ADULT Updated: April 9, 2024

Regimen Reference Order

THOR – DOXOrubicin + CISplatin + cyclophosphamide

ARIA: LUNG - [DOXO + CIS + cyclo]

Planned Course: Limited stage disease: Every 21 days for 2 to 4 cycles

OR

Metastatic disease: Every 21 days for 6 to 8 cycles

Indication for Use: Thymoma

CVAD: Preferred (VESICANT INVOLVED)

Proceed with treatment if:

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

- Creatinine clearance greater than 45 mL/minute
 - Contact Physician if parameters not met

Note: Hepatitis B serology results must be reviewed in accordance with CCMB Policy Hepatitis B Monitoring for Oncology and Hematology Patients

SEQUENCE OF MEDICATION ADMINISTRATION

| | Pre-treatment Requirements | | | | |
|--|----------------------------|------|-------------------------------|--|--|
| | Drug | Dose | CCMB Administration Guideline | | |
| Instruct patient to start vigorous oral pre-hydration (600-900 mL) the morning of cyclophosphamide tre (Self-administered at home) | | | | | |

Treatment Regimen – THOR – DOXOrubicin + CISplatin + cyclophosphamide Establish primary solution 500 mL of: normal saline Drug Dose CCMR Administration Guideline

| Drug | Dose | CCMB Administration Guideline |
|-------------------|-----------------------|--|
| magnesium sulfate | 2 g | IV in normal saline 1000 mL over 2 hours (Pre hydration) |
| aprepitant | 125 mg | Orally 1 hour pre-chemotherapy |
| ondansetron | 16 mg | Orally 30 minutes pre-chemotherapy |
| dexamethasone | 12 mg | Orally 30 minutes pre-chemotherapy |
| OLANZapine | 2.5 mg | Orally 30 minutes pre-chemotherapy |
| DOXOrubicin | 50 mg/m ² | IV push over 10 to 15 minutes |
| CISplatin | 50 mg/m ² | IV in normal saline 500 mL over 1 hour *Alert: CISplatin infusion must be complete prior to mannitol administration |
| mannitol | 12.5 g | IV in normal saline 500 mL over 1 hour (Post hydration) *Alert: diluent volume and duration of infusion are different than standards used in other regimens |
| cyclophosphamide | 500 mg/m ² | IV in normal saline 500 mL over 1 hour |

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

REQUIRED MONITORING

Hepatitis B serology

· Hepatitis B surface antigen and Hepatitis B core antibody (drawn within preceding 5 years)

Cardiac Monitoring

• Left Ventricular Ejection Fraction (LVEF) monitoring is recommended at baseline and as clinically indicated (consider MUGA every 4 cycles)

All Cycles

- CBC, serum creatinine, urea, electrolytes and liver enzymes as per Physician Orders
- Baseline blood pressure prior to magnesium infusion and repeat 15 minutes after start of magnesium infusion

| 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, 3 and 4 | | |
| OLANZapine | 2.5 mg | Orally the evening of Day 1 then twice daily on Days 2, 3 and 4. Also use OLANZapine 2.5 to 5 mg AS NEEDED for breakthrough nausea and vomiting (including Days 1 to 4) up to a maximum of 10 mg per day. Contact clinic if nausea/vomiting is not adequately controlled | | |

DISCHARGE INSTRUCTIONS

- Instruct patient to:
 - o Continue taking anti-emetic(s) at home
 - o Maintain oral intake of 2000 mL (8 glasses) of fluid daily at home
 - Empty bladder every 2 hours while awake and at bedtime for 24 hours after each dose of cyclophosphamide
 - o Obtain immediate assistance as per your clinic's contact instructions if:
 - Symptoms of hemorrhagic cystitis (e.g. dysuria, hematuria)
 - Unable to drink recommended amount of fluid
- Reinforce applicable safe handling precautions of medications, blood and body fluids for 48 hours after completion of chemotherapy

ADDITIONAL INFORMATION

- CISplatin is ototoxic and nephrotoxic
- · CISplatin can cause hypomagnesemia
- Due to the risk of reactivation of Hepatitis B virus (HBV) while on this treatment regimen, prescriber must adhere to CCMB Policy Hepatitis B Monitoring for Oncology and Hematology Patients for ordering and interpreting HBV serology and prescribing antiviral prophylaxis
- Cumulative anthracycline dose (e.g. epiRUBicin, DOXOrubicin) dose should be calculated. If exceeding recommended
 lifetime anthracycline dose thresholds and patient is benefiting from ongoing anthracycline therapy, adding
 dexrazoxane may be considered by the medical oncologist (see SUPP dexrazoxane)

