## OP BENDAMUSTINE / BORTEZOMIB / PREDNISONE

**Types:** ONCOLOGY TREATMENT

**Synonyms:** BORTEZOMIB, MM, VELCADE, BORE, MYELOMA, MULTIPLE, BENDEKA, BENDA, PREDN, PRED, DELT, BENDAMUSTINE, PREDNISONE

### Take-Home Medications

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Repeat 1 time</th>
<th>Cycle length: 1 day</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Take-Home Medications Prior to Treatment</strong></td>
<td></td>
<td>Perform every 1 day x1</td>
</tr>
<tr>
<td>acyclovir (ZOVIRAX) 800 MG tablet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dose: 800 mg</td>
<td>Route: oral</td>
<td>2 times daily</td>
</tr>
<tr>
<td>Dispense: 42 tablet</td>
<td>Refills: 4</td>
<td></td>
</tr>
<tr>
<td>Start: S</td>
<td>End: S+21</td>
<td></td>
</tr>
<tr>
<td>Instructions:</td>
<td>For infection prevention.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Repeat 4 times</th>
<th>Cycle length: 21 days</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Take-Home Medications Prior to Treatment</strong></td>
<td></td>
<td>Perform every 1 day x1</td>
</tr>
<tr>
<td>predniSONE (DELTASONE) 50 MG tablet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dose: 100 mg</td>
<td>Route: oral</td>
<td></td>
</tr>
<tr>
<td>Dispense: 10 tablet</td>
<td>Refills: 4</td>
<td></td>
</tr>
<tr>
<td>Start: S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructions:</td>
<td>On day 1, 2, 4, 8, 11 of all cycles. Take after meals or with food or milk.</td>
<td></td>
</tr>
</tbody>
</table>

### Cycles 1 to 4

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Repeat 4 times</th>
<th>Cycle length: 21 days</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appointment Requests</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INFUSION APPOINTMENT REQUEST</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interval: --</td>
<td>Occurrences: --</td>
<td></td>
</tr>
</tbody>
</table>

### Labs

- **COMPREHENSIVE METABOLIC PANEL**
  - Interval: --
  - Occurrences: --

- **CBC WITH PLATELET AND DIFFERENTIAL**
  - Interval: --
  - Occurrences: --

- **MAGNESIUM LEVEL**
  - Interval: --
  - Occurrences: --

- **LDH**
  - Interval: --
  - Occurrences: --

- **URIC ACID LEVEL**
  - Interval: --
  - Occurrences: --

- **PHOSPHOROUS LEVEL**
  - Interval: --
  - Occurrences: --

### Outpatient Electrolyte Replacement Protocol

- **TREATMENT CONDITIONS 39**
  - Interval: --
  - Occurrences: --
  - Comments: Potassium (Normal range 3.5 to 5.0mEq/L)
    - Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP
    - Protocol applies only to same day lab value.
    - Serum potassium less than 3.0mEq/L, give 40mEq KCL IV or PO and contact MD/NP
    - Serum potassium 3.0 to 3.2mEq/L, give 40mEq KCL IV or PO
o Serum potassium 3.3 to 3.4mEq/L, give 20mEq KCL IV or PO
o Serum potassium 3.5 mEq/L or greater, do not give potassium replacement
o If patient meets criteria, order SmartSet called "Outpatient Electrolyte Replacement"
o Sign electrolyte replacement order as Per protocol: cosign required

TREATMENT CONDITIONS 40
Interval: -- Occurrences: --
Comments: Magnesium (Normal range 1.6 to 2.6mEq/L)
o Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP
o Protocol applies only to same day lab value.
o Serum Magnesium less than 1.0mEq/L, give 2 gram magnesium sulfate IV and contact MD/NP
o Serum Magnesium 1.0 to 1.2mEq/L, give 2 gram magnesium sulfate IV
o Serum Magnesium 1.3 to 1.5mEq/L, give 1 gram magnesium sulfate IV
o Serum Magnesium 1.6 mEq/L or greater, do not give magnesium replacement
o If patient meets criteria, order SmartSet called "Outpatient Electrolyte Replacement"
o Sign electrolyte replacement order as Per protocol: cosign required

Nursing Orders
ONC NURSING COMMUNICATION 59
Interval: -- Occurrences: --
Comments: Verify that patient took PREDNISONE orally prior to chemotherapy. Otherwise, please contact physician to order Dexamethasone IV.

Nursing Orders
ONC NURSING COMMUNICATION 51
Interval: -- Occurrences: --
Comments: HOLD and notify provider if ANC LESS than 1000; Platelets LESS than 100,000.

Nursing Orders
ONC NURSING COMMUNICATION 51
Interval: -- Occurrences: --
Comments: HOLD Bortezomib and notify provider if Hgb is LESS than or equal to *** g/dL.

