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**Title:** Avelumab vs docetaxel in patients with platinum-treated advanced non-small-cell lung cancer: 2-year follow-up from the JAVELIN Lung 200 phase 3 trial

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## **Abstract**

### **Introduction**

In the JAVELIN Lung 200 trial, avelumab (anti-PD-L1 antibody) did not significantly prolong overall survival (OS) vs docetaxel in patients with platinum-treated PD-L1+ NSCLC. We report >2-year follow-up data.

### **Methods**

Patients with stage IIIB/IV or recurrent NSCLC with disease progression following platinum-doublet chemotherapy were randomized 1:1 to avelumab 10 mg/kg every 2 weeks or docetaxel 75 mg/m<sup>2</sup> every 3 weeks. The primary endpoint was OS in patients with PD-L1+ tumors ( $\geq 1\%$  tumor cell expression; IHC 73-10 pharmDx assay).

### **Results**

Of 792 patients, 529 had PD-L1+ tumors (264 vs 265 in the avelumab vs docetaxel arms, respectively). As of March 4, 2019, median duration of follow-up for OS in the PD-L1+ population was 35.4 months in the avelumab arm and 34.7 months in the docetaxel arm; study treatment was ongoing in 25 (9.5%) vs 0 patients, respectively. In the PD-L1+ population, 2-year OS rates (95% CI) with avelumab vs docetaxel were 29.9% (24.5%-35.5%) vs 20.5% (15.6%-25.8%); in  $\geq 50\%$  PD-L1+ subgroups, 2-year OS rates were 36.4% (29.1%-43.7%) vs 17.7% (11.8%-24.7%), and in the  $\geq 80\%$  subgroup were 40.2% (31.3%-49.0%) vs 20.3% (12.9%-28.8%), respectively. Median duration of response (investigator assessed) was 19.1 months (95% CI: 10.8-34.8) vs 5.7 months (95% CI: 4.1-8.3). Safety profiles for both arms were consistent with the primary analysis.

### **Conclusions**

Although the JAVELIN Lung 200 primary analysis (reported previously) showed that avelumab did not significantly prolong OS vs docetaxel in patients with platinum-treated PD-L1+ NSCLC, post hoc analyses at 2 years of follow-up showed that 2-year OS rates were doubled with avelumab in subgroups with higher PD-L1 expression ( $\geq 50\%$  and  $\geq 80\%$ ).

**Keywords:** Avelumab; PD-L1; Non-small cell lung cancer; Second-line; Phase 3

## Introduction

Since 2015, immune checkpoint inhibitors that inhibit the programmed death 1 (PD-1)/programmed death ligand 1 (PD-L1) interaction have become established therapeutic options for the treatment of advanced non-small cell lung cancer (NSCLC) based on data from randomized trials of nivolumab, pembrolizumab, and atezolizumab.<sup>1-4</sup>

Avelumab (anti-PD-L1) has been approved in metastatic Merkel cell carcinoma as first-line and above monotherapy, in advanced urothelial carcinoma as first-line maintenance and as second-line therapy following disease progression on platinum-based chemotherapy, and in combination with axitinib as first-line treatment for advanced renal cell carcinoma.<sup>5, 6</sup>

Avelumab has also shown clinical activity in patients with advanced NSCLC as first-line or second-line treatment in two phase 1 cohorts.<sup>7, 8</sup> In a subsequent phase 3 open-label trial, JAVELIN Lung 200, avelumab did not significantly improve overall survival (OS; primary endpoint) compared with docetaxel in patients with stage IIIB or IV PD-L1+ (defined as expression on  $\geq 1\%$  of tumor cells using the 73-10 PD-L1 assay [Agilent Technologies/Dako, Carpinteria, CA]) NSCLC that had progressed after treatment with platinum-containing doublet chemotherapy.<sup>9</sup> In the primary analysis, reported after a median follow-up of 18.3 months, median OS in the PD-L1+ population was 11.4 months (95% CI, 9.4-13.9 months) with avelumab vs 10.3 months (95% CI, 8.5-13.0 months) with docetaxel (hazard ratio [HR], 0.90 [96% CI, 0.72-1.12]). However, post hoc analyses suggested that OS was affected by the high frequency of post-study immune checkpoint inhibitor use in the docetaxel arm.<sup>10</sup> Prespecified exploratory analyses from JAVELIN Lung 200 showed longer OS with avelumab vs docetaxel in



patients with tumors with higher PD-L1 expression<sup>9</sup>; median OS in patients with ≥50% PD-L1 expression was 13.6 vs 9.2 months (HR, 0.67 [95% CI, 0.51-0.89]) and in patients with ≥80% PD-L1 expression was 17.1 vs 9.3 months (HR, 0.59 [95% CI, 0.42-0.83]). The ≥80% PD-L1 cut-off for the 73-10 assay is comparable to a tumor proportion score of ≥50% with the 22C3 (pembrolizumab) assay, each identifying approximately 30% of patients with advanced NSCLC<sup>1, 9, 11</sup>

We report updated data from the JAVELIN Lung 200 study with an additional 16 months of median follow-up (≥24 months in all patients).

## **Materials and Methods**

### *Study Design and Treatment*

JAVELIN Lung 200 is an open-label, multicenter, randomized phase 3 trial assessing avelumab vs docetaxel as second-line treatment in patients with advanced NSCLC. Full eligibility criteria for this trial were reported previously.<sup>9</sup> Briefly, eligibility criteria included patients with histologically confirmed stage IIIB/IV or recurrent NSCLC with disease progression following platinum doublet treatment with tumor material available for biomarker assessment, an Eastern Cooperative Oncology Group performance status (ECOG PS) of 0 or 1, and adequate hematologic, renal, and hepatic function. Patients were not eligible if they had received prior immune checkpoint inhibitor therapy or systemic anticancer treatment after disease progression with platinum-based therapy.

