ADULT Updated: April 23, 2024

Regimen Reference Order – GENU – MVAC (Dose Dense)

ARIA: GENU - [MVAC (dose dense)]

Planned Course: Every 14 days for 6 cycles Indication for Use: Bladder Cancer; Neo-Adjuvant

CVAD: Preferred (VESICANT INVOLVED)

Proceed with treatment if:

- ANC equal to or greater than 1.5 x $10^9/L$ AND Platelets equal to or greater than $100 \times 10^9/L$
- Creatinine clearance greater than 50 mL/minute
 - ❖ Do not delay or cancel therapy without consulting Medical Oncologist

Note: Hepatitis B serology results must be reviewed in accordance with CCMB Policy Hepatitis B Monitoring for Oncology and Hematology Patients

SEQUENCE OF MEDICATION ADMINISTRATION

| Pre-treatment Requirements | | | | |
|----------------------------|------|------|-------------------------------|--|
| | Drug | Dose | CCMB Administration Guideline | |
| Not Applicable | | | | |

| Establish primary solution 500 mL of: normal saline | | | | | |
|---|----------------------|--|--|--|--|
| Drug | Dose | CCMB Administration Guideline | | | |
| Day 1 | | | | | |
| methotrexate | 30 mg/m ² | IV in normal saline 50 mL over 20 minutes | | | |
| | | (Maximum rate 10 mg/minute) | | | |
| Day 2 | | | | | |
| 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 | | | |
| vinBLAStine | 3 mg/m ² | IV in normal saline 25 mL over 5 to 10 minutes by gravity infusion | | | |
| DOXOrubicin | 30 mg/m ² | IV Push over 10 to 15 minutes | | | |
| CISplatin | 70 mg/m ² | IV in normal saline 500 mL over 1 hour *Alert: CISplatin infusion must be complete prior to mannitol administration | | | |
| mannitol | 12.5 g | IV in normal saline 1000 mL over 2 hours (Post hydration) | | | |

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

REQUIRED MONITORING

Hepatitis B serology

· Hepatitis B surface antigen and Hepatitis B core antibody (drawn within preceding 5 years)

Cardiac monitoring

• Left Ventricular Ejection Fraction (LVEF) monitoring is recommended at baseline and as clinically indicated

All Cycles

Day 1

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

Day 2

• Baseline blood pressure prior to magnesium infusion and repeat 15 minutes after start of magnesium infusion

| Recommended Support Medications | | | | |
|---|--------|--|--|--|
| Drug | Dose | CCMB Administration Guideline | | |
| pegfilgrastim (brand name specific) (See Filgrastim Clinical Guide) | 6 mg | Subcutaneous once on Day 3 *Alert: pegfilgrastim to be given as a single dose once per chemotherapy cycle no sooner than 24 hours after chemotherapy | | |
| aprepitant | 80 mg | Orally once daily on Days 3 and 4 | | |
| dexamethasone | 8 mg | Orally once daily on Days 3, 4 and 5 | | |
| OLANZapine | 2.5 mg | Orally the evening of Day 2 then twice daily on Days 3, 4 and 5. Also use OLANZapine 2.5 to 5 mg AS NEEDED for breakthrough nausea and vomiting (including Days 2 to 5) up to a maximum of 10 mg per day. Contact clinic if nausea/vomiting is not adequately controlled | | |

DISCHARGE INSTRUCTIONS

- Ensure patient receives pegfilgrastim supply if patient is self-administering at home
- Instruct patient to continue taking anti-emetic(s) at home
- Reinforce applicable safe handling precautions of medications, blood and body fluids for 48 hours after completion of chemotherapy

ADDITIONAL INFORMATION

- This protocol requires methotrexate to be given on Day 1 of the regimen. methotrexate must not be administered on Day 2 with the other chemotherapy agents
- DOXOrubicin is cardiotoxic
- Cumulative DOXOrubicin dose should be calculated and should not exceed 450 mg/m²
- CISplatin is ototoxic and nephrotoxic
- CISplatin can cause hypomagnesemia
- Due to the risk of reactivation of Hepatitis B virus (HBV) while on this treatment regimen, prescriber must adhere to CCMB Policy Hepatitis B Monitoring for Oncology and Hematology Patients for ordering and interpreting HBV serology and prescribing antiviral prophylaxis

