

CANCEROPOLE EST 2025

LES NOUVEAUTÉS EN IMMUNOTHÉRAPIE DANS LE CANCER BRONCHIQUE

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UNITÉ D'ONCOLOGIE THORACIQUE

CHRU DE STRASBOURG

UMR1260 - INSERM



CBPC

- LOCALEMENT AVANCÉ
- MÉTASTATIQUE

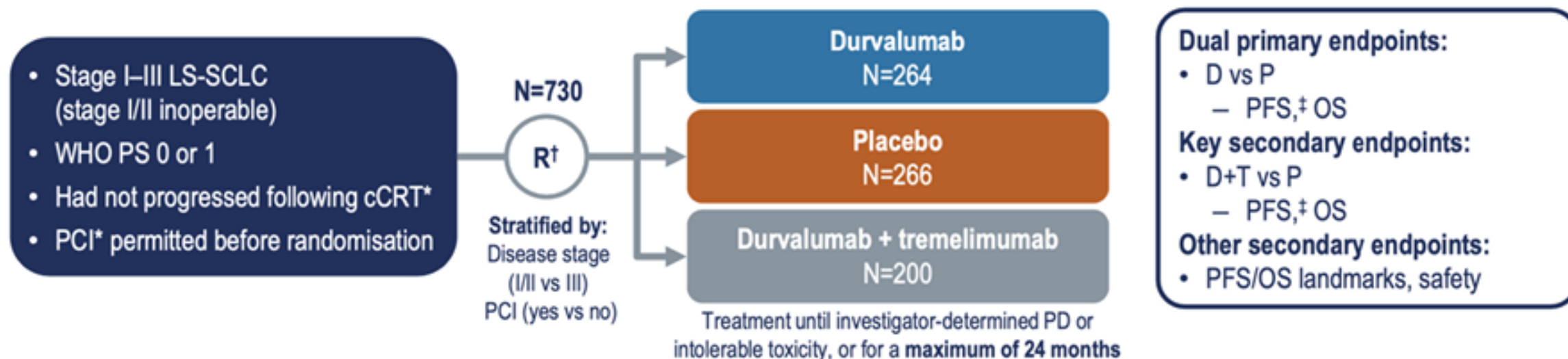
CBNPC

- LOCALISÉ
- LOCALEMENT AVANCÉ – NON RÉSÉCABLE
- MÉTASTATIQUE



LE CANCER BRONCHIQUE À PETITES CELLULES

CBPC LOCALEMENT AVANCÉ : ADRIATIC

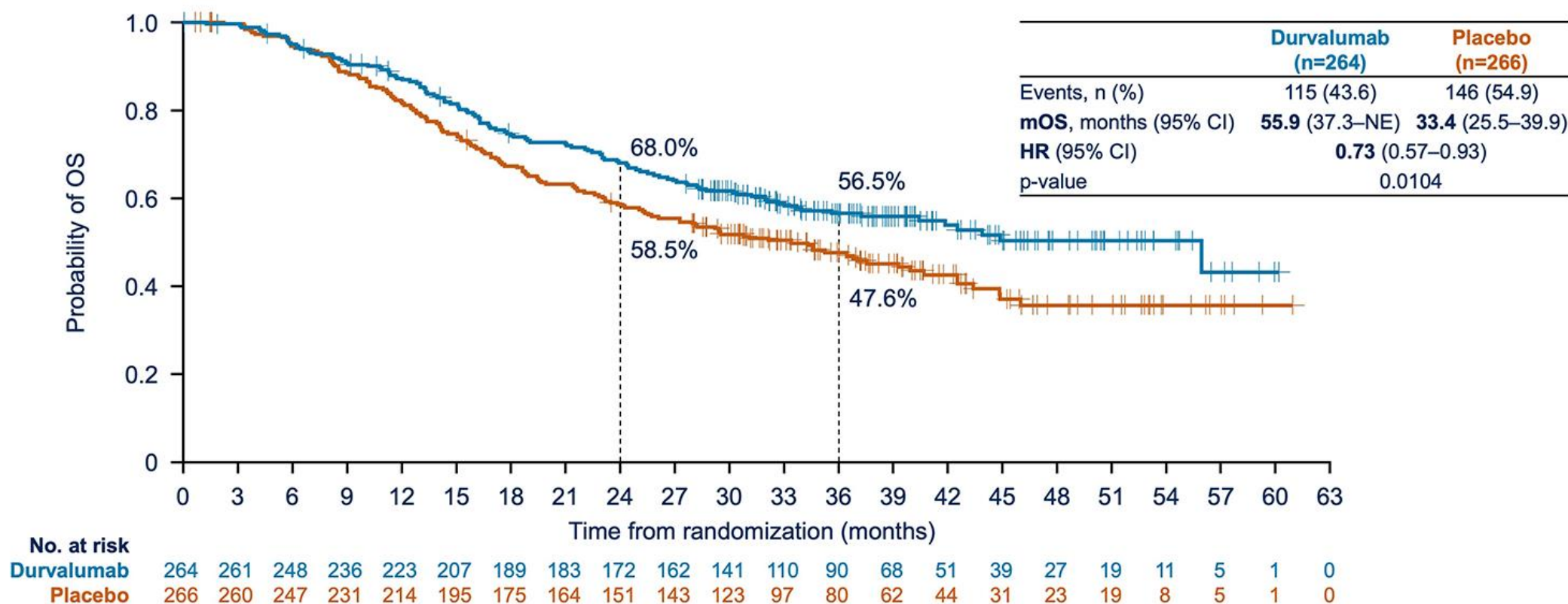


PCI/cCRT components (in line with standards of care)*

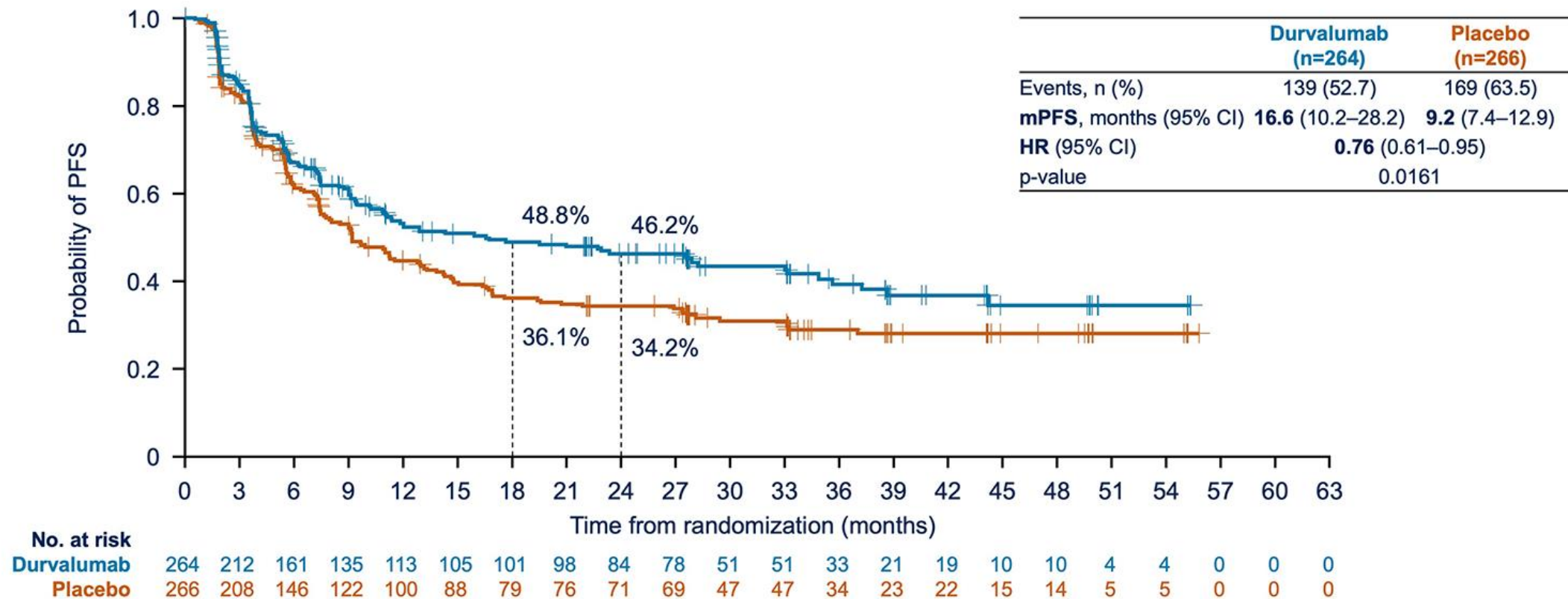
- PCI delivered before randomisation, as clinically indicated
- Four cycles of platinum (cisplatin or carboplatin) and etoposide (three permitted[†])
- RT: 60–66 Gy QD over 6 weeks or 45 Gy BID over 3 weeks[‡]

ITT population	Durvalumab (n = 264)	Placebo (n = 266)
Received PCI, %	54	54
Carboplatin / cisplatin CT,[§] %	34 / 66	33 / 67
BID / QD thoracic RT, %	26 / 74	30 / 70

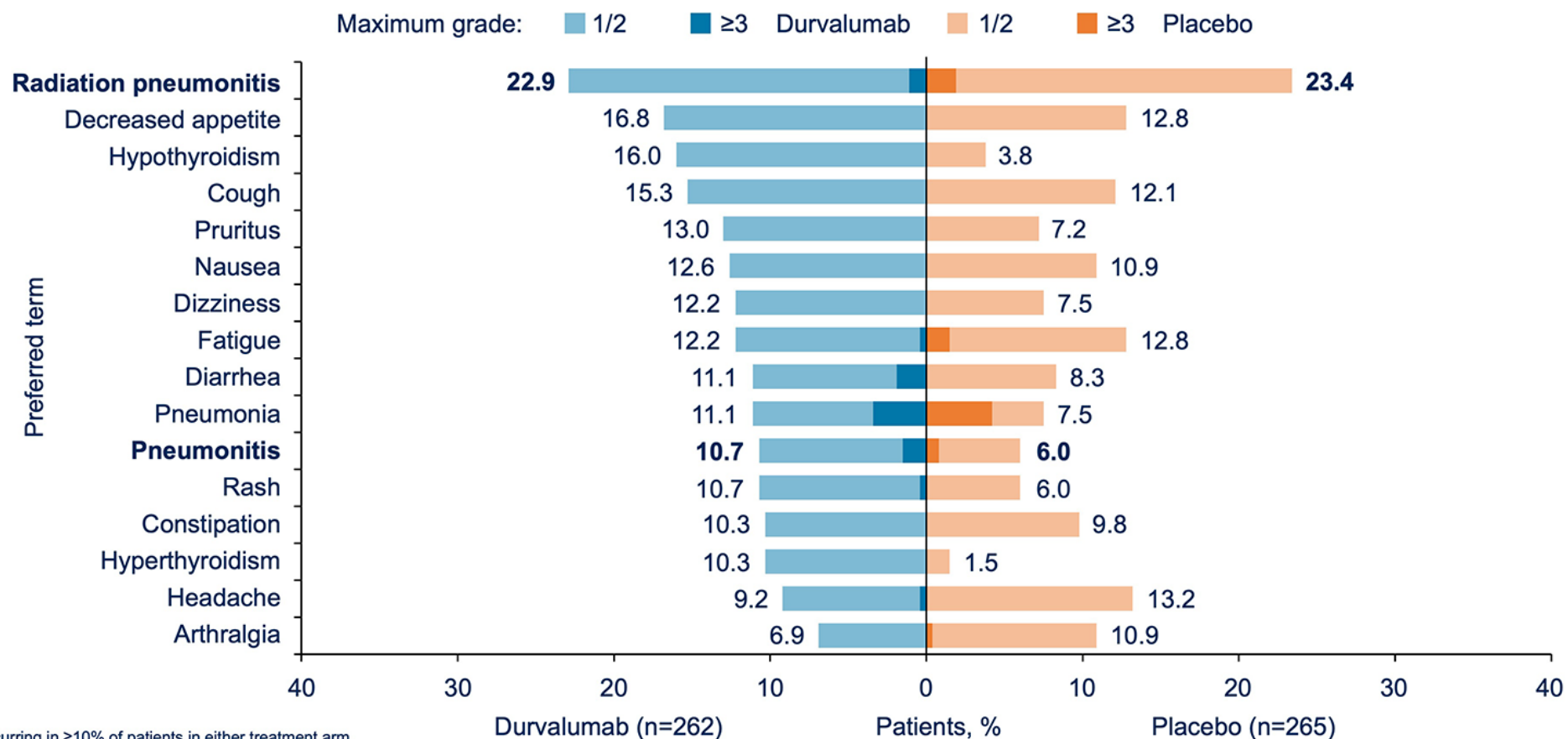
CBPC LOCALEMENT AVANCÉ : ADRIATIC



CBPC LOCALEMENT AVANCÉ : ADRIATIC



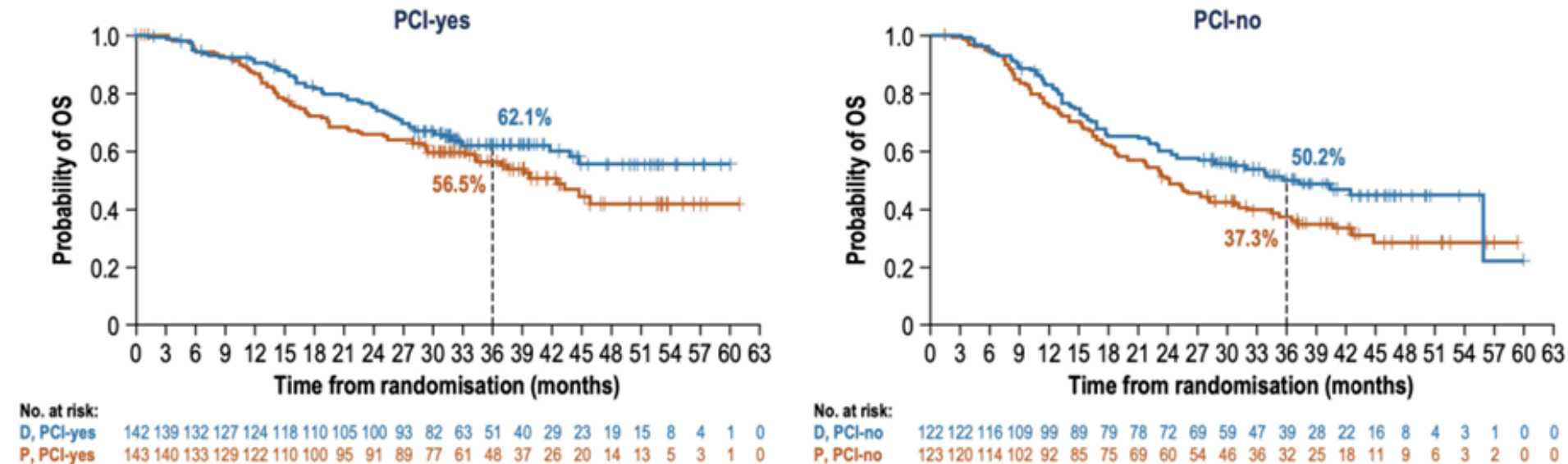
CBPC LOCALEMENT AVANCÉ : ADRIATIC



*Occurring in ≥10% of patients in either treatment arm.

CBPC LOCALEMENT AVANCÉ : ADRIATIC

	PCI-yes		PCI-no		ITT	
	D (n = 142)	P (n = 143)	D (n = 122)	P (n = 123)	D (n = 264)	P (n = 266)
Median OS (95% CI), months	NR (43.9–NE)	42.5 (33.4–NE)	37.3 (24.3–NE)	24.1 (18.8–31.1)	55.9 (37.3–NE)	33.4 (25.5–39.9)
3-year OS, %	62.1	56.5	50.2	37.3	56.5	47.6
HR (95% CI)	0.75 (0.52–1.07)*		0.71 (0.51–0.99)*		0.73 (0.57–0.93)†	
Multivariable HR (95% CI)	0.72 (0.50–1.03)‡		0.73 (0.52–1.02)‡		–	



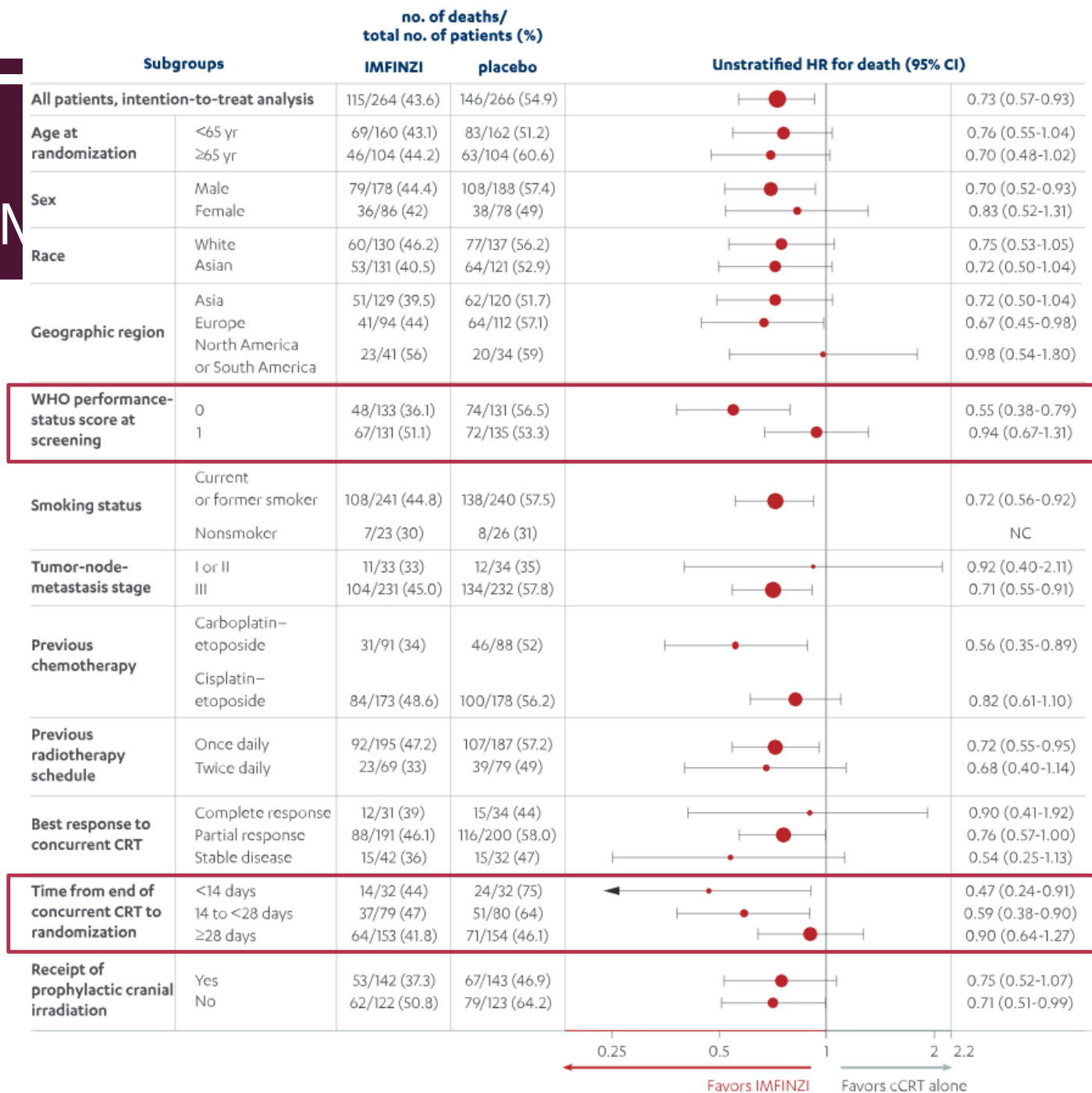
*Subgroup HRs and CIs calculated using an unstratified Cox proportional hazards model.

†ITT HR and CIs calculated using a Cox proportional hazards model stratified by receipt of PCI.

‡Multivariable analysis interaction p-value 0.96.

CI, confidence interval; NE, not estimable; NR, not reached; yr, year.