The study protocol was approved by institutional review boards and ethics committees at each institution. The study was done in accordance with the trial protocol,

Good Clinical Practice guidelines, and the Declaration of Helsinki, and all patients provided written informed consent.

### *Procedures and Assessments*

All procedures, assessments, and statistical methodologies were reported previously.<sup>9</sup> Patients were randomized 1:1 to receive either avelumab 10 mg/kg every 2 weeks or docetaxel 75 mg/m<sup>2</sup> every 3 weeks. Allocation was stratified by PD-L1 status (PD-L1+ vs PD-L1-) and NSCLC histology (squamous vs nonsquamous). PD-L1+ status was defined as PD-L1 expression on ≥1% of tumor cells, assessed centrally using the 73-10 assay. No crossover to the avelumab arm was permitted. The primary endpoint was OS, and the primary analysis population was patients with PD-L1+ tumors. Analyses of PD-L1+ subgroups defined by ≥50% and ≥80% expression were prespecified exploratory endpoints. Tumors were assessed via radiographic imaging at baseline, every 6 weeks for the first 12 months, and then every 12 weeks thereafter. In this update, tumor responses were determined by investigator assessment according to Response Evaluation Criteria in Solid Tumors v1.1. Safety was assessed at each treatment visit, and adverse events (AEs) were coded in accordance with Medical Dictionary for Regulatory Activities (MedDRA) v21.1 and graded according to National Cancer Institute Common Terminology Criteria for AEs v4.03. Infusion-related reactions with avelumab were assessed as AEs of special interest and identified according to a prespecified list of MedDRA preferred terms, including infusion-related reaction, drug hypersensitivity, hypersensitivity, type 1 hypersensitivity, and anaphylactic reaction occurring on the day of or the day after the study drug infusion or various signs and

symptoms of infusion-related reaction (including abdominal pain, back pain, chills, dyspnea, flushing, hypotension, pyrexia, urticaria, and wheezing) occurring on the day of the study drug infusion and resolving within 2 days. Immune-related AEs (irAEs) were identified using a prespecified list of MedDRA preferred terms followed by a comprehensive medical review.

## **Results**

### *Patient Characteristics and Disposition*

In total, 792 patients were enrolled (intention-to-treat population) and randomized 1:1 to avelumab or docetaxel (396 per arm). Of these, 529 (66.8%) had PD-L1+ tumors (primary population, defined as expression on  $\geq 1\%$  of tumor cells; 264 patients in the avelumab arm and 265 patients in the docetaxel arm).

Patient demographics and disease characteristics were similar between avelumab and docetaxel arms and were reported previously.<sup>9</sup> Briefly, in the avelumab and docetaxel arms of the PD-L1+ population, 182 (68.9%) vs 185 (69.8%) were male, ECOG PS was 0 in 96 (36.4%) vs 91 (34.3%) and 1 in 168 (63.6%) vs 174 (65.7%), tumor histology was squamous in 88 (33.3%) vs 92 (34.7%) and nonsquamous in 176 (66.7%) vs 173 (65.3%), and smoking status was ever smoker in 220 (83.3%) vs 224 (84.5%), respectively. Of 792 total patients, 315 (39.8%) patients had  $\geq 50\%$  PD-L1+ tumors (168 [21.2%] in the avelumab arm and 147 patients [18.6%] in the docetaxel arm) and 226 (28.5%) had  $\geq 80\%$  PD-L1+ tumors (120 [15.2%] in the avelumab arm and 106 patients [13.4%] in the docetaxel arm).

At data cutoff (March 4, 2019), median duration of follow-up for OS in the PD-L1+ population was 35.4 months (range, 0.2-45.3 months) for avelumab and 34.7 months (range, 0.03-44.4 months) for docetaxel. In the PD-L1+ population, study treatment was ongoing in the avelumab arm only (25 patients [9.5%]). Reasons for permanent treatment discontinuation (avelumab vs docetaxel arm) were progressive disease (172 [65.2%] vs 153 [57.7%] patients), AE (40 [15.2%] vs 41 [15.5%]), loss to follow-up (0 vs 2 [0.8%]), withdrawal of consent (7 [2.7%] vs 17 [6.4%]), death (15 [5.7%] vs 11 [4.2%]), and other reasons (physician's decision in 2 [0.8%] vs 10 [3.8%], patient's decision in 1 [0.4%] vs 1 [0.4%], and maximum number of docetaxel cycles completed per local practice in 10 [3.8%]). Median duration of treatment was 3.4 months (range, 0.5-42.3 months) with avelumab and 2.8 months (range, 0.7-21.8 months) with docetaxel. In avelumab and docetaxel arms, subsequent immune checkpoint inhibitor was received by 17 patients (6.4%) vs 74 patients (27.9%), respectively. In the docetaxel arm, a higher proportion of patients received subsequent immune checkpoint inhibitor treatment among those with nonsquamous tumors (61/173 [35.3%] vs squamous tumors (13/92 [14.1%]).

### *Efficacy*

In the PD-L1+ population ( $\geq 1\%$  expression), median OS with avelumab vs docetaxel was 11.4 months (95% CI, 9.4-13.8 months) vs 10.6 months (95% CI, 8.5-12.9 months), respectively (HR, 0.87 [95% CI, 0.71-1.05]; 1-sided  $p=0.0721$ ) (**Fig. 1A**). Two-year OS rates were 29.9% (95% CI, 24.5%-35.5%) vs 20.5% (95% CI, 15.6%-25.8%), respectively. Of patients who had  $\geq 2$ -year OS in the PD-L1+ population, 10 of 77

patients (13.0%) in the avelumab arm and 30 of 45 patients (66.7%) in the docetaxel arm received subsequent immune checkpoint inhibitor therapy. The difference in OS increased with increasing PD-L1 expression (**Fig. 1B and 1C**). With avelumab vs docetaxel, 2-year OS rates in the  $\geq 50\%$  PD-L1+ subgroup were 36.4% (95% CI, 29.1%-43.7%) vs 17.7% (95% CI, 11.8%-24.7%) and in the  $\geq 80\%$  PD-L1+ subgroup were 40.2% (95% CI, 31.3%-49.0%) vs 20.3% (95% CI, 12.9%-28.8%), respectively. Median OS values were consistent with the primary analysis of these subgroups. In the full analysis set (all patients irrespective of PD-L1 status), 2-year OS rates were 26.6% (95% CI, 22.3%-31.1%) in the avelumab arm vs 19.8% (95% CI, 15.9%-24.1%) in the docetaxel arm (**Supplementary Fig. 1**).

