

Stade III : immunothérapie de consolidation pour tous ?

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17^{ème} réunion clinico-pathologique en oncologie thoracique





CONFLITS D'INTÉRÊT

Invitations & hospitalité

LVL médical ouest,
Lilly France SAS,
Novartis Pharma SAS,
MSD France,
Boehringer Ingelheim
France, Pfizer SAS,
Chugai Pharma,
Roche SAS,
AstraZeneca

Subventions de recherche

Roche, Novartis

Interventions rémunérées / non rémunérées

MSD France,
Boehringer Ingelheim
France, AstraZeneca,
Takeda, Sanofi



CONTEXTE





CONTEXTE

EORTC- Lung Cancer Group Initiative on a consensual definition of stage III NSCLC resectability

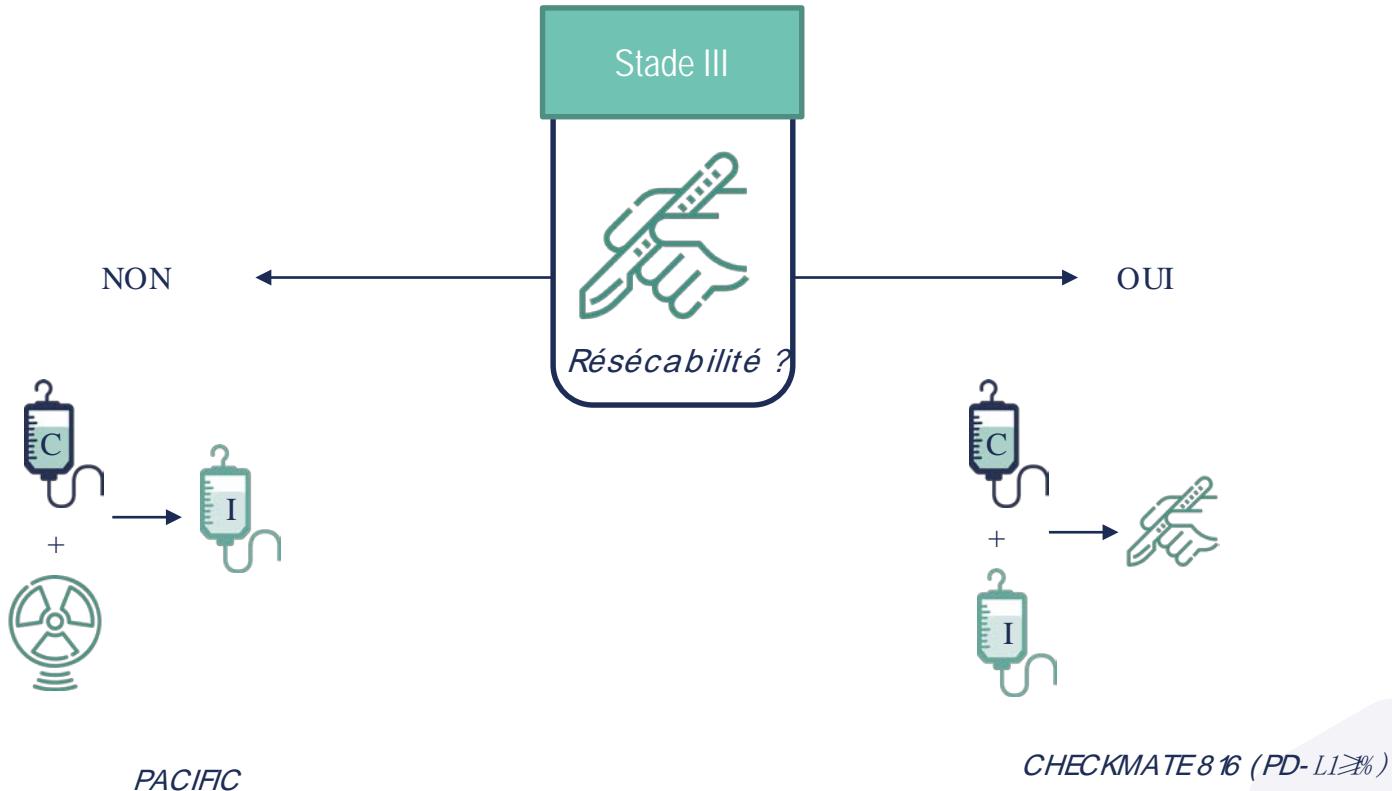
	N0	N1	N2 single (non-bulky)	N2 multi (non-bulky)	N2 Bulky\$	N2 invasive	N3
T1- T2			RESECTABLE	POTENTIALLY RESECTABLE*	?	UNRESECTABLE	UNRESECTABLE
T3 size / satellite /invasion		RESECTABLE	RESECTABLE	POTENTIALLY RESECTABLE*	UNRESECTABLE	UNRESECTABLE	UNRESECTABLE
T4 size /satellite	RESECTABLE	RESECTABLE	RESECTABLE	POTENTIALLY RESECTABLE*	UNRESECTABLE	UNRESECTABLE	UNRESECTABLE
T4 invasion	POTENTIALLY RESECTABLE	POTENTIALLY RESECTABLE	POTENTIALLY RESECTABLE	POTENTIALLY RESECTABLE*	UNRESECTABLE	UNRESECTABLE	UNRESECTABLE

* Exact number of N2 stations not defined

\$ lymph nodes with short axis diameter >2,5- 3cm

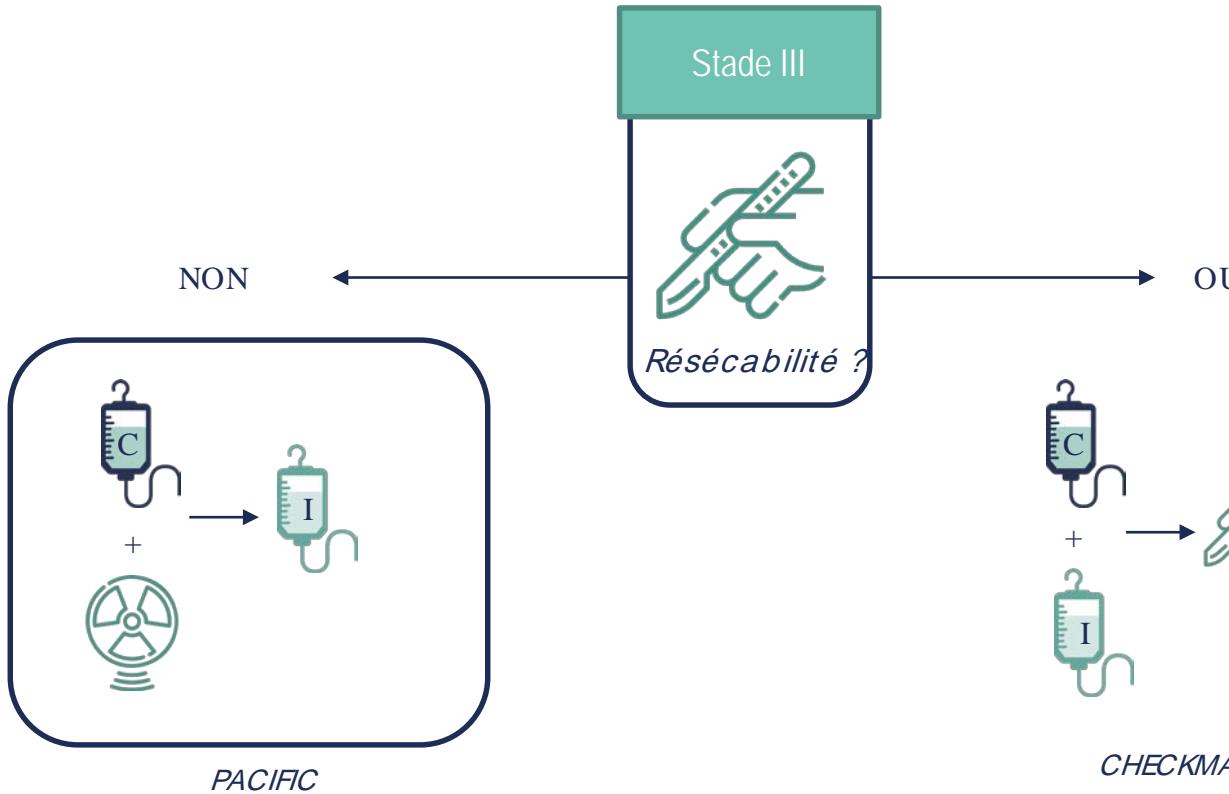


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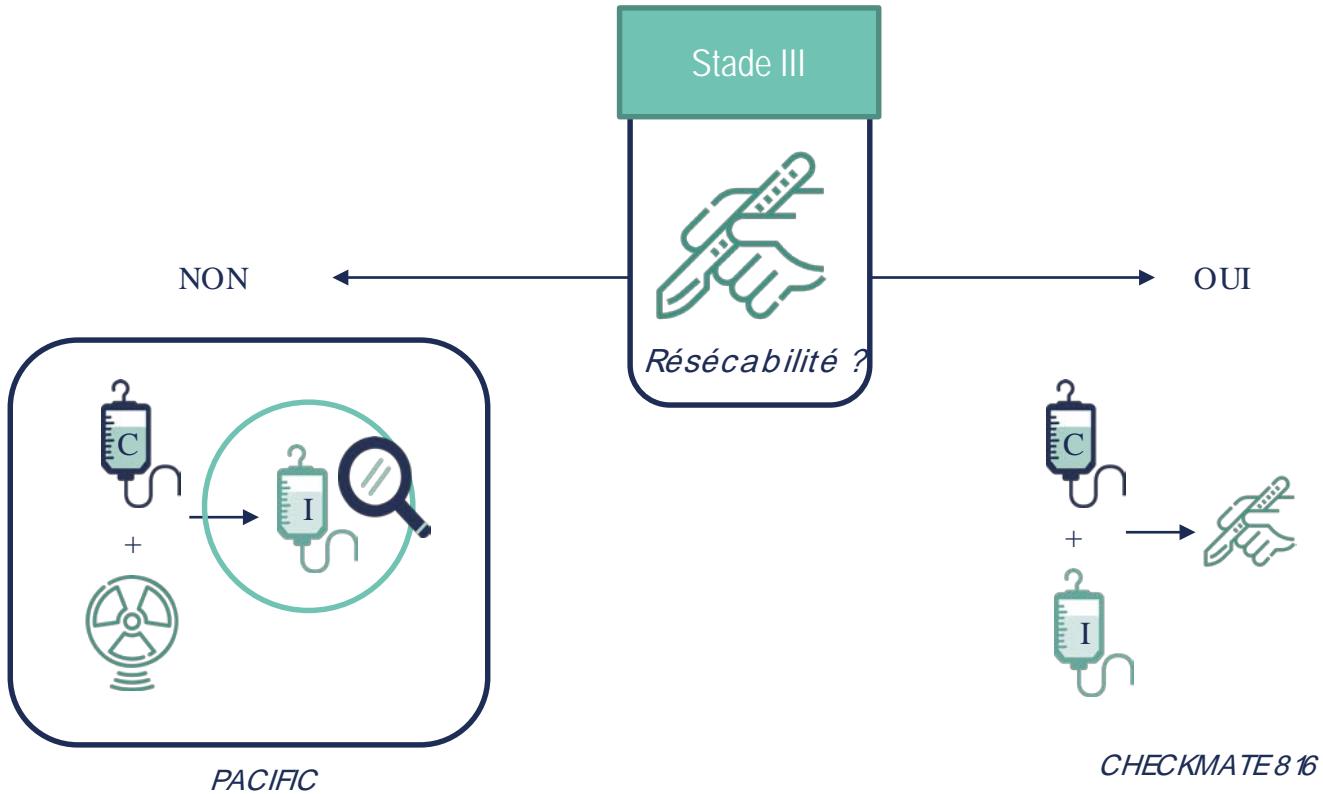


CONTEXTE





CONTEXTE



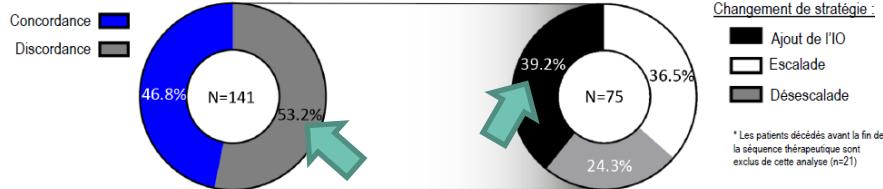


GFPC- OBSTINATE

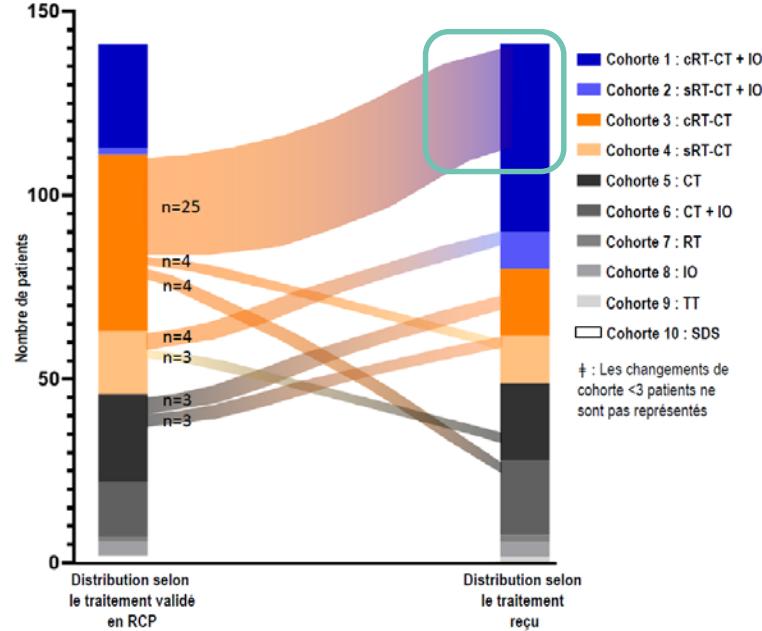
◆ Stratégie retenue en RCP vs Traitements reçus