CBPC LOCALEN



CBPC MÉTASTATIQUE : BMS 986012

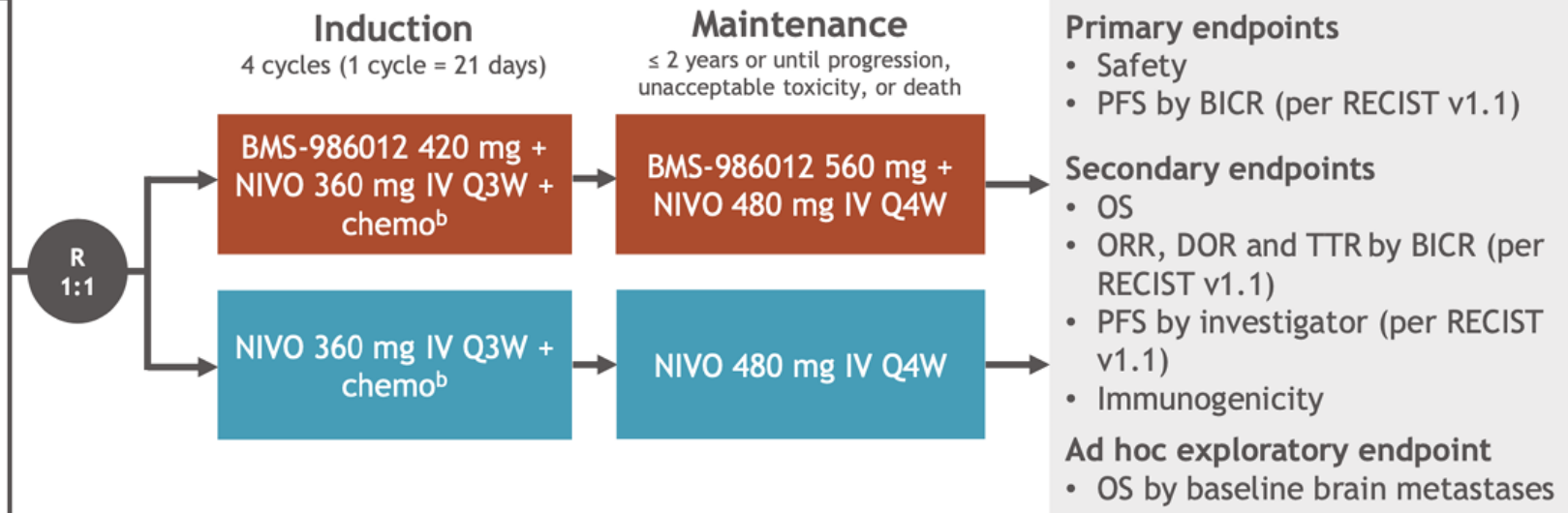
A randomized, open-label phase 2 study of BMS-986012 (anti-Fuc-GM1)
+ NIVO + chemo as first-line therapy for ES-SCLC

Key eligibility criteria

- Age ≥ 18 years
- Histologically/cytologically confirmed ES-SCLC^a
- No prior systemic therapy/newly diagnosed
- ≥ 1 measurable lesion
- ECOG PS (0/1)

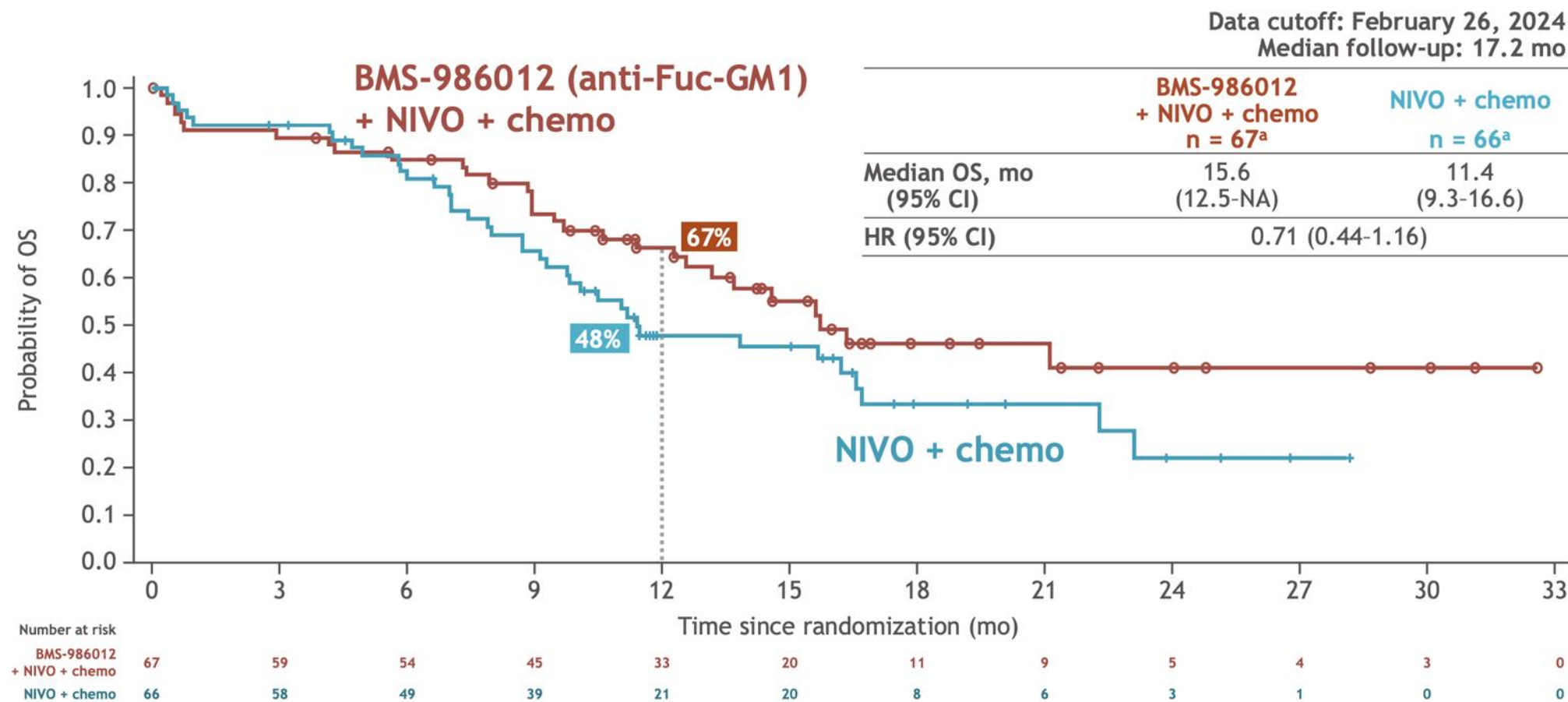
Stratification

- Liver metastases (yes/no)
- ECOG PS (0/1)

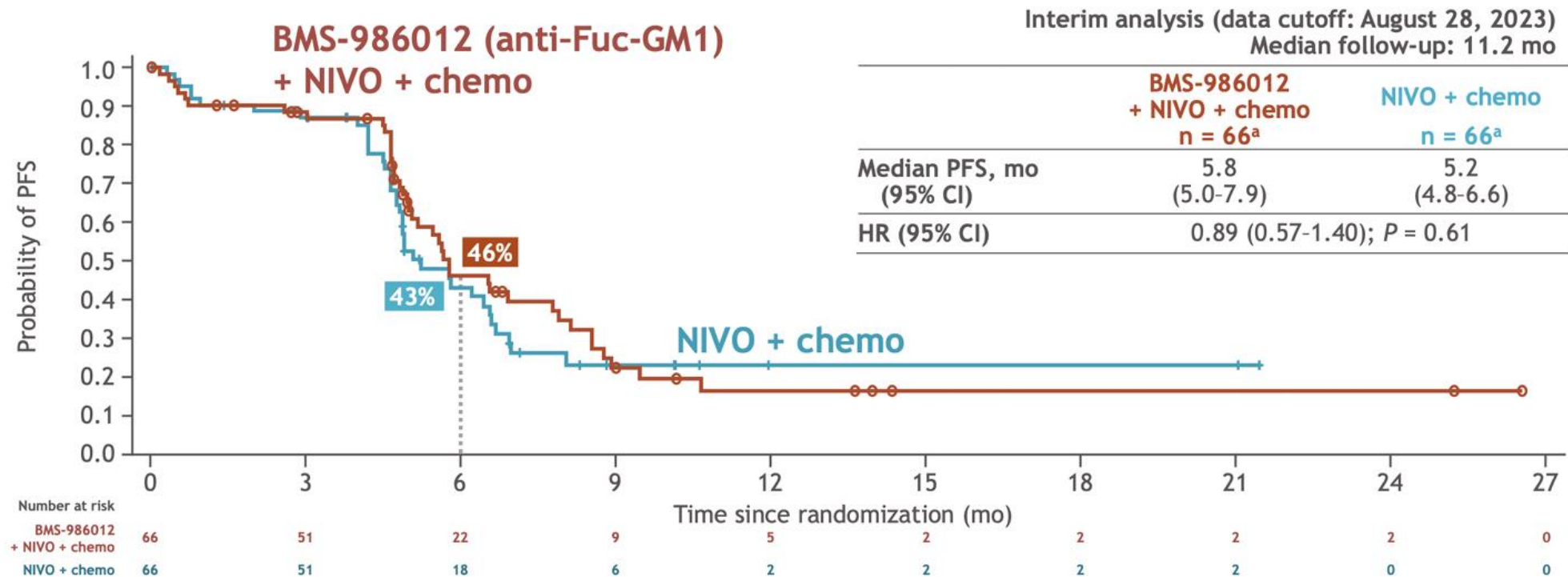


- The prespecified interim analysis took place when $\sim 75\%$ of PFS information was available: data cutoff August 28, 2023
- An additional analysis took place after longer follow-up to allow a more meaningful assessment of OS: data cutoff February 26, 2024

CBPC MÉTASTATIQUE : BMS 986012



CBPC MÉTASTATIQUE : BMS 986012



- At the later February 2024 data cutoff (median follow-up of 17.2 mo), median PFS was 5.8 mo (95% CI, 5.0-7.9) with **BMS-986012 + NIVO + chemo** vs 5.1 mo (95% CI, 4.8-6.6) with **NIVO + chemo**, HR 0.81 (95% CI, 0.53-1.23, P = 0.32)
 - The 12-month PFS rate was 22% (95% CI, 12-33) with **BMS-986012 + NIVO + chemo** vs 19% (95% CI, 9-31) with **NIVO + chemo**



LE CANCER BRONCHIQUE NON À PETITES CELLULES



CBNPC localisé



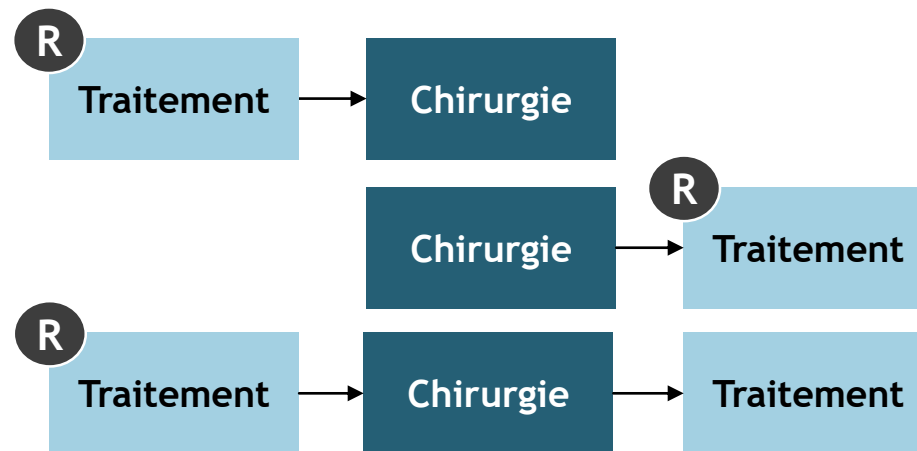
CBNPC LOCALISÉ

Approches

Néoadjuvant

Adjuvant

Péri-opératoire

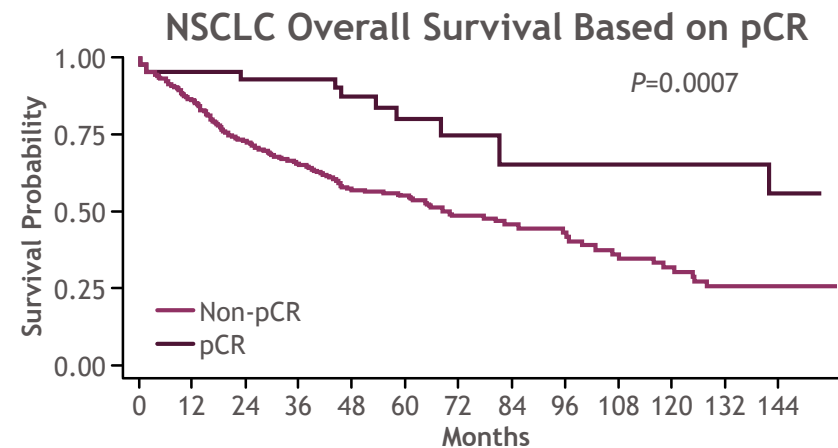


Critères

EFS, pCR, MPR,
OS

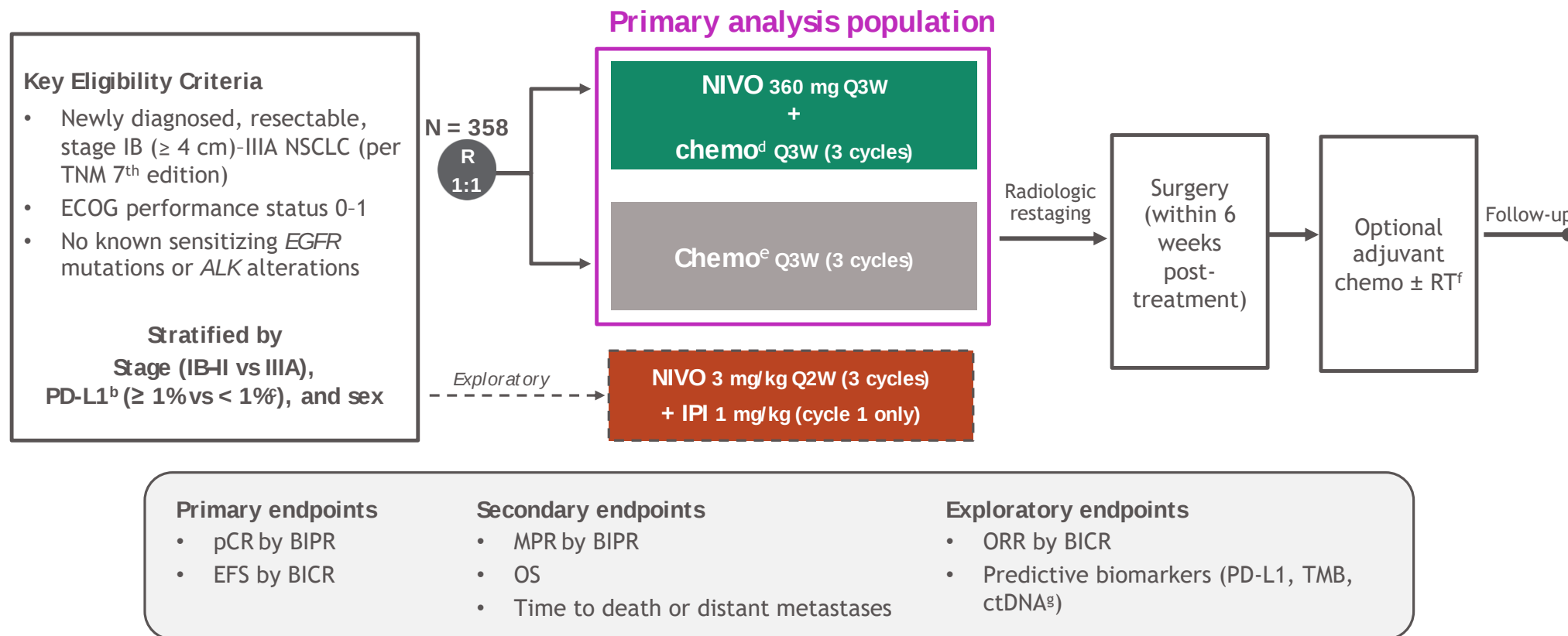
DFS, OS

EFS, pCR, MPR,
OS



- **IMMUNOTHERAPIE
NEOADJUVANTE**

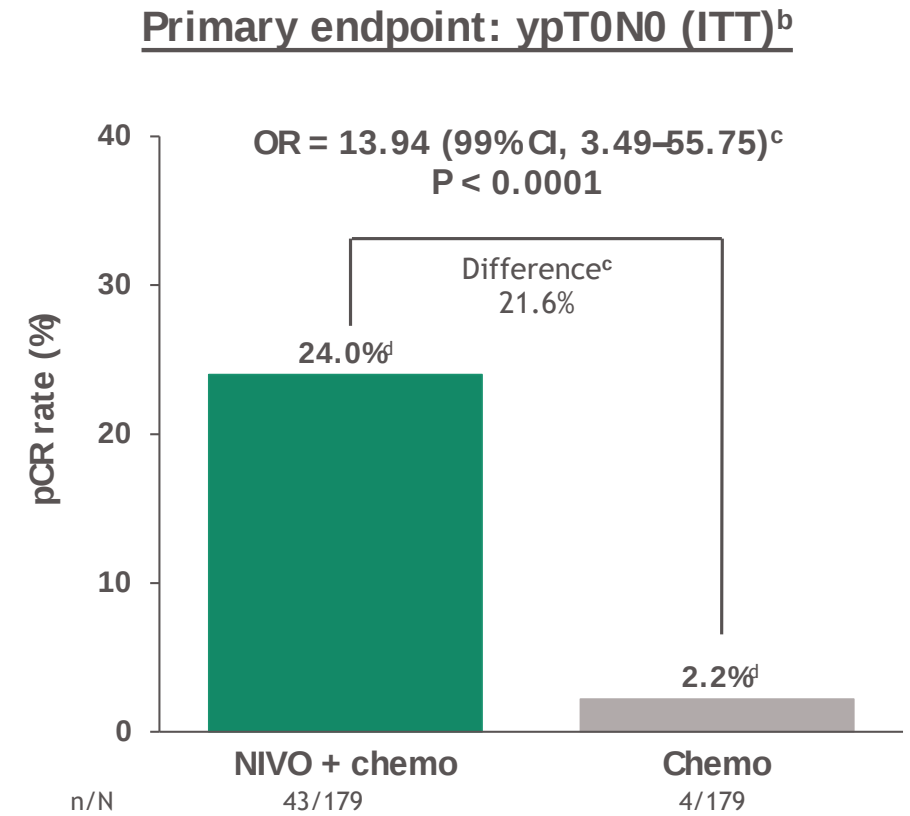
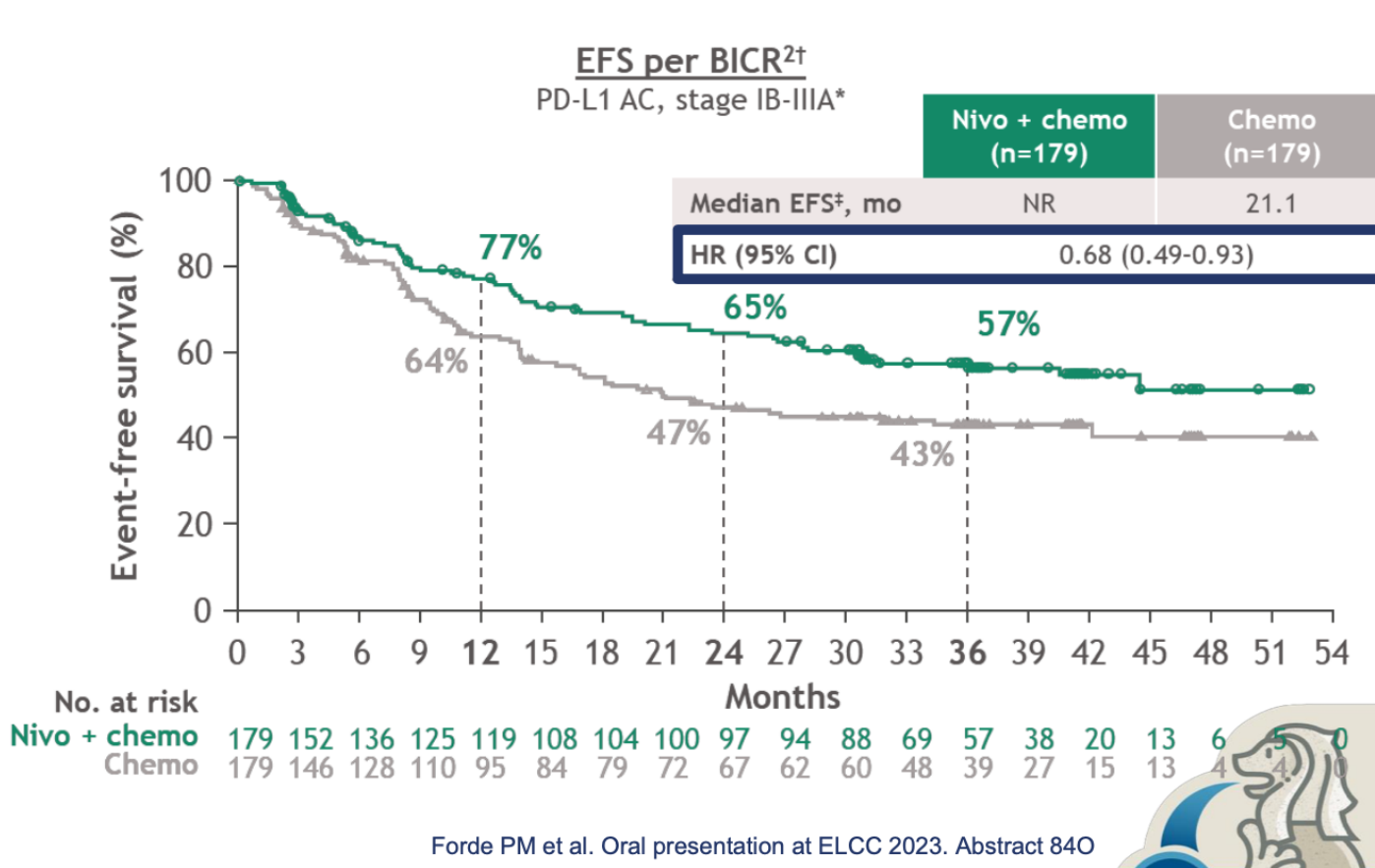
CBNPC LOCALISÉ : CHECKMATE 816



Database lock: September 16, 2020; minimum follow-up: 7.6 mo for NIVO + chemo and chemo arms.

