



CONTROVERSIAS EN ONCOLOGÍA ALMERÍA

Almería, 28 de noviembre de 2019



Inmunoterapia en CPNCP y Melanoma metastásico

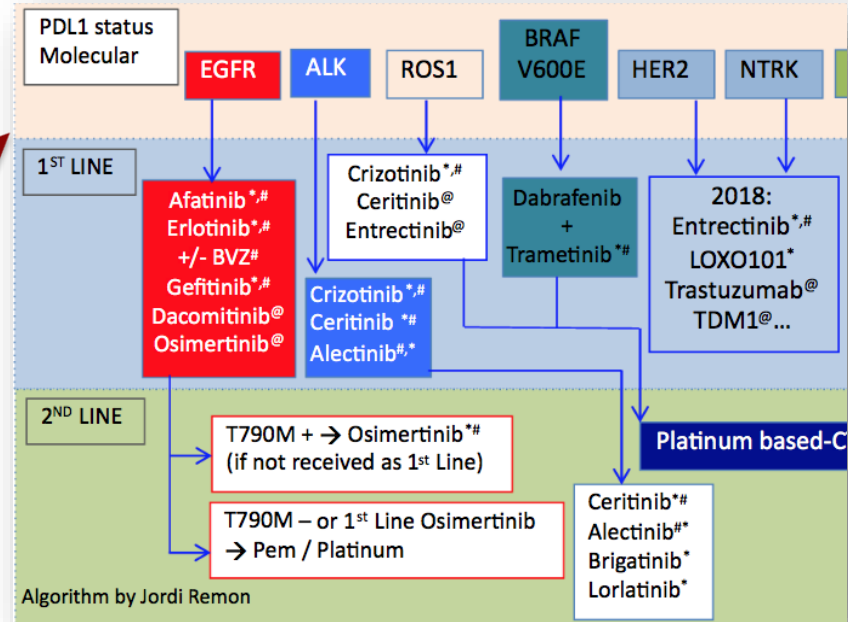
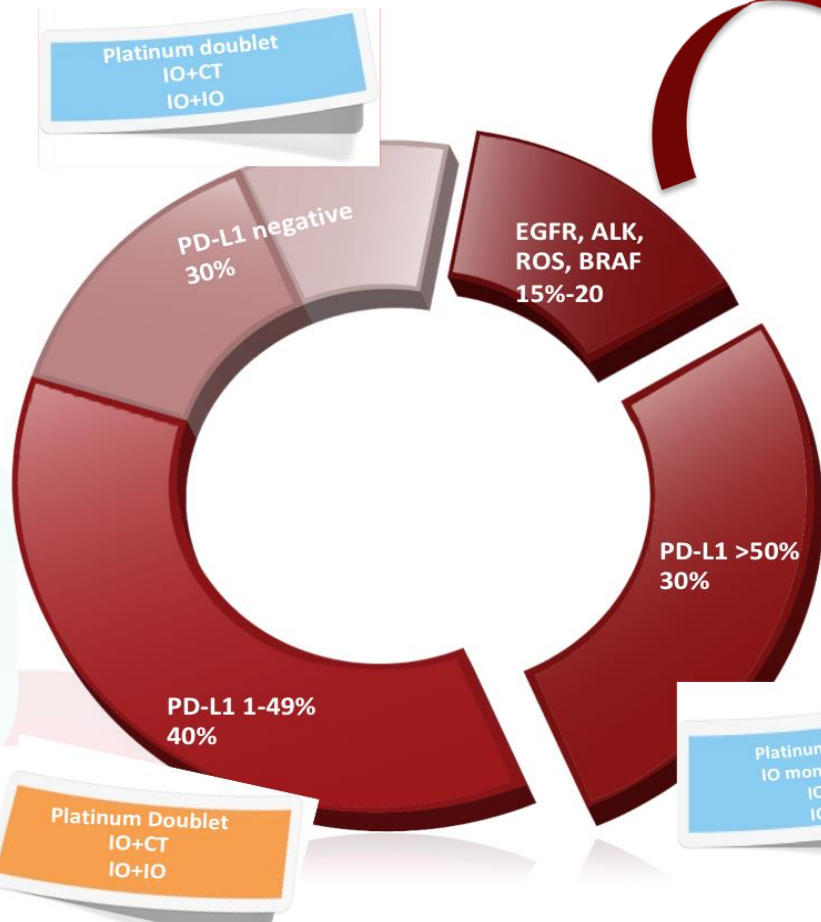
Dra. Victoria Eugenia Castellón Rubio



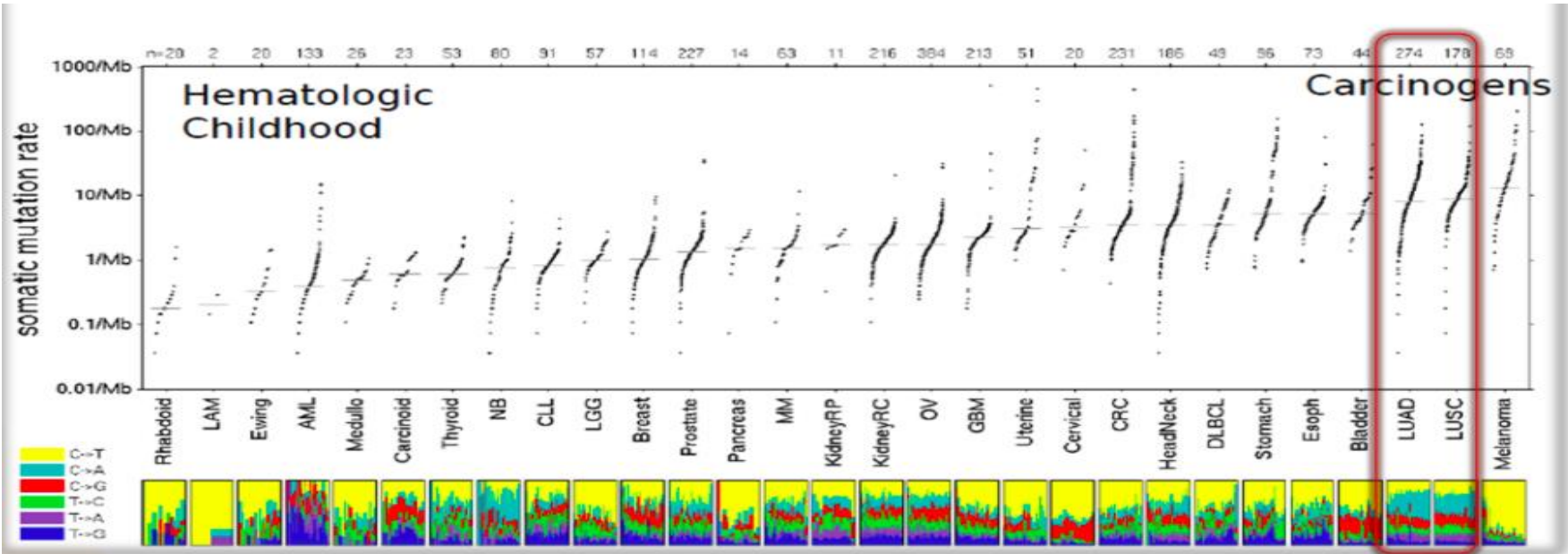


Inmunoterapia 1º línea CPNCP EIV

MOLECULAR ABNORMALITIES



Lung cancers have a very high rate of somatic mutations



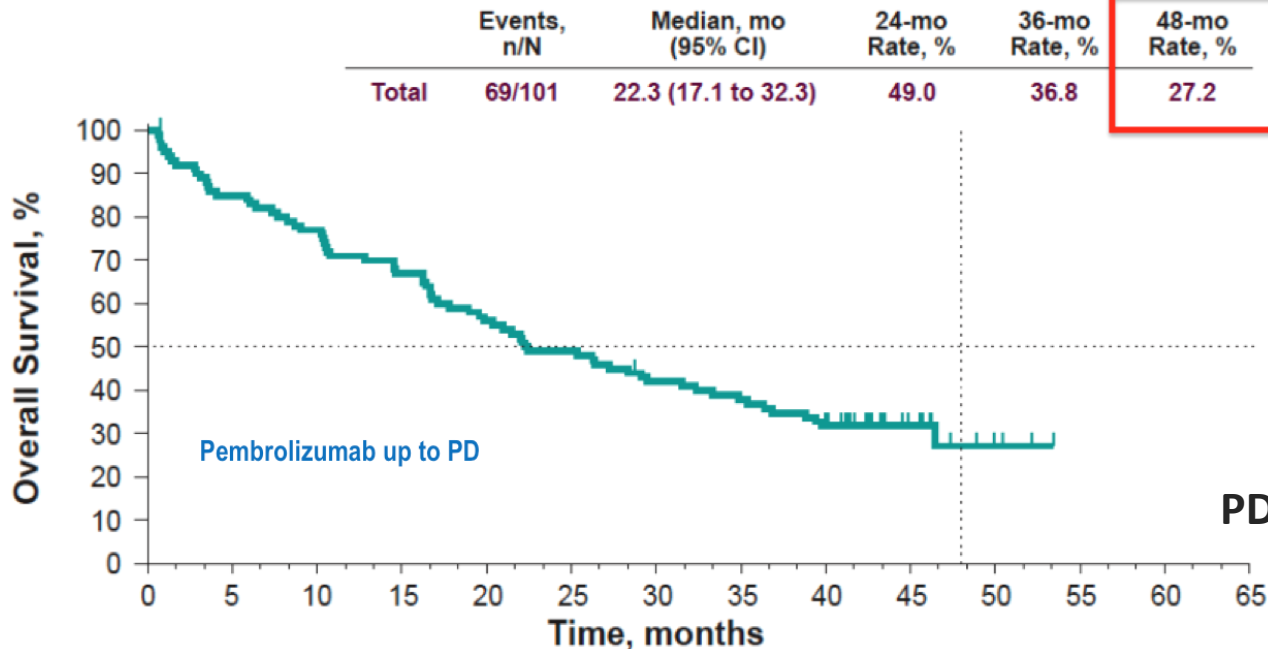
Higher mutation rates have been observed in lung cancer tumors from smokers vs non-smokers

Monoterapia con IO

Pembrolizumab: Largos supervivientes en 1ª línea

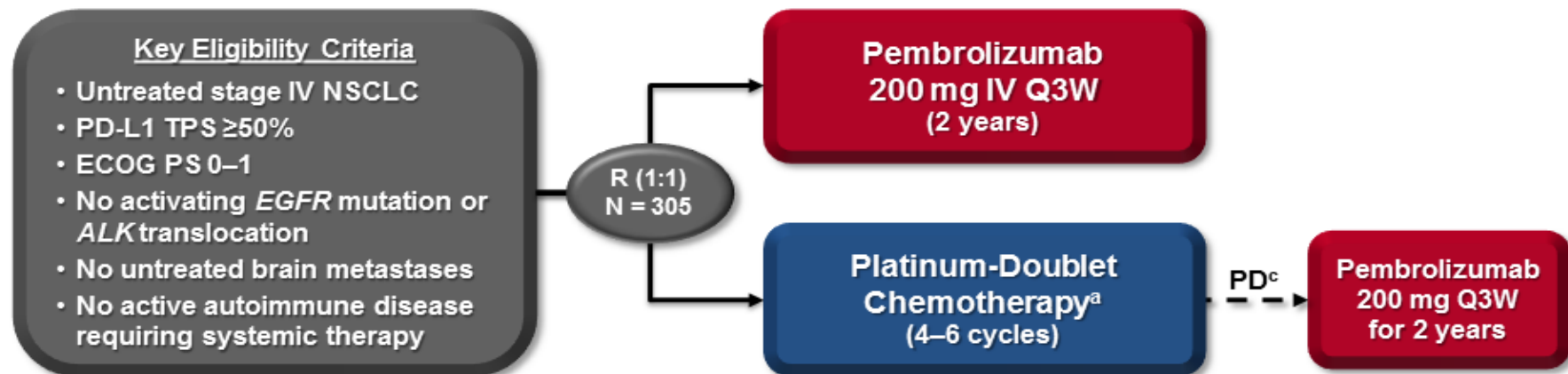
8th TNM IASLC Classification, 4-y OS M1c: ~4-5%

A. Treatment-naïve cohort



4y OS phase I KEYNOTE 001 Trial

KEYNOTE-024: Pembrolizumab vs Platinum-Based Chemotherapy as First-Line Therapy for Advanced NSCLC With a PD-L1 TPS $\geq 50\%$



End Points

Primary: PFS (RECIST v1.1, blinded independent central review)

