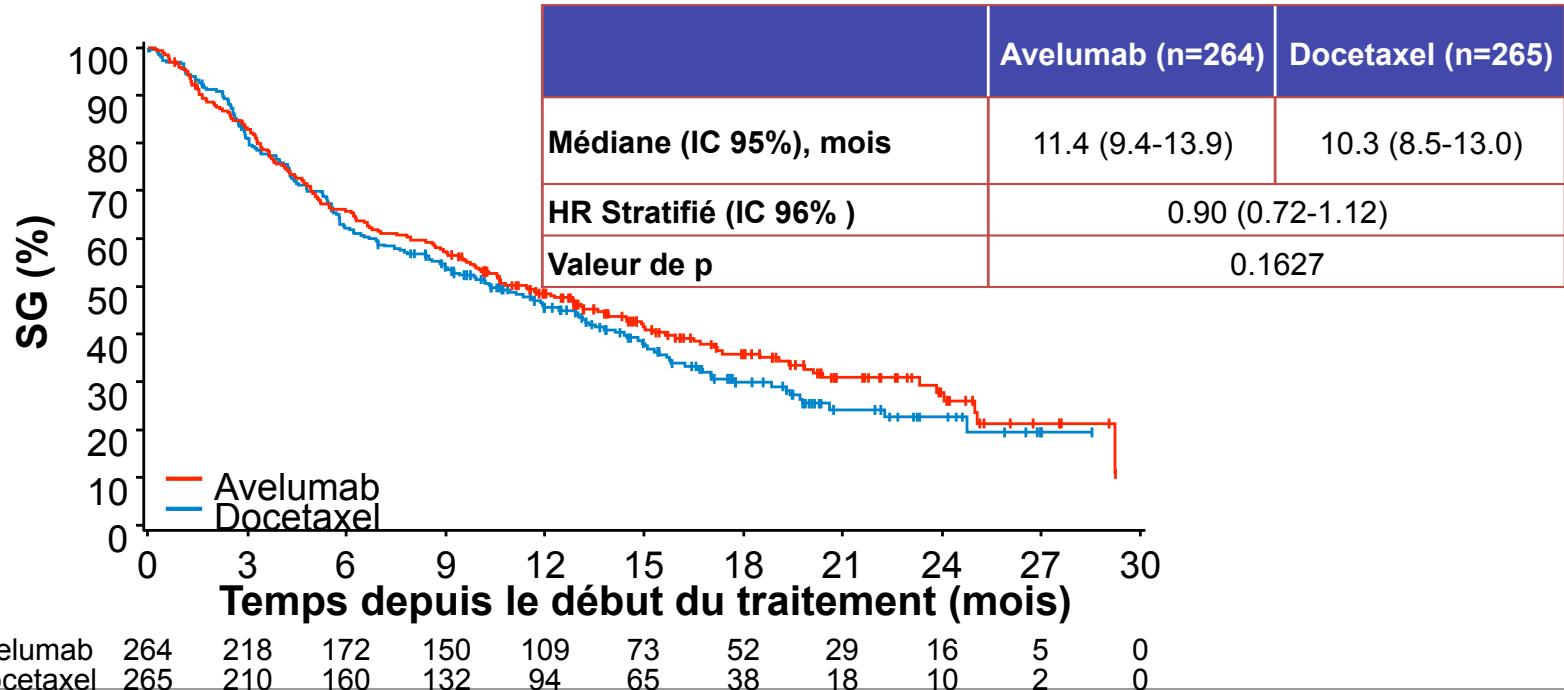
Objectif principal:
SG
(population PD-L1+)

Objectif secondaire :
SG (tous patients),
Meilleure réponse, SSP,
Qdv, Tolérance

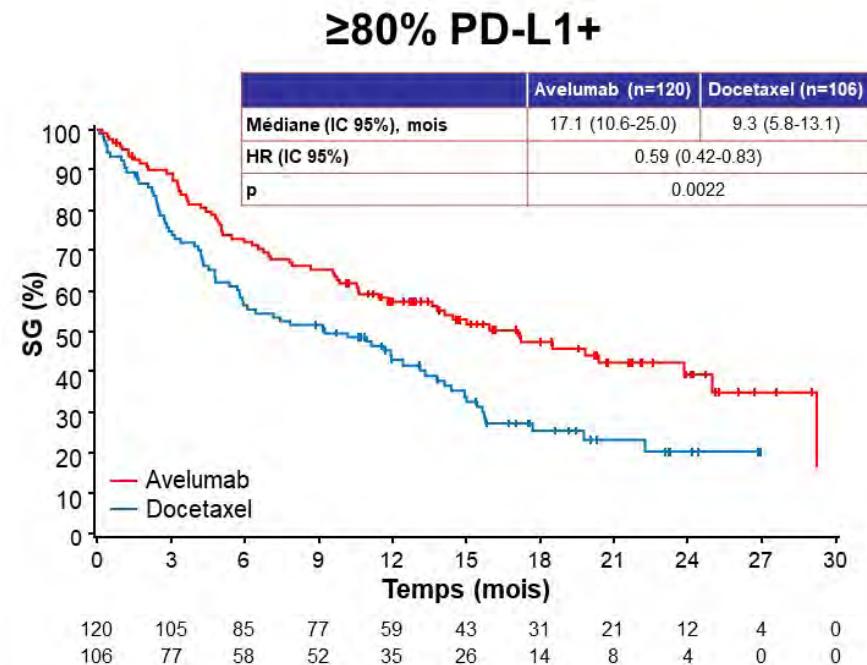
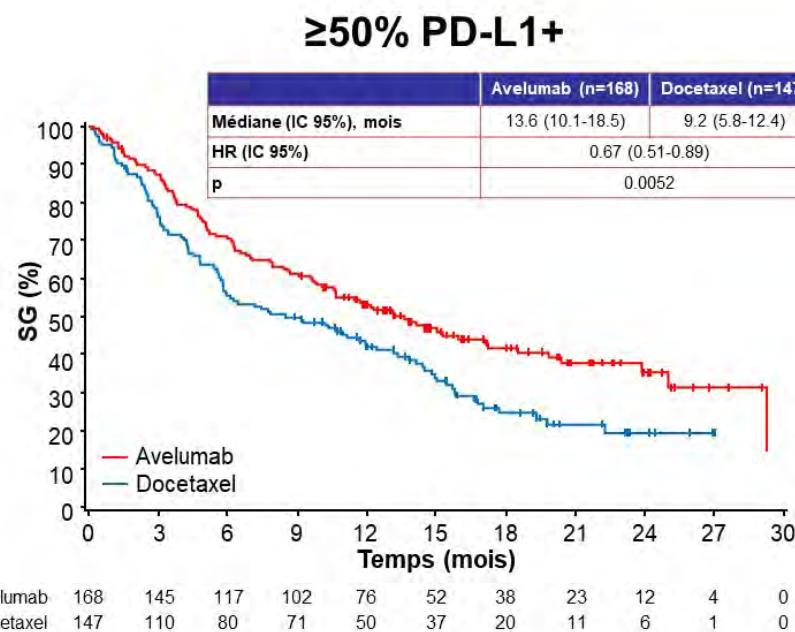


