

« En Vrac »

Pr Nicolas ISAMBERT



PD inhibition in soft-tissue sarcomas with tertiary lymphoid structures: a multicenter phase II trial

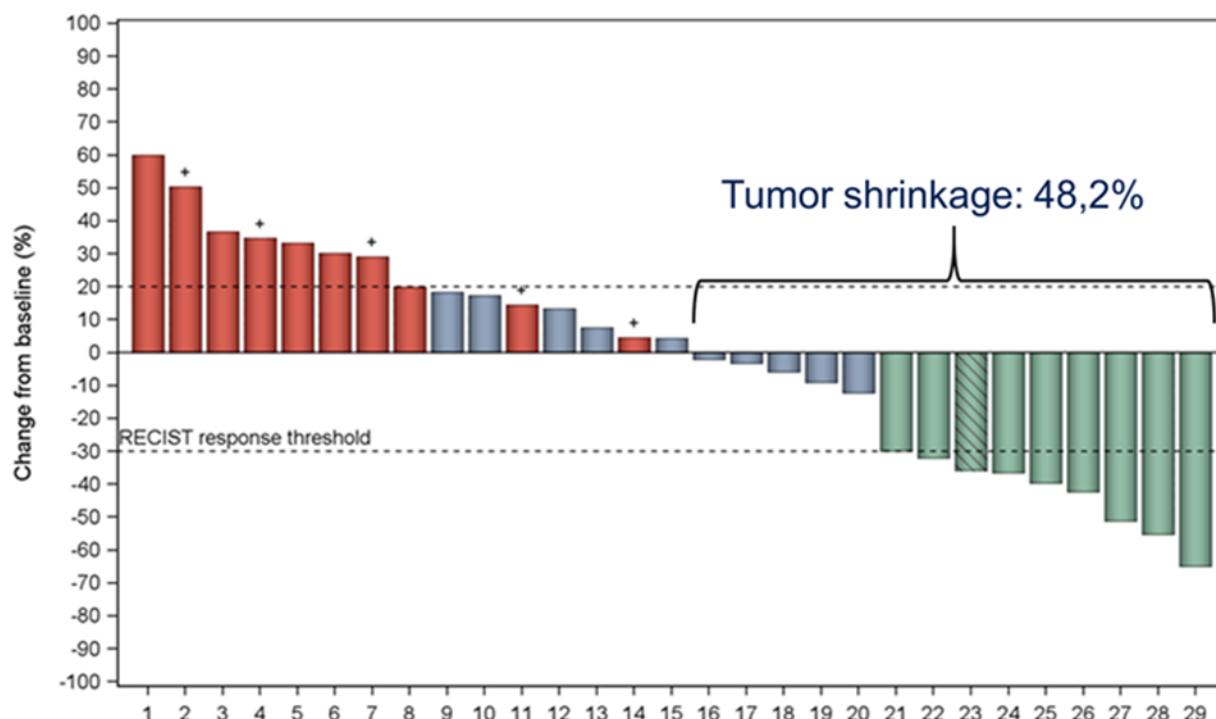
- PEMBROSARC
- étude de phase 2 évaluant la tolérance et l'efficacité d'un traitement associant pembrolizumab 200 mg IV et cyclophosphamide métronomique (50 mg/j 1 semaine/2) chez des patients ayant un sarcome localement avancé et/ou métastatique après une première ligne de traitement
- two-stage Simon's design
- sélection des patients sur les statut TLS (central review)
- revue centralisée de l'histologie et des évaluations radiologiques

Caractéristiques de la population

| Sex, n (%) | |
|---|--------------|
| Male | 19 (54.3%) |
| Female | 16 (45.7%) |
| Age | |
| Median, years (range) | 69 (20 – 88) |
| ECOG PS, n (%) | |
| 0 | 20 (57,1%) |
| 1 | 13 (37,1%) |
| ND | 2 (5,7%) |
| Histological subtype (%) | |
| Well-differentiated/dedifferentiated liposarcomas | 13 (37.1%) |
| UPS | 6 (17.1%) |
| Epithelioid sarcomas | 3 (8.7%) |
| Other* | 13 (37.1%) |
| Stage n (%) | |
| Locally advanced | 9 (17.1%) |
| Metastatic | 26 (82.9%) |
| Prior lines of chemotherapy n (%) | |
| 0 | 14 (40%) |
| 1 | 11 (28.6%) |
| 2 | 4 (11.4%) |
| > 2 | 6 (17.1%) |

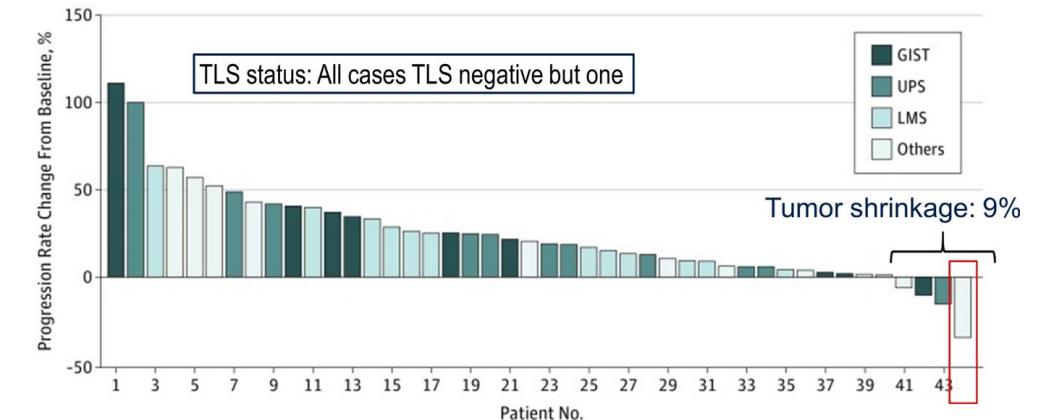
fibrosarcomas, solitary fibrous tumor, desmoplastic round cell tumor