- Etude **observationnelle** prospective multicentrique Stade III non-réséable
- Objectif principal : évaluation de la QdV
- Inclusions terminées (>150 patients dans les cohortes d'intérêt)
- Importance du suivi longitudinal des patients et de leur données de QdV

► Concordance entre la stratégie validée en RCP et le traitement reçu (n=141*)



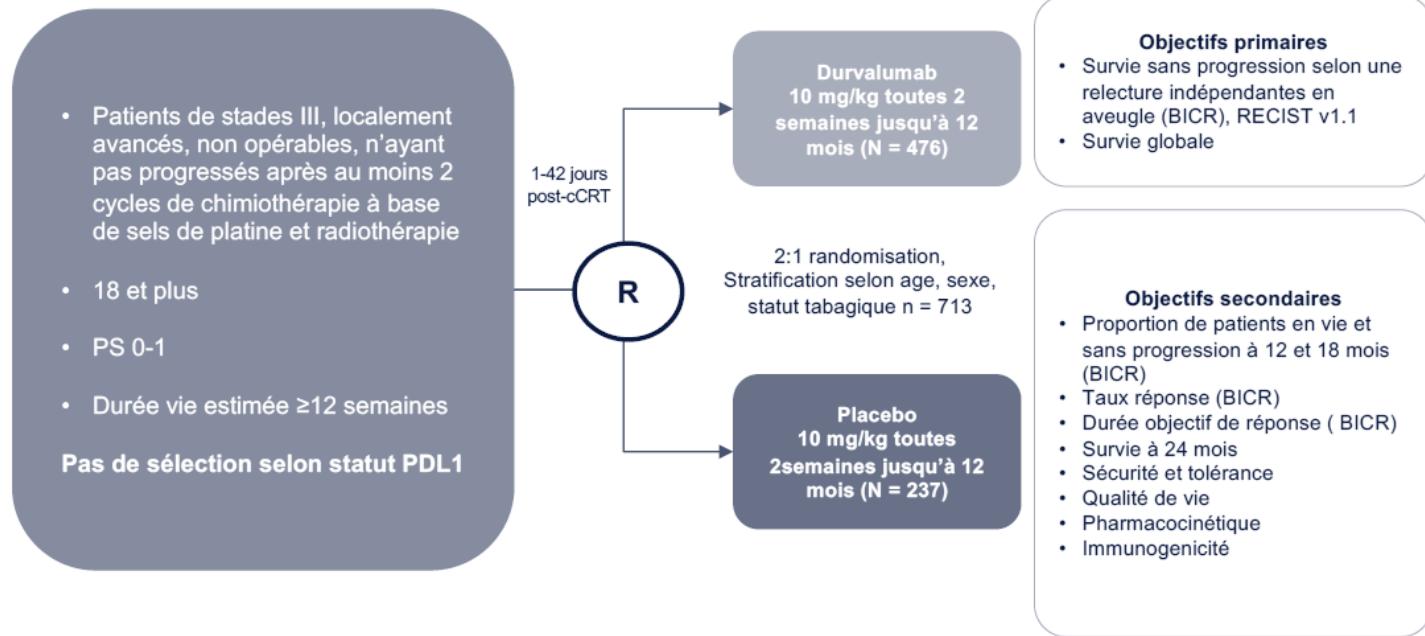
► Distribution des cohortes en fonction de la stratégie proposée en RCP et le traitement reçu : (n= 141) ‡





PACIFIC

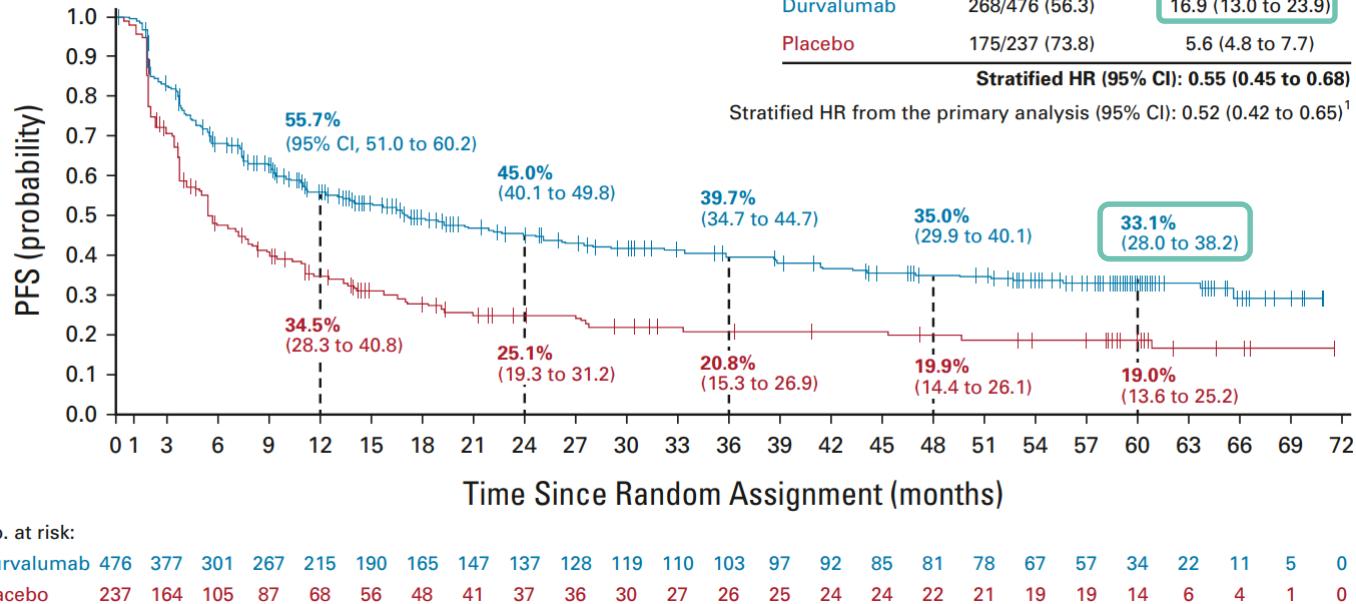
◆ Design





PACIFIC

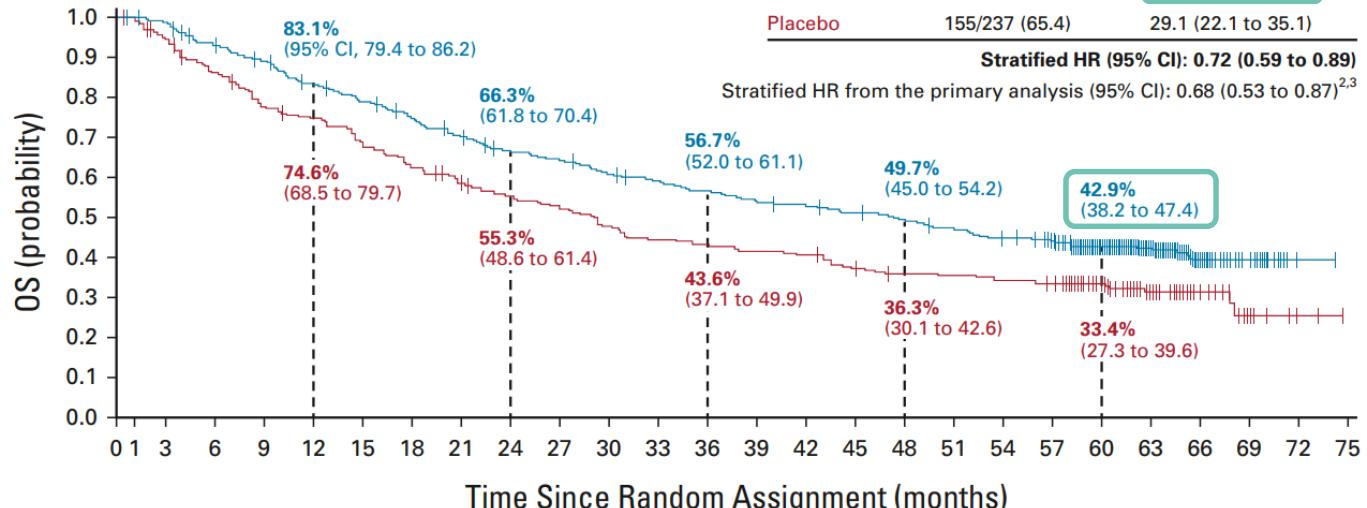
◆ PFS à 5 ans





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Survie globale à 5 ans



No. at risk:

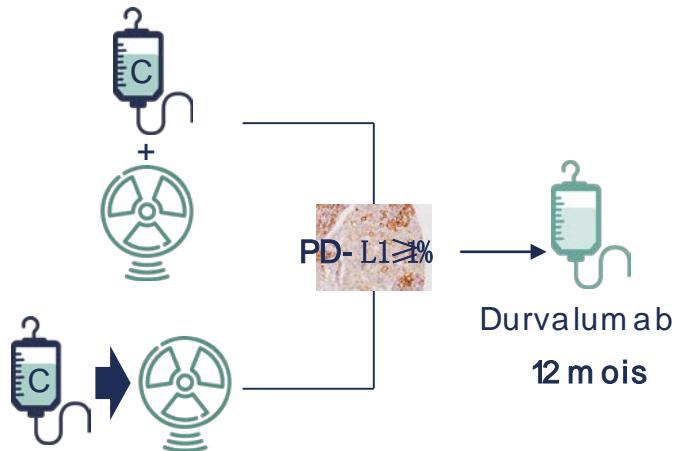
Durvalumab	476	464	431	414	385	364	343	319	298	289	273	264	252	241	236	227	218	207	196	183	134	91	40	18	2	0
Placebo	237	220	199	179	171	156	143	133	123	116	107	99	97	93	91	83	78	77	74	72	56	33	16	7	2	0



PACIFIC

AMM européenne du durvalumab ou IMFINZI®

« En monothérapie pour le traitement du cancer bronchique non à petites cellules (CBNPC) localement avancé, non opérable, chez les adultes dont les tumeurs expriment PD-L1 ≥ 1% des cellules tumorales et dont la maladie n'a pas progressé après une chimioradiothérapie à base de platine »

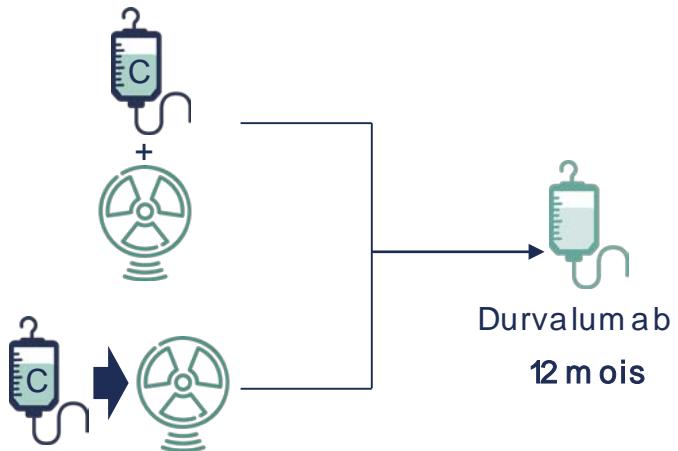




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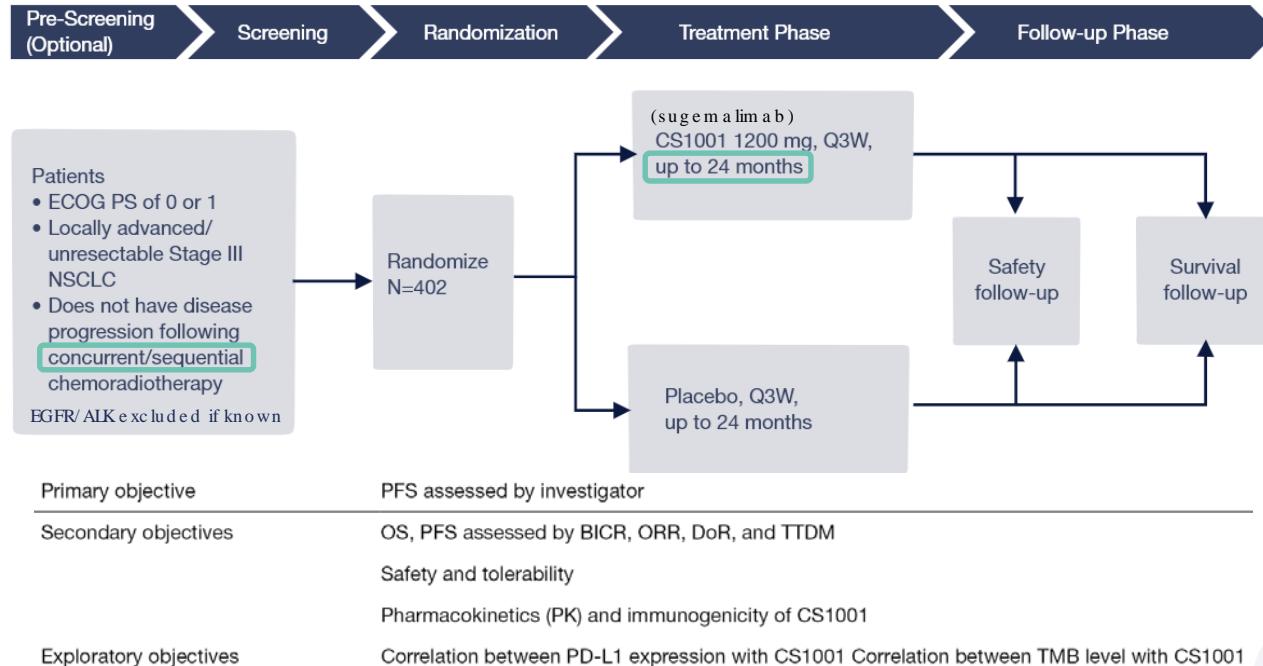