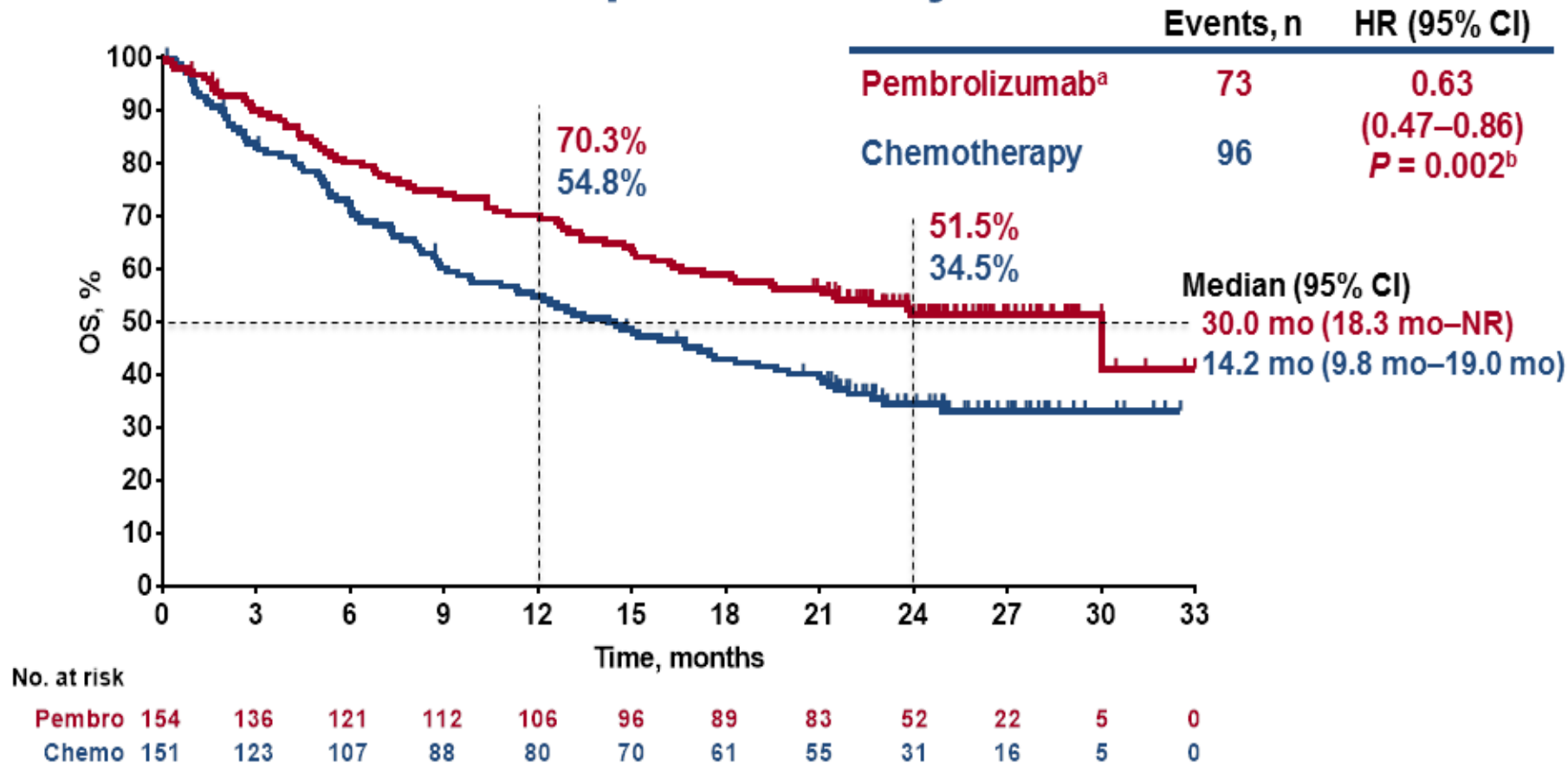
Key secondary: OS

Secondary: ORR, safety

Exploratory: DOR

- Pemetrexed + carboplatin^b
- Pemetrexed + cisplatin^b
- Paclitaxel + carboplatin
- Gemcitabine + carboplatin
- Gemcitabine + cisplatin

Overall Survival: Updated Analysis



KEYNOTE-042

Pembrolizumab 1^o LINEA PD-L1 POSITIVO

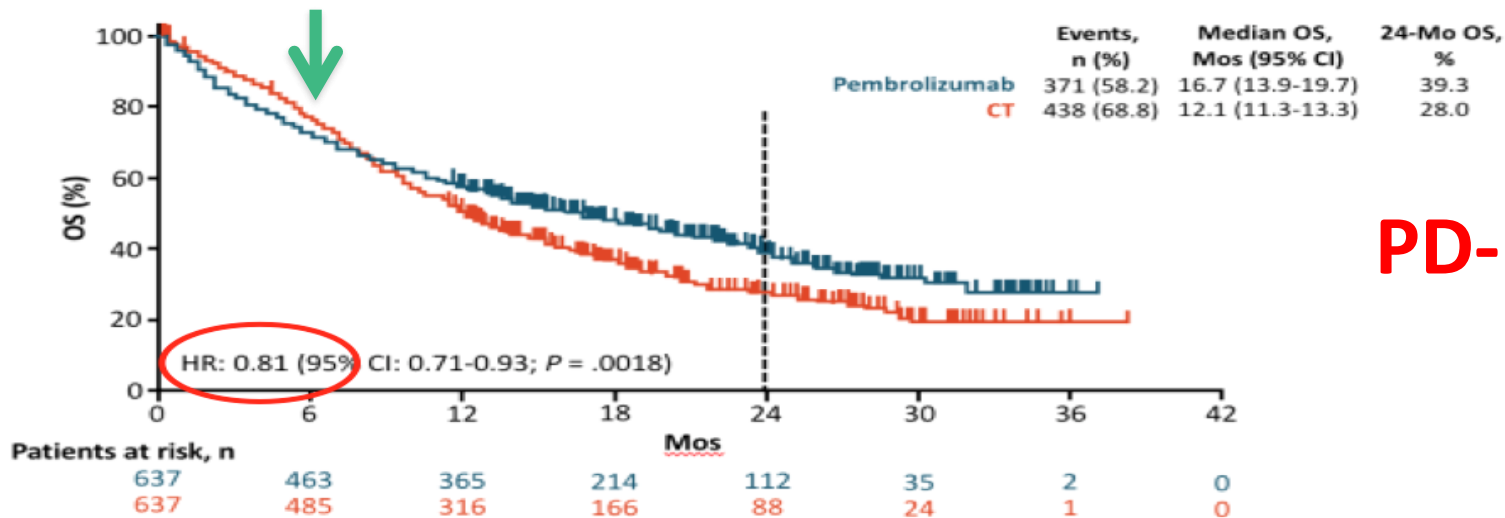
PRESENTED AT: 2018 ASCO
ANNUAL MEETING

#ASCO18
Only use the graphical information
provided unless indicated for use.

PRESENTED BY: Gilberto Lopes

4

KEYNOTE-042: OS in PD-L1 TPS $\geq 1\%$ Population (Primary Endpoint)

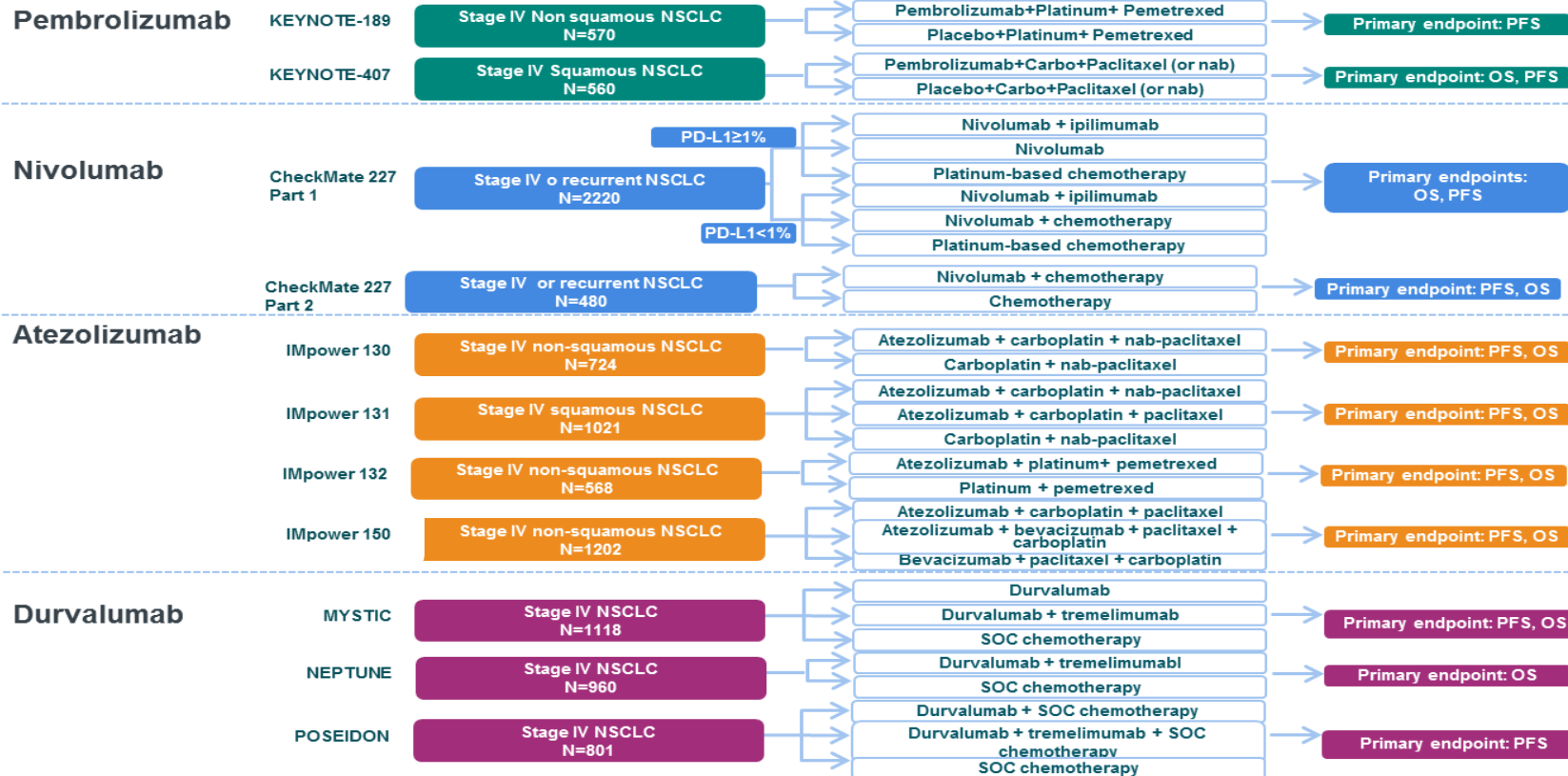


PD-L1 >1%

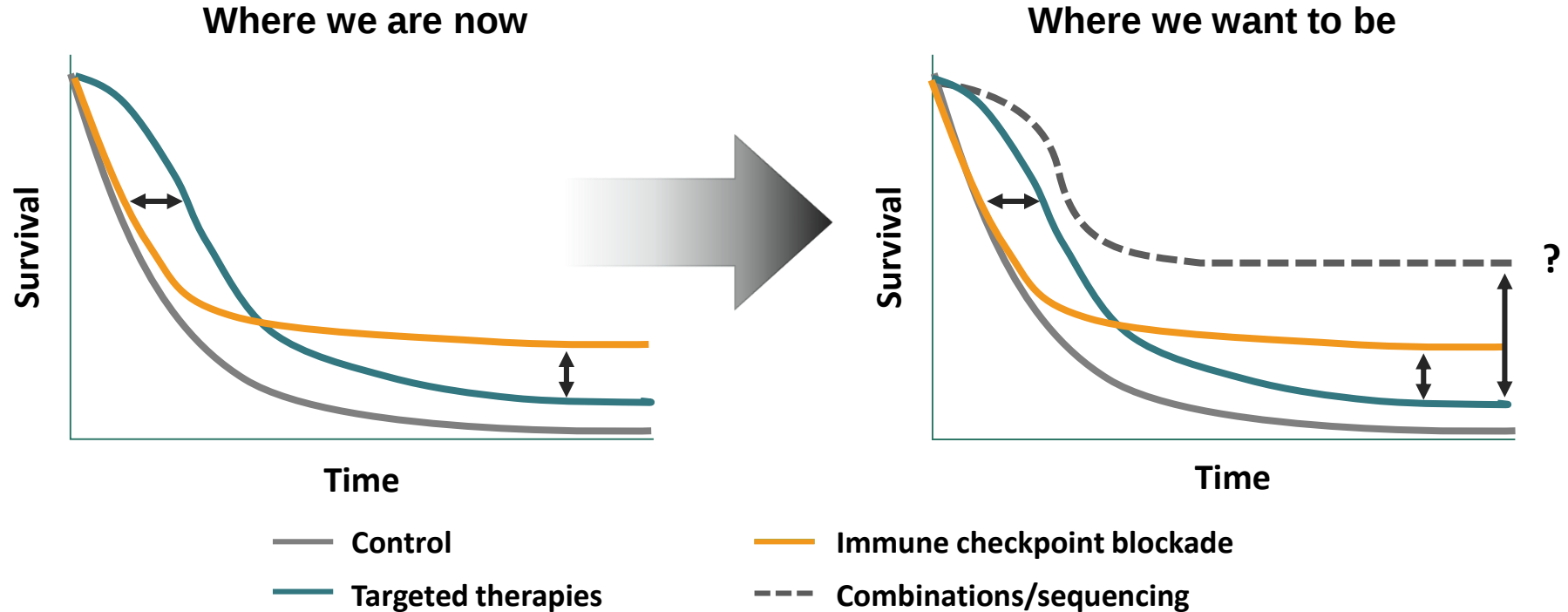
Combinaciones QT + IO

Estudios fase 3 de combinaciones de Inmunoterapia en 1ª línea CPNCP EIV

Anti-PD-1/PD-L1



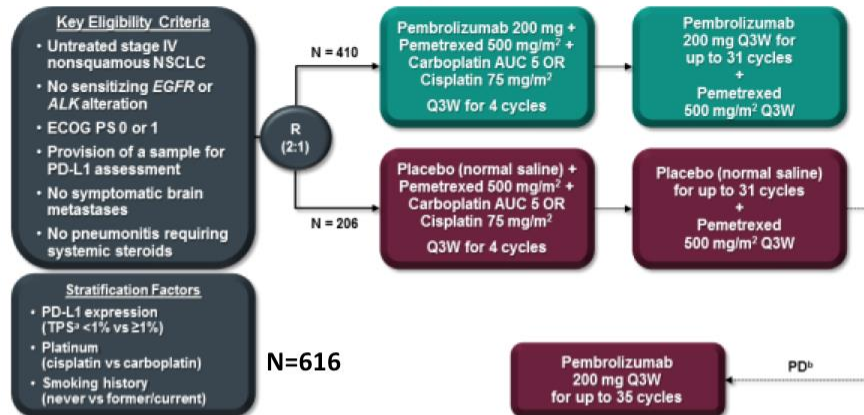
Objetivos teóricos de la Inmunoterapia



Adapted from Sharma P, Allison JP. *Cell*. 2015;161(2):205-214.

Histología no escamosa

KEYNOTE-189 Study Design (NCT02578680)



^aPercentage of tumor cells with membranous PD-L1 staining assessed using the PD-L1 IHC 22C3 pharmDx assay. ^bPatients could crossover during the induction or maintenance phases. To be eligible for crossover, PD must have been verified by blinded, independent central radiologic review and all safety criteria had to be met.

