### OP GEMCITABINE / VINORELBINE / DOXORUBICIN LIPOSOMAL

**Types:** ONCOLOGY TREATMENT  
**Synonyms:** PRIMARY, PROGRESSIVE, RELAPSED, HODG, DOXIL, GEMZA, GEMCIT, VINORE, DOXORB, LIPOS, GEMZA, NAVELB

<table>
<thead>
<tr>
<th>Cycles 1 to 6</th>
<th>Repeat 6 times</th>
<th>Cycle length: 21 days</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day 1</strong></td>
<td></td>
<td>Perform every 1 day x1</td>
</tr>
</tbody>
</table>

**Appointment Requests**

<table>
<thead>
<tr>
<th>Infusion Appointment Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interval: --</td>
</tr>
</tbody>
</table>

**Labs**

1. **COMPREHENSIVE METABOLIC PANEL**  
   - Interval: --  
   - Occurrences: --

2. **CBC WITH PLATELET AND DIFFERENTIAL**  
   - Interval: --  
   - Occurrences: --

3. **MAGNESIUM LEVEL**  
   - Interval: --  
   - Occurrences: --

4. **LDH**  
   - Interval: --  
   - Occurrences: --

5. **URIC ACID LEVEL**  
   - Interval: --  
   - Occurrences: --

6. **PHOSPHORUS LEVEL**  
   - Interval: --  
   - Occurrences: --

**Outpatient Electrolyte Replacement Protocol**

**TREATMENT CONDITIONS 39**

- **Interval:** --  
- **Occurrences:** --

**Comments:**

- **Potassium (Normal range 3.5 to 5.0mEq/L)**  
  - Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP  
  - Protocol applies only to same day lab value.  
  - Serum potassium less than 3.0mEq/L, give 40mEq KCL IV or PO and contact MD/NP  
  - Serum potassium 3.0 to 3.2mEq/L, give 40mEq KCL IV or PO  
  - Serum potassium 3.3 to 3.4mEq/L, give 20mEq KCL IV or PO  
  - Serum potassium 3.5 mEq/L or greater, do not give potassium replacement  
  - If patient meets criteria, order SmartSet called "Outpatient Electrolyte Replacement"  
  - Sign electrolyte replacement order as Per protocol: cosign required

**TREATMENT CONDITIONS 40**

- **Interval:** --  
- **Occurrences:** --

**Magnesium (Normal range 1.6 to 2.6mEq/L)**  
- Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP  
- Protocol applies only to same day lab value.  
- Serum Magnesium less than 1.0mEq/L, give 2 gram magnesium sulfate IV and contact MD/NP  
- Serum Magnesium 1.0 to 1.2mEq/L, give 2 gram magnesium
sulfate IV
- Serum Magnesium 1.3 to 1.5mEq/L, give 1 gram magnesium sulfate IV
- Serum Magnesium 1.6 mEq/L or greater, do not give magnesium replacement
- If patient meets criteria, order SmartSet called "Outpatient Electrolyte Replacement"
- Sign electrolyte replacement order as Per protocol: cosign required

Provider Communication

**ONC PROVIDER COMMUNICATION**

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

**Line Flush**

- **dextrose 5% flush syringe 20 mL**
  - **Dose:** 20 mL  
  - **Route:** intravenous  
  - **PRN**
  - **Start:** S
  - **Instructions:** Administer ONLY for Liposomal Doxorubicin.

- **sodium chloride 0.9 % flush 20 mL**
  - **Dose:** 20 mL  
  - **Route:** intravenous  
  - **PRN**
  - **Start:** S
  - **Instructions:** Do NOT administer with Liposomal Doxorubicin.

**Nursing Orders**

- **dextrose 5% infusion 250 mL**
  - **Dose:** 250 mL  
  - **Route:** intravenous  
  - **once @ 30 mL/hr for 1 dose**
  - **Start:** S
  - **Instructions:** To keep vein open for Liposomal Doxorubicin.

- **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. Do NOT administer with Liposomal Doxorubicin.

