Lung Cancer UPDATES
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Iniciativa científica de:
GECP
lung cancer research

MESOTELIOMA

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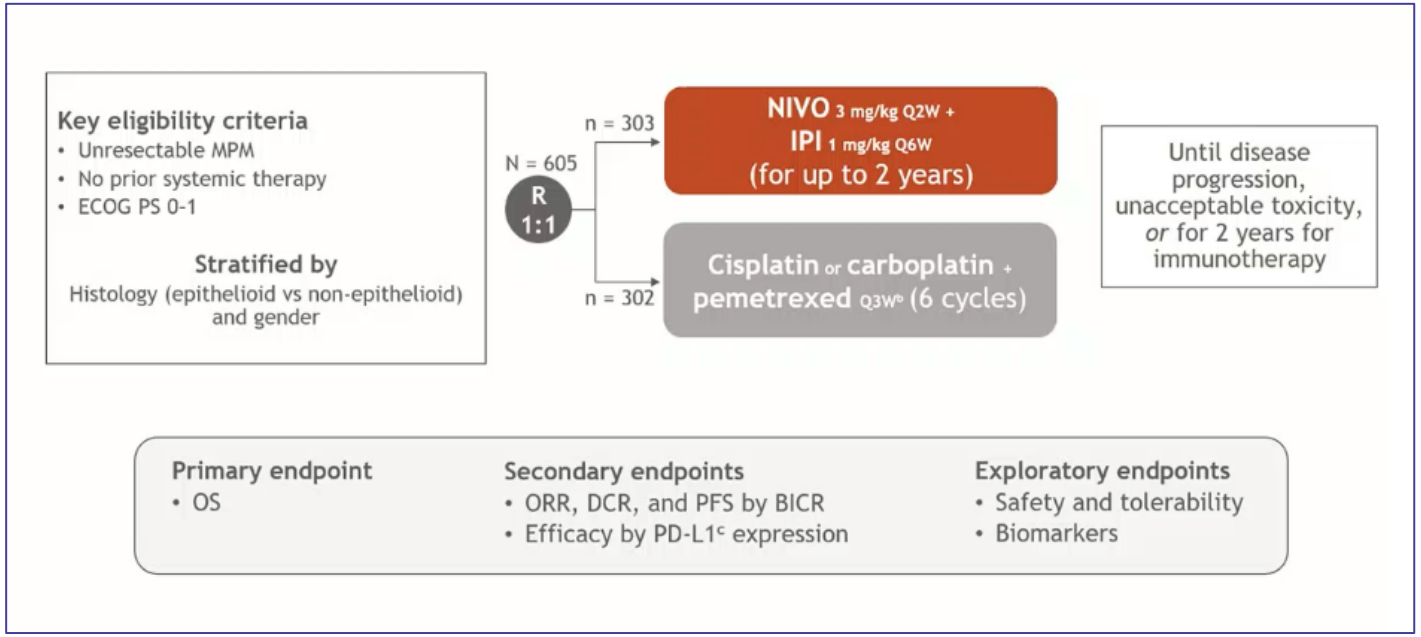
- CheckMate 743: 3-year update. First-line nivolumab (NIVO) plus ipilimumab (IPI) vs chemotherapy (chemo) in patients (pts) with unresectable malignant pleural mesothelioma (MPM)

- PEMBIB phase 1b: Pembrolizumab and Nintedanib for Patients with Advanced Mesothelioma

First-line nivolumab (NIVO) plus ipilimumab (IPI) vs chemotherapy (chemo) in patients (pts) with unresectable malignant pleural mesothelioma (MPM): 3-year update from CheckMate 743

LBA65. Solange Peters, et al.

- Dual immunotherapy with nivolumab (NIVO) + ipilimumab (IPI), which have distinct but complementary mechanism of action, has improved long-term OS in multiple tumor types
- CheckMate 743: study design



- 1L NIVO + IPI significantly prolonged OS vs chemotherapy (chemo) in patients with unresectable MPM
- This regimen is now approved in EU, US, and other countries as 1L treatment for adults with unresectable MPM

First-line nivolumab (NIVO) plus ipilimumab (IPI) vs chemotherapy (chemo) in patients (pts) with unresectable malignant pleural mesothelioma (MPM): 3-year update from CheckMate 743

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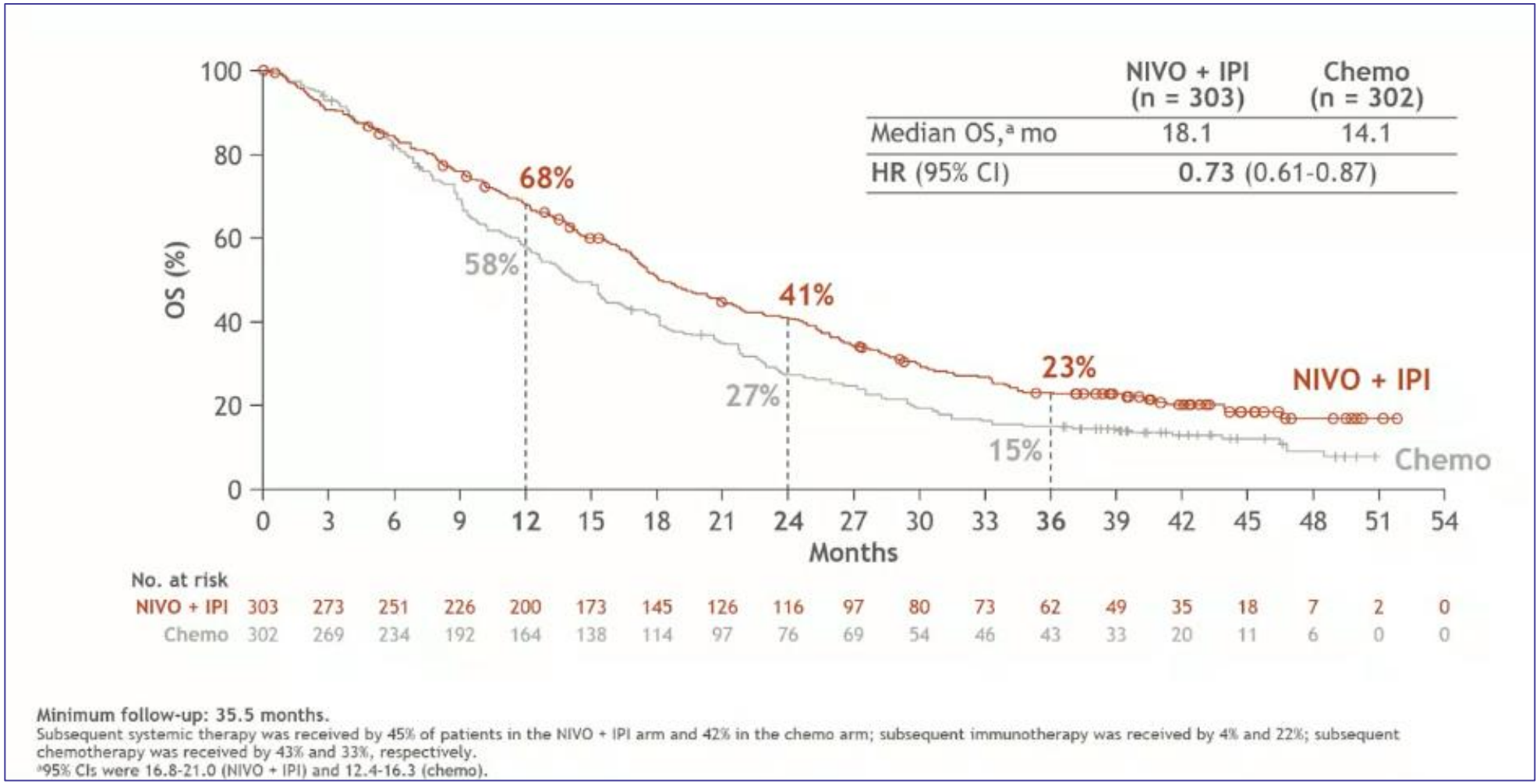
- 3-year update: overall survival in all randomized patients