OS findings for avelumab vs docetaxel were different between patients with squamous vs nonsquamous NSCLC in the PD-L1+ population (**Supplementary Fig. 2**). In patients with squamous NSCLC, the HR for OS was 0.72 (95% CI, 0.52-1.01), and 2-year OS rates were 31.9% (95% CI, 22.4%-41.9%) with avelumab vs 16.6% (95% CI, 9.6%-25.3%) with docetaxel. In patients with squamous NSCLC with  $\geq 50\%$  (n=120) and  $\geq 80\%$  (n=80) PD-L1+ tumors, HRs were 0.64 (95% CI, 0.43-0.97) and 0.55 (95% CI, 0.34-0.90), respectively. In patients with nonsquamous NSCLC, the HR for OS was 0.95 (95% CI, 0.75-1.21), and 2-year OS rates were 28.9% (95% CI, 22.3%-35.7%) with avelumab vs 22.5% (95% CI, 16.3%-29.2%) with docetaxel. However, in patients with nonsquamous NSCLC with  $\geq 50\%$  (n=195) and  $\geq 80\%$  (n=139) PD-L1+ tumors, HRs were 0.67 (95% CI, 0.49-0.93) and 0.67 (95% CI, 0.45-0.99), respectively. Analyses of OS in other subgroups of the PD-L1+ population were consistent with those reported previously (**Figure 2**).<sup>9</sup> Subgroup analyses in the full analysis set were similar.

In the PD-L1+ population, objective response rates (ORRs) by investigator assessment with avelumab and docetaxel were 18.9% (95% CI, 14.4%-24.2%) vs 10.6% (95% CI, 7.1%-14.9%), respectively. ORRs with avelumab increased with increasing PD-L1 expression (**Fig. 3**). ORRs in the full analysis set were 15.2% (95% CI, 11.8%-19.1%) with avelumab vs 10.6% (95% CI, 7.8-14.1) with docetaxel. Median duration of response by investigator assessment in the avelumab and docetaxel arms in the PD-L1+ population was 19.1 months (95% CI, 10.8-34.8 months) vs 5.7 months (95% CI, 4.1-8.3 months), respectively, and differences were consistent across PD-L1 expression subgroups (**Figs. 3 and 4**). Of responding patients in the PD-L1+ population in the avelumab (n=50) and docetaxel (n=28) arms, proportions with an objective response lasting  $\geq 2$  years (calculated by Kaplan-Meier analysis) were 44.9% (95% CI, 30.3%-58.5%) in the avelumab arm compared with 4.9% (95% CI, 0.4%-19.5%) in the docetaxel arm. In the full analysis set, median duration of response by investigator assessment in the avelumab and docetaxel arms was 15.4 months (95% CI, 10.6-30.4) vs 5.6 months (95% CI, 4.1-8.3), respectively, and responses lasted  $\geq 2$  years in 40.6% (95% CI, 27.7%-53.1%) vs 6.1% (95% CI, 1.2%-17.2%) of responders, respectively.

### *Safety*

The overall safety profile of avelumab with long-term follow-up was consistent with the primary analysis. Among all treated patients, AEs (related or unrelated) occurred in 375 of 393 patients (95.4%) in the avelumab arm and 346 of 365 patients (94.8%) in the docetaxel arm (**Table 1 and Supplementary Table 1**). Treatment-related AEs (TRAEs) of any grade occurred in 252 patients (64.1%) in the avelumab arm (1 additional patient

compared with the primary analysis) and 313 patients (85.8%) in the docetaxel arm (identical to the primary analysis). In the avelumab and docetaxel arms, a grade  $\geq 3$  TRAE occurred in 41 (10.4%) vs 180 (49.3%), respectively, representing 2 additional patients in the avelumab arm compared with the primary analysis. In the avelumab arm, the most common TRAEs of any grade were decreased appetite (34 [8.7%]), asthenia (31 [7.9%]), and fatigue (31 [7.9%]) and of grade  $\geq 3$  were increased lipase (5 [1.3%]), alanine aminotransferase increased (3 [0.8%]; 1 additional patient vs the primary analysis),  $\gamma$ -glutamyltransferase increased (3 [0.8%]), and pneumonitis (3 [0.8%]). In the docetaxel arm, the most common TRAEs of any grade were alopecia (97 [26.6%]), anemia (69 [18.9%]), and decreased appetite (66 [18.1%]) and of grade  $\geq 3$  were neutropenia (51 [14.0%]), febrile neutropenia (37 [10.1%]), and decreased neutrophil count (36 [9.9%]), with incidences of these TRAEs unchanged since the primary analysis.