**Pre-Medications**

- **ondansetron (ZOFRAN) injection 8 mg**
  - **Dose:** 8 mg  
  - **Route:** intravenous  
  - **once for 1 dose**
  - **Start:** S  
  - **End:** S 11:15 AM
<table>
<thead>
<tr>
<th>Medicine</th>
<th>Dose</th>
<th>Route</th>
<th>Timing</th>
<th>Ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>ondansetron (ZOFRAN) tablet 16 mg</td>
<td>16 mg</td>
<td>oral</td>
<td>once for 1 dose</td>
<td></td>
</tr>
<tr>
<td>ondansetron (ZOFRAN) 16 mg in dextrose 5% 50 mL IVPB</td>
<td>16 mg</td>
<td>intravenous</td>
<td>once over 15 Minutes for 1 dose</td>
<td></td>
</tr>
<tr>
<td>vinorelbine (NAVELBINE) 20 mg/m2 in sodium chloride 0.9 % 50 mL chemo IVPB</td>
<td>20 mg/m2</td>
<td>intravenous</td>
<td>once over 10 Minutes for 1 dose</td>
<td></td>
</tr>
<tr>
<td>gemcitabine (GEMZAR) 1,000 mg/m2 in sodium chloride 0.9 % 250 mL chemo IVPB</td>
<td>1,000 mg/m2</td>
<td>intravenous</td>
<td>once over 30 Minutes for 1 dose</td>
<td></td>
</tr>
</tbody>
</table>

### Chemotherapy

**DOXOrubicin liposomal (DOXIL) 15 mg/m2 in dextrose 5% 250 mL chemo IVPB**

- **Dose:** 15 mg/m2
- **Route:** intravenous
- **Timing:** once over 30 Minutes for 1 dose
- **Instructions:**
  - Initial infusion infused at 1 mg/min, but no faster than 1 hour to prevent infusion related reactions.
  - Monitor vital signs 15 minutes, 30 minutes, and one hour into infusion, then hourly for remainder of initial infusion. Stay with patient for the first 15 minutes of the initial infusion. If patient tolerated initial infusion, subsequent infusions to be given over 1 hour.

**Ingredients:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOXORUBICIN, PEGYLATED LIPOSOMAL 2 MG/ML INTRAVENOUS SUSPENSION</td>
<td>Medications</td>
<td>15 mg/m2</td>
<td>Main</td>
<td>Yes</td>
</tr>
<tr>
<td>DEXTROSE 5% IN WATER (D5W) INTRAVENOUS SOLUTION</td>
<td>Base</td>
<td>250 mL</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**vinorelbine (NAVELBINE) 20 mg/m2 in sodium chloride 0.9 % 50 mL chemo IVPB**

- **Dose:** 20 mg/m2
- **Route:** intravenous
- **Timing:** once over 10 Minutes for 1 dose
- **Instructions:**
  - Caution-VESICANT; must have CENTRAL line.

**Ingredients:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>VINORELBINE 10 MG/ML INTRAVENOUS SOLUTION SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION</td>
<td>Medications</td>
<td>20 mg/m2</td>
<td>Main</td>
<td>Yes</td>
</tr>
<tr>
<td>QS Base</td>
<td>Base</td>
<td>50 mL</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Ingredients:</td>
<td>Name</td>
<td>Type</td>
<td>Dose</td>
<td>Selected</td>
</tr>
<tr>
<td>-------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>GEMCITABINE 200 MG INTRAVENOUS SOLUTION</td>
<td>Medications</td>
<td>1,000 mg/m2</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION</td>
<td>QS Base</td>
<td>250 mL</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION</td>
<td>QS Base</td>
<td>250 mL</td>
<td>No</td>
</tr>
</tbody>
</table>

**Discharge Nursing Orders**

**ONC NURSING COMMUNICATION 76**

Interval: --

Comment: 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.

