

Short-term outcomes of enfortumab vedotin plus pembrolizumab as a first-line treatment for advanced urothelial carcinoma: Real-world use in multicenter cohort regardless of cisplatin eligibility

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Abstract

This study aimed to evaluate the short-term efficacy and safety of enfortumab vedotin plus pembrolizumab (EV + P) as a first-line systemic therapy for patients with advanced urothelial carcinoma (UC) in real-world practice, with a focus on cisplatin (CDDP) eligibility. Seventy-six patients who received EV + P treatment for advanced UC at 13 institutions between November 2024 and March 2025 were retrospectively included in this study. We collected the clinical characteristics and treatment data of the patients and assessed treatment response, progression-free survival (PFS), and adverse events (AEs). Patients were divided into two groups based on CDDP eligibility, and both efficacy and safety were compared between the groups. The median observation period was 5.25 (range, 0.72–10.06) months. Complete response (CR) was achieved in 6 (7.9%) patients receiving EV + P, partial response (PR) in 40 (52.6%), stable disease (SD) in 20 (26.3%), and progressive disease (PD) in 10 (13.2%). Six-month and median PFS rates were 80.6% and not reached, respectively. AEs of any grade and grade ≥ 3 occurred in 59 (77.6%) and 25 (32.9%) patients, respectively. The most frequently observed AE was skin disorders, which occurred in 33 (43.4%) patients; no grade 5 AEs were observed. Efficacy and safety did not differ between CDDP-ineligible and CDDP-eligible patients. In conclusion, the short-term efficacy of EV + P treatment seemed comparable to that in previous reports, and the safety profile was acceptable, regardless of CDDP eligibility.

Introduction

Urothelial carcinoma (UC) arises from the urothelial endothelium, encompassing the upper (renal pelvis and ureter) and lower (bladder and urethra) urinary tract. Patients with metastatic or unresectable UC have a very poor prognosis [1, 2]. The 5-year survival rate of patients with metastatic bladder cancer is $< 10\%$ [1].

Cisplatin (CDDP)-based chemotherapies are recommended as first-line treatment for patients with metastatic or unresectable UC. Although gemcitabine plus CDDP (GC) chemotherapy has been a first-line regimen until recent years [3], patients with renal dysfunction, Eastern Cooperative Oncology Group (ECOG) performance status (PS) of ≥ 2 , audiometric hearing loss, peripheral neuropathy, or heart failure are considered ineligible for CDDP [4]. Pembrolizumab, an immune checkpoint inhibitor (ICI), has been used as first-line treatment in CDDP-ineligible patients with advanced UC; however, despite longer durations of response, it has lower response rates in a limited proportion of these patients [5]. In contrast, enfortumab vedotin (EV), an antibody–drug conjugate, has demonstrated a high response rate in patients with advanced UC, even after chemotherapy and ICI treatment [6].

Recently, a large-scale randomized phase III trial revealed that EV plus pembrolizumab (EV + P) demonstrated better outcomes than conventional chemotherapy in CDDP-ineligible and CDDP-eligible patients with previously untreated UC [7]. We have been using this combination therapy in Japan since November 2024 as an insurance-covered treatment for patients with advanced UC. However, beyond clinical trials, few reports of EV + P treatment have been published [8].

This study aimed to evaluate the short-term efficacy and safety of EV + P as a first-line systemic therapy for patients with advanced UC in real-world practice, with a focus on CDDP eligibility as a patient-related factor.

Methods

Study design

We retrospectively included 76 patients who received EV + P treatment for advanced UC at The University of Osaka Hospital and 12 affiliated institutions between November 2024 and March 2025 without predefined exclusion criteria.

All patients received 1.25 mg/kg of EV intravenously on days 1 and 8 and 200 mg of pembrolizumab on day 1 of a 21-day cycle. Dose modifications or discontinuation of either agent was performed at the discretion of the treating physician. This study was approved by the Institutional Review Board of Osaka University Hospital (No. 23530).

Clinical characteristics and treatment data were collected from the medical records. CDDP eligibility was defined as an estimated glomerular filtration rate ≥ 50 mL/min/1.73 m² and ECOG PS ≤ 1 . Adverse events (AEs) were graded according to the Common Terminology Criteria for Adverse Events, version 6.0. Hypothyroidism and adrenal insufficiency were defined as immune-related AEs (irAEs).

Treatment response was classified as the best overall response based on imaging and clinical evaluations using the Response Evaluation Criteria in Solid Tumors, version 1.1, conducted under routine clinical practice at each institution; these included complete response (CR), partial response (PR), stable disease (SD), or progressive disease (PD). The objective response rate (ORR) comprised CR and PR, and the disease control rate (DCR) included CR, PR, and SD. All data were presented as median (range) or number (%). The cumulative incidence of each AE, dose modifications of EV, progression-free survival (PFS), and overall survival (OS) were calculated using the Kaplan–Meier method.

Patients were divided into two groups (CDDP-eligible and CDDP-ineligible), and efficacy and safety were compared between the groups.

Statistical analysis

The log-rank test was used for between-group comparisons of PFS, the cumulative incidence of each AE, and dose modifications. Statistical analyses were performed using JMP Pro 15.0.0 (SAS Institute Inc., Cary, NC, USA), and $p < 0.05$ was considered statistically significant.