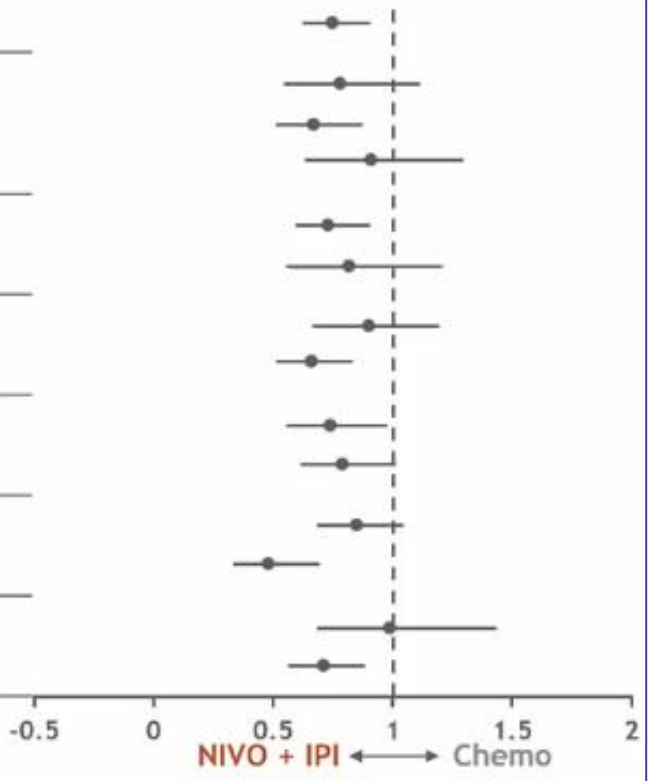
Minimum follow-up: 35.5 months.
Subsequent systemic therapy was received by 45% of patients in the NIVO + IPI arm and 42% in the chemo arm; subsequent immunotherapy was received by 4% and 22%; subsequent chemotherapy was received by 43% and 33%, respectively.
[a]95% CIs were 16.8-21.0 (NIVO + IPI) and 12.4-16.3 (chemo).

First-line nivolumab (NIVO) plus ipilimumab (IPI) vs chemotherapy (chemo) in patients (pts) with unresectable malignant pleural mesothelioma (MPM): 3-year update from CheckMate 743

LBA65. Solange Peters, et al.

- 3-year update: overall survival subgroup analysis

Subgroup	Median OS, mo		Unstratified HR	Unstratified HR (95% CI)
	NIVO + IPI (n = 303)	Chemo (n = 302)		
All randomized (N = 605)	18.1	14.1	0.75[a]	
< 65 years (n = 167)	17.2	13.3	0.78	
≥ 65 to < 75 years (n = 281)	20.3	14.5	0.67	
≥ 75 years (n = 157)	16.9	15.5	0.91	
Male (n = 467)	**17.5**	**13.7**	**0.73**	
Female (n = 138)	**21.1**	**18.0**	**0.82**	
ECOG PS 0 (n = 242)	20.7	19.5	0.90	
ECOG PS ≥ 1[b] (n = 363)	17.0	11.6	0.66	
Never smoker (n = 249)	17.9	14.1	0.74	
Former smoker[c] (n = 318)	17.6	14.9	0.79	
Epithelioid (n = 455)	**18.2**	**16.7**	**0.85**	
Non-epithelioid[d,e] (n = 150)	**18.1**	**8.8**	**0.48**	
PD-L1 < 1% (n = 135)	17.3	16.6	0.99	
PD-L1 ≥ 1%[f] (n = 451)	18.0	13.3	0.71	

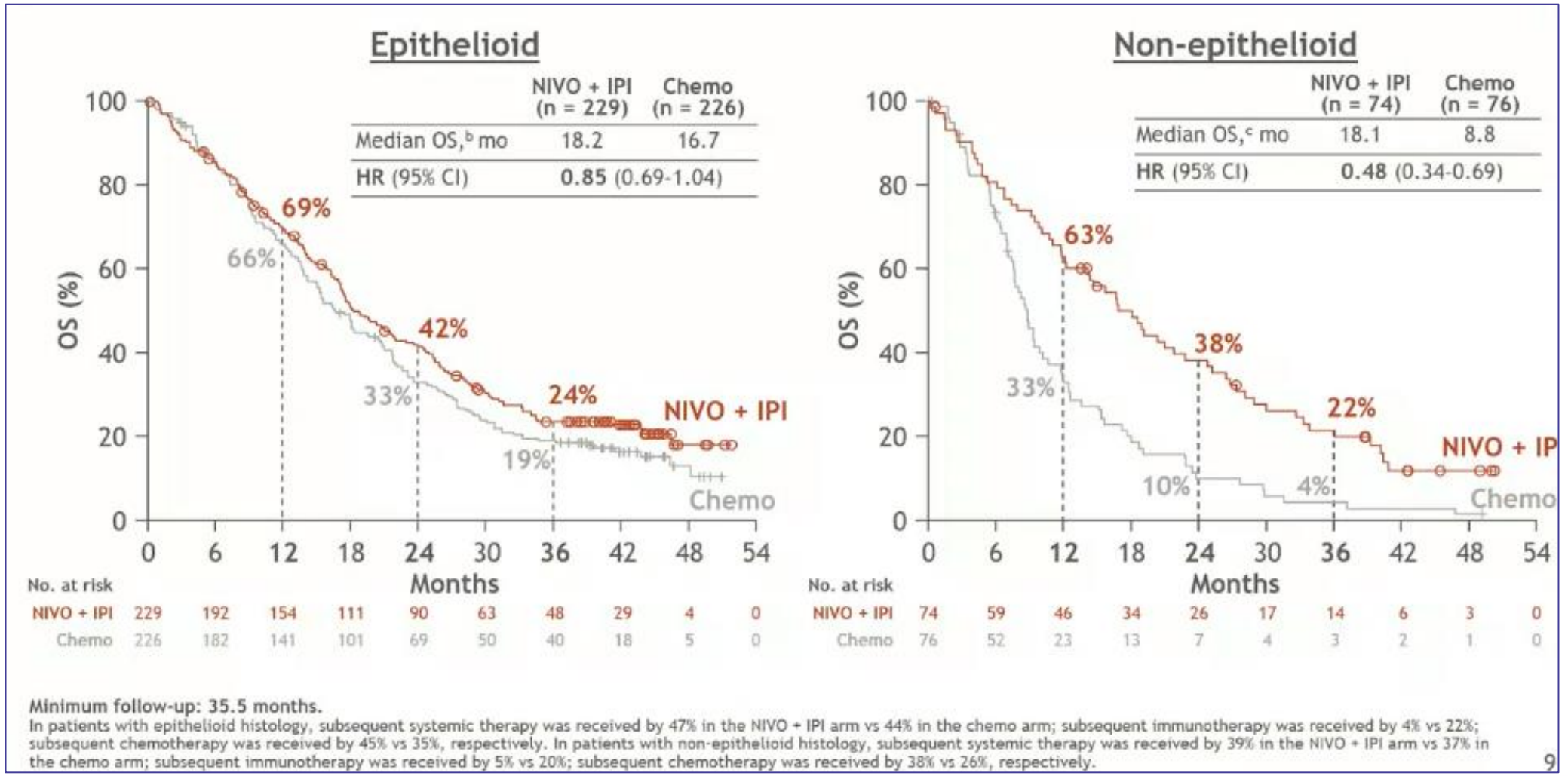


Minimum follow-up: 35.5 months.
Bold text indicates study stratification factors.
[a]Stratified HR, 0.73; [b]One patient in the chemotherapy group had a baseline ECOG PS of 2 (protocol deviation); [c]26 patients were current smokers; smoking status of 12 patients was unknown; [d]Includes sarcomatoid, mixed, and other; [e]One patient was changed from epithelioid to non-epithelioid after the primary analysis; [f]PD-L1 expression level was not reported for 19 patients.

First-line nivolumab (NIVO) plus ipilimumab (IPI) vs chemotherapy (chemo) in patients (pts) with unresectable malignant pleural mesothelioma (MPM): 3-year update from CheckMate 743

LBA65. Solange Peters, et al.