CBNPC de stade IV L2

SG dans la population PD-L1+ ($\geq 1\%$)



CBNPC de stade IV L2



Avelumab



- ▶ 10 mois MS du Docétaxel
- ▶ 36 % de cross over dans le bras Docétaxel
- ▶ Critères d'inclusion

	Docétaxel	Pemetrexed	Paclitaxel+ bevacizumab	Docétaxel+ nindétanib	Docétaxel+ ramucirumab	Erlotinib	Afatinib
Dose	75 mg/m2 J1/21	500 mg/m2 J1/21	Paclitaxel 90 mg/m2 J1,8 et 15 Bevacizumab 10 mg/kg J1 et 15 / 28 jours	Docétaxel 75 mg/m2 J1/21 Nindétanib 200mgx2/J J2-22	Docétaxel 75 mg/m2 Ramucirumab 10mg/kg J1/21	150 mg/j	40 mg/j
Phase III	Vs placebo	Vs Docétaxel	Vs Docetaxel	Vs Docétaxel	Vs Docétaxel	Vs placebo	Vs Erlotinib
Histologie	Toutes	Toutes	Adénocarcinome	Toutes	Toutes	Epidermoide	Epidermoide
Résultats	<p>N=272</p> <p>SG :9,2 vs 6 m* (HR : 0,62)</p> <p>SSP :3,5 vs 2,8 m* (HR : 0,62)</p> <p>RO : 20 vs 9 %</p> <p>Tox G3-4 : 8 vs 56%</p>	<p>N= 571</p> <p>SG :8,3 vs 7,9 m</p> <p>SSP :2,9 vs 2,9 m</p> <p>RO : 9,1 vs 8,8%</p> <p>Toxicités moins avec le Pemetrexed</p>	<p>N= 166</p> <p>SG : 9,9 vs 10,8 m</p> <p>SSP : 5,4 vs 3,9 m* (HR 0,62)</p> <p>RO : 22,5 vs 5,5 % *</p> <p>Toxicités : Moindre neutropénie Plus neuropathie</p>	<p>N=1314</p> <p>SG 12,6 vs 10,3 * (ADK) (HR 0,83)</p> <p>SSP 3,7 vs 2,4 m* (HR 0,83)</p> <p>RO : 4,4 vs 3,3 %</p> <p>Toxicités: augmentées avec nindétanib</p>	<p>N= 1253</p> <p>SG 10,5 vs 9,1 m* (HR 0,86)</p> <p>SSP :3,4 vs 2,7 m* (HR :0,79)</p> <p>RO : 23 vs 14% *</p> <p>Toxicités : augmentation neutropénie</p>	<p>N= 731</p> <p>SG : 6,7 vs 4,7 m* (HR :0,70)</p> <p>SSP :2,2 vs 1,8 m* (HR :0,61)</p> <p>RO : 8, 9 vs 0,7 %*</p> <p>Toxicités : attendues avec erlotinib</p>	<p>N=795</p> <p>SG : 7,9 vs 6,8 m* (HR 0,81)</p> <p>SSP: 2,6 vs 1,9 m* (HR : 0,81)</p> <p>RO : 6 vs 3%</p> <p>Toxicités : identiques</p>
Commentaire		Etude de non infériorité	En 2 ^o ou 3 ^o ligne. Cross over autorisé 1 ^o ligne avec bévacizumab autorisée	Pas de remboursement dans cette indication	Pas de remboursement dans cette indication		AMM obtenu mais pas de remboursement dans cette indication

CBNPC de stade IV L2



	Nivolumab	Pembrolizumab	Atézolizumab	Durvalumab	Avélumab
Type d'anticorps	Anti PD1 IgG4	Anti PD1 IgG4	Anti PDL1 IgG1 modifiée	Anti PDL1 IgG1 modifiée	Anti PDL1 IgG1
Dose recommandée (CBNPC)	3 mg/kg / 14 j 240 mg / 14 j	2 mg/kg / 21 j 200 mg / 21 j	1200 mg / 21 j	10 mg/kg / 14 j (Adjuvant stade III)	10 mg/kg / 14 j
Test expression PDL1	Dako 28-8	Dako 22C3	Ventana SP142	Ventana SP 263	Dako 73-10

Les Questions ???



IO en 2° ligne ou en 3° ligne ?



Y a t'il une différence entre les IO??

IMMUNOTHERAPIE : L2 OU L x ?



Exclusive systemic tt	N=319 (75%)		
Single agent chemotherapy	n=210 (49 %)	Docetaxel	61 (14%)
		Gemcitabine	64 (15%)
		Paclitacel +/- bevacizumab	38 (9%)
		Vinorelbine	24 (6%)
		Pemetrexed	20 (5%)
		Other	3 (1%)
Platin-based doublet	n=35 (8%)	Platin-Paclitaxel	21 (5%)
		Other	14 (3%)
Targeted therapy	n=57 (13%)	Erlotinib	43 (10%)
		Other	14 (3%)
Nivolumab rechallenge	n=15 (4%)		
Other/unknown systemic tt	n=2 (0.5%)		
Surgery +/- radiotherapy +/- systemic tt	N=100 (24%)		
Unknown tt	N=7 (2%)		

9371 - N. Girard et al.

IFCT - 1502 CLINIVO: Real - life experience with nivolumab in 600 patients (pts) with advanced Non - Small Cell Lung Cancer (NSCLC).

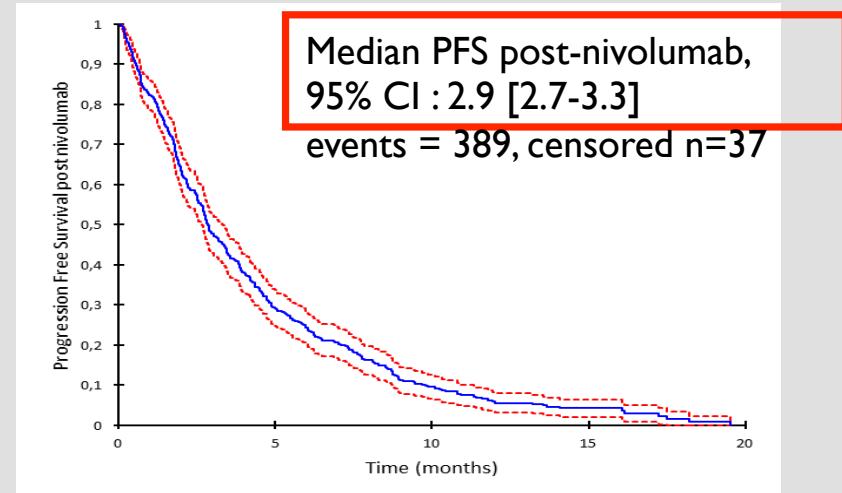
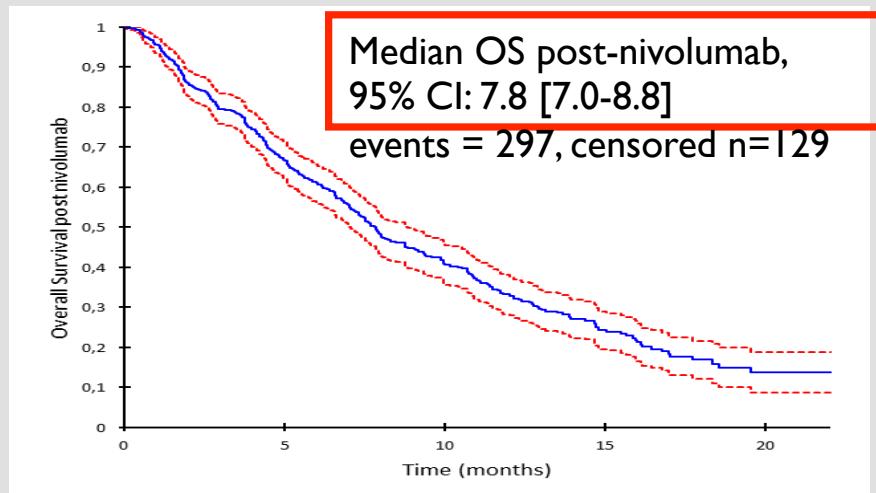