**Hematology & Oncology Hypersensitivity Reaction Standing Order**

**ONC NURSING COMMUNICATION 82**

Interval: --

Comment: 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: --

Comment: 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
Start: S
Route: intravenous
PRN

fexofenadine (ALLEGRA) tablet 180 mg
Dose: 180 mg
Start: S
Route: oral
PRN

famotidine (PEPCID) 20 mg/2 mL injection 20 mg
Dose: 20 mg
Start: S
Route: intravenous
PRN

hydrocortisone sodium succinate (Solu-CORTEF) injection 100 mg
Dose: 100 mg
Start: S
Route: intravenous
PRN

dexamethasone (DECADRON) injection 4 mg
Dose: 4 mg
Start: S
Route: intravenous
PRN

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

### Route
subcutaneous

### PRN

### Start
Day 8

### Appointment Requests
Perform every 1 day x1

<table>
<thead>
<tr>
<th>INFUSION APPOINTMENT REQUEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interval: --</td>
</tr>
<tr>
<td>Occurrences: --</td>
</tr>
</tbody>
</table>

### 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

- **Potassium (Normal range 3.5 to 5.0mEq/L)**
  - Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP
  - Protocol applies only to same day lab value.
  - Serum potassium less than 3.0mEq/L, give 40mEq KCL IV or PO and contact MD/NP
  - Serum potassium 3.0 to 3.2mEq/L, give 40mEq KCL IV or PO
  - Serum potassium 3.3 to 3.4mEq/L, give 20mEq KCL IV or PO
  - Serum potassium 3.5 mEq/L or greater, do not give potassium replacement
  - If patient meets criteria, order SmartSet called "Outpatient Electrolyte Replacement"
  - Sign electrolyte replacement order as Per protocol: cosign required

#### TREATMENT CONDITIONS 40

- **Magnesium (Normal range 1.6 to 2.6mEq/L)**
  - Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP
  - Protocol applies only to same day lab value.
  - Serum Magnesium less than 1.0mEq/L, give 2 gram magnesium sulfate IV and contact MD/NP
  - Serum Magnesium 1.0 to 1.2mEq/L, give 2 gram magnesium sulfate IV
  - Serum Magnesium 1.3 to 1.5mEq/L, give 1 gram magnesium sulfate IV
  - Serum Magnesium 1.6 mEq/L or greater, do not give magnesium replacement
  - If patient meets criteria, order SmartSet called "Outpatient Electrolyte Replacement"
  - Sign electrolyte replacement order as Per protocol: cosign required
### Nursing Orders

**TREATMENT CONDITIONS 18**

- **Interval:** --
- **Occurrences:** --
- **Comments:**

  Day 8: If ANC 500-1199, or Plt 75-99, 25% dose reduction in Gemzar and Navelbine.

  If ANC <500 or Plt <75, delay treatment until ANC >= 500 and Plt >= 75.

  If platelet nadir is <20, apply 25% dose reduction to Gemzar and Navelbine on all subsequent cycles.

  For patients with prior autotransplant, dosing is:

  - 800 mg/m² Gemzar
  - 15 mg/m² Navelbine
  - 10 mg/m² Doxil

  If patient does not meet treatment parameters, contact physician.

### Line Flush

- **dextrose 5% flush syringe 20 mL**
  - **Dose:** 20 mL
  - **Route:** intravenous
  - **Start:** S
  - **Instructions:** Administer ONLY for Liposomal Doxorubicin.

- **sodium chloride 0.9 % flush 20 mL**
  - **Dose:** 20 mL
  - **Route:** intravenous
  - **Start:** S
  - **Instructions:** Do NOT administer with Liposomal Doxorubicin.

### Nursing Orders

- **dextrose 5% infusion 250 mL**
  - **Dose:** 250 mL
  - **Route:** intravenous
  - **Start:** S
  - **Instructions:** To keep vein open for Liposomal Doxorubicin.

- **sodium chloride 0.9 % infusion 250 mL**
  - **Dose:** 250 mL
  - **Route:** intravenous
  - **Start:** S
  - **Instructions:** To keep vein open. Do NOT administer with Liposomal Doxorubicin.