Vitals
ONC NURSING COMMUNICATION 50
Interval: -- Occurrences: --
Comments: 1) Check vital signs (BP, temperature, pulse, and respirations) prior to and 30 minutes after Bortezomib administration.
2) If systolic BP, 30 minutes after Bortezomib infusion, drops more than 30 mmHg, or if systolic BP is less than 90, please contact MD.

Line Flush
sodium chloride 0.9 % flush 20 mL
Dose: 20 mL Route: intravenous PRN
Start: S
<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium chloride 0.9 % infusion 250 mL</td>
<td></td>
<td>250 mL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dose: 250 mL</td>
<td>Route: intravenous</td>
<td>once @ 30 mL/hr for 1 dose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Start: S</td>
<td>Instructions:</td>
<td>To keep vein open.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Medications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☑ ondansetron (ZOFRAN) 16 mg in sodium chloride 0.9% 50 mL IVPB</td>
<td>Route: intravenous</td>
<td>once over 15 Minutes for 1 dose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dose: --</td>
<td>Start: S</td>
<td>End: S 11:30 AM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructions:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give ONLY if patient had NOT taken their oral dexamethasone on day of chemotherapy treatment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ingredients:</td>
<td>Name</td>
<td>Type</td>
<td>Dose</td>
<td>Selected</td>
</tr>
<tr>
<td>Onodansetron (ZOFRAN) HCL (PF) 4 MG/2 ML INJECTION SOLUTION</td>
<td>Medications</td>
<td>16 mg</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Dexamethasone (DECADRON) 12 mg in sodium chloride 0.9% 50 mL IVPB</td>
<td>Route: intravenous</td>
<td>once over 15 Minutes for 1 dose</td>
<td>Start: S</td>
<td>End: S 11:30 AM</td>
</tr>
<tr>
<td>Dose: --</td>
<td>Instructions:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give ONLY if patient had NOT taken their oral dexamethasone on day of chemotherapy treatment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ingredients:</td>
<td>Name</td>
<td>Type</td>
<td>Dose</td>
<td>Selected</td>
</tr>
<tr>
<td>Onodansetron (ZOFRAN) tablet 16 mg</td>
<td>Route: oral</td>
<td>once for 1 dose</td>
<td>Start: S</td>
<td>End: S 11:30 AM</td>
</tr>
<tr>
<td>Dose: 16 mg</td>
<td>Dexamethasone (DECADRON) tablet 12 mg</td>
<td>Route: oral</td>
<td>once for 1 dose</td>
<td>Start: S</td>
</tr>
</tbody>
</table>
### Palonosetron (ALOXI) Injection 0.25 mg

**Dose:** 250 mcg  
**Route:** intravenous  
**Start:** S  
**End:** S 3:00 PM  
**Once for 1 dose**

### Aprepitant (CINVANTI) 130 mg in Dextrose (NON-PVC) 5% 130 mL IVPB

**Dose:** 130 mg  
**Route:** intravenous  
**Start:** S  
**End:** S  
**Once over 30 Minutes for 1 dose**

**Ingredients:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aprepitant 7.2 mg/ML INTRAVENOUS EMULSION</td>
<td>Medications</td>
<td>130 mg</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Dextrose 5% in Water (D5W) IV SOLP (EXCEL; NON-PVC)</td>
<td>Base</td>
<td>130 mL</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sodium Chloride 0.9% IV SOLP (EXCEL; NON-PVC)</td>
<td>Base</td>
<td>130 mL</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Chemotherapy: Bendamustine (BENDEKA) 60 mg/m2 in Sodium Chloride 0.9% 50 mL Chemo IVPB

**Dose:** 60 mg/m2  
**Route:** intravenous  
**Once over 10 Minutes for 1 dose**  
**Offset:** 30 Minutes

**Instructions:**  
VESICANT

**Ingredients:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bendamustine 25 mg/ML INTRAVENOUS SOLUTION</td>
<td>Medications</td>
<td>60 mg/m2</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sodium Chloride 0.9% INTRAVENOUS SOLUTION</td>
<td>Base</td>
<td>50 mL</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Chemotherapy: Bortezomib (VelCADE) 1.3 mg/m2 in Sodium Chloride 0.9% Chemo Injection

**Dose:** 1.3 mg/m2  
**Route:** subcutaneous  
**Once for 1 dose**  
**Offset:** 30 Minutes

**Instructions:**  
DRUG IS AN IRRITANT. Administer drug slowly to prevent burning upon administration. 72 hours between doses is recommended

**Ingredients:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bortezomib 3.5 mg Solution FOR INJECTION</td>
<td>Medications</td>
<td>1.3 mg/m2</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Sodium Chloride 0.9% INJECTION SOLUTION</td>
<td>Base</td>
<td>Always</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