Infusion-related reaction in the avelumab arm using an expanded definition (see Methods for signs and symptoms included) occurred at any grade in 107 patients (27.2%) and at grade  $\geq 3$  in 6 patients (1.5%), unchanged from the primary analysis. In avelumab-treated patients, irAEs of any grade occurred in 68 patients (17.3%) (**Supplementary Table 2**). The most common irAEs were hypothyroidism (20 [5.1%]), rash (14 [3.6%]), and pneumonitis (9 [2.3%]). Three additional patients had an irAE in this analysis compared with the primary analysis. Newly reported irAEs were blood thyroid stimulating hormone increased, dermatitis acneiform, drug eruption, and skin toxicity, which each occurred in 1 patient each (0.3%). Compared with the primary analysis, rates of the following irAEs were reported in 1 additional patient each:

hypothyroidism, rash, alanine aminotransferase increased, aspartate aminotransferase increased, and blood creatine phosphokinase. Grade  $\geq 3$  irAEs occurred in 12 patients (3.1%) with avelumab treatment in this analysis, an increase of 1 patient compared with the primary analysis (**Supplementary Table 2**). The only newly reported grade  $\geq 3$  irAE was aspartate aminotransferase increased (1 [0.3%]). Compared with the primary analysis, rates of the following grade  $\geq 3$  irAEs were reported in 1 additional patient each: increased alanine aminotransferase and increased blood creatine phosphokinase.

## **Discussion**

Consistent with the primary analysis, 2-year follow-up from the JAVELIN Lung 200 trial showed no improvement in OS with avelumab vs docetaxel in the primary population of patients with PD-L1+ tumors ( $\geq 1\%$  cutoff); however, 2-year follow-up data from this trial substantiate the previous finding of markedly increased efficacy for avelumab vs docetaxel in subgroups with higher levels of tumor PD-L1 expression ( $\geq 50\%$  and  $\geq 80\%$  expression cutoffs). Two-year OS rates for avelumab vs docetaxel in the  $\geq 1\%$  population were 29.9% vs 20.5%, whereas 2-year OS rates were doubled in higher PD-L1+ subgroups: 36% vs 18% in the  $\geq 50\%$  subgroup and 40% vs 20% in the  $\geq 80\%$  subgroup (equivalent to a tumor proportion score of  $\geq 50\%$  in pembrolizumab trials<sup>11</sup>), respectively. Furthermore, in the  $\geq 80\%$  subgroup, the ORR was increased by >4-fold for avelumab vs docetaxel (31.7% vs 7.5%, respectively). Of note, more than two-thirds of patients in the  $\geq 50\%$  subgroup had  $\geq 80\%$  PD-L1 expression, suggesting that the  $\geq 80\%$  subgroup may be the main driver of improved efficacy. Randomization of patients in the trial was



stratified by PD-L1 status ( $\geq 1\%$  expression) but not by higher PD-L1 expression, which is a limitation of the comparisons between arms in the higher PD-L1+ subgroups.

Several trials of other immune checkpoint inhibitor monotherapies in the first-line and post-platinum NSCLC settings have also reported the greatest efficacy benefits in subgroups with the highest PD-L1 expression.<sup>1, 2, 12-15</sup> Duration of response was longer with avelumab vs docetaxel irrespective of PD-L1 status (median 19.1 vs 5.7 months in the PD-L1+ population and 15.4 vs 5.6 months in the full analysis set, respectively). The safety profile of avelumab after extended treatment remained consistent with the earlier analysis,<sup>10</sup> including a lower rate of grade  $\geq 3$  TRAEs vs docetaxel (10.4% vs 49.3%, respectively) and only small increases in AE rates; no new safety signals were identified with prolonged treatment.

Long-term survival in a subset of patients has been reported for other anti-PD-1/PD-L1 agents in the second-line NSCLC treatment setting after 2 to 3 years of follow-up. In the phase 3 KEYNOTE-010 trial, 36-month OS rates for pembrolizumab vs docetaxel in patients with  $\geq 50\%$  PD-L1 expression were 35% vs 13%, respectively.<sup>16</sup> In a 2-year updated analysis from the CheckMate 017 and CheckMate 057 phase 3 trials, 2-year OS rates for nivolumab vs docetaxel were 23% vs 8% for squamous NSCLC and 29% vs 16% for nonsquamous NSCLC (both trials included patients with NSCLC unselected for PD-L1 expression).<sup>13</sup> In an updated analysis from the phase 3 OAK trial, 2-year OS rates for atezolizumab vs docetaxel in patients with  $\geq 50\%$  PD-L1 expression (assessed using the Ventana SP142 IHC assay) were 43% vs 17%.<sup>17</sup> OS rates in docetaxel arms across different studies appear to have increased over time, consistent with the increasing availability of immune checkpoint inhibitors as subsequent

treatment.<sup>17</sup> However, direct cross-trial comparison of OS rates should be interpreted with caution due to differences in study designs and patient populations.

In this trial, patients with squamous NSCLC had a nonsignificant trend for longer OS with avelumab vs docetaxel, whereas OS was similar between arms in patients with nonsquamous NSCLC, as noted in the primary analysis. In the docetaxel arm, the proportion of patients who received subsequent immune checkpoint inhibitor treatment was lower in those with squamous vs nonsquamous histology (14% vs 35%).

Since the JAVELIN Lung 200 trial was initiated, use of ICIs as 1L treatment for NSCLC without *EGFR* or *ALK* genomic tumor aberrations, either as monotherapy or within combination regimens, has become standard.<sup>18</sup> A phase 3 trial, JAVELIN Lung 100 (NCT02576574), is assessing avelumab monotherapy as first-line treatment vs platinum-based doublet therapy in patients with PD-L1+ NSCLC. The primary analysis population is patients with high PD-L1–expressing tumors ( $\geq 80\%$  expression on tumor cells using the 73-10 assay).<sup>19</sup>

In conclusion, 2-year follow-up data from the JAVELIN Lung 200 trial suggested that a subset of patients experienced long-term efficacy benefits with avelumab, which were increased with increasing tumor PD-L1 expression. No new safety signals were observed, and avelumab continued to show a lower rate of TRAEs compared with docetaxel.

