

Regimen Reference Order – BRST – gemcitabine + CARBOplatin

ARIA: - BRST – [gemcitabine + CARBOplatin]

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

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	750 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	750 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, liver enzymes, total bilirubin and electrolytes as per Physician Orders

Day 8

- CBC

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 Breast DSG uses **actual body weight** to calculate GFR
 - CCMB Breast DSG uses a maximum CARBOplatin dose of 750 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										
<i>Calculation of CARBOplatin dose: (maximum 750 mg)</i>										
Dose (mg) = target AUC (GFR + 25)										
$\text{GFR} = \frac{N \times (140 - \text{age in years}) \times \text{Actual Body Weight (kg)}}{\text{serum creatinine in } \mu\text{mol/L}} = \text{___ mL/min}$										
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;"> 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="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; padding: 5px;"> _____ </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)