Results

Clinical characteristics and treatment data

The clinical characteristics of the 76 patients are presented in Table 1. The median age was 74 years (range, 41–88 years), and 54 (71.1%) patients were male. A total of 39 (51.3%), 29 (38.2%), and 8 (10.5%) patients had an ECOG PS of 0, 1, and ≥ 2 , respectively. Thirty-five (46.1%) patients were eligible for CDDP, whereas 41 (53.9%) were ineligible. Regarding the histological type, 57 (75.0%) patients had only UC, and 14 (18.4%) had a variant subtype. Primary lesions were in the renal pelvis or ureter in 27 (35.5%) patients, bladder or urethra in 44 (57.9%), and both in 5 (6.6%). Metastatic lesions comprised the lymph node alone in 25 (32.9%) patients, peritoneal dissemination or local recurrence in 16 (21.1%), lung in 17 (22.4%), bone in 12 (15.8%), and liver in 7 (9.2%).

Table 1
Patient characteristics and treatment data (n = 76)

		Total (n = 76)	Eligible (n = 35)	Ineligible (n = 41)	P value
Age (years), median (range)		74 (41–88)	73 (41–88)	77 (57–88)	0.0329*
Sex n (%)	Male	54 (71.1)	21 (60.0)	33 (80.5)	0.0496*
	Female	22 (28.9)	14 (40.0)	8 (19.5)	
ECOG PS n (%)	0	39 (51.3)	22 (62.9)	17 (41.5)	-
	1	29 (38.2)	13 (37.1)	16 (39.0)	
	≥ 2	8 (10.5)	0 (0.0)	8 (19.5)	
CDDP eligibility* n (%)	Eligible	35 (46.1)	35 (100)	0 (0.0)	-
	Ineligible	41 (53.9)	0 (0.0)	41 (100)	
Histological type n (%)	UC only	57 (75.0)	26 (74.3)	31 (75.6)	0.356
	Variant	14 (18.4)	8 (22.8)	6 (14.6)	
	Unknown	5 (6.6)	1 (2.9)	4 (9.8)	
Primary lesion n (%)	Renal pelvis, ureter	27 (35.5)	7 (20.0)	20 (48.8)	0.0070*
	Bladder, urethra	44 (57.9)	27 (77.1)	17 (41.4)	
	Both	5 (6.6)	1 (2.9)	4 (9.8)	
Metastatic lesion n (%)	LN only	25 (32.9)	12 (34.3)	13 (31.7)	0.812
	Lung	17 (22.4)	5 (14.3)	12 (29.3)	0.118
	Bone	12 (15.8)	4 (11.4)	8 (19.5)	0.335
	Liver	7 (9.2)	2 (5.7)	5 (12.2)	0.330
History of local treatment n (%)	Yes	38 (50.0)	14 (40.0)	24 (58.5)	0.107
	No	38 (50.0)	21 (60.0)	17 (41.5)	
History of perioperative treatment n (%)	Yes	22 (28.9)	11 (31.4)	11 (26.8)	0.659
	No	54 (71.1)	24 (68.6)	30 (73.2)	
History of chemotherapy n (%)	Yes	21 (27.6)	10 (28.6)	11 (26.8)	0.866
	No	55 (72.4)	25 (71.4)	30 (73.2)	
History of immunotherapy n (%)	Yes	2 (2.6)	2 (5.7)	0 (0.0)	0.121
	No	74 (97.4)	33 (94.3)	41 (100.0)	

*CDDP eligibility: eligible was defined as eGFR ≥ 50.0 mL/min/1.73 m² and PS ≤ 1.

CDDP: cisplatin; ECOG: Eastern Cooperative Oncology Group; eGFR: estimated glomerular filtration rate; LN: lymph node; PS: performance status; UC: urothelial carcinoma; AE: adverse event; EV: enfortumab vedotin

		Total (n = 76)	Eligible (n = 35)	Ineligible (n = 41)	P value
Premedication with steroids	Yes	62 (81.6)	24 (68.6)	38 (92.7)	0.0069*
n (%)	No	14 (18.4)	11 (31.4)	3 (7.3)	
Initial dose reduction	Yes	6 (7.9)	1 (2.9)	5 (12.2)	0.132
n (%)	No	70 (92.1)	34 (97.1)	36 (87.8)	
AE	Yes	59 (77.6)	26 (74.3)	33 (80.5)	0.518
n (%)	≤G2 / ≥G3	56 (73.7) / 25 (32.9)	25 (71.4) / 11 (31.4)	31 (75.6) / 14 (34.1)	0.680
	No	17 (22.4)	9 (25.7)	8 (19.5)	0.802
Current medication	Ongoing	48 (63.2)	22 (62.9)	26 (63.4)	0.429
n (%)	EV only	44 (57.9)	19 (54.3)	25 (61.0)	
	Discontinuation	28 (36.8)	13 (37.1)	15 (36.6)	
	AE / progression	18 (23.7) / 10 (13.1)	10 (28.6) / 3 (8.5)	8 (19.5) / 7 (17.1)	
Observation period (month), median (range)		5.25 (0.72–10.06)	6.54 (0.72–10.06)	4.50 (0.82–9.37)	0.0147*
*CDDP eligibility: eligible was defined as eGFR ≥ 50.0 mL/min/1.73 m ² and PS ≤ 1.					
CDDP: cisplatin; ECOG: Eastern Cooperative Oncology Group; eGFR: estimated glomerular filtration rate; LN: lymph node; PS: performance status; UC: urothelial carcinoma; AE: adverse event; EV: enfortumab vedotin					