- 3-year update: overall survival by histology



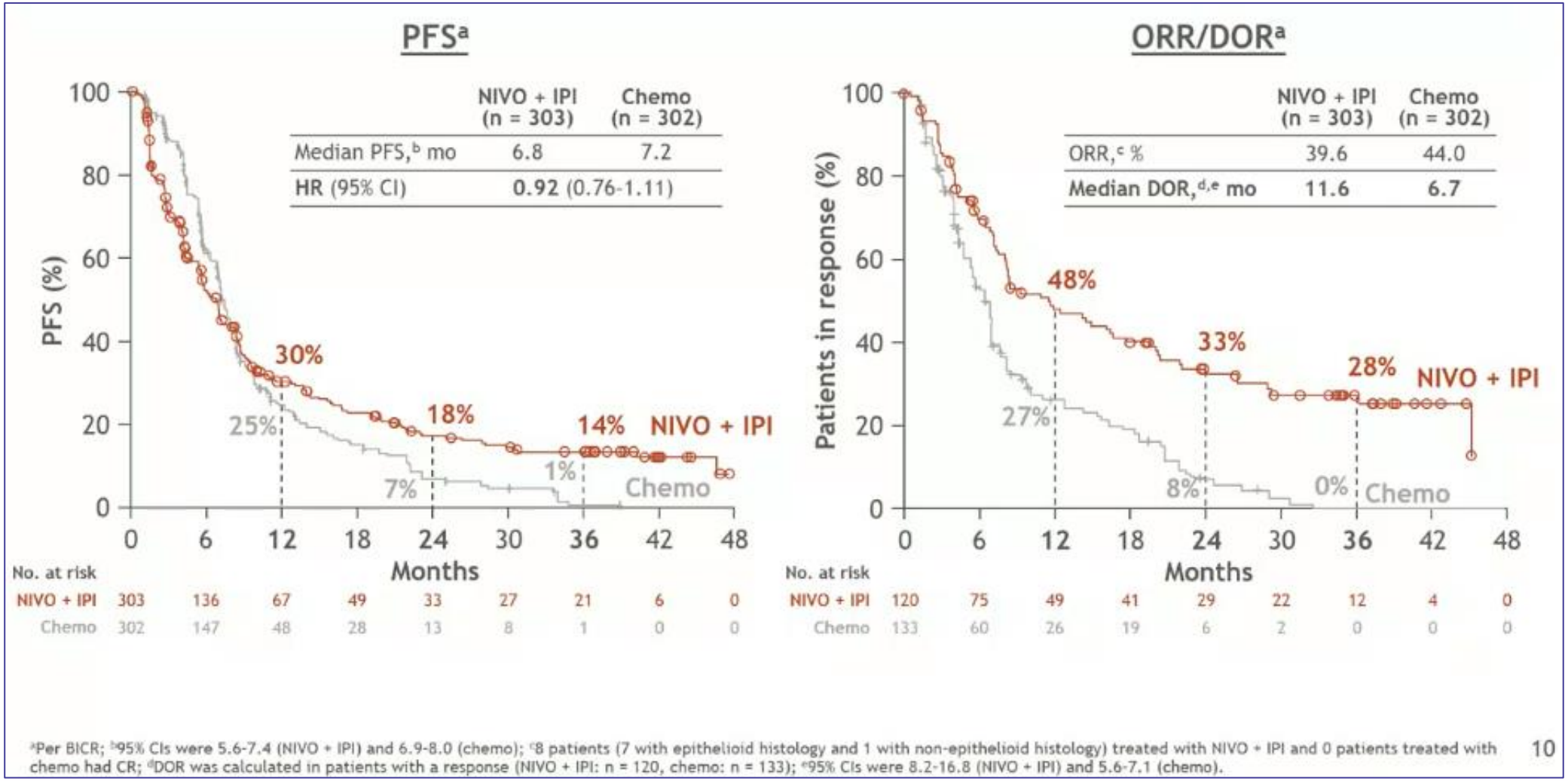
Minimum follow-up: 35.5 months.

In patients with epithelioid histology, subsequent systemic therapy was received by 47% in the NIVO + IPI arm vs 44% in the chemo arm; subsequent immunotherapy was received by 4% vs 22%; subsequent chemotherapy was received by 45% vs 35%, respectively. In patients with non-epithelioid histology, subsequent systemic therapy was received by 39% in the NIVO + IPI arm vs 37% in the chemo arm; subsequent immunotherapy was received by 5% vs 20%; subsequent chemotherapy was received by 38% vs 26%, respectively.

First-line nivolumab (NIVO) plus ipilimumab (IPI) vs chemotherapy (chemo) in patients (pts) with unresectable malignant pleural mesothelioma (MPM): 3-year update from CheckMate 743

LBA65. Solange Peters, et al.

- 3-year update: PFS, ORR and DOR in all randomized patients



[a]Per BICR; [b]95% CIs were 5.6-7.4 (NIVO + IPI) and 6.9-8.0 (chemo); [c]8 patients (7 with epithelioid histology and 1 with non-epithelioid histology) treated with NIVO + IPI and 0 patients treated with chemo had CR; [d]DOR was calculated in patients with a response (NIVO + IPI: n = 120, chemo: n = 133); [e]95% CIs were 8.2-16.8 (NIVO + IPI) and 5.6-7.1 (chemo).

First-line nivolumab (NIVO) plus ipilimumab (IPI) vs chemotherapy (chemo) in patients (pts) with unresectable malignant pleural mesothelioma (MPM): 3-year update from CheckMate 743

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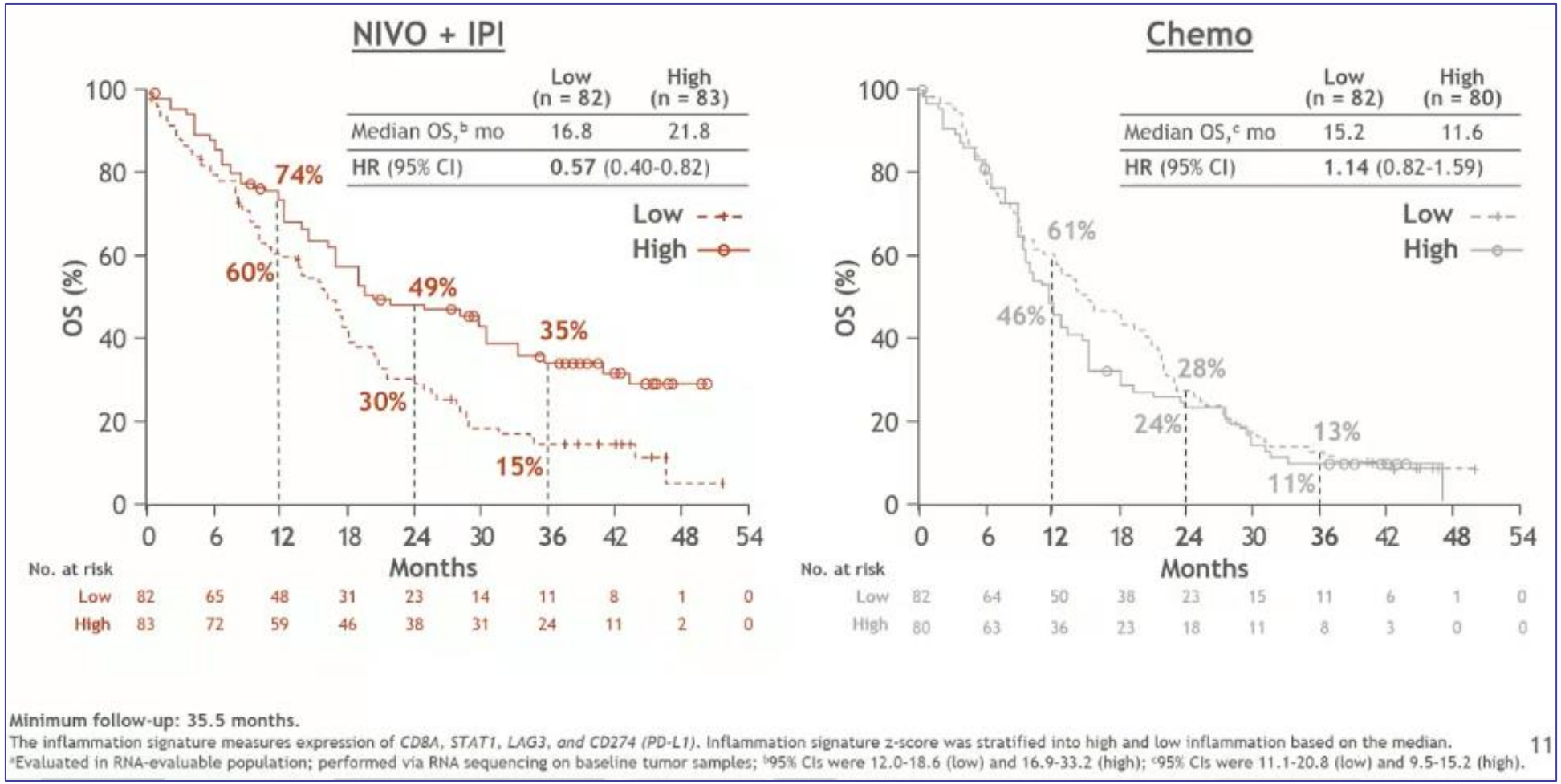
- Exploratory biomarker analyses: OS by 4-gene inflammatory signature score
  - 4-gene inflammatory signature score includes CD8A, STAT1, LAG3 and CD274 (PD-L1) genes
  - Performed via RNA sequencing on baseline formalin-fixed, paraffin-embedded tumor samples



Minimum follow-up: 35.5 months.