- **Hematology & Oncology Hypersensitivity Reaction Standing Order**
  - **ONC NURSING COMMUNICATION 82**
    - **Interval:** --
    - **Occurrences:** --
    - **Comments:** Grade 1 - MILD Symptoms (cutaneous and subcutaneous symptoms only – itching, flushing, periorbital edema, rash, or runny nose)  
      1. Stop the infusion.
2. Place the patient on continuous monitoring.
3. Obtain vital signs.
4. Administer Normal Saline at 50 mL per hour using a new bag and new intravenous tubing.
5. If greater than or equal to 30 minutes since the last dose of Diphenhydramine, administer Diphenhydramine 25 mg intravenous once.
6. If less than 30 minutes since the last dose of Diphenhydramine, administer Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.
7. Notify the treating physician.
8. If no improvement after 15 minutes, advance level of care to Grade 2 (Moderate) or Grade 3 (Severe).
9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

### ONC NURSING COMMUNICATION 4

**Interval:** --
**Occurrences:** --
**Comments:**
Grade 2 – MODERATE Symptoms (cardiovascular, respiratory, or gastrointestinal symptoms – shortness of breath, wheezing, nausea, vomiting, dizziness, diaphoresis, throat or chest tightness, abdominal or back pain)

1. Stop the infusion.
2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O2 saturation of greater than or equal to 92%.
6. Administer Normal Saline at 150 mL per hour using a new bag and new intravenous tubing.
7. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous), Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.
8. If no improvement after 15 minutes, advance level of care to Grade 3 (Severe).
9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

### ONC NURSING COMMUNICATION 83

**Interval:** --
**Occurrences:** --
**Comments:**
Grade 3 – SEVERE Symptoms (hypoxia, hypotension, or neurologic compromise – cyanosis or O2 saturation less than 92%, hypotension with systolic blood pressure less than 90 mmHg, confusion, collapse, loss of consciousness, or incontinence)

1. Stop the infusion.
2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. If heart rate is less than 50 or greater than 120, or blood pressure is less than 90/50 mmHg, place patient in reclined or flattened position.
6. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O2 saturation of greater than or equal to 92%.
7. Administer Normal Saline at 1000 mL intravenous bolus using a new bag and new intravenous tubing.
8. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous) and Famotidine 20 mg intravenous once.
9. Administer Epinephrine (1:1000) 0.3 mg subcutaneous.
10. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.
<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>Route</th>
<th>Start</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenhydramine (Benadryl) injection 25 mg</td>
<td>25 mg</td>
<td>Intravenous</td>
<td>S</td>
<td></td>
</tr>
<tr>
<td>Fexofenadine (Allegra) tablet 180 mg</td>
<td>180 mg</td>
<td>Oral</td>
<td>S</td>
<td></td>
</tr>
<tr>
<td>Famotidine (Pepto) 20 mg/2 mL injection 20 mg</td>
<td>20 mg</td>
<td>Intravenous</td>
<td>S</td>
<td></td>
</tr>
<tr>
<td>Hydrocortisone sodium succinate (Solu-Cortef) injection 100 mg</td>
<td>100 mg</td>
<td>Intravenous</td>
<td>S</td>
<td></td>
</tr>
<tr>
<td>Dexamethasone (Decadron) injection 4 mg</td>
<td>4 mg</td>
<td>Intravenous</td>
<td>S</td>
<td></td>
</tr>
<tr>
<td>Epinephrine (Adrenaline) 1 mg/10 mL ADULT injection syringe 0.3 mg</td>
<td>0.3 mg</td>
<td>Subcutaneous</td>
<td>S</td>
<td></td>
</tr>
</tbody>
</table>

**Discharge Nursing Orders**

- **ONC NURSING COMMUNICATION 76**
  - Interval: --
  - Occurrences: --
  - Comments: Discontinue IV.

**Discharge Nursing Orders**

- **Sodium chloride 0.9% flush 20 mL**
  - Dose: 20 mL
  - Route: Intravenous
  - PRN

- **HEParin, porcine (PF) injection 500 Units**
  - Dose: 500 Units
  - Route: Intra-catheter
  - Once PRN
  - Instructions:
    - Concentration: 100 units/mL. Heparin flush for Implanted Vascular Access Device maintenance.

**Day 2**

**Appointment Requests**

- **INFUSION APPOINTMENT REQUEST**
  - Interval: --
  - Occurrences: --

**Labs**

- **COMPREHENSIVE METABOLIC PANEL**
  - Interval: --
  - Occurrences: --

- **CBC WITH PLATELET AND DIFFERENTIAL**
  - Interval: --
  - Occurrences: --

- **MAGNESIUM LEVEL**
  - Interval: --
  - Occurrences: --

- **LDH**
  - Interval: --
  - Occurrences: --
**URIC ACID LEVEL**
Interval: -- Occurrences: --