Treatment data are also summarized in Table 1. A total of 38 (50.0%), 22 (28.9%), 21 (27.6%), and 2 (2.6%) patients had a history of local treatment, perioperative treatment, chemotherapy, and immunotherapy, respectively. Premedication with steroids and initial dose reductions were administered to 62 (81.6%) and 6 (7.9%) patients, respectively. AEs of any grade, grade ≤ 2, and grade ≥ 3 occurred in 59 (77.6%), 56 (73.7%), and 25 (32.9%) patients, respectively. EV + P was ongoing in 48 (63.2%) patients, whereas 44 (57.9%) patients received EV monotherapy. EV + P was discontinued owing to AEs in 18 (23.7%) patients and disease progression in 10 (13.1%). The median observation period was 5.25 (range, 0.72–10.06) months.

Efficacy of EV + P treatment

The treatment responses to EV + P were CR in 6 (7.9%) patients, PR in 40 (52.6%), SD in 20 (26.3%), and PD in 10 (13.2%) (Fig. 1a). The ORR was 60.5%, and DCR was 86.8%.

PFS (Fig. 1b) and OS (Online Resource, Supplementary Fig. S1) were calculated after EV + P treatment initiation. Six-month PFS and OS rates were 80.6% and 85.1%, respectively. Median PFS and OS were not reached.

AEs due to EV + P treatment

Table 2 presents a list of the observed AEs. The most frequently recorded AE was skin disorders, which occurred in 33 (43.4%) patients. Peripheral neuropathy, interstitial pneumonia, hyperglycemia, hypothyroidism, and adrenal insufficiency were observed in 11 (14.5%), 6 (7.9%), 4 (5.3%), 3 (3.9), and 2 (2.6%) patients, respectively. AEs of grade ≥ 3 included skin disorders in 8 (10.5%) patients, general malaise in 4 (5.3%), diarrhea in 2 (2.6%), interstitial pneumonia in 2 (2.6%), cytopenia in 4 (5.3%), hyperglycemia in 1 (1.3%), hepatic disorder in 1 (1.3%), and adrenal insufficiency in 1 (1.3%). No grade 5 AEs were recorded in this cohort.

Table 2
List of adverse events (n = 76)

	Any grade			Grade ≥ 3			Grade ≤ 2		
	n (%)			n (%)			n (%)		
	Total (n = 76)	Eligible (n = 35)	Ineligible (n = 41)	Total (n = 76)	Eligible (n = 35)	Ineligible (n = 41)	Total (n = 76)	Eligible (n = 35)	Ineligible (n = 41)
Skin disorders	33 (43.4)	16 (45.7)	17 (41.5)	8 (10.5)	4 (11.4)	4 (9.8)	31 (40.8)	15 (42.9)	16 (39.0)
Peripheral neuropathy	11 (14.5)	4 (11.4)	7 (17.1)	0 (0.0)	0 (0.0)	0 (0.0)	11 (14.5)	4 (11.4)	7 (17.1)
General malaise	10 (13.2)	3 (8.6)	7 (17.1)	4 (5.3)	1 (2.9)	3 (7.3)	7 (9.2)	2 (5.7)	5 (12.2)
Diarrhea	8 (10.5)	4 (11.4)	4 (9.8)	2 (2.6)	0 (0.0)	2 (4.9)	6 (7.9)	4 (11.4)	2 (4.9)
Taste disorders	8 (10.5)	5 (14.3)	3 (7.3)	0 (0.0)	0 (0.0)	0 (0.0)	8 (10.5)	5 (14.3)	3 (7.3)
Interstitial pneumonia	6 (7.9)	4 (11.4)	2 (4.9)	2 (2.6)	2 (5.7)	0 (0.0)	4 (5.3)	2 (5.7)	2 (4.9)
Cytopenia	5 (6.6)	1 (2.9)	4 (9.8)	4 (5.3)	2 (5.7)	2 (4.9)	2 (2.6)	0 (0.0)	2 (4.9)
Hyperglycemia	4 (5.3)	3 (8.6)	1 (2.4)	1 (1.3)	1 (2.9)	0 (0.0)	4 (5.3)	3 (8.6)	1 (2.4)
Hepatic disorders	3 (3.9)	0 (0.0)	3 (7.3)	1 (1.3)	0 (0.0)	1 (2.4)	2 (2.6)	0 (0.0)	2 (4.9)
Hypothyroidism	3 (3.9)	2 (5.7)	1 (2.4)	0 (0.0)	0 (0.0)	0 (0.0)	3 (3.9)	2 (5.7)	1 (2.4)
Adrenal insufficiency	2 (2.6)	2 (5.7)	0 (0.0)	1 (1.3)	1 (2.9)	0 (0.0)	1 (1.3)	1 (2.9)	0 (0.0)
Polyarthrititis	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Others	16 (21.1)	9 (25.7)	7 (17.1)	5 (6.6)	3 (8.6)	2 (4.9)	16 (21.1)	9 (25.7)	7 (17.1)
For CDDP eligibility, eligible was defined as eGFR ≥ 50.0 mL/min/1.73 m ² and PS ≤ 1 .									
CDDP: cisplatin; eGFR: estimated glomerular filtration rate; PS: performance status									

