First-Line Systemic Treatment Patterns in Metastatic Urothelial Carcinoma in US Community Oncology Practices

Dhaval Shah, MD, MBA[1]; Asit Paul, MD, PhD[2]; Deepak Kilari, MD[3]; Roby Thomas, MD[4]; John Li, MPH, PhD[5]; Bogdana Schmidt, MD, MPH[6]; Alejandro Sanchez, MD[6]; Rushir Choksi, MD[4]; Gino Cioffi, MPH, PhD[5]; Steven Champaloux, MPH, PhD[5]; Don Parris, MPH, PhD[5]; Anna Rui, MPH[5]; Mike Gart, MBA[5]; Brandon Wang, MBA[5]; Prateesh Varughese, PharmD, MBA[5]; Jeffrey Scott, MD[5]; Manish Kohli, MD[6]

[1]Medical Oncology Hematology Consultants, Newark, DE, USA; [2]Massey Comprehensive Cancer Center, Virginia Commonwealth University, Richmond, VA, USA; [3]Medical College of Wisconsin, Milwaukee, WI, USA; [4]University of Pittsburgh Medical Center, Pittsburgh, PA, USA; [5]PrecisionQ, IntegraConnect, West Palm Beach, FL, USA; [6]University of Utah, Salt Lake City, UT, USA

INTRODUCTION

- The treatment landscape for metastatic urothelial carcinoma (mUC) in the first-line (1L) setting has evolved with the recent approval of enfortumab vedotin EV + pembrolizumab (EV+P).
- The real-world adoption of these therapies in US community oncology practices is unknown.
- This work aimed to assess current utilization patterns of 1L treatment regimens for mUC.

METHODS

Data Source: This retrospective study utilized the Integra PrecisionQ database, a fully de-identified oncology dataset comprising records of ~2.2 million cancer patients across >500 US care sites.

Study Population:

- Adults with mUC initiating 1L systemic therapy between 01-Dec-2023 and 07-Jul-2025 were assessed.
- Regimens were grouped as follows:
  - Enfortumab vedotin + pembrolizumab (EV+P)
  - EV monotherapy/other (EV Mono/Other)
  - Chemotherapy (Chemo)*
  - Immunotherapy (IO)
  - Immunotherapy + Chemotherapy (IO+Chemo)
  - All other regimens grouped as "Other"

Statistical Analysis:

- Descriptive statistics summarized demographic and clinical characteristics by treatment group.
- Chi-squared tests assessed categorical variables.
- Patient characteristics included:
  - Age at index
  - Sex
  - Race
  - Ethnicity
  - Payer
  - Eastern Cooperative Oncology Group Performance (ECOG PS)
  - Metastatic type
  - National Cancer Institute Comorbidity Index (NCI CI) — a claims-based score quantifying the burden of comorbid conditions; higher values indicate greater comorbidity
- Treatment utilization by year was also assessed.

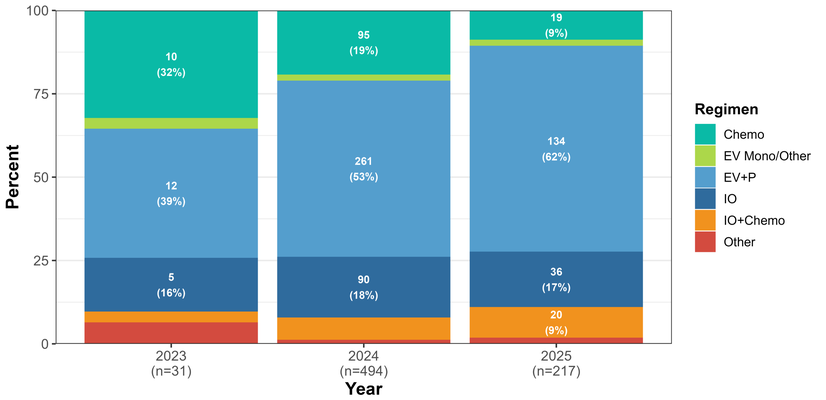
**Chemo includes 71% platinum-based (e.g., gemcitabine + cisplatin/carboplatin) and 29% non-platinum regimens.*

