

# IP CYBORDEX

Types: ONCOLOGY TREATMENT

Synonyms: MM, MULTIPLE, MYELOMA, CYCLO, CYTOX, BORTEZ, VEL

Cycle 1	Repeat 1 time	Cycle length: 28 days
<b>Day 1</b> Perform every 1 day x1		
<b>Provider Communication</b>		
<b>ONC PROVIDER COMMUNICATION 5</b> Interval: Once Occurrences: -- Comments: Use baseline weight to calculate dose. Adjust dose for weight gains/losses of greater than or equal to 10%.		
<b>Labs</b>		
<input checked="" type="checkbox"/> <b>COMPREHENSIVE METABOLIC PANEL</b> Interval: Once Occurrences: --		
<input checked="" type="checkbox"/> <b>CBC WITH PLATELET AND DIFFERENTIAL</b> Interval: Once Occurrences: --		
<input checked="" type="checkbox"/> <b>MAGNESIUM LEVEL</b> Interval: Once Occurrences: --		
<input checked="" type="checkbox"/> <b>LDH</b> Interval: Once Occurrences: --		
<input checked="" type="checkbox"/> <b>URIC ACID LEVEL</b> Interval: Once Occurrences: --		
<input checked="" type="checkbox"/> <b>PHOSPHORUS LEVEL</b> Interval: Once Occurrences: --		
<b>Nursing Orders</b>		
<b>TREATMENT CONDITIONS 7</b> Interval: Once Occurrences: -- Comments: HOLD and notify provider if ANC LESS than 1000; Platelets LESS than 100,000.		
<b>Nursing Orders</b>		
<b>ONC NURSING COMMUNICATION 51</b> Interval: Once Occurrences: -- Comments: HOLD Bortezomib and notify provider if Hgb is LESS than or equal to *** g/dL.		
<b>Vitals</b>		
<b>ONC NURSING COMMUNICATION 50</b> Interval: Once 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.		
<b>Line Flush</b>		
<b>sodium chloride 0.9 % flush 20 mL</b> 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

**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

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**

**cyclophosphamide (CYTOXAN) 300 mg/m2 in sodium chloride 0.9 % 100 mL chemo IVPB**

Dose: 300 mg/m2      Route: intravenous      once over 30 Minutes for 1 dose  
 Offset: 30 Minutes

Instructions:  
 DRUG IS AN IRRITANT. Rapid infusion may result in dizziness, nasal/sinus congestion, and/or nasal burning.

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	CYCLOPHOSPHAMIDE 1 GRAM INTRAVENOUS SOLUTION	Medications	300 mg/m2	Main Ingredient	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	100 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	100 mL	No	Yes

**cyclophosphamide (CYTOXAN) chemo capsule 300 mg/m2 (Treatment Plan)**

Dose: 300 mg/m2      Route: oral      once for 1 dose  
 Offset: 30 Minutes

**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.

Ingredients:

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

Provider Communication

**ONC PROVIDER COMMUNICATION**

Interval: Once

Occurrences: --

Comments:

Please go to Meds & Orders to order:

- o Zofran 8 mg po BID for 5 Doses, beginning on Day 1 at 2100.
- o Zofran 8 mg po BID for 5 Doses, beginning on Day 8 at 2100.
- o Zofran 8 mg po BID for 5 Doses, beginning on Day 15 at 2100.
- o Zofran 8 mg po BID for 5 Doses, beginning on Day 22 at 2100.
- o Dexamethasone 40 mg PO Daily for 4 Doses, beginning on Day 1 at 1800.
- o Dexamethasone 40 mg PO Daily for 4 Doses, beginning on Day 9 at 1800.
- o Dexamethasone 40 mg PO Daily for 4 Doses, beginning on Day 17 at 1800.

Pre-Medications

**LORazepam (ATIVAN) tablet 1 mg**

Dose: 1 mg  
Start: S

Route: oral                      once for 1 dose

Hematology & Oncology Hypersensitivity Reaction Standing Order

**ONC NURSING COMMUNICATION 82**

Interval: Until discontinued

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 83**

Interval: Until discontinued

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 4**

Interval: Until discontinued

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

**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 4**

Perform every 1 day x1

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

**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

**Ingredients:**

**Name**

**Type**

**Dose**

**Selected**

**Adds Vol.**

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

Medications

16 mg

Main

No

Ingredient

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.

**Ingredients:**

**Name**

**Type**

**Dose**

**Selected**

**Adds Vol.**

BORTEZOMIB 3.5 MG SOLUTION

Medications

1.3

mg/m2

Main

No

Ingredient

FOR INJECTION  
SODIUM  
CHLORIDE 0.9 %  
INJECTION  
SOLUTION

Base

Always Yes

**Day 8**

Perform every 1 day x1

Labs

**CBC WITH PLATELET AND DIFFERENTIAL**

Interval: Once Occurrences: --

**COMPREHENSIVE METABOLIC PANEL**

Interval: Once Occurrences: --

**MAGNESIUM LEVEL**

Interval: Once Occurrences: --

**LDH**

Interval: Once Occurrences: --

**URIC ACID LEVEL**

Interval: Once Occurrences: --

Nursing Orders

**TREATMENT CONDITIONS 7**

Interval: Once Occurrences: --

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

Nursing Orders

**ONC NURSING COMMUNICATION 51**

Interval: Once Occurrences: --

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

Vitals

**ONC NURSING COMMUNICATION 50**

Interval: Once 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.