« Traitement des patients adultes atteints d'un cancer bronchique non à petites cellules (CBNPC) localement avancé non opérable et dont la maladie n'a pas progressé après une chimioradiothérapie à base de platine, en cas d'expression tumorale de PD-L1 < 1% ou dans le cas où ce statut est recherché mais le résultat de ce marqueur n'est pas exploitable (statut inconnu). »



GEMSTONE-301

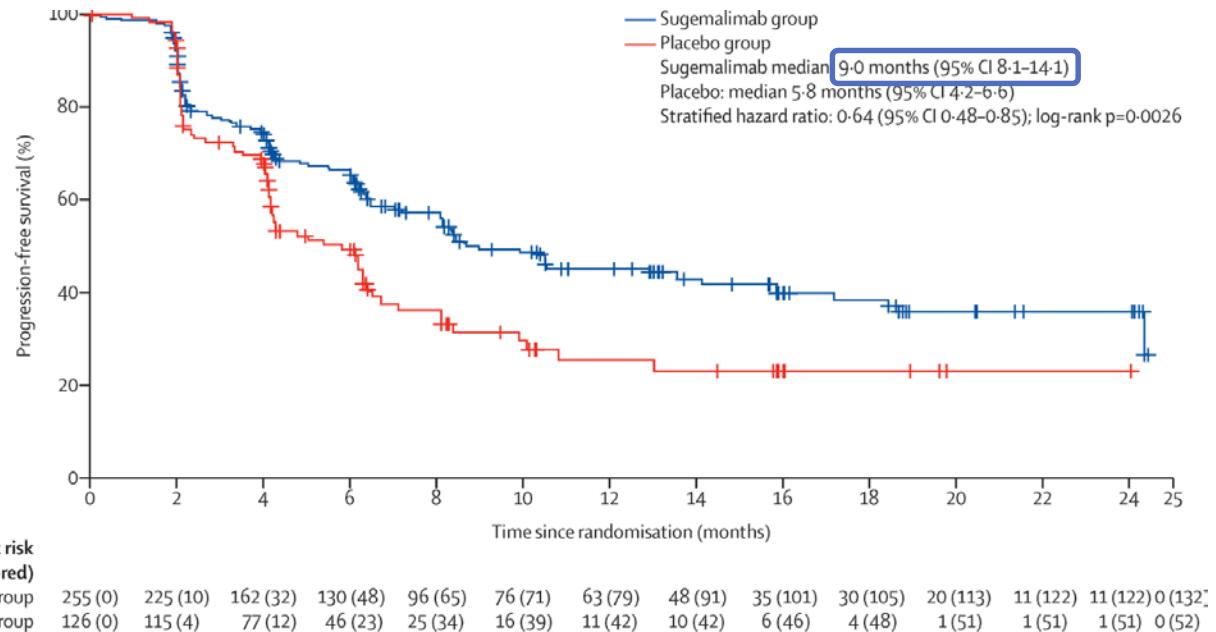
◆ Design





GEMSTONE-301

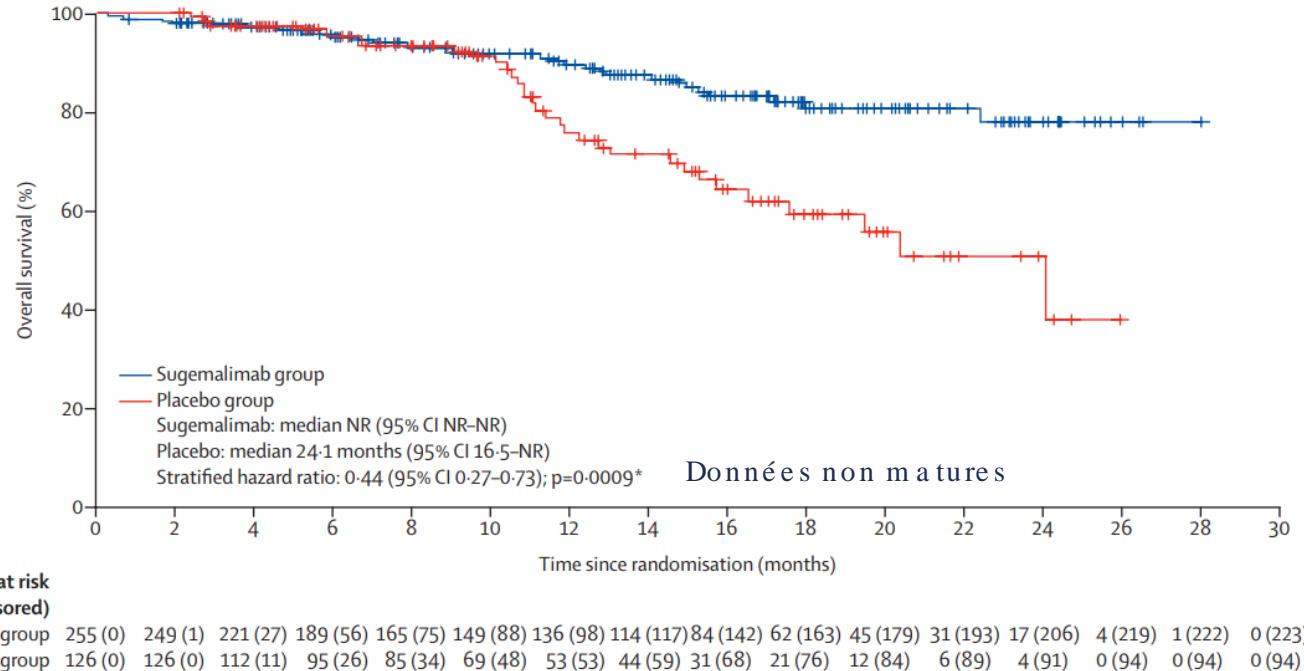
◆ SSP (BICR)





GEMSTONE-301

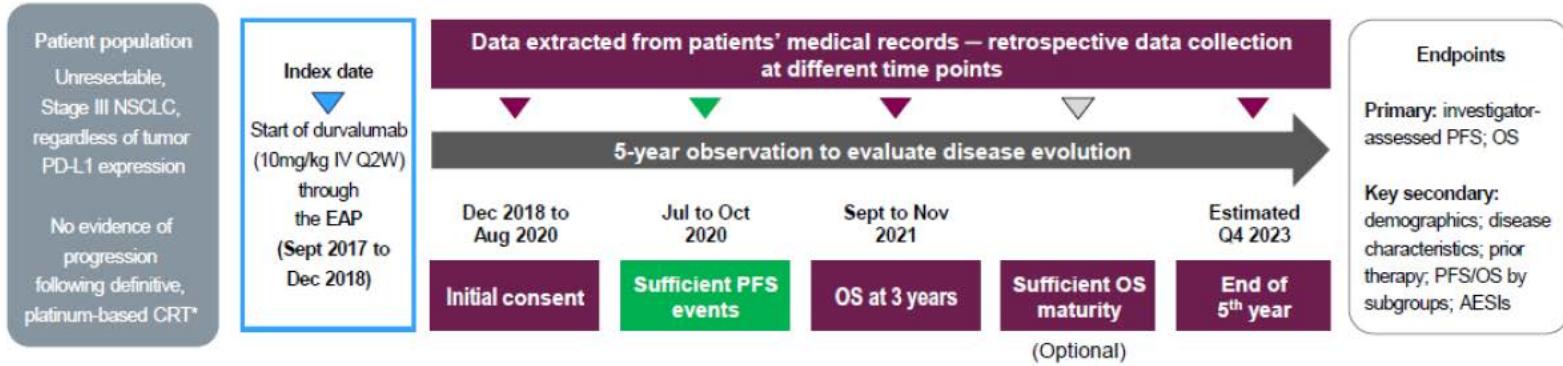
◆ OS





PACIFIC- R

◆ Design

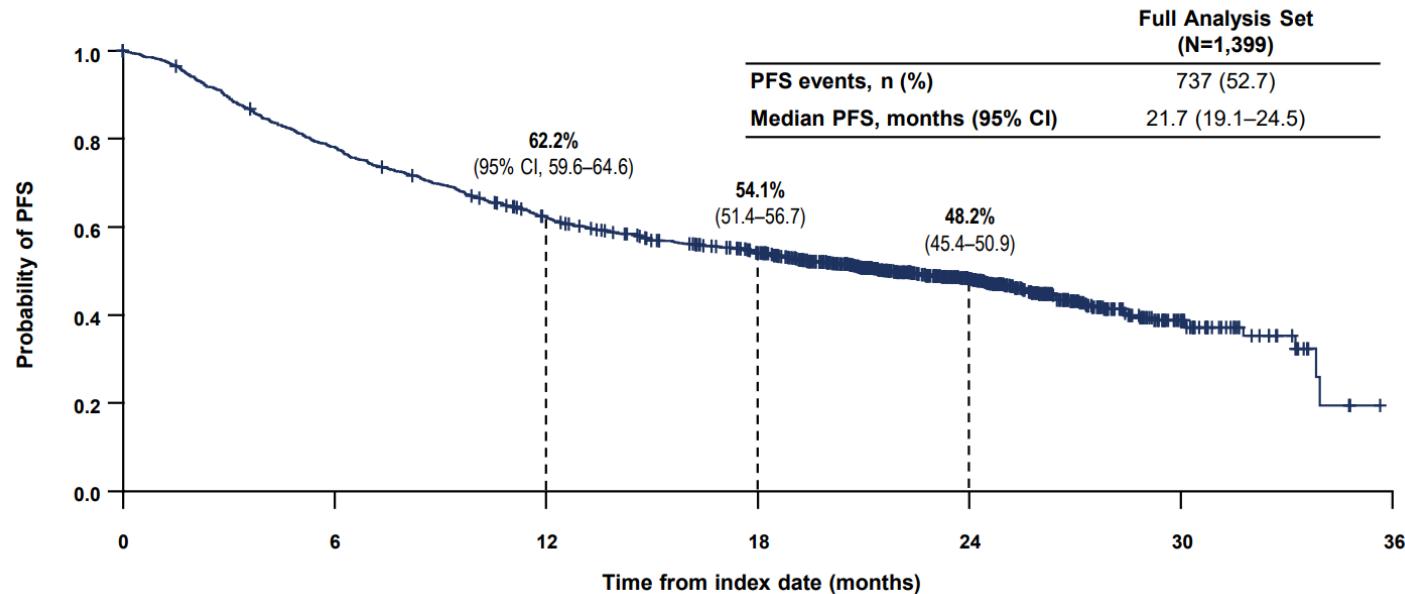


- Etude internationale observationnelle : 1399 patients (290 centres et 11pays)



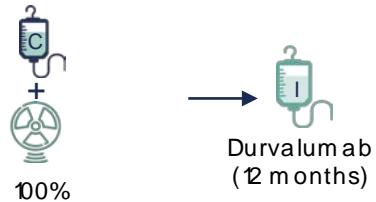
PACIFIC- R

- ◆ *SSP évalué par investigateur*





PACIFIC



m PFS

16,9

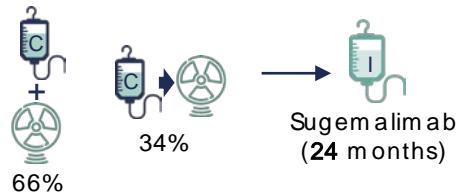
PFS 1y

55,7%

PFS 2y

45%

GEMSTONE-301

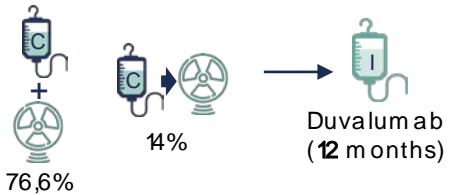


9,0

45,4%

-

PACIFIC-R



21,7

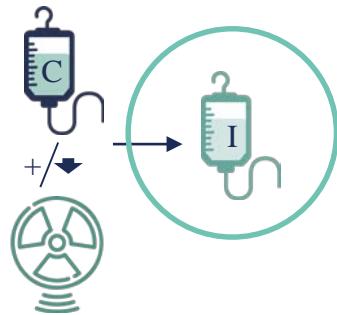
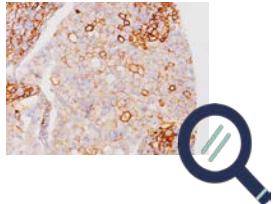
62,2%

48,2%



CONTEXTE

Statut PD-L1





CONTEXTE

Statut PD-L1

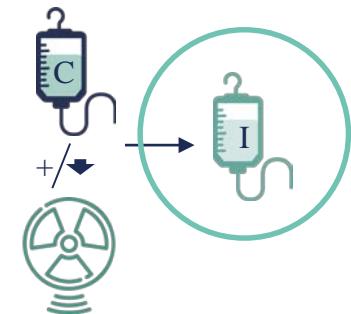
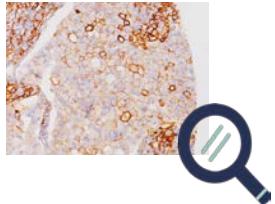