The cumulative incidence of each AE was calculated (Fig. 1c). In patients who experienced each AE, the median time to onset of skin disorders was 20 (2–173) days, peripheral neuropathy was 66 (2–117) days, interstitial pneumonia was 86 (42–230) days, hyperglycemia was 15 (4–58) days, and irAEs was 69 (53–145) days.

Comparisons of the CDDP-eligible and CDDP-ineligible groups

Patient characteristics and treatment data were compared between the CDDP-eligible and CDDP-ineligible groups (Table 1). Patients were significantly older ($p = 0.0329$), and the male-to-female ratio was significantly higher ($p = 0.0496$) in the CDDP-ineligible group compared with the CDDP-eligible group. The proportion of patients with primary tumors of the upper urinary tract (renal pelvis or ureter) in the CDDP-ineligible group was significantly higher ($p = 0.0070$) than that in the CDDP-eligible group, which may be due to the higher likelihood of developing renal impairment induced by disease progression or treatment. No significant differences in the histological type, metastatic lesions, history of each treatment, or incidence of AEs were observed between the groups. A detailed list of the AEs in each group is provided in Table 2.

No significant differences in treatment response, ORR (68.6% vs. 53.7%), DCR (88.6% vs. 85.4%) (Fig. 2a), or PFS (Fig. 2b) were observed between the groups. Moreover, the cumulative incidence of common AEs (skin disorders, peripheral neuropathy, interstitial pneumonia, hyperglycemia, and irAEs) did not differ between the groups (Fig. 3).

Considering EV dose modifications, the median cumulative incidence was 4.83 months (Fig. 4a). The minimum EV dose was 1.25 mg/kg in 51.3% of patients, 1.0 mg/kg in 21.0%, 0.75 mg/kg in 5.3%, and 0 mg/kg in 22.4% (Fig. 4b). The average minimum EV dose was 0.89 mg/kg. No significant differences in the cumulative incidence of EV dose modifications were observed between the CDDP-eligible and CDDP-ineligible groups (Fig. 4c). The minimum EV doses for each group are shown in Fig. 4d. No significant differences were observed between the groups in terms of the average minimum EV dose (0.86 vs. 0.92 mg/kg; $p = 0.781$).

Discussion

We assessed the efficacy of EV + P treatment in the present study; the ORR and DCR were 60.5% and 86.8%, respectively, and the 6-month PFS and OS were 80.6 and 85.1%, respectively. These results seem comparable to previous reports in both clinical trial and real-world settings. Specifically, the ORR and DCR were 67.8% and 76.5%, respectively, in a clinical trial setting [7] and 73.3% and 82.6%, respectively, in a real-world report [8]. Six-month PFS and OS rates were approximately 75% and 90%, respectively, in the clinical trial setting and approximately 70% and > 80%, respectively, in the real-world report.

During the median 5.25 months of EV + P treatment, AEs of any grade and grade ≥ 3 occurred in 77.6% and 32.9% of the patients in this study, respectively. These incidence rates were relatively lower than those reported previously [7, 8]. In the clinical trial setting [7], AEs of any grade and grade ≥ 3 occurred in 97.0% and 55.9% of patients, respectively, during a median 9.4 months. In the real-world report [8], AEs of any grade and grade ≥ 3 occurred in 91.7% and 28.3% of patients, respectively, during a median follow-up 14.0 months. The differences in incidence rates between this study and previous reports were likely due to differences in ethnic backgrounds or the observation period of each cohort. In particular, the incidence rate of peripheral neuropathy was lower in the current study than in previous reports (any grade/grade ≥ 3 , 14.5%/0.0% vs. 50.0%/3.6% [7] and 39.9%/6.0% [8]). The rates of peripheral neuropathy in our study were also lower than those reported in a previous real-world cohort of late-line EV monotherapy with a median follow-up of 8 months (any grade/grade ≥ 3 , 25.6%/9.6%) [9]. However, our observed rates were comparable with those of a Japanese cohort receiving EV monotherapy (any grade/grade ≥ 3 , 14.3%/0.0%) [10], suggesting a lower incidence of

peripheral neuropathy during EV administration in Japanese patients than in those with other ethnicities. Furthermore, grade 5 AEs did not occur in the current study, whereas some grade 5 AEs have been previously reported, including multiple organ dysfunction syndrome, diarrhea, asthenia, immune-related lung disease and myocarditis, and sepsis [7, 8]. Importantly, the time to onset of peripheral neuropathy, interstitial pneumonia, and irAEs was ≥ 60 days in the current study, indicating that careful long-term follow-up may be required, despite an acceptable safety profile.

