

Regimen Reference Order – THOR – PEMEtrexed (NSCLC – 2nd line)

ARIA: LUNG – [PEMEtrexed (NSCLC) 2nd line]

LUNG – PEMEtrexed support (NSCLC)

Planned Course: Every 21 days until disease progression or unacceptable toxicity

Indication for Use: Lung Cancer Non-Small Cell Metastatic

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 not met

SEQUENCE OF MEDICATION ADMINISTRATION

Pre-treatment Requirements

Drug	Dose	CCMB Administration Guideline
folic acid	1 mg	Orally daily beginning 7 – 14 days prior to first dose of PEMEtrexed and continuing daily until 21 days after the last dose of PEMEtrexed (Self-administered at home)
vitamin B12	1000 mcg	Intramuscularly 7 – 14 days prior to first dose of PEMEtrexed (Note: vitamin B12 continues every 9 weeks throughout treatment and for one additional dose upon discontinuation of PEMEtrexed)
dexamethasone	8 mg	Orally once daily the day before, day of and the day after each dose of PEMEtrexed (Higher or additional doses are permitted) (Self-administered at home)

Treatment Regimen – THOR – PEMEtrexed (NSCLC – 2nd line)

Establish primary solution 500 mL of: normal saline

Drug	Dose	CCMB Administration Guideline
PEMEtrexed	500 mg/m ²	IV in normal saline 100 mL over 10 minutes
vitamin B12	1000 mcg	Intramuscularly once every 9 weeks throughout treatment and for one additional dose upon discontinuation of PEMEtrexed *Nursing Alert: vitamin B12 will be given on Day 1 of Cycles 4, 7, 10, 13, etc (continued every 3 cycles) until PEMEtrexed is discontinued plus one additional dose *Alert: The last dose of vitamin B12 will be given either 3 weeks, 6 weeks, or 9 weeks after the patient's last dose of PEMEtrexed, depending on when they received their last dose of vitamin B12

All doses will be automatically rounded that fall within the DSG Approved Dose Bands. See THOR DSG – 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, urea, electrolytes, liver enzymes and total bilirubin as per Physician Orders

Recommended Support Medications

Drug	Dose	CCMB Administration Guideline
metoclopramide	10 – 20 mg	Orally every 4 hours as needed for nausea and vomiting

DISCHARGE INSTRUCTIONS

- Instruct patient to continue taking folic acid, dexamethasone and anti-emetic(s) at home
- vitamin B12 is part of this treatment regimen. Patient should notify clinic if they are receiving vitamin B12 for other indications
- Reinforce applicable safe handling precautions of medications, blood and body fluids for 48 hours after completion of chemotherapy

ADDITIONAL INFORMATION

- folic acid, vitamin B12 and dexamethasone are prescribed to decrease PEMEtrexed toxicity
- Non-Steroidal Anti-Inflammatory drugs (NSAIDs) may increase the toxicity of PEMEtrexed. Hold NSAIDs for 2 days before, the day of and for 2 days after PEMEtrexed
- Support protocol under **PEME Support (NSCLC)** in the “Lung Cancer” folder is to be used to order folic acid and the first and last dose of vitamin B12