Université Claude Bernard Lyon 1



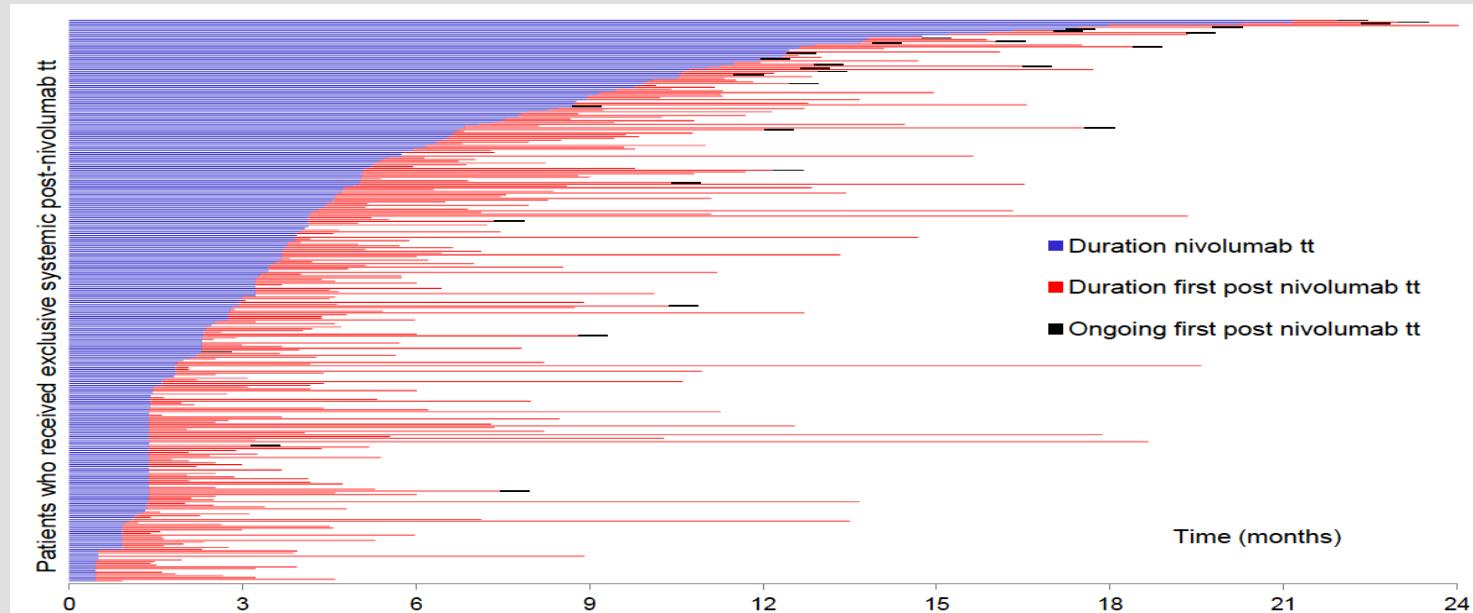
IMMUNOTHERAPIE : L2 OU L x ?

- Best response to first post-nivolumab systemic tt (n=319) was: ORR=16.2 %; SD=42.3%; PD=41.5%.



IMMUNOTHERAPIE : L2 OU L x??

Duration of nivolumab and first post-nivolumab treatment



CBNPC de stade IV



NOMBREUSES REVUES SYSTEMATIQUES ET « META-ANALYSES »

- | | |
|------------------------|--------------------------|
| N TOMOHIRO et al | The Oncologist 2017 |
| PM ELLIS et al | Clin Lung Cancer 2017 |
| M KHAN et al | Medicine 2018 |
| F PASSIGLIA et al | Int J Cancer 2018 |
| P CREQUIT et al | BMC Médecine 2017 |
| X ARMOIRY et al | Plos One 2018 |

Table 1. Characteristics of included studies.