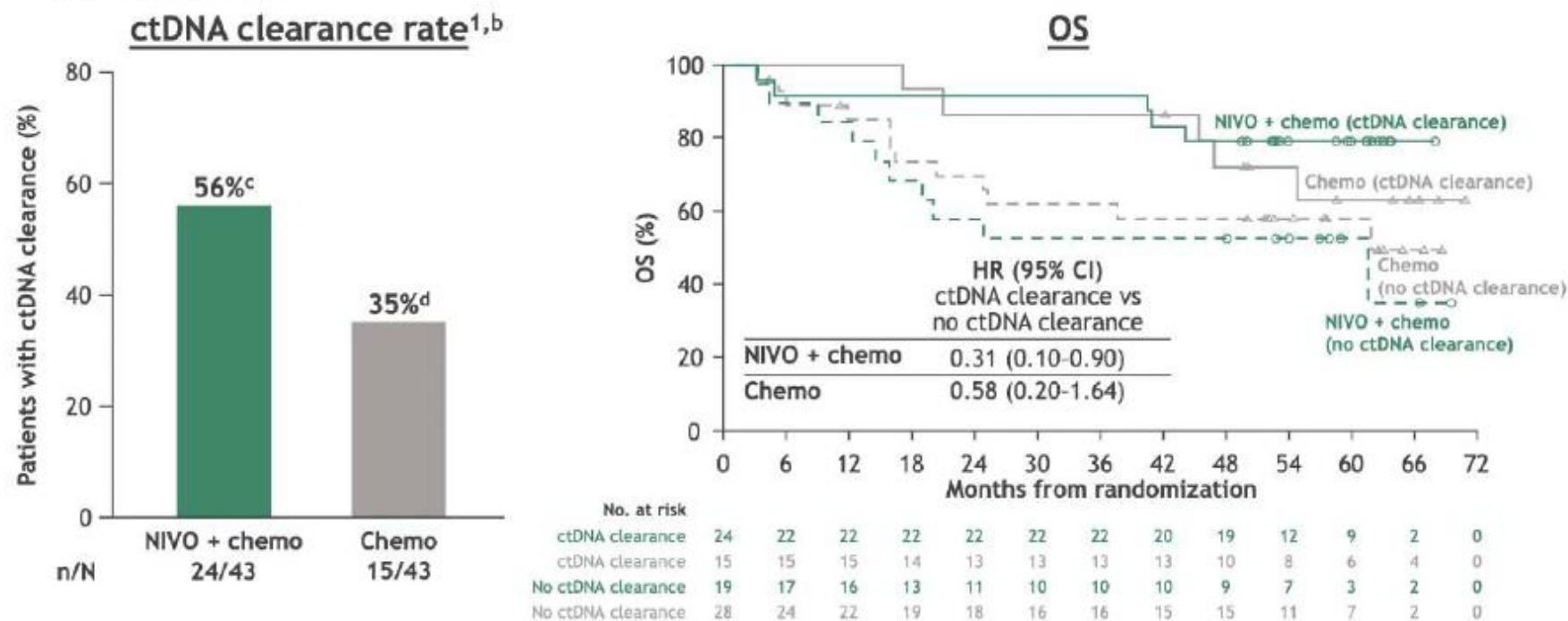
^aNCT02998528; ^bDetermined by the PD-L1 IHC 28-8 pharmDx assay (Dako); ^cIncluded patients with PD-L1 expression status not evaluable and indeterminate; ^dNSQ; pemetrexed + cisplatin; paclitaxel + carboplatin; SQ: gemcitabine + cisplatin; paclitaxel + carboplatin; ^eVinorelbine + cisplatin, or docetaxel + cisplatin, or gemcitabine + cisplatin (SQ only), or pemetrexed + cisplatin (NSQ only) or paclitaxel + carboplatin; ^fPer HCP choice; ^gPerformed using tumor-guided personalized ctDNA panel (ArcherDX PCM).

CBNPC LOCALISÉ : CHECKMATE 816



CBNPC LOCALISÉ : CHECKMATE 816

- Among concurrently randomized patients, 89 (25%) had evaluable ctDNA levels, and 86 (24%) had detectable ctDNA levels at baseline^{1,a}



Minimum/median follow-up, 49.1/57.6 months.

CBNPC LOCALISÉ : NEOSTAR & FORDE

CA209-926 (NEOSTAR)¹

Key Eligibility

NSCLC Stage I-IIIa N2 single station (AJCC 7th)
No prior systemic therapy
Surgical resectability
ECOG PS 0-1
Stratified by Stage

R
1:1

Arm A:
Nivolumab 3 mg/kg D1,15,29

n=23

Arm B:
Nivolumab 3 mg/kg D1,15,29
Ipilimumab 1 mg/kg D1

n=21

Surgery

SOC adjuvant
therapy

Primary Endpoint: MPR Rate

NIVOLUMAB : 57.7%
survie sans
évènement, 70% de
survie globale

CA209-159 (FORDE)^{2,3}

Key Eligibility

NSCLC Stage I-IIIa (AJCC 7th)
No prior systemic therapy
Surgical resectability
ECOG PS 0-1

Sequential
Enrollment

Nivolumab 3mg/kg D1,15

n=21

Nivolumab 3mg/kg D1,15, 29
Ipilimumab 1mg/kg D1

n=9

Nivolumab 3mg/kg D1,15, 29

n=16

Surgery

SOC adjuvant
therapy

Primary Endpoint: Feasibility/Safety

NIVO + IPI : 50.5 % de
survie sans
évènement, 66.9% de
survie globale

Combined Patient Analysis

Nivolumab
3 cohorts, n= 60

Nivolumab plus Ipilimumab
2 cohorts, n= 30

1. Cascone et al. Nat Med 2021; 2. Forde et al. N Engl J Med 2018; 3. Reuss et al. J Immunother Cancer 2020

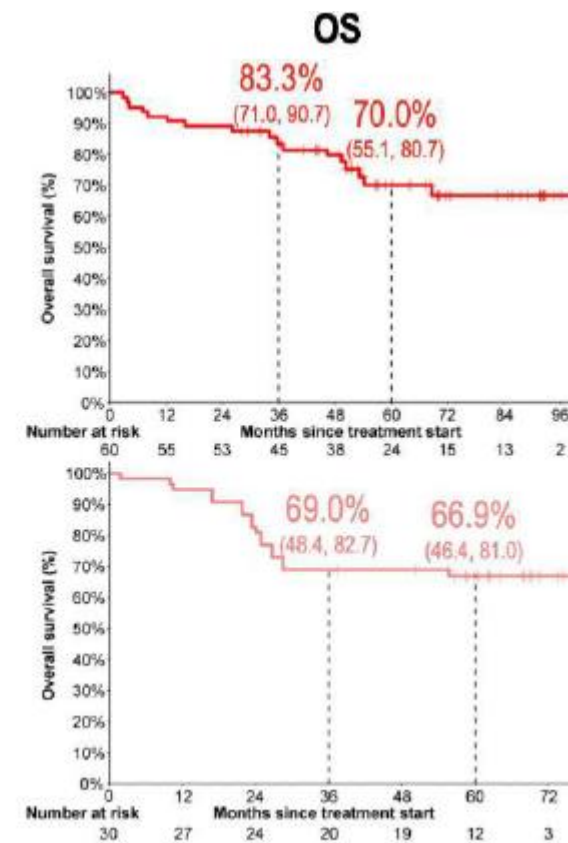
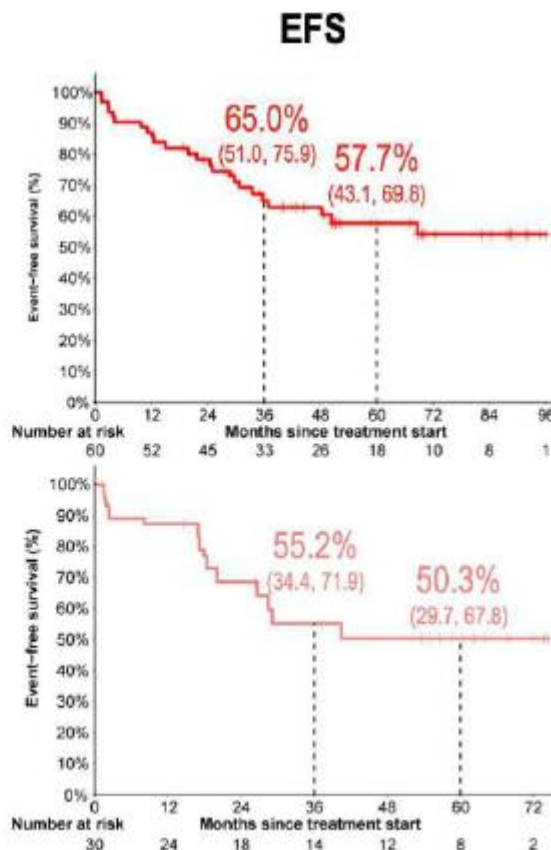
CBNPC LOCALISÉ : NEOSTAR & FORDE

Pathologic Response Rates

	MPR (95% CI)	pCR (95% CI)
Nivo (n=60)	28.1% (17.4, 42.1)	8.3% (3.5, 18.5)
Nivo plus Ipi (n=30)	33.3% (19.0, 51.7)	26.7% (13.9, 45.0)
TOTAL (n=90)	30.0% (21.5, 40.2)	13.5% (6.6, 25.7)

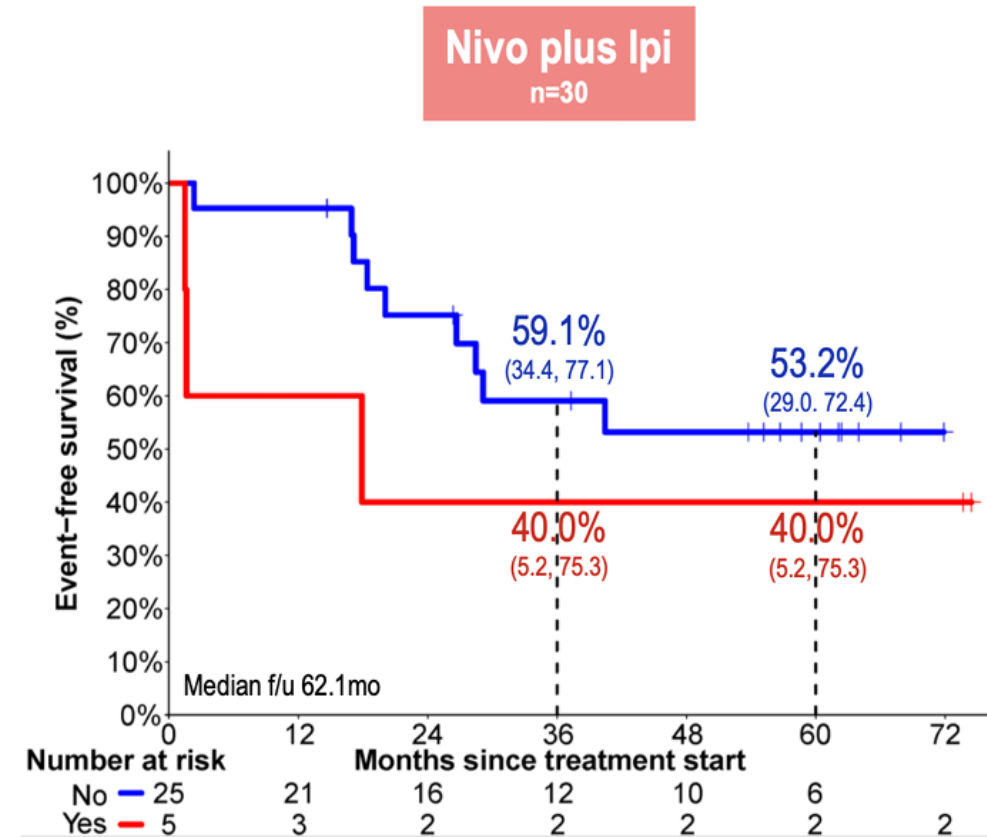
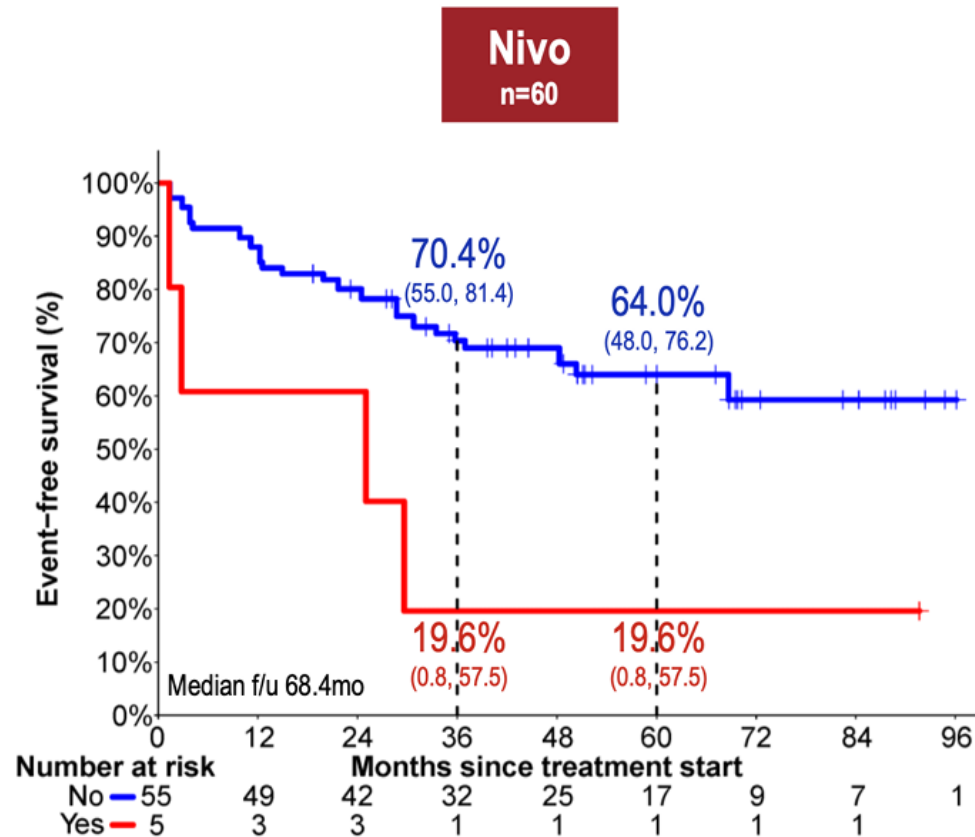
Nivo
n=60
Median f/u 68.4mo

Nivo plus Ipi
n=30
Median f/u 62.1mo



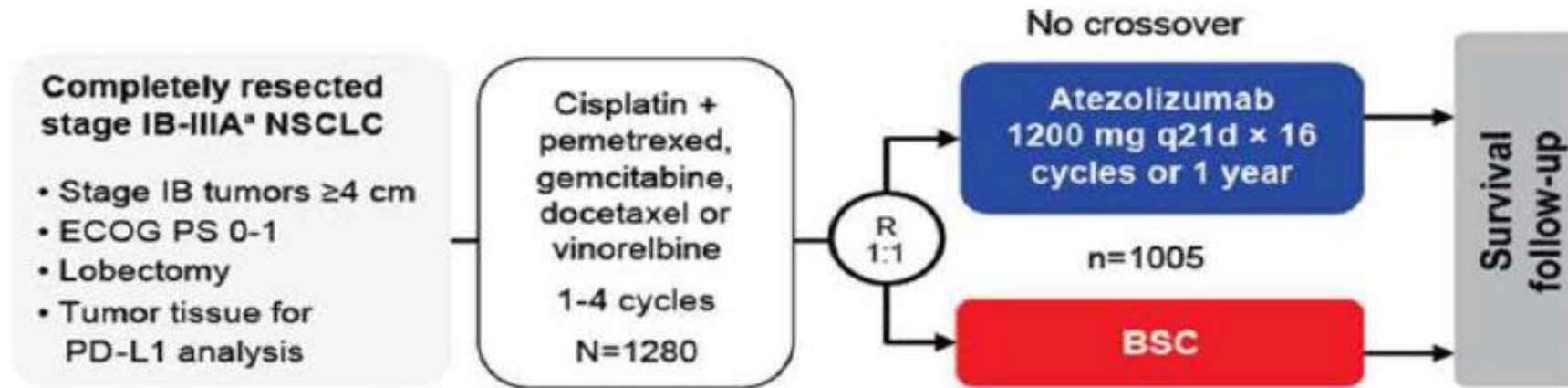
CBNPC LOCALISÉ : NEOSTAR & FORDE

EFS by *KRAS* co-mutation w/ *STK11*, *KEAP1*, and/or *SMARCA4* status (No/Yes)



