ADULT Updated: March 28, 2024

# Regimen Reference Order – trastuzumab desensitization

Desensitization protocol is prescribed in combination with a trastuzumab protocol

To order this therapy in ARIA, refer to Additional Information below

Planned Course: Refer to prescribed trastuzumab-based protocol

Indication for Use: Eligible patients with previous hypersensitivity reactions to trastuzumab

**Alert: Desensitization protocol** 

#### trastuzumab:

- trastuzumab is prepared in 3 separate bags with a total volume of 250 mL in each bag
- IV tubing is primed with trastuzumab (Cytotoxic)
- trastuzumab is administered slowly following specified rate increases.
   trastuzumab infusion takes approximately 6 hours to complete

**CVAD: At Provider's Discretion** 

### **Blood work requirements:**

Refer to prescribed trastuzumab-based protocol

## **SEQUENCE OF MEDICATION ADMINISTRATION**

	Pre-treatment Requirements					
	Drug	Dose	CCMB Administration Guideline			
Refer to prescribed trastuzumab-based protocol						

Treatment Regimen – trastuzumab desensitization					
Establish primary solution 500 mL of: normal saline					
Drug	Dose	CCMB Administration Guideline			
Day 1					
cetirizine	20 mg	Orally 1 hour prior to trastuzumab			
montelukast	10 mg	Orally 1 hour prior to trastuzumab			
acetylsalicylic acid	650 mg	Orally 1 hour prior to trastuzumab			
famotidine	20 mg	IV in normal saline 50 mL over 15 minutes <u>1 hour</u> prior to trastuzumab			



dexamethasone	20 mg	IV in normal saline 50 mL over 15 minutes <u>1 hour</u> prior to trastuzumab
		*Nursing Alert: trastuzumab starts 1 hour after completion of dexamethasone infusion
Wait 1 hour after comp	pletion of IV pre-medication(	s) before starting trastuzumab
trastuzumab	1/100 <sup>th</sup> (1%) of dose (BAG 1)	IV in normal saline 250 mL following the administration rates below:
	(=::==)	Step 1: 2 mL/hour for 15 minutes, then
		Step 2: 5 mL/hour for 15 minutes, then
		Step 3: 10 mL/hour for 15 minutes, then
		Step 4: 20 mL/hour for 15 minutes
		Once step 4 is complete, discard remainder of bag and proceed immediately to BAG 2
		*Alert: Pharmacy to ensure final volume in bag = 250 mL
		*Nursing Alert: IV tubing is primed with trastuzumab
	1/10 <sup>th</sup> (10%) of dose (BAG 2)	IV in normal saline 250 mL following the administration rates below:
		Step 5: 5 mL/hour for 15 minutes, then
		Step 6: 10 mL/hour for 15 minutes, then
		Step 7: 20 mL/hour for 15 minutes, then
		Step 8: 40 mL/hour for 15 minutes
		Once step 8 is complete, discard remainder of bag and proceed immediately to BAG 3
		*Alert: Pharmacy to ensure final volume in bag = 250 mL
		*Nursing Alert: IV tubing is primed with trastuzumab
	99.2% of dose (BAG 3)	IV in normal saline 250 mL following the administration rates below:
		Step 9: 10 mL/hour for 15 minutes, then
		Step 10: 20 mL/hour for 15 minutes, then
		Step 11: 40 mL/hour for 15 minutes, then
		Step 12: 80 mL/hour until infusion is complete
		*Alert: Pharmacy to ensure final volume in bag = 250 mL
		*Nursing Alert: IV tubing is primed with trastuzumab

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

## **REQUIRED MONITORING**

## All Cycles

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O<sub>2</sub> saturation) at baseline and as clinically indicated
- No observation period is required after trastuzumab administration. Patient can be discharged from treatment room if stable whether they had a reaction or not
- · Refer to the prescribed trastuzumab-based protocol for additional monitoring



Recommended Support Medications						
Drug	Dose	CCMB Administration Guideline				
Refer to prescribed trastuzumab-based protocol						

#### **DISCHARGE INSTRUCTIONS**

- Patients should be instructed to contact their cancer team immediately if symptoms of hypersensitivity occur after discharge
- Refer to the prescribed trastuzumab-based protocol for additional discharge instructions

#### **ADDITIONAL INFORMATION**

- Oncologist must write first prescription of trastuzumab desensitization protocol
- Once the patient requires trastuzumab desensitization protocol, all subsequent trastuzumab doses <u>must</u> be given using trastuzumab desensitization protocol
- Refer to the prescribed trastuzumab-based protocol for additional trastuzumab information
- · ARIA ordering: Support protocol is available under trastuzumab in the "Desensitization" folder
- Due to the duration of treatment, administration site restrictions may be in place for trastuzumab desensitization