KN 189: Pembro+Platinum+Pem is superior to
Platinum+Pem in non-SCC irrespective of PD-L1 expression

OS, ITT

	Events	HR (95% CI)
Pembro/Pem/Plat	52.0%	0.56
Placebo/Pem/Plat	69.9%	10.42



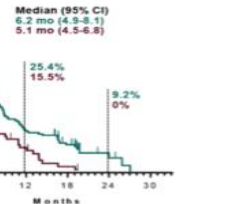
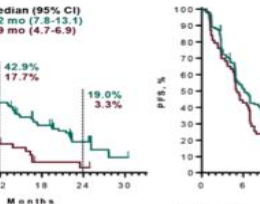
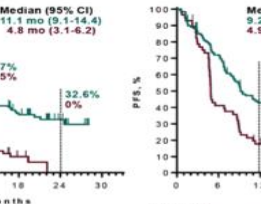
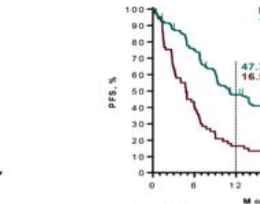
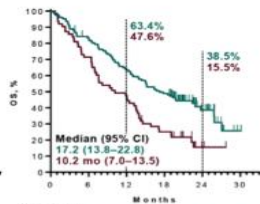
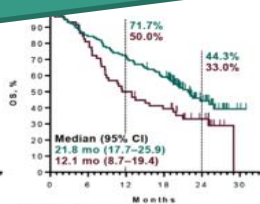
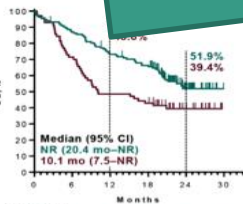
**NUEVO ESTÁNDAR 1º LINEA CPNCP EIV
HISTOLOGÍA NO ESCAMOSA
SIN MUTACIONES EN EGFR Y ALK
INDEPENDIENTE DE EXPRESIÓN PDL-1**

	Events	HR (95% CI)
Pembro/Pem/Plat	52.0%	0.56
Placebo/Pem/Plat	69.9%	10.42

Median (95% CI)
9.0 mo (8.1-9.9)
4.9 mo (4.7-5.5)

OS b

Pembro/Pem/Plat
Placebo/Pem/Plat



TPS 1-49%

	Events	HR (95% CI)
Pembro/Pem/Plat	63.6%	0.36
Placebo/Pem/Plat	90.0%	(0.26-0.51)

Median (95% CI)
11.1 mo (9.1-14.4)
4.8 mo (3.1-6.2)

TPS <1%

	Events	HR (95% CI)
Pembro/Pem/Plat	74.2%	0.51
Placebo/Pem/Plat	89.7%	(0.36-0.73)

Median (95% CI)
9.2 mo (7.8-13.1)
4.9 mo (4.7-6.9)

Median (95% CI)
6.2 mo (4.9-8.1)
5.1 mo (4.5-6.8)

No. at Risk
132 114 96 85 29 0
70 60 34 30 11 0

No. at Risk
128 107 91 74 28 2
68 47 29 22 11 0

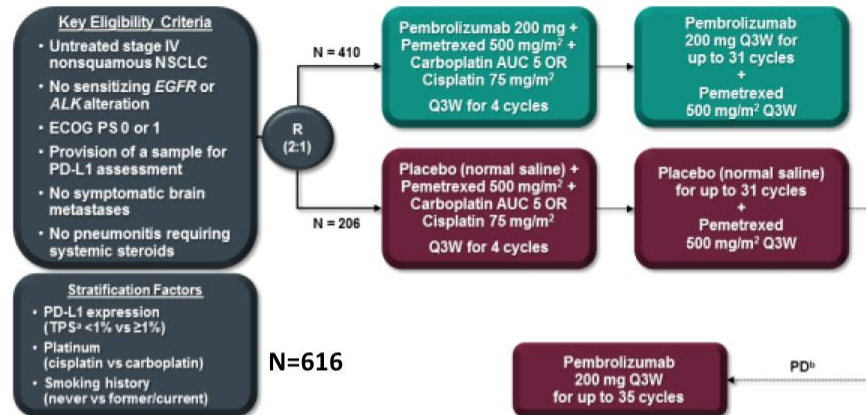
No. at Risk
127 104 79 61 17 0
63 45 30 15 2 0

No. at Risk
132 97 59 40 12 0
70 27 11 4 0 0

No. at Risk
128 89 50 29 11 1
58 23 8 2 1 0

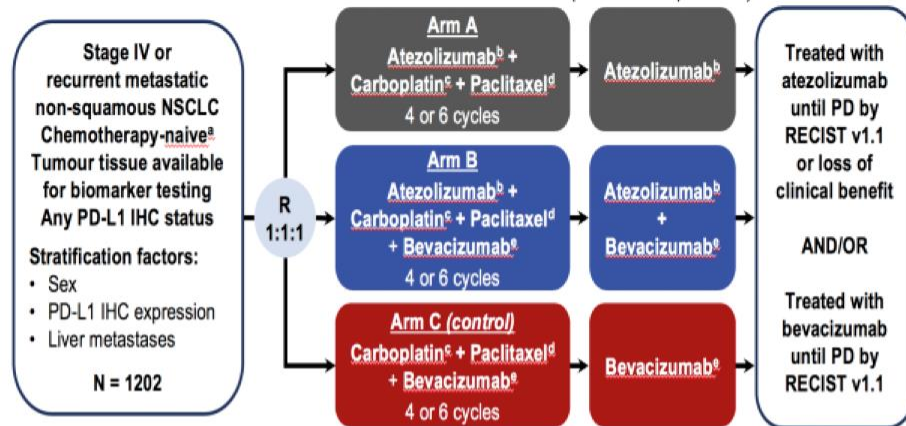
No. at Risk
127 63 31 17 3 0
63 27 9 2 0 0

KEYNOTE-189 Study Design (NCT02578680)



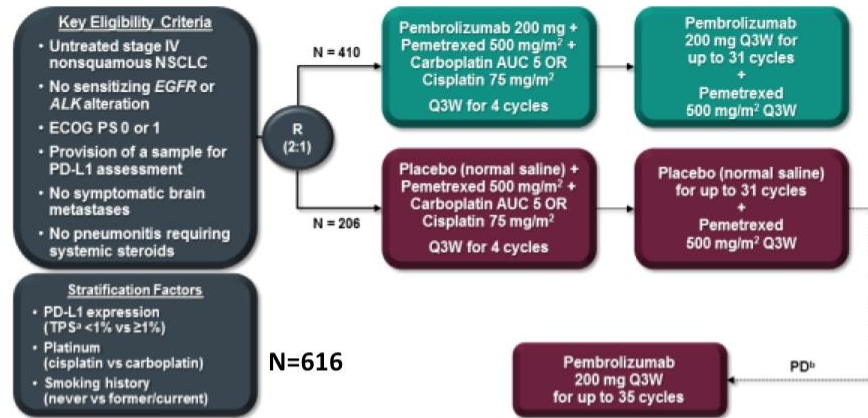
*Percentage of tumor cells with membranous PD-L1 staining assessed using the PD-L1 IHC 22C3 pharmDx assay. ^bPatients could crossover during the induction or maintenance phases. To be eligible for crossover, PD must have been verified by blinded, independent central radiologic review and all safety criteria had to be met.

IMpower150 study design



KEYNOTE-189 Study Design (NCT02578680)

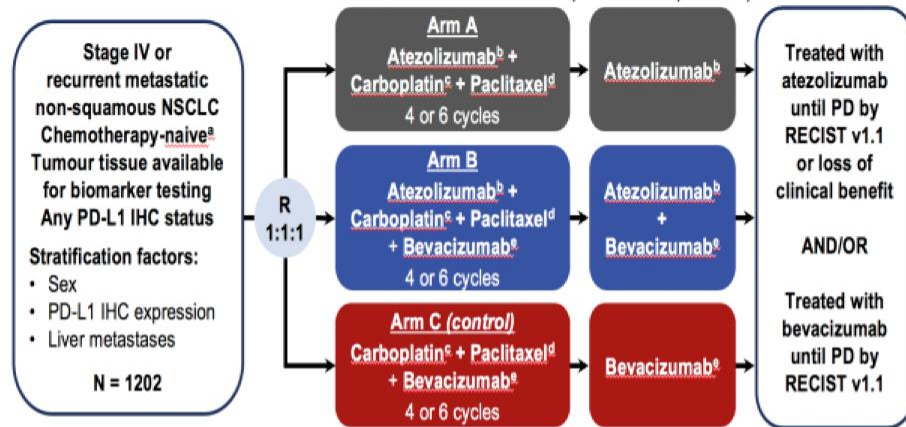
Gandhi KN189
AACR 2018



^aPercentage of tumor cells with membranous PD-L1 staining assessed using the PD-L1 IHC 22C3 pharmDx assay. ^bPatients could crossover during the induction or maintenance phases. To be eligible for crossover, PD must have been verified by blinded, independent central radiologic review and all safety criteria had to be met.

IMpower150 study design

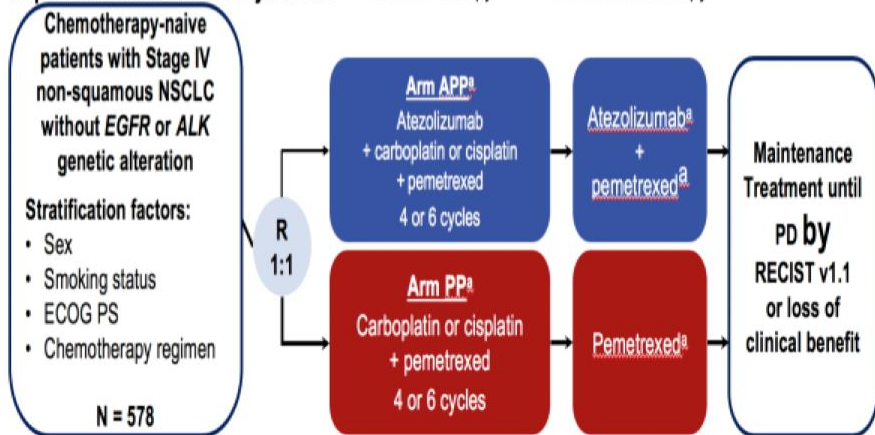
Maintenance therapy
(no crossover permitted)



IMpower132: PFS and Safety Results

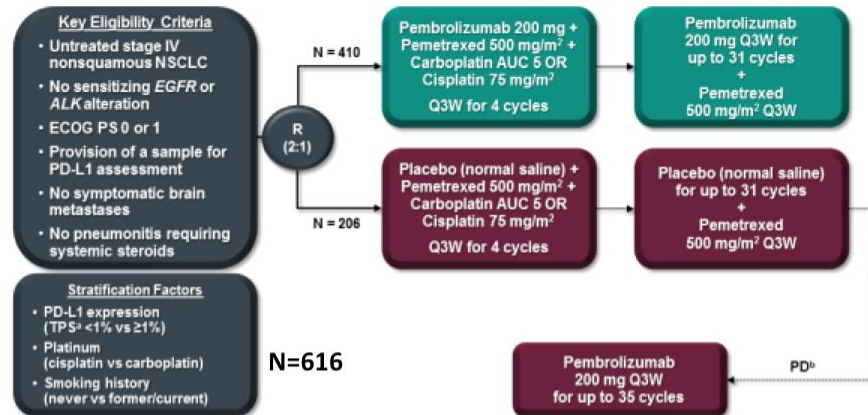
Induction therapy

Maintenance therapy



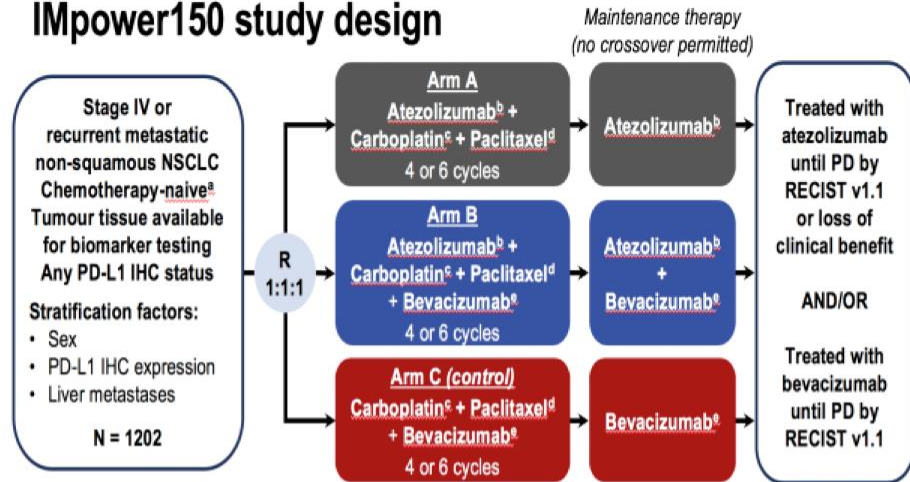
KEYNOTE-189 Study Design (NCT02578680)

Gandhi KN189
AACR 2018



^aPercentage of tumor cells with membranous PD-L1 staining assessed using the PD-L1 IHC 22C3 pharmDx assay. ^bPatients could crossover during the induction or maintenance phases. To be eligible for crossover, PD must have been verified by blinded, independent central radiologic review and all safety criteria had to be met.