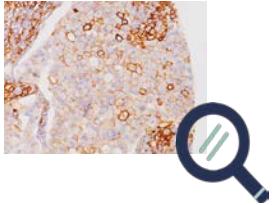
Schéma de
radiothérapie





CONTEXTE

Statut PD-L1



Addiction
oncogénique
activable

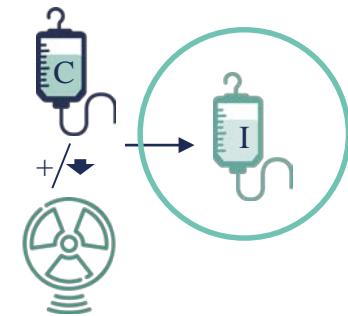


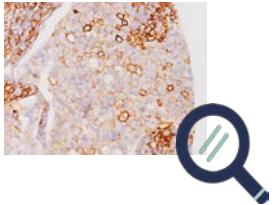
Schéma de
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CONTEXTE

Statut PD-L1



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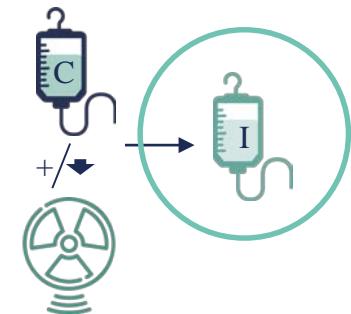


Schéma de
radiothérapie



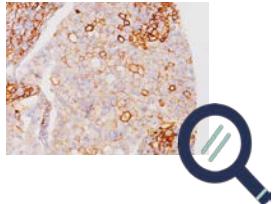
Timing idéal pour
l'immunothérapie





CONTEXTE

Statut PD-L1



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oncogénique
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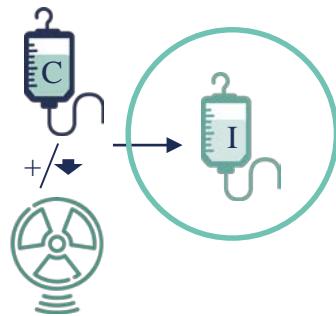


Schéma de
radiothérapie



Timing idéal pour
l'immunothérapie





Statut PD- L1

◆ Influence du statut PD- L1évalué par TCS

- Cas d'un stade IIIAN2 non résécable
- Statut PD- L1élevé
- Quel influence sur une proposition de RT- CT puis IO ?



Pas de différence de profil de répondant (taille de centre, lieu d'exercice, expérience)



PACIFIC

Statut PD-L1

◆ Analyse en sous-groupe



- Recherche du statut PD-L1 non obligatoire
- Statut inconnu pour **37%** des patients de la cohorte



GEMSTONE-301

Statut PD-L1

◆ Caractéristiques des patients

	Sugemalimab group (n=255)	Placebo group (n=126)
Sex		
Male	236 (93%)	115 (91%)
Female	19 (7%)	11 (9%)
Age, years		
Median	61 (56-65)	60 (55-65)
<65	182 (71%)	94 (75%)
≥65	73 (29%)	32 (25%)
Smoking history		
Never smoked	42 (16%)	16 (13%)
Former or current smoker	213 (84%)	110 (87%)
Eastern Cooperative Oncology Group performance status		
0	78 (31%)	38 (30%)
1	177 (69%)	88 (70%)
Chemoradiotherapy type		
Sequential	86 (34%)	41 (33%)
Concurrent	169 (66%)	85 (67%)
Radiotherapy dose		
<60 Gy	43 (17%)	20 (16%)
≥60 Gy	212 (83%)	106 (84%)
Disease stage		
IIIA	74 (29%)	32 (25%)
IIIB	146 (57%)	65 (52%)
IIIC	33 (13%)	28 (22%)
Other	2 (1%)	1 (1%)
Tumour histological type		
Squamous cell carcinoma	177 (69%)	86 (68%)
Non-squamous cell carcinoma	76 (30%)	40 (32%)
Missing data	2 (1%)	0
Previous platinum treatment*		
Cisplatin	130 (51%)	61 (48%)
Carboplatin	82 (32%)	47 (37%)
Nedaplatin	56 (22%)	20 (16%)
Best response to chemoradiotherapy		
Complete response	4 (2%)	2 (2%)
Partial response	172 (67%)	77 (61%)
Stable disease	79 (31%)	47 (37%)
PD-L1 expression†		
<1%	51 (20%)	29 (23%)
≥1%	72 (28%)	23 (18%)
Missing	132 (52%)	74 (59%)

Data are median (IQR) or n (%). *Some patients had more than one type of platinum treatment. †Assessment of baseline PD-L1 expression was not mandatory for study enrolment, therefore PD-L1 status was missing for more than half of the randomly assigned patients.

Table 1: Baseline characteristics of patients in the intention-to-treat population



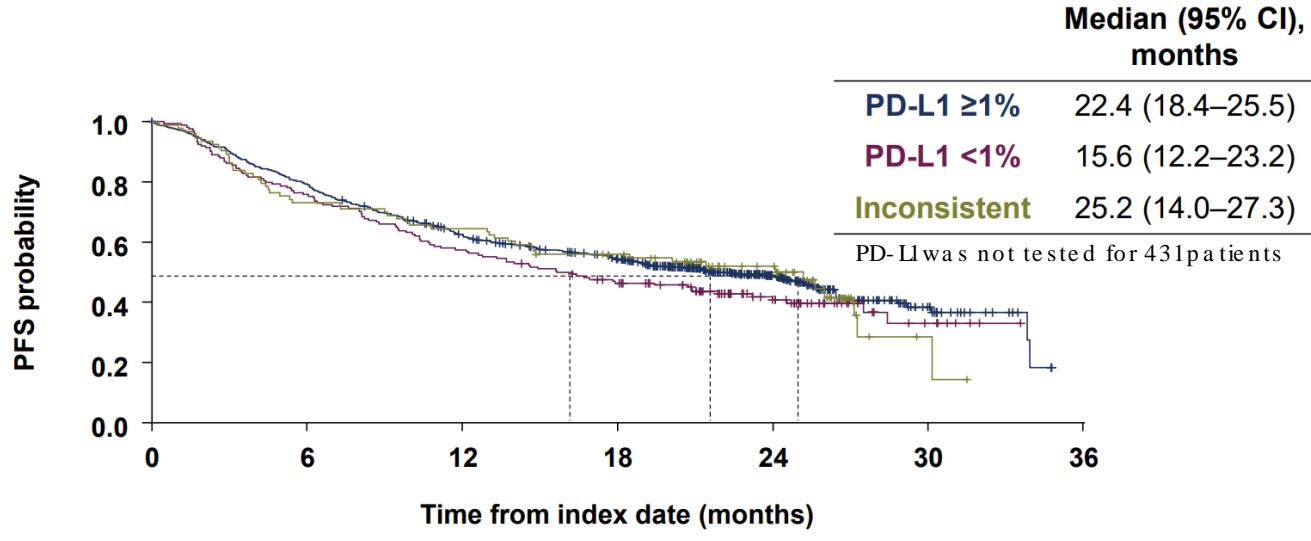
- Statut inconnu pour >50% des patients de la cohorte
- Aucune analyse en sous groupe communiquée sur PD-L1 (objectif exploratoire pourtant)



PACIFIC- R

Statut PD- L1

◆ Analyses en sous-groupes



No. at risk	700	554	425	347	144	24	0
174	174	132	100	77	38	7	0
93	93	68	60	49	27	2	0



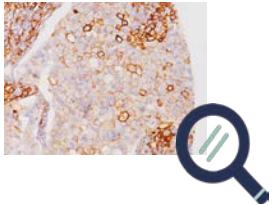
PACIFIC- R

	Median RwPFS	RwPFS rate, %				
		Months	95% CI	12 Months	18 Months	24 Months
Smoking status (at EAP inclusion)						
Current smoker	n = 456	21.6	17.7–26.9	62.9	53.8	49.0
Former smoker	n = 832	23.0	19.4–25.5	62.5	55.0	49.1
Never smoker	n = 111	17.4	11.7–22.6	56.6	48.0	37.4
Timing of durvalumab initiation relative to the end of radiotherapy						
≤42 days	n = 411	25.7	18.4–NE	62.0	55.5	51.5
>42 days	n = 954	20.8	18.6–24.2	62.3	53.8	47.1
>3 months	n = 197	22.6	16.7–26.5	67.9	55.3	48.3
>6 months	n = 13	NE	5.0–NE	61.5	53.8	53.8
PD-L1 status						
PD-L1 ≥1%	n = 700	22.4	18.4–25.5	62.4	54.4	48.9
PD-L1 <1%	n = 174	15.6	12.2–23.2	57.5	46.4	40.9
PD-L1 inconsistent ^a	n = 93	25.2	14.0–27.3	64.5	55.9	52.0
Oncogenic aberration status (reported at Stage III diagnosis)				PD-L1 was not tested for 431 patients		
Any known aberration ^b	n = 185	20.9	13.9–25.8	60.8	52.0	44.7
KRAS mutated	n = 113	24.2	17.8–NE	66.3	59.1	50.8
EGFR mutated	n = 46	11.1	8.8–24.0	47.8	41.3	35.5



CONTEXTE

Statut PD-L1



Addiction
oncogénique
activable

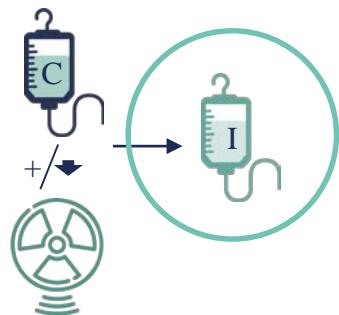


Schéma de
radiothérapie



Timing idéal pour
l'immunothérapie





GEMSTONE-301

◆ SSP (BICR)

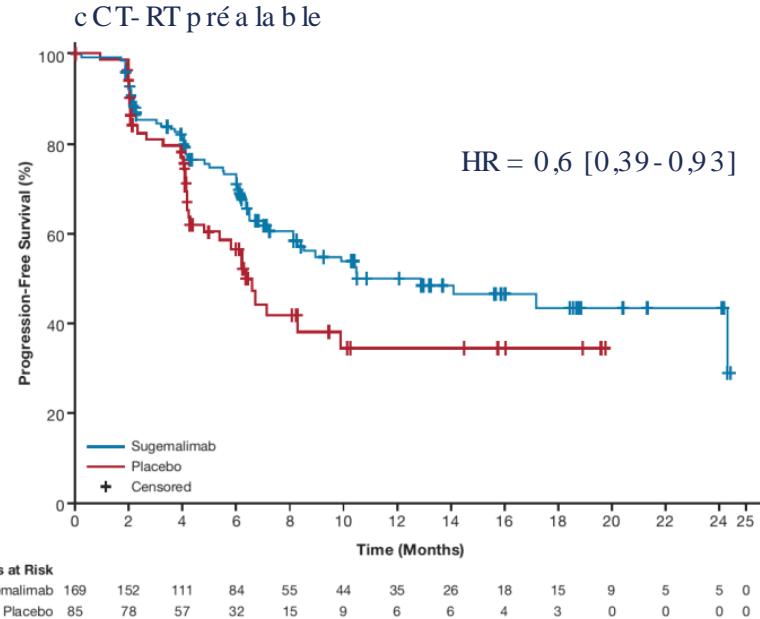
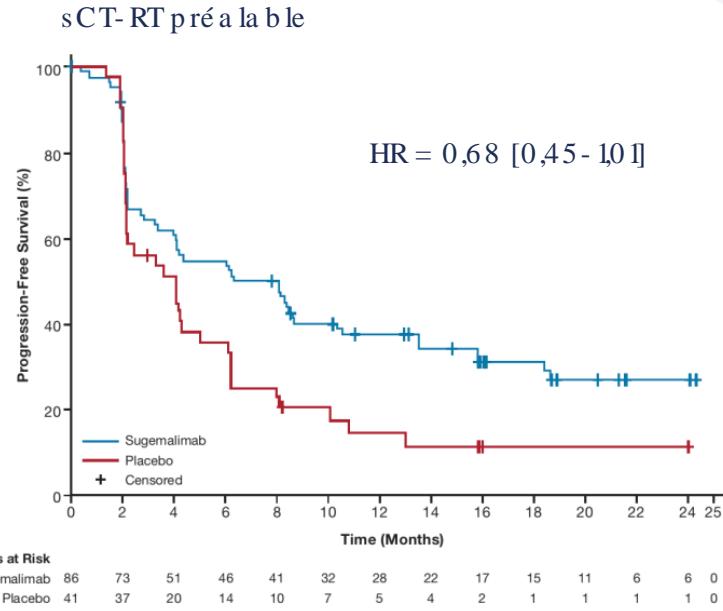