Efficacité



| Best overall response | | | |
|-----------------------|----------------|----------------------------|------------------------------|
| Progressive disease | Stable disease | Partial response confirmed | Partial response unconfirmed |

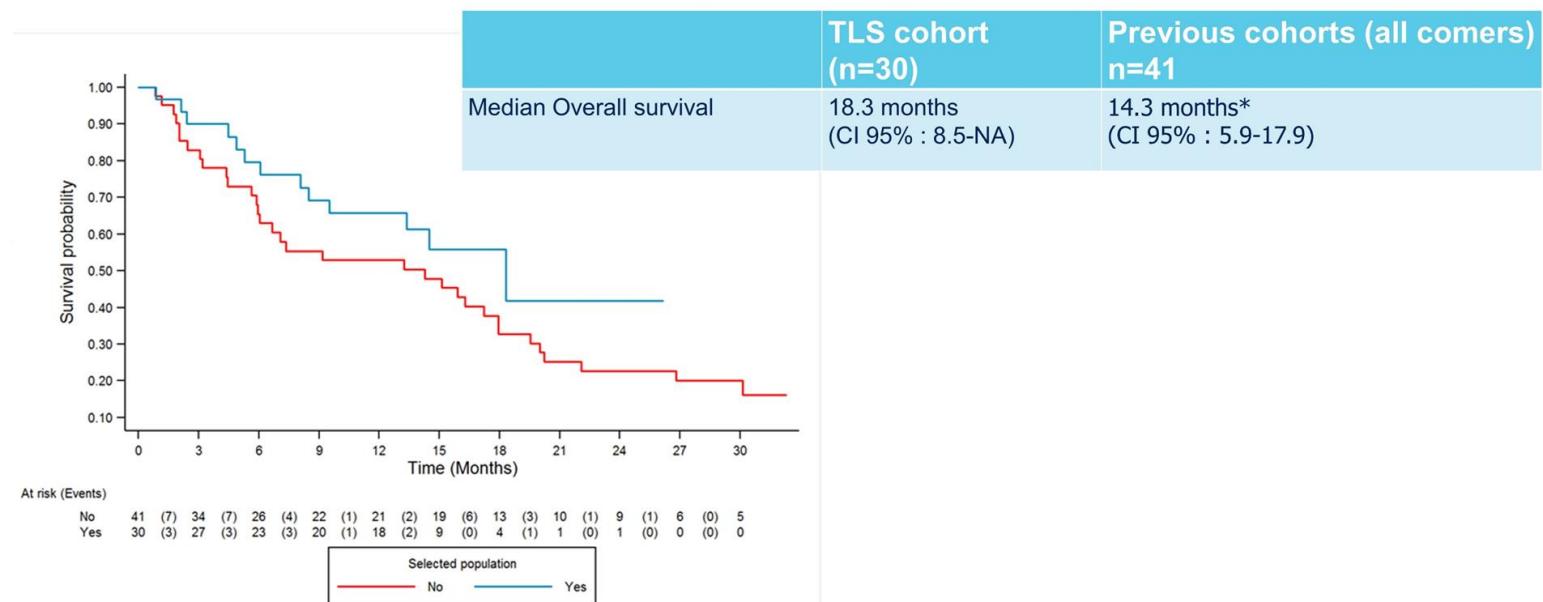
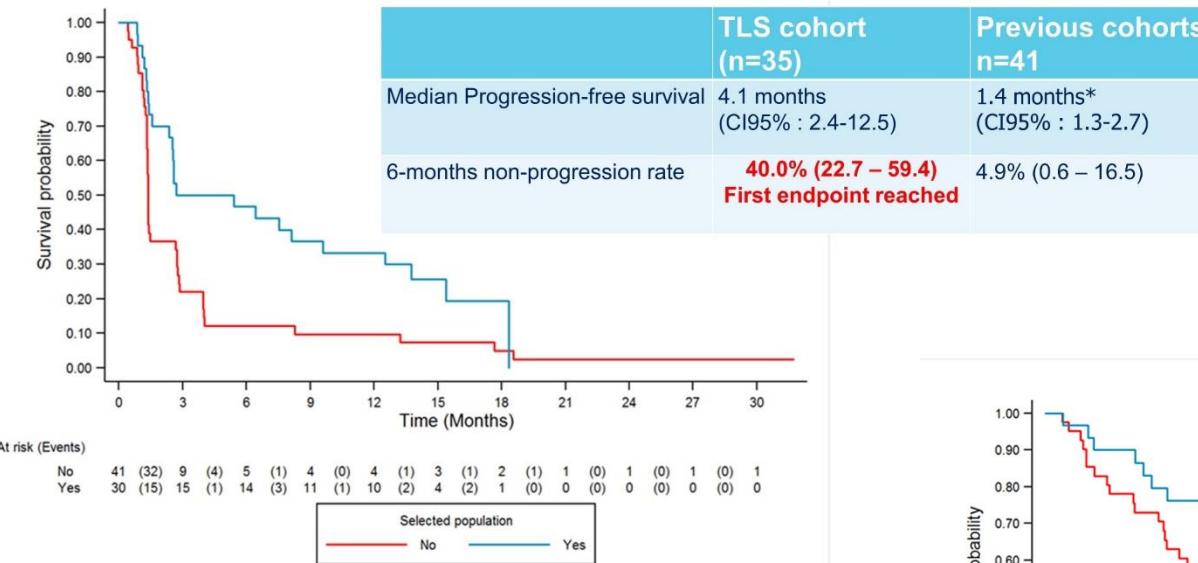
+ : New Lesion