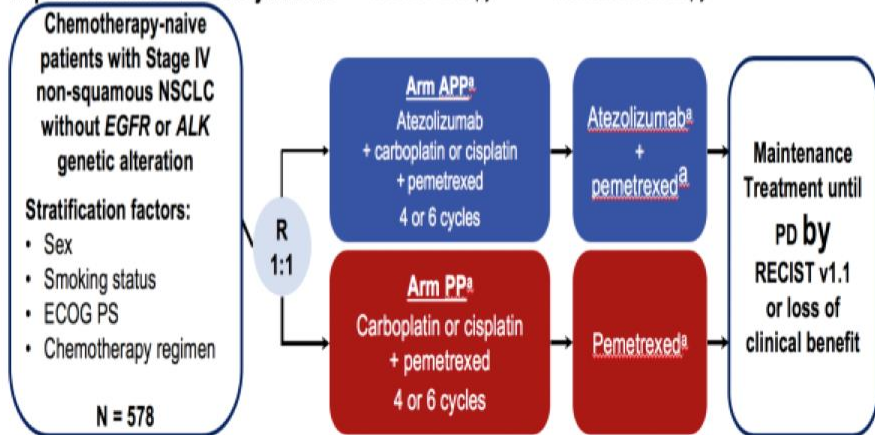
IMpower150 study design



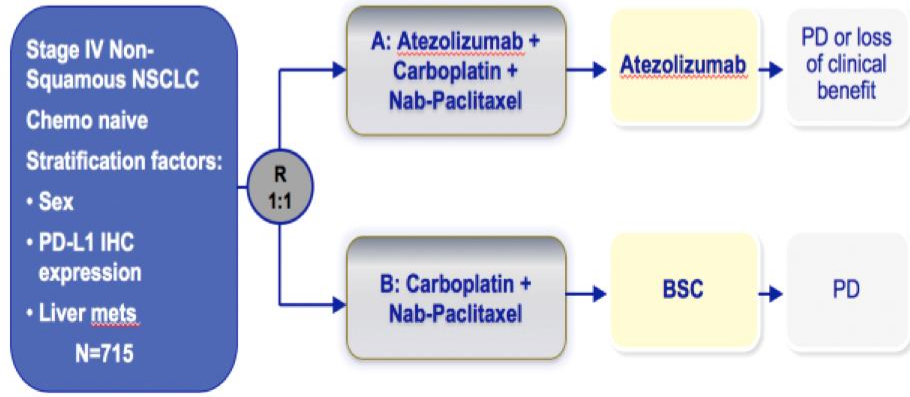
IMpower132: PFS and Safety Results

Induction therapy

Maintenance therapy

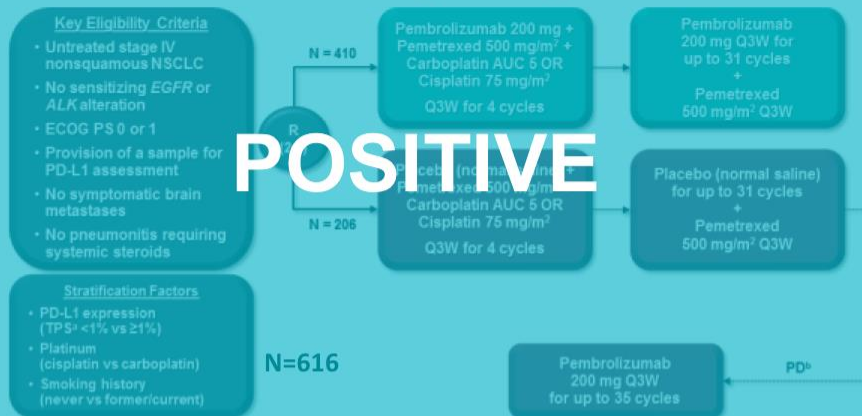


IMpower130



KEYNOTE-189 Study Design (NCT02578680)

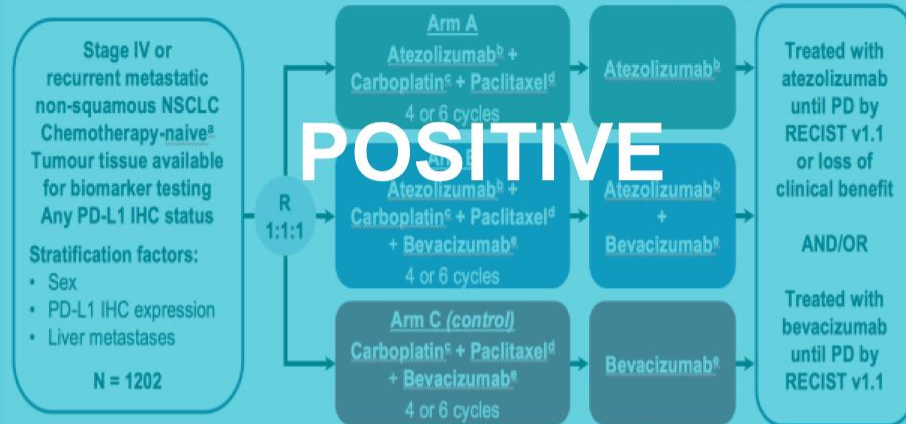
Gandhi KN189
AACR 2018



^aPercentage of tumor cells with membranous PD-L1 staining assessed using the PD-L1 IHC 22C3 pharmDx assay. ^bPatients could crossover during the induction or maintenance phases. To be eligible for crossover, PD must have been verified by blinded, independent central radiologic review and all safety criteria had to be met.

IMpower150 study design

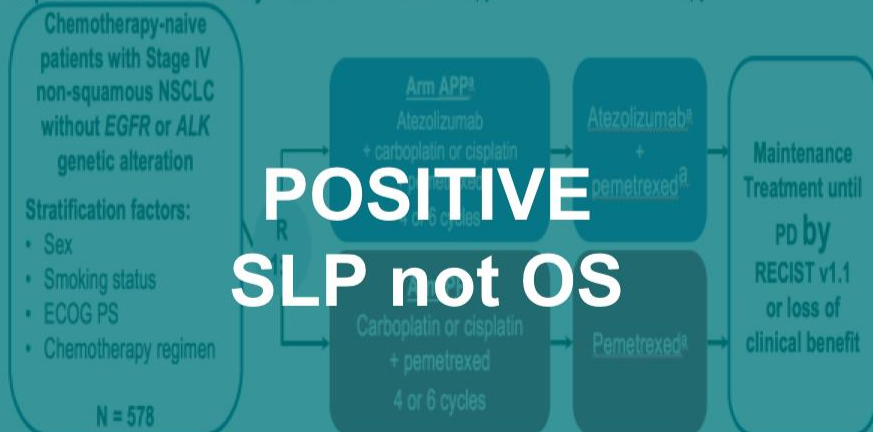
Maintenance therapy
(no crossover permitted)



IMpower132: PFS and Safety Results

Induction therapy

Maintenance therapy



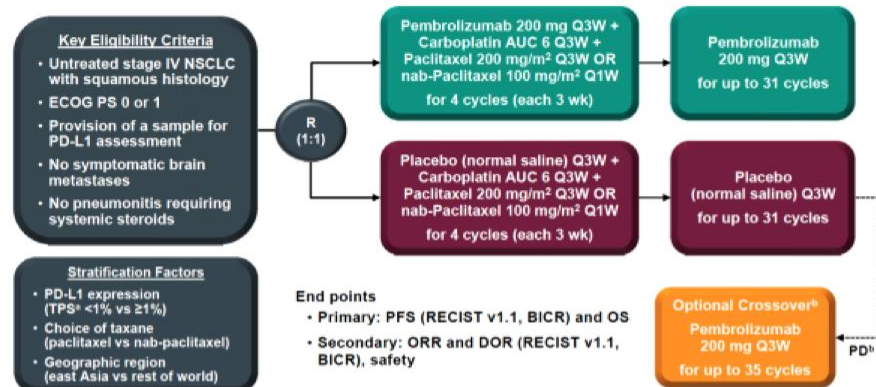
IMpower130

Maintenance
(No crossover permitted)



Histología escamosa

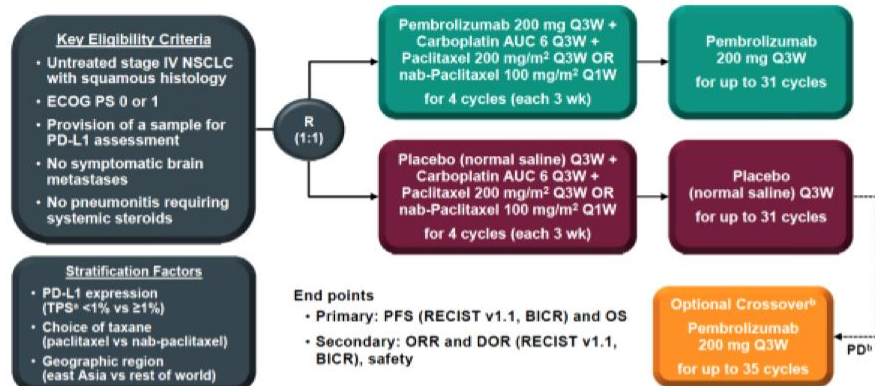
KEYNOTE-407 Study Design (NCT02775435)



BICR, blinded independent central radiologic review. *Percentage of tumor cells with membranous PD-L1 staining assessed using the PD-L1 IHC 22C3 pharmDx assay.
^bPatients could crossover during combination therapy or monotherapy. To be eligible for crossover, PD must have been verified by BICR and all safety criteria had to be met.

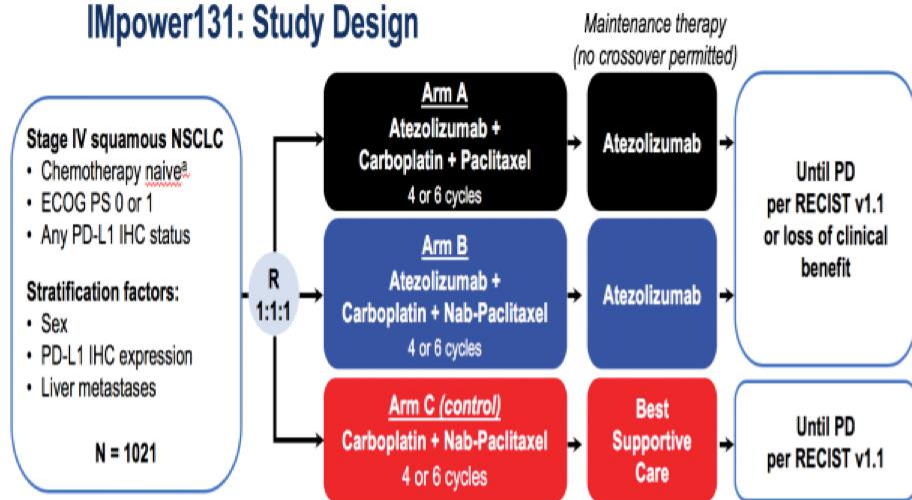
KEYNOTE-407 Study Design (NCT02775435)

Paz-Ares KN407 ASCO 2018



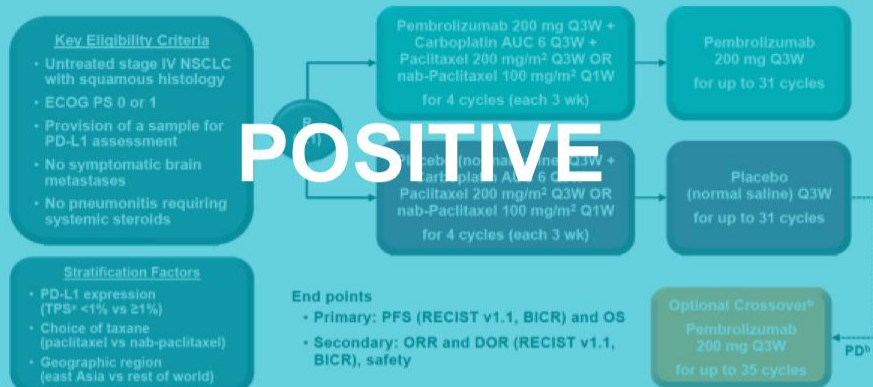
BICR, blinded independent central radiologic review. *Percentage of tumor cells with membranous PD-L1 staining assessed using the PD-L1 IHC 22C3 pharmDx assay. ^bPatients could crossover during combination therapy or monotherapy. To be eligible for crossover, PD must have been verified by BICR and all safety criteria had to be met.

IMpower131: Study Design



KEYNOTE-407 Study Design (NCT02775435)

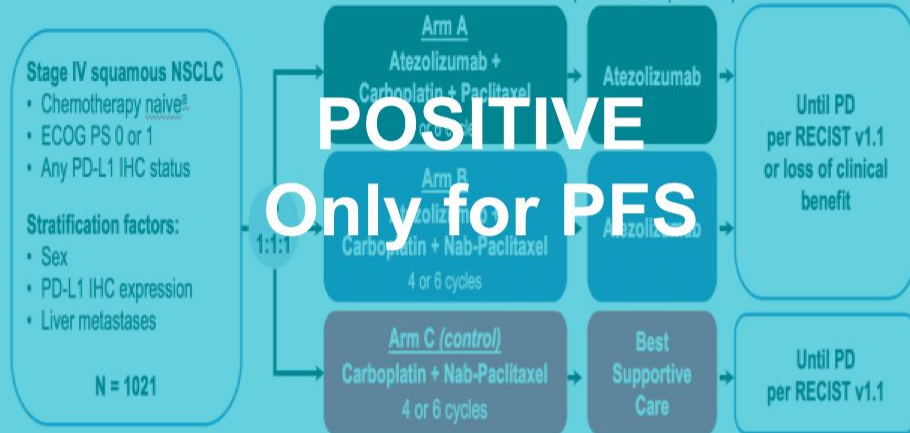
Paz-Ares KN407 ASCO 2018



BICR, blinded independent central radiologic review. *Percentage of tumor cells with membranous PD-L1 staining assessed using the PD-L1 IHC 22C3 pharmDx assay. ^bPatients could crossover during combination therapy or monotherapy. To be eligible for crossover, PD must have been verified by BICR and all safety criteria had to be met.