Schéma de RT- CT

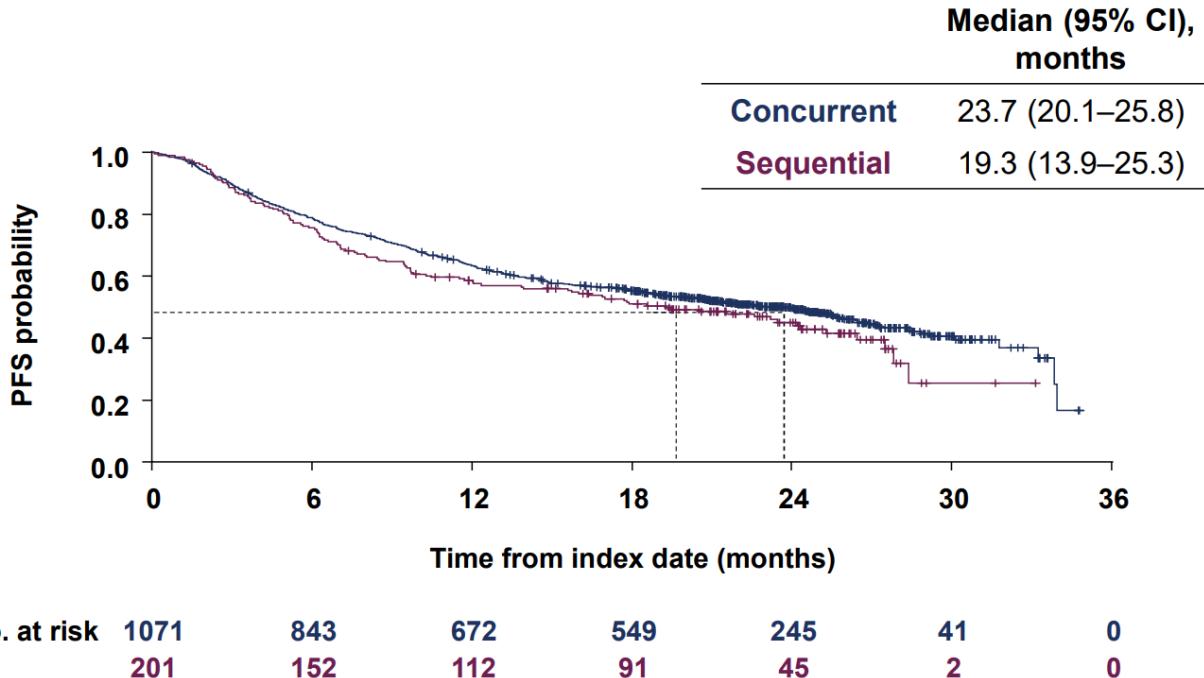




PACIFIC- R

Schéma de RT- CT

◆ Analyses en sous-groupes

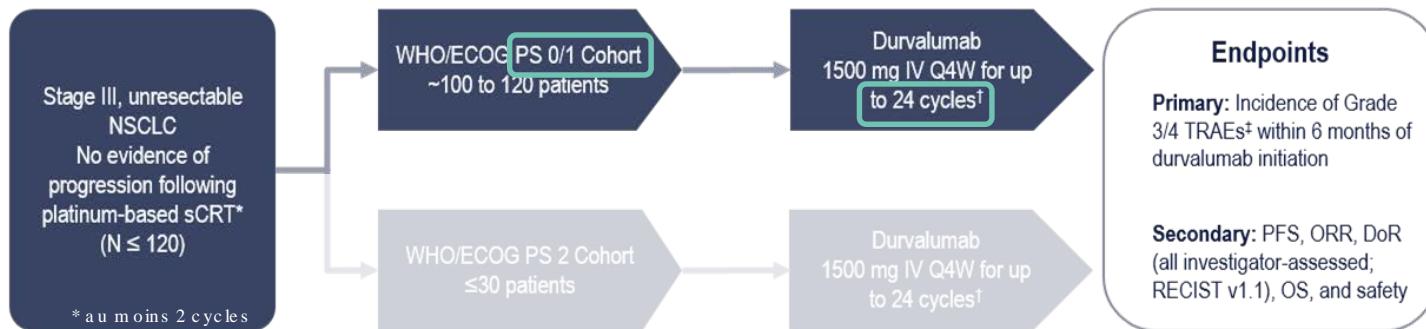




PACIFIC- 6

Schéma de RT- CT

◆ Design (phase 2)



- Incidence of AEs (CTCAE v4.03), and the ORR, were summarised with descriptive statistics
- PFS and OS were analysed by Kaplan–Meier method (to estimate medians, 12-month rates and associated 95% CIs)



PACIFIC- 6

◆ Population

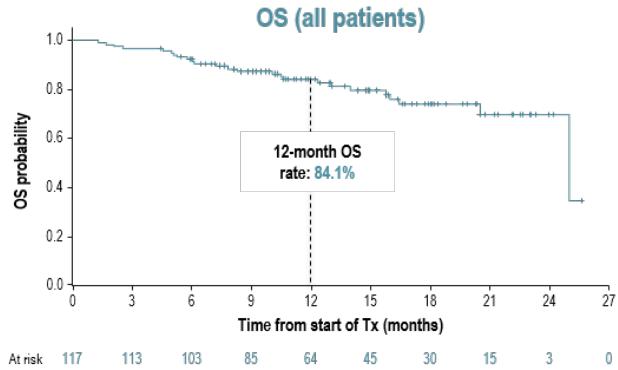
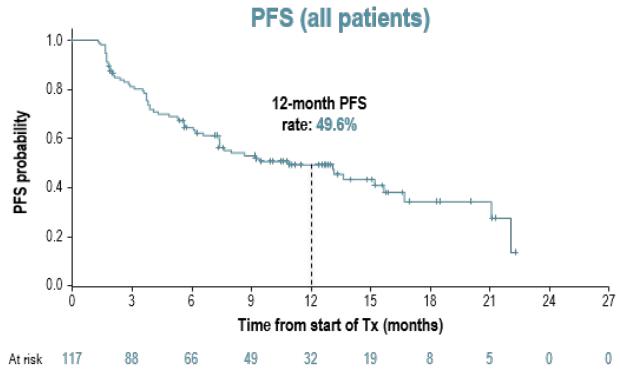
Table 1. Baseline Patient and Disease Characteristics

Characteristic	ECOG PS 0 or 1 (n = 114)
Median age (range), y	68.0 (39-85)
Age group, n (%)	
<65 y	39 (34.2)
≥65 y	75 (65.8)
≥75 y	20 (17.5)
Sex, n (%)	
Men	71 (62.3)
Women	43 (37.7)
Race, n (%)	
White	101 (88.6)
Unknown	13 (11.4)
Smoking history, n (%)	
Never smoker	9 (7.9)
Former smoker	73 (64.0)
Current smoker	32 (28.1)
ECOG PS, n (%)	
0	47 (41.2)
1	67 (58.8)
2	0
Histologic type, n (%)	
Adenocarcinoma	63 (55.3)
Squamous cell	42 (36.8)
Other	9 (7.9)
Disease stage at baseline, n (%)	
IA	1 (0.9)
IIIA	44 (38.6)
IIIB	58 (50.9)
IIIC	11 (9.6)
PD-L1 expression on TCs, n (%)	
<1%	34 (29.8)
≥1%	33 (28.9)
Missing	47 (41.2)



PACIFIC- 6

◆ Données de survie

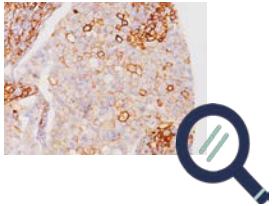


Endpoint	All patients (N = 117)*	PS 0/1 cohort (n = 114) [†]
PFS	Median, months (95% CI)	10.9 (7.3–15.6)
	12-month rate, % (95% CI)	49.6 (39.5–58.9)
OS	Median, months (95% CI)	25.0 (25.0–NC)
	12-month rate, % (95% CI)	84.1 (75.6–89.9)
Confirmed ORR	n (%)	20 (17.1) [‡]
	[95% CI] [§]	[11.1–25.8]



CONTEXTE

Statut PD-L1



Addiction
oncogénique
activable

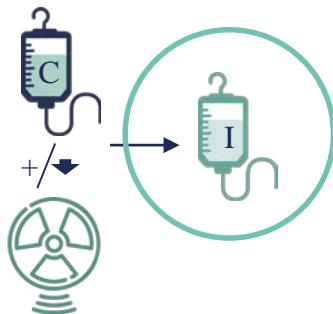


Schéma de
radiothérapie



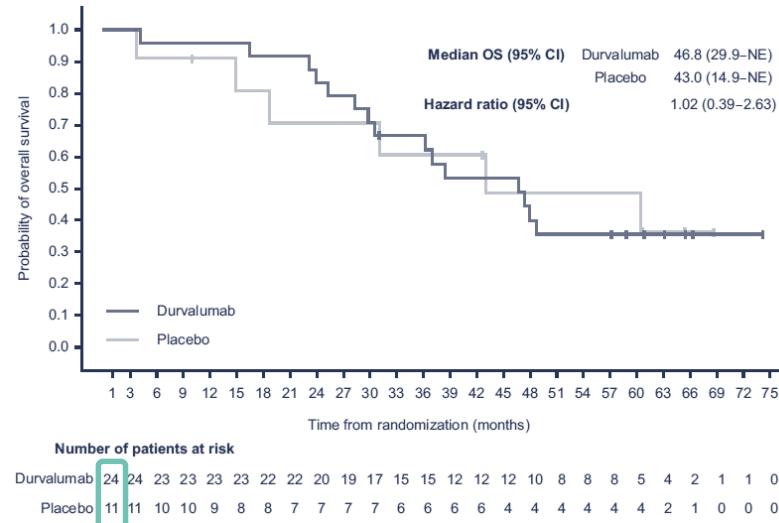
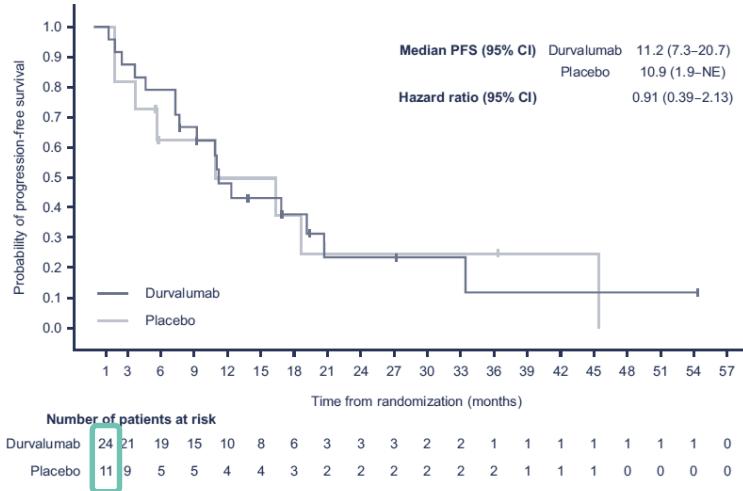
Timing idéal pour
l'immunothérapie





PACIFIC

◆ Analyse post-hoc



Patients avec
mutation EGFR



PACIFIC- R

Patients avec
mutation EGFR

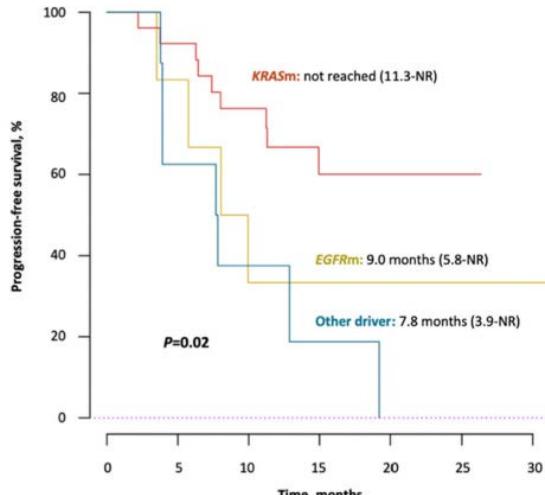
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Any known aberration ^b	n = 185	20.9	13.9–25.8	60.8	52.0	44.7
KRAS mutated	n = 113	24.2	17.8–NE	66.3	59.1	50.8
EGFR mutated	n = 46	11.1	8.8–24.0	47.8	41.3	35.5



Etudes rétrospectives

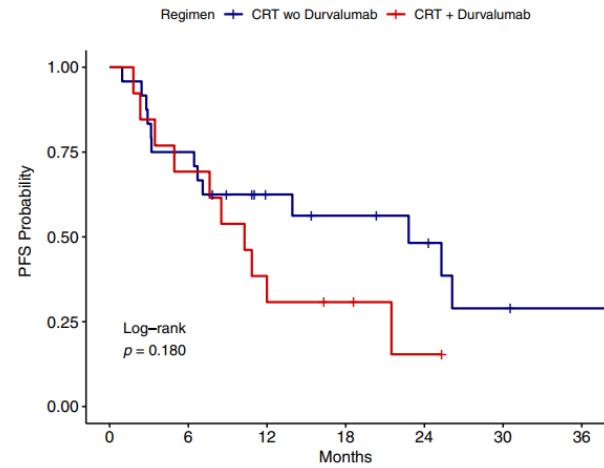
Original Research

Durvalumab consolidation in patients with unresectable stage III non-small cell lung cancer with driver genomic alterations



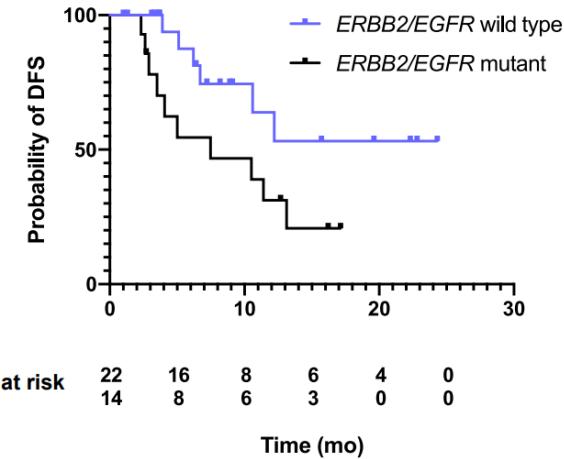
ORIGINAL ARTICLE

Durvalumab for Stage III EGFR-Mutated NSCLC After Definitive Chemoradiotherapy



BRIEF REPORT

Role of Consolidation Durvalumab in Patients With EGFR- and HER2-Mutant Unresectable Stage III NSCLC





Guidelines ESMO

Patients avec
mutation EGFR



ESMO expert consensus statements on the management of *EGFR* mutant non-small-cell lung cancer

9: In patients with *EGFR*-mutant inoperable stage III NSCLC, undergoing curative-intent chemoradiotherapy, what is the role of consolidation ICI therapy?

