

Regimen Reference Order – GENU – gemcitabine + CARBOplatin

ARIA: GENU - [gem + CARBO (Bladder) (ADJ)]

GENU - [gem + CARBO (Bladder) (MET)]

Planned Course: Every 21 days for 4 cycles (Adjuvant) OR 6 cycles (Metastatic)

Indication for Use: Urothelial Cancer

CVAD: At Provider's Discretion

Proceed with treatment if:

Day 1

ANC equal to or greater than $1.5 \times 10^9/L$ AND Platelets equal to or greater than $100 \times 10^9/L$

❖ Contact Physician if parameters not met

Day 8

ANC equal to or greater than $1 \times 10^9/L$ AND Platelets equal to or greater than $75 \times 10^9/L$

❖ **OMIT DAY 8 OF CURRENT CYCLE IF CBC PARAMETERS ARE NOT MET**

Note: Consult with Genitourinary Medical Oncologist for direction on dose reduction(s) prior to patient's next scheduled cycle if Day 8 is omitted

SEQUENCE OF MEDICATION ADMINISTRATION

Pre-treatment Requirements

Drug	Dose	CCMB Administration Guideline
Not Applicable		

Treatment Regimen – GENU – gemcitabine + CARBOplatin

Establish primary solution 500 mL of: normal saline

Drug	Dose	CCMB Administration Guideline
Day 1		
aprepitant	125 mg	Orally 1 hour pre-chemotherapy
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy
dexamethasone	12 mg	Orally 30 minutes pre-chemotherapy
gemcitabine	1000 mg/m^2	IV in normal saline 250 mL over 30 minutes
CARBOplatin	AUC 5 mg/mL.min; maximum dose 750 mg (see table below)	IV in D5W 250 mL over 30 minutes

Day 8		
dexamethasone	8 mg	Orally 30 minutes pre-chemotherapy
gemcitabine	1000 mg/m ²	IV in normal saline 250 mL over 30 minutes

In the event of an infusion-related hypersensitivity reaction, refer to the 'Hypersensitivity Reaction Standing Order'

REQUIRED MONITORING

All Cycles

Day 1

- CBC, serum creatinine, urea and liver enzymes as per Physician Orders

Day 8

- CBC as per Physician Orders

Recommended Support Medications		
Drug	Dose	CCMB Administration Guideline
aprepitant	80 mg	Orally once daily on Days 2 and 3
dexamethasone	8 mg	Orally once daily on Days 2 and 3
metoclopramide	10 – 20 mg	Orally every 4 hours as needed for nausea and vomiting

DISCHARGE INSTRUCTIONS

- Instruct patient to continue taking anti-emetic(s) at home
- Reinforce applicable safe handling precautions of medications, blood and body fluids for 48 hours after completion of chemotherapy

ADDITIONAL INFORMATION

- CARBOplatin dose considerations:
 - CCMB Genitourinary DSG uses **actual body weight** to calculate GFR
 - CCMB Genitourinary DSG uses a maximum CARBOplatin dose of 750 mg for this regimen
 - If calculated CARBOplatin dose differs **more than 10%** from prescribed CARBOplatin dose, contact the prescriber

CARBOplatin Dosing Calculations per CCMB Genitourinary DSG										
Calculation of CARBOplatin dose: (maximum 750 mg)										
Dose (mg) = target AUC (GFR + 25)										
$\text{GFR} = \frac{N \times (140 - \text{age in years}) \times \text{Actual Body Weight (kg)}}{\text{serum creatinine in micromol/L}} = \text{___ mL/min}$										
N = 1.23 in males N = 1.04 in females										
<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px;">AUC (mg/mL.min)</td> </tr> <tr> <td style="border-top: 1px solid black; text-align: center; padding: 2px;">5</td> </tr> </table>	AUC (mg/mL.min)	5	X	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px;">GFR + 25 (mL/min)</td> </tr> <tr> <td style="border-top: 1px solid black; text-align: center; padding: 2px;">___ + 25</td> </tr> </table>	GFR + 25 (mL/min)	___ + 25	=	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Total Dose (mg)</td> </tr> <tr> <td style="border-top: 1px solid black; text-align: center; padding: 2px;">___</td> </tr> </table>	Total Dose (mg)	___
AUC (mg/mL.min)										
5										
GFR + 25 (mL/min)										
___ + 25										
Total Dose (mg)										

AUC = Area Under Curve

The estimated creatinine clearance is based on limited evidence. Sound clinical judgment and interpretation of the estimation are required, because the equation above may not be appropriate for some patient populations (for example, acute renal failure).