

Regimen Reference Order

BRST – gemcitabine + CARBOplatin (Days 1 and 8)

ARIA: - BRST – [gem + CARBO (day 1 + 8)]

Planned Course: Every 21 days until disease progression or unacceptable toxicity

Indication for Use: Breast Cancer Metastatic or Recurrent

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 – BRST – gemcitabine + CARBOplatin (Days 1 and 8)

Establish primary solution 500 mL of: normal saline

Drug	Dose	CCMB Administration Guideline
Day 1		
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 2 mg/mL.min; maximum dose 300 mg (see table below)	IV in D5W 250 mL over 30 minutes
Day 8		
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 2 mg/mL.min; maximum dose 300 mg (see table below)	IV in D5W 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, liver enzymes, total bilirubin and electrolytes as per Physician Orders

Day 8

- CBC

Recommended Support Medications

Drug	Dose	CCMB Administration Guideline
dexamethasone	8 mg	Orally once daily on Days 2, 3, 9 and 10
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 Breast DSG uses **actual body weight** to calculate GFR
 - CCMB Breast DSG uses a maximum CARBOplatin dose of 300 mg for this regimen
 - If calculated CARBOplatin differs **more than 10%** from prescribed CARBOplatin dose, contact the prescriber

CARBOplatin Dosing Calculations per CCMB Breast DSG										
Calculation of CARBOplatin dose: (maximum 300 mg)										
Dose (mg) = target AUC (GFR + 25)										
$\text{GFR} = \frac{N \times (140 - \text{age in years}) \times \text{Actual Body Weight (kg)}}{\text{serum creatinine in } \mu\text{mol/L}} = \text{___ mL/min}$										
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="text-align: center; border-top: 1px solid black; padding: 5px;"> 2 </td> </tr> </table>	AUC (mg/mL.min)	2	X	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;"> GFR + 25 (mL/min) </td> </tr> <tr> <td style="text-align: center; border-top: 1px solid black; 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="text-align: center; border-top: 1px solid black; height: 20px;"> </td> </tr> </table>	Total Dose (mg)	
AUC (mg/mL.min)										
2										
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___ + 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).