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## TABLES

**Table 1. Overview of safety in all treated patients: comparison between the updated analysis and the primary analysis**

	Primary analysis (data cutoff: November 22, 2017)		≥24-month follow up (data cutoff: March 4, 2019)	
	Avelumab (n=393)	Docetaxel (n=365)	Avelumab (n=393)	Docetaxel (n=365)
AE (related or unrelated), n (%)				
Any grade	375 (95.4)	346 (94.8)	375 (95.4)	346 (94.8)
Grade ≥3	201 (51.1)	247 (67.7)	209 (53.2)	247 (67.7)
TRAE, n (%)				
Any grade	251 (63.9)	313 (85.8)	252 (64.1)	313 (85.8)
Grade ≥3	39 (9.9)	180 (49.3)	41 (10.4)	180 (49.3)
Serious AE, n (%)	163 (41.5)	143 (39.2)	167 (42.5)	145 (39.7)
Serious TRAE, n (%)	34 (8.7)	75 (20.5)	35 (8.9)	75 (20.5)
AE leading to permanent treatment discontinuation, n (%)	84 (21.4)	89 (24.4)	91 (23.2)	90 (24.7)
TRAE leading to permanent treatment discontinuation, n (%)	28 (7.1)	51 (14.0)	31 (7.9)	52 (14.2)
irAE, n (%)				
Any grade	65 (16.5)	NA	68 (17.3)	–
Grade ≥3	11 (2.8)	NA	12 (3.1)	–
Death due to AE, n (%)	64 (16.3)	49 (13.4)	64 (17.3)	51 (14.0)
Death due to TRAE, n (%)	3 (0.8)	14 (3.8)	3 (0.8)	14 (3.8)

irAE, immune-related adverse event; TRAE, treatment-related adverse event.

## **FIGURES LEGENDS**

**Figure 1. Overall survival (OS) with avelumab vs docetaxel in patients with (A)  $\geq 1\%$  PD-L1+ tumors (primary population), (B)  $\geq 50\%$  PD-L1+ tumors, and (C)  $\geq 80\%$  PD-L1+ tumors**

**Figure 2. Subgroup analysis of overall survival (OS) in the PD-L1+ population.**

ECOG PS, Eastern Cooperative Oncology Group performance status; PD-L1, programmed death ligand 1.

**Figure 3. Objective response rate and duration of response by investigator assessment with avelumab vs docetaxel by PD-L1 expression.**

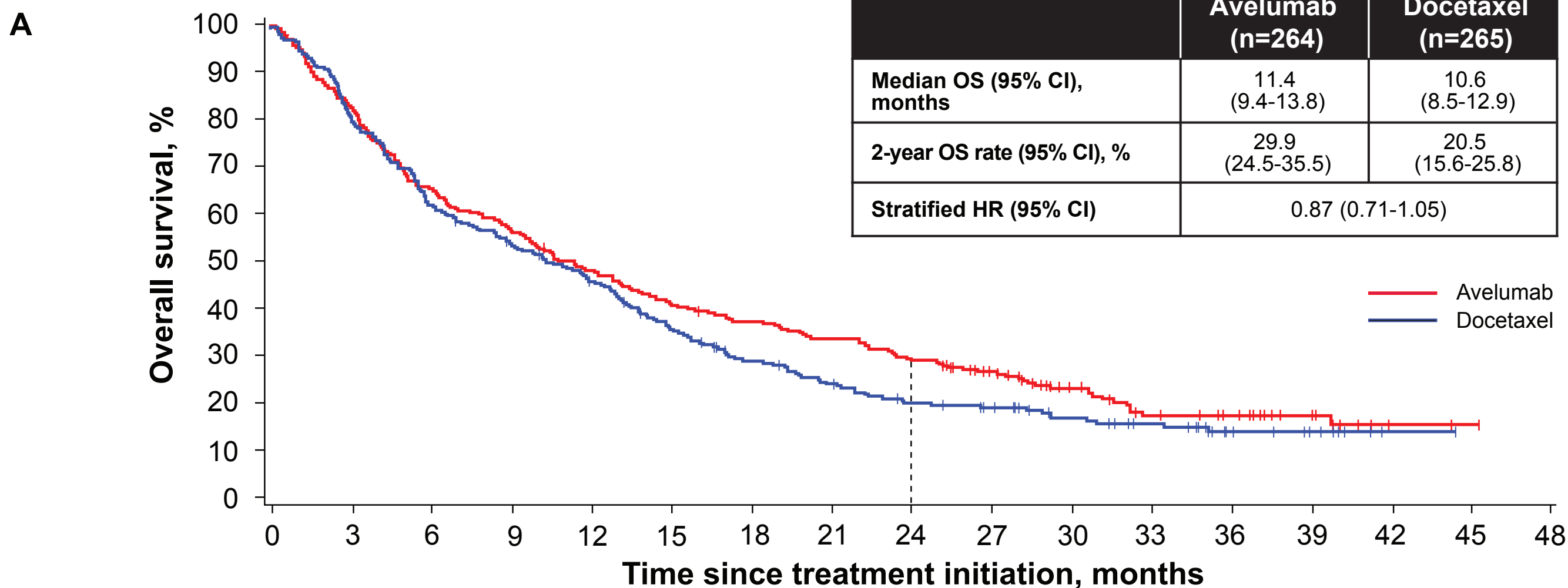
PD-L1, programmed death ligand 1.

<sup>a</sup> Error bars show 95% CIs; <sup>b</sup> Based on Kaplan-Meier estimates.