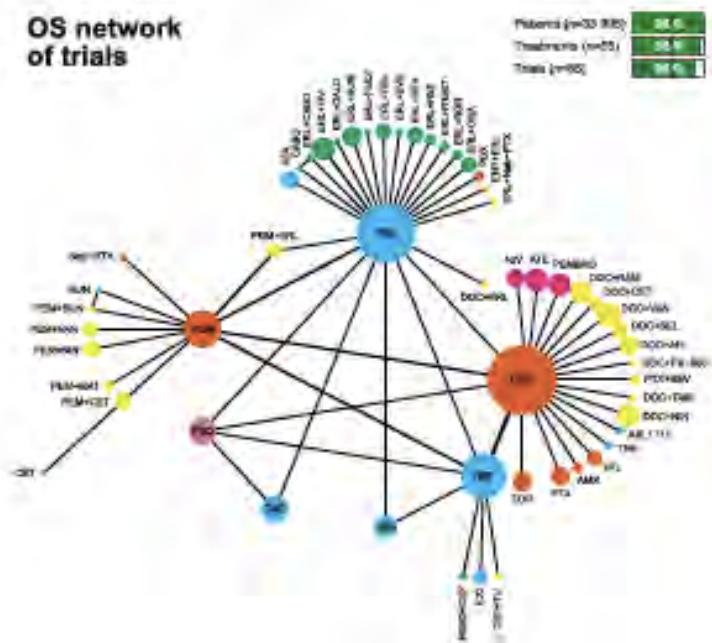
Variables variables stated	REVIEWS		LUME-LUNG 1		CHECKMATE-017		CHECKMATE-037		Rationale		KEYNOTE-048		IMPROVE		TATTOO-		ISMC		Race-Lung 8		Kwiatkowski et al. (2018)		
	RAM + SOC (n = 626)	PBO + SOC (n = 625)	SOC + SOC (n = 625)	PBO + SOC (n = 625)	NIV (n = 335)	DOC (n = 337)	NIV (n = 293)	DOC (n = 296)	PEMB (n = 285)	DOC (n = 280)	Pembrolizumab (n = 344)	DOC (n = 343)	ATEZ (n = 340)	DOC (n = 345)	ERL (n = 386)	DOC (n = 385)	ATEZ (n = 421)	DOC (n = 420)	AFA (n = 396)	ERL (n = 397)	PEMB (n = 346)	ERL (n = 344)	
Age, years (median; range)	62 (21–85)	62 (21–86)	62 (33–87)	62 (34–86)	62 (39–85)	62 (42–84)	61 (21–85)	61 (21–85)	59 (21–85)	57 (28–87)	60 (54) 48 (46)	62 (56–69)	62 (42–82)	62 (46–84)	62 (35–87)	62 (34–82)	62 (34–83)	62 (33–86)	62 (34–84)	62 (33–86)	62 (32–85)	62 (31–84)	
Male sex	494 (77)	493 (76)	476 (73)	476 (73)	442 (62)	477 (73)	334 (32)	346 (32)	344 (32)	323 (29)	213 (62)	269 (68)	85 (62)	76 (73)	77 (73)	73 (68)	382 (63)	259 (65)	315 (64)	321 (63)	138 (13)	135 (13)	
White	526 (84)	509 (83)	332 (83)	330 (80)	322 (86)	336 (83)	267 (73)	268 (72)	268 (72)	264 (72)	264 (72)	259 (73)	268 (85)	194 (79)	186 (78)	194 (79)	186 (78)	312 (78)	311 (78)	269 (78)	269 (78)		
Asian	74 (12)	88 (14)	100 (18)	100 (18)	42	41 (1)	2 (1)	9 (3)	8 (3)	—	73 (21)	70 (21)	268 (11)	268 (11)	8 (1)	8 (1)	85 (22)	86 (22)	86 (22)	86 (22)	269 (1)	269 (1)	
Black	87 (14)	89 (14)	41 (1)	3 (1)	8 (1)	2 (1)	7 (2)	9 (2)	—	—	13 (4)	7 (2)	268 (1)	268 (1)	0	0	—	—	268 (1)	268 (1)	269 (1)	269 (1)	
25–50	267 (40)	259 (40)	145 (29)	149 (29)	23 (20)	35 (27)	44 (29)	45 (30)	45 (29)	45 (29)	412 (100)	418 (94)	46 (37)	45 (32)	52 (48)	53 (48)	255 (36)	249 (36)	126 (32)	124 (34)	37 (22.3)	40 (20.5)	
55–64	429 (67)	429 (68)	467 (74)	479 (74)	186 (79)	196 (79)	268 (77)	268 (77)	268 (77)	268 (77)	329 (67)	324 (69)	96 (68)	97 (68)	68 (64)	68 (64)	226 (64)	245 (62)	269 (66)	262 (64)	48 (34)	48 (32)	
External beam radiotherapy	108 (18)	445 (77)	496 (75)	498 (76)	131 (48)	129 (98)	231 (79)	227 (78)	264	264	279 (68)	268 (78)	817 (18)	133 (88)	90 (63)	89 (73)	343 (88)	513 (88)	641 (71)	462 (62)	128 (12)	124 (7.7)	
Chemotherapy	380 (67)	181 (23)	185 (23)	184 (24)	69 (27)	7 (2)	58 (26)	69 (23)	—	—	63 (18)	62 (20)	27 (29)	29 (28)	19 (17)	19 (27)	44 (28)	32 (17)	26 (7)	18 (15)	24 (18.8)	29 (17.3)	
Stage IIB or metastasis	0	0	148 (23)	148 (23)	29 (13)	13 (13)	38 (17)	38 (18)	71 (25)	71 (25)	—	—	—	—	—	—	—	—	—	—	—	—	
Stage IV or metastasis	628 (100)	625 (100)	399 (84)	406 (82)	180 (79)	182 (82)	272 (79)	266 (82)	312	310	412 (100)	418 (94)	46 (37)	45 (32)	52 (48)	53 (48)	255 (36)	249 (36)	126 (32)	124 (34)	37 (22.3)	40 (20.5)	
None	460 (74)	467 (72)	347 (53)	352 (53)	9	6	292 (60)	290 (60)	184	182	346 (78)	340 (78)	95 (64)	95 (64)	78 (17.5)	87 (17.5)	183 (27)	195 (27)	17 (1.6)	17 (1.6)	17 (1.6)	17 (1.6)	
Supplementary radiotherapy	157 (23)	171 (27)	276 (42)	279 (42)	1,934 (489)	837 (386)	—	—	78 (21.6)	81 (21.6)	78 (22.3)	66 (19)	49 (34)	48 (34)	21 (12.6)	29 (12.3)	112 (28)	113 (28)	17 (1.6)	17 (1.6)	17 (1.6)	17 (1.6)	
Prior platinum-based chemotherapy	627 (98)	632 (99)	628 (97)	636 (98)	457 (100)	458 (100)	292 (98)	289 (100)	283 (98)	283 (98)	346 (98)	346 (98)	346 (98)	346 (98)	919 (100)	919 (100)	425 (100)	425 (100)	766 (100)	766 (100)	766 (100)	766 (100)	
First-line bevacizumab	58 (14)	93 (15)	27 (10)	23 (10)	1 (1)	2 (1)	—	—	—	—	—	—	—	—	—	—	298	302	302	302	302	302	
Prior immunotherapy	133 (21)	143 (23)	324	324	324	324	322 (62)	311 (38)	324	324	—	—	—	—	144 (100)	143 (100)	109 (100)	109 (100)	206	206	206	206	
Previous treatment	153 (24)	152 (24)	554	554	64 (100)	64 (100)	—	—	79 (23.8)	80 (23.8)	—	—	—	—	506	506	9 (10)	9 (10)	206	206	206	206	
First to third line	207 (31)	197 (32)	324	324	324	324	—	—	—	—	324	324	293 (30)	294 (30)	259	259	89 (100)	89 (100)	110 (75)	109 (75)	206	206	
EGFR mutation	11 (2)	16 (3)	348	348	504	504	44 (21)	58 (21)	—	—	28 (18)	28 (18)	114 (62)	84 (62)	—	—	42 (100)	48 (100)	206	206	11 (2)	11 (2)	
Unknowns on metastasis	400 (100)	400 (100)	609 (100)	609 (100)	1,031 (100)	817 (100)	292 (100)	289 (100)	285 (100)	286 (100)	243 (17)	253 (18)	97 (62)	96 (62)	1,024 (100)	1,024 (100)	792 (100)	792 (100)	796 (100)	796 (100)	796 (100)	796 (100)	
1 prior therapy	628 (100)	625 (100)	609 (100)	609 (100)	1,031 (100)	817 (100)	292 (100)	289 (100)	285 (100)	286 (100)	243 (17)	253 (18)	97 (62)	96 (62)	1,024 (100)	1,024 (100)	792 (100)	792 (100)	796 (100)	796 (100)	796 (100)	796 (100)	
2 prior therapies	0	0	0	0	0	0	0	0	0	0	—	—	—	—	—	—	100%	100%	0	0	100%	100%	