Objective response rates in previous PEMBROSARC cohorts (all comers): 2.3%

| | n | % | Rate |
|-------------------------------|----|------|-------|
| Best overall response | | | |
| Partial response confirmed | 8 | 26.7 | 26.7% |
| Partial response unconfirmed* | 1 | 3.3 | 3.3% |
| Stable disease | 10 | 33.3 | 33.3% |
| Progressive disease | 10 | 33.3 | 33.3% |
| Not evaluable for response | 1 | 3.3 | 3.3% |

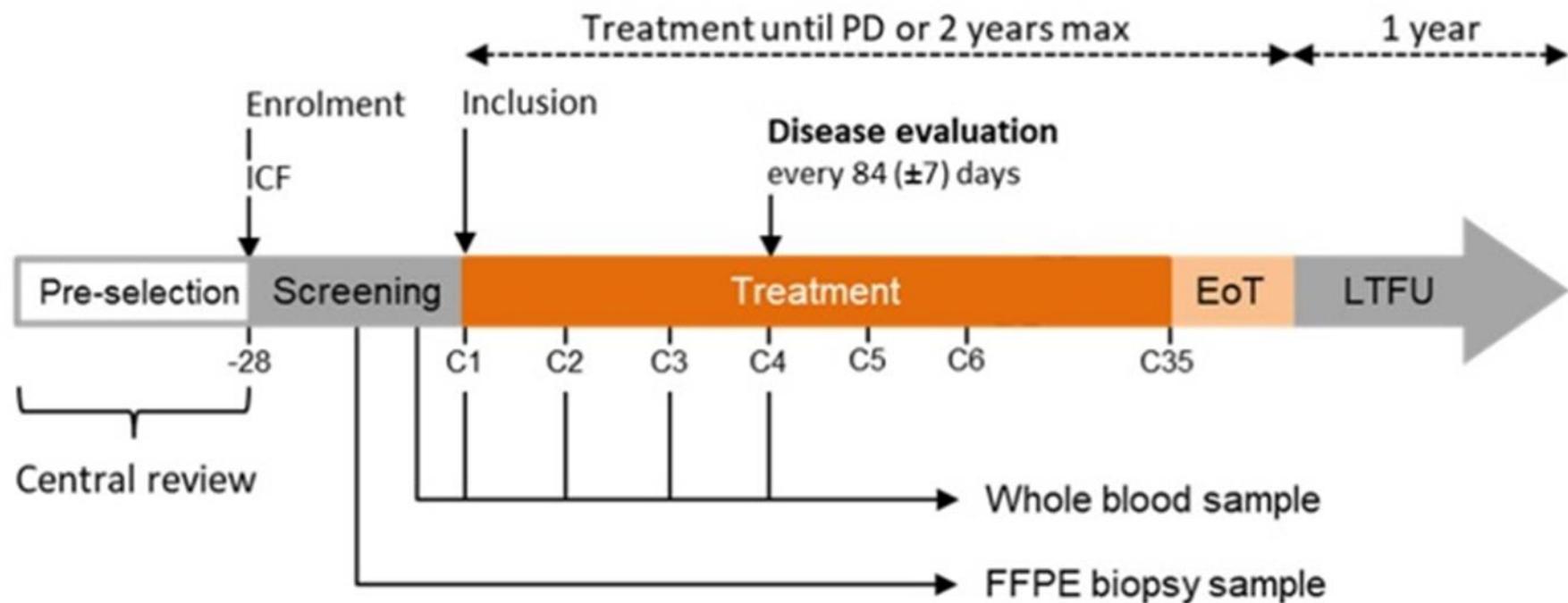
Efficacité



* Toulmonde et al JAMA Oncol 2017

Italiano A et al. ASCO 2021 Abst 11507

High clinical activity of pembrolizumab in chordoma, alveolar soft part sarcoma (ASPS) and other rare sarcoma histotypes: The French AcSé pembrolizumab study from Unicancer



Caractéristiques de la population

| Parameters | Value | N | Stat |
|-----------------------|-------|----|-------------|
| AGE | | 97 | 51 [35 ;65] |
| SEX | M | 54 | 55.1 % |
| | F | 44 | 44.9 % |
| ECOG | 0 | 33 | 33.67 % |
| | 1 | 64 | 65.31 % |
| | 2 | 1 | 1.02 % |
| PREVIOUS LINES | | 98 | 2 [1 ;3] |

Description of Sarcoma (N=98)

| | |
|--|--------------|
| Chordoma | 34 (34.69 %) |
| Alveolar soft-part sarcoma (ASPS) | 14 (14.29 %) |
| Desmoplastic tumor with little circular cells (DSRCT) | 8 (8,16 %) |
| smarca4 deficient malignant rhabdoid tumor (SMRT) | 11 (11,22 %) |
| Other histologies | 31 (31,63 %) |

Efficacité

Primary endpoint (at 12 weeks)

| Parameters | Value | N | % |
|-------------------|---------------|----|------|
| | | 98 | |
| OBSERVED RESPONSE | PR | 6 | 8 % |
| | SD | 39 | 48 % |
| | PD | 36 | 44 % |
| | Non available | 17 | |
| OVERALL RESPONSE | Non-response | 92 | 94 % |
| | Response | 6 | 6 % |

Median number of cycles : 5 (range 1-35)

Best response

| Parameters | Value | N | % |
|---------------|-------|----|------|
| BEST RESPONSE | CR | 1 | 1% |
| | PR | 14 | 14% |
| | SD | 33 | 34 % |

Meilleure réponse : 3 (8,8%) chordomes, 7 (50%) ASPS, 2 (20%) SMRT, 3 (9%) autres histologies
 Durée médiane de réponse : 8,2 mois

Overall Survival, OS

Median OS on the overall population = 19.7 months

1-year OS rates:

- 76.6% (chordoma),
- 85.7% (ASPS),
- 30.0% (SMRT),
- 0% (DSCRT),
- 46.5% (other),

Median OS only reached for:

- SMRT = 2.1 months,
- DSRCT = 7.4 months,
- other = 7.1 months

Progression-free Survival, PFS

Median PFS on the overall population = 2.75 months

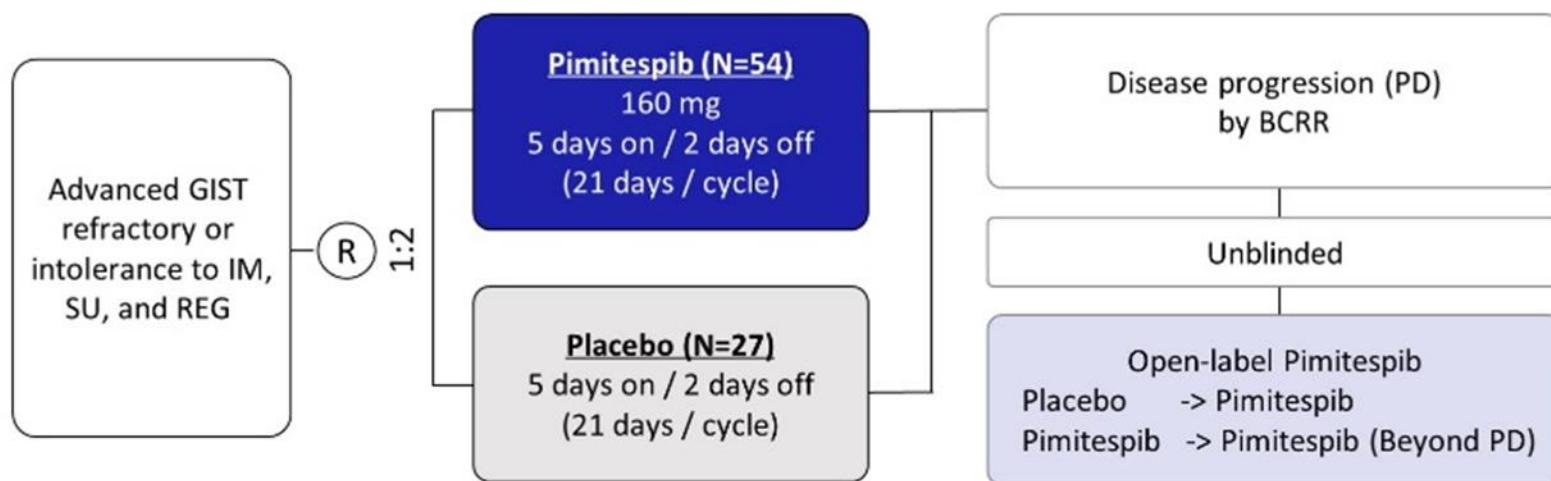
1-year PFS rates:

- 31.2% (chordoma),
- 35.7% (ASPS),
- 10.0% (SMRT),
- 0% (DSCRT)
- 6.3% (other).

Median PFS:

- 6.6 months (chordoma),
- 7.5 months (ASPS),
- 1.0 months (SMRT),
- 2.1 months (DSCRT),
- 2.1 months (other).

Randomized, double-blind, placebo (PL)-controlled, phase III trial of pimtespib (TAS-116), an oral inhibitor of heat shock protein 90 (HSP90), in patients with advanced gastrointestinal stromal tumor refractory to imatinib, sunitinib and regorafenib



- **Primary endpoint:** PFS by BCRR based on modified RECIST 1.1.
- **Secondary endpoints:** overall survival (OS), PFS in the pts crossed over to pimtespib (secondary PFS), pharmacogenomics (PGx), and safety. Crossover-adjusted OS using the rank preserving structural failure time (RPSFT⁹) model.