The inflammation signature measures expression of *CD8A, STAT1, LAG3, and CD274 (PD-L1)*. Inflammation signature z-score was stratified into high and low inflammation based on the median.

[a]Evaluated in RNA-evaluable population; performed via RNA sequencing on baseline tumor samples; [b]95% CIs were 12.0-18.6 (low) and 16.9-33.2 (high); [c]95% CIs were 11.1-20.8 (low) and 9.5-15.2 (high).

First-line nivolumab (NIVO) plus ipilimumab (IPI) vs chemotherapy (chemo) in patients (pts) with unresectable malignant pleural mesothelioma (MPM): 3-year update from CheckMate 743

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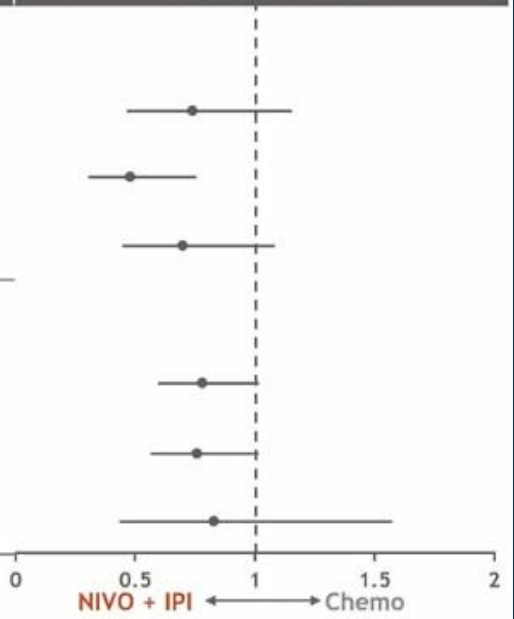
- Exploratory biomarker analyses: OS by TMB and LIPI score
  - Tumor mutational burden (TMB)
    - TMB is the total number of somatic missense mutations, excluding variants, in the gnomaAD database
    - Tissue TMB was evaluated using whole-exome sequencing of matched tumor and normal samples and characterized in low, intermediate, or high tertiles based on number of mutations
  - Lung immune prognostic index (LIPI)
    - LIPI scores (poor, intermediate, and good) were assessed by LDH levels and derived neutrophil-to-lymphocyte ratio (dNLR) from peripheral blood samples

Subgroup	Median OS, mo		Unstratified HR	Unstratified HR (95% CI)
	NIVO + IPI	Chemo		
Tissue TMB tertile[a]				
Low[b] (n = 103)	19.3	18.0	0.74	
Intermediate[c] (n = 97)	17.9	9.9	0.48	
High[d] (n = 95)	17.1	14.1	0.70	
LIPI score[e]				
Good[f] (n = 293)	21.6	16.3	0.78	
Intermediate[g] (n = 233)	17.1	14.1	0.76	
Poor[h] (n = 47)	6.1	6.0	0.83	



Minimum follow-up: 35.5 months.

[a]TMB was determined using whole-exome sequencing; 160 patients in the NIVO + IPI arm and 135 in the chemo arm were evaluable for TMB; median TMB was 35 total mutations (1.75 mut/Mb); [b]< 32 total mutations (< 1.60 mut/Mb); [c]32-41 total mutations (1.60-2.05 mut/Mb); [d]> 41 total mutations (> 2.05 mut/Mb); [e]LIPI score was based on baseline dNLR (neutrophils / [WBC − neutrophils]) and LDH levels; 296 patients in the NIVO + IPI arm and 277 patients in the chemo arm were evaluable for LIPI; [f]dNLR < 3 and LDH < ULN; [g]dNLR < 3 or LDH < ULN; [h]dNLR ≥ 3 and LDH ≥ ULN.

First-line nivolumab (NIVO) plus ipilimumab (IPI) vs chemotherapy (chemo) in patients (pts) with unresectable malignant pleural mesothelioma (MPM): 3-year update from CheckMate 743

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- 3-year update: treatment-related AEs in all treated patients

TRAE, %	NIVO + IPI[a] (n = 300)		Chemo[b] (n = 284)	
	Any grade	Grade 3-4	Any grade	Grade 3-4
Any TRAE[c]	80	31	82	32
TRAEs leading to discontinuation of any component of the regimen[c]	23	15	16	7
TRAEs leading to discontinuation of all components of the regimen	17	13	8	5
Serious TRAEs[c]	21	16	8	6
Treatment-related deaths	1[d]		<1[e]	

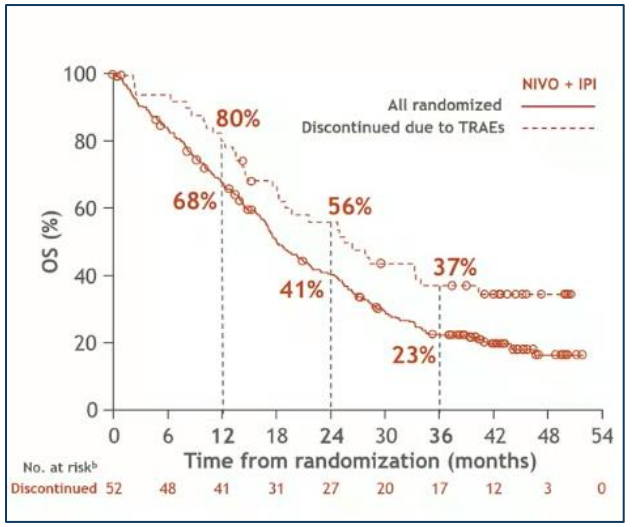
- With 12 additional months of follow-up, safety was consistent with the previous report with no change in the overall rate of TRAEs
- Incidence of exposure-adjusted TRAEs per 100 person-years were 503.4 with NIVO + IPI and 1354.1 with chemo

Person-years of exposure: NIVO + IPI, 220.7; chemo, 94.6.
[a]Median (IQR) doses for treated patients: NIVO 12.0 (5.0-23.5); IPI 4.0 (2.0-7.0); [b]Median (IQR) doses for treated patients: pemetrexed 6.0 (4.0-6.0), cisplatin 5.0 (3.0-6.0), carboplatin 6.0 (4.0-6.0); [c]Includes events reported between first dose and 30 days after last dose of study drug; [d]3 deaths due to NIVO + IPI: pneumonitis, encephalitis, acute heart failure; [e]1 death due to chemo: myelosuppression

- Efficacy in patients who discontinued NIVO + IPI due to TRAEs

	NIVO + IPI (n = 52)
From randomization	
Median OS,[c] mo	25.4
3-year OS rate, %	37
ORR,[d] n (%)	35 (67)
After treatment discontinuation	
Median DOR,[e] mo	20.0
Ongoing response for ≥ 3 years,[f] %	34[e]

Among patients who discontinued all components of NIVO + IPI due to TRAEs:
- Median (range) number of doses was 9 (1-47) for NIVO and 3 (1-16) for IPI
- Median (range) duration of treatment was 4.3 (0.0-22.5) months



