

Regimen Reference Order – ESOPH – PACLitaxel + CARBOplatin + radiation

ARIA: ESOPH – [PACLitaxel + CARBO + RT (NEOADJ)]

Planned Course: Once weekly for 5 weeks with concurrent radiation

Indication for Use: Esophageal Cancer

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 are not met

SEQUENCE OF MEDICATION ADMINISTRATION

Pre-treatment Requirements

Drug	Dose	CCMB Administration Guideline
Not Applicable		

Treatment Regimen – ESOPH – PACLitaxel + CARBOplatin + radiation

Establish primary solution 500 mL of: normal saline

Drug	Dose	CCMB Administration Guideline
Days 1, 8, 15, 22 and 29		
famotidine	40 mg	Orally 1 hour prior to PACLitaxel
cetirizine	10 mg	Orally 1 hour prior to PACLitaxel
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy
dexamethasone	20 mg	IV in normal saline 50 mL over 15 minutes
Wait 30 minutes after completion of IV pre-medication(s) before starting PACLitaxel		
PACLitaxel	50 mg/m ²	IV in normal saline 250 mL over 1 hour <i>Use non-DEHP bags and non-DEHP administration sets with 0.2 or 0.22 micron filter</i> <i>Concentration dependent drug: Pharmacy will adjust diluent volume to ensure drug stability</i>
CARBOplatin	AUC 2 mg/mL.min; maximum dose 300 mg (see table below)	IV in D5W 250 mL over 30 minutes <i>Concentration dependent drug: Pharmacy will adjust diluent volume to ensure drug stability</i>

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

REQUIRED MONITORING

Days 1, 8, 15, 22 and 29

- CBC, serum creatinine, urea, electrolytes, liver enzymes and total bilirubin 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 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
dexamethasone	8 mg	Orally once daily on Days 2, 3, 9, 10, 16, 17, 23, 24, 30 and 31 (i.e. for 2 days beginning the day after each dose of chemotherapy)
metoclopramide	10 to 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

- PACLitaxel may cause progressive, irreversible neuropathy
- CARBOplatin dose considerations:
 - CCMB Thoracic DSG uses **actual body weight** to calculate GFR
 - CCMB Thoracic DSG uses a maximum CARBOplatin dose of 300 mg for this regimen
 - If calculated CARBOplatin dose differs **more than 10%** from prescribed CARBOplatin dose, contact the prescriber

CARBOplatin Dosing Calculations per CCMB Thoracic DSG <i>Calculation of CARBOplatin dose: (maximum 300 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="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">AUC (mg/mL.min)</td> </tr> <tr> <td style="text-align: center; border-top: 1px solid black;">2</td> </tr> </table>	AUC (mg/mL.min)	2	X	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">GFR + 25 (mL/min)</td> </tr> <tr> <td style="text-align: center; border-top: 1px solid black;">___ + 25</td> </tr> </table>	GFR + 25 (mL/min)	___ + 25	=	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Total Dose (mg)</td> </tr> <tr> <td style="text-align: center; border-top: 1px solid black;"> </td> </tr> </table>	Total Dose (mg)	
AUC (mg/mL.min)										
2										
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)