**Figure 4. Time to and duration of response with (A) avelumab (n=50) and (B) docetaxel (n=28) by investigator assessment in the PD-L1+ population.**

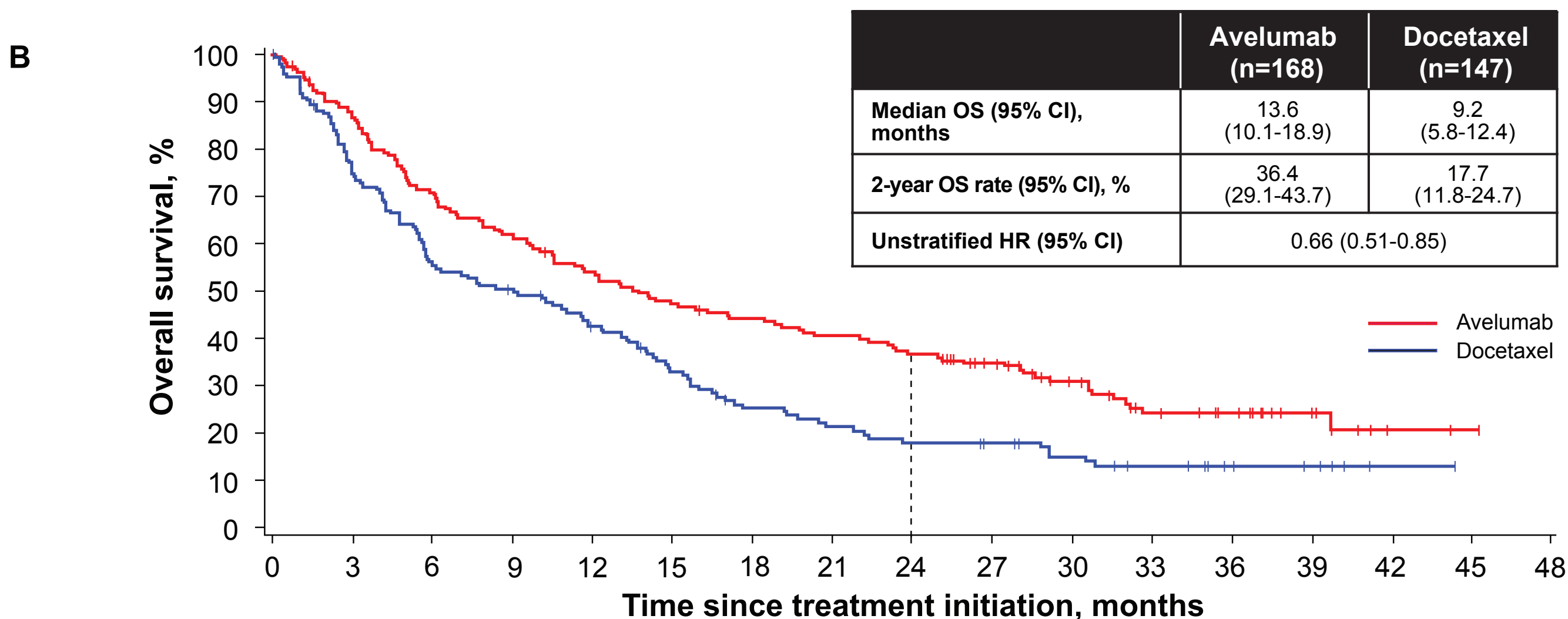
PD-L1, programmed death ligand





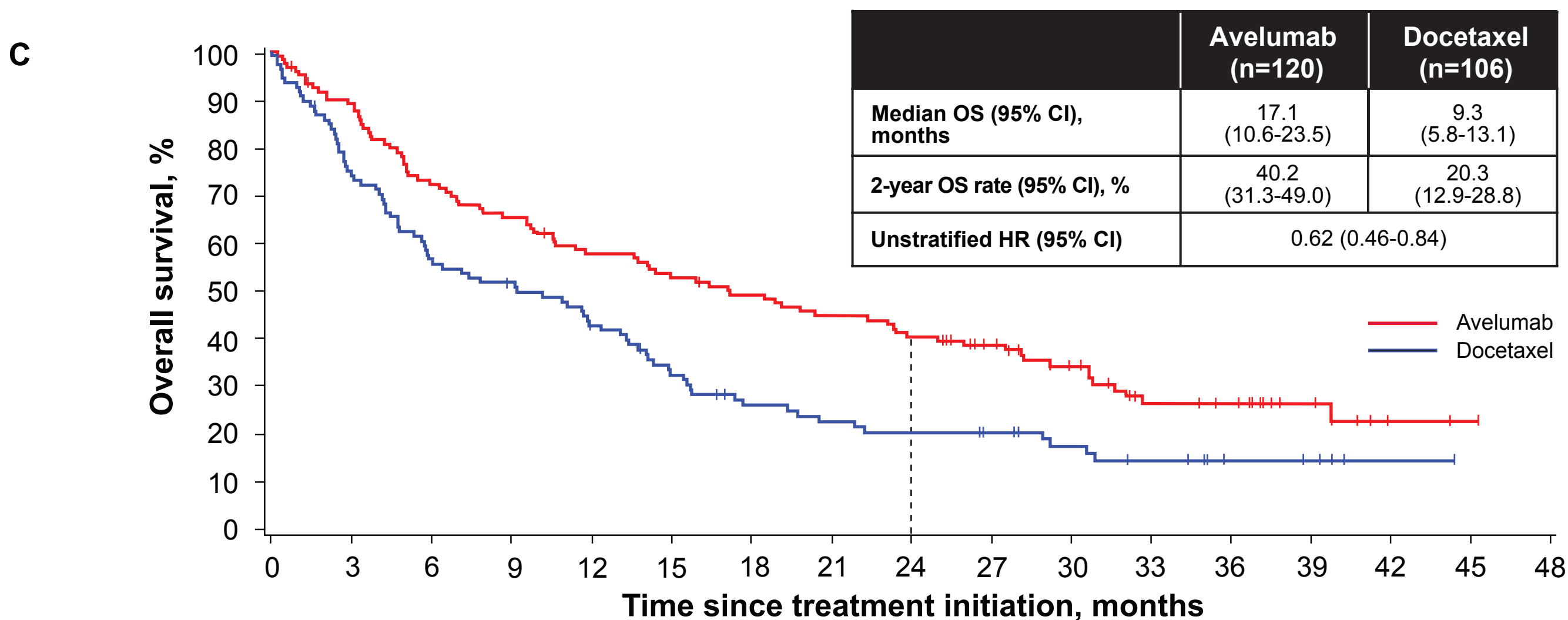
Number at risk

Avelumab	264	218	172	150	126	108	97	87	77	59	39	26	21	11	3	2	0
Docetaxel	265	210	160	137	115	89	68	56	45	40	29	23	11	7	1	0	0



