Protocol Index

# IP PAD

*Types:* ONCOLOGY TREATMENT
*Synonyms:* BORTEZOMIB, VELCADE, MM, BORTEZOMIB, MYELOMA, MULTIPLE, BORT, PAD, DOXORUBICIN, DOXO, ADRIA, ADRIAMYCIN, MM, VELCADE

**Cycle 1** Repeat 1 time Cycle length: 21 days

**Day 1** 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: --

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.

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-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

**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 |

☐ **ondansetron (ZOFRAN) tablet 16 mg**

Dose: 16 mg | Route: oral | once for 1 dose

Start: S

☐ **dexamethasone (DECADRON) tablet 12 mg**

Dose: 12 mg | Route: oral | once for 1 dose

Start: S

☐ **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: | Base | 130 mL | Yes | Yes |

| | | | | |
|---|---|---|---|---|
| NON-PVC) | | | | |
| SODIUM CHLORIDE 0.9 % IV SOLP (EXCEL;NON-PVC) | Base | 130 mL | No | Yes |

Pre-Medications

**dexamethasone (DECADRON) tablet 40 mg**

Dose: 40 mg Route: oral once for 1 dose

Pre-Medications

○ **LORazepam (ATIVAN) tablet 1 mg**

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

Chemotherapy

**DOXOrubicin (ADRIAmycin) 9 mg/m2 in sodium chloride 0.9% 500 mL chemo IVPB**

Dose: 9 mg/m2 Route: intravenous once over 24 Hours for 1 dose
Offset: 30 Minutes

Instructions:
Protect from light. VESICANT

| Ingredients: | Name | Type | Dose | Selected | Adds Vol. |
|---|---|---|---|---|---|
| | DOXORUBICIN 50 MG/25 ML INTRAVENOUS SOLUTION | Medications | 9 mg/m2 | Main Ingredient | Yes |
| | SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION | QS Base | 500 mL | Yes | Yes |
| | DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION | QS Base | 500 mL | No | Yes |

**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 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: 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 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 | 12 mg | No | No |
| SODIUM CHLORIDE 0.9 % INTRAVENOUS | Base | 50 mL | Always | Yes |

| | | | | |
|---|---|---|---|---|
| SOLUTION | | | | |
| 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

☐ **dexamethasone (DECADRON) tablet 12 mg**

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

☐ **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 |

Pre-Medications

**dexamethasone (DECADRON) tablet 40 mg**

Dose: 40 mg Route: oral once for 1 dose

Pre-Medications

○ **LORazepam (ATIVAN) tablet 1 mg**

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

Chemotherapy

**DOXOrubicin (ADRIAmycin) 9 mg/m2 in sodium chloride 0.9% 500 mL chemo IVPB**

Dose: 9 mg/m2 Route: intravenous once over 24 Hours for 1 dose
Offset: 30 Minutes

Instructions:
Protect from light. VESICANT

**Ingredients:**

| Name | Type | Dose | Selected | Adds Vol. |
|---|---|---|---|---|
| DOXORUBICIN 50 MG/25 ML INTRAVENOUS SOLUTION | Medications | 9 mg/m2 | Main Ingredient | Yes |
| SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION | QS Base | 500 mL | Yes | Yes |
| DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION | QS Base | 500 mL | No | Yes |

**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) 16 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 | 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 |

☐ **ondansetron (ZOFRAN) tablet 16 mg**

Dose: 16 mg | Route: oral | once for 1 dose

Start: S

☐ **dexamethasone (DECADRON) tablet 12 mg**

Dose: 12 mg | Route: oral | once for 1 dose

Start: S

☐ **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 |

Pre-Medications

**dexamethasone (DECADRON) tablet 40 mg**

Dose: 40 mg | Route: oral | once for 1 dose

Chemotherapy

**DOXOrubicin (ADRIAmycin) 9 mg/m2 in sodium chloride 0.9% 500 mL chemo IVPB**

Dose: 9 mg/m2 Route: intravenous once over 24 Hours for 1 dose
Offset: 30 Minutes

Instructions:
Protect from light. VESICANT

| Ingredients: | Name | Type | Dose | Selected | Adds Vol. |
|---|---|---|---|---|---|
| | DOXORUBICIN 50 MG/25 ML INTRAVENOUS SOLUTION | Medications | 9 mg/m2 | Main Ingredient | Yes |
| | SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION | QS Base | 500 mL | Yes | Yes |
| | DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION | QS Base | 500 mL | No | Yes |

**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 MG SOLUTION FOR INJECTION | Medications | 1.3 mg/m2 | Main Ingredient | No |
| | 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

**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.

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.

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 |