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) injection 8 mg**

Dose: 8 mg Route: intravenous once for 1 dose

Start: S End: S 11:15 AM

**ondansetron (ZOFTRAN) tablet 16 mg**

Dose: 16 mg Route: oral once for 1 dose

Start: S

○ **ondansetron (ZOFTRAN) 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

○ **cyclophosphamide (CYTOXAN) 300 mg/m2 in sodium chloride 0.9 % 100 mL chemo IVPB**

Dose: 300 mg/m2                      Route: intravenous                      once over 30 Minutes for 1 dose  
 Offset: 30 Minutes

Instructions:  
 DRUG IS AN IRRITANT. Rapid infusion may result in dizziness, nasal/sinus congestion, and/or nasal burning.

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	CYCLOPHOSPHAMIDE 1 GRAM INTRAVENOUS SOLUTION	Medications	300 mg/m2	Main Ingredient	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	100 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	100 mL	No	Yes

● **cyclophosphamide (CYTOXAN) chemo capsule 300 mg/m2 (Treatment Plan)**

Dose: 300 mg/m2                      Route: oral                              once for 1 dose  
 Offset: 30 Minutes

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.

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

Day 11

Perform every 1 day x1

Vitals

**ONC NURSING COMMUNICATION 50**

Interval: Once                      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.

**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.

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

**Day 15**

Perform every 1 day x1

**Labs**

**CBC WITH PLATELET AND DIFFERENTIAL**

Interval: Once      Occurrences: --

**COMPREHENSIVE METABOLIC PANEL**

Interval: Once      Occurrences: --



**MAGNESIUM LEVEL**

Interval: Once Occurrences: --

**LDH**

Interval: Once Occurrences: --

**URIC ACID LEVEL**

Interval: Once Occurrences: --

**Nursing Orders**

**TREATMENT CONDITIONS 7**

Interval: Once Occurrences: --

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

**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  
Ingredient

DEXTROSE 5 % IN  
WATER (D5W)  
INTRAVENOUS  
SOLUTION

Base

50 mL

Always Yes

**Chemotherapy**

**cyclophosphamide (CYTOXAN) 300 mg/m2 in sodium chloride 0.9 % 100 mL chemo IVPB**

Dose: 300 mg/m2 Route: intravenous once over 30 Minutes for 1 dose

Offset: 30 Minutes

Instructions:

DRUG IS AN IRRITANT. Rapid infusion may result in dizziness, nasal/sinus congestion, and/or nasal burning.

**Ingredients:**

**Name**

**Type**

**Dose**

**Selected**

**Adds Vol.**

CYCLOPHOSPHAM  
IDE 1 GRAM  
INTRAVENOUS  
SOLUTION

Medications

300

mg/m2

Main Yes  
Ingredient

SODIUM  
CHLORIDE 0.9 %

QS Base

100 mL

Yes Yes

INTRAVENOUS SOLUTION  
 DEXTROSE 5 % IN QS Base 100 mL No Yes  
 WATER (D5W)  
 INTRAVENOUS SOLUTION

☉ **cyclophosphamide (CYTOXAN) chemo capsule 300 mg/m2 (Treatment Plan)**

Dose: 300 mg/m2      Route: oral      once for 1 dose  
 Offset: 30 Minutes

**Day 22**

Perform every 1 day x1

Labs

**CBC WITH PLATELET AND DIFFERENTIAL**

Interval: Once      Occurrences: --

**COMPREHENSIVE METABOLIC PANEL**

Interval: Once      Occurrences: --

**MAGNESIUM LEVEL**

Interval: Once      Occurrences: --

**LDH**

Interval: Once      Occurrences: --

**URIC ACID LEVEL**

Interval: Once      Occurrences: --

Nursing Orders

**TREATMENT CONDITIONS 7**

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

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) injection 8 mg**

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

○ **ondansetron (ZOFTRAN) tablet 16 mg**

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

○ **ondansetron (ZOFTRAN) 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 Base		50 mL	Always	Yes

WATER (D5W)  
INTRAVENOUS  
SOLUTION

Chemotherapy

- **cyclophosphamide (CYTOXAN) 300 mg/m<sup>2</sup> in sodium chloride 0.9 % 100 mL chemo IVPB**

Dose: 300 mg/m<sup>2</sup>      Route: intravenous      once over 30 Minutes for 1 dose  
Offset: 30 Minutes

Instructions:

DRUG IS AN IRRITANT. Rapid infusion may result in dizziness, nasal/sinus congestion, and/or nasal burning.

**Ingredients:**

<b>Name</b>	<b>Type</b>	<b>Dose</b>	<b>Selected</b>	<b>Adds Vol.</b>
CYCLOPHOSPHAMIDE 1 GRAM INTRAVENOUS SOLUTION	Medications	300 mg/m <sup>2</sup>	Main Ingredient	Yes
SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	100 mL	Yes	Yes
DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	100 mL	No	Yes

- **cyclophosphamide (CYTOXAN) chemo capsule 300 mg/m<sup>2</sup> (Treatment Plan)**

Dose: 300 mg/m<sup>2</sup>      Route: oral      once for 1 dose  
Offset: 30 Minutes