

## OP BENDAMUSTINE / BORTEZOMIB / PREDNISONE

*Types:* ONCOLOGY TREATMENT

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

Take-Home Medications	Repeat 1 time	Cycle length: 1 day
<b>Day 1</b> Perform every 1 day x1		
Take-Home Medications Prior to Treatment		
<b>acyclovir (ZOVIRAX) 800 MG tablet</b>		
Dose: 800 mg	Route: oral	2 times daily
Dispense: 42 tablet	Refills: 4	
Start: S	End: S+21	
Instructions: For infection prevention.		
Take-Home Medications Prior to Treatment		
<b>predniSONE (DELTASONE) 50 MG tablet</b>		
Dose: 100 mg	Route: oral	
Dispense: 10 tablet	Refills: 4	
Start: S		
Instructions: On day 1, 2, 4, 8, 11 of all cycles. Take after meals or with food or milk.		
Cycles 1 to 4	Repeat 4 times	Cycle length: 21 days
<b>Day 1</b> Perform every 1 day x1		
Appointment Requests		
<b>INFUSION APPOINTMENT REQUEST</b>		
Interval: --	Occurrences: --	
Labs		
<input checked="" type="checkbox"/> <b>COMPREHENSIVE METABOLIC PANEL</b>		
Interval: --	Occurrences: --	
<input checked="" type="checkbox"/> <b>CBC WITH PLATELET AND DIFFERENTIAL</b>		
Interval: --	Occurrences: --	
<input checked="" type="checkbox"/> <b>MAGNESIUM LEVEL</b>		
Interval: --	Occurrences: --	
<input checked="" type="checkbox"/> <b>LDH</b>		
Interval: --	Occurrences: --	
<input checked="" type="checkbox"/> <b>URIC ACID LEVEL</b>		
Interval: --	Occurrences: --	
<input checked="" type="checkbox"/> <b>PHOSPHORUS LEVEL</b>		
Interval: --	Occurrences: --	
Outpatient Electrolyte Replacement Protocol		
<b>TREATMENT CONDITIONS 39</b>		
Interval: --	Occurrences: --	
Comments:	Potassium (Normal range 3.5 to 5.0mEq/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 potassium less than 3.0mEq/L, give 40mEq KCL IV or PO and contact MD/NP	
	o 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 PREDNISONONE 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.

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

Nursing Orders

**sodium chloride 0.9 % infusion 250 mL**

Dose: 250 mL      Route: intravenous      once @ 30 mL/hr for 1 dose  
Start: S  
Instructions:  
To keep vein open.

Pre-Medications

**ondansetron (ZOFTRAN) 16 mg in sodium chloride 0.9% 50 mL IVPB**

Dose: --      Route: intravenous      once over 15 Minutes for 1 dose

Start: S      End: S 11:30 AM

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	ONDANSETRON HCL (PF) 4 MG/2 ML INJECTION SOLUTION	Medications	16 mg	Yes	No
	DEXAMETHASONE 4 MG/ML INJECTION SOLUTION	Medications	12 mg	No	No
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Base	50 mL	Always	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base		No	Yes

**dexamethasone (DECADRON) 12 mg in sodium chloride 0.9% 50 mL IVPB**

Dose: --      Route: intravenous      once over 15 Minutes for 1 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.

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	ONDANSETRON HCL (PF) 4 MG/2 ML INJECTION SOLUTION	Medications	16 mg	No	No
	DEXAMETHASONE 4 MG/ML INJECTION SOLUTION	Medications	12 mg	Yes	No
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Base	50 mL	Always	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base		No	Yes

**ondansetron (ZOFTRAN) tablet 16 mg**

Dose: 16 mg      Route: oral      once for 1 dose  
Start: S      End: S 11:30 AM

**dexamethasone (DECADRON) tablet 12 mg**

Dose: 12 mg      Route: oral      once for 1 dose  
Start: S

**palonosetron (ALOXI) injection 0.25 mg**

Dose: 250 mcg  
Start: S

Route: intravenous  
End: S 3:00 PM

once for 1 dose

**aprepitant (CINVANTI) 130 mg in dextrose (NON-PVC) 5% 130 mL IVPB**

Dose: 130 mg  
Start: S

Route: intravenous  
End: S

once over 30 Minutes for 1 dose

**Ingredients:**

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

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:**

<b>Name</b>	<b>Type</b>	<b>Dose</b>	<b>Selected</b>	<b>Adds Vol.</b>
BENDAMUSTINE 25 MG/ML INTRAVENOUS SOLUTION	Medications	60 mg/m2	Main Ingredient	Yes
SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Base	50 mL	Yes	Yes

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:**

<b>Name</b>	<b>Type</b>	<b>Dose</b>	<b>Selected</b>	<b>Adds Vol.</b>
BORTEZOMIB 3.5 MG SOLUTION FOR INJECTION	Medications	1.3 mg/m2	Main Ingredient	No
SODIUM CHLORIDE 0.9 % INJECTION SOLUTION	Base		Always	Yes

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 O<sub>2</sub> 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 O<sub>2</sub> 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 O<sub>2</sub> 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.

