

Regimen Reference Order – THOR – CARBOplatin + irinotecan

ARIA: LUNG – [CARBOplatin + irinotecan]

Planned Course: Every 28 days for 6 cycles

Indication for Use: Small Cell Lung 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 not met**

SEQUENCE OF MEDICATION ADMINISTRATION

Pre-treatment Requirements

Drug	Dose	CCMB Administration Guideline
Not Applicable		

Treatment Regimen – THOR – CARBOplatin + irinotecan

Establish primary solution 500 mL of: normal saline

Drug	Dose	CCMB Administration Guideline
Day 1		
aprepitant	125 mg	Orally 1 hour pre-chemotherapy
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy
dexamethasone	12 mg	Orally 30 minutes pre-chemotherapy
CARBOplatin	AUC 5 mg/mL.min; maximum dose 750 mg (see table below)	IV in D5W 250 mL over 30 minutes
atropine	0.6 mg	IV push over 2 to 3 minutes prior to irinotecan May be repeated once if diarrhea occurs during irinotecan infusion
irinotecan	50 mg/m ²	IV in D5W 250 mL over 30 minutes
Days 8 and 15		
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy
dexamethasone	12 mg	Orally 30 minutes pre-chemotherapy
atropine	0.6 mg	IV push over 2 to 3 minutes prior to irinotecan May be repeated once if diarrhea occurs during irinotecan infusion
irinotecan	50 mg/m ²	IV in D5W 250 mL over 30 minutes

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

REQUIRED MONITORING

All Cycles

Day 1

- CBC, serum creatinine, urea, electrolytes, liver enzymes and total bilirubin as per Physician Orders

Days 8 and 15

- CBC as per Physician Orders

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 for 2 days starting the day after chemotherapy on Days 2, 9 and 16
prochlorperazine	10 mg	Orally every 4 to 6 hours as needed for nausea and vomiting
loperamide	2 – 4 mg	Orally as directed below

DISCHARGE INSTRUCTIONS

- Instruct patient to continue taking anti-emetic(s) at home
- Advise patient that atropine may cause blurred vision and drowsiness
- If diarrhea occurs within 24 hours of irinotecan administration:
 - Return to cancer care clinic or go to the emergency department. A second dose of intravenous atropine may be required
- If cramping or diarrhea occurs more than 24 hours after irinotecan administration:
 - Take loperamide 4 mg (two 2 mg tablets) orally STAT; then
 - During the day: take 2 mg (one 2 mg tablet) orally every 2 hours
 - During the night: Take 4 mg (two 2 mg tablets) orally at bedtime and then every 4 hours until morning
 - STOP loperamide once no bowel movement has occurred (e.g. diarrhea-free) for 12 hours
 - If diarrhea has not stopped despite taking **12 tablets (24 mg) of loperamide over a 24-hour period**, please contact your clinic for further instructions. If this occurs after clinic hours, please call the Medical Oncologist on-call and/or report to the nearest emergency room/urgent care centre. Please note that 24 mg per 24 hours is higher than the usual "over the counter" dose for loperamide
- Reinforce applicable safe handling precautions of medications, blood and body fluids for 48 hours after completion of chemotherapy

ADDITIONAL INFORMATION

- Nursing to provide patient with 30 tablet supply of loperamide 2 mg, labelled by Pharmacy, to take at home with Cycle 1
- atropine can cause anticholinergic side effects; including but not limited to tachycardia, bradycardia, urinary retention, changes in vision, dry mouth and drowsiness
- CARBOplatin dose considerations:
 - CCMB Thoracic DSG uses **actual body weight** to calculate GFR
 - CCMB Thoracic DSG uses a maximum CARBOplatin dose of 750 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										
Calculation of CARBOplatin dose: (max.750 mg)										
Dose (mg) = target AUC (GFR + 25)										
$\text{GFR} = \frac{N \times (140 - \text{age in years}) \times \text{Actual Body Weight (kg)}}{\text{serum creatinine in } \mu\text{mol/L}} = \text{___ mL/min}$										
N = 1.23 in males N = 1.04 in females										
<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;"> AUC (mg/mL.min) </td> </tr> <tr> <td style="border-top: 1px solid black; padding: 5px; text-align: center;">5</td> </tr> </table>	AUC (mg/mL.min)	5	X	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;"> GFR + 25 (mL/min) </td> </tr> <tr> <td style="border-top: 1px solid black; padding: 5px; text-align: center;">___ + 25</td> </tr> </table>	GFR + 25 (mL/min)	___ + 25	=	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;"> Total Dose (mg) </td> </tr> <tr> <td style="border-top: 1px solid black; padding: 5px; text-align: center;">___</td> </tr> </table>	Total Dose (mg)	___
AUC (mg/mL.min)										
5										
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).