RESULTS

Table 1: Demographic and Clinical Characteristics Stratified by Regimen

Characteristic	Overall N=742	EV+P n=407	EV Mono/ Other n=14	Chemo n=124	IO n=131	IO+Chemo n=54	Other n=12	*P* value
Sex								0.007
Female	204 (27%)	98 (24%)	7 (50%)	43 (35%)	30 (23%)	20 (37%)	6 (50%)	
Male	538 (73%)	309 (76%)	7 (50%)	81 (65%)	101 (77%)	34 (63%)	6 (50%)	
Race								0.2
White	452 (61%)	244 (60%)	7 (50%)	82 (66%)	82 (63%)	33 (61%)	4 (33%)	
Black or African American	39 (5.3%)	20 (4.9%)	1 (7.1%)	11 (8.9%)	4 (3.1%)	3 (5.6%)	0 (0%)	
Asian	14 (1.9%)	7 (1.7%)	0 (0%)	1 (0.8%)	5 (3.8%)	1 (1.9%)	0 (0%)	
Other/Unknown	237 (32%)	136 (33%)	6 (43%)	30 (24%)	40 (31%)	17 (31%)	8 (67%)	
Ethnicity								0.2
Not Hispanic or Latino	496 (67%)	264 (65%)	6 (43%)	87 (70%)	91 (69%)	42 (78%)	6 (50%)	
Hispanic or Latino	21 (2.8%)	13 (3.2%)	0 (0%)	3 (2.4%)	2 (1.5%)	2 (3.7%)	1 (8.3%)	
Other/Unknown	225 (30%)	130 (32%)	8 (57%)	34 (27%)	38 (29%)	10 (19%)	5 (42%)	
Payer								0.13
Commercial	105 (14%)	57 (14%)	1 (7.1%)	15 (12%)	23 (18%)	5 (9.3%)	4 (33%)	
Medicare/Medicaid	379 (51%)	220 (54%)	8 (57%)	60 (48%)	66 (50%)	23 (43%)	2 (17%)	
Self Pay	23 (3.1%)	12 (3.0%)	0 (0%)	4 (3.2%)	6 (4.6%)	0 (0%)	1 (8.3%)	
Other/Unknown	238 (32%)	119 (29%)	5 (36%)	46 (37%)	36 (27%)	27 (50%)	5 (42%)	
ECOG PS								0.6
0-1	467 (63%)	262 (64%)	8 (57%)	80 (65%)	74 (56%)	36 (67%)	7 (58%)	
2+	131 (18%)	70 (17%)	4 (29%)	20 (16%)	30 (23%)	5 (9.3%)	2 (17%)	
Unknown	144 (19%)	75 (18%)	2 (14%)	24 (19%)	27 (21%)	13 (24%)	3 (25%)	
Metastatic Type								0.007
De novo	673 (91%)	382 (94%)	13 (93%)	104 (84%)	119 (91%)	45 (83%)	10 (83%)	
Recurrent	69 (9.3%)	25 (6.1%)	1 (7.1%)	20 (16%)	12 (9.2%)	9 (17%)	2 (17%)	
Region								0.2
Northeast	103 (14%)	48 (12%)	1 (7.1%)	16 (13%)	22 (17%)	15 (28%)	1 (8.3%)	
South	509 (69%)	286 (71%)	12 (86%)	88 (72%)	87 (66%)	26 (48%)	10 (83%)	
Midwest	63 (8.5%)	35 (8.7%)	0 (0%)	11 (8.9%)	10 (7.6%)	6 (11%)	1 (8.3%)	
West	62 (8.4%)	34 (8.4%)	1 (7.1%)	8 (6.5%)	12 (9.2%)	7 (13%)	0 (0%)	
Unknown	5	4	0	1	0	0	0	
Age at Index								0.003
≤65 years	165 (22%)	92 (23%)	2 (14%)	35 (28%)	14 (11%)	18 (33%)	4 (33%)	
>65 years	577 (78%)	315 (77%)	12 (86%)	89 (72%)	117 (89%)	36 (67%)	8 (67%)	
NCI CI								0.063
NCI CI >0.47	125 (45%)	58 (42%)	0 (0%)	25 (42%)	27 (56%)	12 (63%)	3 (50%)	
NCI CI ≤0.47	150 (55%)	79 (58%)	6 (100%)	34 (58%)	21 (44%)	7 (37%)	3 (50%)	
Unknown	467	270	8	65	83	35	6	

Figure 1: 1L Regimen Distribution by Year



Study Population:

A total of 742 patients initiated 1L therapy

- EV+P: n=407
- EV mono/other: n=14
- Chemo: n=124
- IO: n=131
- IO+chemo: n=54
- Other: n=12

Demographic and Clincical Differences:

- Most patients presented with de novo metastases (91%), with the highest rates in the EV+P (94%) and IO (91%) groups and lowest in the IO+chemo (83%) and chemo (84%) groups (*P*=0.007).
- Patients treated with IO alone were more often >65 years (86%) compared with a lower proportion in the IO+chemo (67%), chemo (72%), and EV+P (77%) groups (*P*=0.003).
- Male predominance was greater in the IO (77%) and EV+P (76%) groups than in IO+chemo (63%) or chemo (65%) groups (*P*=0.007).

Differences by Year:

- Chemo use declined significantly from 32% in late 2023 to 9% in 2025.
- In contrast, EV+P rose from 39% to 62% from 2023 to 2025 (*P*<0.001).

- In this real-world analysis, 1L mUC treatment in US community oncology practices shifted rapidly toward EV+P, with declining use of chemotherapy.
- These real-world patterns reflect rapid adoption and evolving treatment selection, underscoring the need to evaluate downstream outcomes and tolerability.
- Persistent chemotherapy may reflect cisplatin-eligible patients with established protocols, provider familiarity, or payer/access constraints delaying EV+P adoption.