**PHOSPHORUS LEVEL**
Interval: -- Occurrences: --

### Outpatient Electrolyte Replacement Protocol

**TREATMENT CONDITIONS 39**

Interval: -- Occurrences: --
Comments:
- Potassium (Normal range 3.5 to 5.0mEq/L)
  - Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP
  - Protocol applies only to same day lab value.
  - Serum potassium less than 3.0mEq/L, give 40mEq KCL IV or PO and contact MD/NP
  - Serum potassium 3.0 to 3.2mEq/L, give 40mEq KCL IV or PO
  - Serum potassium 3.3 to 3.4mEq/L, give 20mEq KCL IV or PO
  - Serum potassium 3.5 mEq/L or greater, do not give potassium replacement
  - If patient meets criteria, order SmartSet called "Outpatient Electrolyte Replacement"
  - Sign electrolyte replacement order as Per protocol: cosign required

**TREATMENT CONDITIONS 40**

Interval: -- Occurrences: --
Comments:
- Magnesium (Normal range 1.6 to 2.6mEq/L)
  - Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP
  - Protocol applies only to same day lab value.
  - Serum Magnesium less than 1.0mEq/L, give 2 gram magnesium sulfate IV and contact MD/NP
  - Serum Magnesium 1.0 to 1.2mEq/L, give 2 gram magnesium sulfate IV
  - Serum Magnesium 1.3 to 1.5mEq/L, give 1 gram magnesium sulfate IV
  - Serum Magnesium 1.6 mEq/L or greater, do not give magnesium replacement
  - If patient meets criteria, order SmartSet called "Outpatient Electrolyte Replacement"
  - Sign electrolyte replacement order as Per protocol: cosign required

### Nursing Orders

**ONC NURSING COMMUNICATION 59**

Interval: -- Occurrences: --
Comments:
- Verify that patient took PREDNISONE orally prior to chemotherapy. Otherwise, please contact physician to order Dexamethasone IV.

### Nursing Orders

**TREATMENT CONDITIONS 7**

Interval: -- Occurrences: --
Comments:
- HOLD and notify provider if ANC LESS than 1000; Platelets LESS than 100,000.

### Line Flush

**sodium chloride 0.9 % flush 20 mL**
- Dose: 20 mL
- Route: intravenous
- PRN

### Nursing Orders
**sodium chloride 0.9 % infusion 250 mL**
Dose: 250 mL  
Route: intravenous  
Instructions:  
To keep vein open.

**Pre-Medications**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ondansetron (ZOFRAN) 16 mg in sodium</td>
<td>Medications</td>
<td>16 mg</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>chloride 0.9% 50 mL IVPB</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dose: --  
Start: S  
End: S 11:30 AM

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>dexamethasone (DECADRON) 12 mg in sodium</td>
<td>Medications</td>
<td>12 mg</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>chloride 0.9% 50 mL IVPB</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dose: --  
Start: S  
End: S 11:30 AM

Instructions:
Give ONLY if patient had NOT taken their scheduled dose of ORAL dexamethasone on day of chemotherapy treatment.

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ondansetron (ZOFRAN) tablet 16 mg</td>
<td>Medications</td>
<td>16 mg</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Dose: 16 mg  
Start: S  
End: S 11:30 AM

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>dexamethasone (DECADRON) tablet 12 mg</td>
<td>Medications</td>
<td>12 mg</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Dose: 12 mg  
Start: S
☐ **palonosetron (ALOXI) injection 0.25 mg**
Dose: 250 mcg  
Route: intravenous  
Start: S  
End: S  3:00 PM  
once for 1 dose

☐ **aprepitant (CINVANTI) 130 mg in dextrose (NON-PVC) 5% 130 mL IVPB**
Dose: 130 mg  
Route: intravenous  
Start: S  
End: S  
once over 30 Minutes for 1 dose

### Ingredients:

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>APREPITANT 7.2 MG/ML INTRAVENOUS EMULSION</td>
<td>Medications</td>
<td>130 mg</td>
<td>Main</td>
<td>Yes</td>
</tr>
<tr>
<td>DEXTROSE 5 % IN WATER (D5W) IV SOLP (EXCEL; NON-PVC)</td>
<td>Base</td>
<td>130 mL</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>SODIUM CHLORIDE 0.9 % IV SOLP (EXCEL;NON-PVC)</td>
<td>Base</td>
<td>130 mL</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Chemotherapy

**bendamustine (BENDEKA) 60 mg/m2 in sodium chloride 0.9 % 50 mL chemo IVPB**
Dose: 60 mg/m2  
Route: intravenous  
Start: S  
End: S  
once over 10 Minutes for 1 dose  
Offset: 30 Minutes

### Instructions:
VESICANT

### Ingredients:

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENDAMUSTINE 25 MG/ML INTRAVENOUS SOLUTION</td>
<td>Medications</td>
<td>60 mg/m2</td>
<td>Main</td>
<td>Yes</td>
</tr>
<tr>
<td>SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION</td>
<td>Base</td>
<td>50 mL</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Discharge Nursing Orders