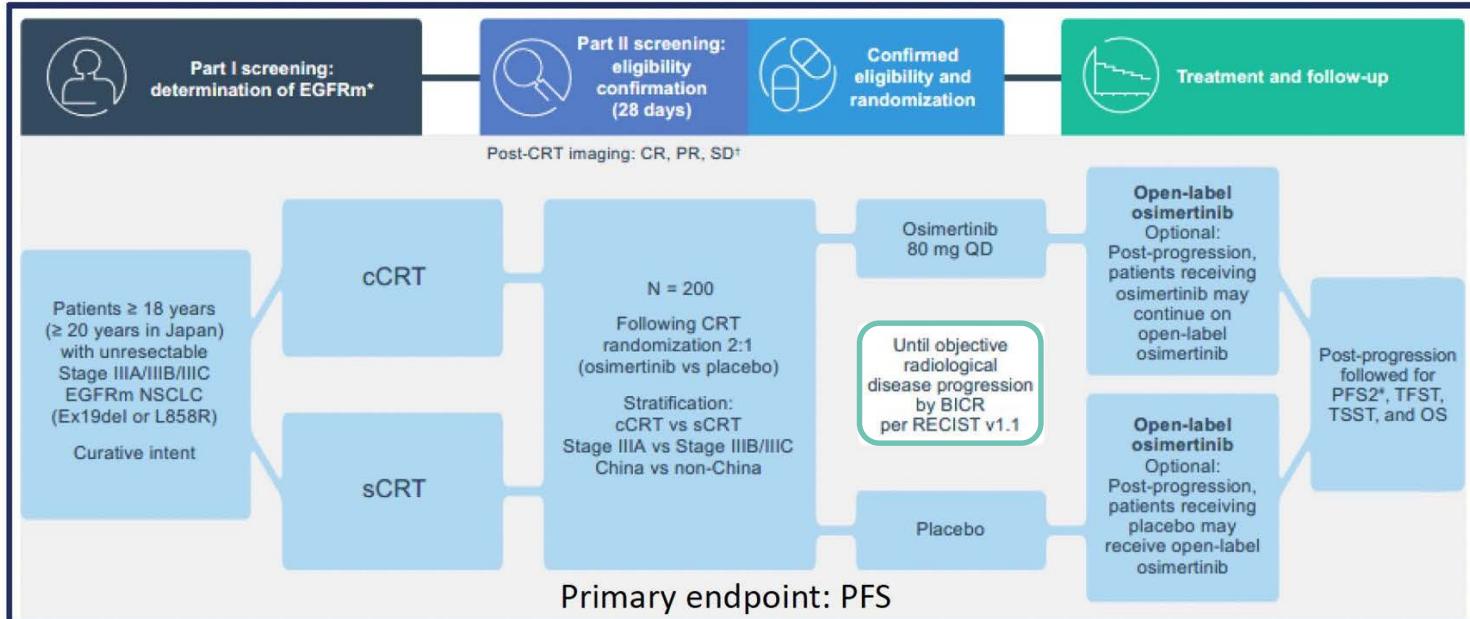
STATEMENT: In *EGFR*-positive disease, the use of consolidation ICI therapy after curative-intent chemoradiotherapy (CT-RT), is not recommended [I,C].



Perspectives

Patients avec
mutation EGFR

◆ Etude LAURA

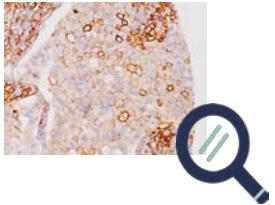


NB : étude comparable en cours avec
la umoleratinib



CONTEXTE

Statut PD-L1



Addiction
oncogénique
activable

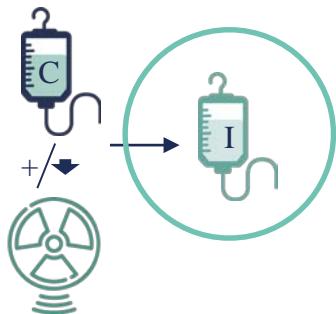


Schéma de
radiothérapie

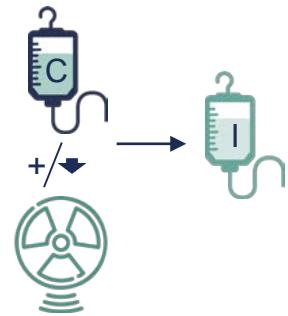


Timing idéal pour
l'immunothérapie



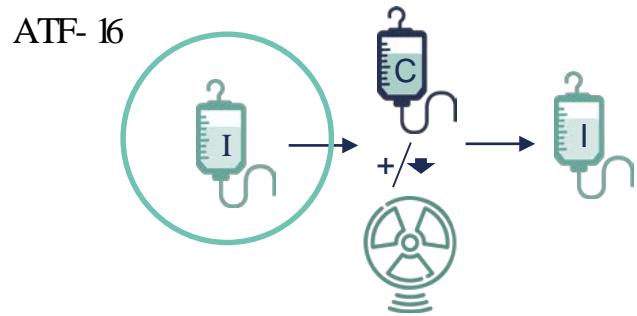


Quel timing pour l'immunothérapie ?



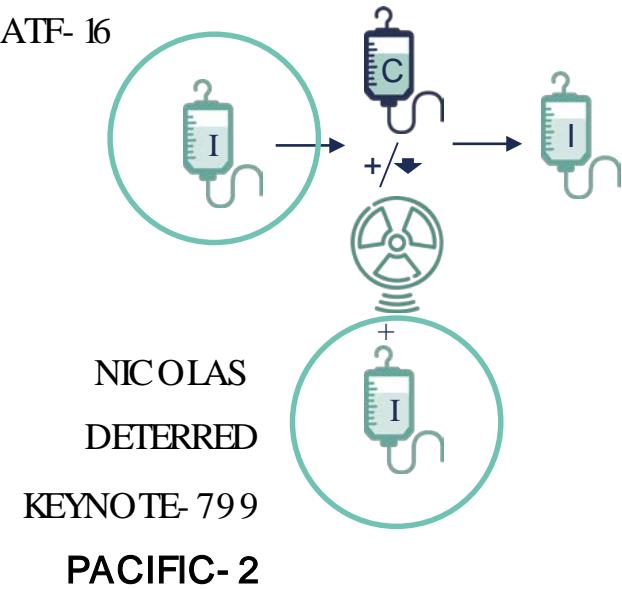


Quel timing pour l'immunothérapie ?



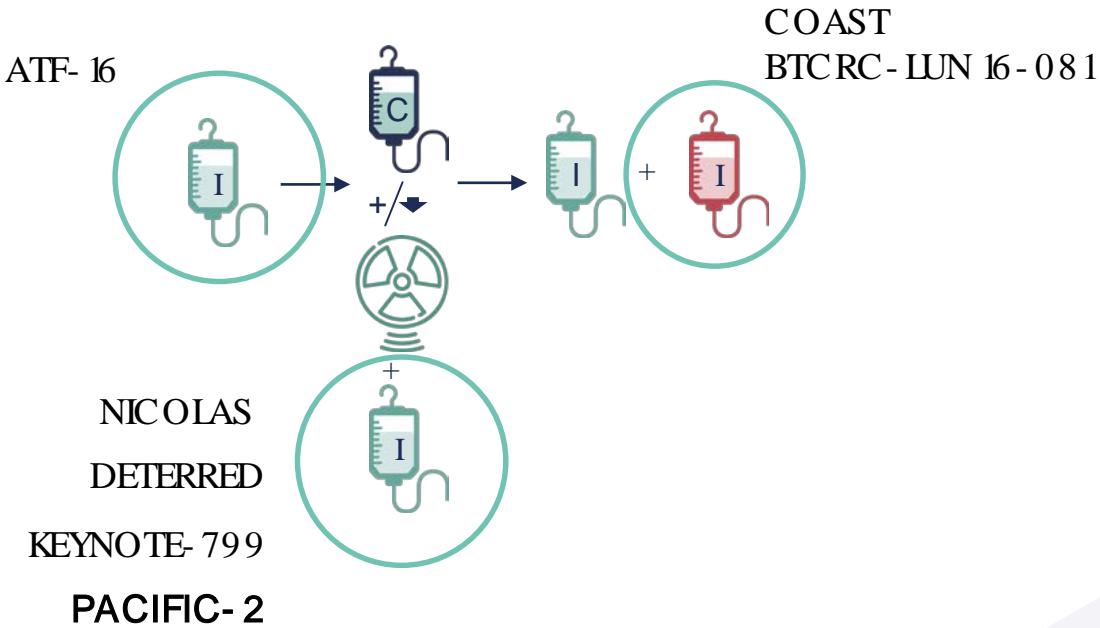


Quel timing pour l'immunothérapie ?



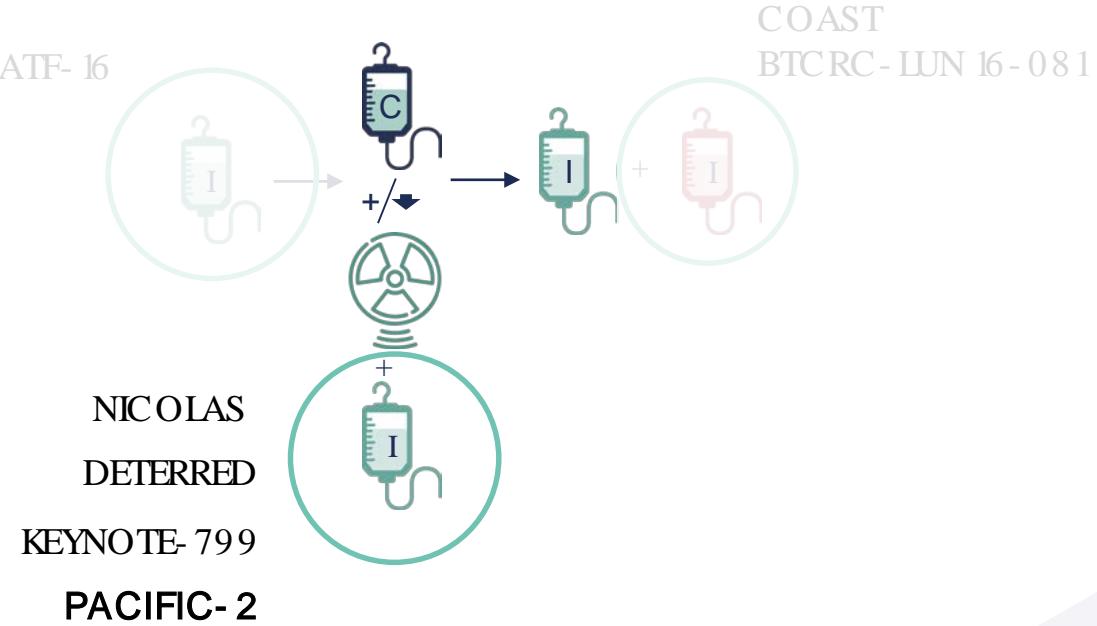


Quel timing pour l'immunothérapie ?





Quel timing pour l'immunothérapie ?





Immunothérapie concomitante

	Phase	m PFS	m OS	Pn G3	Notes
NICOLAS nivolumab	II	12,7	38,8	10,3%	- c RTCT ou s RT-CT
DETERRED atezolizumab	II	Part 2 : 13,2	NR	16%	- Part 2 : triplet c RT-CT-IO
KEYNOTE-199 pembrolizumab	II	A : 30,6 B : NR	NR	7,5%	- Cohorte A = SQ+NSQ - Cohorte B = NSQ - Exclusion si ↓ poids >10% sur 3 mois



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PACIFIC durvalumab	III	16,9	47,5	3,4%	



