ADULT ORAL Updated: August 17, 2023

# Regimen Reference Order – THOR – selpercatinib

ARIA: LUNG - [selpercatinib (under 50kg)]
LUNG - [selpercatinib (50kg or more)]

Planned Course: Twice daily until disease progression or unacceptable toxicity (1 cycle = 30 days)

Indication for Use: Non-Small Cell Lung Cancer, RET Fusion-Positive

# Proceed with treatment if:

- ANC equal to or greater than  $1 \times 10^9/L$  AND Platelets equal to or greater than  $75 \times 10^9/L$
- AST/ALT less than 5 times upper limit of normal
- Total bilirubin less than 3 times upper limit of normal
  - Contact Physician if parameters not met

# **SEQUENCE OF MEDICATION ADMINISTRATION**

Drug	Dose	CCMB Administration Guideline
selpercatinib	Body weight less than 50 kg:	Orally twice daily with or without food
	120 mg	Swallow whole  (Self-administered at home)
	Body weight greater than or equal to 50 kg:	
	160 mg	

# **REQUIRED MONITORING**

# **Cardiac Monitoring**

- Blood Pressure
  - o At baseline, then
  - 1 week after starting selpercatinib, then
  - o every month as per Physician Orders
- EKG
  - At baseline, then
  - o 1 week after starting selpercatinib, then
  - o every month for 6 months, then
  - $\circ$  every 3 to 4 months as clinically indicated as per Physician Orders

# Cycle 1

#### Day 1

- CBC, serum creatinine, urea, electrolytes (including potassium, calcium and magnesium), liver enzymes, total bilirubin, glucose and albumin as per Physician Orders
- TSH prior to Cycle 1 then every 3 cycles thereafter as per Physician Orders

## Days 8 and 15

· Electrolytes (including potassium, calcium and magnesium), liver enzymes and albumin as per Physician Orders



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#### Cycles 2 and 3

#### Day 1

• CBC, serum creatinine, urea, electrolytes (including potassium, calcium and magnesium), liver enzymes, total bilirubin, glucose and albumin as per Physician Orders

#### Day 15

· Liver enzymes

#### Cycle 4 and Onwards

# Day 1

- CBC, serum creatinine, urea, electrolytes (including potassium, calcium and magnesium), liver enzymes, total bilirubin, glucose and albumin as per Physician Orders
- TSH every 3 cycles as per Physician Orders

 Recommended Support Medications				
Drug	Dose	CCMB Administration Guideline		
None required				

#### INSTRUCTIONS FOR PATIENT

- Patients should be instructed to contact their cancer team immediately if symptoms of hypersensitivity reactions
- selpercatinib has potential for drug-drug interactions. Patients should notify clinic prior to starting any new medication
- Avoid grapefruit and grapefruit juice, Seville oranges (i.e. orange marmalade) and starfruit
- Acid-reducing agents should be avoided while on selpercatinib. If concomitant use cannot be avoided:
  - selpercatinib should be taken with food if patient is taking a proton pump inhibitor (e.g. omeprazole, pantoprazole, esomeprazole, lansoprazole)
  - selpercatinib should be taken 2 hours before or 10 hours after an H<sub>2</sub>-receptor antagonist (e.g. raNITIdine, famotidine)
  - o selpercatinib should be taken 2 hours before or 2 hours after a locally acting antacid (e.g. calcium carbonate, aluminum hydroxide, magnesium hydroxide, simethicone)
- Reinforce applicable safe handling precautions of medications, blood and body fluids while on selpercatinib

## **ADDITIONAL INFORMATION**

- selpercatinib can cause QT prolongation
- selpercatinib has been associated with hypersensitivity that can present as fever, rash, myalgia/arthralgia, with concurrent decreased platelets or AST/ALT increase
- selpercatinib can cause hypertension, hepatotoxicity, hemorrhage and impaired wound healing
- selpercatinib will be dispensed by CCMB Pharmacy