First-line nivolumab (NIVO) plus ipilimumab (IPI) vs chemotherapy (chemo) in patients (pts) with unresectable malignant pleural mesothelioma (MPM): 3-year update from CheckMate 743

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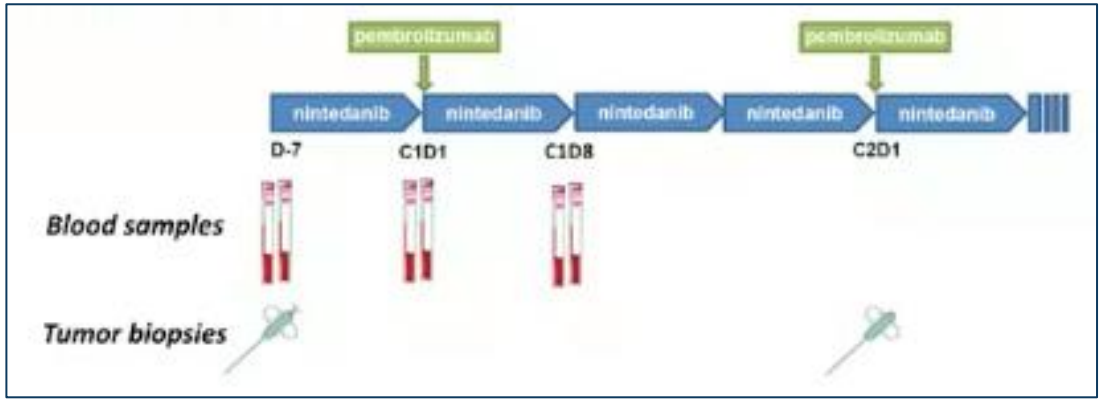
- These results from CheckMate 743 represent the first 3-year survival data with immunotherapy in 1L MPM; NIVO + IPI continued to provide durable and long-term benefit versus chemo with no new safety signals, despite patients being off therapy for 1 year
  - 3-year OS rates: 23% vs 15%, respectively
  - 28% of responders have ongoing response at 3 years
- In exploratory biomarker analyses, a high score of the 4-gene inflammatory signature appeared to correlate with improved survival benefit with NIVO + IPI
  - OS showed a trend favoring NIVO + IPI vs chemo across all LIPI scores; TMB did not correlate with survival benefit
- In a post hoc analysis, discontinuation of NIVO + IPI due to TRAEs did not have a negative impact on the long-term benefits seen in all randomized patients
  - 34% of responders who had a TRAE leading to treatment discontinuation maintained their responses for ≥ 3 years after discontinuation
- With additional 12 months follow-up, these data from CheckMate 743 confirm NIVO + IPI as a standard of care for unresectable MPM regardless of histology

Pembrolizumab and Nintedanib for Patients with Advanced Mesothelioma

1732MO. Francois-Xavier Danlos, et al.

- Expansion cohort of PEMBIB phase 1b clinical trial
- Pleural Mesothelioma Relapsing/Refractory
- Nintedanib 150mg BID with 7 days lead-in
- Pembrolizumab 200mg IV Q3W
- Blood and Tumor samples
- RECIST v1.1 assessments



- Clinical characteristics

	Total (n=30)
Male	20 (67%)
Mean age, years [SD]	69 [11]
Body mass index, kg/m², mean [SD]	25 [4.9]
ECOG performans status	
0	9 (30%)
1	20 (67%)
Histology subtypes	
Epithelioid	25 (83%)
Biphasic	4 (13%)
Sarcomatoid	1 (3.3%)
TNM UICC (v.8)	
III	20 (67%)
IV	10 (33%)
Previous systemic anticancer treatment	
1	23 (77%)
2	5 (17%)
≥3	2 (6.7%)
Previous treatment with Bevacizumab	
No	18 (60%)
Yes	12 (40%)
BAP1 expression status (IHC)	
Loss	9 (30%)
Normal	3 (10%)
Not done	12 (40%)

Pembrolizumab and Nintedanib for Patients with Advanced Mesothelioma

1732MO. Francois-Xavier Danlos, et al.

- Adverse events (frequence ≥ 10%)

	Grade 1-2	Grade 3	Grade 4	Grade 5
Myocarditis & cardiac disorder	1 (3.3%)	1 (3.3%)	0	1 (3.3%)
Diarrhea	18 (60%)	1 (3.3%)	0	0
Fatigue	14 (46.7%)	2 (6.7%)	0	0
Dyspnea	11 (36.7%)	2 (6.7%)	0	0
Skin disorder (including rash & pruritis)	6 (20%)	2 (6.7%)	0	0
Nausea	7 (23.3%)	1 (3.3%)	0	0
Vomiting	10 (30%)	0	0	0
Arthralgia	6 (20%)	0	0	0
Fever	6 (20%)	0	0	0
Hypomagnesemia	5 (16.7%)	0	0	0
Central nervous system disorder	5 (16.7%)	0	0	0
Anemia	4 (13.3%)	0	0	0
Hypothyroidism	4 (13.3%)	0	0	0
Lipase increased	1 (3.3%)	2 (6.7%)	1 (3.3%)	0
Transaminases increased	3 (10%)	0	0	0
Pneumonitis	3 (10%)	0	0	0
Colitis	0	1 (3.3%)	0	0

Pembrolizumab and Nintedanib for Patients with Advanced Mesothelioma

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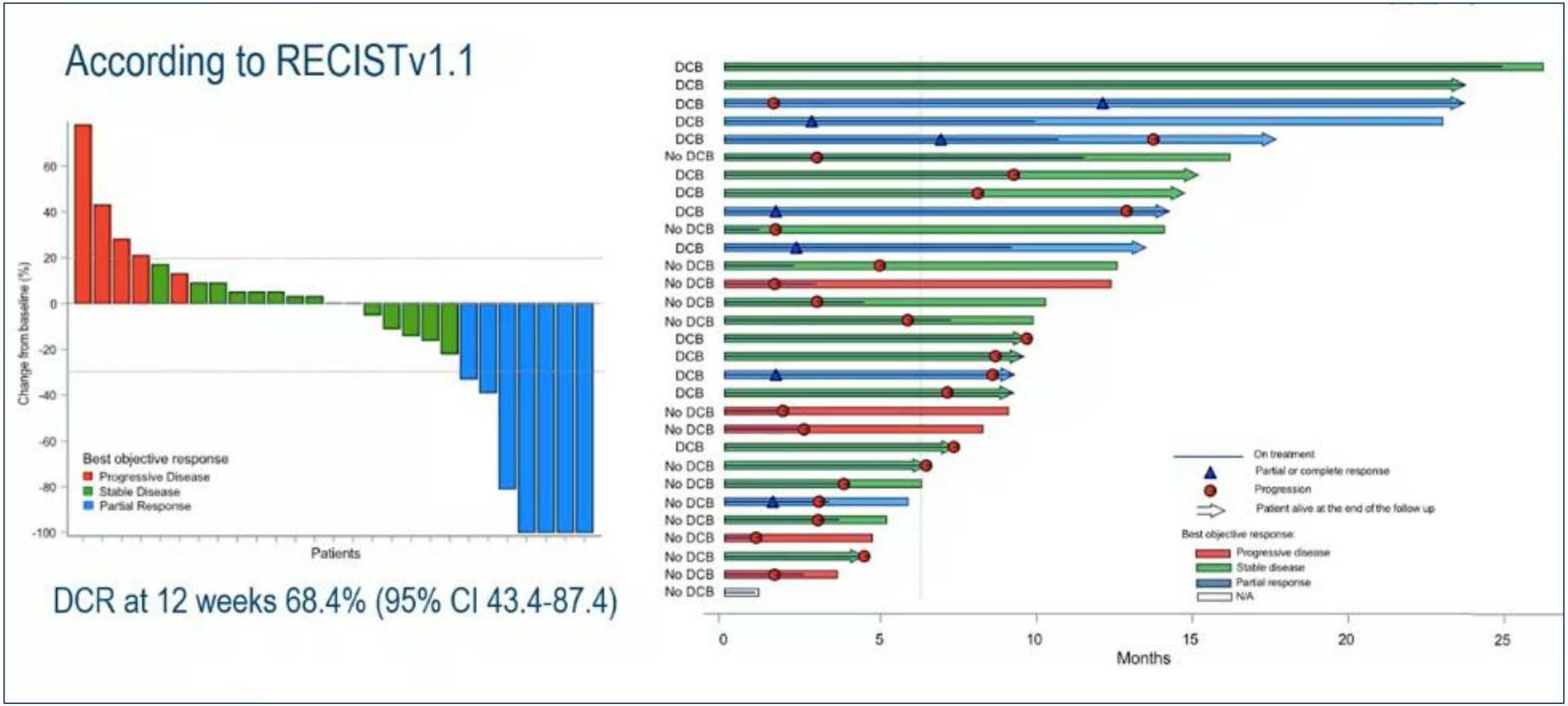
- Outcomes