Efficacy and safety did not significantly differ between CDDP-ineligible and CDDP-eligible patients, which is consistent with a previous report in a clinical trial setting [11]. Specifically, the ORR was reported as 63.9% in the CDDP-ineligible group and 70.8% in the CDDP-eligible group, compared with 53.7% vs. 68.6% in the current study; furthermore, 32.5% and 24.7% of patients achieved CR in the CDDP-ineligible and CDDP-eligible groups, respectively, compared with 11.4% and 4.9% in the current study. Although GC plus nivolumab is also a first-line systemic treatment for patients with advanced UC, with better outcomes than conventional GC chemotherapy [12], this regimen cannot be administered to CDDP-ineligible patients. In contrast, EV + P treatment is indicated for almost all patients, regardless of CDDP eligibility.

Reducing the EV dose by 0.25 mg/kg is recommended after the occurrence of AEs that preclude continued administration at the same dose. This study demonstrated that more than half of patients continued EV treatment without dose reduction at a median of 5.25 months after EV + P treatment initiation. To the best of our knowledge, no comprehensive studies on dose modifications of EV in EV + P treatment have been previously reported. In a study on advanced UC in American cancer clinics, Mamtani et al. reported that the median EV dose was 1.1 mg/kg during a median treatment duration of 5 months in a late-line EV monotherapy setting [13]. In this setting, patients received 1.25 mg/kg of EV on days 1, 8, and 15 of a 28-day cycle. More patients received EV treatment without dose reduction in the current study than in this previous EV monotherapy report, which was likely due to the better general condition of treatment-naïve patients or to the lower frequency of EV administration compared with late-line settings.

Safety and real-world use of this combination treatment could provide more valuable data because the treatment is likely to be incorporated into perioperative treatment in the near future. Several limitations should be acknowledged. First, this study had a retrospective design and limited patient information. Incomplete records or selection bias may have affected the data collection. Second, the observation period was too short to evaluate robust outcomes. Lastly, the indicators for dose modifications depended on the physicians at each institution. Consequently, further studies with larger cohorts are required to validate our results.

In conclusion, the short-term efficacy of first-line EV + P treatment for patients with advanced UC seemed comparable to that in previous reports, and the safety profile was acceptable, regardless of CDDP eligibility.

Declarations

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Author's contribution: Takuji Hayashi: Data collection, Data analysis, Manuscript writing, Atsunari Kawashima: Project development, Data collection, Data analysis, Manuscript editing, Yoshiyuki Yamamoto: Data collection, Manuscript editing, Yu Ishizuya: Data collection, Manuscript editing, Hiromu Horitani: Data collection, Shunsuke Inoguchi: Data collection, Yuki Horibe: Data collection, Nesrine Sassi: Manuscript editing, Yujiro Hayashi: Data collection, Takeshi Ujike: Data collection, Kosuke Nakano: Data collection, Osamu Miyake: Data collection, Hitoshi Takayama: Data collection, Koji Yazawa: Data collection, Kenji Tsutsui: Data collection, Yutaka Kurahashi.: Data collection, Wataru

Nakata: Data collection, Toshihisa Asakura: Data collection, Tetsuya Murakawa: Data collection, Koichi Okada: Data collection, Masashi Nakayama: Data collection, Taigo Kato: Manuscript editing, Koji Hatano: Manuscript editing, Norio Nonomura: Project development

Data availability: All data generated or analyzed during this study are included in this published article and its supplementary information files.

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Consent to participate: The need for informed consent was waived by the Institutional Review Board of Osaka University Hospital.