<https://doi.org/10.1371/journal.pone.0199575.t001>

Armoiry X, Tsirtsadze A, Connock M, Royle P, Melendez-Torres GJ, et al. (2018) Comparative efficacy and safety of licensed treatments for previously treated non-small cell lung cancer: A systematic review and network meta-analysis. PLOS ONE 13(7): e0199575. <https://doi.org/10.1371/journal.pone.0199575>

CBNPC de stade IV L2

OS network
of trials



SAE network
of trials

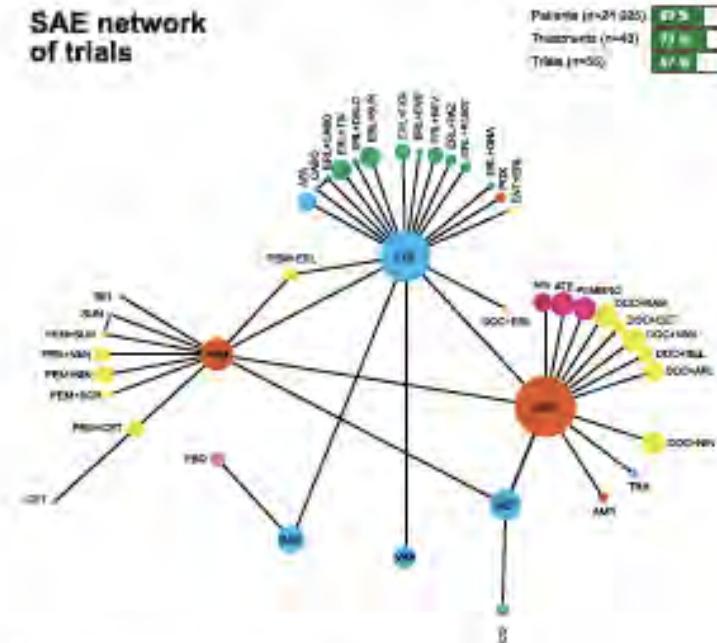


Fig. 3 (Cas lésion(s) en tout nombre)

CBNPC de stade IV L2

Efficacité

Docetaxel	0.53 (0.26-1.09)	0.45 (0.19-1.16)	0.76 (0.56-1.06)	1.02 (0.68-1.47)	0.97 (0.59-1.59)	1.03 (0.72-1.48)
1.03 (0.92-1.17)	Pemetrexed	0.85 (0.44-1.71)	1.43 (0.69-2.88)	1.90 (0.80-4.30)	1.82 (0.75-4.36)	1.94 (0.67-4.33)
1.01 (0.89-1.16)	0.98 (0.84-1.13)	5.1 (0.55-4.10)	1.67 (0.55-4.10)	2.23 (0.81-5.83)	2.14 (0.74-5.91)	2.26 (0.83-5.85)
1.04 (0.94-1.14)	1.00 (0.88-1.14)	1.02 (0.90-1.16)	softenib	1.34 (0.79-2.14)	1.28 (0.70-2.27)	1.37 (0.83-2.14)
0.69 (0.56-0.83)	0.67 (0.52-0.83)	0.68 (0.53-0.86)	0.66 (0.53-0.83)	fluorouracil	0.95 (0.52-1.81)	1.01 (0.61-1.75)
0.71 (0.56-0.90)	0.69 (0.53-0.89)	0.70 (0.54-0.92)	0.68 (0.53-0.88)	1.03 (0.77-1.40)	Pembrolizumab	1.06 (0.58-1.96)
0.73 (0.62-0.87)	0.71 (0.57-0.87)	0.72 (0.58-0.88)	0.70 (0.58-0.85)	1.06 (0.82-1.37)	1.03 (0.77-1.36)	Fluorouracil

Effets secondaires

CBNPC de stade IV L2



SSP

Docetaxel	1.10 (0.72-1.73)	1.24 (0.76-2.08)	1.45 (0.97-2.15)	2.02 (0.98-4.27)	2.15 (0.80-5.67)	1.01 (0.49-2.07)
1.04 (0.87-1.24)	Pemetrexed	1.13 (0.69-1.83)	1.32 (0.82-2.03)	1.84 (0.78-4.29)	1.96 (0.65-5.54)	0.91 (0.39-2.07)
1.06 (0.87-1.29)	1.02 (0.83-1.27)	1.00 Unknown	1.17 (0.70-1.88)	1.63 (0.67-3.96)	1.74 (0.57-5.08)	0.81 (0.34-1.92)
1.03 (0.88-1.20)	0.99 (0.83-1.18)	0.97 (0.79-1.18)	0.99 Unknown	1.39 (0.61-3.29)	1.48 (0.51-4.28)	0.69 (0.31-1.59)
0.78 (0.59-1.02)	0.75 (0.54-1.03)	0.74 (0.52-1.02)	0.76 (0.55-1.03)	1.06 Unknown	1.06 (0.31-3.53)	0.50 (0.18-1.35)
0.88 (0.61-1.26)	0.85 (0.57-1.26)	0.83 (0.55-1.25)	0.85 (0.58-1.27)	1.13 (0.72-1.79)	1.13 Unknown	0.47 (0.14-1.57)
0.95 (0.73-1.23)	0.91 (0.66-1.25)	0.89 (0.64-1.23)	0.92 (0.68-1.25)	1.21 (0.83-1.79)	1.07 (0.69-1.68)	1.07 Unknown

RO



P CREQUIT et al, BMC Médecine, 2017



Université Claude Bernard Lyon 1



CBNPC de stade IV L2

Le meilleur taux de réponse
23 % vs 14 %

La meilleure survie sans progression..