IMpower131: Study Design

Maintenance therapy
(no crossover permitted)

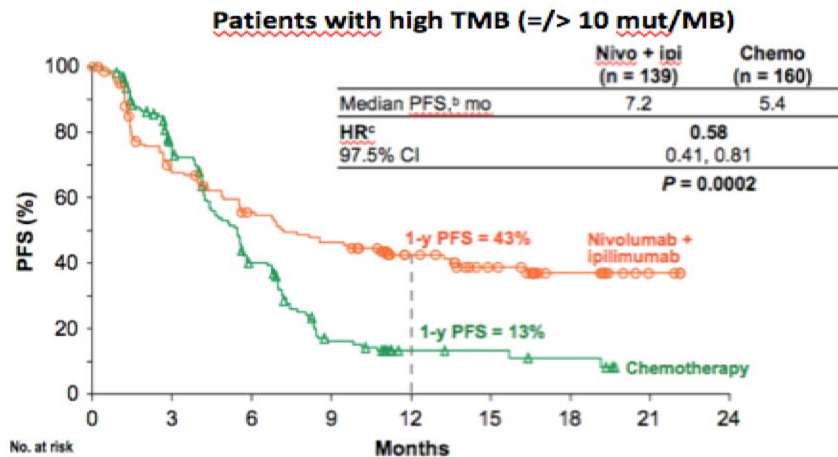
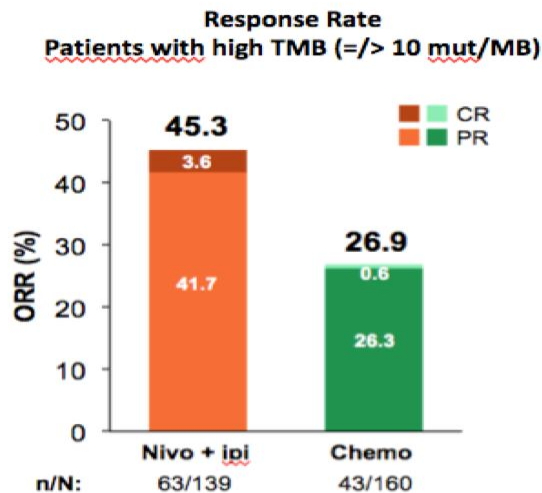


Escamoso y no escamoso

Nivo+Ipi vs QT en 1º LINEA CPNCP TMB > 10 mut/Mb

CheckMate 227: Nivo + Ipi in 1L NSCLC With High TMB (≥ 10 mut/Mb)

CM-227: First Results



PD-1 > 1% y TMB > 10 mut

Histology	Trial	N (Int vs Cont)	ORR (%)	PFS (months)	HR PFS	OS (months)	HR OS	PFS PD-L1 >50% HR	OS PD-L1 >50% HR
Non squamous	KN 189	410 vs 206	47.6 vs 18.9	8.8 vs 4.9	0.52	NR vs 11.3	0.49	0.36	0.42
	ImP150*	400 vs 400	63.5 vs 48.0	8.3 vs 6.8	0.59	19.2 vs 14.7	0.78	0.48	0.70(NS)
	ImP13	292 vs 136	51.6 vs 31.6	7.2 vs 5.2	0.70	18.1 vs 11.3	0.71 (NS)	0.46	0.64 (NS)
	ImP130	451 vs 228	49.2 vs 31.9	7.0 vs 5.5	0.64	18.6 vs 13.8	0.79	0.51	0.84 (NS)
Squamous	KN 407	101 vs 103	58.4 vs 35	4.8 vs 6.4	0.56	15.9 vs 11.3	0.64	0.37	0.64(NS)
	ImP131*	343 vs 340	59.4 vs 51.3	6.3 vs 5.6	0.71	14.0 vs 13.9	0.96 (NS)	0.44	0.56
All histologies	Mystic ^a	728 vs 364	35.6 vs 37.7	4.7 vs 5.4 ^a	0.87	16.3 vs 12.9	0.76-0.85 (NS)		0.76
	CM227**	139 vs 160	45.3 vs 26.9	7.2 vs 5.4	0.58	23 vs 16	0.77(NS)		

iGood Bye D-Platinum alone!

¿Cómo podemos seguir
aumentando la SG en CP?



¿Cómo hemos conseguido aumentar la SG?

Treatment evolution without biomarker

- ❖ Importance of histology
- ❖ Role of maintenance therapy
- ❖ Role of immuno + chemo

Best support care



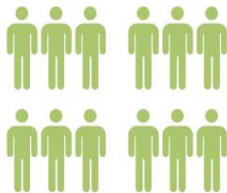
2-4 months

Platinum doublet chemo



6-8 months

Platinum base chemo and 3er generations



8-10 months

Chemotherapy by histology, and chemo plus bevacizumab.



12 months

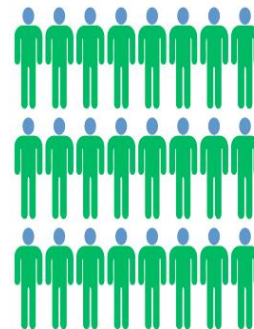
New maintenance therapy



16,9 months

New treatment options:

Chemo-IO



22 months

<1970

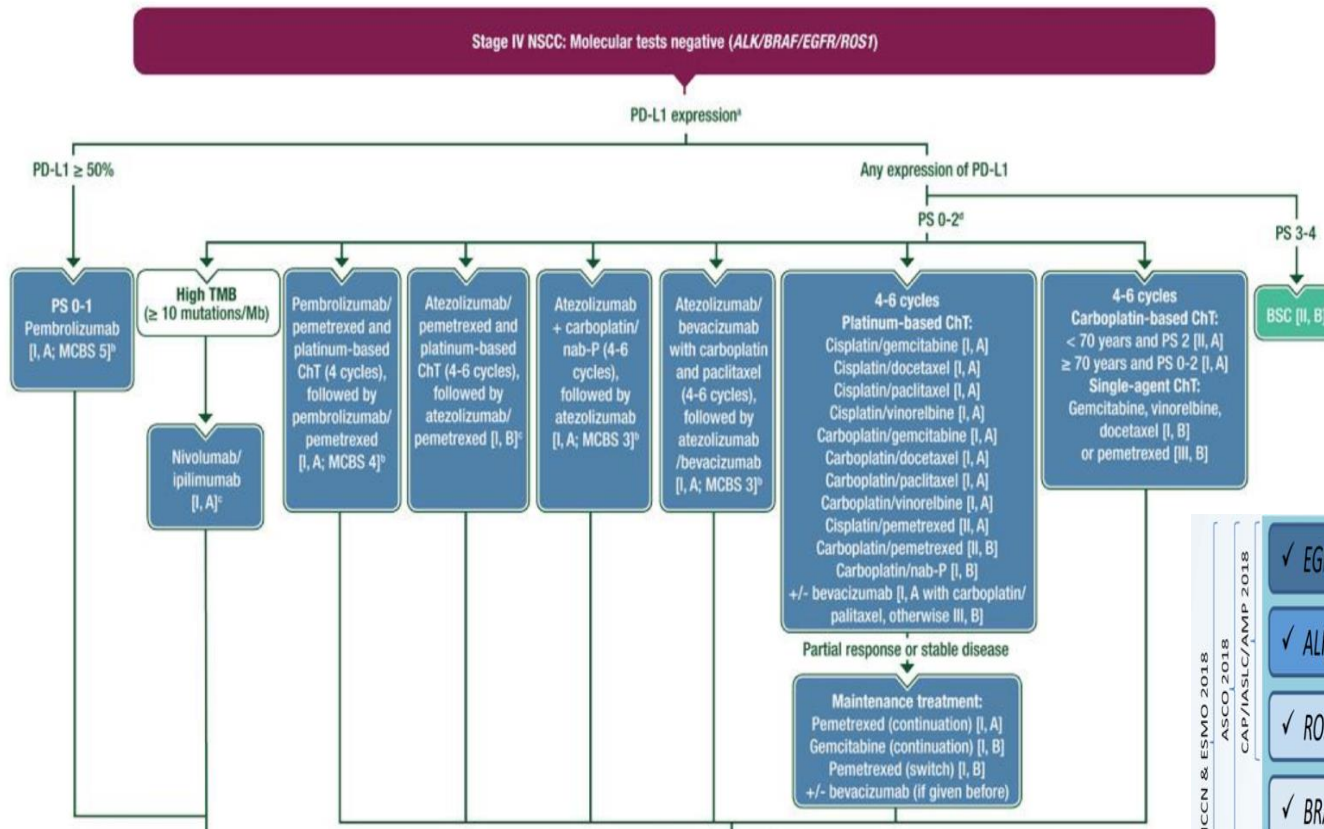
1980

1990-2005

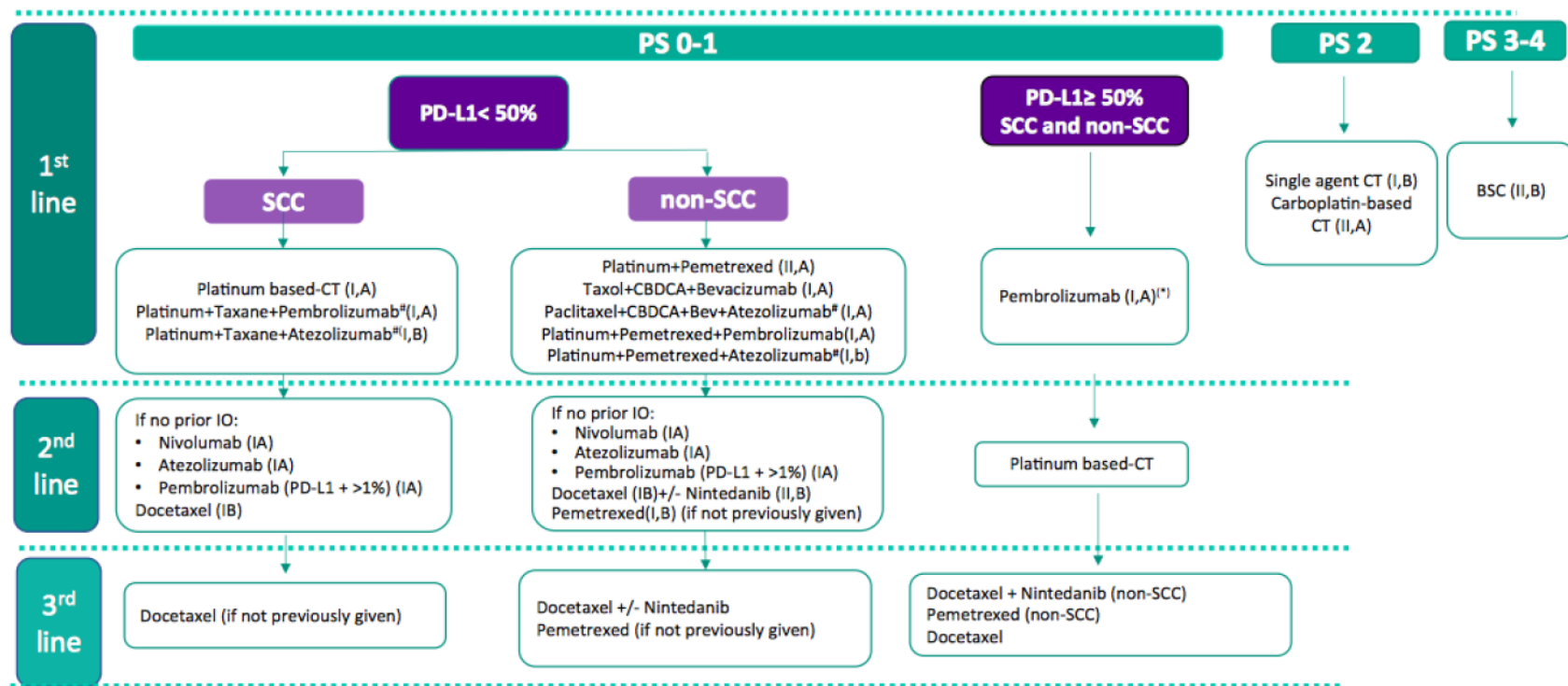
2005-2009

2010-2012

2014-2018



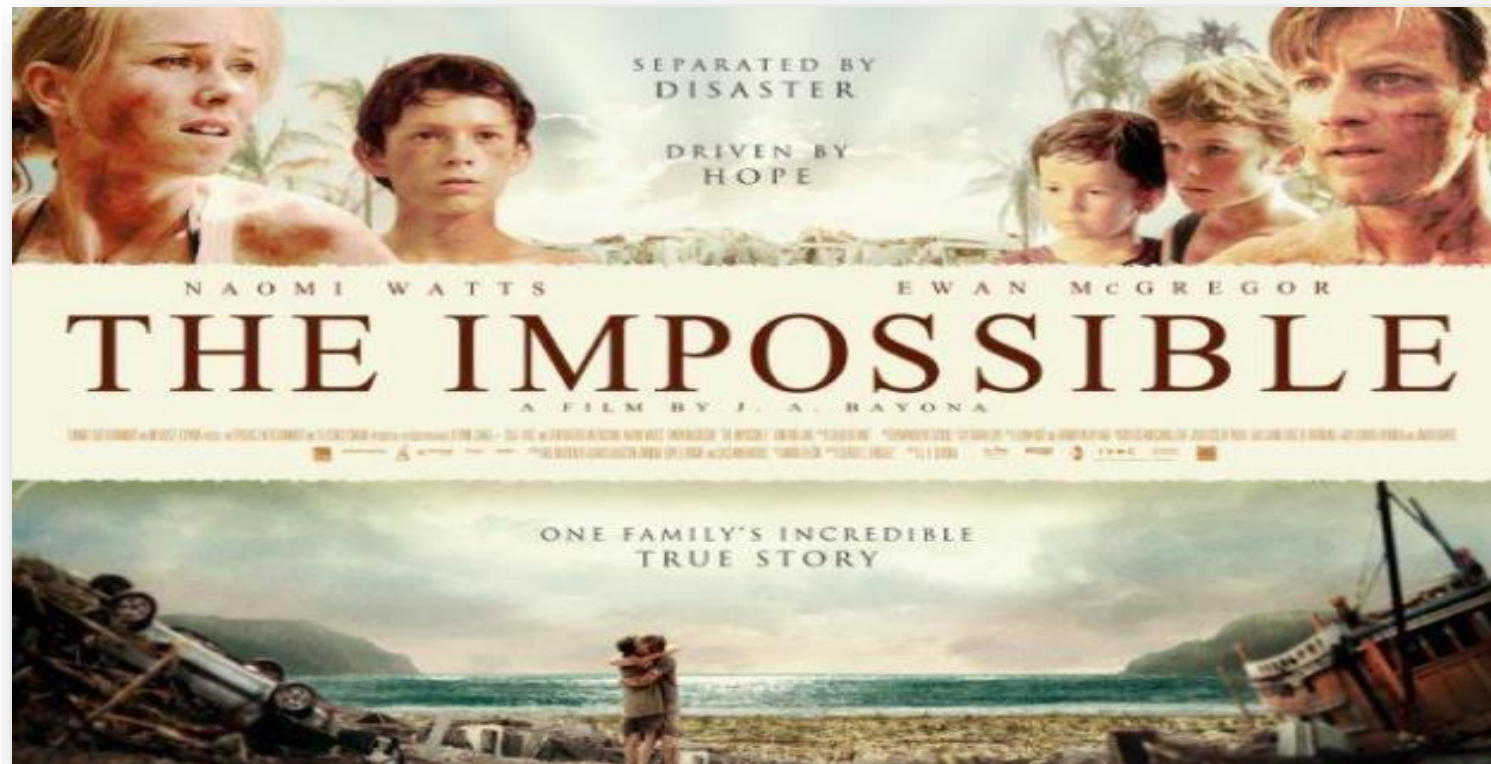
Stage IV NSCLC (no targetable alterations)



