

Regimen Reference Order

GAST – CARBOplatin + gemcitabine (biliary tract)

ARIA: GAST - [CARBO + gemcitabine]

Planned Course: Every 21 days for 8 cycles
Indication for Use: Biliary Tract Cancer; Unresectable or Metastatic
CVAD: At Provider’s Discretion

Proceed with treatment if:
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**

SEQUENCE OF MEDICATION ADMINISTRATION

Pre-treatment Requirements		
Drug	Dose	CCMB Administration Guideline
Not Applicable		

Treatment Regimen – GAST – CARBOplatin + gemcitabine		
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
All doses will be automatically rounded that fall within CCMB Approved Dose Bands. See Dose Banding document for more information		

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, electrolytes, liver enzymes and total bilirubin 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 dosing considerations:
 - CCMB Gastrointestinal DSG uses **actual body weight** to calculate GFR
 - CCMB Gastrointestinal 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 Gastrointestinal DSG										
<i>Calculation of CARBOplatin dose: (maximum 750 mg)</i>										
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: 5px;">AUC (mg/mL.min)</td> </tr> <tr> <td style="border-top: 1px solid black; text-align: center; padding: 5px;">5</td> </tr> </table>	AUC (mg/mL.min)	5	X	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;">GFR + 25 (mL/min)</td> </tr> <tr> <td style="border-top: 1px solid black; text-align: center; padding: 5px;">___ + 25</td> </tr> </table>	GFR + 25 (mL/min)	___ + 25	=	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Total Dose (mg)</td> </tr> <tr> <td style="border-top: 1px solid black; height: 20px;"></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)