

Regimen Reference Order

GYNE – CARBOplatin desensitization + PACLitaxel

ARIA: GYNE - [CARBO (DESENS) + PACL q21d]

Planned Course: Every 21 days for 6 cycles
Indication for Use: Ovarian or Endometrial Cancer / Eligible patients with previous hypersensitivity reactions to CARBOplatin

Alert: Desensitization protocol

CARBOplatin:

- *CARBOplatin is prepared in a total volume of 500 mL by Pharmacy*
- *CARBOplatin must be the first chemotherapy agent administered when given in combination with another chemotherapy agent*
- *IV tubing is primed with CARBOplatin (Cytotoxic)*
- *CARBOplatin is administered slowly following specified rate increases. CARBOplatin infusion takes approximately 4.5 hours to complete*

CVAD: At Provider’s Discretion

Proceed with treatment if:

Cycle 1

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

Cycle 2 and Onwards

- *ANC equal to or greater than $1.2 \times 10^9/L$ AND Platelets equal to or greater than $75 \times 10^9/L$*
- ❖ *Contact Physician if parameters not met*

SEQUENCE OF MEDICATION ADMINISTRATION

Pre-treatment Requirements		
Drug	Dose	CCMB Administration Guideline
Not Applicable		

Treatment Regimen – GYNE – CARBOplatin desensitization + PACLitaxel		
Establish primary solution 500 mL of: normal saline		
Drug	Dose	CCMB Administration Guideline
cetirizine	20 mg	Orally 1 hour prior to CARBOplatin
acetaminophen	650 mg	Orally 1 hour prior to CARBOplatin

aprepitant	125 mg	Orally 1 hour pre-chemotherapy
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy
dexamethasone	20 mg	IV in normal saline 50 mL over 15 minutes 1 hour prior to CARBOplatin <i>*Nursing Alert: CARBOplatin starts 1 hour after completion of dexamethasone infusion</i>
famotidine	20 mg	IV in normal saline 50 mL over 15 minutes 45 minutes prior to CARBOplatin
Wait 45 minutes after completion of IV pre-medication(s) before starting CARBOplatin		
CARBOplatin	AUC 6 mg/mL.min; maximum dose 900 mg (see table below)	IV in D5W 500 mL following the administration rates below: Step 1: 2 mL/hour for 15 minutes, then Step 2: 4 mL/hour for 15 minutes, then Step 3: 6 mL/hour for 15 minutes, then Step 4: 8 mL/hour for 15 minutes, then Step 5: 10 mL/hour for 15 minutes, then Step 6: 15 mL/hour for 15 minutes, then Step 7: 30 mL/hour for 15 minutes, then Step 8: 60 mL/hour for 15 minutes, then Step 9: 80 mL/hour for 15 minutes, then Step 10: 100 mL/hour for 15 minutes, then Step 11: 120 mL/hour for 15 minutes, then Step 12: 140 mL/hour for 15 minutes, then Step 13: 160 mL/hour for 15 minutes, then Step 14: 180 mL/hour for 15 minutes, then Step 15: 200 mL/hour for 15 minutes, then Step 16: 400 mL/hour for 15 minutes, then Step 17: 600 mL/hour until infusion is complete <i>*Alert: Pharmacy to ensure final volume in bag = 500 mL</i> <i>*Alert: CARBOplatin must be the first chemotherapy agent administered when given in combination with another chemotherapy agent</i> <i>*Nursing Alert: IV tubing is primed with CARBOplatin</i>
PACLitaxel	175 mg/m ²	IV in normal saline 500 mL over 3 hours following the administration rates below: <ul style="list-style-type: none"> Administer at 100 mL/hour for 15 minutes, then Administer remaining volume over 2 hours and 45 minutes Use non-DEHP bags and non-DEHP administration sets with 0.2 or 0.22 micron filter <i>*Nursing Alert: Gently invert bag 8 to 10 times immediately prior to administration of PACLitaxel to evenly distribute the drug</i>
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

- CBC, serum creatinine and liver enzymes as per Physician Orders
- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O₂ saturation) at baseline and as clinically indicated
- No observation period is required after CARBOplatin or PACLitaxel administration. Patient can be discharged from treatment room if stable whether they had a reaction or not

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

- Patients should be instructed to contact their cancer team immediately if symptoms of hypersensitivity reactions occur after discharge
- 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

- Oncologist must write first prescription of CARBOplatin desensitization protocol
- Once the patient requires CARBOplatin desensitization protocol, all subsequent CARBOplatin doses must be given using CARBOplatin desensitization protocol
- Due to the duration of treatment, administration site restrictions may be in place for CARBOplatin desensitization when given in combination with PACLitaxel
- PACLitaxel may cause progressive, irreversible neuropathy
- CARBOplatin dose considerations:
 - CCMB Gynecological DSG uses **actual body weight** to calculate GFR
 - CCMB Gynecological DSG uses a maximum CARBOplatin dose of 900 mg for this regimen
 - If calculated CARBOplatin dose differs **more than 10%** from prescribed CARBOplatin dose, contact the prescriber

CARBOplatin Dosing Calculations per CCMB Gynecological DSG									
Calculation of CARBOplatin dose: (maximum 900 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 = 1.04 in females									
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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 may not be appropriate for some patient populations (for example, acute renal failure).