**ONC NURSING COMMUNICATION 76**
Interval: --  
Occurrences: --  
Comments: Discontinue IV.

Discharge Nursing Orders

☑ **sodium chloride 0.9 % flush 20 mL**
Dose: 20 mL  
Route: intravenous  
PRN

☑ **HEParin, porcine (PF) injection 500 Units**
Dose: 500 Units  
Start: S  
Route: intra-catheter  
Instructions: Concentration: 100 units/mL. Heparin flush for Implanted Vascular Access Device maintenance.  
once PRN

Days 4,8  
Perform every 4 days x2

Appointment Requests

**INFUSION APPOINTMENT REQUEST**
Interval: --  
Occurrences: --

Labs
<table>
<thead>
<tr>
<th>Test Description</th>
<th>Interval</th>
<th>Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive Metabolic Panel</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>CBC with Platelet and Differential</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Magnesium Level</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>LDH</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Uric Acid Level</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Phosphorus Level</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Outpatient Electrolyte Replacement Protocol

### Treatment Conditions 39

<table>
<thead>
<tr>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium (Normal range 3.5 to 5.0mEq/L)</td>
</tr>
<tr>
<td>Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP</td>
</tr>
<tr>
<td>Protocol applies only to same day lab value.</td>
</tr>
<tr>
<td>Serum potassium less than 3.0mEq/L, give 40mEq KCL IV or PO and contact MD/NP</td>
</tr>
<tr>
<td>Serum potassium 3.0 to 3.2mEq/L, give 40mEq KCL IV or PO</td>
</tr>
<tr>
<td>Serum potassium 3.3 to 3.4mEq/L, give 20mEq KCL IV or PO</td>
</tr>
<tr>
<td>Serum potassium 3.5 mEq/L or greater, do not give potassium replacement</td>
</tr>
<tr>
<td>If patient meets criteria, order SmartSet called &quot;Outpatient Electrolyte Replacement&quot;</td>
</tr>
<tr>
<td>Sign electrolyte replacement order as Per protocol: cosign required</td>
</tr>
</tbody>
</table>

### Treatment Conditions 40

<table>
<thead>
<tr>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium (Normal range 1.6 to 2.6mEq/L)</td>
</tr>
<tr>
<td>Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP</td>
</tr>
<tr>
<td>Protocol applies only to same day lab value.</td>
</tr>
<tr>
<td>Serum Magnesium less than 1.0mEq/L, give 2 gram magnesium sulfate IV and contact MD/NP</td>
</tr>
<tr>
<td>Serum Magnesium 1.0 to 1.2mEq/L, give 2 gram magnesium sulfate IV</td>
</tr>
<tr>
<td>Serum Magnesium 1.3 to 1.5mEq/L, give 1 gram magnesium sulfate IV</td>
</tr>
<tr>
<td>Serum Magnesium 1.6 mEq/L or greater, do not give magnesium replacement</td>
</tr>
<tr>
<td>If patient meets criteria, order SmartSet called &quot;Outpatient Electrolyte Replacement&quot;</td>
</tr>
<tr>
<td>Sign electrolyte replacement order as Per protocol: cosign required</td>
</tr>
</tbody>
</table>

Nursing Orders

### Onc Nursing Communication 59

<table>
<thead>
<tr>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verify that patient took PREDNISONE orally prior to chemotherapy.</td>
</tr>
<tr>
<td>Otherwise, please contact physician to order Dexamethasone IV.</td>
</tr>
</tbody>
</table>
Nursing Orders

**ONC NURSING COMMUNICATION 51**
Interval: --
Occurrences: --
Comments: HOLD Bortezomib and notify provider if Hgb is LESS than or equal to *** g/dL.

Vitals

**ONC NURSING COMMUNICATION 50**
Interval: --
Occurrences: --
Comments: 
1) Check vital signs (BP, temperature, pulse, and respirations) prior to and 30 minutes after Bortezomib administration.
2) If systolic BP, 30 minutes after Bortezomib infusion, drops more than 30 mmHg, or if systolic BP is less than 90, please contact MD.

Line Flush

**sodium chloride 0.9 % flush 20 mL**
Dose: 20 mL
Route: intravenous
Start: S
PRN

Nursing Orders

**sodium chloride 0.9 % infusion 250 mL**
Dose: 250 mL
Route: intravenous
Start: S
Instructions: To keep vein open.

Pre-Medications

◉ **ondansetron (ZOFRAN) injection 8 mg**
Dose: 8 mg
Route: intravenous
End: S 11:15 AM
once for 1 dose

◉ **ondansetron (ZOFRAN) tablet 16 mg**
Dose: 16 mg
Route: oral
once for 1 dose

◉ **ondansetron (ZOFRAN) 16 mg in dextrose 5% 50 mL IVPB**
Dose: 16 mg
Route: intravenous
End: S 11:00 AM
once over 15 Minutes for 1 dose

**Ingredients:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONDANSETRON HCL (PF) 4 MG/2 ML INJECTION SOLUTION</td>
<td>Medications</td>
<td>16 mg</td>
<td>Main</td>
<td>No</td>
</tr>
<tr>
<td>DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION</td>
<td>Base</td>
<td>50 mL</td>
<td>Always</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Chemotherapy

**bortezomib (VelCADE) 1.3 mg/m2 in sodium chloride 0.9 % chemo injection**
Dose: 1.3 mg/m2
Route: subcutaneous
Start: S
Offset: 30 Minutes
Instructions: DRUG IS AN IRRITANT. Administer drug slowly to prevent burning upon administration. 72 hours between doses is recommended.