Pembrolizumab and Nintedanib for Patients with Advanced Mesothelioma

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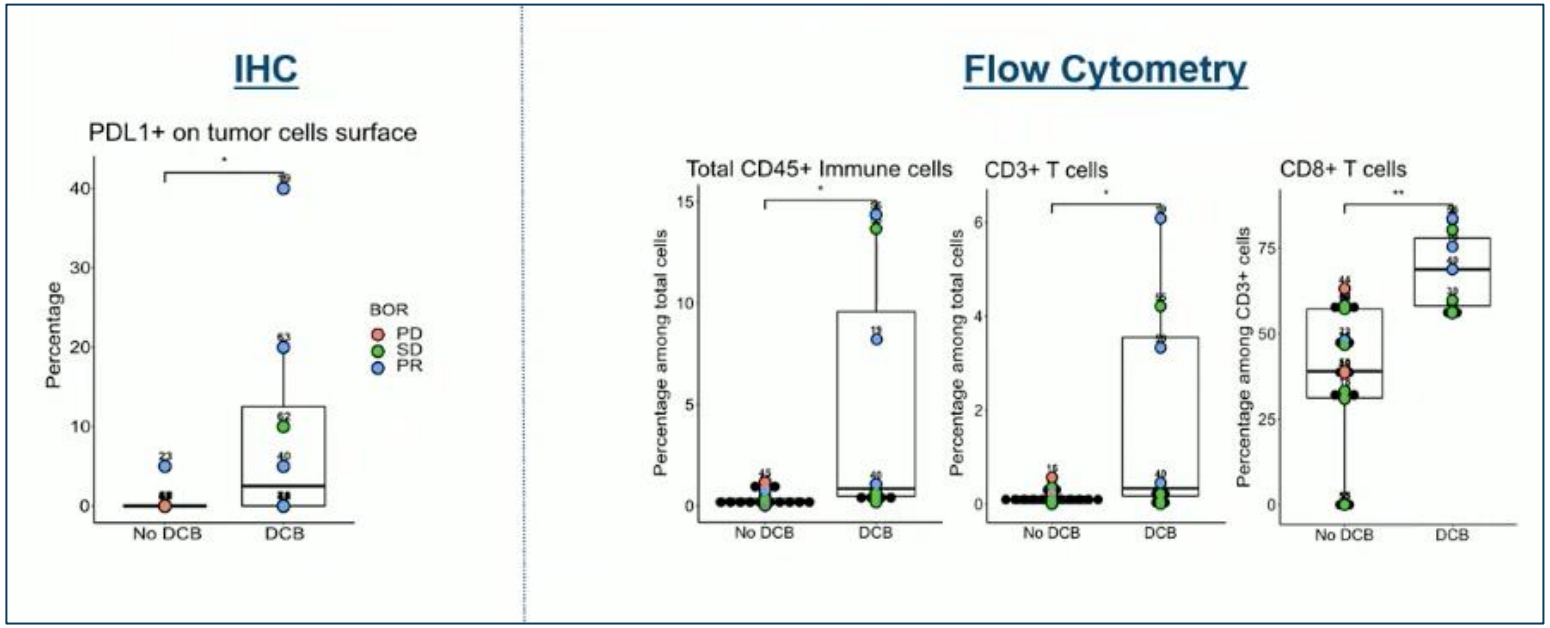
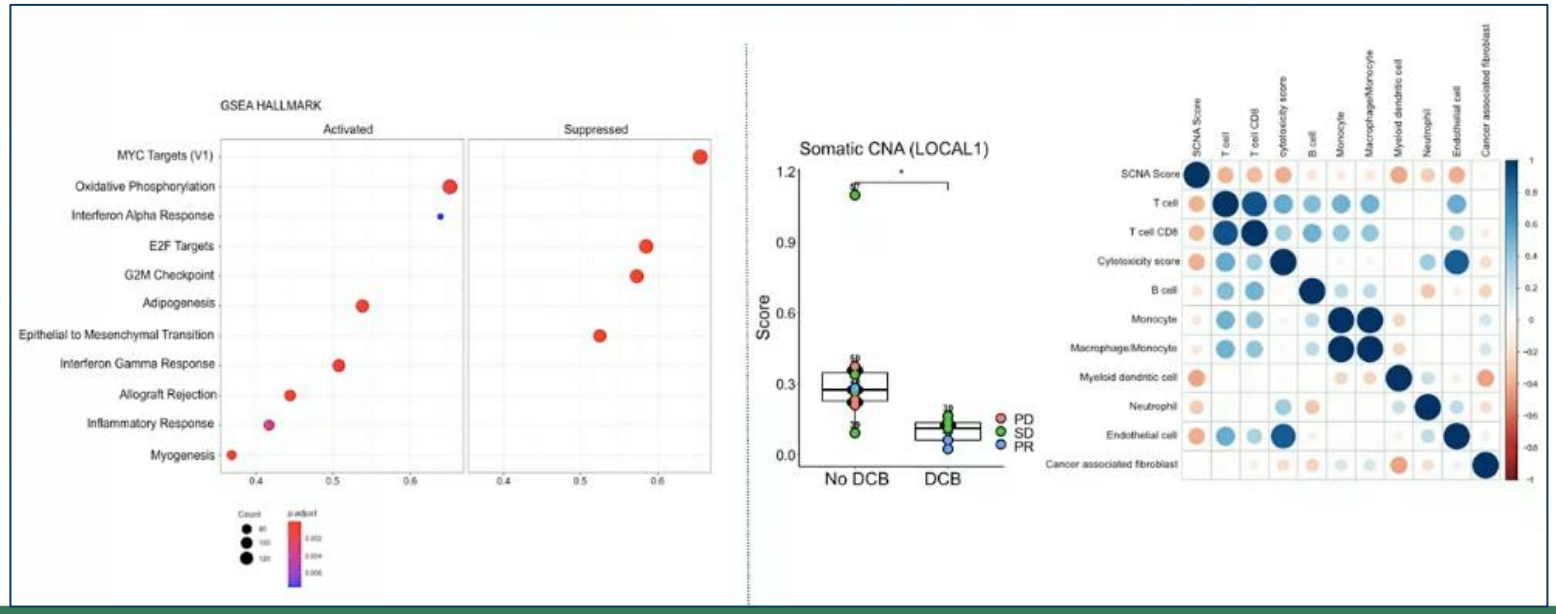


- PDL1+ on tumor cells and CD8+ T lymphocytes infiltrates were higher in patients with benefit to treatment



- Oncogenic pathways led to primary resistance and aneuploidy (SCNA) shaped tumoral immune infiltration

Pembrolizumab and Nintedanib for Patients with Advanced Mesothelioma

1732MO. Francois-Xavier Danlos, et al.

- Nintedanib 150mg bid + Pembrolizumab 200mg Q3W were tolerated in patients with unresectable pleural mesothelioma after resistance to platinum-based chemotherapy with pemetrexed.
- Disease control rate at 12 weeks: 68.4% (95% CI 43.4-87.4).
- Anti-angiogenic + anti-PD1 have same pharmacodynamic impacts on all patients.
- PDL1 expression by cancer cells and tumor infiltrating CD8+ T-cells at baseline are predictive of anti-angiogenic + anti-PD1 efficacy.
- SCNA due to accumulation of oncogenic mutations lead to IL6 mediated immunosuppression and resistance to anti-angiogenic + anti-PD1.