- **IMMUNOTHERAPIE
ADJUVANTE**

CBNPC LOCALISÉ : IMPOWER 010



Stratification factors

- Sex | Disease stage | Histology | PD-L1 status

Primary endpoint

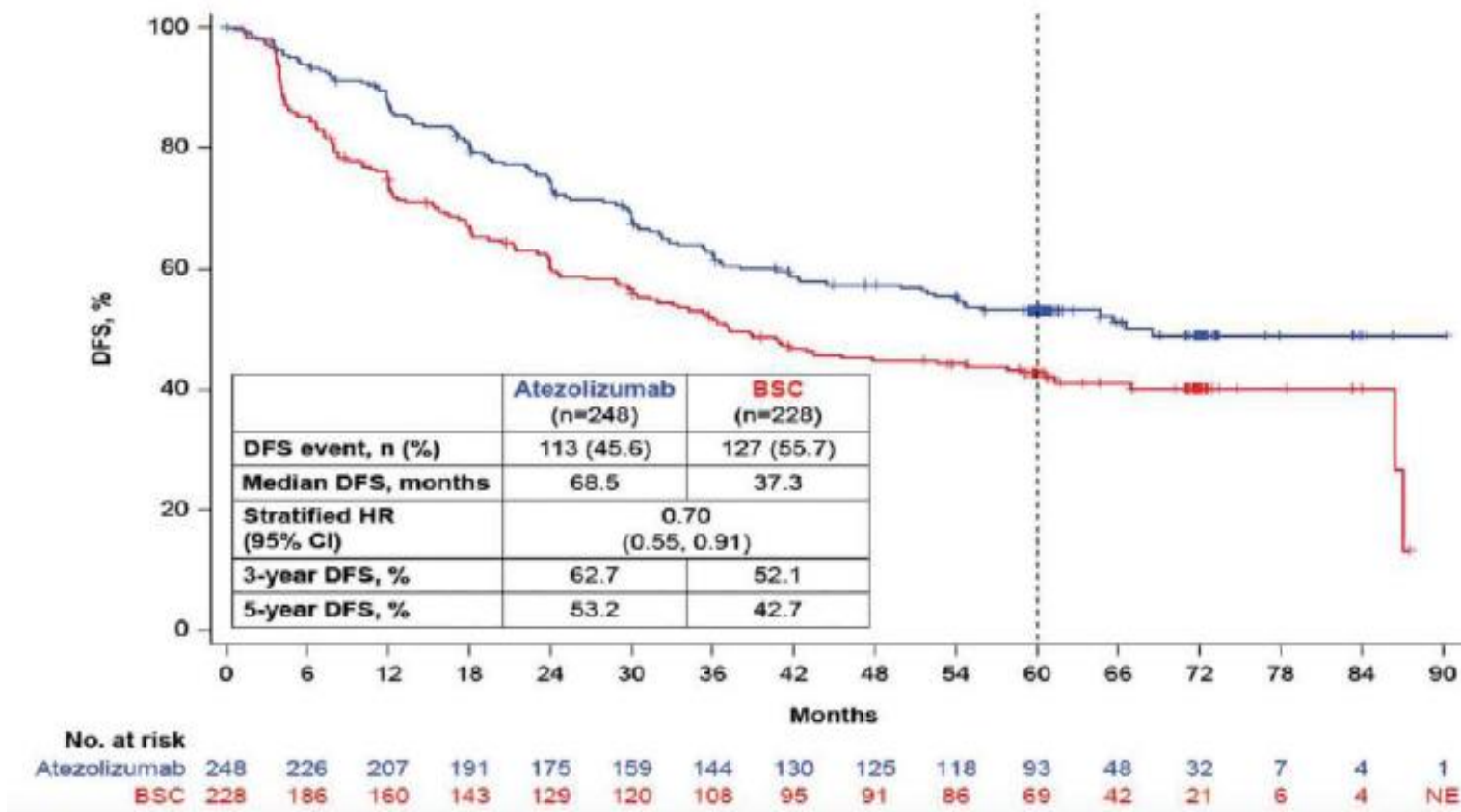
- Investigator-assessed DFS tested hierarchically