**Ingredients:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BORTEZOMIB 3.5</td>
<td>Medications</td>
<td>1.3</td>
<td>Main</td>
<td>No</td>
</tr>
</tbody>
</table>
### MG SOLUTION FOR INJECTION

**SODIUM CHLORIDE 0.9 % INJECTION SOLUTION**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>mg/m²</th>
<th>Base</th>
<th>Always</th>
<th>Yes</th>
</tr>
</thead>
</table>

### Hematology & Oncology Hypersensitivity Reaction Standing Order

<table>
<thead>
<tr>
<th>ONC NURSING COMMUNICATION 82</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interval:</strong> --</td>
</tr>
<tr>
<td><strong>Occurrences:</strong> --</td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
</tr>
</tbody>
</table>

**Grade 1 - MILD Symptoms** (cutaneous and subcutaneous symptoms only – itching, flushing, peri-orbital edema, rash, or runny nose)

1. Stop the infusion.
2. Place the patient on continuous monitoring.
3. Obtain vital signs.
4. Administer Normal Saline at 50 mL per hour using a new bag and new intravenous tubing.
5. If greater than or equal to 30 minutes since the last dose of Diphenhydramine, administer Diphenhydramine 25 mg intravenous once.
6. If less than 30 minutes since the last dose of Diphenhydramine, administer Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.
7. Notify the treating physician.
8. If no improvement after 15 minutes, advance level of care to Grade 2 (Moderate) or Grade 3 (Severe).
9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

<table>
<thead>
<tr>
<th>ONC NURSING COMMUNICATION 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interval:</strong> --</td>
</tr>
<tr>
<td><strong>Occurrences:</strong> --</td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
</tr>
</tbody>
</table>

**Grade 2 – MODERATE Symptoms** (cardiovascular, respiratory, or gastrointestinal symptoms – shortness of breath, wheezing, nausea, vomiting, dizziness, diaphoresis, throat or chest tightness, abdominal or back pain)

1. Stop the infusion.
2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O₂ saturation of greater than or equal to 92%.
6. Administer Normal Saline at 150 mL per hour using a new bag and new intravenous tubing.
7. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous), Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.
8. If no improvement after 15 minutes, advance level of care to Grade 3 (Severe).
9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

<table>
<thead>
<tr>
<th>ONC NURSING COMMUNICATION 83</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interval:</strong> --</td>
</tr>
<tr>
<td><strong>Occurrences:</strong> --</td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
</tr>
</tbody>
</table>

**Grade 3 – SEVERE Symptoms** (hypoxia, hypotension, or neurologic compromise – cyanosis or O₂ saturation less than 92%, hypotension with systolic blood pressure less than 90 mmHg, confusion, collapse, loss of consciousness, or incontinence)

1. Stop the infusion.
2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. If heart rate is less than 50 or greater than 120, or blood pressure is less than 90/50 mmHg, place patient in reclined or flattened position.
6. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O2 saturation of greater than or equal to 92%.
7. Administer Normal Saline at 1000 mL intravenous bolus using a new bag and new intravenous tubing.
8. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous) and Famotidine 20 mg intravenous once.
9. Administer Epinephrine (1:1000) 0.3 mg subcutaneous.
10. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

**Medications**

- **diphenhydramine (BENADRYL) injection 25 mg**
  - Dose: 25 mg
  - Route: intravenous
  - PRN

- **fexofenadine (ALLEGRA) tablet 180 mg**
  - Dose: 180 mg
  - Route: oral
  - PRN

- **famotidine (PEPCID) 20 mg/2 mL injection 20 mg**
  - Dose: 20 mg
  - Route: intravenous
  - PRN

- **hydrocortisone sodium succinate (Solu-CORTEF) injection 100 mg**
  - Dose: 100 mg
  - Route: intravenous
  - PRN

- **dexamethasone (DECADRON) injection 4 mg**
  - Dose: 4 mg
  - Route: intravenous
  - PRN

- **epinephrine (ADRENALIN) 1 mg/10 mL ADULT injection syringe 0.3 mg**
  - Dose: 0.3 mg
  - Route: subcutaneous
  - PRN

**Discharge Nursing Orders**

- **ONC NURSING COMMUNICATION 76**
  - Interval: --
  - Occurrences: --
  - Comments: Discontinue IV.

**Sodium Chloride 0.9% Flush 20 mL**

- **HEParin, porcine (PF) injection 500 Units**
  - Dose: 500 Units
  - Route: intra-catheter
  - Once PRN
  - Instructions:
    - Concentration: 100 units/mL. Heparin flush for Implanted Vascular Access Device maintenance.