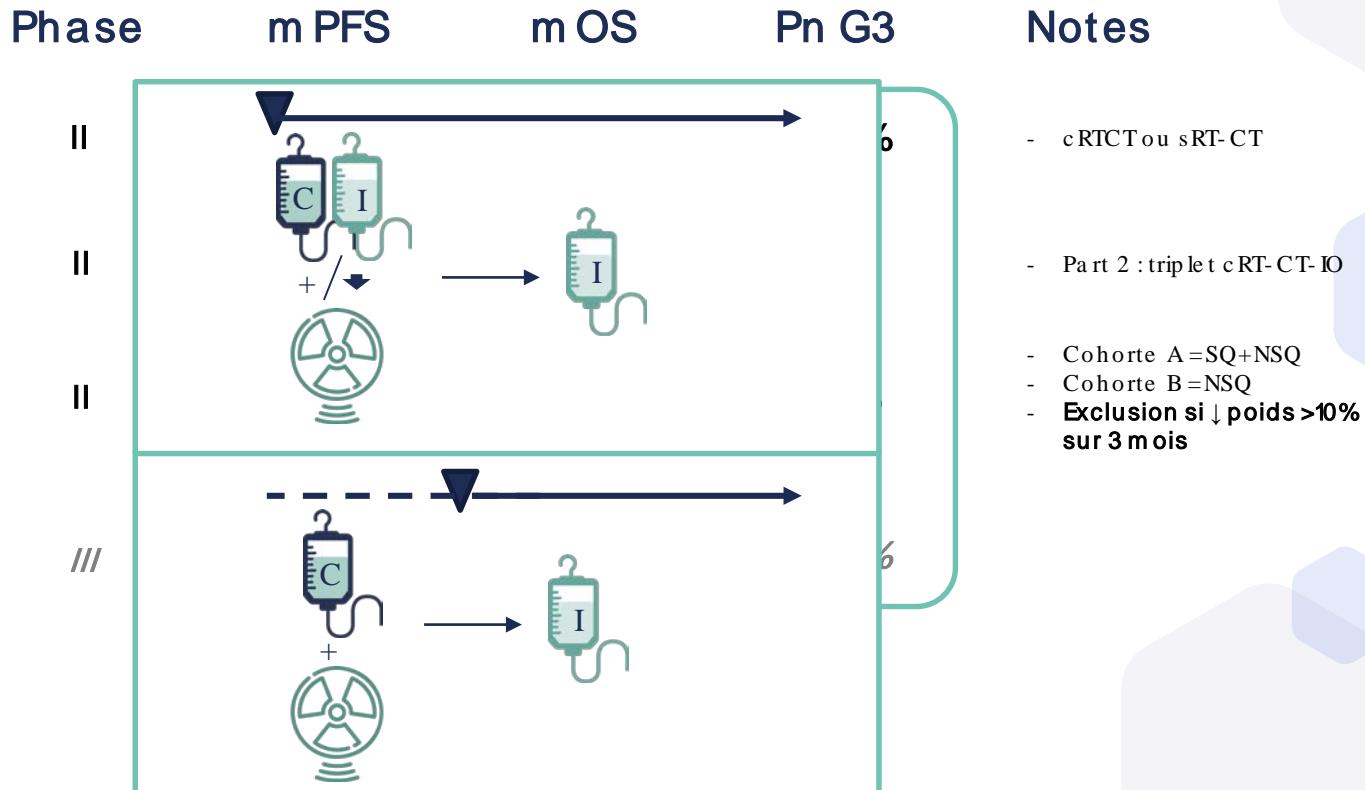
Immunothérapie concomitante

NICOLAS
nivolumab

DETERRED
atezolizumab

KEYNOTE-199
pembrolizumab

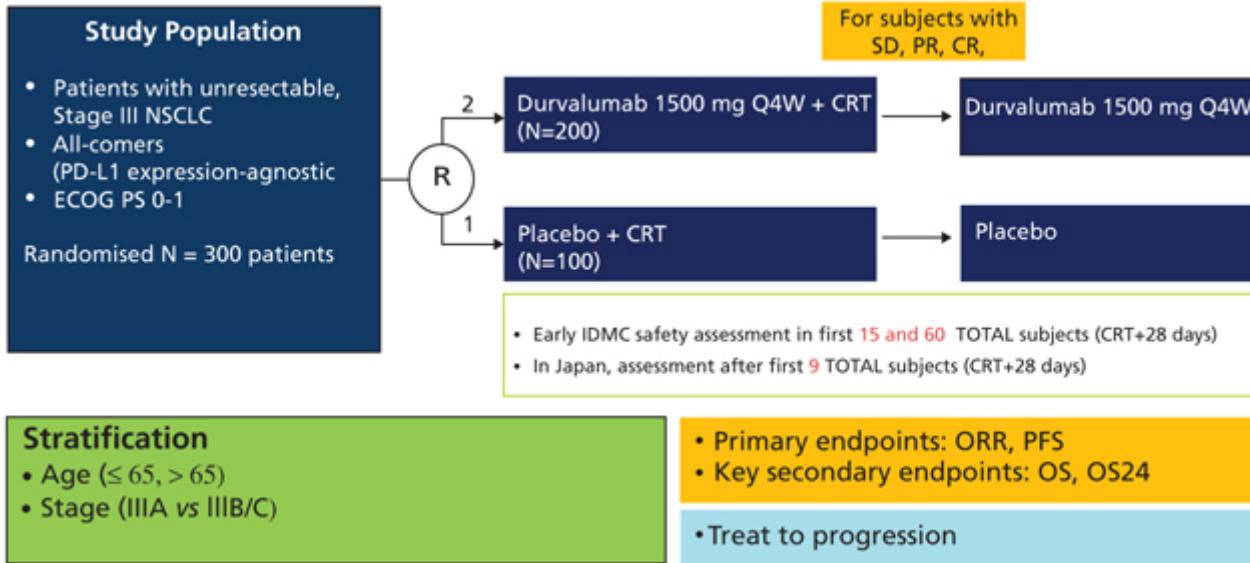
PACIFIC
durvalumab





PACIFIC- 2

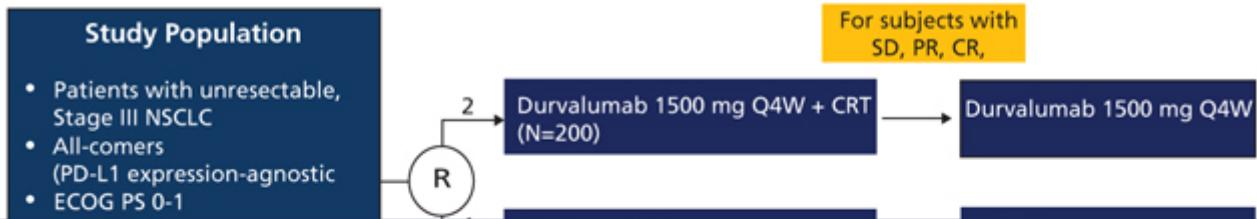
◆ Design





PACIFIC- 2

◆ Design



Update on PACIFIC-2 Phase III trial of Imfinzi concurrently administered with platinum-based chemoradiotherapy in unresectable, Stage III non-small cell lung cancer

PUBLISHED

14 November 2023

The PACIFIC-2 Phase III trial for *Imfinzi* (durvalumab) concurrently administered with chemoradiotherapy (CRT) did not achieve statistical significance for the primary endpoint of progression-free survival (PFS) versus CRT alone for the treatment of patients with unresectable, Stage III non-small cell lung cancer (NSCLC).

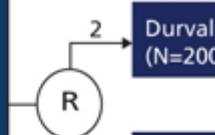


PACIFIC- 2

◆ Design

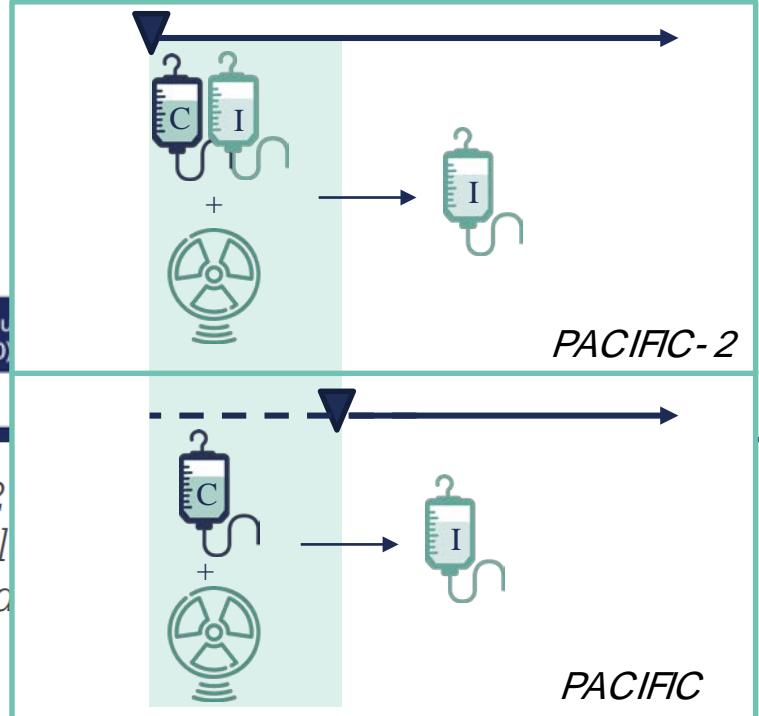
Study Population

- Patients with unresectable, Stage III NSCLC
- All-comers (PD-L1 expression-agnostic)
- ECOG PS 0-1



*Update on PACIFIC-2 administered with pl
unresectable, Sta*

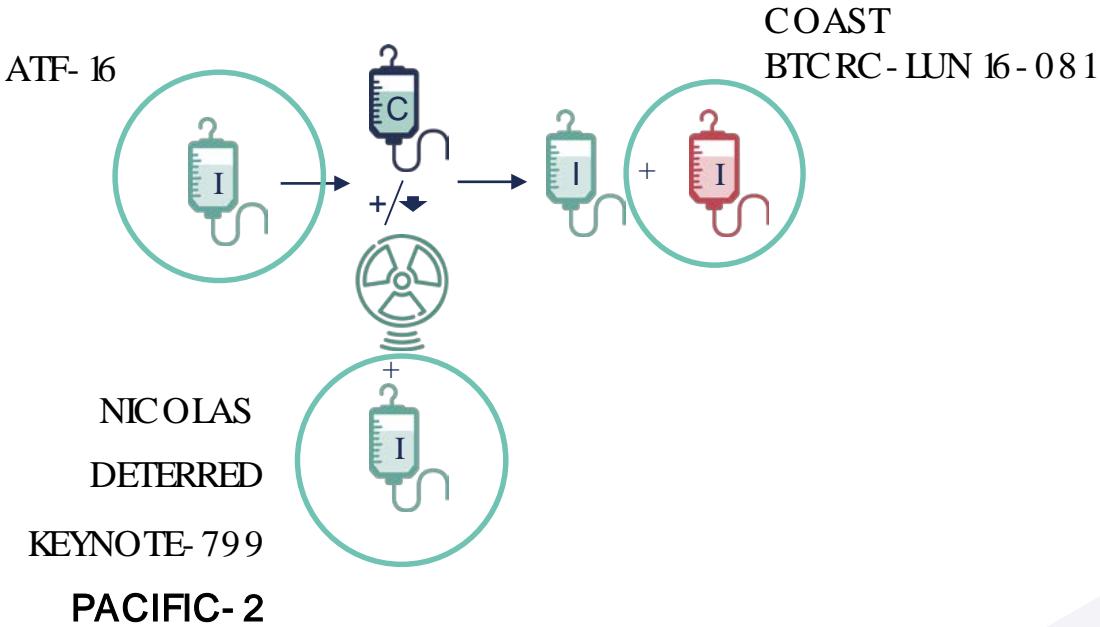
PUBLISHED
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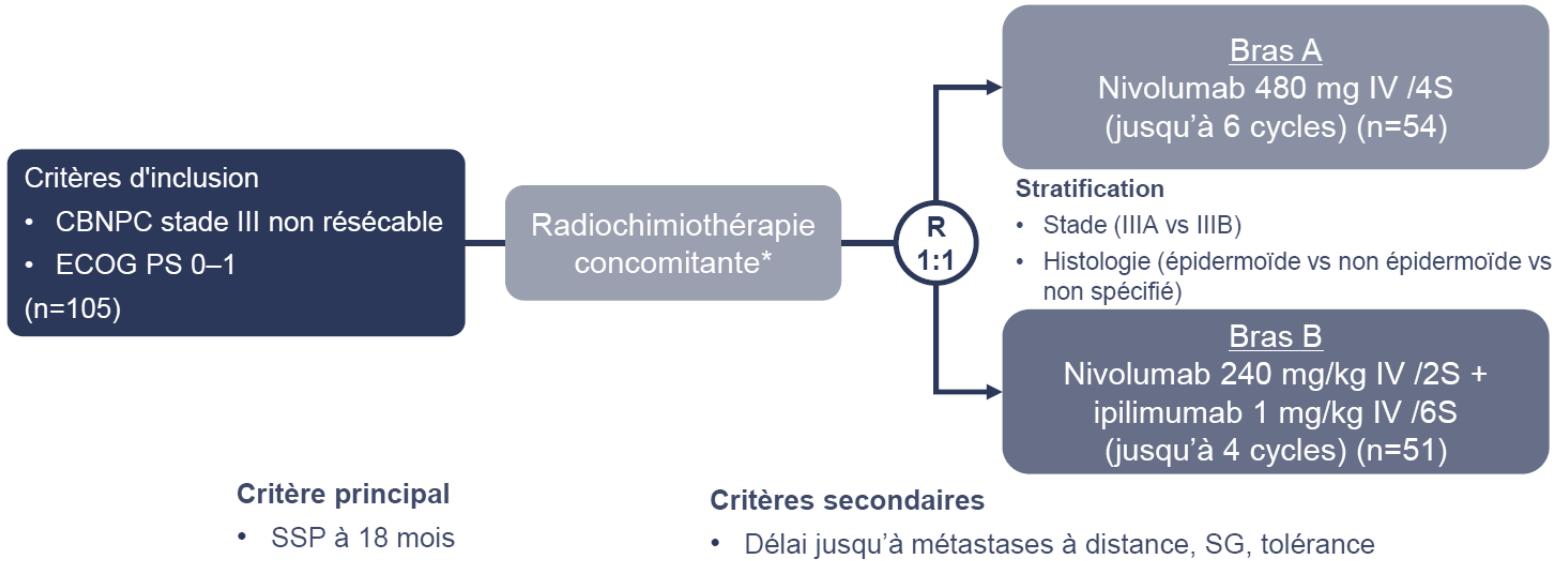
Quel timing pour l'immunothérapie ?