Key secondary endpoints

- OS in ITT | DFS in PD-L1 TC ≥50% stage II-IIIa | 3- and 5-year DFS

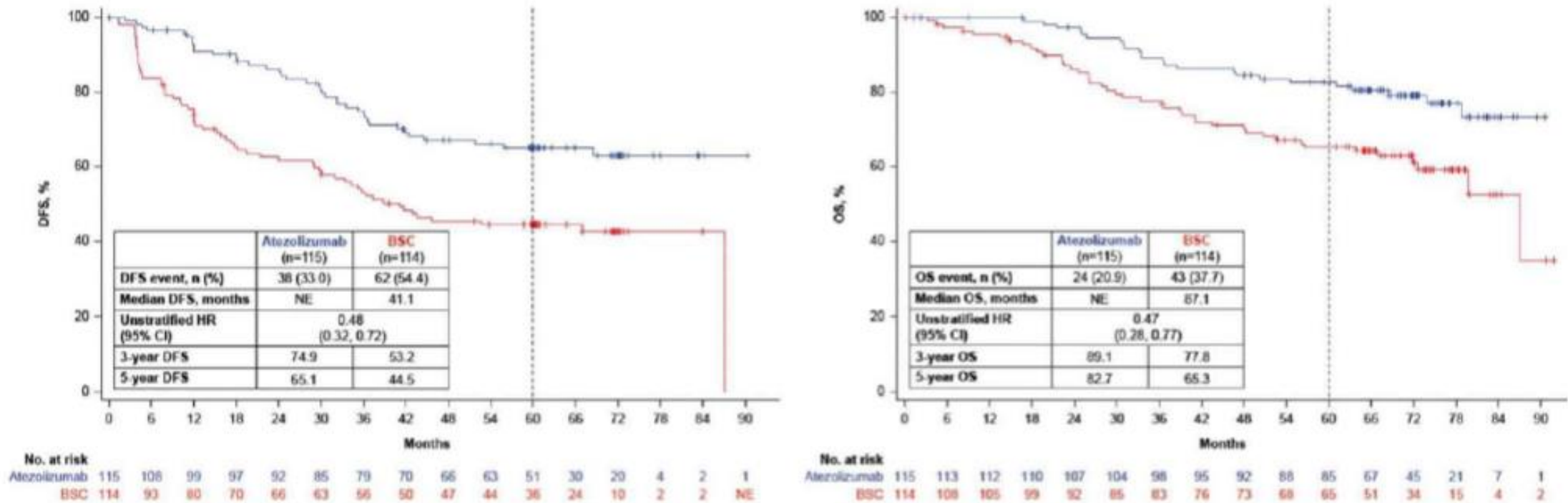
CBNPC LOCALISÉ : IMPOWER 010

Figure 2. DFS in the stage II-III A PD-L1 TC $\geq 1\%$ population



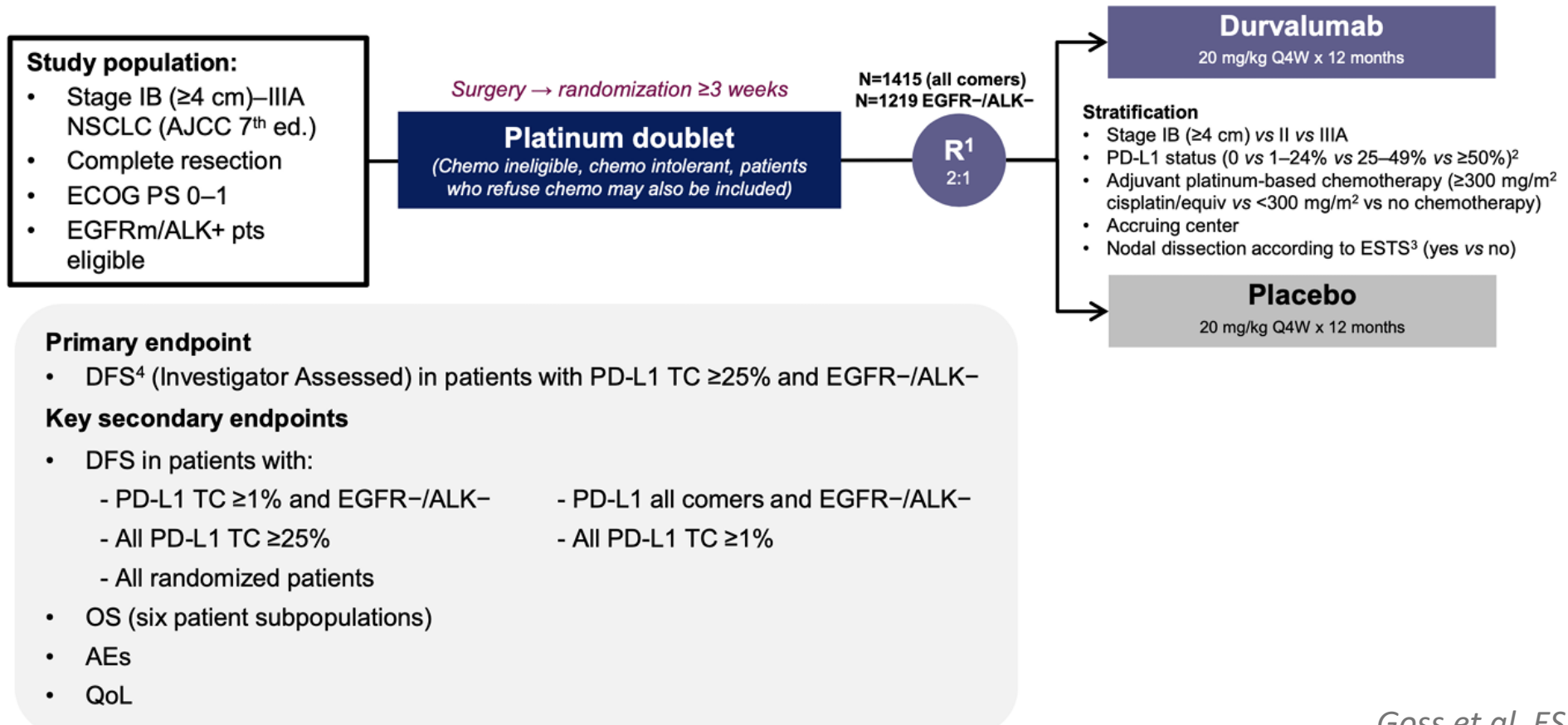
CBNPC LOCALISÉ : IMPOWER 010

Figure 5. DFS and OS in the stage II-IIIa PD-L1 TC ≥50% population



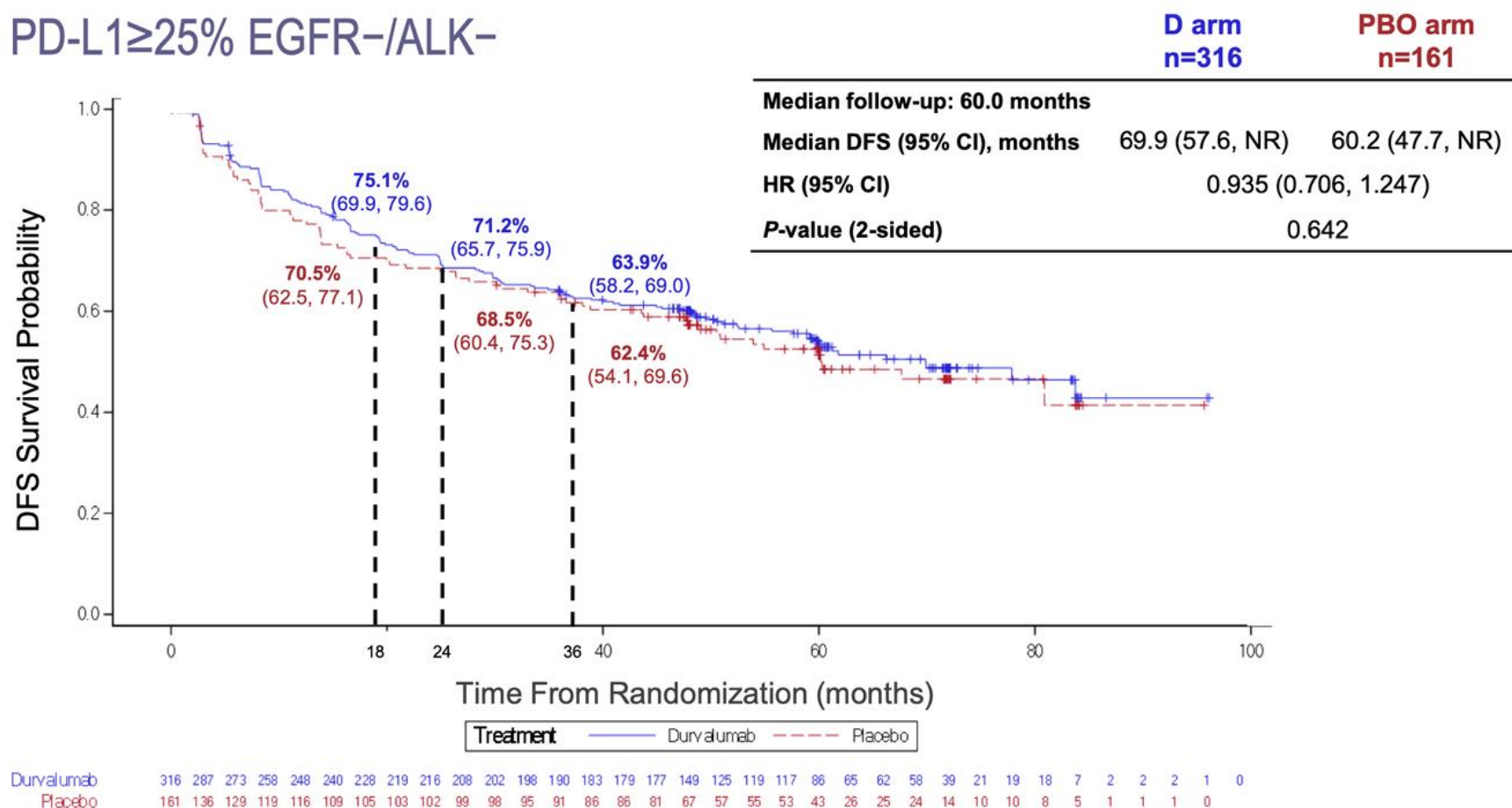
CBNPC LOCALISÉ : CCTG BR.31

CCTG BR.31 Trial Design

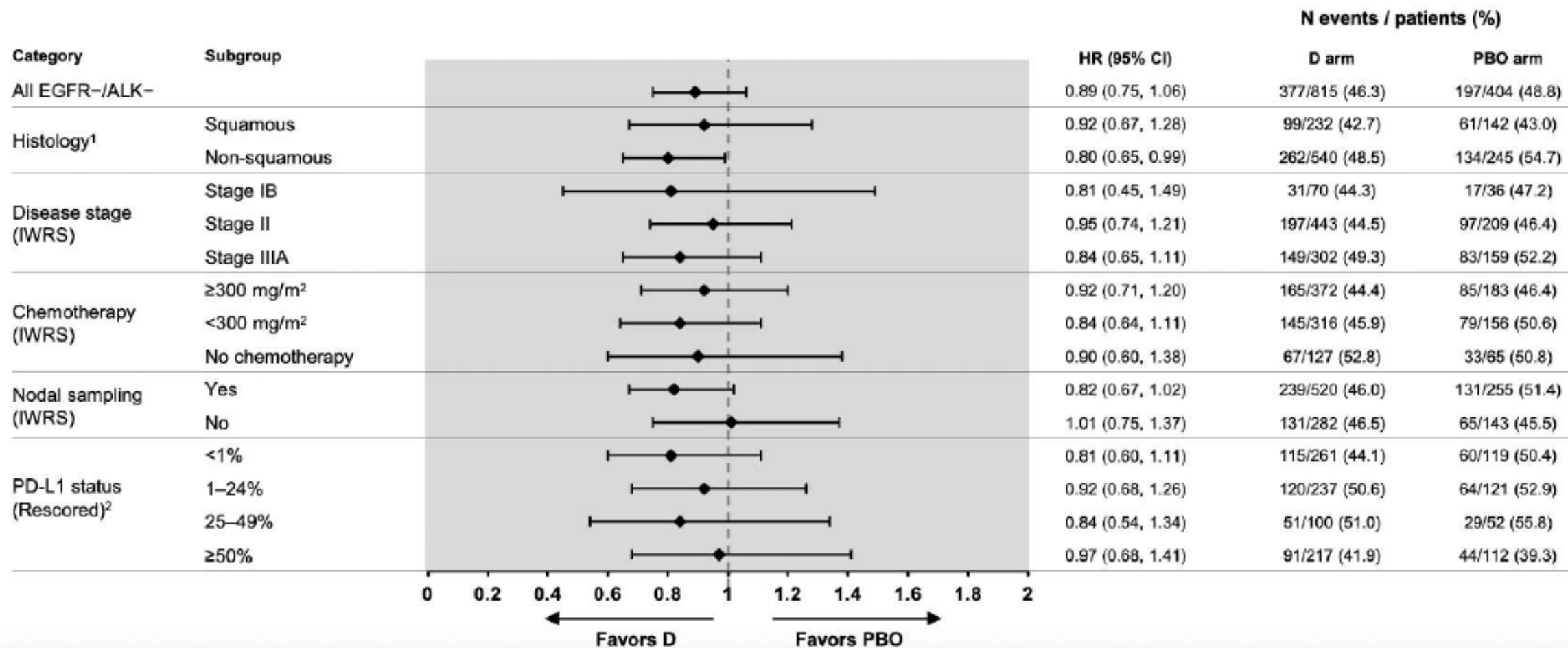


CBNPC LOCALISÉ : CCTG BR.31

DFS in PD-L1 $\geq$ 25% EGFR-/ALK-

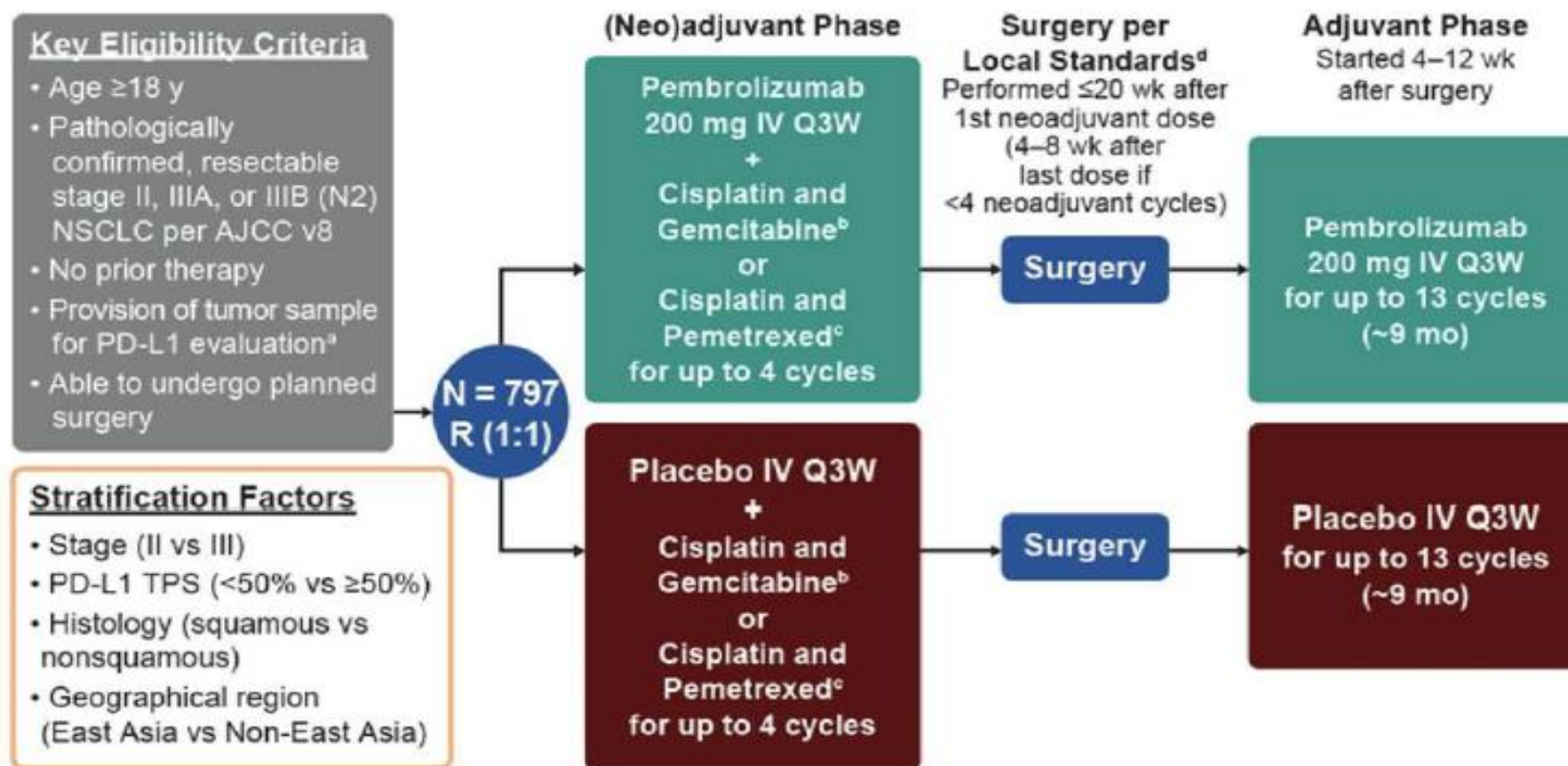


CBNPC LOCALISÉ : CCTG BR.31

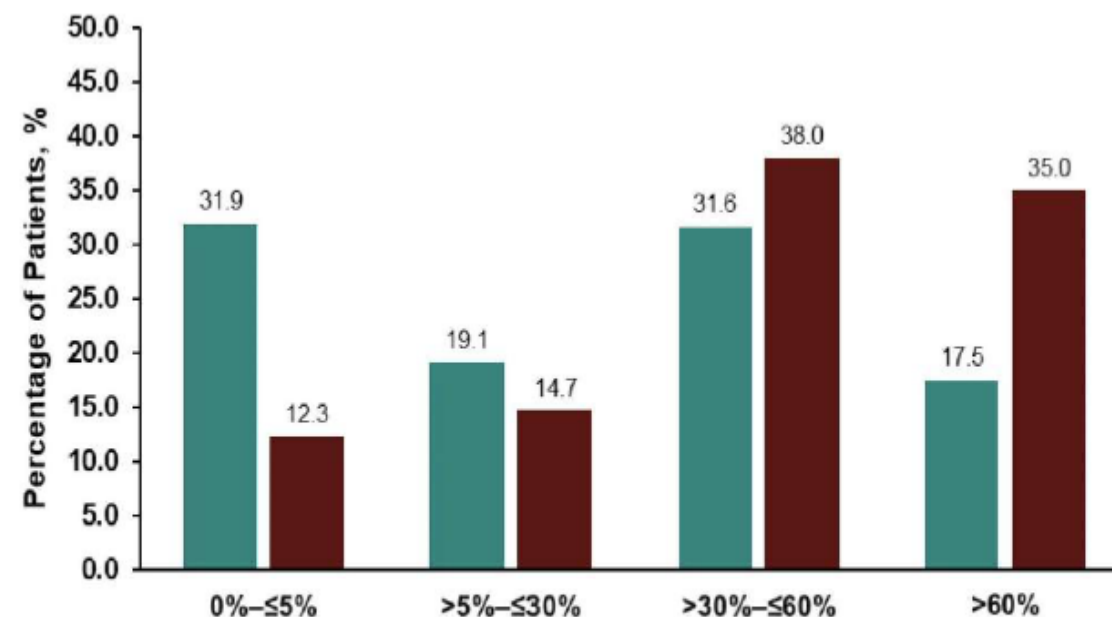
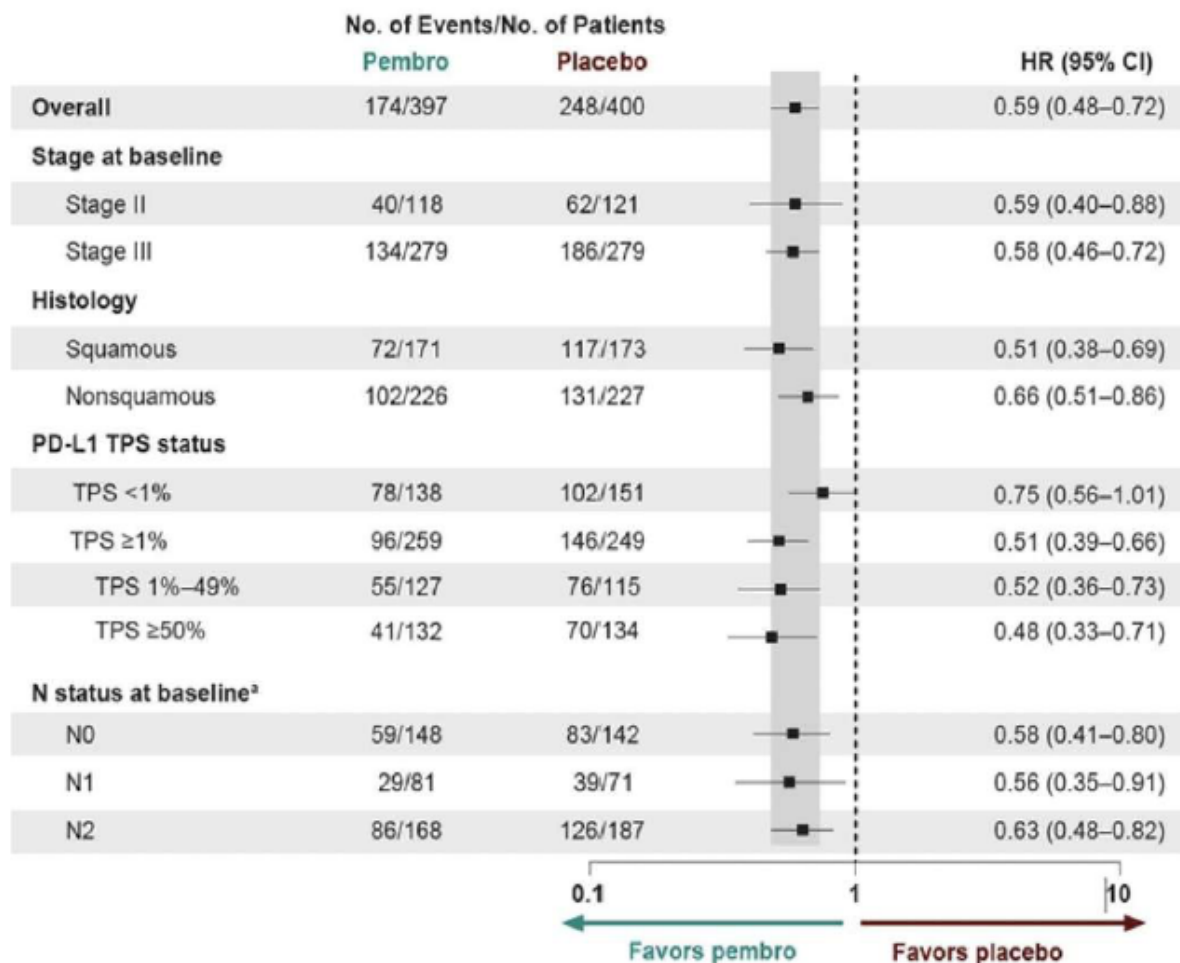


- **IMMUNOTHERAPIE
PERIOPERATOIRE**

CBNPC LOCALISÉ : KEYNOTE 671



CBNPC LOCALISÉ : KEYNOTE 671



	% Viable Tumor	
	n	Median %RVT (IQR), %
Pembro Arm	320	29.5 (1.0–56.0)
Placebo Arm	300	52.0 (29.0–68.0)

Garassino et al, ESMO24
Jones et al, WCLC24

CBNPC LOCALISÉ : CHECKMATE 77T

Key eligibility criteria

- Resectable, stage IIA (> 4 cm)–IIIB (N2) NSCLC (per AJCC 8th edition)
- No prior systemic anti-cancer treatment
- ECOG PS 0–1
- No *EGFR* mutation/known *ALK* alterations^b

N = 461

R
1:1

NIVO 360 mg Q3W
+
chemo^d Q3W
(4 cycles)

PBO Q3W
+
chemo^d Q3W
(4 cycles)

Radiologic
restaging

Radiologic
restaging

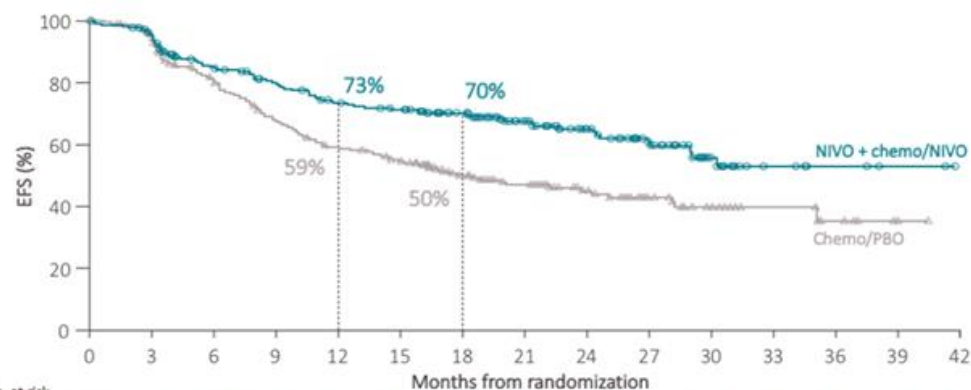
Surgery
(within 6 weeks post-
neoadjuvant
treatment)

Surgery
(within 6 weeks post-
neoadjuvant
treatment)

NIVO 480 mg Q4W
(1 year)

PBO Q4W
(1 year)

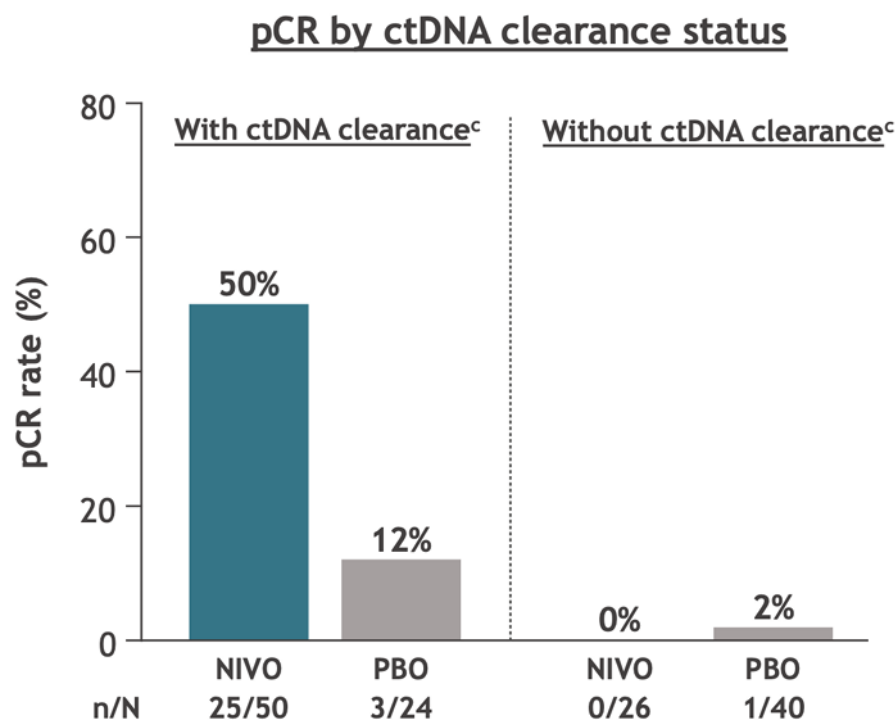
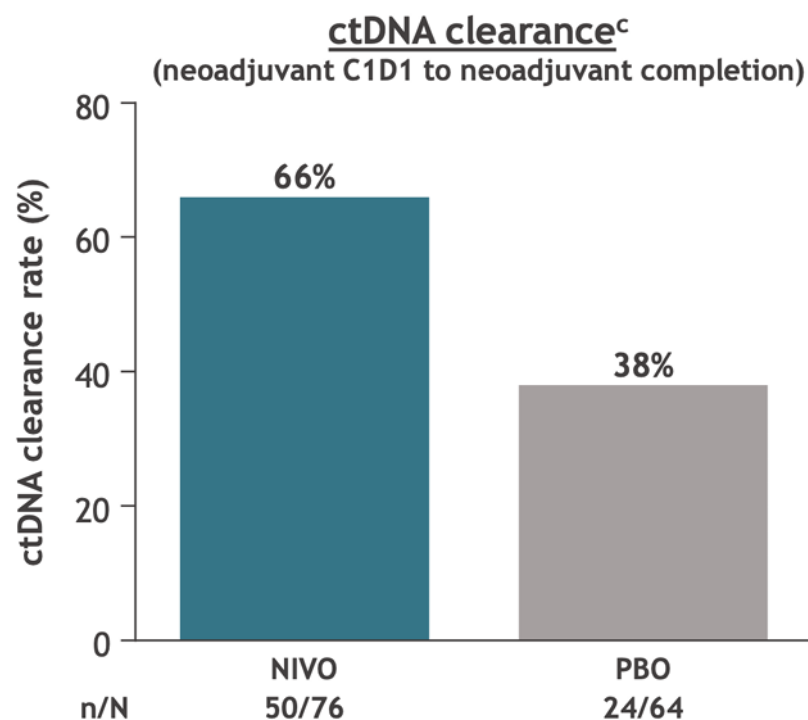
Follow-up



	NIVO + chemo/NIVO (n = 229)	Chemo/PBO (n = 232)
Median EFS, mo (95% CI)	NR (28.9–NR)	18.4 (13.6–28.1)
HR (97.36% CI) ^b	0.58 (0.42–0.81)	
P value	0.00025	

CBNPC LOCALISÉ : CHECKMATE 77T

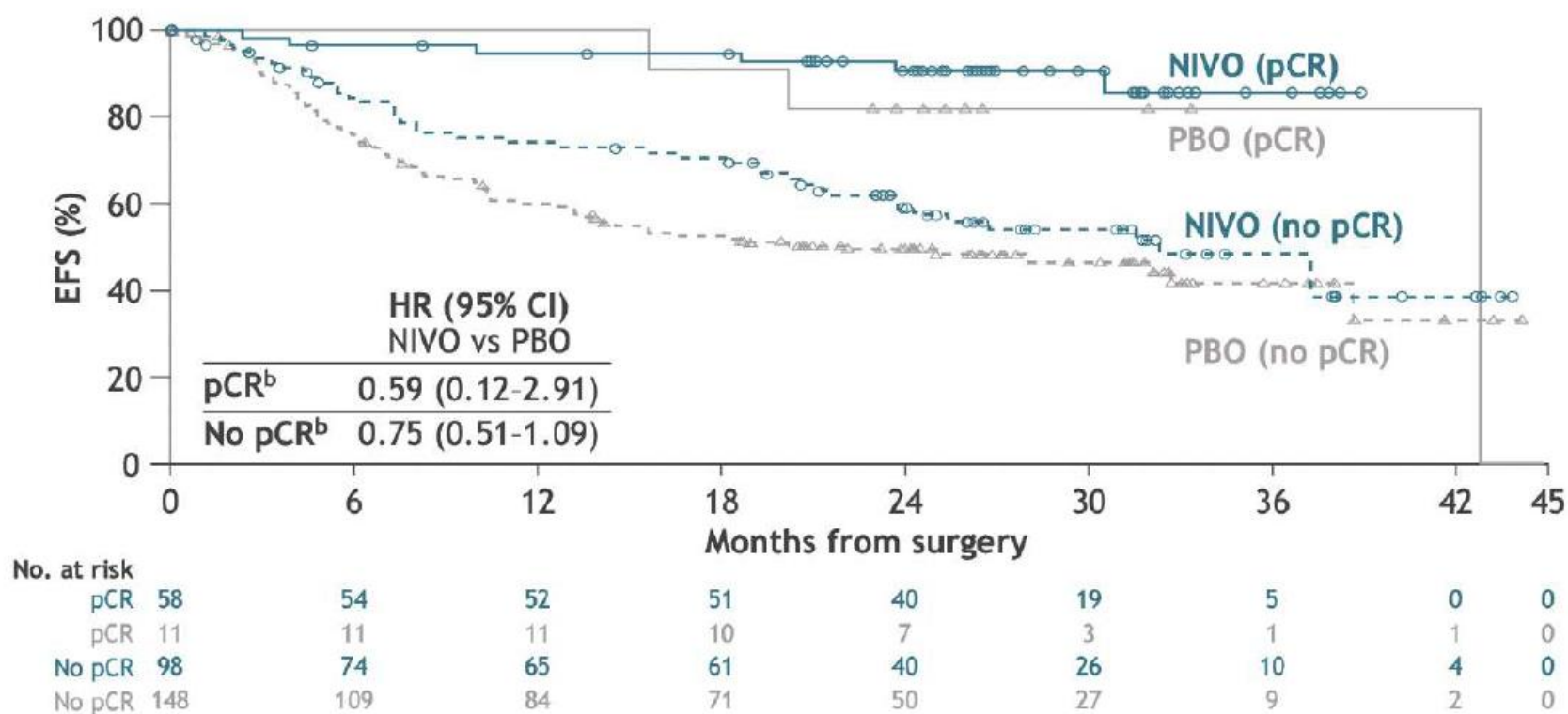
Augmentation de la survie sans événements à **40 mois groupe expérimental** versus **17 mois groupe contrôle**



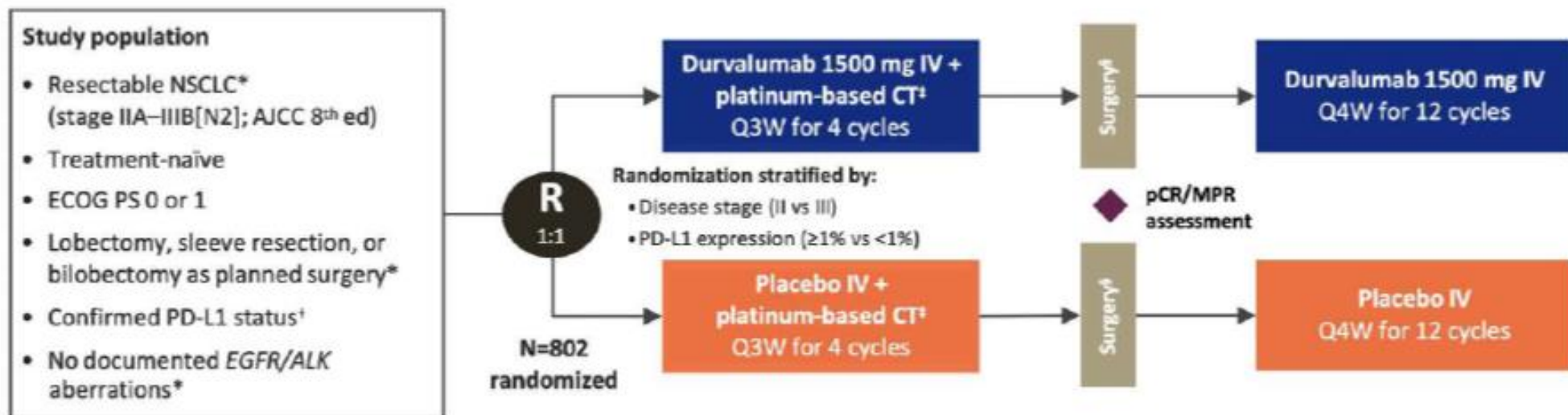
- Among patients with ctDNA clearance, the EFS HR was 0.38 (95% CI, 0.16-0.88); 2-year EFS rates were 81% (NIVO) vs 58% (PBO)
- Among patients without ctDNA clearance, the EFS HR was 0.74 (95% CI, 0.39-1.42); 2-year EFS rates were 50% (NIVO) vs 31% (PBO)

CBNPC LOCALISÉ : CHECKMATE 77T

Landmark EFS from definitive surgery^a by pCR status



CBNPC LOCALISÉ : AEGAN (ANALYSE INTERMÉDIAIRE)



Efficacy analyses were performed in the mITT population (or its resected subpopulation), which excluded patients with documented *EGFR*/*ALK* aberrations[¶]