Analysis of chemotherapy (Ct) efficacy according to histology in malignant pleural mesothelioma (MPM) patients (p)

Abstract 1733P

VHIO VALL D'HEBRON Institute of Oncology — Vall d'Hebron Hospital

1733P_Analysis of chemotherapy (Ct) efficacy according to histology in malignant pleural mesothelioma (MPM) patients

Cedrés S[1], Asaf JD[1], Iranzo P[1], **Callejo A[1]**, Pardo-Aranda **N[1]** , Navarro **A[1]**, Marmolejo **D[1]**, Rezqallah **A[1]** , , Pedrola **A[1]**, Gonzalo J[1], **Frigola J[1]**, **Carbonell C[1]**, **Amat R[1]** , Dienstmann **R[1]**, Felip E[1]
[1]Medical Oncology Dept, Vall d´Hebron Institute of Oncology and University Hospital, Barcelona, Spain

Background:

•MPM is a highly aggressive pleural tumor with limited survival. CheckMate-743 demonstrated survival benefit of immunotherapy over Ct in 1st line with some differences in the efficacy according to histology. The objective of this study is to characterize the impact of chemotherapy according to histology in patients (p) diagnosed with MPM at our institution.

Methods and patients:

•Review of 189 MPM p between November 2002 and April 2020. Associations between clinical variables and outcome were assessed with Cox regression models and survival data were calculated by the Kaplan-Meier method.

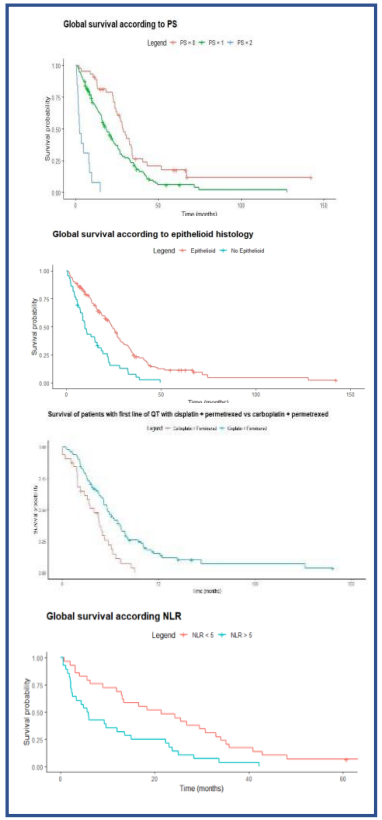
Results:

- Median age 68 years (y) (45-88 y)
- 1st line chemo: 85% of p (66% cisplatin-pemetrexed and 27% carboplatin-pemetrexed)
- Median survival (OS) in overall population was 21.3 m (95%CI17.2-24.3).
- Epithelioid histology, PS 0, neutrophil-lymphocyte ratio >5 and treatment with cisplatin vs carboplatin were associated with significant improvements in OS.
- For patients treated with chemotherapy in first line the progression free survival (PFS) was 4.4 m and the OS 23.1 m.
- Patients with epithelioid tumors had better PFS and OS.
- Median progression PFS for p with epithelioid tumors treated with chemotherapy in first line was 4.8 m versus 3.6 months in no epithelioid tumors (HR 1.5 CI95% 1.0-2.3; p=0.03).
- OS for epithelioid patients treated with first line chemotherapy was 26.7 m versus 15.0 m in no epithelioid patients (HR2.25 CI95% 1.4-3.4; p<0.001).

BASELINE PATIENTS CHARACTERISTICS

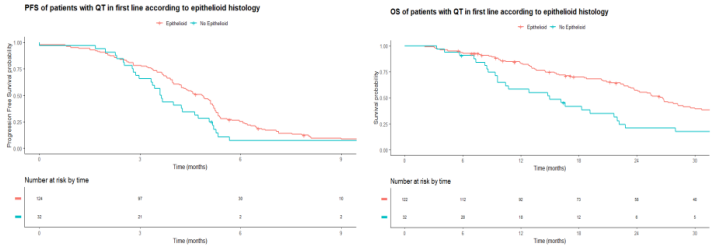
Characteristic	Number	Percentage
Median age	68 y (45-88)	
Gender		
Males	57	70
Females	132	30
PS		
0	44	23
1	131	69
2	14	13
Asbestos		
Yes	141	74
No	47	26
Histology		
Epithelioid	145	76
No-epithelioid	44	24
First line chemo		
Yes	161	85
No	28	15
Type of chemo		
Cisplatin-pem	108	66
Carboplatin-pem	32	27

PROGNOSTIC FACTORS



SURVIVAL ACCORDING HISTOLOGY

	PFS			OS		
	Overall	Cisplatin	Carboplatin	Overall	Cisplatin	Carboplatin
EPITHELIOID	4.8	5.1	4.5	26.7	30.7	26.7
NON-EPITHELIOID	3.6	3.6	3.6	15.0	17.2	14.8
	HR 1.5 CI95% 1.1-2.3; p=0.03	HR 1.4 CI95% 0.91-2.3; p=0.06	HR 1.99 CI95% 0.96-4.1; p=0.06	HR 2.25 CI95% 1.4-3.4; p<0.001	HR 2.7 CI95% 1.6-4.5; p<0.001	HR 2.7 CI95% 1.3-5.8; p=0.008



CONCLUSION:

In our series, patients with no epithelioid tumors presented worse prognosis. Although epithelioid tumors exposed to cisplatin had higher PFS, histology was not a clear predictor of Ct efficacy.

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Dr Cedres has personal fees from Bristol-Myers Squibb, Hoffmann La Roche, Pfizer, Boehringer Ingelheim, MSD Oncology and Amphera

Genomic landscape of pleural and peritoneal mesothelioma tumors

Abstract 1734P

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University of Zurich[UZH] **1734P**

USZ Universitäts Spital Zürich

Genomic Landscape of Pleural and Peritoneal Mesothelioma Tumors

Stefanie Hiltbrunner[1,2], Zoe Fleischmann[3], Ethan S. Sokol[3], Martin Zoche [4,5], Emanuela Felley-Bosco[6,2], Alessandra Curioni-Fontecedro[1,2]

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Background

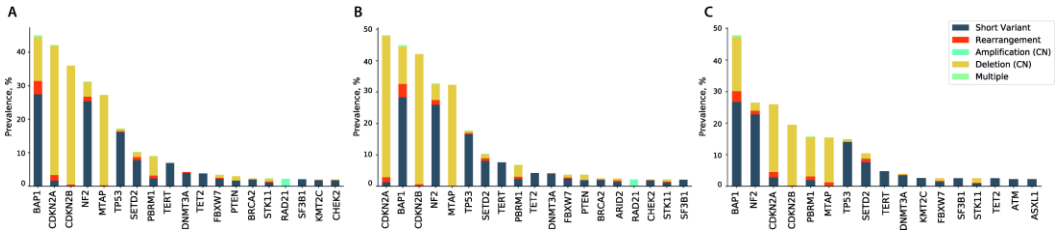
Malignant pleural and peritoneal mesotheliomas are rare malignancies with an unacceptably poor prognosis and limited treatment options. The genomic landscape is mainly characterized by loss of tumor suppressor genes and mutations in DNA repair genes. Currently, data from next-generation sequencing (NGS) of mesothelioma tumors is restricted to a limited number of cases; moreover, data comparing molecular features of mesothelioma from pleural and peritoneal origin with NGS are lacking. Here, we have analyzed the largest cohort of patients with mesothelioma so far, for molecular alterations by NGS. These results indicate that molecular analysis for mesothelioma may inform clinical routine.

Materials and Methods

We analyzed 1113 pleural mesothelioma and 355 peritoneal mesothelioma samples from patients sequenced through December 2020. All tumors were sequenced with the FoundationOne® or FoundationOne®CDx test for detection of substitutions, insertion-deletions, copy-number alterations and selected rearrangements in at least 324 cancer genes. Microsatellite instability was called on at least 95 loci and tumor mutational burden (TMB) was calculated on 0.8-1.2 Mb.

