

# EV-201 Cohort 1: Long-term Results of Enfortumab Vedotin Monotherapy for Locally Advanced or Metastatic Urothelial Cancer Previously Treated with Platinum and a PD-1 or PD-L1 Inhibitor (NCT03219333)

Peter H. O'Donnell<sup>1</sup>, Matthew D. Galsky<sup>2</sup>, Jonathan E. Rosenberg<sup>3</sup>, Daniel P. Petrylak<sup>4</sup>, Arjun V. Balar<sup>5</sup>, Bradley A. McGregor<sup>6</sup>, Elisabeth I. Heath<sup>7</sup>, Evan Y. Yu<sup>8</sup>, David I. Quinn<sup>9</sup>, Noah M. Hahn<sup>10</sup>, Mary Campbell<sup>11</sup>, Shang-Ying Liang<sup>11</sup>, Joyce Steinberg<sup>12</sup>, Yohann Loriot<sup>13</sup>

<sup>1</sup>University of Chicago, Chicago, IL; <sup>2</sup>Tisch Cancer Institute, Icahn School of Medicine at Mount Sinai, New York, NY; <sup>3</sup>Memorial Sloan Kettering Cancer Center, New York, NY; <sup>4</sup>Yale Cancer Center, New Haven, CT; <sup>5</sup>Perlmutter Cancer Center at NYU Langone Health, New York, NY; <sup>6</sup>Dana-Farber Cancer Institute, Boston, MA; <sup>7</sup>Karmanos Cancer Institute/Wayne State University, Detroit, MI; <sup>8</sup>Fred Hutchinson Cancer Research Center, Seattle, WA; <sup>9</sup>Keck School of Medicine, University of Southern California, Los Angeles, CA; <sup>10</sup>Greenberg Bladder Cancer Institute, Johns Hopkins Medical Center, Baltimore, MD; <sup>11</sup>Seattle Genetics, Inc., Bothell, WA; <sup>12</sup>Astellas Pharma, Inc., Northbrook, IL; <sup>13</sup>Institut de Cancérologie Gustave Roussy, Villejuif, France

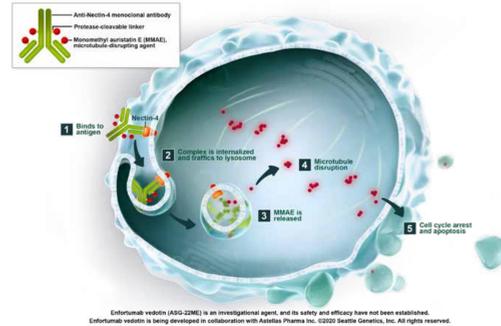
## Advanced Urothelial Carcinoma Has a High Unmet Need

- Locally advanced and metastatic urothelial carcinoma is incurable with poor overall survival (OS), particularly in patients who progress on or after platinum-containing chemotherapy
  - Taxanes/vinorelbine showed a median OS of 7.4 months and a 12-month OS rate of 30.7% in patients who previously received platinum-containing therapy<sup>1</sup>. OS data following PD-1/PD-L1 inhibitors and platinum-containing chemotherapy are limited.
- In the EV-201 study (NCT03219333; EudraCT Number 2017-003479-78), enfortumab vedotin, an antibody-drug conjugate, showed an objective response rate (ORR) of 44% in Cohort 1, which enrolled patients who previously received both a prior PD-1/PD-L1 inhibitor and platinum-containing chemotherapy in the neoadjuvant/adjuvant or locally-advanced/metastatic setting<sup>2</sup>
  - In Dec 2019, the US FDA granted accelerated approval to enfortumab vedotin based on the data from EV-201 Cohort 1 (01 Mar 2019 data cutoff)
- Herein, we present updated OS and safety data from EV-201 Cohort 1 with an additional year of follow-up (15 Mar 2020 data cutoff)

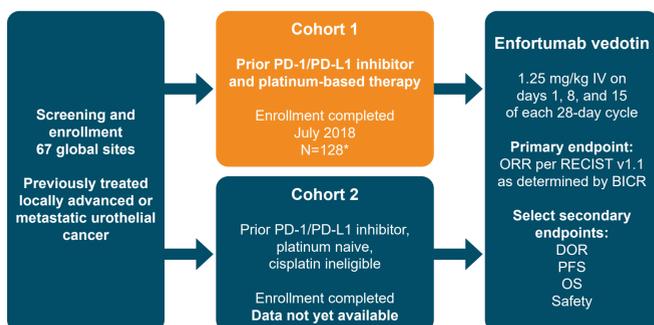
## Enfortumab Vedotin: A Nectin-4 Directed Antibody-Drug Conjugate

### Proposed Mechanism of Action of Enfortumab Vedotin

- Enfortumab vedotin is directed against Nectin-4, a cell surface adhesion protein on target cells, and upon internalization releases monomethyl auristatin E (MMAE), microtubule-disrupting agent.