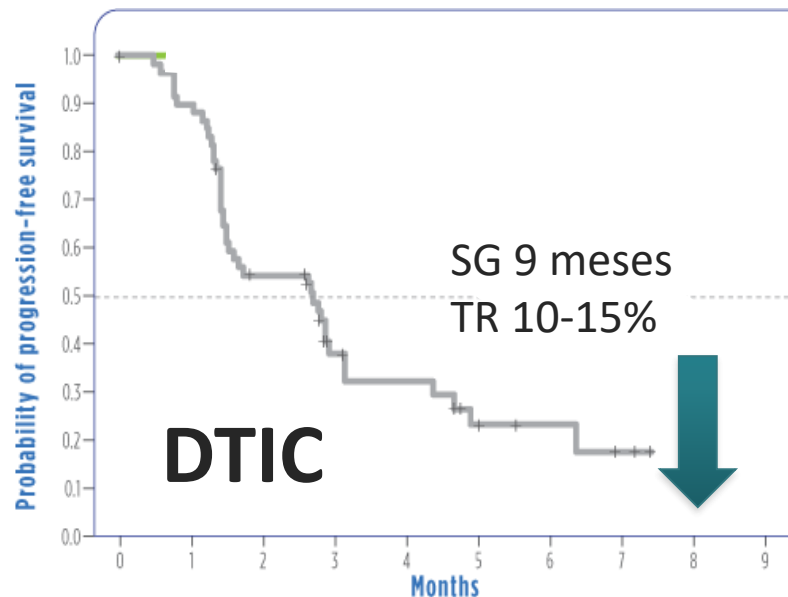


Inmunoterapia Melanoma metastásico

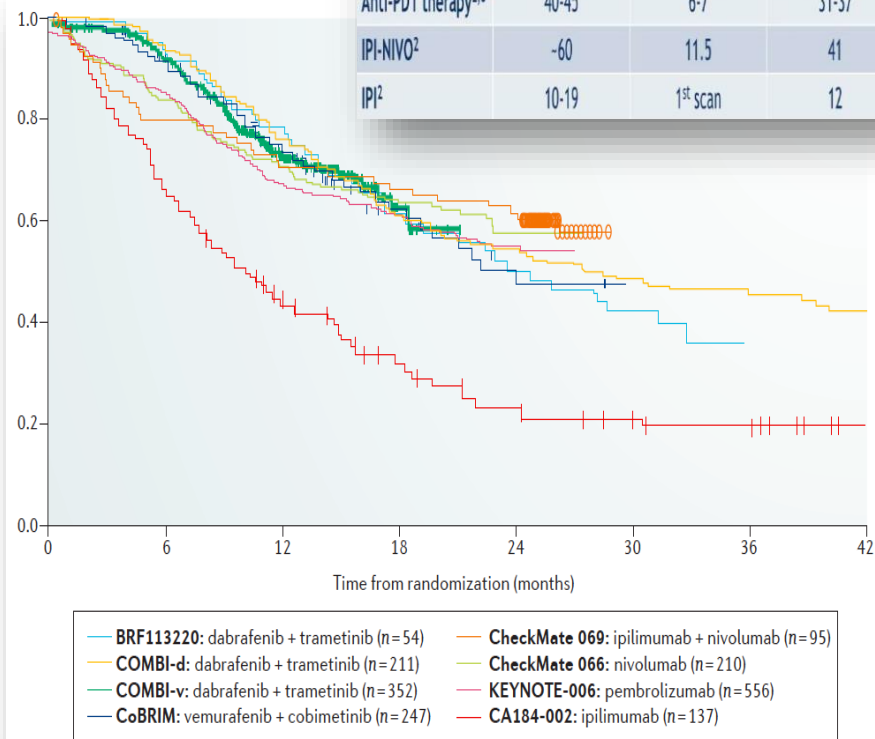
En los últimos años en melanoma...



En los últimos años en melanoma...



Therapy	Response rate (%)	Median PFS (Months)	2-year PFS (%)	2-yr OS (%)
BRAFi/MEKi ^{1,3,4}	65-70	11-15	30	53-57
Anti-PD1 therapy ^{2,5}	40-45	6-7	31-37	57-58
IPI-NIVO ²	~60	11.5	41	64
IPI ²	10-19	1 st scan	12	45



TRATAMIENTO ACTUAL 1º LINEA MELANOMA METASTÁSICO

INMUNOTERAPIA

TERAPIA DIRIGIDA

Keynote 006 (pembro vs Ipi 1ª/2ª línea)
Checkmate 066 (nivo vs QT BRAF WT)
Checkmate 067 (nivo o ipi/nivo vs ipi)

Keynote 006 (pembro vs Ipi 1ª/2ª línea)
- 35% BRAF mutado
- 17% BRAF previo
Checkmate 067 (nivo o ipi/nivo vs ipi)
- 1ª línea pura -> pacientes naïve para iBRAF/iMEK previo
- 31'5% BRAF mutado

Checkmate 067 (nivo o ipi/nivo vs ipi)
Keynote 029 (fase II, ipi LOW DOSE/pembro)

Optim (T-VEC vs G-CSF)
- IIIB/C irresecables y M1a

**PRIMERA
LÍNEA**

RESPUESTA RÁPIDA
NECESARIA

Anti PD1 TVEC (IIIB-M1A)

RÉGIMEN: Ipilimumab +
Nivolumab

**Estadio
IV**

ANÁLISIS
BRAF

BRAF WT



BRAF MUTADO

RESPUESTA RÁPIDA
NECESARIA

inh
BRAF/MEK

RÉGIMEN: Ipilimumab
+ Nivolumab
(si NO rápido progresor)

RESPUESTA RÁPIDA
NO NECESARIA

inh
BRAF/MEK

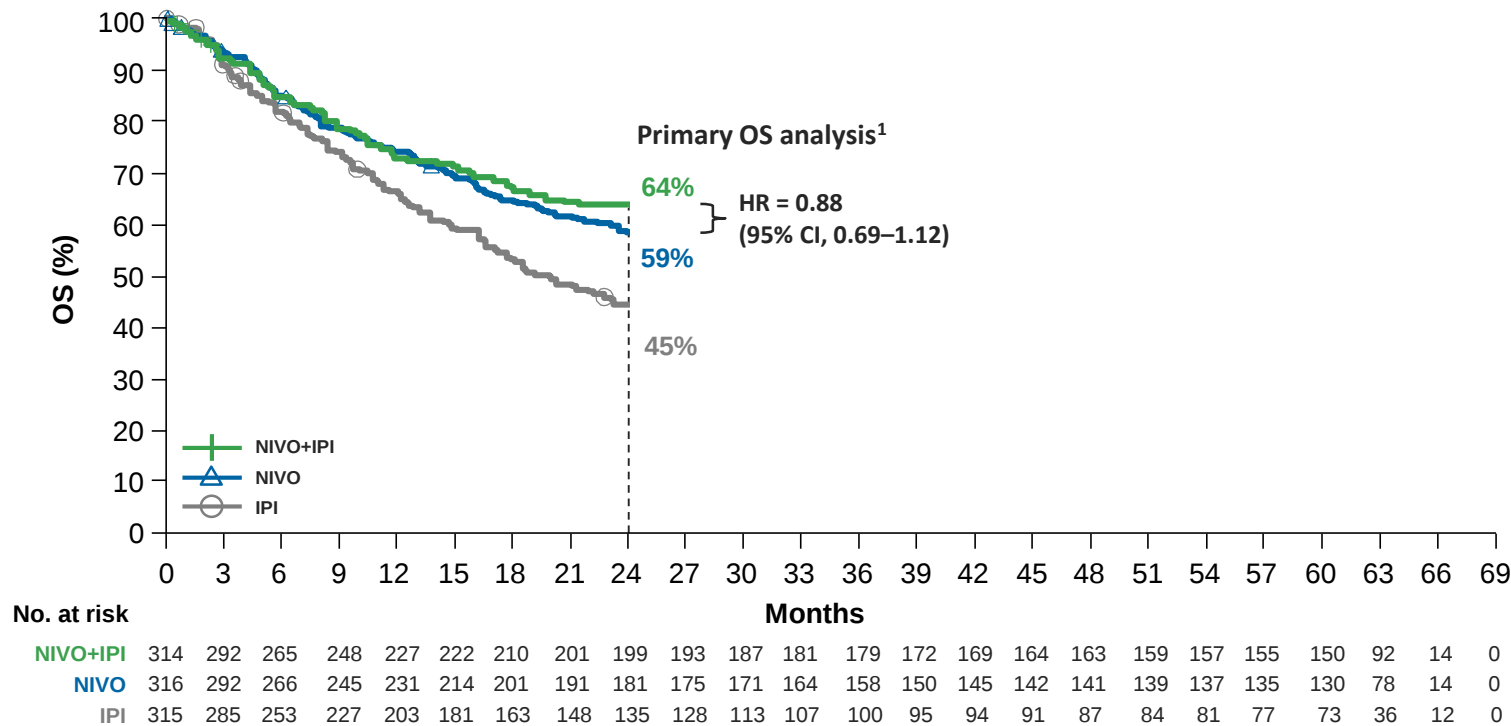
Anti PD1

Inmunoterapia Melanoma Metastásico

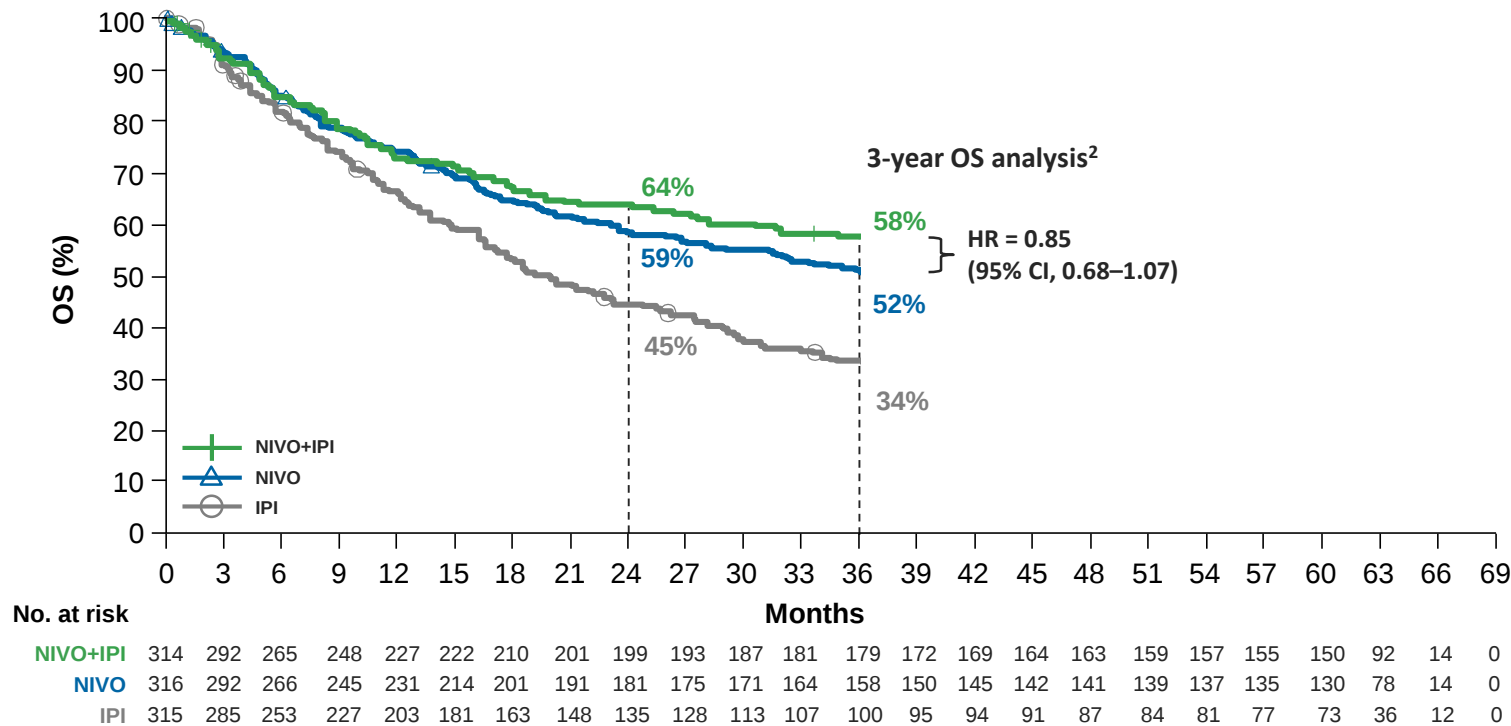
Algunas cuestiones...

- ¿Largos supervivientes con inmunoterapia?