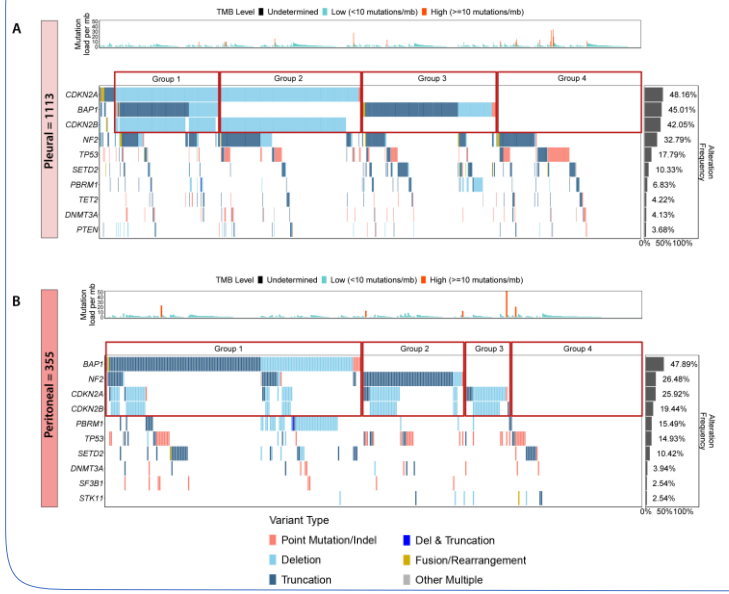
Results

1. Prevalence of genomic alterations



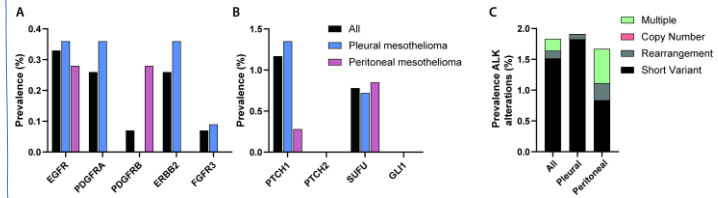
This analysis revealed 19 genes with an overall prevalence of at least 2%. Alterations in *BAP1, CDKN2A, CDKN2B, NF2, MTAP, TP53,* and *SETD2* occurred with a prevalence of at least 10%. A) prevalence of alterations in the entire cohort, B) in pleural mesothelioma and C) in peritoneal mesothelioma. The alterations include short variants (short nucleotide variants (SNV) and insertion-deletions (indels)), gene rearrangements, copy number variations and multiple alterations.

2. Overview on genomic subgroups according to ***CDKN2A/B*** and ***BAP1*** expression



Based on the most common alterations occurring, four distinct subgroups in pleural and peritoneal mesothelioma were identified. Due to large differences in the prevalence of the genomic alterations between pleural and peritoneal mesothelioma, the subgroups in pleural and peritoneal mesothelioma are defined by their different genomic makeup. In pleural mesothelioma, group 1 had alterations in *CDKN2A/B* and *BAP1*, group 2 in *CDKN2A/B*, group 3 in *BAP1* only and group 4 neither in *BAP1* nor in *CDKN2A/B* but in *TP53*. *NF2* alterations were identified across all four groups. In peritoneal mesothelioma, group 1 was characterized by *BAP1* expression, group 2 by *NF2*, group 3 by no expression of *BAP1* and *NF2*. *CDKN2A/B* is expressed homogenously throughout group 1-3. Group 4 had none of the major alterations. *CDKN2A/B* was expressed homogenously throughout group 1-3. Group 4 had non of the major alterations.

3. Expression levels of targetable alterations



We have previously reported the case of a patient with peritoneal mesothelioma harboring an *ALK* translocation. The patient underwent targeted treatment and achieved a very good partial response (Rüschoff et al., 2019). Thus, we analysed the cohort for the presence of different druggable alterations and found targetable alterations in A) *KRAS, EGFR, PDGFRA/B, ERBB2* and *FGFR3*, and B) alterations in genes part of the Hedgehog pathway *PTCH1, PTCH2, SUFU, GLI1,* and C) alterations in *ALK*.

Disclosure and contact information

SH, EFB, ACF: No conflict of interest related to this work
ZF, ESS: Employees of Foundation Medicine and Shareholders in Roche

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Conclusion

Precision medicine including comprehensive genomic profiling has tremendously improved the outcome of patients, especially in lung cancer, breast cancer and melanoma. Nevertheless, rare malignancies and in malignancies with a low numbers of somatic mutations need to be analyzed to identify new therapeutic options for these difficult to treat cancers.

Prognostic factors predicting survival in malignant pleural mesothelioma: A retrospective study in two Spanish hospitals

Abstract 1736P

#1736P: Prognostic factors predicting survival in malignant pleural mesothelioma: A retrospective study in two Spanish hospitals

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Background

Malignant pleural mesothelioma (MPM) is a rare, aggressive tumor, with poor prognosis. Its well-known association to asbestos exposure helps to identify the population mostly affected by this disease. The aim of this study is to characterize patients with MPM in two Spanish hospitals, as well as define prognostic variables which may influence outcomes and survival.

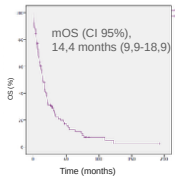
Methods

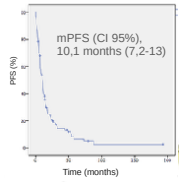
A descriptive, retrospective analysis of 97 patients diagnosed of MPM from November 2004 to December 2020 in Regional University and Virgen de la Victoria hospitals located in Málaga, Spain, was carried out. Qualitative variables were analyzed under frequency tables, and quantitative variables in the form of mean, median, maximum, minimum and standard deviation. Overall survival (OS) was calculated from the start of therapy to death from any cause or latest check-up. Survival curves were estimated with the Kaplan–Meier method and the differences between survival curves were evaluated with log-rank test.

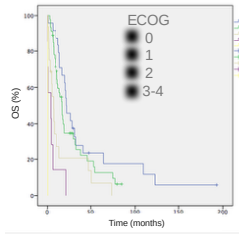
Results

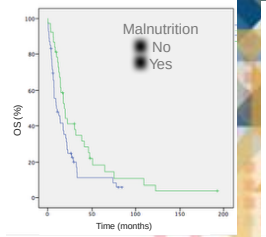
With a median follow-up of 14 months (range 0-193), a total of 97 patients were analyzed, median age 70 (range 23-91) 71,1% (n=69) males. A 35,1% (n=34) had a known history of asbestos exposure, 74,5% (n=70) had an ECOG 0-1, and 80,4% (n=78) had advanced disease at the moment of diagnosis, defined by TNM III-IV. Median OS was 14,4 months (CI 95% 9,9-18,9), and median progression free survival (PFS) 10,1 months (CI 95% 7,2-13).
Univariate analysis demonstrated TNM stage, age over 75 years old, malnutrition, poor ECOG and first treatment received were independent prognostic factors that predicted poor survival ($p<0.05$). History of smoking was found to be associated with advanced stage at diagnosis ($p<0.05$).

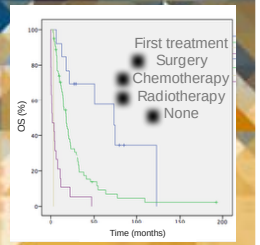
General characteristics	% (n)
Median age (range)	70 (23-91)
Sex % (n)	
Men	71,1 (69)
Women	28,9 (28)
ECOG	
0-1	72,1 (70)
≥2	27,9 (24)
Histology	
Epithelioid	71,1% (n=69)
Non epithelioid	12,4% (n=12)
Unknown	16,5% (n=16)
TNM stage	
I	10,3% (n=10)
II	9,3% (n=9)
III	47,4% (n=46)
IV	33% (n=32)
First treatment received	
Surgery	13,7 (13)
Chemotherapy	65,3 (62)
Radiotherapy	1,1 (1)
No treatment	20 (19)
Number of chemotherapy lines	
0-2	73,2 (60)
3-4	24,4 (20)
≥5	2,4(2)

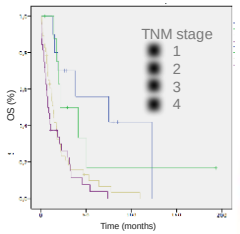


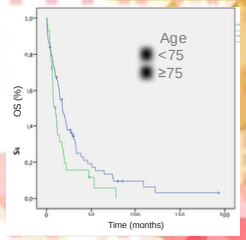












Conclusions

Our study confirms poor overall survival in MPM. Nutritional condition, age, TNM stage, ECOG and first treatment received were found as prognostic factors in our cohort. Further investigation with larger samples should be carried out to verify this findings.

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Gracias por su atención