Regimen Reference Order

ESOPH – PACLitaxel + CARBOplatin with concurrent radiation

ARIA: ESOPH - [PACL+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 x 10^9/L AND Platelets equal to or greater than 100 x 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 with concurrent radiation

Establish primary solution 500 mL of: normal saline

Drug	Dose	CCMB Administration Guideline
Days 1, 8, 15, 22 and 29		
cetirizine	20 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 **1 hour** prior to PACLitaxel **Nursing Alert: PACLitaxel starts **1 hour after completion** of dexamethasone infusion*
Wait 1 hour after completion of IV pre-medication(s) before starting PACLitaxel		
PACLitaxel	50 mg/m^2	IV in normal saline 250 mL over 1 hour, following the administration rates below: • Administer at 100 mL/hour for 15 minutes, then • Administer remaining volume over 45 minutes *Use non-DEHP bags and non-DEHP administration sets with 0.2 or 0.22 micron filter* **Nursing Alert: Gently invert bag 8 to 10 times immediately prior to administration of PACLitaxel to evenly distribute the drug*
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

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 O_2 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 – 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
- Since treatment is given concurrently with radiation, site restrictions are in place

CARBOplatin Dosing Calculations per CCMB Thoracic DSG

Calculation of CARBOplatin dose: (maximum 300 mg)

Dose (mg) = target AUC (GFR + 25)

$$\text{GFR} = \frac{\text{N} \times (140 - \text{age in years}) \times \text{Actual Body Weight (kg)}}{\text{serum creatinine in micromol/L}} = \_\_\_ \text{ mL/min}$$

N = 1.23 in males
N = 1.04 in females

$$\frac{\text{AUC (mg/mL.min)}}{2} \times \frac{\text{GFR + 25 (mL/min)}}{\_\_\_\_ + 25} = \text{Total Dose (mg)}$$

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).