

Regimen Reference Order – CNS – CARBOplatin + tamoxifen

ARIA: CNS – [CARBO + tamoxifen (Male Dosing)]

CNS – [CARBO + tamoxifen (Female Dosing)]

Planned Course: Until disease progression or unacceptable toxicity (1 cycle = 28 days)

Indication for Use: Recurrent Glioma

CVAD: At Provider's Discretion

Proceed with treatment if:

CARBOplatin:

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

tamoxifen:

- Continued throughout therapy regardless of CBC. If CARBOplatin is held for toxicity, tamoxifen is continued

❖ Contact Physician if parameters not met

SEQUENCE OF MEDICATION ADMINISTRATION

Pre-treatment Requirements

Drug	Dose	CCMB Administration Guideline
Not Applicable		

Treatment Regimen – CNS – CARBOplatin + tamoxifen

Establish primary solution 500 mL of: D5W

Drug	Dose	CCMB Administration Guideline
Cycle 1		
Days 1 to 28		
tamoxifen	Days 1 to 7: 20 mg	Orally twice daily (Self-administered at home)
	Days 8 to 14: 40 mg	
	Days 15 to 21: 60 mg	
	Days 22 to 28: 80 mg	
Day 1 ONLY		
aprepitant	125 mg	Orally 1 hour pre-chemotherapy
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy
dexamethasone	12 mg	Orally 30 minutes pre-chemotherapy

CARBOplatin	AUC 5 mg/mL.min; maximum dose 750 mg (see table below)	IV in D5W 250 mL over 30 minutes
Cycle 2 and Onwards		
Days 1 to 28		
tamoxifen	FOR MALE PATIENTS: 100 mg	Orally twice daily (Self-administered at home)
	FOR FEMALE PATIENTS: 80 mg	
Day 1 ONLY		
aprepitant	125 mg	Orally 1 hour pre-chemotherapy
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy
dexamethasone	12 mg	Orally 30 minutes pre-chemotherapy
CARBOplatin	AUC 5 mg/mL.min; maximum dose 750 mg (see table below)	IV in D5W 250 mL over 30 minutes
tamoxifen available dosage strength: 20 mg tablet		
Classification: Non-Cytotoxic, Hazardous		

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

REQUIRED MONITORING

All Cycles

- CBC, serum creatinine, urea, electrolytes, liver enzymes, total bilirubin, albumin, glucose, 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	20 mg	Orally every 4 hours as needed for nausea and vomiting

DISCHARGE INSTRUCTIONS

- Instruct patient to continue taking anti-emetic(s) at home
- tamoxifen has potential for drug-drug interactions. Patient should notify clinic prior to starting any new medication
- Avoid grapefruit and grapefruit juice, Seville oranges (i.e. orange marmalade) and starfruit
- Reinforce applicable safe handling precautions of medications, blood and body fluids for 48 hours after completion of chemotherapy

ADDITIONAL INFORMATION

- CARBOplatin dose considerations:
 - CCMB CNS DSG uses **actual body weight** to calculate GFR
 - CCMB CNS 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 CNS 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="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)	
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5										
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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).