

IP BORTEZOMIB / DEXAMETHASONE / CYCLOPHOSHAMIDE

Types: ONCOLOGY TREATMENT

Synonyms: MM, MULTIPLE, MYELOMA, CYCLO, CYTOX, BORTEZ, VEL, VAL, DEX, DEC, CYBO, NEO, MODIFIED

Cycle 1 Repeat 1 time Cycle length: 28 days

Day 1 Perform every 1 day x1

Provider Communication

ONC PROVIDER COMMUNICATION 5

Interval: Once Occurrences: --
Comments: Use baseline weight to calculate dose. Adjust dose for weight gains/losses of greater than or equal to 10%.

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.

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-Hydration

sodium chloride 0.9 % infusion 500 mL
 Dose: 500 mL Route: intravenous once @ 250 mL/hr for 1 dose

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 End: S

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

Pre-Medications

dexamethasone (DECADRON) tablet 40 mg
 Dose: 40 mg Route: oral once for 1 dose

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

Chemotherapy

⊙ **cyclophosphamide (CYTOXAN) 300 mg/m2 in sodium chloride 0.9 % 250 mL chemo IVPB**

Dose: 300 mg/m2 Route: intravenous once over 60 Minutes for 1 dose
 Offset: 2 Hours

Instructions:
 DRUG IS AN IRRITANT. Observe carefully for signs of local irritation or infiltration. Apply ice if infiltration occurs.

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	250 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	250 mL	No	Yes

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

Dose: 300 mg/m2 Route: oral once for 1 dose
 Start: S

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 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 4

Interval: Until discontinued

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

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

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.

Pre-Medications

dexamethasone (DECADRON) tablet 40 mg

Dose: 40 mg Route: oral once for 1 dose

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
SODIUM CHLORIDE 0.9 % INJECTION SOLUTION

Medications

1.3 mg/m2

Main No
Ingredient

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 7Interval: Once
Comments:

Occurrences: --

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

Nursing Orders

ONC NURSING COMMUNICATION 51Interval: Once
Comments:

Occurrences: --

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

Vitals

ONC NURSING COMMUNICATION 50Interval: Once
Comments:

Occurrences: --

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 mLDose: 250 mL
Start: S

Route: intravenous

once @ 30 mL/hr for 1 dose

Instructions:

To keep vein open.

Pre-Hydration

sodium chloride 0.9 % infusion 500 mL

Dose: 500 mL

Route: intravenous

once @ 250 mL/hr for 1 dose

Pre-Medications

 ondansetron (ZOFTRAN) injection 8 mgDose: 8 mg
Start: S

Route: intravenous

once for 1 dose

 ondansetron (ZOFTRAN) tablet 16 mgDose: 16 mg
Start: S

Route: oral

once for 1 dose

 ondansetron (ZOFTRAN) 16 mg in dextrose 5% 50 mL IVPBDose: 16 mg
Start: S

Route: intravenous

once over 15 Minutes for 1 dose

End: S

Ingredients:**Name****Type****Dose****Selected****Adds Vol.**

ONDANSETRON

Medications

16 mg

Yes

No

HCL 2 MG/ML

INTRAVENOUS

SOLUTION

DEXAMETHASONE Medications

No

No

4 MG/ML

INJECTION

SOLUTION

SODIUM

Base

50 mL

No

Yes

CHLORIDE 0.9 %

INTRAVENOUS

SOLUTION

DEXTROSE 5 % IN Base

50 mL

Yes

Yes

WATER (D5W)

**INTRAVENOUS
SOLUTION**

Pre-Medications

dexamethasone (DECADRON) tablet 40 mg

Dose: 40 mg Route: oral once for 1 dose

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.
	BOREZOMIB 3.5 MG SOLUTION FOR INJECTION	Medications	1.3 mg/m2	Main Ingredient	No
	SODIUM CHLORIDE 0.9 % INJECTION SOLUTION	Base		Always	Yes

Chemotherapy

cyclophosphamide (CYTOXAN) 300 mg/m2 in sodium chloride 0.9 % 250 mL chemo IVPB

Dose: 300 mg/m2 Route: intravenous once over 60 Minutes for 1 dose
Offset: 2 Hours

Instructions:
DRUG IS AN IRRITANT. Observe carefully for signs of local irritation or infiltration. Apply ice if infiltration occurs.

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	250 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	250 mL	No	Yes

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

Dose: 300 mg/m2 Route: oral once for 1 dose
Start: S

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.

Pre-Medications

dexamethasone (DECADRON) tablet 40 mg

Dose: 40 mg Route: oral once for 1 dose

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