Combinaison d'immunothérapie

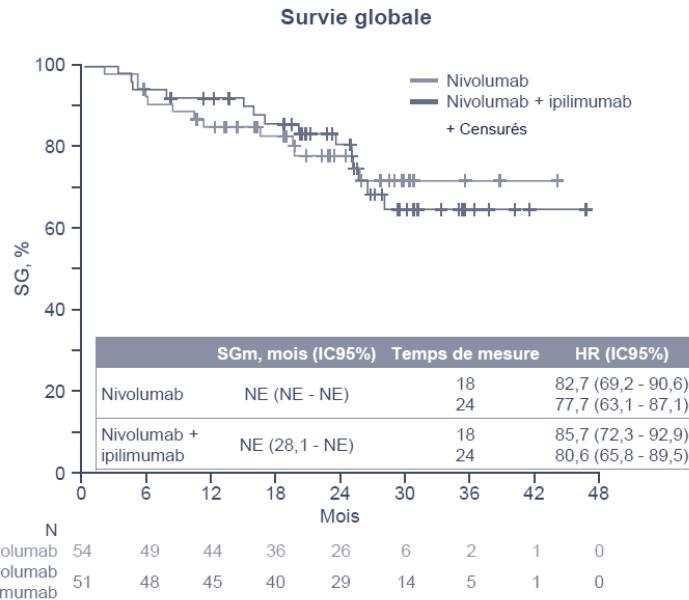
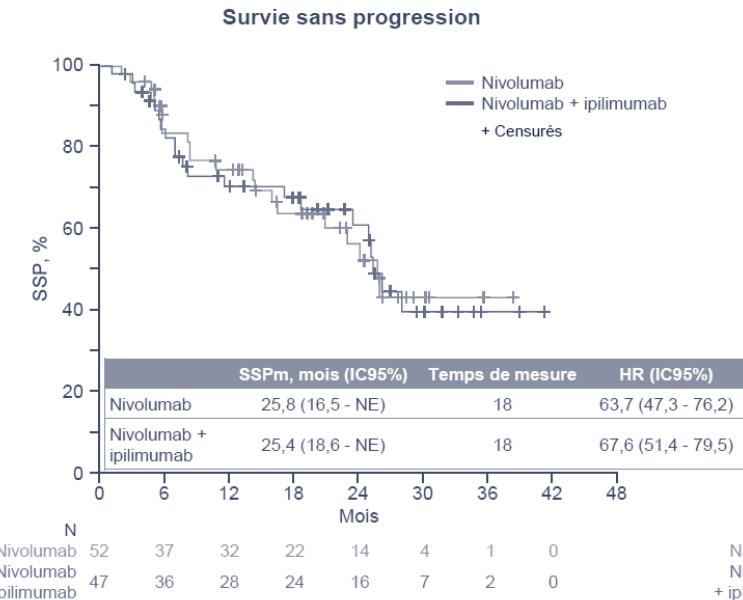
◆ BTCRC LUN 16-081: design





Combinaison d'immunothérapie

◆ BTCRC LUN 16-081: résultats

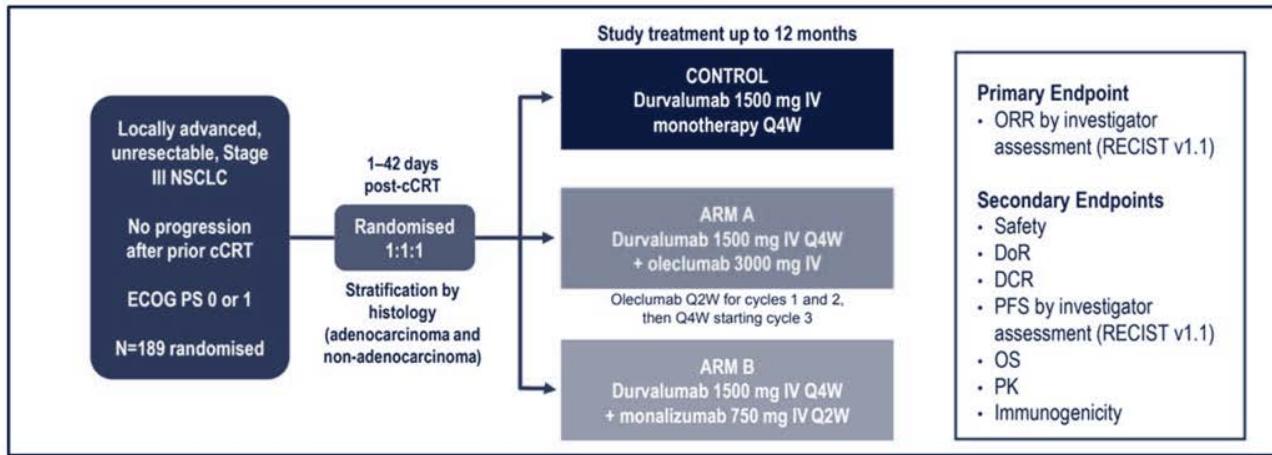


EILTs, n (%)	Nivolumab (n=54)	Nivolumab + ipilimumab (n=51)
Total	39 (72,2)	41 (80,4)
EILTs grade ≥3	10 (18,5)	14 (27,5)



Combinaison d'immunothérapie

◆ COAST: design

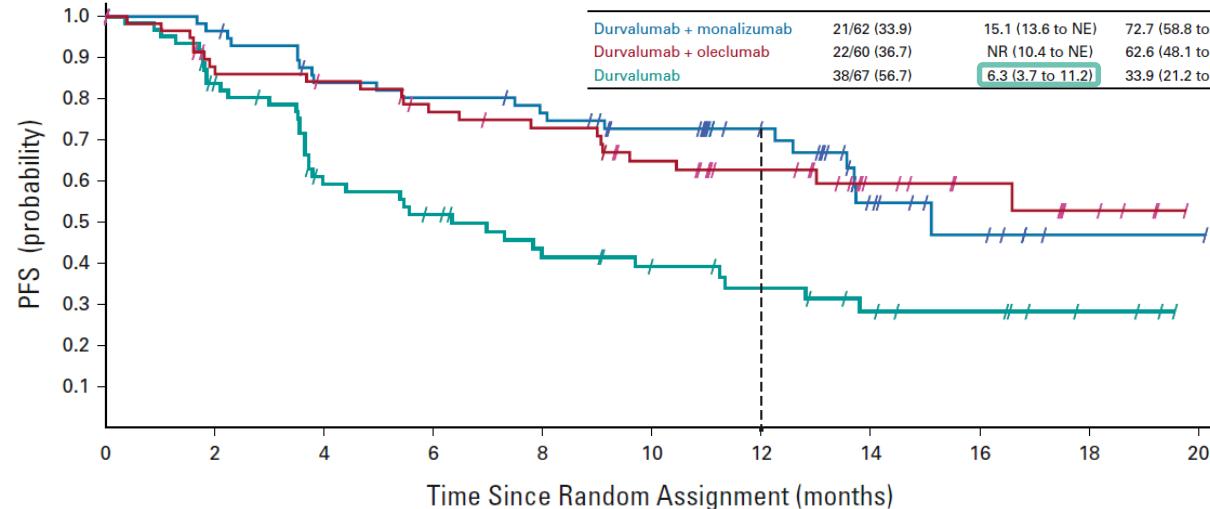


- *Oleclumab : anti-CD73 (inhibition de la disponibilité de l'adénosine dans le microenvironnement tumoral)*
- *Monalizumab : anti-NKG2A (inhibition de l'anergie des cellules NK)*



Combinaison d'immunothérapie

◆ Résultats (PFS – obj secondaire)



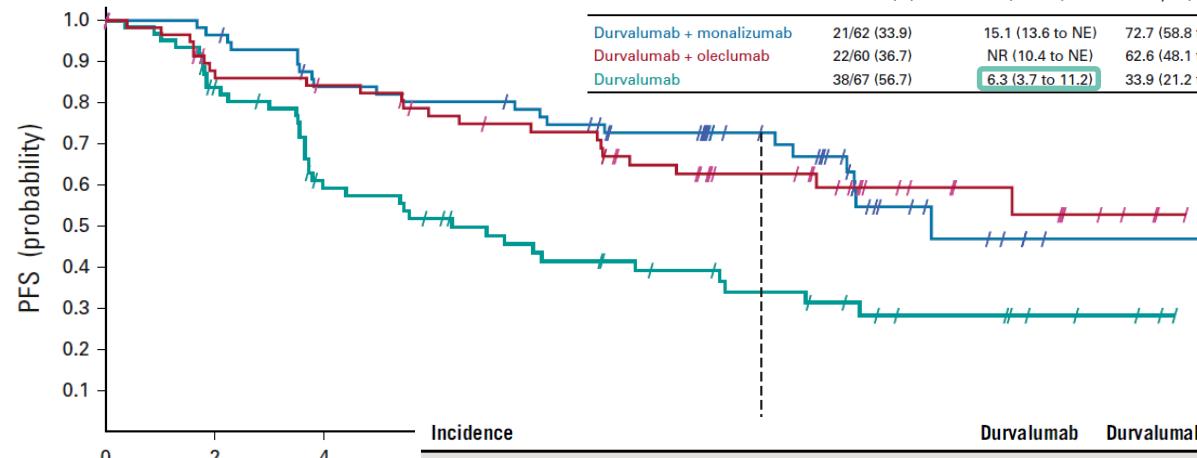
No. at risk:

Durvalumab + monalizumab	62	55	46	44	41	35	25	11	6	1	1
Durvalumab + oleclumab	60	49	46	40	37	30	22	13	9	5	0
Durvalumab	67	50	32	27	20	16	13	9	7	3	0



Combinaison d'immunothérapie

◆ Résultats (PFS – obj secondaire)



Treatment Arm	No. of Events/ Total No. of Patients (%)	Median PFS, Months (95% CI) ^a	12-Month PFS Rate, % (95% CI)	HR, % (95% CI) ^{b,c}
Durvalumab + monalizumab	21/62 (33.9)	15.1 (13.6 to NE)	72.7 (58.8 to 82.6)	0.42 (0.24 to 0.72)
Durvalumab + oleclumab	22/60 (36.7)	NR (10.4 to NE)	62.6 (48.1 to 74.2)	0.44 (0.26 to 0.75)
Durvalumab	38/67 (56.7)	6.3 (3.7 to 11.2)	33.9 (21.2 to 47.1)	–

Incidence	Durvalumab	Durvalumab + Oleclumab	Durvalumab + Monalizumab
Any TEAEs, No. (%)	65 (98.5)	57 (96.6)	61 (100)
Grade \geq 3 TEAEs, No. (%)	26 (39.4)	24 (40.7)	17 (27.9)
Study drug-related AEs, No. (%)	49 (74.2)	46 (78.0)	50 (82.0)
Study drug-related SAEs, No. (%)	6 (9.1)	7 (11.9)	5 (8.2)
TEAEs leading to treatment discontinuation, No. (%)	11 (16.7)	9 (15.3)	9 (14.8)

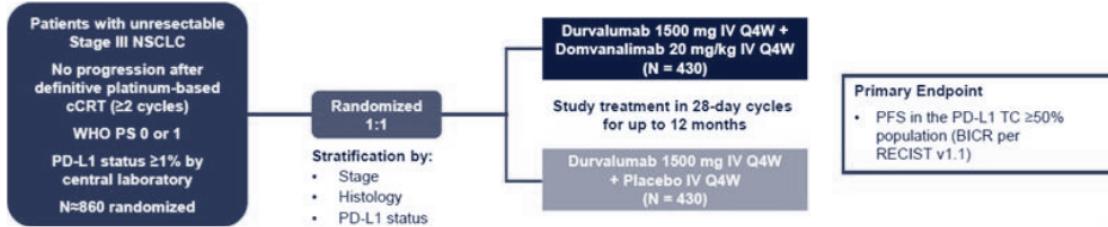


Combinaison d'immunothérapie

◆ Phases 3 à suivre ...

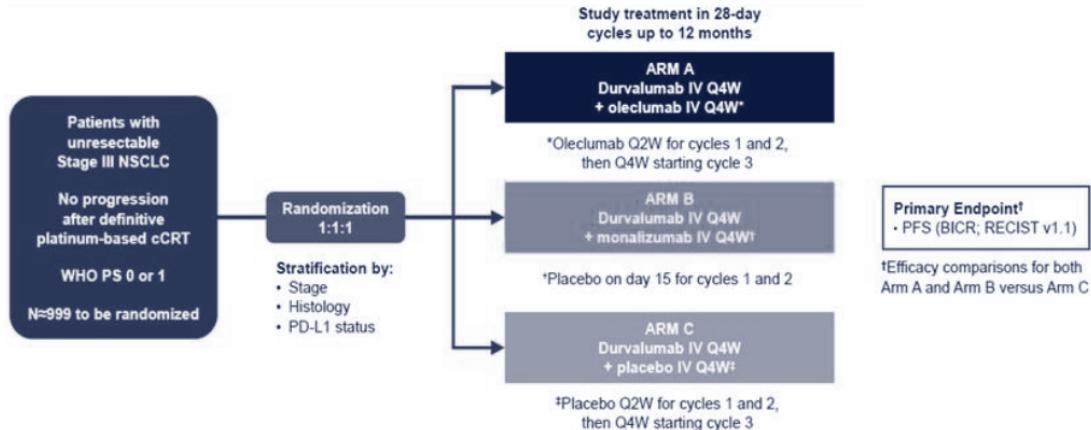
PACIFIC- 8

Anti-TIGIT



PACIFIC- 9

Anti-CD73
Anti-NKG2A

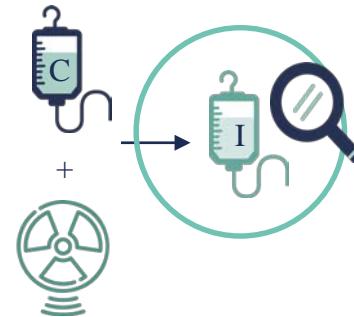




CONCLUSION

● *Immunothérapie de consolidation pour tous ?*

- Quelque soit le statut PD-L1 ? OUI
- Quelque soit les modalités de RT-CT ? OUI
- Chez les patients avec mutation EGFR ?
(et autres drivers du non-fumeur?) NON
- Quelles perspectives : → RT-CT-IO concorde ?
 - Combinaison d'immunothérapie ? Phase 3 à suivre...
 - Place pour une désescalade ? Essai académique
 - (1 an d'IO pour tous ? CT pour tous ?)





Merci