**diphenhydramine (BENADRYL) injection 25 mg**

Dose: 25 mg                      Route: intravenous                      PRN  
Start: S

**fexofenadine (ALLEGRA) tablet 180 mg**

Dose: 180 mg                      Route: oral                      PRN  
Start: S

**famotidine (PEPCID) 20 mg/2 mL injection 20 mg**

Dose: 20 mg                      Route: intravenous                      PRN  
Start: S

**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  
Start: S

**epINEPHrine (ADRENALIN) 1 mg/10 mL ADULT injection syringe 0.3 mg**

Dose: 0.3 mg                      Route: subcutaneous                      PRN  
Start: S

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  
Start: S

Instructions:

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

**Day 2**

Perform every 1 day x1

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)

- o Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP
- o Protocol applies only to same day lab value.
- o Serum potassium less than 3.0mEq/L, give 40mEq KCL IV or PO and contact MD/NP
- o 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

**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

Start: S

Nursing Orders

**sodium chloride 0.9 % infusion 250 mL**

Dose: 250 mL

Route: intravenous

once @ 30 mL/hr for 1 dose

Start: S

Instructions:

To keep vein open.

Pre-Medications

**ondansetron (ZOFRAN) 16 mg in sodium chloride 0.9% 50 mL IVPB**

Dose: --

Route: intravenous

once over 15 Minutes for 1 dose

Start: S

End: S 11:30 AM

**Ingredients:**

**Name**

**Type**

**Dose**

**Selected**

**Adds Vol.**

ONDANSETRON  
HCL (PF) 4 MG/2  
ML INJECTION  
SOLUTION

Medications

16 mg

Yes

No

DEXAMETHASONE  
4 MG/ML  
INJECTION  
SOLUTION

Medications

12 mg

No

No

SODIUM  
CHLORIDE 0.9 %  
INTRAVENOUS  
SOLUTION

Base

50 mL

Always

Yes

DEXTROSE 5 % IN  
WATER (D5W)  
INTRAVENOUS  
SOLUTION

Base

No

Yes

**dexamethasone (DECADRON) 12 mg in sodium chloride 0.9% 50 mL IVPB**

Dose: --

Route: intravenous

once over 15 Minutes for 1 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.

**Ingredients:**

**Name**

**Type**

**Dose**

**Selected**

**Adds Vol.**

ONDANSETRON  
HCL (PF) 4 MG/2  
ML INJECTION  
SOLUTION

Medications

16 mg

No

No

DEXAMETHASONE  
4 MG/ML  
INJECTION  
SOLUTION

Medications

12 mg

Yes

No

SODIUM  
CHLORIDE 0.9 %  
INTRAVENOUS  
SOLUTION

Base

50 mL

Always

Yes

DEXTROSE 5 % IN  
WATER (D5W)  
INTRAVENOUS  
SOLUTION

Base

No

Yes

**ondansetron (ZOFRAN) tablet 16 mg**

Dose: 16 mg

Route: oral

once for 1 dose

Start: S

End: S 11:30 AM

**dexamethasone (DECADRON) tablet 12 mg**

Dose: 12 mg

Route: oral

once for 1 dose

Start: S



**palonosetron (ALOXI) injection 0.25 mg**

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

**aprepitant (CINVANTI) 130 mg in dextrose (NON-PVC) 5% 130 mL IVPB**

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

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	APREPITANT 7.2 MG/ML INTRAVENOUS EMULSION	Medications	130 mg	Main Ingredient	Yes
	DEXTROSE 5 % IN WATER (D5W) IV SOLP (EXCEL; NON-PVC)	Base	130 mL	Yes	Yes
	SODIUM CHLORIDE 0.9 % IV SOLP (EXCEL;NON-PVC)	Base	130 mL	No	Yes

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:	Name	Type	Dose	Selected	Adds Vol.
	BENDAMUSTINE 25 MG/ML INTRAVENOUS SOLUTION	Medications	60 mg/m2	Main Ingredient	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Base	50 mL	Yes	Yes

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  
Start: S

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

Days 4,8

Perform every 4 days x2

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)
- o Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP
  - o Protocol applies only to same day lab value.
  - o Serum potassium less than 3.0mEq/L, give 40mEq KCL IV or PO and contact MD/NP
  - o 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 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

Nursing Orders

**sodium chloride 0.9 % infusion 250 mL**

Dose: 250 mL Route: intravenous once @ 30 mL/hr for 1 dose  
 Start: S  
 Instructions: To keep vein open.