9. Korhonen P, et al. J Biopharm Stat.2012;22:1258-1271.

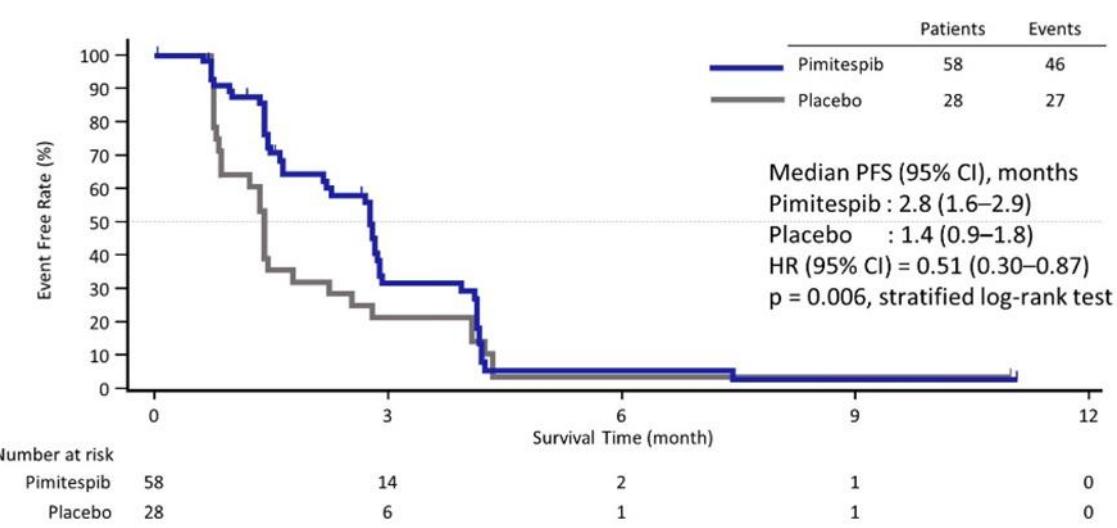
Efficacité - Tolérance

| Baseline characteristics | Pimtespib (N=58) | Placebo (N=28) |
|--|-------------------------|-------------------------|
| Sex: Male / Female | 34 (58.6%) / 24 (41.4%) | 15 (53.6%) / 13 (46.4%) |
| Age: Median (Max-Min) | 62 (32 - 83) | 61.5 (26 - 81) |
| Age: <65 / >65 | 36 (62.1%) / 22 (37.9%) | 17 (60.7%) / 11 (39.3%) |
| ECOG PS: 0 / 1 | 49 (84.5%) / 9 (15.5%) | 24 (85.7%) / 4 (14.3%) |
| Number of previous therapies: 3 / >4 | 40 (69.0%) / 18 (31.0%) | 15 (53.6%) / 13 (46.4%) |
| Genomic status of blood sample | Pimtespib (N=51) | Placebo (N=24) |
| <i>KIT</i> mutation detected (Exon 9, 11, 13/14, 17/18) | 30 (58.8%) | 15 (62.5%) |
| Exon 9 | 3 (5.9%) | 5 (20.8%) |
| Exon 11 | 25 (49.0%) | 12 (50.0%) |
| Exon 13/14, 17/18 | 24 (47.1%) | 14 (58.3%) |
| <i>PDGFRA</i> mutation detected | 6 (10.3) | 0 |

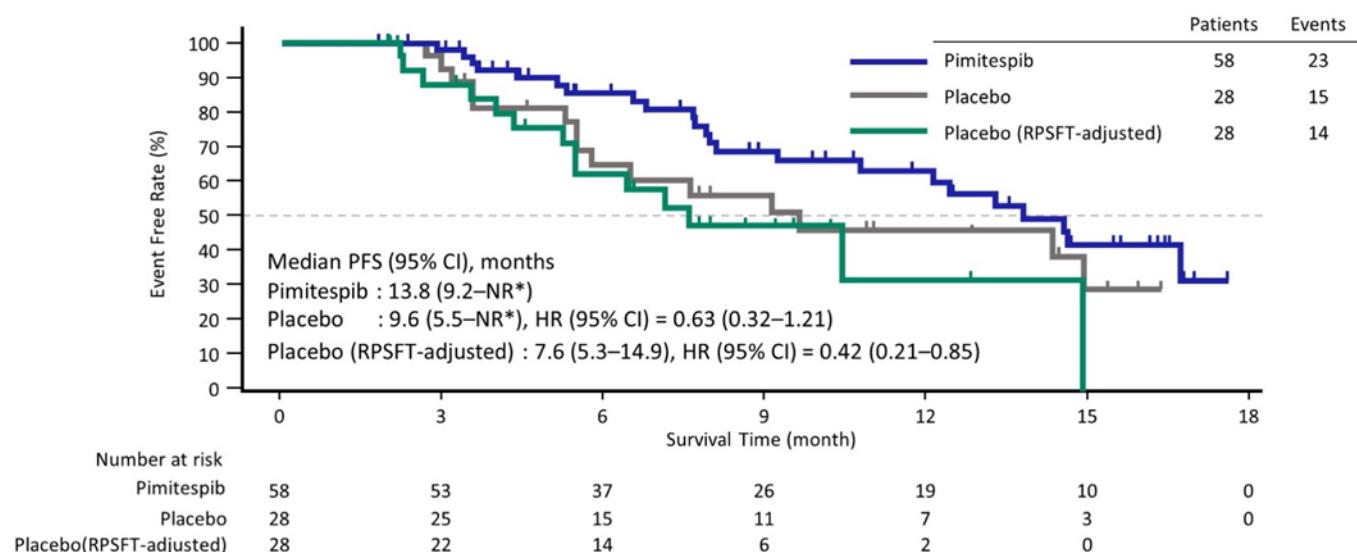
| Preferred Term | Adverse events (AEs) | | | | Treatment-related AEs | | | |
|----------------------------|----------------------|-----------|------------|----------|-----------------------|-----------|------------|----------|
| | All grades | ≥ Grade3 | All grades | ≥ Grade3 | All grades | ≥ Grade3 | All grades | ≥ Grade3 |
| Any Events | 56 (96.6) | 25 (43.1) | 22 (78.6) | 8 (28.6) | 54 (93.1) | 15 (25.9) | 11 (39.3) | 1 (3.6) |
| Diarrhea | 43 (74.1) | 8 (13.8) | 5 (17.9) | 0 | 43 (74.1) | 8 (13.8) | 4 (14.3) | 0 |
| Decreased appetite | 21 (36.2) | 4 (6.9) | 4 (14.3) | 0 | 18 (31.0) | 1 (1.7) | 2 (7.1) | 0 |
| Malaise | 18 (31.0) | 2 (3.4) | 5 (17.9) | 0 | 15 (25.9) | 1 (1.7) | 3 (10.7) | 0 |
| Nausea | 16 (27.6) | 0 | 5 (17.9) | 0 | 14 (24.1) | 0 | 3 (10.7) | 0 |
| Blood creatinine increased | 15 (25.9) | 0 | 3 (10.7) | 0 | 15 (25.9) | 0 | 2 (7.1) | 0 |
| Renal impairment | 10 (17.2) | 2 (3.4) | 0 | 0 | 9 (15.5) | 2 (3.4) | 0 | 0 |
| Night blindness | 8 (13.8) | 0 | 0 | 0 | 8 (13.8) | 0 | 0 | 0 |
| Tumor pain | 8 (13.8) | 1 (1.7) | 1 (3.6) | 0 | 0 | 0 | 0 | 0 |
| Anemia | 6 (10.3) | 4 (6.9) | 3 (10.7) | 3 (10.7) | 5 (8.6) | 3 (5.2) | 0 | 0 |