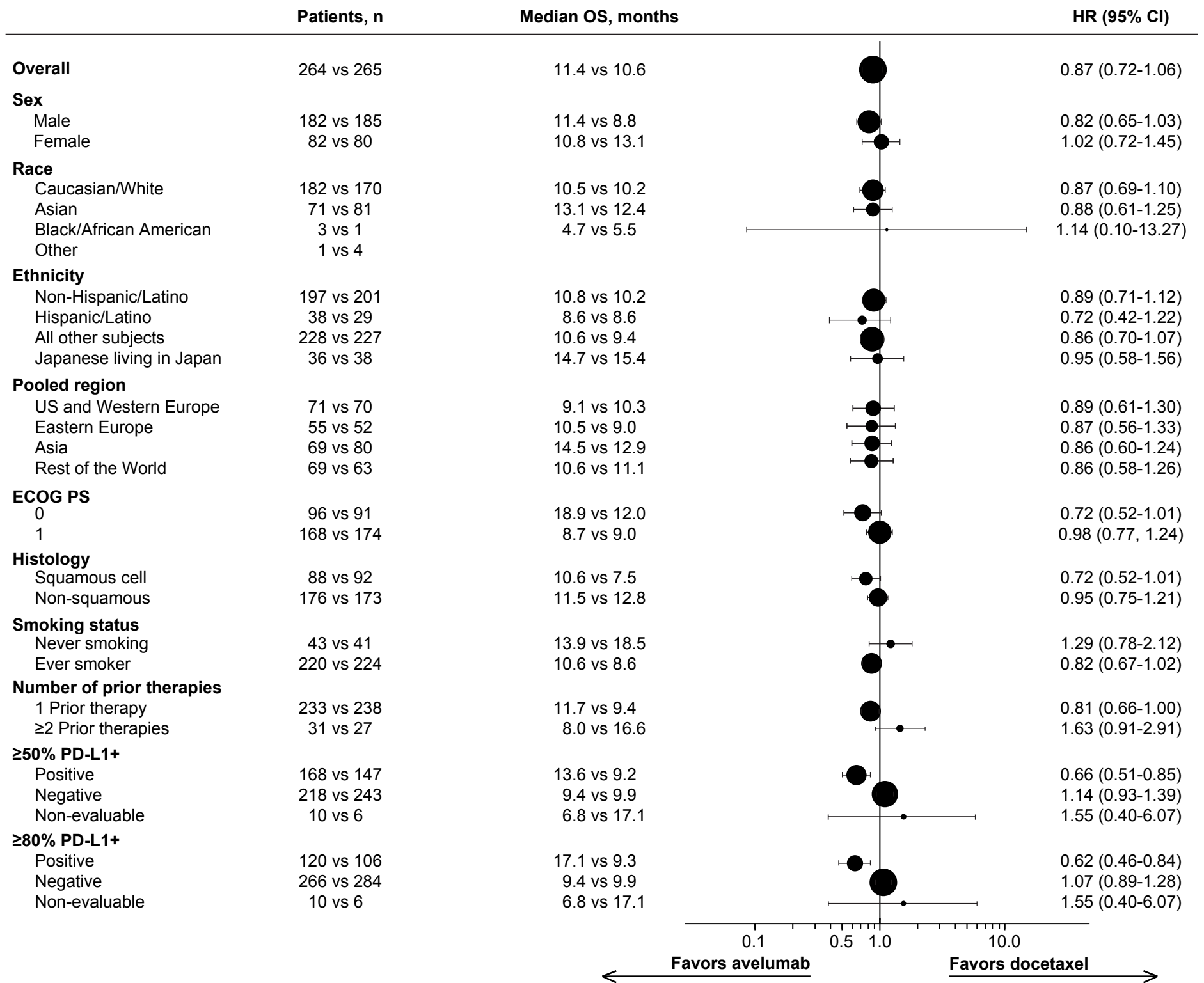
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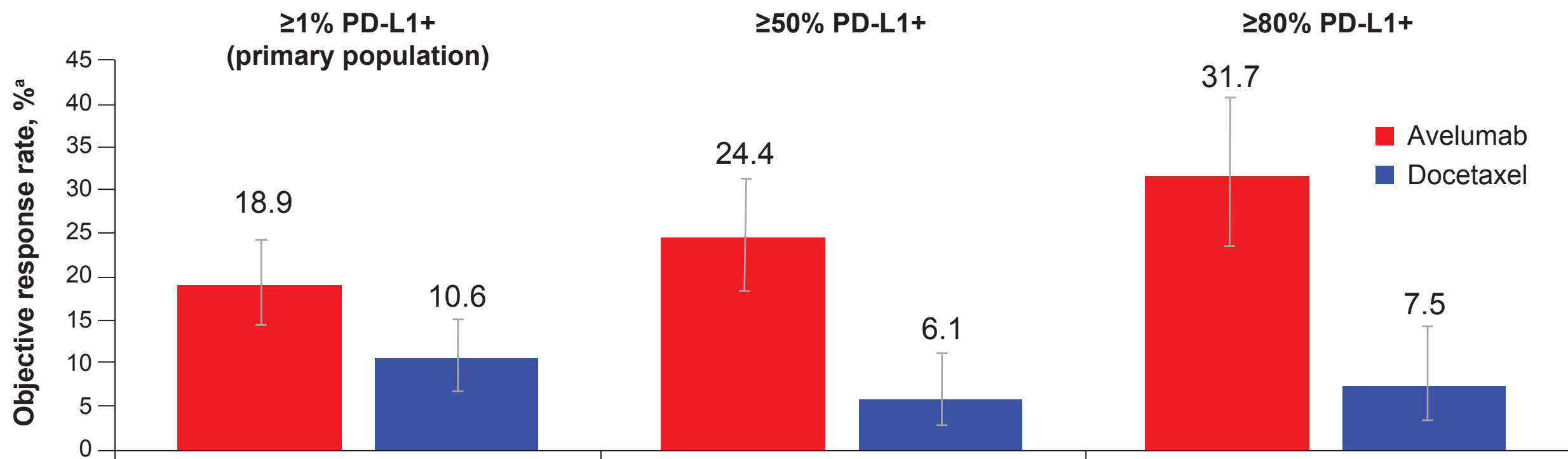
Avelumab	168	145	117	102	88	78	71	65	59	48	34	23	19	9	2	1	0
Docetaxel	147	110	80	71	58	45	31	26	22	20	15	11	7	5	1	0	0