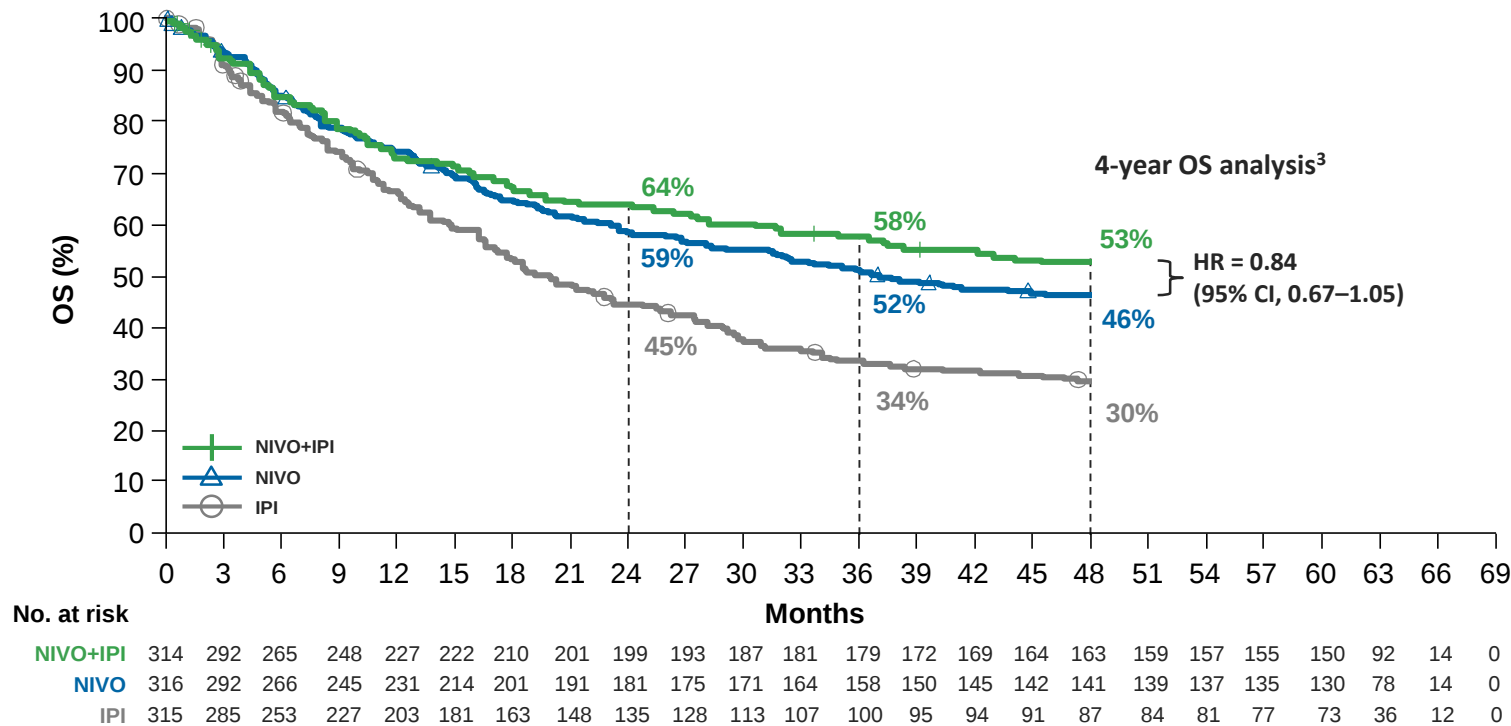
CHECK-MATE 067: *SUPERVIVENCIA A 5 AÑOS*



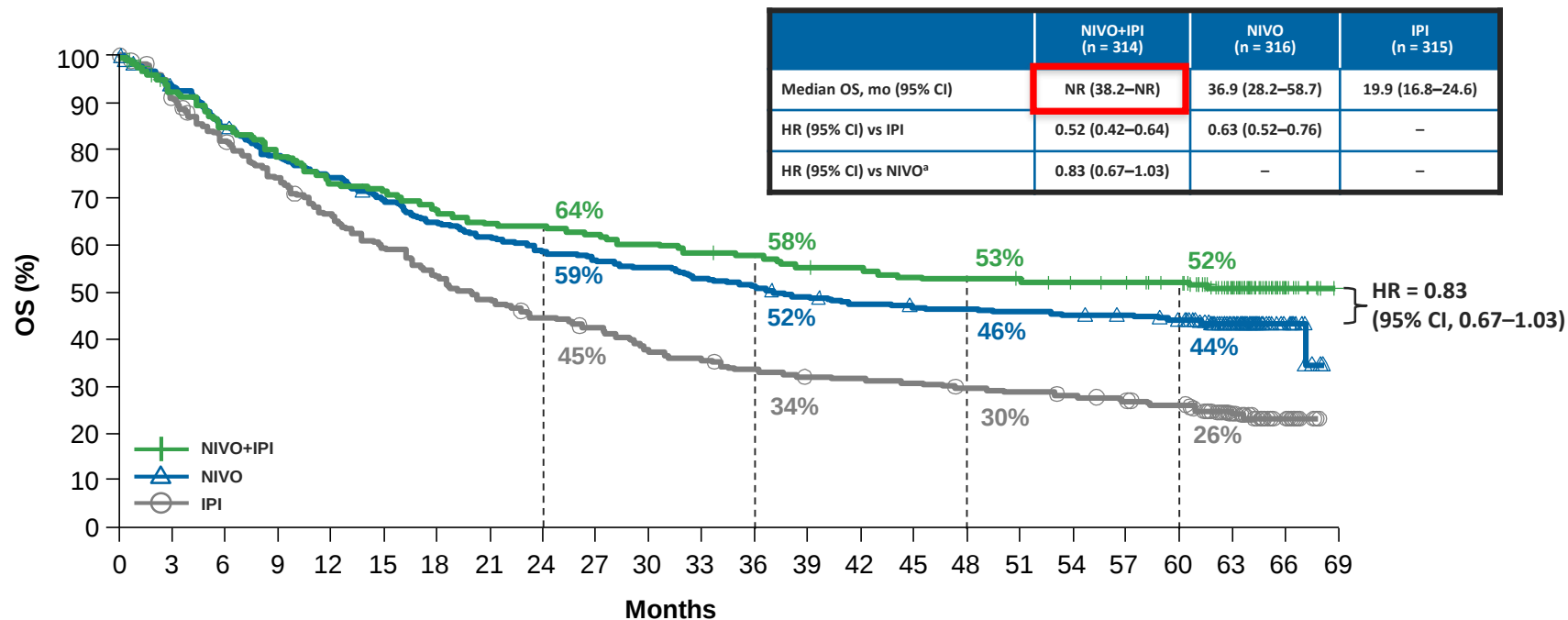
CHECK-MATE 067: SUPERVIVENCIA A 5 AÑOS



CHECK-MATE 067: SUPERVIVENCIA A 5 AÑOS



CHECK-MATE 067: SUPERVIVENCIA A 5 AÑOS



	NIVO	NIVO-IPI	IPI
TOXICIDAD Grado 3-4	23%	59%	28%

Inmunoterapia Melanoma Metastásico

Algunas cuestiones...

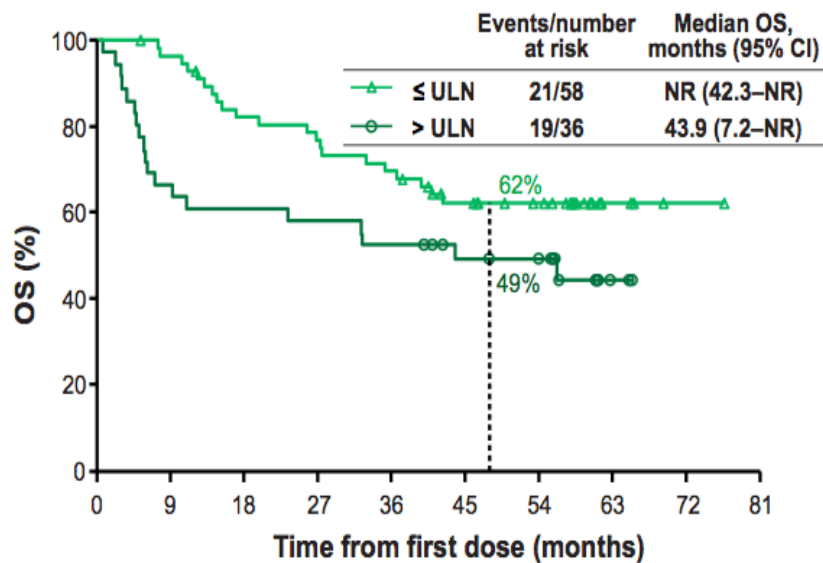
- ¿Largos supervivientes con inmunoterapia?
- **¿Identificación de los largos supervivientes?**

LDH: Factor pronóstico

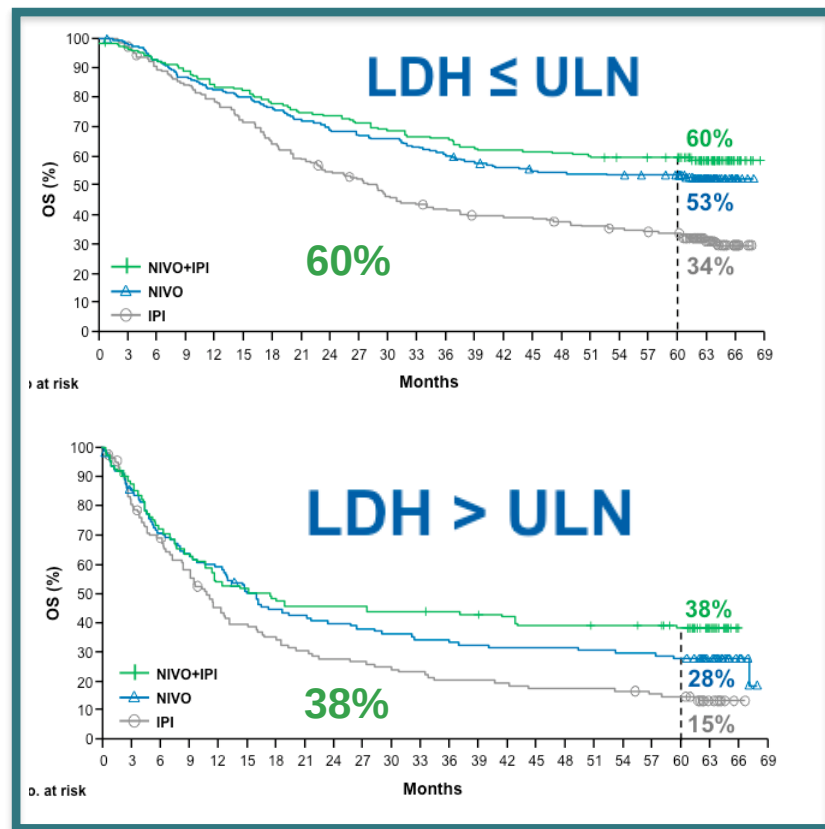
Fase III: Nivo+IPI

By baseline LDH

Fase I: Nivo+IPI



Abstract 9533. Atkins et al. ASCO 2019



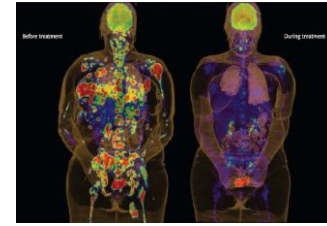
Abstract 2545. Larkin, et al. ESMO 2019

Inmunoterapia Melanoma Metastásico

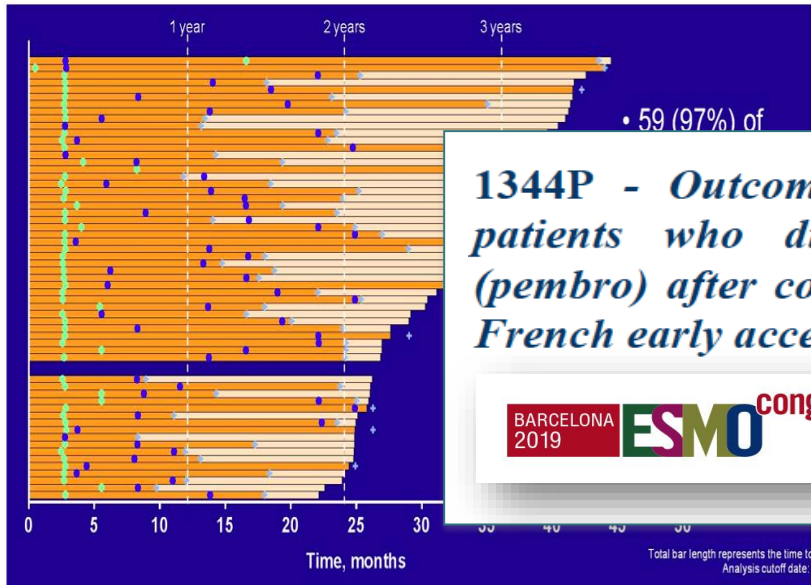
Algunas cuestiones...

- ¿Largos supervivientes con inmunoterapia?
- ¿Identificación de los largos supervivientes?
- **¿Se puede parar la inmunoterapia? ¿Parar compromete la eficacia?**

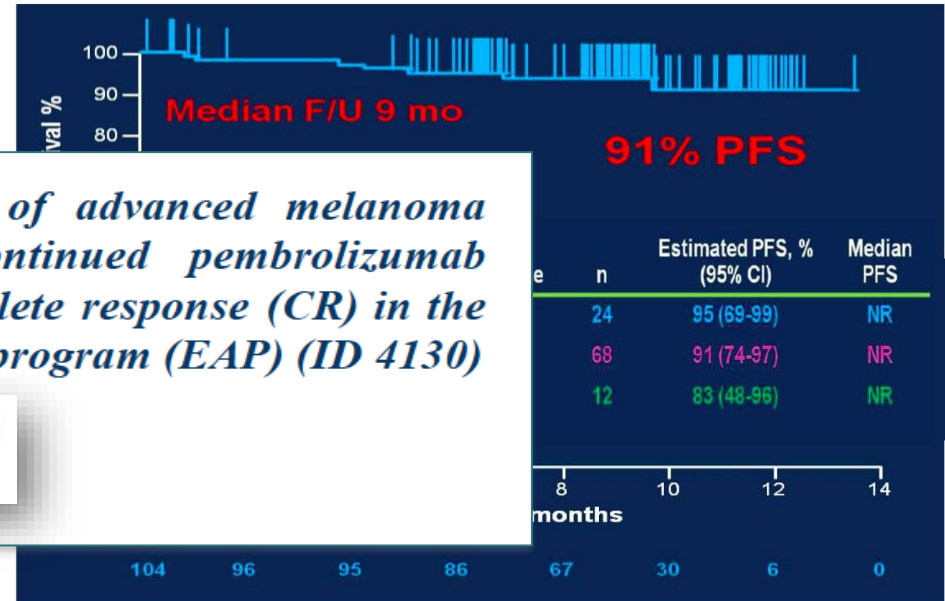
Discontinuación inmunoterapia en respuesta