Docétaxel-Ramucirumab

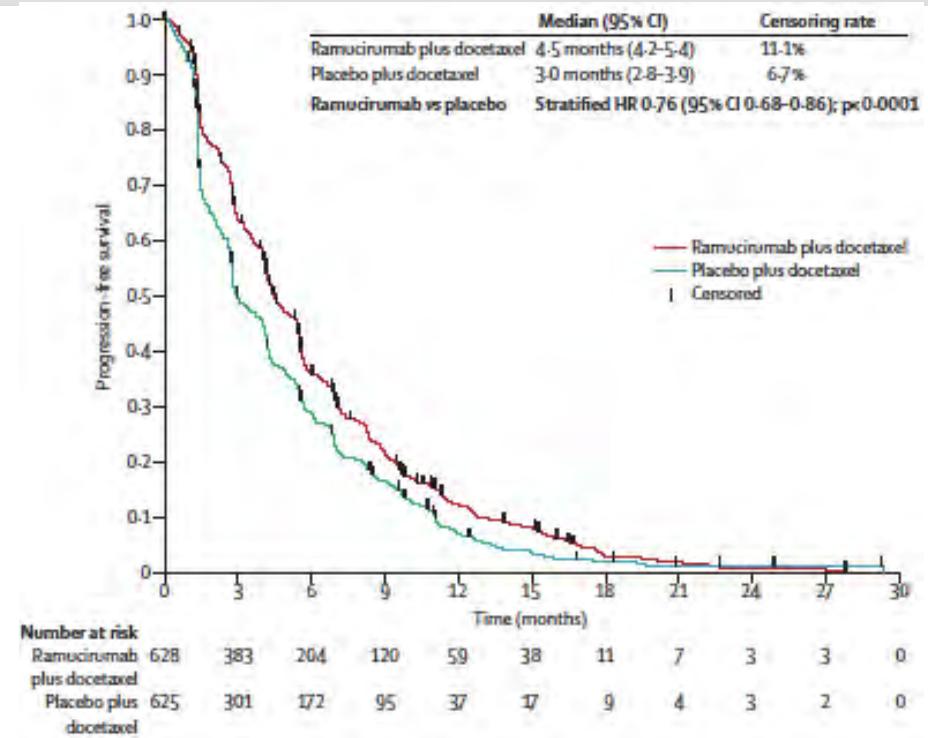
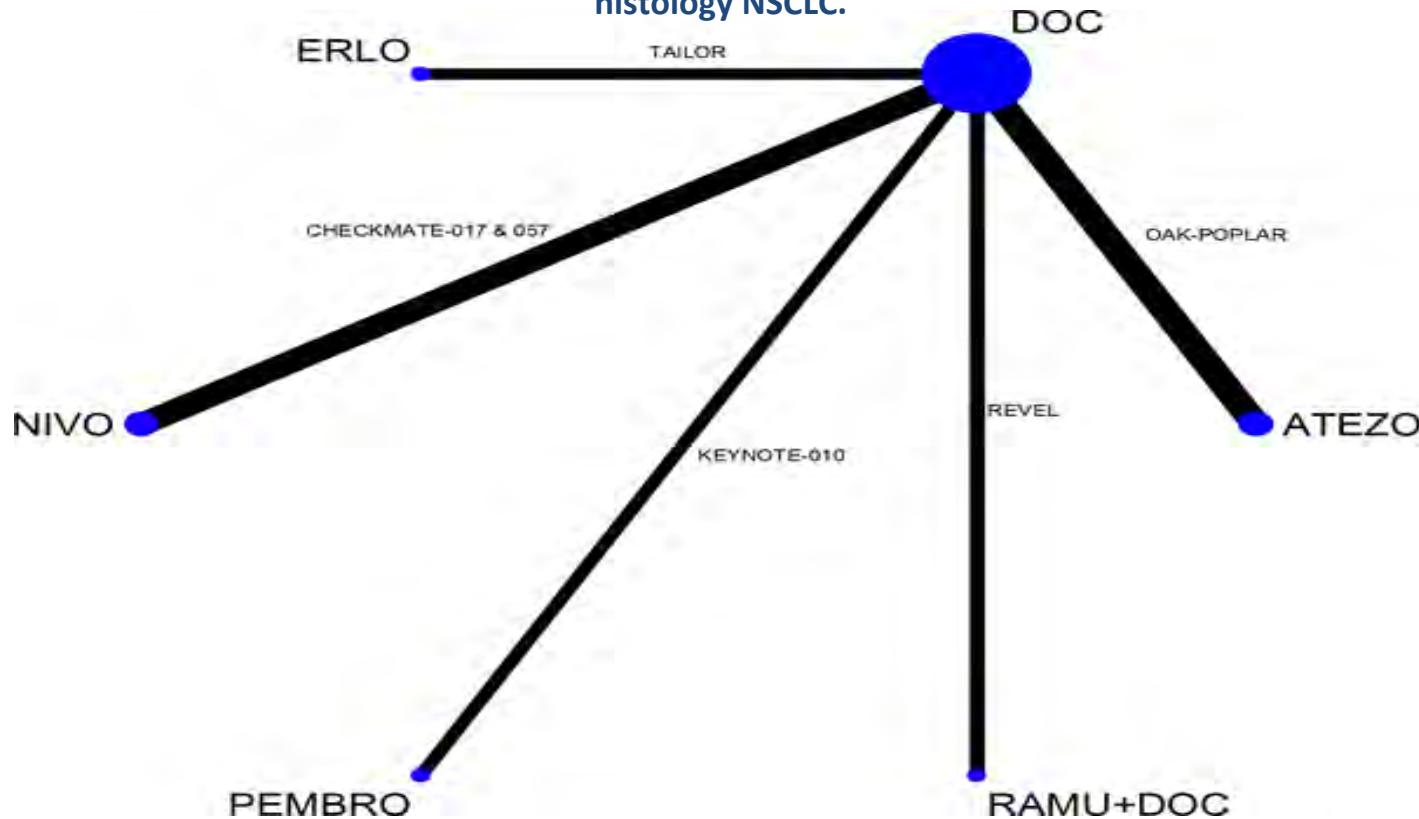
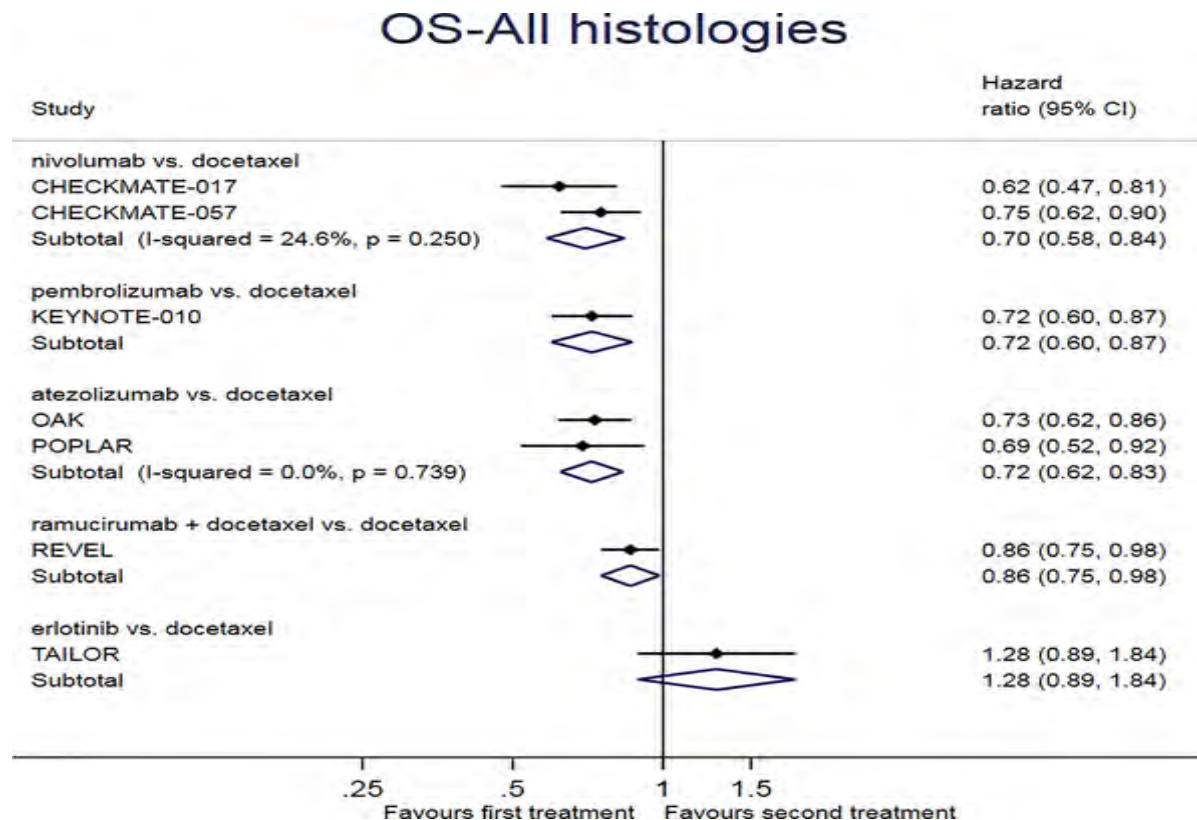