**Day 11**

**Appointment Requests**

- **INFUSION APPOINTMENT REQUEST**
  - Interval: --
  - Occurrences: --

**Labs**
<table>
<thead>
<tr>
<th>Outpatient Electrolyte Replacement Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TREATMENT CONDITIONS 39</strong></td>
</tr>
<tr>
<td>Interval: --</td>
</tr>
<tr>
<td>Occurrences: --</td>
</tr>
<tr>
<td>Comments:</td>
</tr>
<tr>
<td>Potassium (Normal range 3.5 to 5.0mEq/L)</td>
</tr>
<tr>
<td>o Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP</td>
</tr>
<tr>
<td>o Protocol applies only to same day lab value.</td>
</tr>
<tr>
<td>o Serum potassium less than 3.0mEq/L, give 40mEq KCL IV or PO and contact MD/NP</td>
</tr>
<tr>
<td>o Serum potassium 3.0 to 3.2mEq/L, give 40mEq KCL IV or PO</td>
</tr>
<tr>
<td>o Serum potassium 3.3 to 3.4mEq/L, give 20mEq KCL IV or PO</td>
</tr>
<tr>
<td>o Serum potassium 3.5 mEq/L or greater, do not give potassium replacement</td>
</tr>
<tr>
<td>o If patient meets criteria, order SmartSet called &quot;Outpatient Electrolyte Replacement&quot;</td>
</tr>
<tr>
<td>o Sign electrolyte replacement order as Per protocol: cosign required</td>
</tr>
</tbody>
</table>

| TREATMENT CONDITIONS 40                   |
| Interval: --                              |
| Occurrences: --                           |
| Comments:                                 |
| Magnesium (Normal range 1.6 to 2.6mEq/L)  |
| o Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP |
| o Protocol applies only to same day lab value. |
| o Serum Magnesium less than 1.0mEq/L, give 2 gram magnesium sulfate IV and contact MD/NP |
| o Serum Magnesium 1.0 to 1.2mEq/L, give 2 gram magnesium sulfate IV |
| o Serum Magnesium 1.3 to 1.5mEq/L, give 1 gram magnesium sulfate IV |
| o Serum Magnesium 1.6 mEq/L or greater, do not give magnesium replacement |
| o If patient meets criteria, order SmartSet called "Outpatient Electrolyte Replacement" |
| o Sign electrolyte replacement order as Per protocol: cosign required |

<table>
<thead>
<tr>
<th>Nursing Orders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ONC NURSING COMMUNICATION 59</strong></td>
</tr>
<tr>
<td>Interval: --</td>
</tr>
<tr>
<td>Occurrences: --</td>
</tr>
<tr>
<td>Comments:</td>
</tr>
<tr>
<td>Verify that patient took PREDNISONE orally prior to chemotherapy. Otherwise, please contact physician to order Dexamethasone IV.</td>
</tr>
</tbody>
</table>
**Nursing Orders**

**ONC NURSING COMMUNICATION 51**

- **Interval:** --
- **Occurrences:** --
- **Comments:** HOLD Bortezomib and notify provider if Hgb is LESS than or equal to **3** g/dL.

**Vitals**

**ONC NURSING COMMUNICATION 50**

- **Interval:** --
- **Occurrences:** --
- **Comments:**
  1. Check vital signs (BP, temperature, pulse, and respirations) prior to and 30 minutes after Bortezomib administration.
  2. If systolic BP, 30 minutes after Bortezomib infusion, drops more than 30 mmHg, or if systolic BP is less than 90, please contact MD.

**Line Flush**

- **sodium chloride 0.9 % flush 20 mL**
  - **Dose:** 20 mL
  - **Route:** intravenous
  - **Start:** S

**Nursing Orders**

- **sodium chloride 0.9 % infusion 250 mL**
  - **Dose:** 250 mL
  - **Route:** intravenous
  - **Start:** S
  - **Instructions:** To keep vein open.

**Pre-Medications**

- **⚫ ondansetron (ZOFRAN) injection 8 mg**
  - **Dose:** 8 mg
  - **Route:** intravenous
  - **Start:** S
  - **End:** S 11:15 AM

- **⚫ ondansetron (ZOFRAN) tablet 16 mg**
  - **Dose:** 16 mg
  - **Route:** oral
  - **Start:** S

- **⚫ ondansetron (ZOFRAN) 16 mg in dextrose 5% 50 mL IVPB**
  - **Dose:** 16 mg
  - **Route:** intravenous
  - **Start:** S
  - **End:** S 11:00 AM
  - **Ingredients:**
    - **Name:** ONDANSETRON HCL (PF) 4 MG/2 ML INJECTION SOLUTION
    - **Type:** Medications
    - **Dose:** 16 mg
    - **Selected:** Main
    - **Adds Vol.:** No
    - **Name:** DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION
    - **Type:** Base
    - **Dose:** 50 mL
    - **Selected:** Always
    - **Adds Vol.:** Yes

**Chemotherapy**

- **bortezomib (VelCADE) 1.3 mg/m2 in sodium chloride 0.9 % chemo injection**
  - **Dose:** 1.3 mg/m2
  - **Route:** subcutaneous
  - **Start:** S
  - **Instructions:** DRUG IS AN IRRITANT. Administer drug slowly to prevent burning upon administration. 72 hours between doses is recommended.