## EV-201: Single-Arm, Pivotal Phase 2 Trial



\* 3 patients did not receive enfortumab vedotin treatment: one each due to clinical deterioration, patient decision, and low hemoglobin after enrollment

BICR=blinded independent central review; DOR=duration of response; ORR=objective response rate; OS=overall survival; PFS=progression-free survival

## Based on this long-term follow-up of EV-201 Cohort 1:

- The median OS was 12.4 months (95% CI: 9.46, 15.57), with a median follow-up of 22.3 months
- At key milestones of 12 and 18 months, one-half and approximately one-third of patients, respectively, were alive
- Enfortumab vedotin was tolerable with a manageable safety profile consistent with previous reports

## EV-201: Cohort 1 Key Eligibility Criteria

- Histologically documented urothelial carcinoma, including squamous differentiation or mixed cell types
- Metastatic disease or locally advanced disease that is not resectable
- Previous treatment with platinum-containing chemotherapy and a PD-1/PD-L1 inhibitor
- Progression during or following most recent treatment
- Measurable disease by RECIST v1.1
- ECOG ≤1
- No ongoing sensory or motor neuropathy ≥Grade 2
- No active CNS metastases
- No uncontrolled diabetes mellitus\*

\* Hemoglobin A1C (HbA1c) ≥8% or HbA1c of 7% to <8% with associated diabetes symptoms, polyuria or polydipsia, that were not otherwise explained

## EV-201: Cohort 1 Patient Disposition

6 subjects remain on treatment; disease progression is the most common reason for treatment discontinuation

Patients with metastatic urothelial cancer who received enfortumab vedotin	Cohort 1 (N=125) n (%)
Patients continuing treatment	6 (4.8)
Patients in follow-up for progression/survival	25 (20)
Patients off study	94 (75.2)
Reason for treatment discontinuation	
Progressive disease	77 (61.6)
Progression by RECIST	71 (56.8)
Progression by clinical symptoms	6 (4.8)
Any adverse event	24 (19.2)
Patient decision	14 (11.2)
Physician decision	4 (3.2)
<b>Median time on treatment (min, max)</b>	<b>4.6 months (0.5, 27.3)</b>

- Enrollment from Oct 2017 to July 2018
- 128 enrolled; 125 treated
  - 3 withdrew prior to treatment
  - Analyses based on 125 treated patients (Full Analysis Set)
- Max time on treatment: 27.3 months and ongoing

## EV-201: Cohort 1 Demographics and Disease Characteristics<sup>2</sup>

	Patients (N=125)
Male sex, n (%)	88 (70)
Age, years	
Median (min, max)	69 (40, 84)
≥75 years, n (%)	34 (27)
ECOG PS of 1, n (%)	85 (68)
Primary tumor location, n (%)	
Bladder/other	81 (65)
Upper tract	44 (35)
Number of prior systemic therapies*, median (range)	3 (1, 6)
≥1 Bellmunt adverse prognostic factors**	101/124 (81)
≥2 Bellmunt adverse prognostic factors**	52/124 (42)
Metastasis sites, n (%)	
Lymph nodes only	13 (10)
Visceral disease	112 (90)
Liver	50 (40)
PD-L1 status by combined positive score <sup>†</sup>	
<10	78/120 (65)
≥10	42/120 (35)

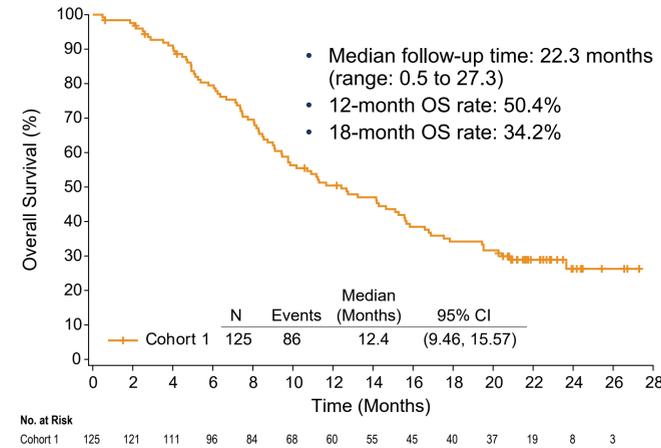
\* Patients with 1 prior therapy had platinum and a PD-1 or PD-L1 inhibitor in combination

\*\* Bellmunt risk score was not available for 1 patient

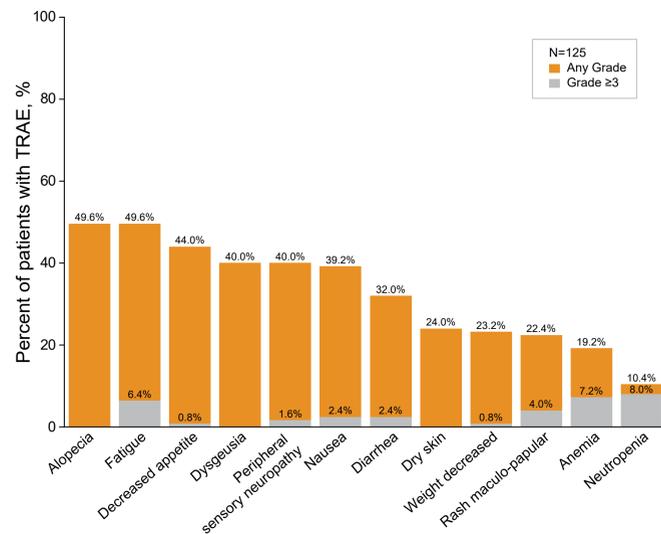
<sup>†</sup> 5 patients were not evaluable for PD-L1