Pre-Medications

**ondansetron (ZOFRAN) injection 8 mg**

Dose: 8 mg Route: intravenous once for 1 dose  
 Start: S End: S 11:15 AM

**ondansetron (ZOFRAN) tablet 16 mg**

Dose: 16 mg Route: oral once for 1 dose  
 Start: S

**ondansetron (ZOFRAN) 16 mg in dextrose 5% 50 mL IVPB**

Dose: 16 mg Route: intravenous once over 15 Minutes for 1 dose  
 Start: S End: S 11:00 AM

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	ONDANSETRON HCL (PF) 4 MG/2 ML INJECTION SOLUTION	Medications	16 mg	Main	No
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base	50 mL	Always	Yes

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:	Name	Type	Dose	Selected	Adds Vol.
	BORTEZOMIB 3.5	Medications	1.3	Main	No

MG SOLUTION FOR INJECTION	mg/m2	Ingredient
SODIUM CHLORIDE 0.9 % INJECTION SOLUTION	Base	Always Yes

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.

**diphenhydramine (BENADRYL) injection 25**

**mg**

Dose: 25 mg                      Route: intravenous                      PRN  
Start: S

**fexofenadine (ALLEGRA) tablet 180 mg**

Dose: 180 mg                      Route: oral                      PRN  
Start: S

**famotidine (PEPCID) 20 mg/2 mL injection 20**

**mg**

Dose: 20 mg                      Route: intravenous                      PRN  
Start: S

**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  
Start: S

**epINEPHrine (ADRENALIN) 1 mg/10 mL ADULT injection syringe 0.3 mg**

Dose: 0.3 mg                      Route: subcutaneous                      PRN  
Start: S

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  
Start: S

Instructions:

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

**Day 11**

Perform every 1 day x1

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:
- o Potassium (Normal range 3.5 to 5.0mEq/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 potassium less than 3.0mEq/L, give 40mEq KCL IV or PO and contact MD/NP
  - o 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:
- o 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:
- o 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 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

Nursing Orders

**sodium chloride 0.9 % infusion 250 mL**

Dose: 250 mL Route: intravenous once @ 30 mL/hr for 1 dose  
 Start: S  
 Instructions: To keep vein open.

Pre-Medications

**ondansetron (ZOFRAN) injection 8 mg**

Dose: 8 mg Route: intravenous once for 1 dose  
 Start: S End: S 11:15 AM

**ondansetron (ZOFRAN) tablet 16 mg**

Dose: 16 mg Route: oral once for 1 dose  
 Start: S

**ondansetron (ZOFRAN) 16 mg in dextrose 5% 50 mL IVPB**

Dose: 16 mg Route: intravenous once over 15 Minutes for 1 dose  
 Start: S End: S 11:00 AM

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	ONDANSETRON HCL (PF) 4 MG/2 ML INJECTION SOLUTION	Medications	16 mg	Main Ingredient	No
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base	50 mL	Always	Yes

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:	Name	Type	Dose	Selected	Adds Vol.
	BORTEZOMIB 3.5	Medications	1.3	Main	No

MG SOLUTION FOR INJECTION	mg/m2	Ingredient
SODIUM CHLORIDE 0.9 % INJECTION SOLUTION	Base	Always Yes

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.

**diphenhydramine (BENADRYL) injection 25**

**mg**

Dose: 25 mg                      Route: intravenous                      PRN  
Start: S

**fexofenadine (ALLEGRA) tablet 180 mg**

Dose: 180 mg                      Route: oral                      PRN  
Start: S

**famotidine (PEPCID) 20 mg/2 mL injection 20**

**mg**

Dose: 20 mg                      Route: intravenous                      PRN  
Start: S

**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  
Start: S

**epINEPHrine (ADRENALIN) 1 mg/10 mL ADULT injection syringe 0.3 mg**

Dose: 0.3 mg                      Route: subcutaneous                      PRN  
Start: S

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  
Start: S

Instructions:

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