Protocol Index

IP VD-PACE

Types: ONCOLOGY TREATMENT
Synonyms: MM, MULTI, MYEL, CISPL, ETOPO, CYCLO, DEXA, DOXOR

Cycle 1 Repeat 1 time Cycle length: 28 days

Day 1 Perform every 1 day x1

Labs

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

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

☑ **MAGNESIUM LEVEL**
Interval: Once Occurrences: --

☑ **LDH**
Interval: Once Occurrences: --

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

☑ **PHOSPHORUS LEVEL**
Interval: Once Occurrences: --

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%.

Provider Communication

ONC PROVIDER COMMUNICATION
Interval: Once Occurrences: --
Comments: Verify Ejection Fraction prior to Cycle 1. Ejection Fraction: ***% on *** (date).

If patient has not had a recent MUGA or ECHO, order one via order entry. A baseline cardiac evaluation with a MUGA scan or an ECHO is recommended, especially in patients with risk factors for increased cardiac toxicity. Repeated MUGA or ECHO determinations of LVEF should be performed, particularly with higher, cumulative anthracycline doses.

Provider Communication

ONC PROVIDER COMMUNICATION 9
Interval: Once Occurrences: --
Comments: Please go to Meds & Orders to order appropriate antibiotics, anti-virals, anti-fungals.

Nursing Orders

TREATMENT CONDITIONS 7
Interval: Once Occurrences: --
Comments: HOLD and notify provider if ANC LESS than 1000; Platelets LESS than 100,000.

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.

Hydration

sodium chloride 0.9 % infusion

Dose: 100 mL/hr | Route: intravenous | continuous

Start: S

Pre-Medications

☑ **ondansetron (ZOFRAN) 16 mg, dexamethasone (DECADRON) 40 mg in sodium chloride 0.9% 50 mL IVPB**

Dose: -- | 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	Yes	No
DEXAMETHASONE 4 MG/ML INJECTION SOLUTION	Medications	40 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

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

CISplatin (PLATINOL) 10 mg/m2, cyclophosphamide (CYTOXAN) 400 mg/m2, etoposide (TOPOSAR) 40 mg/m2 in sodium chloride (NON-PVC) 0.9 % 1,000 mL chemo IVPB

Dose: -- | Route: intravenous | once over 22 Hours for 1 dose
Offset: 30 Minutes

Ingredients:

Name	Type	Dose	Selected	Adds Vol.
CISPLATIN 1 MG/ML INTRAVENOUS SOLUTION	Medications	10 mg/m2	Yes	Yes
CYCLOPHOSPHAMIDE 1 GRAM INTRAVENOUS SOLUTION	Medications	400 mg/m2	Yes	Yes
ETOPOSIDE 20 MG/ML INTRAVENOUS SOLUTION	Medications	40 mg/m2	Yes	Yes
SODIUM CHLORIDE 0.9 % IV SOLP (EXCEL;NON-PVC)	Base	1,000 mL	Yes	Yes

Chemotherapy

DOXOrubicin (ADRIAmycin) 10 mg/m2 in

sodium chloride 0.9 % 1,000 mL chemo IVPB

Dose: 10 mg/m2 | Route: intravenous | once over 22 Hours for 1 dose
Offset: 30 Minutes

Instructions:
Protect from light. DRUG IS A VESICANT.
Y-connect to Cisplatin / Cyclophosphamide / Etoposide bag.

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	DOXORUBICIN 2 MG/ML INTRAVENOUS SOLUTION	Medications	10 mg/m2	Main Ingredient	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	1,000 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base		No	Yes

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

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 2,3 Perform every 1 day x2

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, dexamethasone (DECADRON) 40 mg in sodium chloride 0.9% 50 mL IVPB**
Dose: -- 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	Yes	No
	DEXAMETHASONE 4 MG/ML INJECTION SOLUTION	Medications	40 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

CISplatin (PLATINOL) 10 mg/m2, cyclophosphamide (CYTOXAN) 400 mg/m2, etoposide (TOPOSAR) 40 mg/m2 in sodium chloride (NON-PVC) 0.9 % 1,000 mL chemo IVPB

Dose: -- Route: intravenous once over 22 Hours for 1 dose
Offset: 30 Minutes

Ingredients:

Name	Type	Dose	Selected	Adds Vol.
CISPLATIN 1 MG/ML INTRAVENOUS SOLUTION	Medications	10 mg/m2	Yes	Yes
CYCLOPHOSPHAMIDE 1 GRAM INTRAVENOUS SOLUTION	Medications	400 mg/m2	Yes	Yes
ETOPOSIDE 20 MG/ML INTRAVENOUS SOLUTION	Medications	40 mg/m2	Yes	Yes
SODIUM CHLORIDE 0.9 % IV SOLP (EXCEL;NON-PVC)	Base	1,000 mL	Yes	Yes

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.

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, dexamethasone (DECADRON) 40 mg in sodium chloride 0.9% 50 mL IVPB**

Dose: -- 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	Yes	No
DEXAMETHASONE 4 MG/ML INJECTION SOLUTION	Medications	40 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

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

CISplatin (PLATINOL) 10 mg/m2, cyclophosphamide (CYTOXAN) 400 mg/m2, etoposide (TOPOSAR) 40 mg/m2 in sodium chloride (NON-PVC) 0.9 % 1,000 mL chemo IVPB

Dose: -- Route: intravenous once over 22 Hours for 1 dose

Offset: 30 Minutes

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	CISPLATIN 1 MG/ML INTRAVENOUS SOLUTION	Medications	10 mg/m2	Yes	Yes
	CYCLOPHOSPHAMIDE 1 GRAM INTRAVENOUS SOLUTION	Medications	400 mg/m2	Yes	Yes
	ETOPOSIDE 20 MG/ML INTRAVENOUS SOLUTION	Medications	40 mg/m2	Yes	Yes
	SODIUM CHLORIDE 0.9 % IV SOLP (EXCEL;NON-PVC)	Base	1,000 mL	Yes	Yes