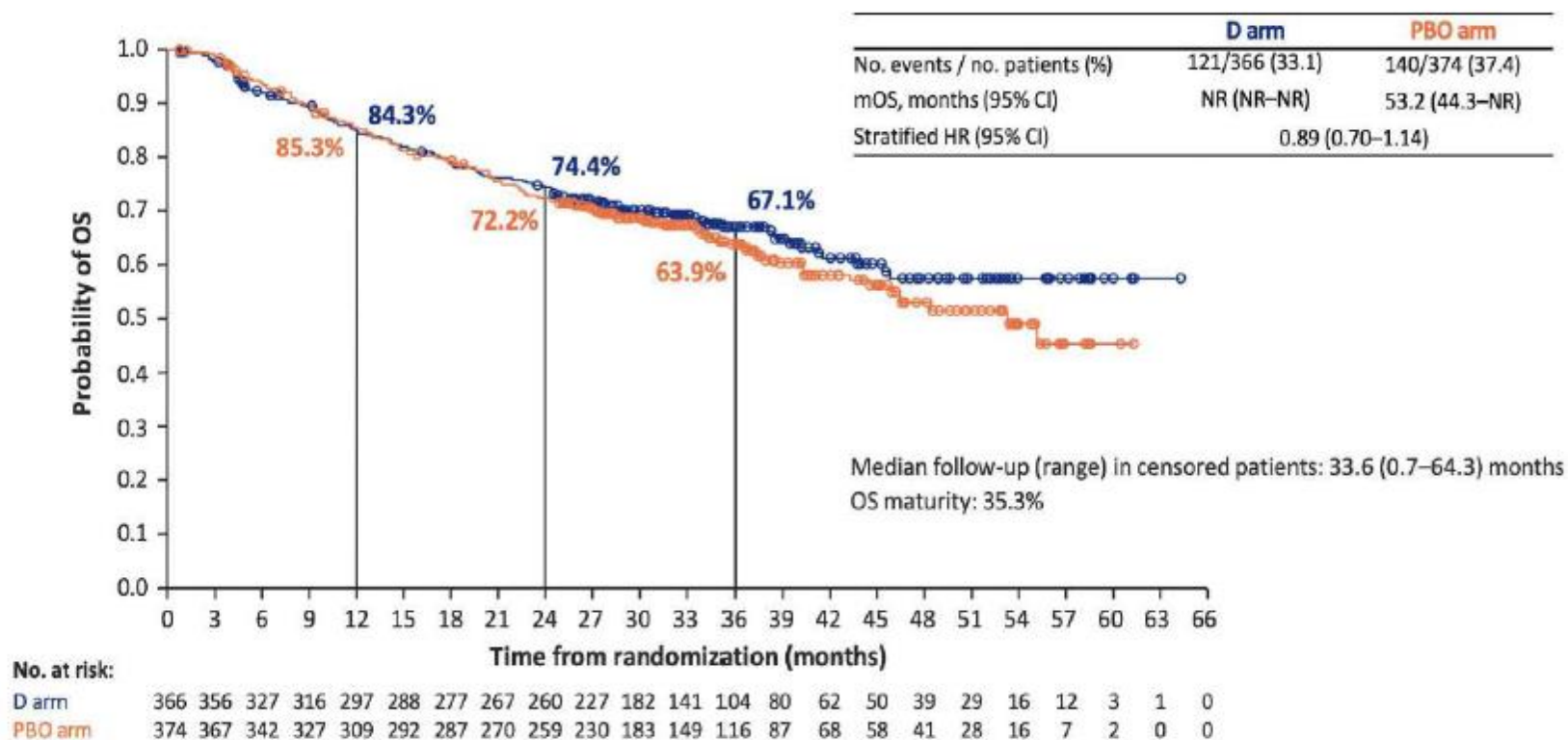
Primary endpoints: pCR, evaluated centrally (IASLC 2020[‡]), and EFS per BICR (RECIST v1.1)

Key secondary endpoints: MPR, evaluated centrally (IASLC 2020[‡]), DFS per BICR (RECIST v1.1) in the resected subpopulation, and OS

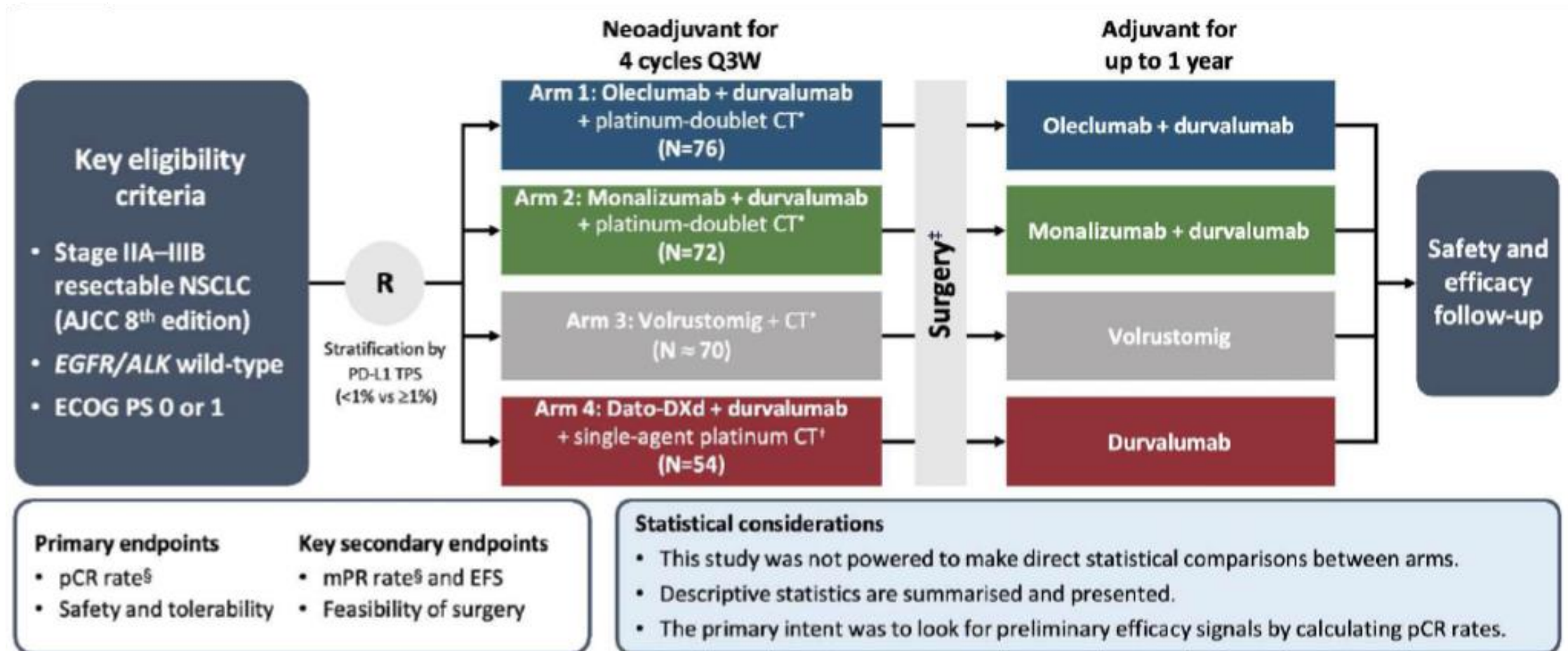
	EFS interim analysis #1	EFS interim analysis #2 (reported here)
Data cutoff	November 10, 2022	May 10, 2024
Median EFS follow-up	11.7 months (censored patients)	25.9 months (censored patients)
Data maturity	31.9%	39.1%

CBNPC LOCALISÉ : AEGAN (ANALYSE INTERMÉDIAIRE)

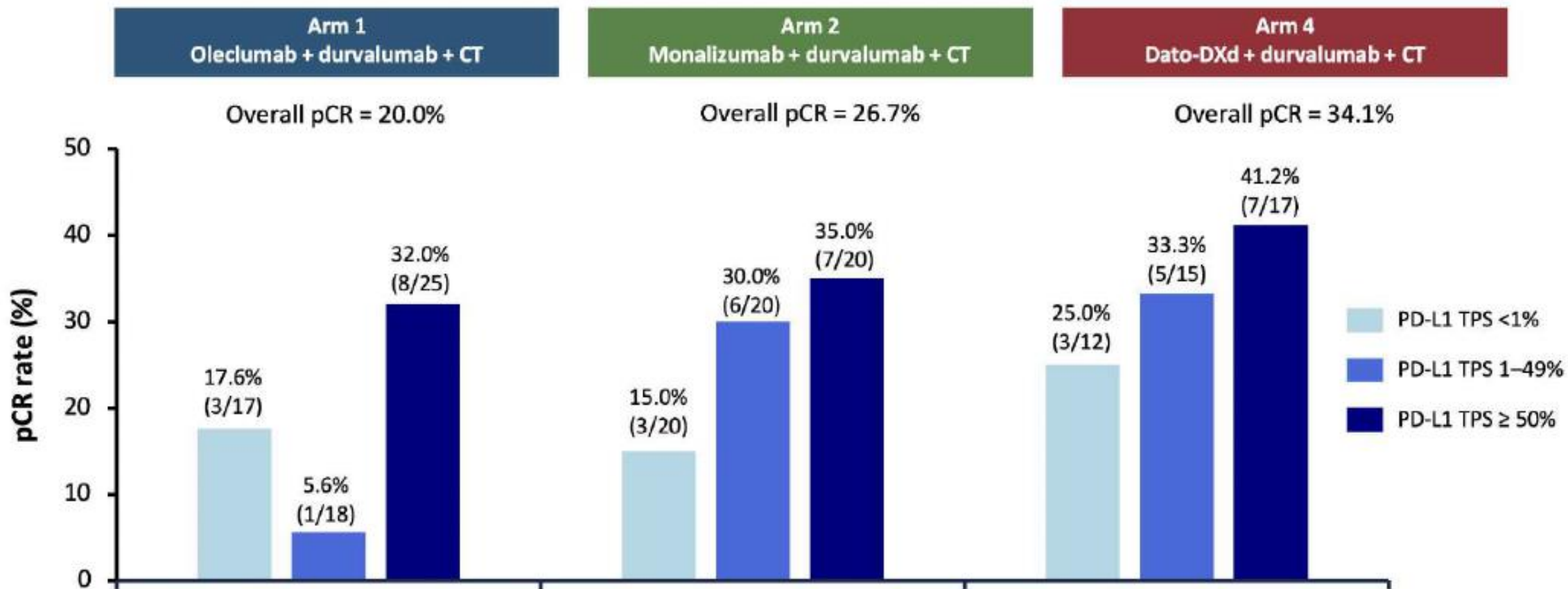
- Based on 35% maturity, an OS trend favoring the durvalumab arm was observed



CBNPC LOCALISÉ : NOUVELLES MOLÉCULES (NEOCOAST)



CBNPC LOCALISÉ : NOUVELLES MOLÉCULES (NEOCOAST)