Fig 2. Network of studies comparing effectiveness (OS, PFS) and safety (grade 3–5 drug-related AE) outcomes in all-histology NSCLC.



Armoiry X, Tsirtsadze A, Connock M, Royle P, Melendez-Torres GJ, et al. (2018) Comparative efficacy and safety of licensed treatments for previously treated non-small cell lung cancer: A systematic review and network meta-analysis. PLOS ONE 13(7): e0199575. <https://doi.org/10.1371/journal.pone.0199575>
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0199575>

Fig 3. Pairwise meta-analyses, OS in all-histology NSCLC.



Armoiry X, Tsirtsadze A, Connock M, Royle P, Melendez-Torres GJ, et al. (2018) Comparative efficacy and safety of licensed treatments for previously treated non-small cell lung cancer: A systematic review and network meta-analysis. PLOS ONE 13(7): e0199575. <https://doi.org/10.1371/journal.pone.0199575>
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0199575>

Table 2. Network meta-analyses: PFS, OS, grade 3–5 AE in all-histology NSCLC.

OS comparisons (Findings are expressed as HR (95% CI), use of random-effects model.							
Drug	SUCRA	Nivo	Atezo	Pembro	Ramu+Doc	Doc	Erlo
Nivo	0.82		0.98 (0.79,1.21)	0.98 (0.77,1.25)	0.82 (0.67,1.00)	0.71 (0.61,0.82)	0.55 (0.37,0.82)
Atezo	0.77			1.00 (0.79,1.27)	0.84 (0.69,1.02)	0.72 (0.62,0.83)	0.56 (0.38,0.83)
Pembro	0.77				0.84 (0.67,1.05)	0.72 (0.60,0.87)	0.56 (0.37,0.85)
Ramu+Doc	0.42					0.86 (0.75,0.98)	0.67 (0.46,0.99)
Doc	0.18						0.78 (0.54,1.12)
Erlo	0.02						

PFS comparisons (Findings expressed as HR (95% CI), use of random-effects model.							
Drug	SUCRA	Ramu+Doc	Nivo	Pembro	Atezo	Doc	Erlo
Ramu+Doc	0.84		0.98 (0.68,1.41)	0.86 (0.58,1.29)	0.80 (0.57,1.14)	0.76 (0.58,0.99)	0.55 (0.35,0.88)
Nivo	0.81			0.88 (0.60,1.29)	0.82 (0.59,1.13)	0.77 (0.61,0.99)	0.56 (0.36,0.88)
Pembro	0.57				0.93 (0.64,1.35)	0.88 (0.65,1.18)	0.64 (0.39,1.03)
Atezo	0.45					0.95 (0.76,1.18)	0.69 (0.44,1.06)
Doc	0.31						0.72 (0.50,1.06)
Erlo	0.02						

Grade 3–5 AE comparisons (Findings are expressed as RR (95% CI), use of random-effects model.							
Drug	SUCRA	Nivo	Atezo	Pembro	Erlo	Doc	Ramu+Doc
Nivo	1		0.55 (0.38,0.79)	0.52 (0.34,0.81)	0.46 (0.29,0.72)	0.18 (0.14,0.25)	0.17 (0.12,0.23)
Atezo	0.68			0.95 (0.66,1.38)	0.83 (0.55,1.23)	0.34 (0.28,0.41)	0.31 (0.25,0.38)
Pembro	0.63				0.87 (0.54,1.39)	0.35 (0.26,0.48)	0.32 (0.23,0.44)
Erlo	0.49					0.41 (0.29,0.58)	0.37 (0.26,0.53)
Doc	0.2						0.91 (0.85,0.97)
Ramu+Doc	0						

Note: The table must be read as the drug on the column against the drug on the row. For example the PFS HR of ramucirumab+docetaxel against nivolumab is 0.98 (95%CI 0.68, 1.41).

<https://doi.org/10.1371/journal.pone.0199575.t002>

Armoiry X, Tsitsvadze A, Connock M, Royle P, Melendez-Torres GJ, et al. (2018) Comparative efficacy and safety of licensed treatments for previously treated non-small cell lung cancer: A systematic review and network meta-analysis. PLOS ONE 13(7): e0199575. <https://doi.org/10.1371/journal.pone.0199575>
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0199575>