Survie

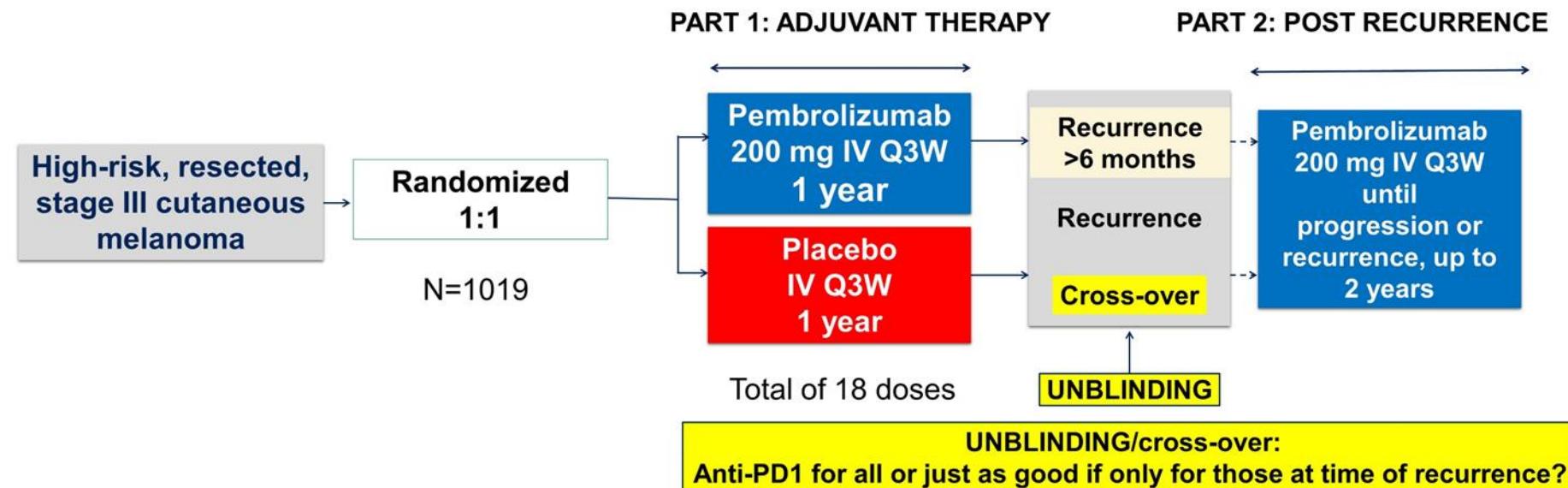
PFS based on BCRR



OS and OS adjusted by RPSFT model



Crossover and rechallenge with pembrolizumab in recurrent patients from the EORTC 1325-MG/Keynote-054 phase 3 trial, pembrolizumab versus placebo after complete resection of high-risk stage III melanoma



Stratification factors:

- ✓ AJCC-7 Stage: IIIA (>1 mm metastasis) vs. IIIB vs. IIIC 1-3 positive lymph nodes vs. IIIC ≥4 positive lymph nodes
- ✓ Region: North America, European countries, Australia/New Zealand, other countries

Primary Endpoints:

- RFS (per investigator) in overall ITT population, and in patients with PD-L1-positive tumors

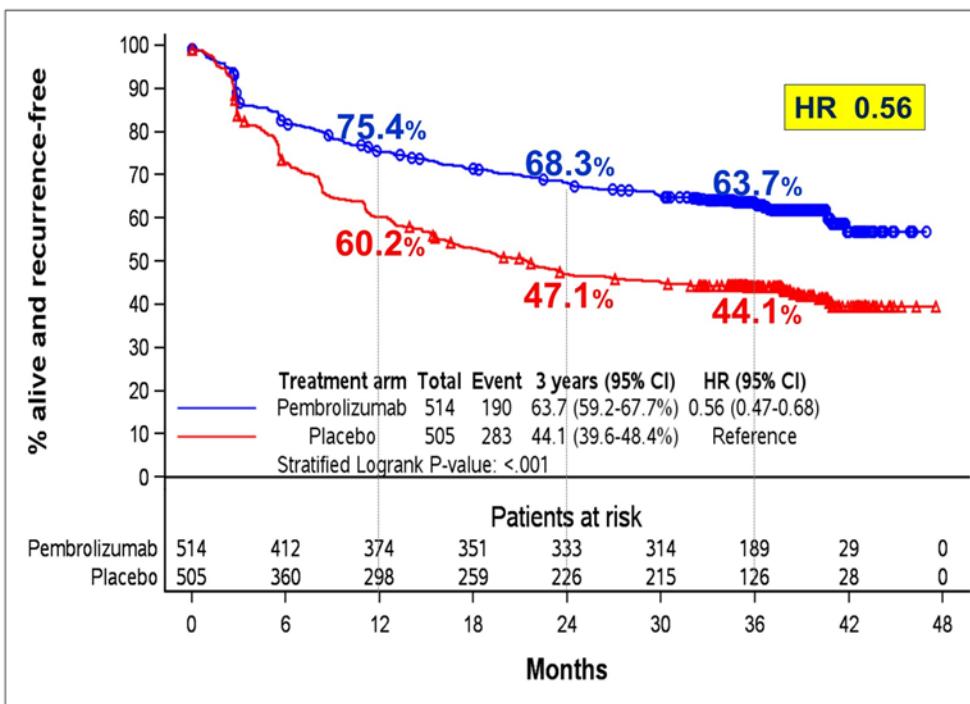
Secondary Endpoints:

- DMFS and OS in these 2 populations; Safety, Health-related quality of life

Survie

RFS updated analysis @ 3YR (ASCO 2020)¹

- Cut-off date (30-Sep-2019); median follow-up: 3 years; 473 RFS events

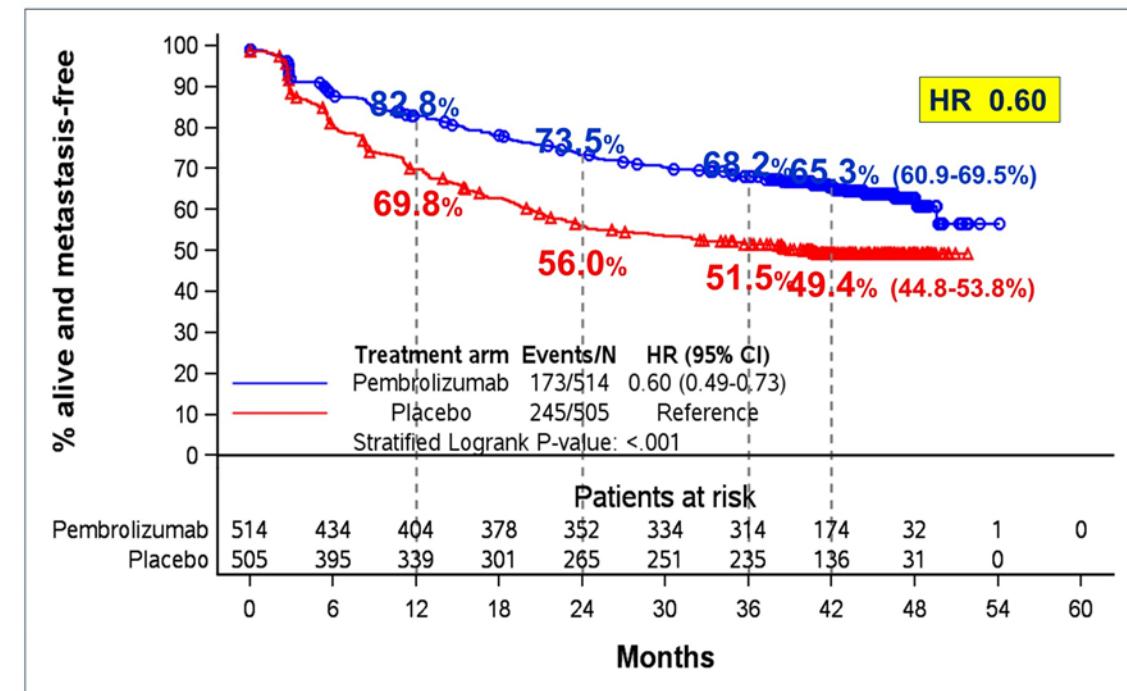


irAE: grade 1-5 (38%); grade 3-5 (7%)

¹Eggermont AMM, et al. *J Clin Oncol* 2020;38:3925-36

DMFS final analysis @ 3.5 YR (ESMO 2020)²

- Cut-off date (3-Apr-2020); median follow-up: 3.5 years; 418 DMFS events (423 planned: ~87% power HR=0.725)



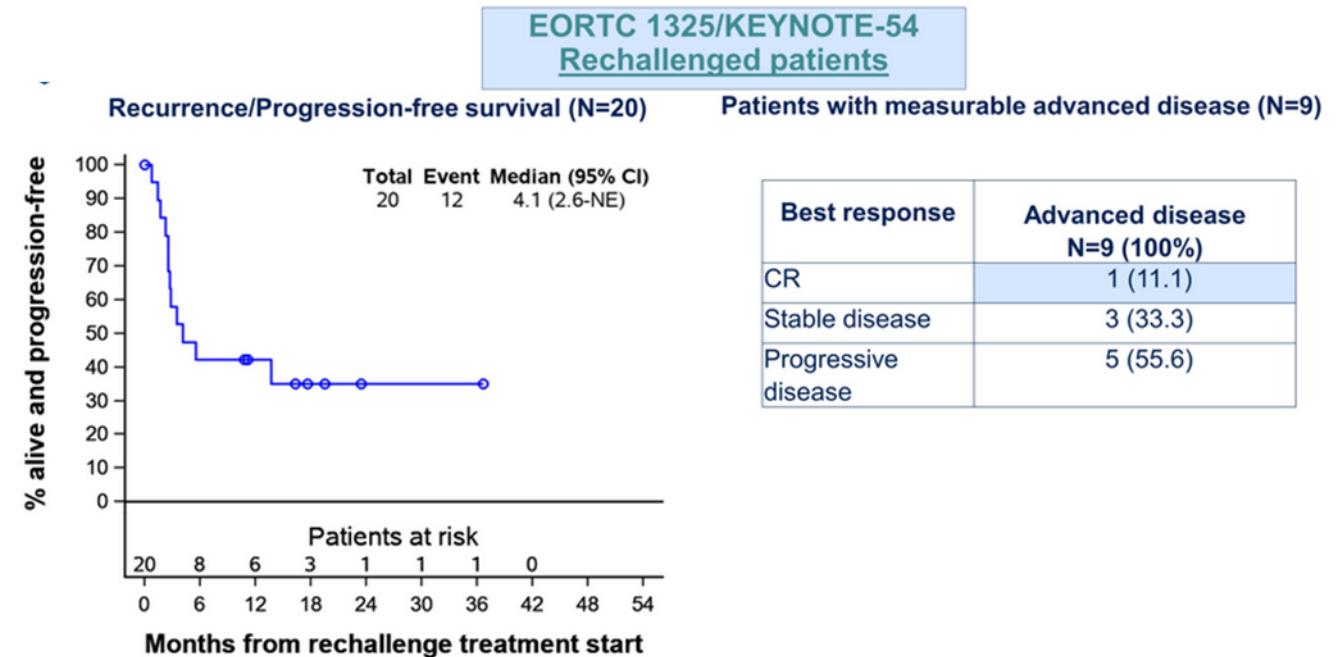
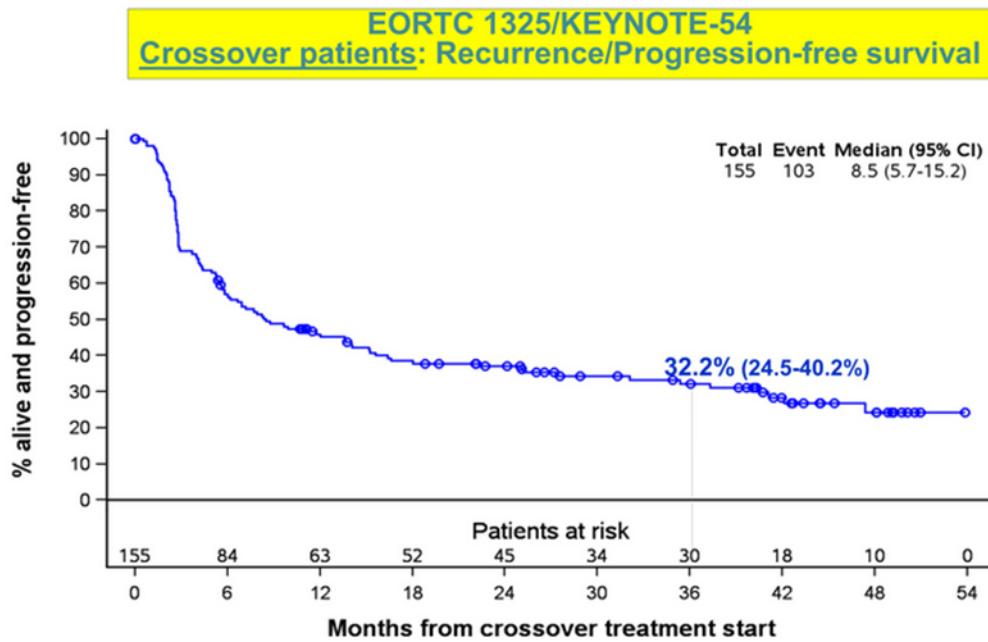
²Eggermont AMM, et al. *Lancet Oncol*. 2021;22:643-654