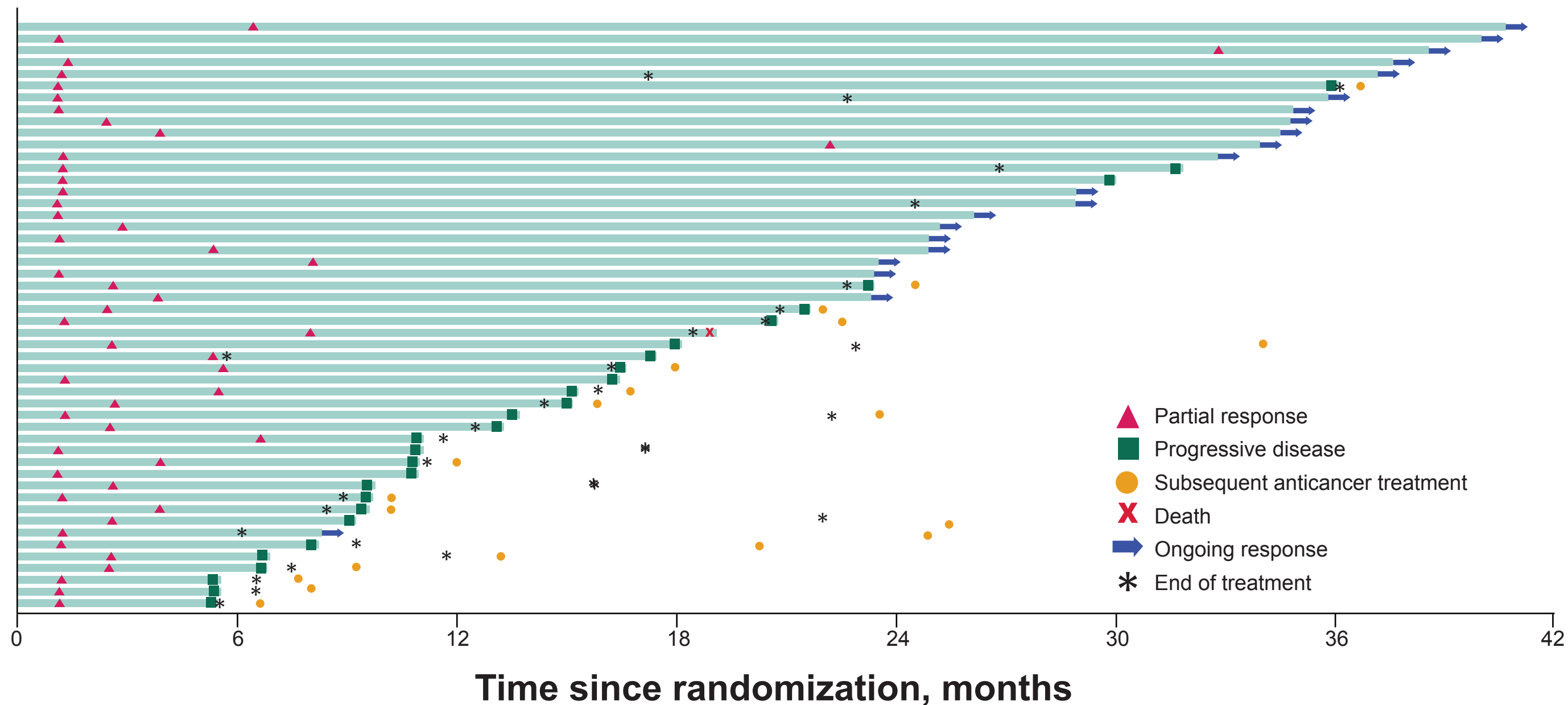
Number at risk

Avelumab	120	105	85	77	67	62	56	51	46	38	28	18	16	8	2	1	0
Docetaxel	106	77	58	52	42	32	23	20	18	16	12	9	5	4	1	0	0





	Avelumab (n=264)	Docetaxel (n=265)	Avelumab (n=168)	Docetaxel (n=147)	Avelumab (n=120)	Docetaxel (n=106)
<b>Odds ratio for objective response rate (95% CI)</b>	1.98 (1.20-3.26)		4.95 (2.31-10.59)		5.68 (2.51-12.85)	
<b>Responding patients, n</b>	50	28	41	9	38	8
<b>Median duration of response (95% CI), months</b>	19.1 (10.8-34.8)	5.7 (4.1-8.3)	19.4 (10.8-34.8)	6.9 (2.8-22.3)	19.4 (10.8-34.8)	7.2 (2.8-22.3)
<b>Duration of response ≥1 year (95% CI), %<sup>b</sup></b>	60.8 (45.6-73.0)	14.8 (4.7-30.4)	62.8 (46.0-75.7)	22.2 (3.4-51.3)	62.5 (45.1-75.9)	25.0 (3.7-55.8)
<b>Duration of response ≥2 years (95% CI), %<sup>b</sup></b>	44.9 (30.3-58.5)	4.9 (0.4-19.5)	46.4 (30.2-61.1)	0	45.5 (29.0-60.6)	0

**A****Patients****B****Patients**