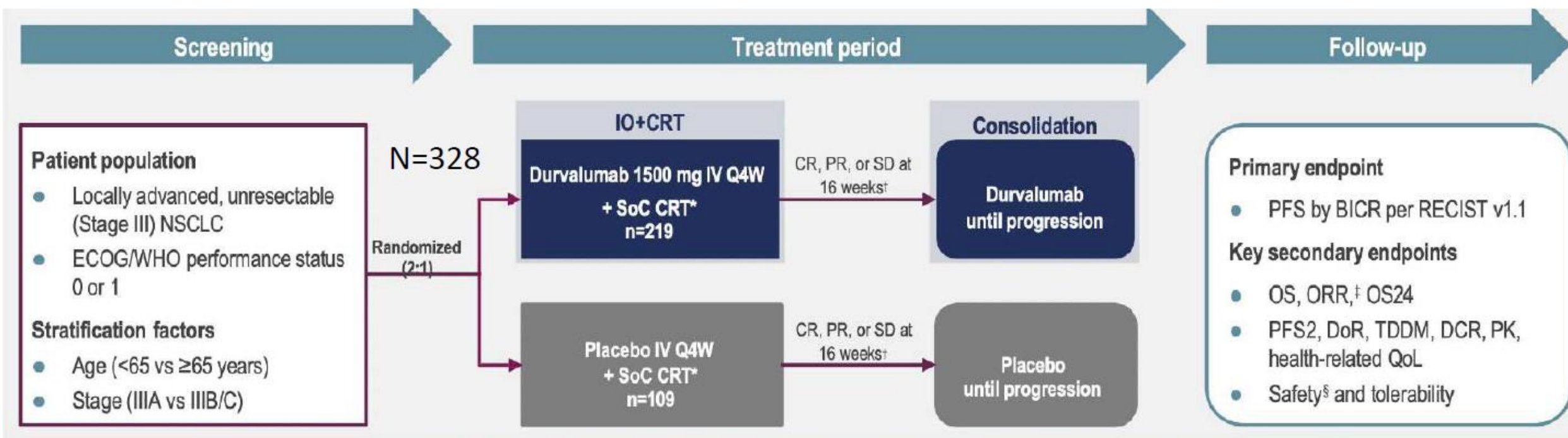




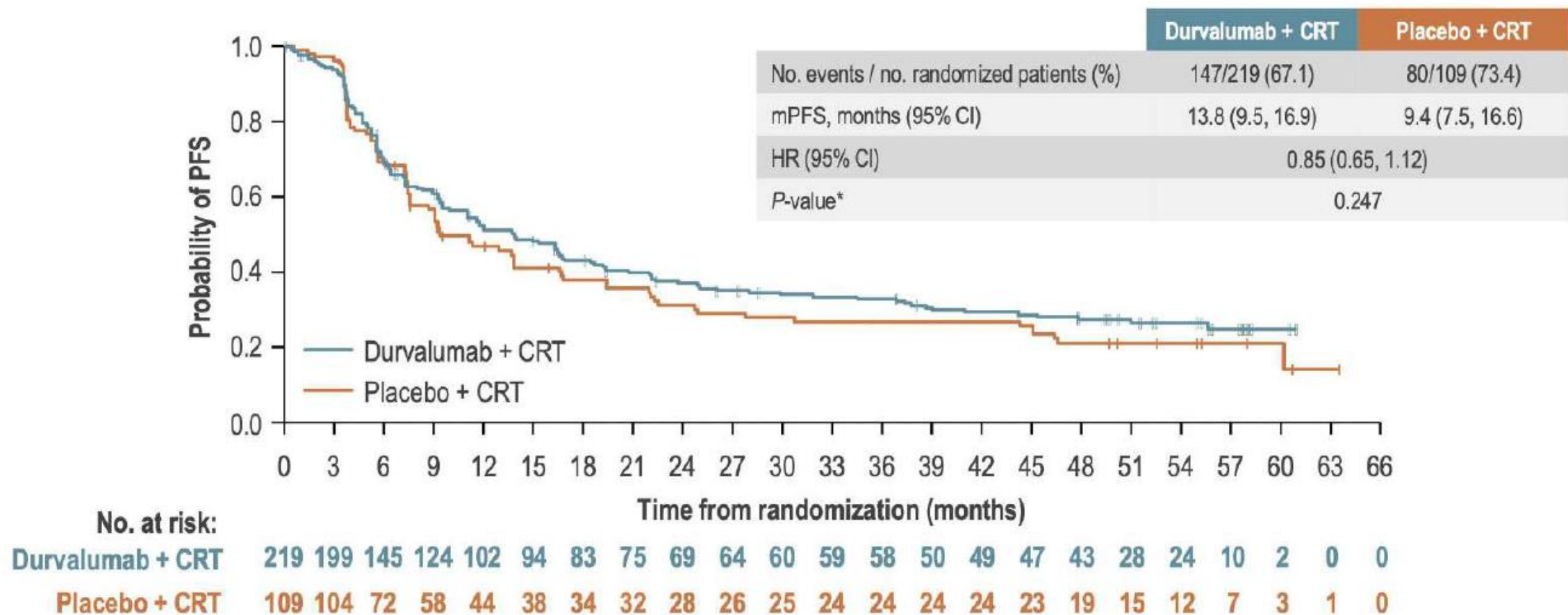
CBNPC
non résécable



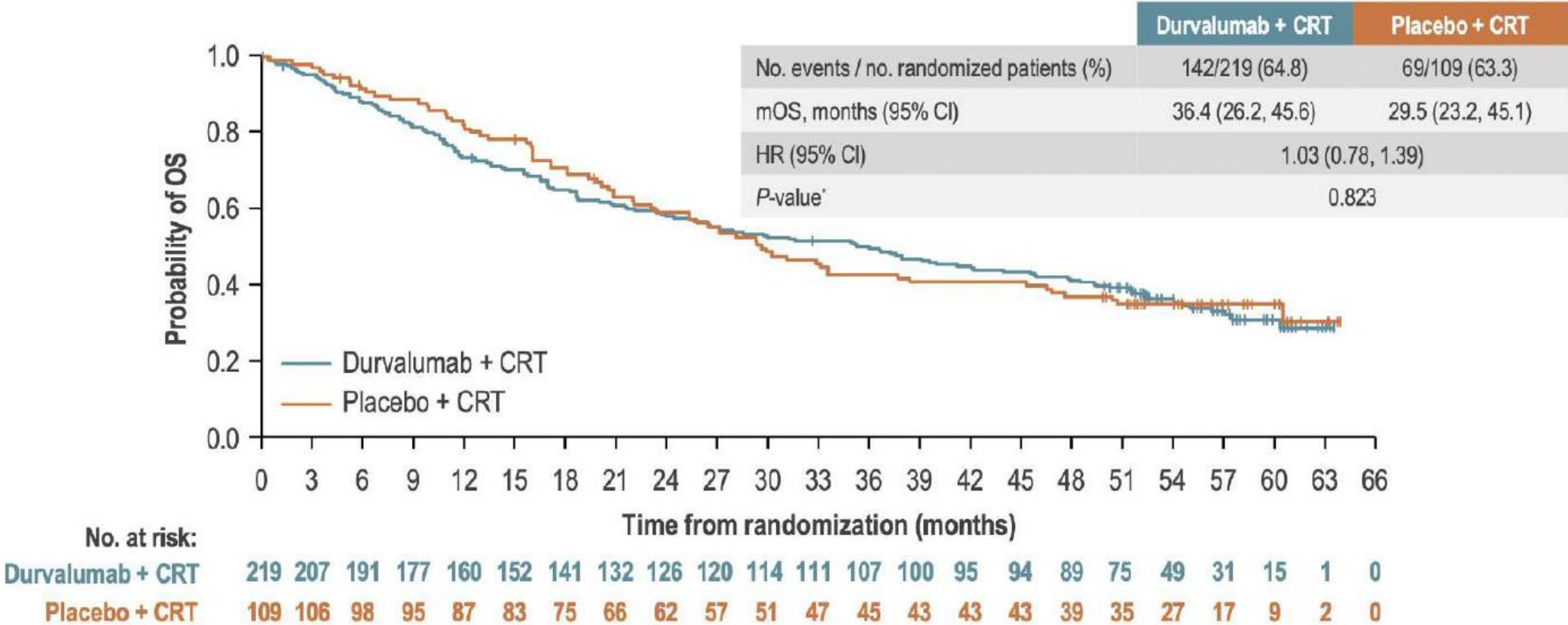
CBNPC NON RÉSÉCABLE : PACIFIC 2



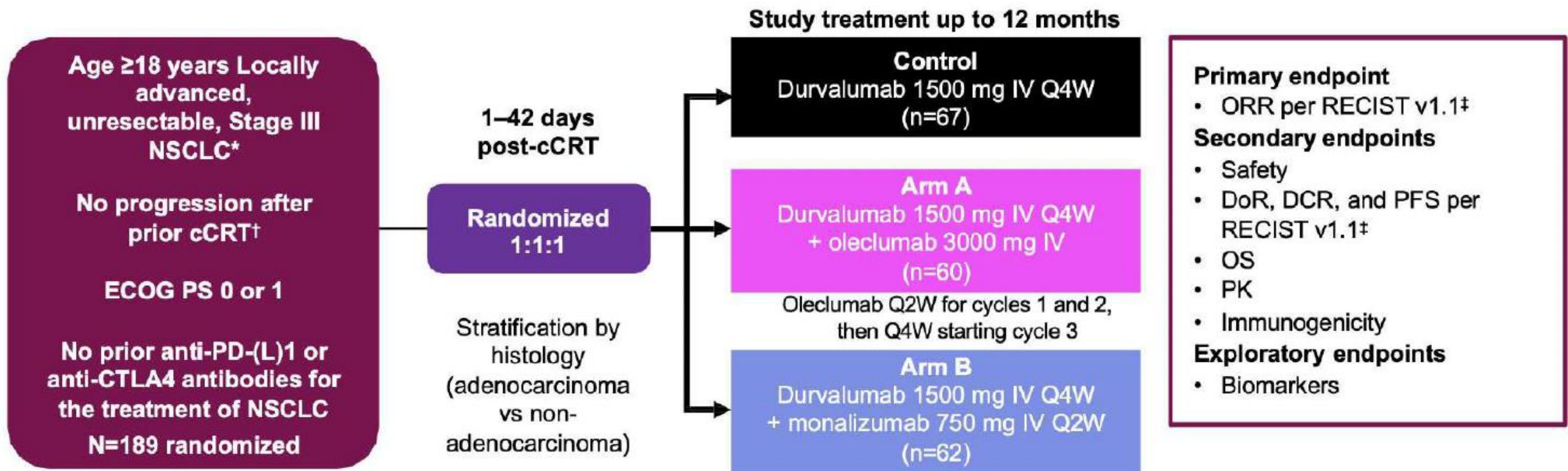
CBNPC NON RÉSÉCABLE : PACIFIC 2



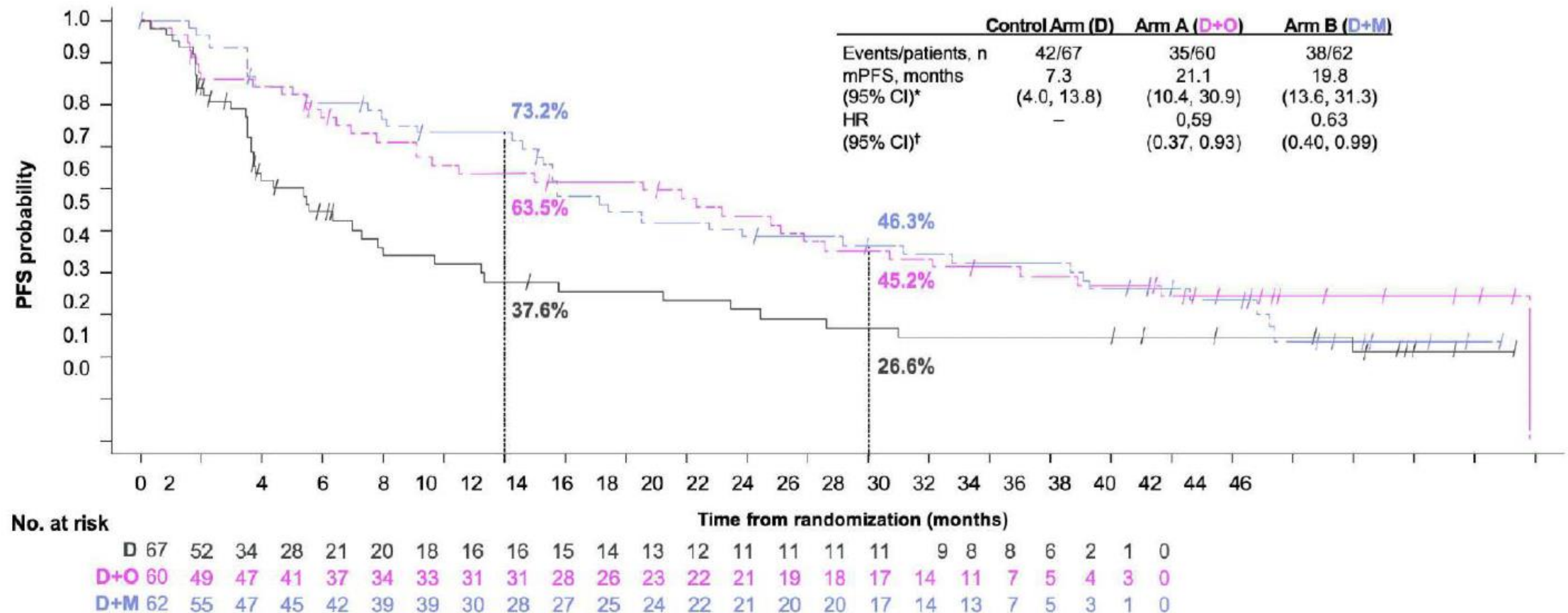
CBNPC NON RÉSÉCABLE : PACIFIC 2



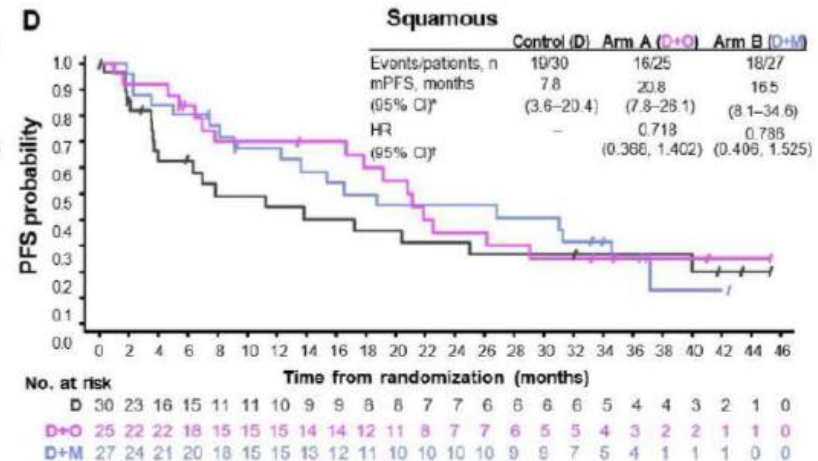
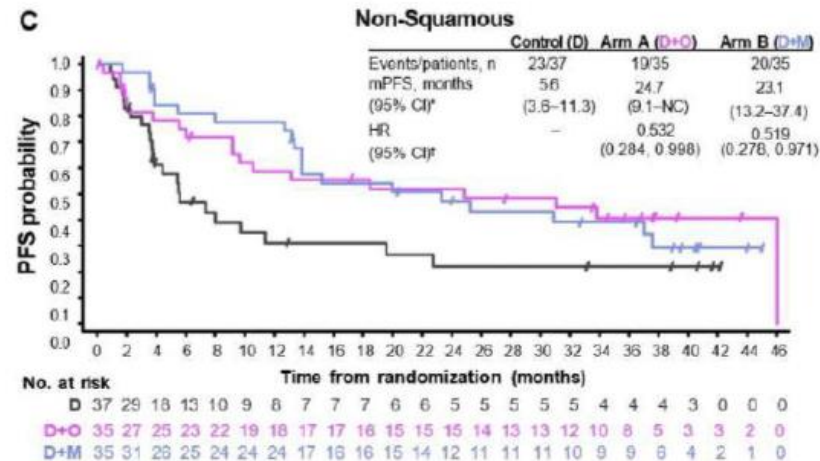
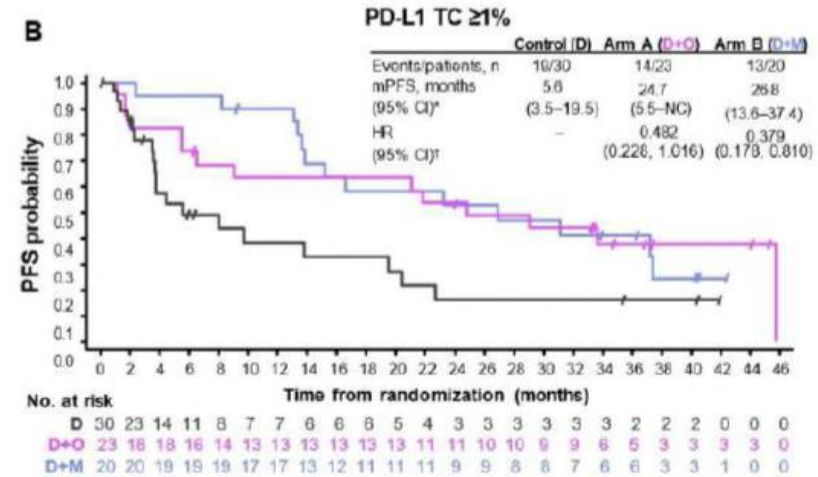
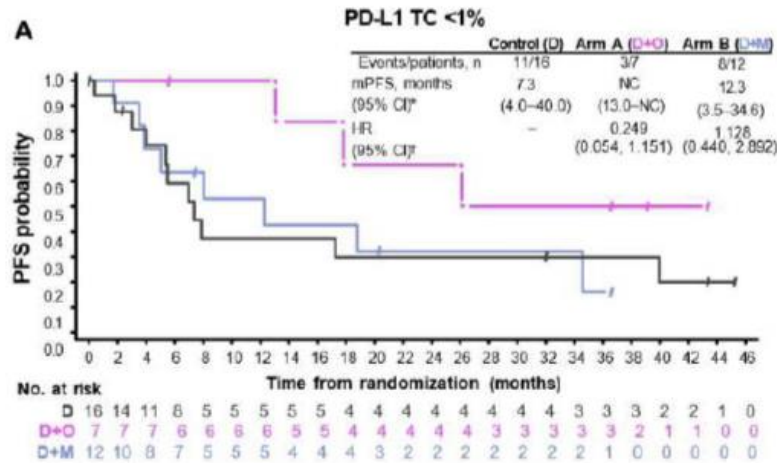
CBNPC NON RÉSECABLE : COAST



CBNPC NON RÉSECABLE : COAST



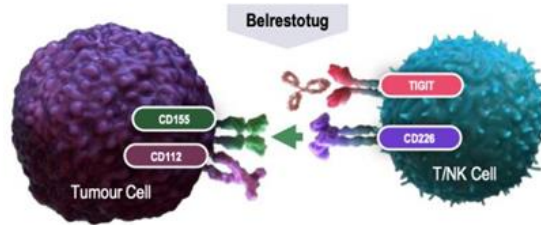
CBNPC NON RÉSECABLE : COAST



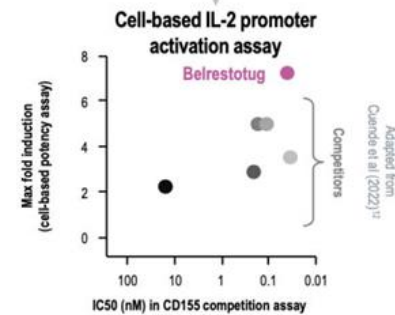
CBNPC métastatique

CBNPC MÉTASTATIQUE : GALAXIES LUNG 201

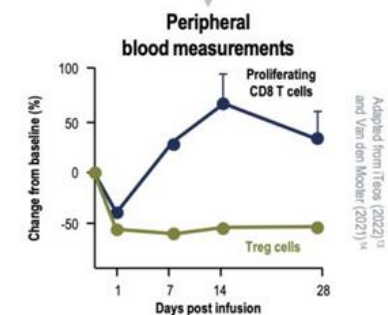
Belrestotug is an **Fcγ-receptor enabled mAb**^{10,11} with two key mechanisms of action



Belrestotug demonstrated **higher potency** relative to other anti-TIGIT mAbs¹²



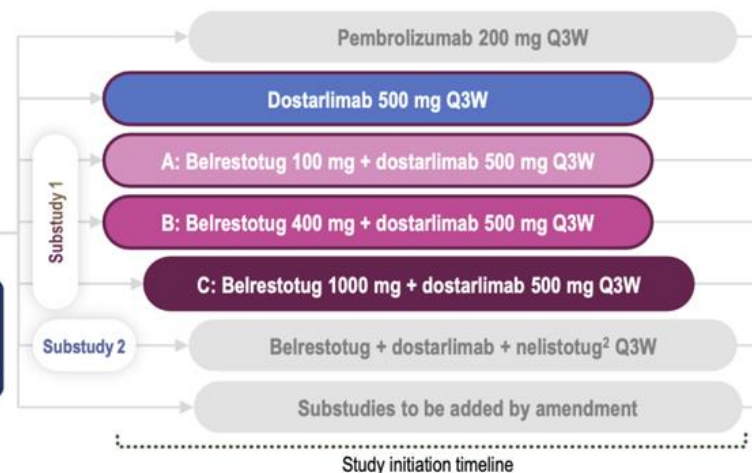
Belrestotug treatment leads to increases in proliferating CD8+ T-cells and a **marked reduction in Tregs** in patients^{13,14}



Key Eligibility Criteria:

- Previously untreated, unresectable, locally advanced/metastatic NSCLC
- PD-L1 high (TPS ≥50%; determined locally or centrally by DAKO 22C3 or VENTANA SP263 assay)
- EGFR/ALK wild-type, no actionable driver mutations
- Current or former smoker
- Asymptomatic and treated brain metastases are eligible

Stratification:
Squamous vs non-squamous



Primary Endpoint:

ORR per RECIST 1.1 by investigator assessment

Key Secondary Endpoints:

- PFS
- OS
- DoR
- Safety
- PK
- ADA

CBNPC MÉTASTATIQUE : GALAXIES LUNG 201

Best Percent Change From Baseline in Tumour Measurement

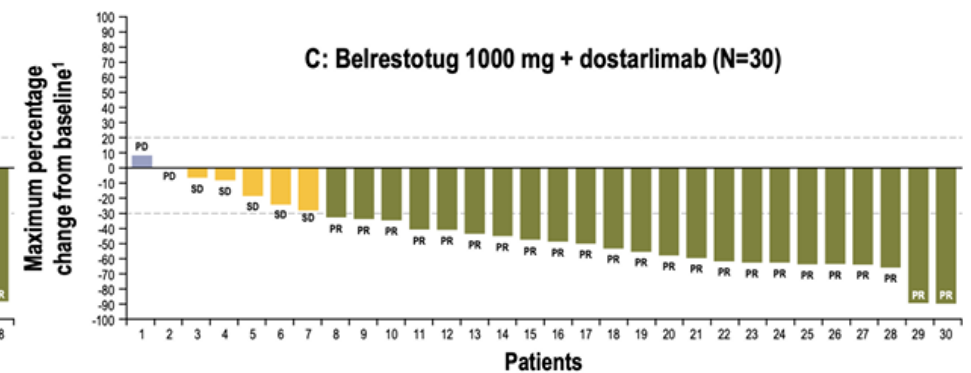
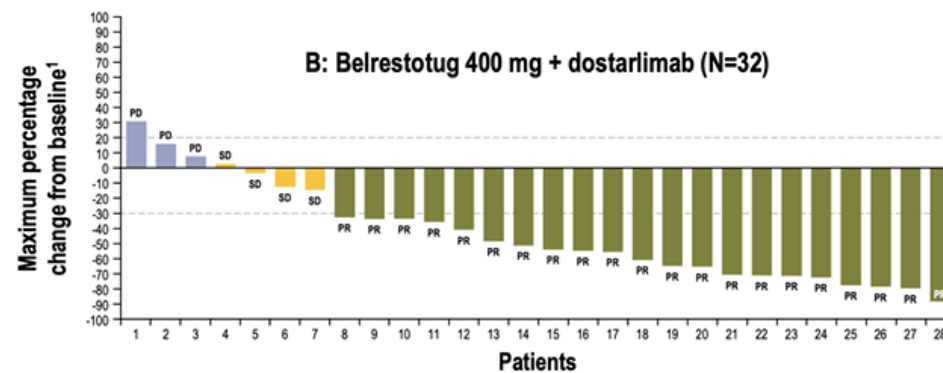
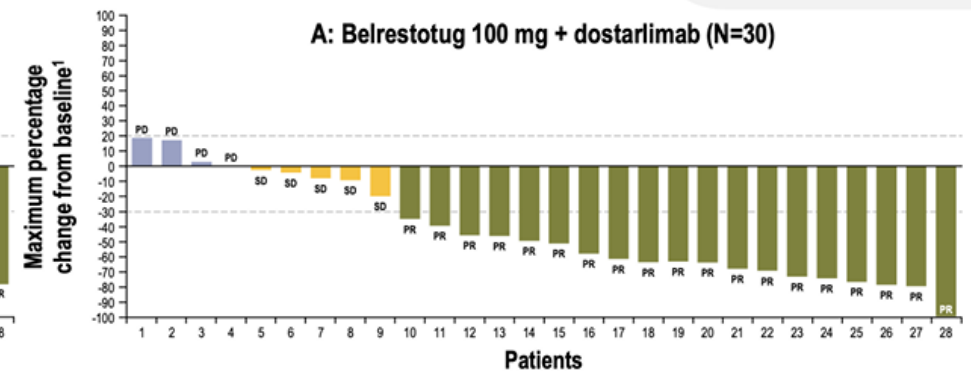
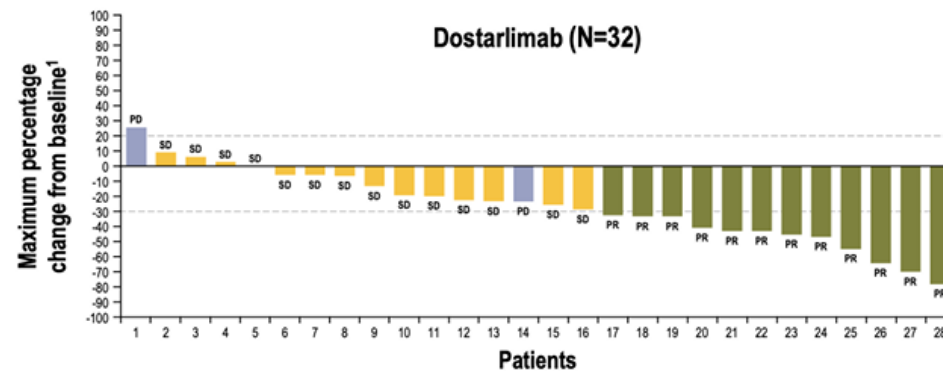
Combination therapy was associated with a greater reduction in tumour size vs dostarlimab monotherapy

Best Overall Response
(Without Confirmation):



Taux de réponse objective :

- 28.1 % groupe DOSTARLIMAB seul
- Environ 60% pour toutes les autres combinaisons anti TIGIT + DOSTARLIMAB

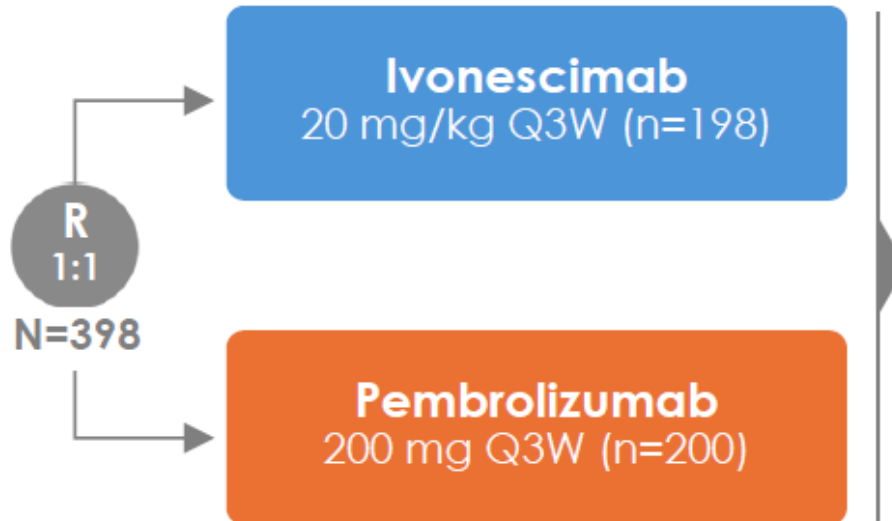


¹Numerically lowest percent change from baseline that is on or prior to date of first radiological PD and start of follow-up anticancer therapy (excluding radiotherapy and surgery); patients without assessable post-baseline scans or where all baseline target lesions are not measured at subsequent visits are not included in figure; responses shown are per RECIST 1.1 by investigator assessment without confirmation. PD, progressive disease; PR, partial response; RECIST, Response Evaluation Criteria in Solid Tumours; SD, stable disease.

