

Regimen Reference Order – GAST – trastuzumab + CISplatin + fluorouracil

ARIA: GAST – [CIS + fluorouracil + trastuzumab]

Planned Course: Every 21 days for 6 cycles

Indication for Use: Gastric Cancer/Gastroesophageal Junction Tumor Metastatic; HER2 positive;

CVAD: Required (Ambulatory Pump)

Proceed with treatment if:

- ANC equal to or greater than $1.5 \times 10^9/L$ AND Platelets equal to or greater than $100 \times 10^9/L$
 - Creatinine clearance greater than 45 mL/minute
- ❖ Contact Physician if parameters not met

SEQUENCE OF MEDICATION ADMINISTRATION

Pre-treatment Requirements

Drug	Dose	CCMB Administration Guideline
Not Applicable		

Treatment Regimen – GAST – trastuzumab + CISplatin + fluorouracil

Establish primary solution 500 mL of: normal saline

Drug	Dose	CCMB Administration Guideline
trastuzumab (brand name specific)	Cycle 1 8 mg/kg Loading Dose	IV in normal saline 250 mL over 90 minutes <i>*Alert: Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order</i> <i>*Nursing Alert: magnesium infusion starts after observation period is complete</i>
	Cycles 2 to 6 6 mg/kg	IV in normal saline 250 mL over 30 minutes <i>*Alert: Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order</i>
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
CISplatin	80 mg/m ²	IV in normal saline 500 mL over 1 hour <i>*Alert: CISplatin infusion must be complete prior to mannitol administration</i>
mannitol	12.5 g	IV in normal saline 1000 mL over 2 hours (Post hydration)

fluorouracil	4000 mg/m ²	IV in D5W continuously over 120 hours by ambulatory infusion device
All doses will be automatically rounded that fall within the DSG Approved Dose Bands. See GAST or THOR DSG – Dose Banding document for more information		

Flush after each medication:

- 50 mL over 6 minutes (500 mL/hr)

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

REQUIRED MONITORING

Cardiac monitoring

- Left Ventricular Ejection Fraction (LVEF) monitoring is recommended at baseline and every 4 cycles

Cycles 1 to 6

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

Cycle 1 Only

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O₂ saturation) at baseline and as clinically indicated
- Observe patient for 30 minutes after trastuzumab infusion. Full vital signs after observation period is complete. Magnesium infusion begins after observation period is complete
- Patient can be discharged from treatment room if stable whether they had a reaction or not

Cycles 2 to 6

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O₂ saturation) at baseline and as clinically indicated
- No observation period required after trastuzumab administration. Patient can be discharged from treatment room if stable whether they had a reaction or not

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 maximum of 10 mg per day. Contact clinic if nausea/vomiting is not adequately controlled

DISCHARGE INSTRUCTIONS

- Patients should be instructed to contact their cancer team immediately if symptoms of hypersensitivity reactions occur after discharge
- Instruct patient to continue taking anti-emetic(s) at home
- Ensure patient has received a home chemotherapy spill kit and instructions for use
- Maintain oral intake of 2000 mL (8 glasses) of fluid daily at home
- 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
- trastuzumab is available from more than one manufacturer and uses several different brand names. Brand name will be indicated in brackets after trastuzumab. **Ensure prescription label matches the brand name on prescribed order**