- Study subjects are representative of the advanced urothelial carcinoma population, predominantly older males with the majority ECOG 1, primary site of disease in the lower urinary tract, and median 3 lines of prior therapy
- Most had poor prognostic factors, 81% had at least 1 Bellmunt risk factor, 90% had visceral disease, and 40% had liver metastases

## EV-201: Cohort 1 Kaplan-Meier Estimates of Survival



## EV-201: Cohort 1 Treatment-Related Adverse Events by Preferred Term in ≥20% of Patients (Any Grade) or ≥5% (≥Grade 3)



- Few discontinuations due to treatment-related AEs (12%)
  - Peripheral sensory neuropathy was the most common (6%)
- 1 treatment-related death reported by the investigator
  - Interstitial lung disease
  - Confounded by high-dose corticosteroid use and suspected *Pneumocystis jirovecii* pneumonia

## Acknowledgements

Thank you to our patients and their families for their participation in the study, and to all research personnel for their support of this important trial.

## EV-201: Cohort 1 Treatment-Related Adverse Events of Interest (AEOI)

### Events categorized based on standardized MedDRA queries or sponsor-specific queries

- Peripheral neuropathy: 50% any grade, 3% ≥Grade 3
  - No Grade 4 events
  - Sensory events most common (44%, all patients)
  - Of patients with peripheral neuropathy at enrollment, 47% did not worsen
  - 76% had resolution or events ongoing at Grade 1 at last follow-up
- Skin reactions: 51% any grade, 13% ≥Grade 3
  - No Grade 4 events
  - 95% had resolution or improvement at last follow-up
  - Of those with ongoing skin reactions, most (80%) were Grade 1
- Hyperglycemia: 11% any grade, 6% ≥Grade 3
  - 52% of patients with pre-existing hyperglycemia did not worsen
  - 1 Grade 4 event, resolved, no need for ongoing medication
  - 79% had resolution or improvement at last follow-up

Data cutoff: 15 March 2020

## EV-201: Cohort 1 Long-term Follow-up Summary and Conclusions

- Enfortumab vedotin: First in class ADC demonstrating substantial clinical activity in patients who progressed after a PD-1/PD-L1 inhibitor and platinum-containing chemotherapy
  - Previously presented ORR of 44% (CR 12%) and median DOR of 7.6 months supported US FDA accelerated approval
- Long-term follow-up from EV-201 Cohort 1 continues to demonstrate favorable benefit-risk profile
  - With median follow-up time of 22.3 months:
    - Median OS is 12.4 months (95% CI: 9.46, 15.57) with one-third being alive at 18 months
    - Safety profile remains tolerable and manageable
    - Rates of hyperglycemia, peripheral neuropathy, and skin reactions were consistent with prior reports and the USPI
- Other active enfortumab vedotin trials include:
  - EV-103** (NCT03288545) **Cohort K** (Enfortumab vedotin ± pembrolizumab) currently enrolling 1L la/mUC patients who are ineligible for cisplatin
  - EV-302** (NCT04223856) in untreated locally advanced/metastatic urothelial cancer treated with enfortumab vedotin and pembrolizumab, or chemotherapy (see ESMO ePoster 2065)
  - EV-303/KEYNOTE-905** (NCT03924895) in cisplatin-ineligible patients with MIBC treated with perioperative pembrolizumab and enfortumab vedotin plus cystectomy, versus pembrolizumab plus cystectomy, versus cystectomy alone
  - EV-202** (NCT04225117) in patients with previously treated locally advanced or metastatic solid tumors treated with enfortumab vedotin

## References

- Bellmunt J, et al. N Engl J Med. 2017;376:1015-26.
- Rosenberg JE, et al. J Clin Oncol. 2019;37:2592-2600.

Copies of this e-poster obtained through QR, AR and/or text key codes are for personal use only and may not be reproduced without written permission of the author. Peter O'Donnell, podonnel@medicine.bsd.uchicago.edu



Disclosures: This study was funded by Seattle Genetics, Inc. and Astellas Pharma, Inc. PHO, MDG, JER, DPP, AVB, BAM, EIH, EYY, DLQ, NMH, and YL received research funding from Seattle Genetics, Inc./Astellas Pharma, Inc. PHO received honoraria (institutional) from Seattle Genetics, Inc./Astellas Pharma, Inc. EYY received honoraria from Seattle Genetics, Inc./Astellas Pharma, Inc. MDG, JER, DLQ hold a consulting and advisory role with Seattle Genetics, Inc. and Astellas Pharma, Inc. AVB holds a consulting and advisory role with Seattle Genetics, Inc. BAM holds a consulting and advisory role with Astellas Pharma, Inc. MC and S-YL are employees of and have ownership interest in Seattle Genetics, Inc. JS is an employee of Astellas Pharma, Inc.