CBNPC MÉTASTATIQUE : HARMONI-2 (AKT 112-303)

Patient population

- CBNPC stade IIIB-IV
- Naïfs de traitement systémique
- Absence de mutation EGFR ou réarrangement ALK
- ECOG PS 0 or 1
- PD-L1 TPS $\geq 1\%$



Traitement jusqu'à absence de bénéfice clinique, toxicité inacceptable ou jusqu'à 24 mois

Strafification

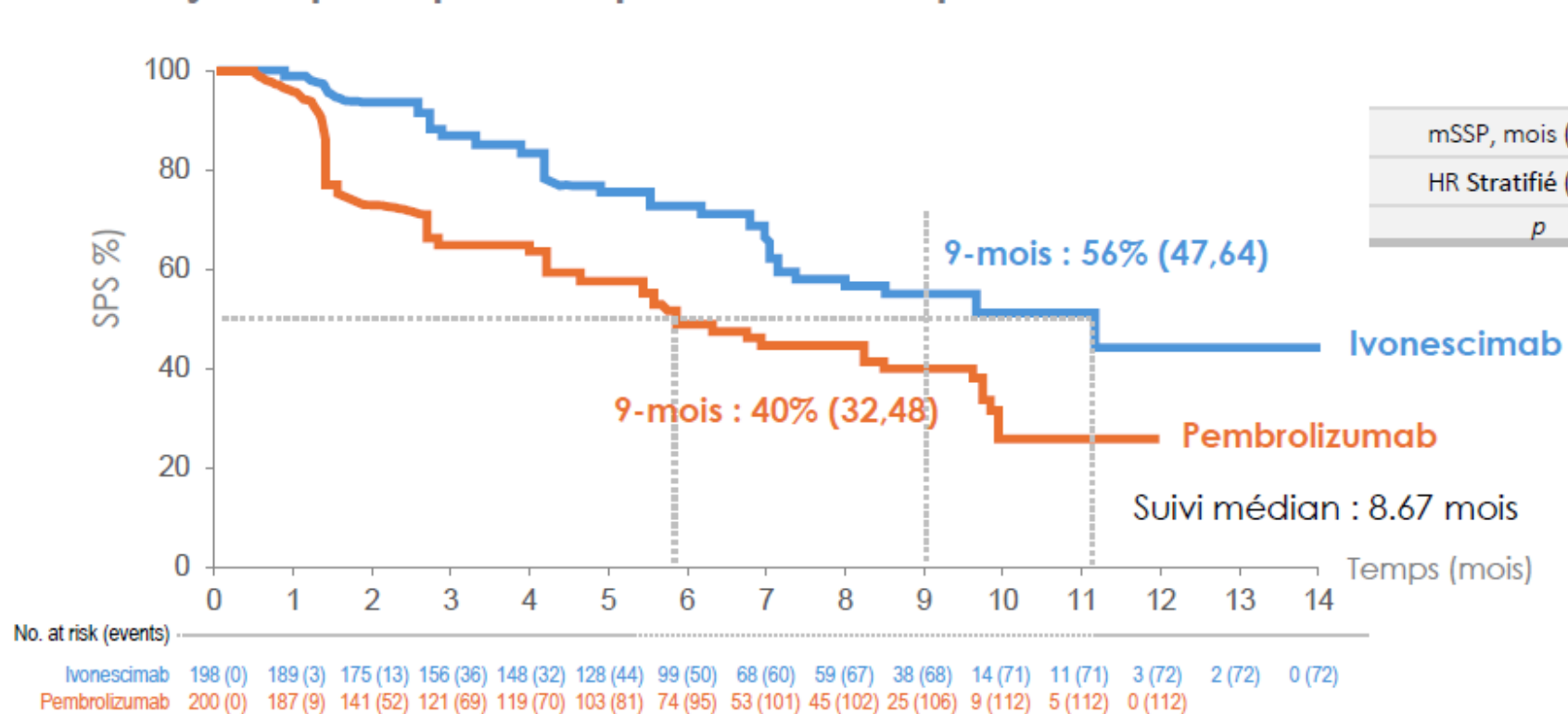
- Stade Clinique (IIIB/C vs IV)
- Histologie (SQ vs non-SQ)
- PD-L1 TPS ($\geq 50\%$ vs 1-49%)

Critères de jugement

- Principal : SSP par revue indépendante par RECIST v1.1
- Secondaires : SG, SSP par investigateurs, ORR, DoR, TTR et tolérance
- Exploratoire : QoL (qualité de vie)

CBNPC MÉTASTATIQUE : HARMONI-2 (AKT 112-303)

Objectif principal: SSP par revue indépendante



	Ivonescimab (n=198)	Pembrolizumab (n=200)
mSSP, mois (IC95%)	11,14 (7,33- NE)	5,82 (5,03-8,21)
HR Stratifié (IC95%)	0.51 (0.38, 0.69)	
p	<0,0001	



LES NOUVEAUTÉS À SUIVRE

LES ADC ANTI TROP 2

Key eligibility criteria

- Histologically confirmed ES-SCLC
- Disease progression after no more than 1 prior line of platinum-based chemo and anti-PD-(L)-1 therapy
- Measurable disease per RECIST v1.1
- ECOG PS 0–1
- Stable, treated brain metastases allowed^a

ES-SCLC cohort
(N = 43)

sacituzumab govitecan

SG 10 mg/kg
IV on D1 and D8
21-day cycles
(until PD or
unacceptable toxicity)

Survival
follow-up

Primary end points

- ORR (INV^b)

Secondary end points

- DOR, CBR, PFS (INV^b)
- ORR, DOR, CBR, PFS (BICR^b)
- OS
- Safety

- At data cutoff (8 March 2024), median follow-up was 12.3 (range, 8.1–20.1) months

Best response to last prior anti-cancer therapy, n (%)^d

CR/PR 24 (55.8)

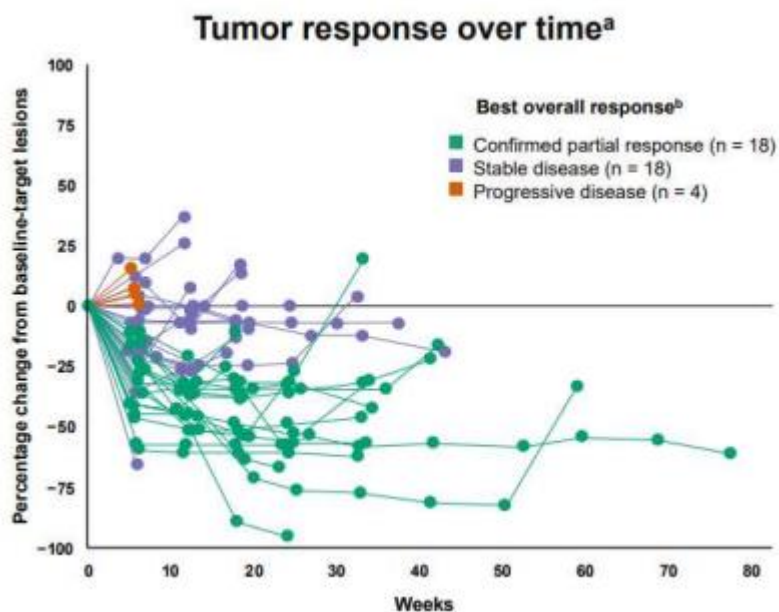
SD/PD 16 (37.2)

Chemotherapy-free interval, n (%)^b

<90 days (platinum-resistant) 20 (46.5)

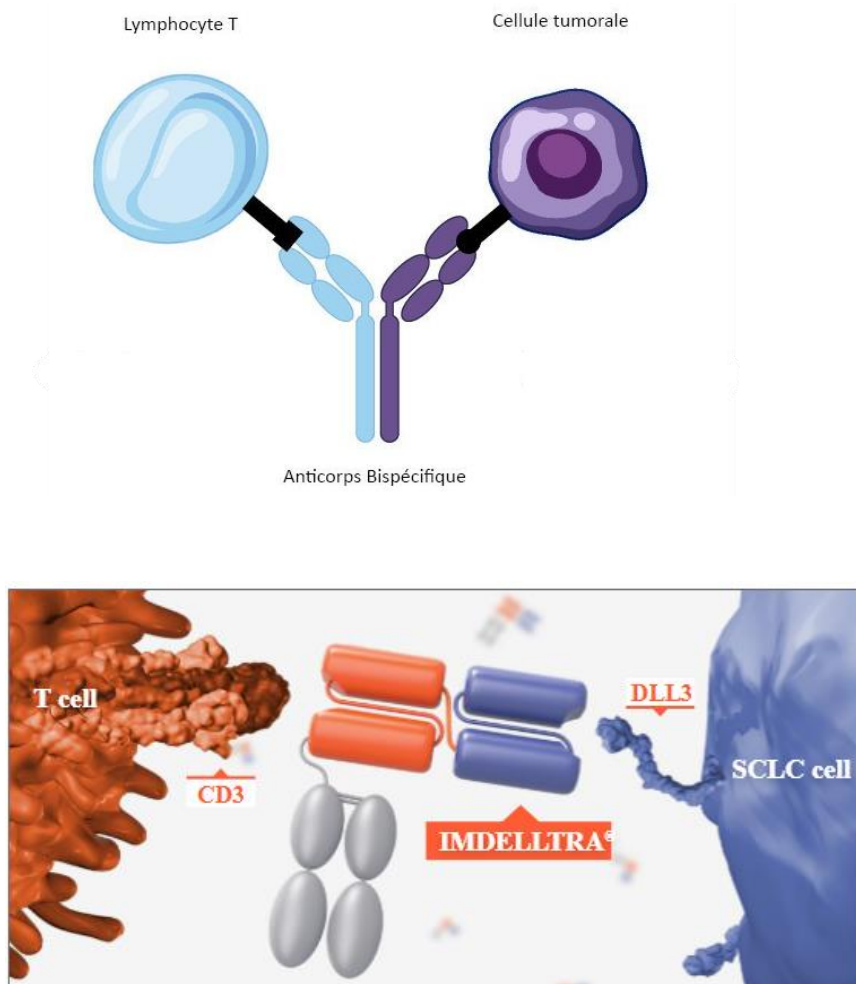
≥90 days (platinum-sensitive) 23 (53.5)

LES ADC ANTI TROP 2



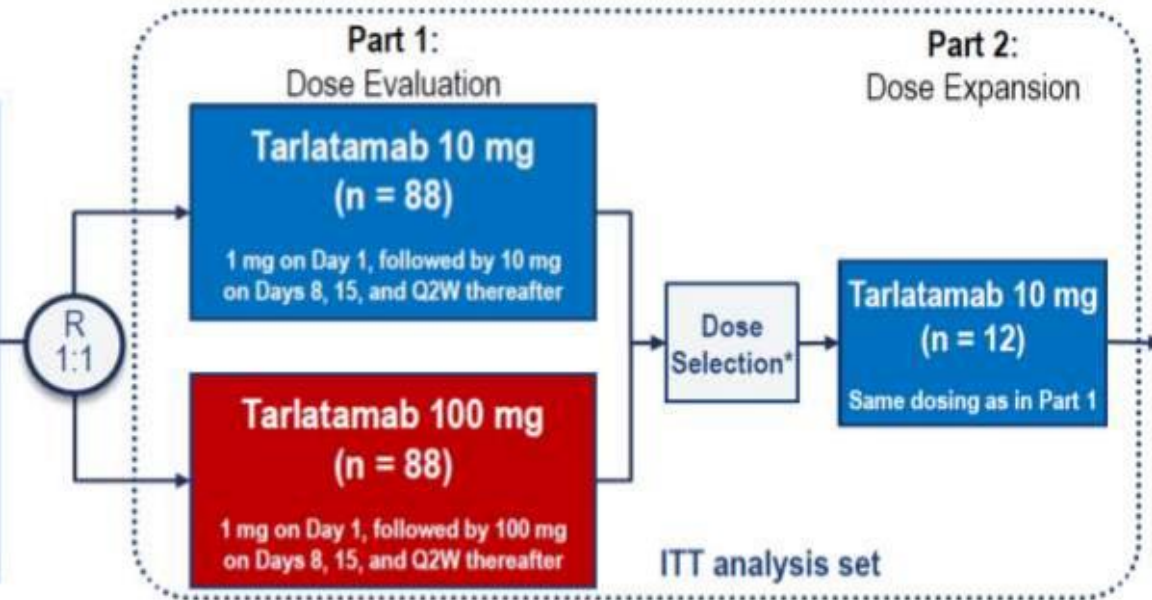
Efficacy ^a	Platinum resistant (CTFI <90 days) (n = 20)	Platinum sensitive (CTFI ≥90 days) (n = 23)
ORR, % (95% CI)	35.0 (15.4–59.2)	47.8 (26.8–69.4)
BOR, n (%)		
Confirmed PR	7 (35.0)	11 (47.8)
SD	7 (35.0)	11 (47.8)
PD	4 (20.0)	0
Not assessed ^b	2 (10.0)	1 (4.3)
DCR (confirmed PR + SD), % (95% CI)	70.0 (45.7–88.1)	95.7 (78.1–99.9)
CBR (confirmed PR + SD for ≥6 months), % (95% CI)	40.0 (19.1–63.9)	56.5 (34.5–76.8)
Median DOR, months (95% CI)^{c,d}	6.3 (1.5–6.9)	4.4 (3.0–NR)
DOR rate at 6 months, % (95% CI) ^c	57.1 (17.2–83.7)	41.6 (13.1–68.4)
Median PFS, months (95% CI)^c	3.8 (1.4–7.6)	5.0 (4.1–7.4)
Median OS, months (95% CI)^c	6.6 (4.7–17.7)	14.7 (7.7–NR)

LES ANTICORPS BI SPÉCIFIQUES : ANTI DLL3

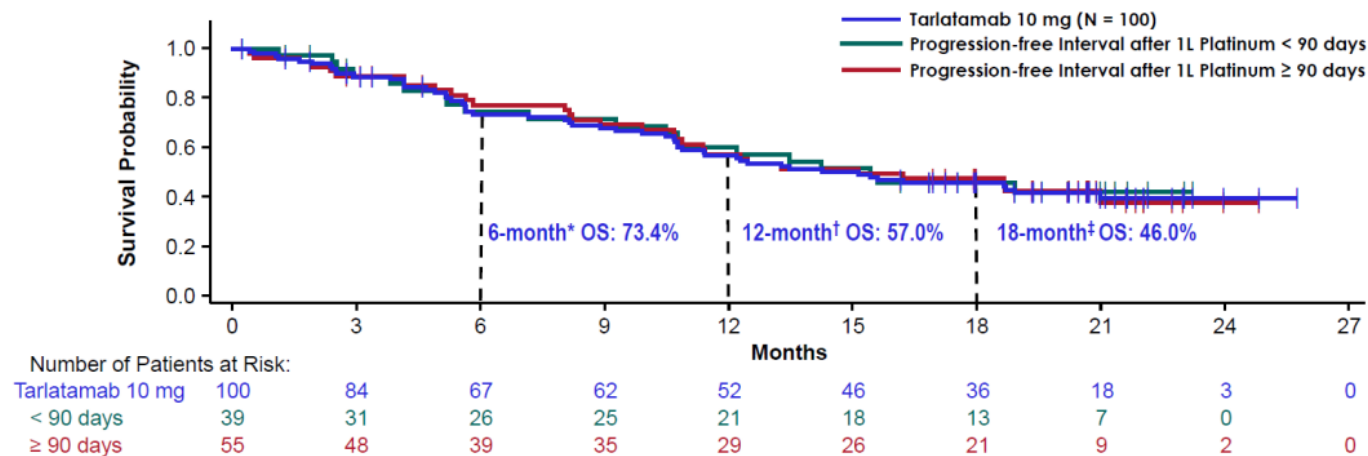
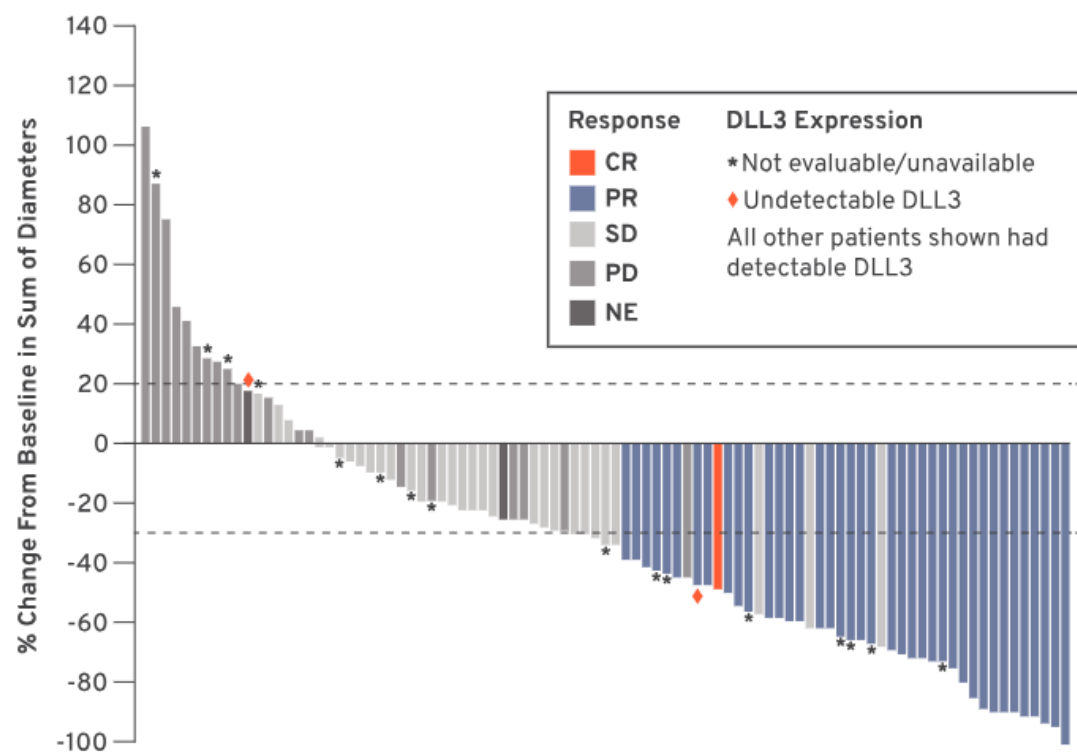


Key Inclusion Criteria

- ES-SCLC
- Previous treatment with ≥ 2 lines (including platinum-doublet)
- ECOG PS 0-1
- Measurable disease
- Treated and stable brain metastases allowed



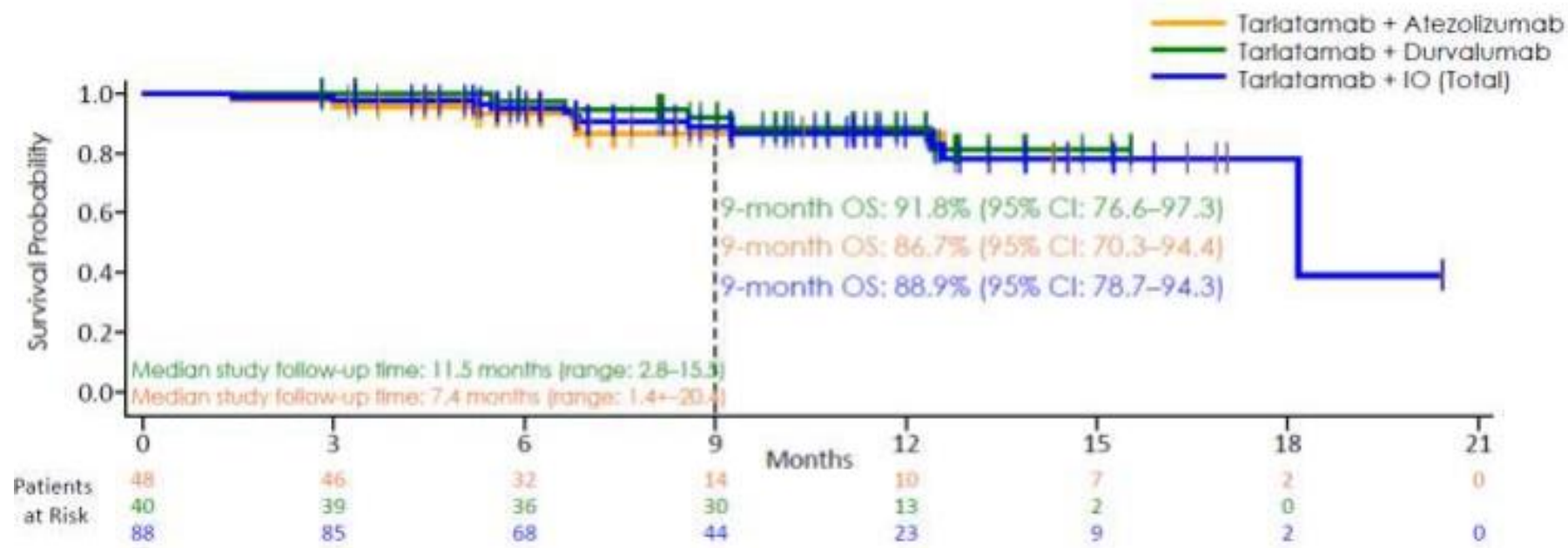
LES ANTICORPS BI SPÉCIFIQUES : ANTI DLL3



LES ANTICORPS BI SPÉCIFIQUES : ANTI DLL3

SG à 9 mois de
la maintenance :
89%

Médiane de SSP
(après
maintenance) :
5,6 mois



MERCI POUR VOTRE
ATTENTION