CBNPC de stade IV L2

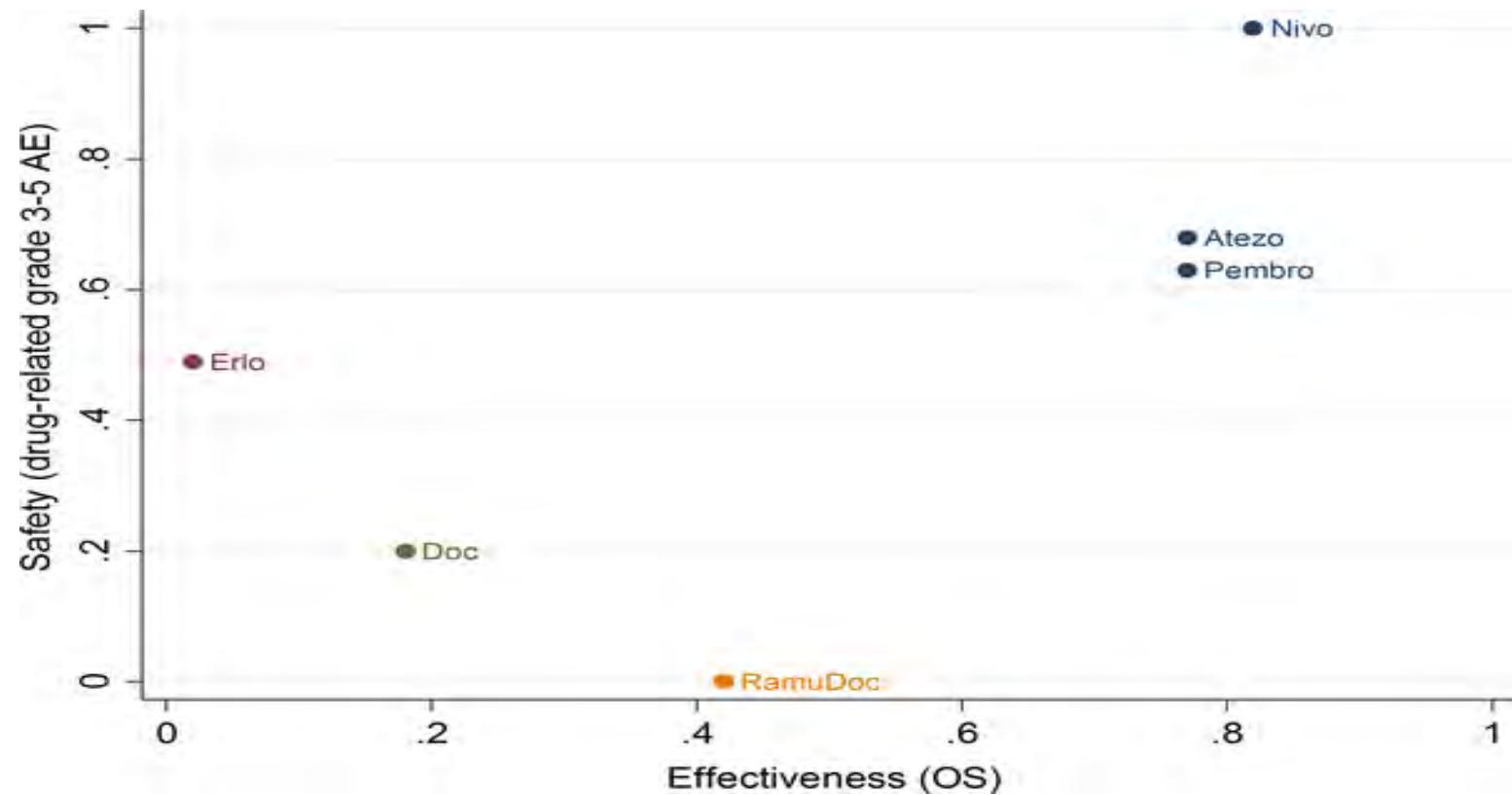


SUCRA (surface under cumulative Ranking Curve) :

Epidermoide Nivo > ? Mais faible nombre d'épi dans certaines études

Non épidermoide Nivo =Pembro =Atézo > Pem > Ninde+ Doc,= Ramu+Doc> Doc

Fig 4. Clustered ranking plot on effectiveness (OS) and safety (grade 3–5 drug-related AE) both expressed as SUCRAS.



Armoiry X, Tsartsadze A, Connock M, Royle P, Melendez-Torres GJ, et al. (2018) Comparative efficacy and safety of licensed treatments for previously treated non-small cell lung cancer: A systematic review and network meta-analysis. PLOS ONE 13(7): e0199575. <https://doi.org/10.1371/journal.pone.0199575>
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0199575>

CBNPC de stade IV L2



MOINS D'EFFETS SECONDAIRES G3-G4-G5 avec le Nivolumab vs Pembro ou Atézo???
MEME TAUX D'EFFETS SECONDAIRES G1-G5 entre les 3 IO...

BIAIS: 1 visite médicale J1 – J15 – J29 – J43 – bilan vers J 55

1 visite médicale J1 – J22 – J43 – bilan vers J 60

Importance de la surveillance médicale, notamment au début du traitement



Surveillance
Web guidée

Symptômes IMMUCARE (saisie hebdomadaire)
Dermatologie (C.H. LYON SUD)

Choix de l'établissement Choix du formulaire **Saisie du formulaire**

Evaluez chaque semaine les effets indésirables liés à votre traitement par immunothérapie. Vos réponses seront transmises à la salle de soins.

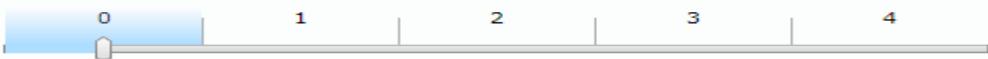
EVALUEZ VOS SYMPTOMES

- **Fatigue**

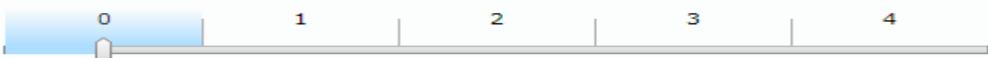

0 1 2 3

Pas de fatigue
- **Maux de tête**

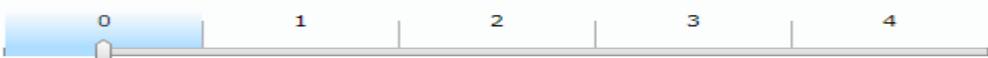

0 1 2 3

Pas de mal de tête
- **Essoufflement**


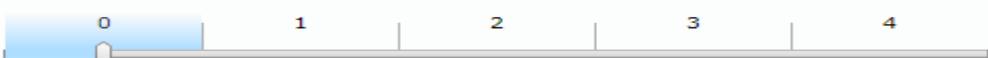
0 1 2 3 4

Pas d'essoufflement
- **Nausées, vomissements**


0 1 2 3 4

Pas de nausée ni de vomissement
- **Eruption cutanée**


0 1 2 3 4

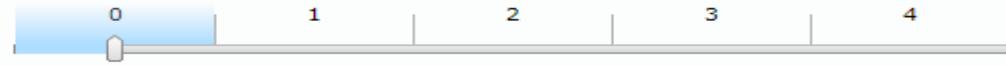
Pas d'éruption
- **Diarrhée**


0 1 2 3 4

Pas de diarrhée

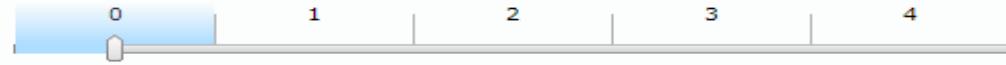
Suite

● Perte d'appétit



Pas de perte d'appétit

● Fièvre



Pas de fièvre

● Fourmillements des extrémités



Pas de fourmillement

● Douleur



Pas de douleur

● Trouble visuel



Aucun trouble visuel

● Quel est votre poids ? (kg)

● Souhaitez-vous nous signaler autre chose, être rappelé ?

En cas d'urgence, n'utilisez pas cette zone : contactez le SAMU en composant le 15.

Précédent

Valider

CBNPC de stade IV L2



Nivolumab: 1053 € les 100mg: 240 mg/14 jours: 7581,6 Euros pour 6 semaines

Pembrolizumab: 2672 € les 100 mg soit par 6 semaines 10 688 Euros

Atézolizumab??

Nivolumab 1 HJ de plus, 1 VSL, 1 bio / 6 semaines que Pembrolizumab = moins de 3100 Euros.... .

CBNPC de stade IV L2



MERCI POUR ATTENTION