Caractéristiques de la population

| | |
|--|--|
| | Median follow-up (IQR) from start of Part 2, months |
| All patients included in Part 2 (N=175) | 39 (27-46) |
| Crossover patients from placebo group (N=155) | 41 (30-48) |
| Rechallenge patients from pembrolizumab group (N=20) | 19 (14-26) |

| | Randomized Placebo N=505 | Randomized pembrolizumab N=515 |
|---|-------------------------------|-----------------------------------|
| Completion of 1 yr of treatment | 297 | 297 |
| Recurrence (before/after trt compl.) | 298 | 203 |
| Recurrence after 6 mts of trt compl. | | 47 |
| Stage at baseline of Part 2, n | Crossover population N=155 | Rechallenge population N=20 |
| III resected (after local, ITM, RLN rec.) | 50 | 7 |
| III/IV various | 105 | 13 |
| III unresected (M0) | 10 | 0 |
| IV (M1) | 95 | 13 |
| IV resected/unresected | 12/83 | 4/9 |
| AJCC-8 M1a | 22 | 4 |
| AJCC-8 M1b | 36 | 5 |
| AJCC-8 M1c | 36 | 4 |
| AJCC-8 M1d | 1 | 0 |

Survie



CheckMate 067: 6.5-year outcomes in patients with advanced melanoma

6.5-year follow up of a randomized,
double-blind, phase 3 study to compare
NIVO + IPI or NIVO alone with IPI alone^a

Previously untreated,
unresectable, or
metastatic melanoma

R
1:1:1

Stratify by:
• BRAF status
• AJCC M stage
• Tumor PD-L1
expression
< 5% vs
≥ 5%

n = 314

n = 316

n = 315

NIVO 1 mg/kg +
IPI 3 mg/kg Q3W for
4 doses then
NIVO 3 mg/kg Q2W

NIVO 3 mg/kg Q2W +
IPI-matched placebo

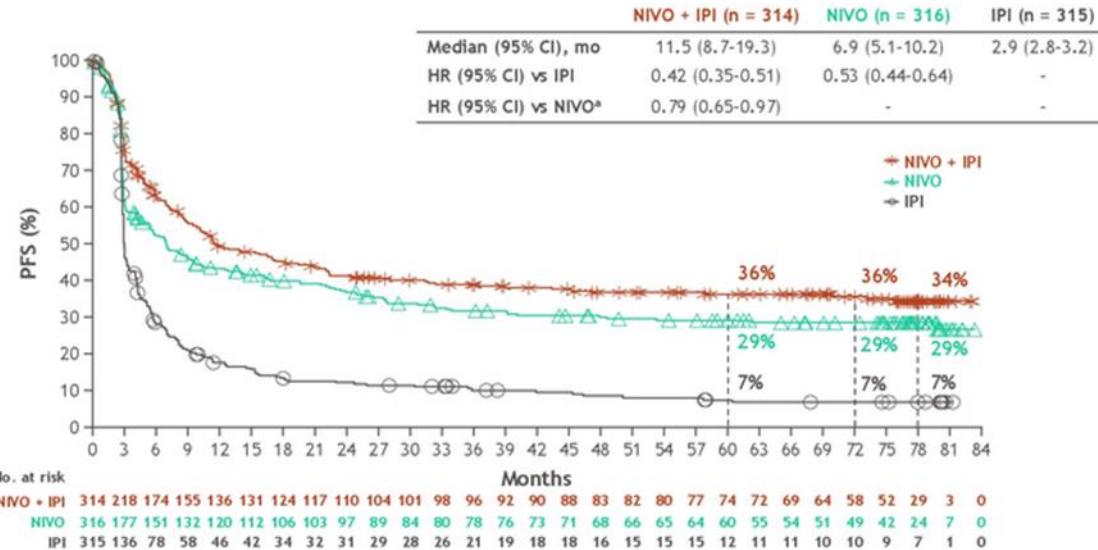
IPI 3 mg/kg Q3W
for 4 doses +
NIVO-matched placebo

Treat until
progression or
unacceptable
toxicity

Endpoints:
Co-primary^b:
PFS, OS
Secondary:
ORR,
descriptive
efficacy
assessments,^c
safety

Database lock: October 19, 2020; minimum
follow-up of 77 months for all patients

Efficacité - Survie



PFS