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Figures

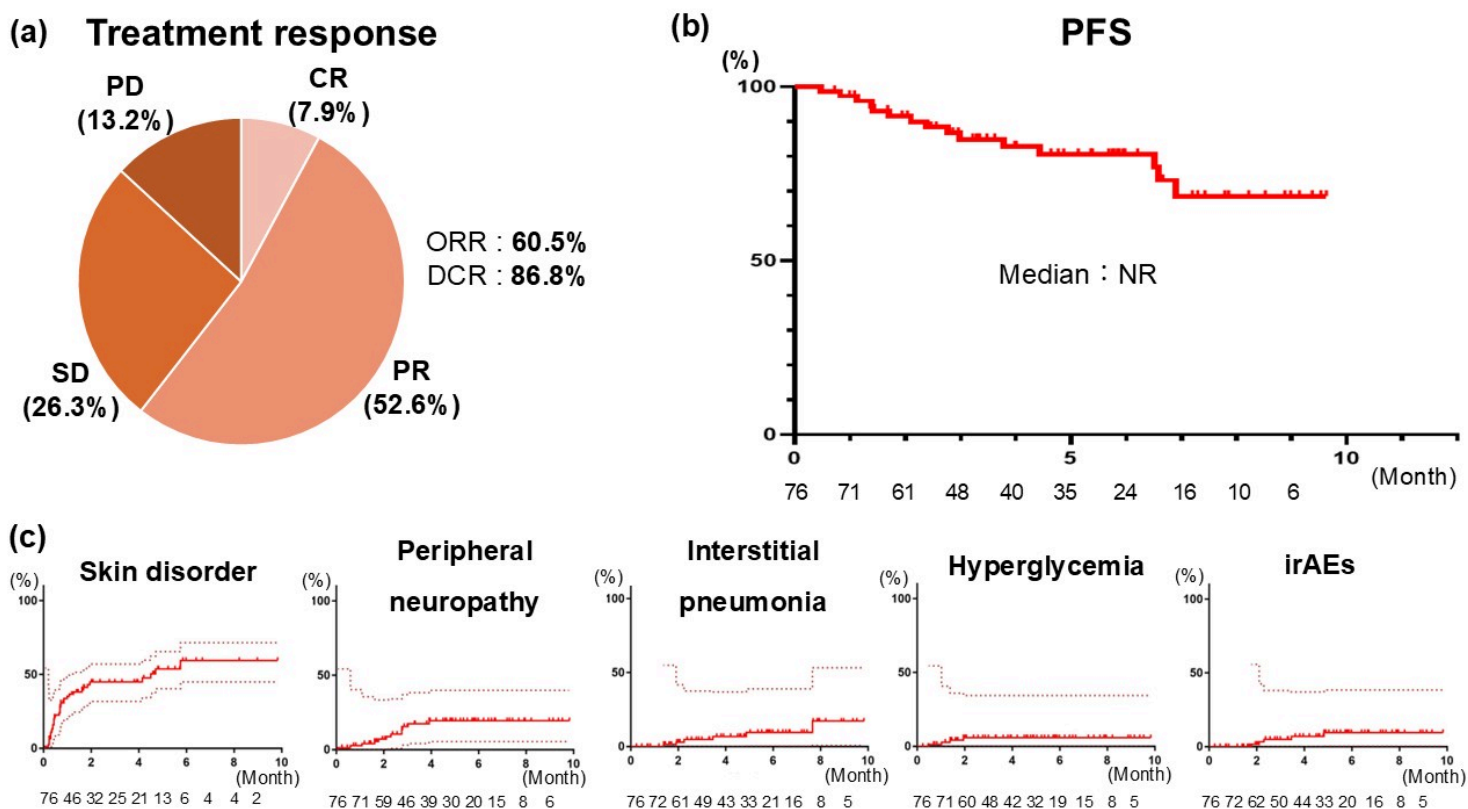


Figure 1

(a) The proportion of treatment responses to EV+P. ORR comprised CR and PR. DCR comprised CR, PR, and SD. (b) Kaplan–Meier curve of PFS. Six-month PFS was 80.6%. Median PFS was not reached. Numbers at risk are presented under the curve. (c) Kaplan–Meier curves of the cumulative incidence of each common AE after induction of EV+P treatment. Numbers at risk are presented under the curve.

CR: complete response; DCR: disease control rate; EV+P: enfortumab vedotin plus pembrolizumab;

NR: not reached, ORR: objective response rate; PD: progressive disease; PFS: progression-free survival; PR: partial response; SD: stable disease; AE: adverse event; irAE: immune-related AE