  - **Ingredients:**
    - **Name:** BORTEZOMIB 3.5
    - **Type:** Medications
    - **Dose:** 1.3
    - **Selected:** Main
    - **Adds Vol.:** No
Hematology & Oncology Hypersensitivity Reaction Standing Order

**ONC NURSING COMMUNICATION 82**

**Interval:** --
**Occurrences:** --
**Comments:**
Grade 1 - MILD Symptoms (cutaneous and subcutaneous symptoms only – itching, flushing, periorbital edema, rash, or runny nose)
1. Stop the infusion.
2. Place the patient on continuous monitoring.
3. Obtain vital signs.
4. Administer Normal Saline at 50 mL per hour using a new bag and new intravenous tubing.
5. If greater than or equal to 30 minutes since the last dose of Diphenhydramine, administer Diphenhydramine 25 mg intravenous once.
6. If less than 30 minutes since the last dose of Diphenhydramine, administer Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.
7. Notify the treating physician.
8. If no improvement after 15 minutes, advance level of care to Grade 2 (Moderate) or Grade 3 (Severe).
9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

**ONC NURSING COMMUNICATION 4**

**Interval:** --
**Occurrences:** --
**Comments:**
Grade 2 – MODERATE Symptoms (cardiovascular, respiratory, or gastrointestinal symptoms – shortness of breath, wheezing, nausea, vomiting, dizziness, diaphoresis, throat or chest tightness, abdominal or back pain)
1. Stop the infusion.
2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O2 saturation of greater than or equal to 92%.
6. Administer Normal Saline at 150 mL per hour using a new bag and new intravenous tubing.
7. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous), Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.
8. If no improvement after 15 minutes, advance level of care to Grade 3 (Severe).
9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

**ONC NURSING COMMUNICATION 83**

**Interval:** --
**Occurrences:** --
**Comments:**
Grade 3 – SEVERE Symptoms (hypoxia, hypotension, or neurologic compromise – cyanosis or O2 saturation less than 92%, hypotension with systolic blood pressure less than 90 mmHg, confusion, collapse, loss of consciousness, or incontinence)
1. Stop the infusion.
2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. If heart rate is less than 50 or greater than 120, or blood pressure is less than 90/50 mmHg, place patient in reclined or flattened position.
6. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O2 saturation of greater than or equal to 92%.
7. Administer Normal Saline at 1000 mL intravenous bolus using a new bag and new intravenous tubing.
8. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous) and Famotidine 20 mg intravenous once.
9. Administer Epinephrine (1:1000) 0.3 mg subcutaneous.
10. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Dose</th>
<th>Route</th>
<th>PRN</th>
</tr>
</thead>
<tbody>
<tr>
<td>diphenhydrAMINE (BENADRYL) injection 25 mg</td>
<td>25 mg</td>
<td>intravenous</td>
<td>PRN</td>
</tr>
<tr>
<td>fexofenadine (ALLEGRA) tablet 180 mg</td>
<td>180 mg</td>
<td>oral</td>
<td>PRN</td>
</tr>
<tr>
<td>famotidine (PEPCID) 20 mg/2 mL injection 20 mg</td>
<td>20 mg</td>
<td>intravenous</td>
<td>PRN</td>
</tr>
<tr>
<td>hydrocortisone sodium succinate (Solu-CORTEF) injection 100 mg</td>
<td>100 mg</td>
<td>intravenous</td>
<td>PRN</td>
</tr>
<tr>
<td>dexamethasone (DECADRON) injection 4 mg</td>
<td>4 mg</td>
<td>intravenous</td>
<td>PRN</td>
</tr>
<tr>
<td>epINEPHrine (ADRENALIN) 1 mg/10 mL ADULT injection syringe 0.3 mg</td>
<td>0.3 mg</td>
<td>subcutaneous</td>
<td>PRN</td>
</tr>
</tbody>
</table>

Discharge Nursing Orders

**ONC NURSING COMMUNICATION 76**

Interval: --  Occurrences: --  Comments: Discontinue IV.

Discharge Nursing Orders

- sodium chloride 0.9 % flush 20 mL
  Dose: 20 mL  Route: intravenous  PRN

- HEParin, porcine (PF) injection 500 Units
  Dose: 500 Units  Route: intra-catheter  once PRN

  Instructions:
  Concentration: 100 units/mL. Heparin flush for Implanted Vascular Access Device maintenance.