KEYNOTE-001: SEGUIMIENTO TRAS PARAR PEMBROLIZUMAB EN RC



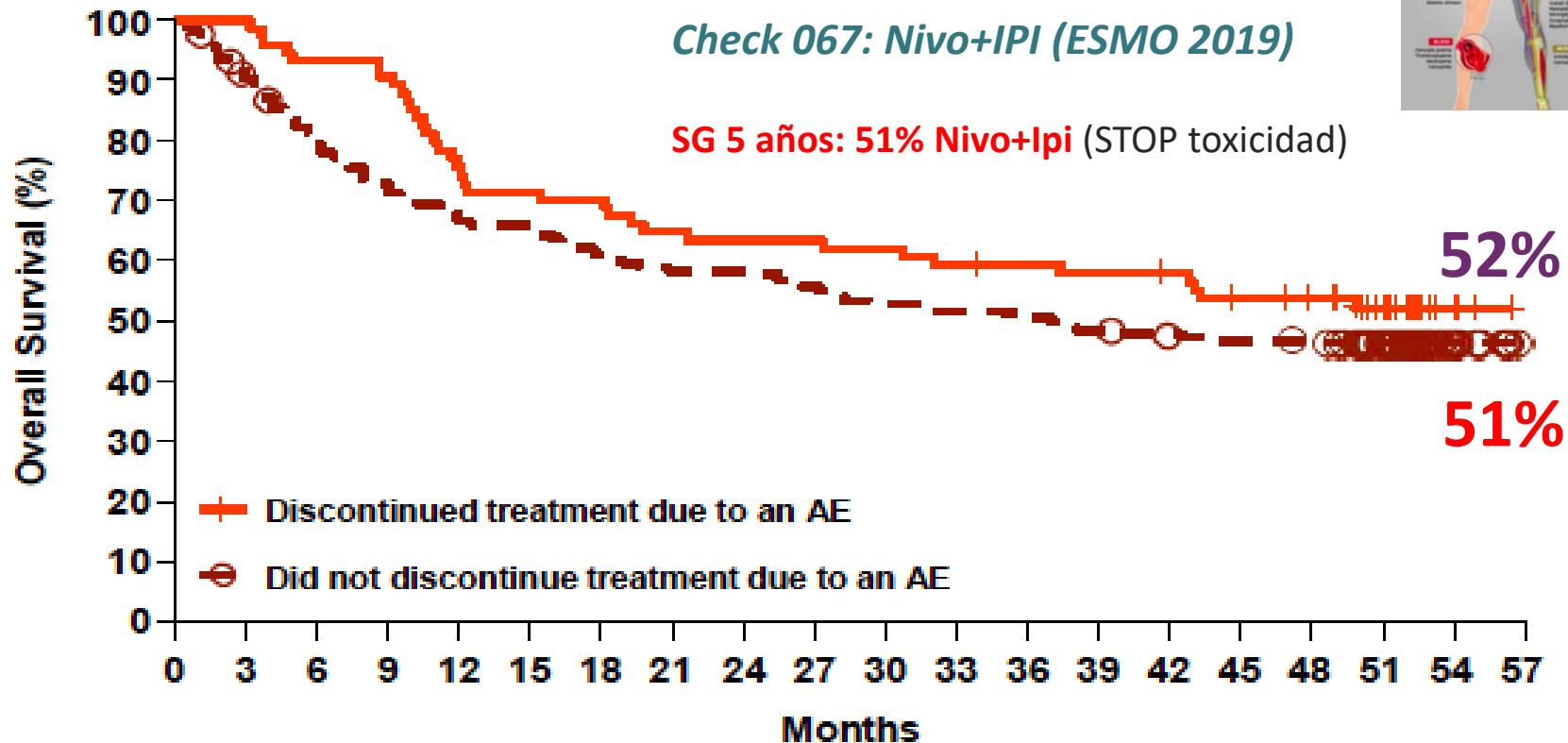
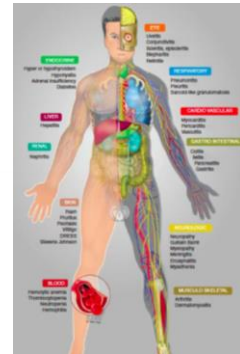
KEYNOTE-006: SEGUIMIENTO TRAS COMPLETAR TRATAMIENTO CON PEMBROLIZUMAB 24 meses



1344P - Outcomes of advanced melanoma patients who discontinued pembrolizumab (pembro) after complete response (CR) in the French early access program (EAP) (ID 4130)



Discontinuación inmunoterapia por toxicidad



¿Hacia dónde vamos?...algunos obstáculos



**Metástasis
Cerebrales**

Melanoma
uveal

Secuencias o
Combinaciones

Biomarcadores

Efficacy and Safety of the Combination of Nivolumab Plus Ipilimumab in Patients With Melanoma and Asymptomatic or Symptomatic Brain Metastases (CheckMate 204)

Key eligibilities

- ≥ 1 measurable, unirradiated MBM (0.5–3.0 cm)
- Prior SRT in ≤ 3 MBM
- Previous treatment with BRAFi/MEKi permitted
- No prior checkpoint inhibitors in metastatic setting

Cohort eligibilities

- Asymptomatic patients
- ECOG PS 0/1
- No steroids

Median follow-up = 20.6 mo

N: 101

Induction

NIVO
1 mg/kg
Q3W × 4
+
IPI
3 mg/kg
Q3W × 4

Maintenance

NIVO
3 mg/kg
Q2W

Treat until progression or toxicity (max. 24 months)^a

Endpoints

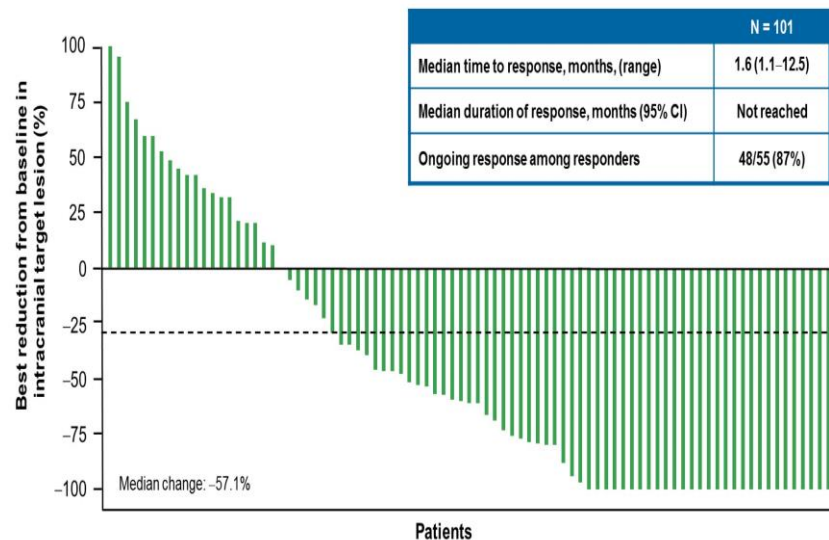
Primary: IC CBR (CR + PR + SD ≥ 6 months)^b

Secondary: safety, PFS, OS, EC and global CBR

Follow for 3 years from first dose

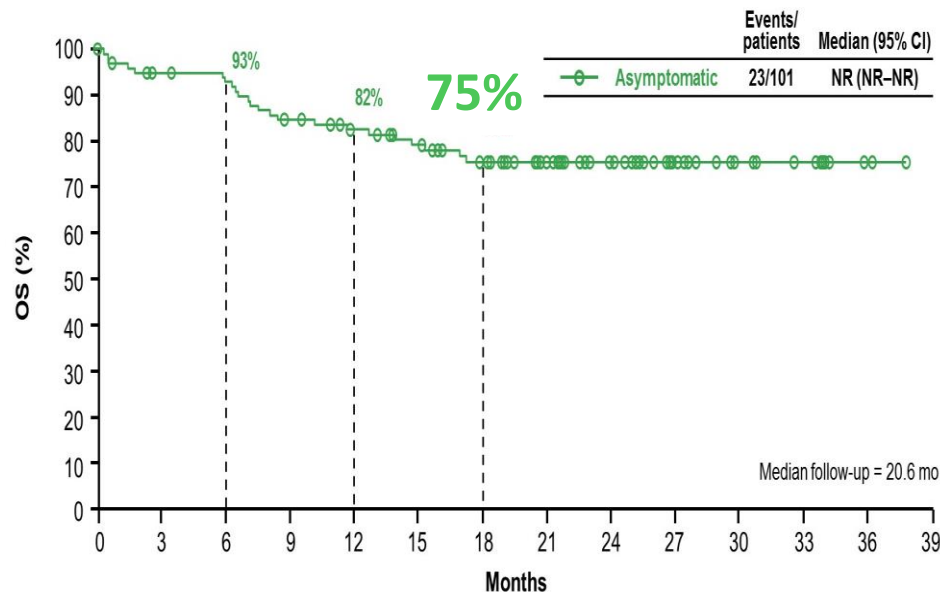
Data cutoff date of May 1, 2018

Intracranial Tumor Burden Change and Characteristics of Intracranial Response – Asymptomatic Patients

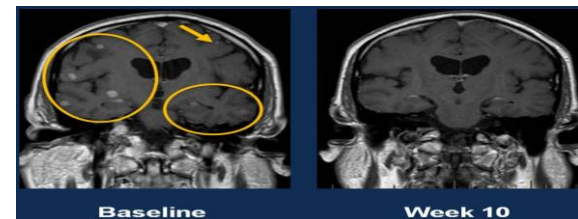


RC 29 (29%)
 RP 26 (26%)
 ORR 55/101 (54%)

Overall Survival – Asymptomatic Patients



Metástasis Cerebrales

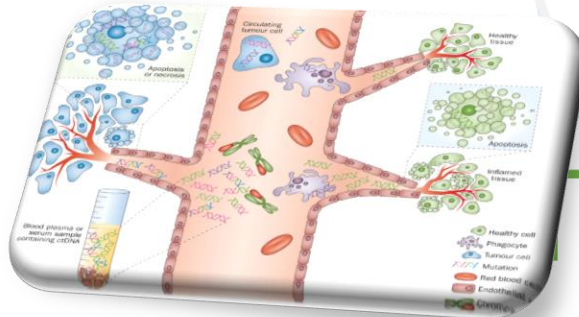
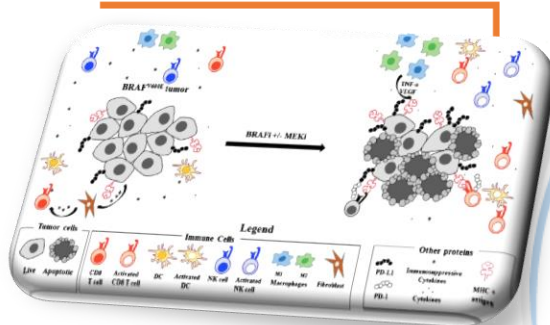


Ensayo	Combinación	Respuesta intracraneal en 1ºL	Respuestas Completas	n
ABC ¹	NIVO-IPI vs NIVO	59% N-I 21% N	26% N-I 16% N	75
Check 204 ²	NIVO-IPI	58%	29%	101

¿Podemos obviar la RT holocraneal?
POBLACIÓN SELECCIONADA

¹ 13110. Long et al. ESMO 2019. ²9501. Tawbi et al. ASCO 2019

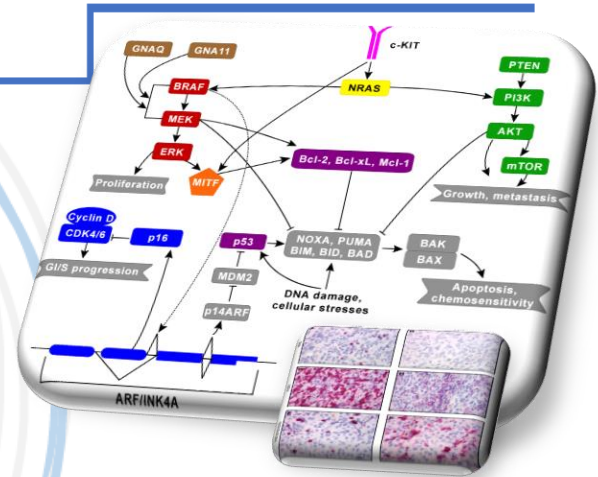
Microambiente tumoral



Sangre periférica

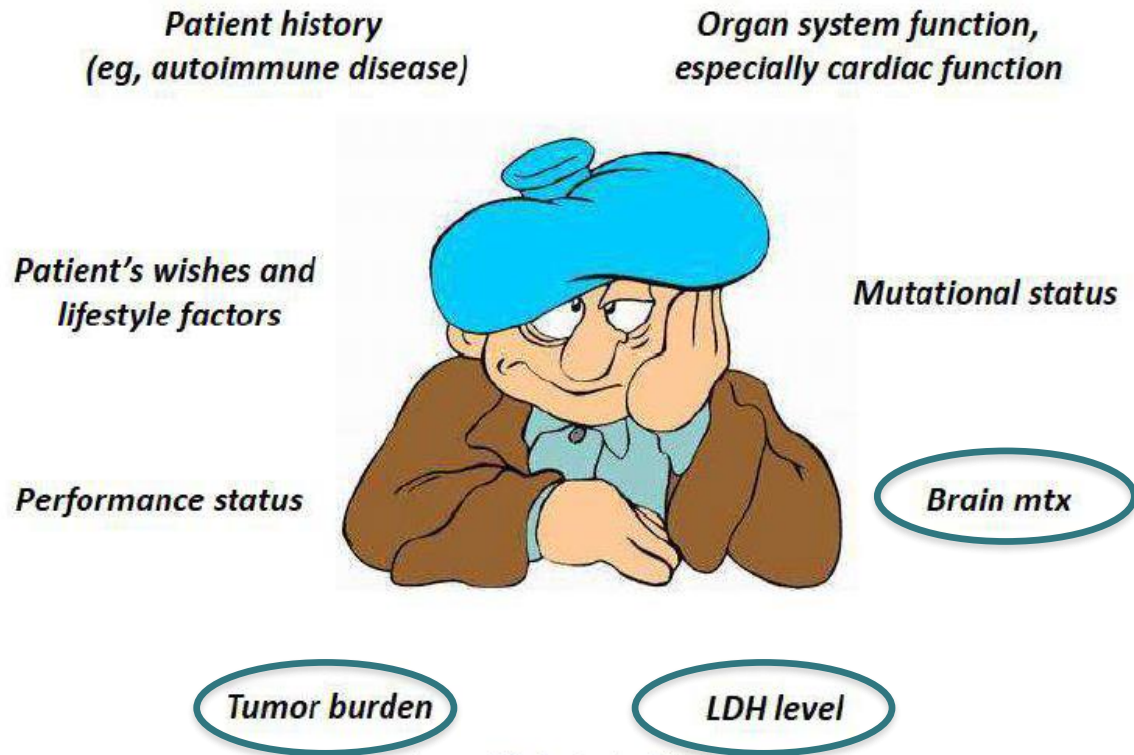


Tumor



Huésped

Treatment based on patient's characteristics



Courtesy of P. Ascierto, ESMO 2018



Muchas Gracias