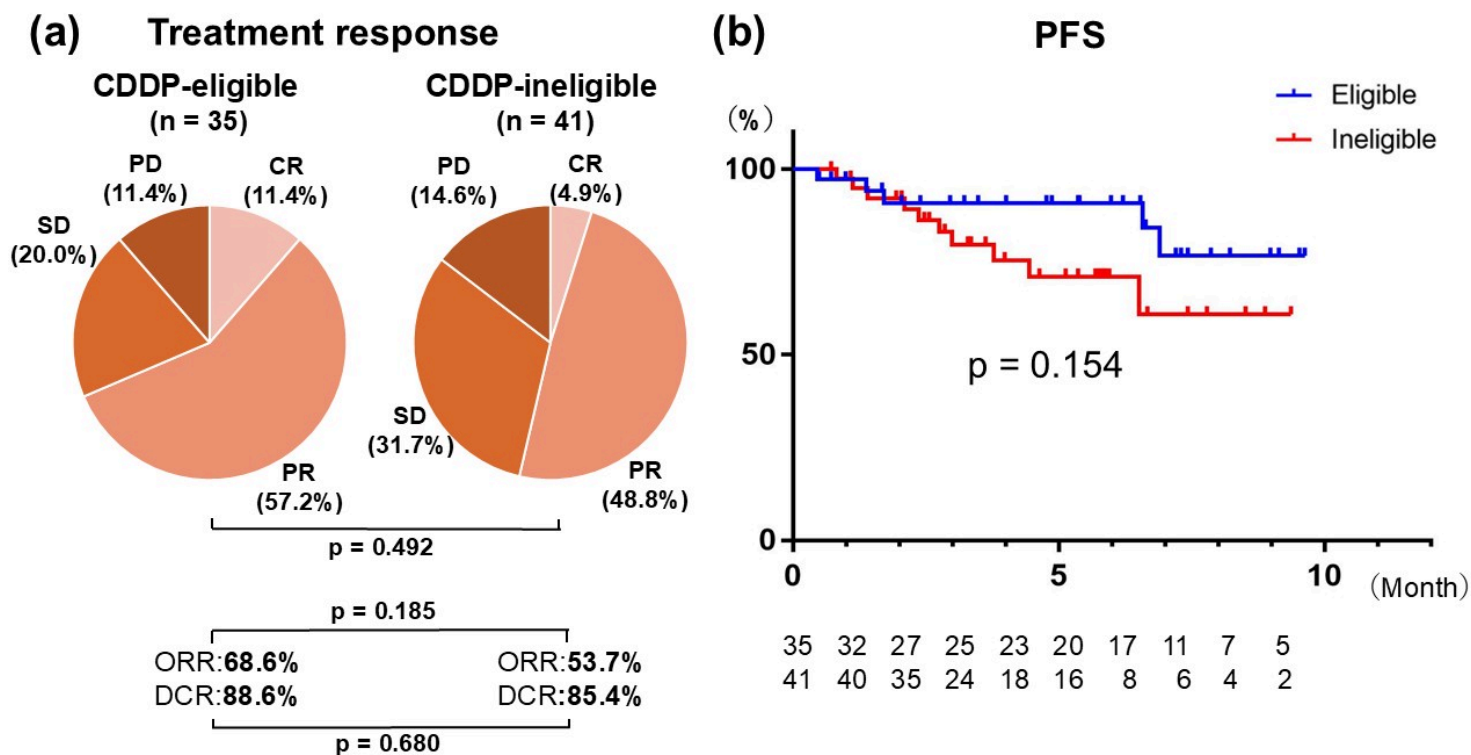


Figure 2

(a) The proportion of treatment responses, ORR, and DCR to EV+P treatment in CDDP-eligible and CDDP-ineligible patients. (b) A comparison of PFS between the two groups based on CDDP eligibility. Numbers at risk are presented under the curve.

CDDP: cisplatin; CR: complete response; DCR: disease control rate; EV+P: enfortumab vedotin plus pembrolizumab; ORR: objective response rate; PD: progressive disease; PFS: progression-free survival; PR: partial response; SD: stable disease

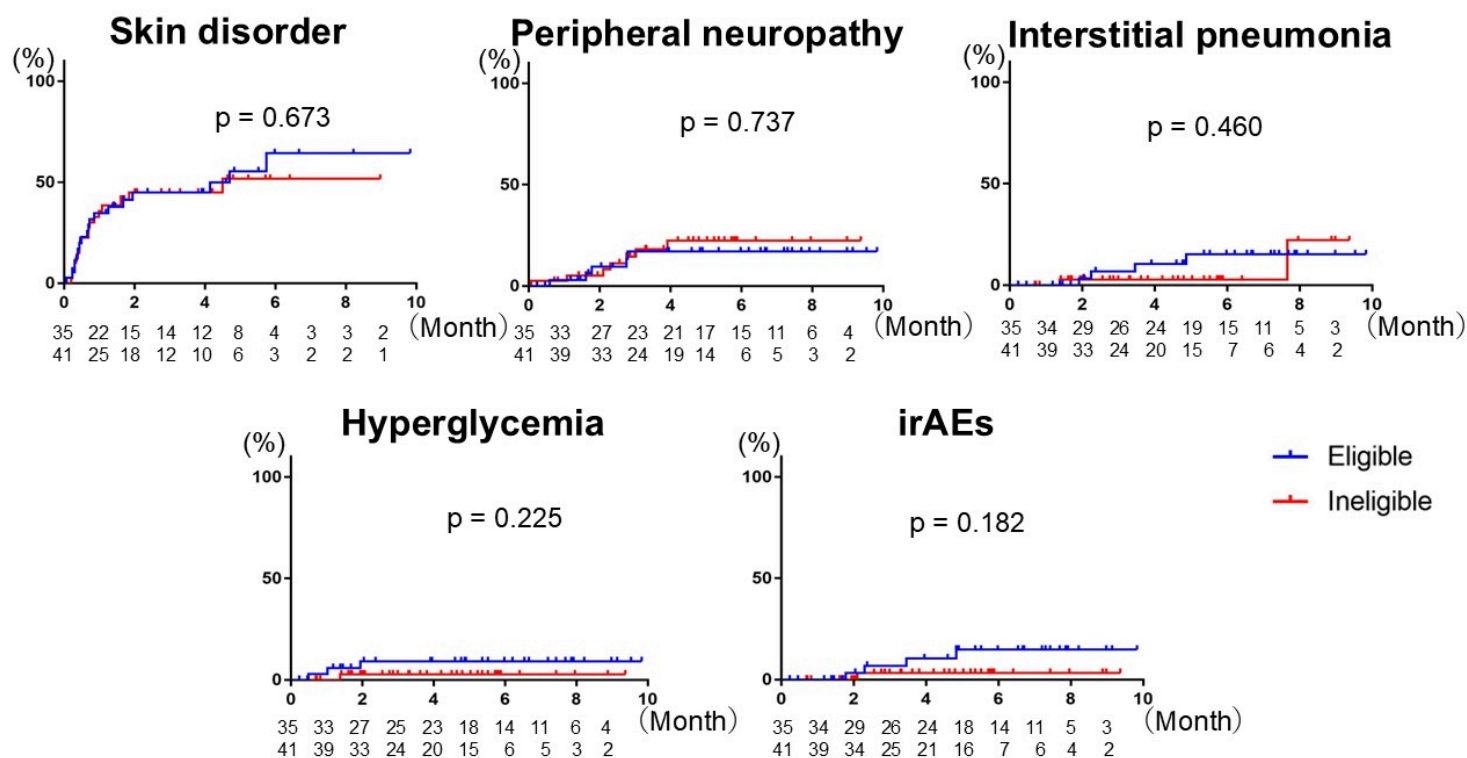


Figure 3

A comparison of the cumulative incidence of each common AE after induction of EV+P treatment between the two groups based on CDDP eligibility. Numbers at risk are presented under the curve.

AE: adverse event; CDDP: cisplatin; EV+P: enfortumab vedotin plus pembrolizumab; irAE: immune-related AE

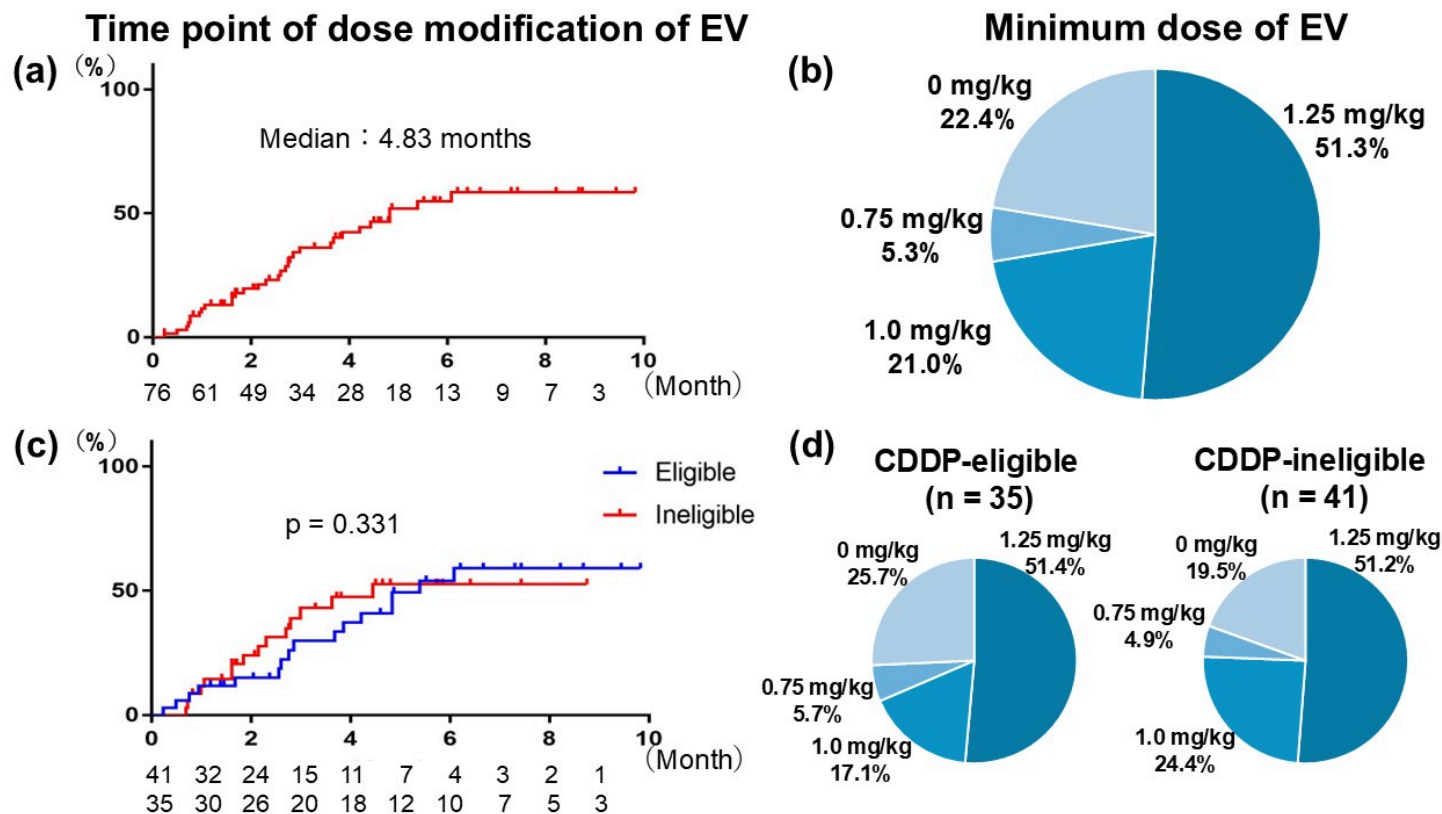


Figure 4

(a) Kaplan–Meier curve of EV dose modifications after induction of EV+P treatment. Median time point was 4.83 months. Numbers at risk are presented under the curve. (b) The proportion of minimum EV doses received by patients during EV+P treatment. (c) A comparison of the cumulative incidence of EV dose modifications between the two groups based on CDDP eligibility. Numbers at risk are presented under the curve. (d) A comparison of the proportion of minimum EV doses received during EV+P treatment between the two groups based on CDDP eligibility.

CDDP: cisplatin; EV: enfortumab vedotin, EV+P: enfortumab vedotin plus pembrolizumab

Supplementary Files

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- [FigS1.jpg](#)