### Pre-Medications

- **onodansetron (ZOFRAN) injection 8 mg**
  - **Dose:** 8 mg
  - **Route:** intravenous
  - **Start:** S
  - **End:** S 11:15 AM

- **onodansetron (ZOFRAN) tablet 16 mg**
  - **Dose:** 16 mg
  - **Route:** oral
  - **Start:** S

- **onodansetron (ZOFRAN) 16 mg in dextrose 5% 50 mL IVPB**
  - **Dose:** 16 mg
  - **Route:** intravenous
  - **Start:** S
  - **End:** S 11:00 AM

### Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Chemotherapy

**DOXOrubicin liposomal (DOXIL) 15 mg/m2 in dextrose 5% 250 mL chemo IVPB**
- Dose: 15 mg/m2
- Route: intravenous
- Once over 30 Minutes for 1 dose
- Offset: 30 Minutes

**Instructions:**
- Initial infusion infused at 1 mg/min, but no faster than 1 hour to prevent infusion related reactions. Monitor vital signs 15 minutes, 30 minutes, and one hour into infusion, then hourly for remainder of initial infusion. Stay with patient for the first 15 minutes of the initial infusion. If patient tolerated initial infusion, subsequent infusions to be given over 1 hour.

<table>
<thead>
<tr>
<th>Ingredients:</th>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medications</td>
<td>DOXORUBICIN, PEGYLATED LIPOSOMAL 2 MG/ML INTRAVENOUS SUSPENSION</td>
<td>Medications</td>
<td>15 mg/m2</td>
<td>Main</td>
<td>Yes</td>
</tr>
<tr>
<td>Base</td>
<td>DEXTROSE 5% IN WATER (D5W) INTRAVENOUS SOLUTION</td>
<td>QS Base</td>
<td>250 mL</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**vinorelbine (NAVELBINE) 20 mg/m2 in sodium chloride 0.9% 50 mL chemo IVPB**
- Dose: 20 mg/m2
- Route: intravenous
- Once over 10 Minutes for 1 dose
- Offset: 60 Minutes

**Instructions:**
- Caution - VESICANT; must have CENTRAL line.

<table>
<thead>
<tr>
<th>Ingredients:</th>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medications</td>
<td>VINORELBINE 10 MG/ML INTRAVENOUS SOLUTION SODIUM CHLORIDE 0.9% INTRAVENOUS SOLUTION</td>
<td>Medications</td>
<td>20 mg/m2</td>
<td>Main</td>
<td>Yes</td>
</tr>
<tr>
<td>Base</td>
<td>QS Base</td>
<td>50 mL</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

**gemcitabine (GEMZAR) 1,000 mg/m2 in sodium chloride 0.9% 250 mL chemo IVPB**
- Dose: 1,000 mg/m2
- Route: intravenous
- Once over 30 Minutes for 1 dose
- Offset: 70 Minutes

<table>
<thead>
<tr>
<th>Ingredients:</th>
<th>Name</th>
<th>Type</th>
<th>Dose</th>
<th>Selected</th>
<th>Adds Vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medications</td>
<td>GEMCITABINE 200 MG INTRAVENOUS SOLUTION SODIUM CHLORIDE 0.9% INTRAVENOUS SOLUTION</td>
<td>Medications</td>
<td>1,000 mg/m2</td>
<td>Main</td>
<td>Yes</td>
</tr>
<tr>
<td>Base</td>
<td>QS Base</td>
<td>250 mL</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
### Discharge Nursing Orders

**ONC NURSING COMMUNICATION 76**

<table>
<thead>
<tr>
<th>Interval: --</th>
<th>Occurrences: --</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments:</td>
<td>Discontinue IV.</td>
</tr>
</tbody>
</table>

**ONC NURSING COMMUNICATION 76**

<table>
<thead>
<tr>
<th>sodium chloride 0.9 % flush 20 mL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dose: 20 mL</td>
</tr>
<tr>
<td>Route: intravenous</td>
</tr>
<tr>
<td>PRN</td>
</tr>
</tbody>
</table>

**ONC NURSING COMMUNICATION 76**

<table>
<thead>
<tr>
<th>HEPArin, porcine (PF) injection 500 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dose: 500 Units</td>
</tr>
<tr>
<td>Start: S</td>
</tr>
<tr>
<td>Route: intra-catheter</td>
</tr>
<tr>
<td>once PRN</td>
</tr>
<tr>
<td>Instructions:</td>
</tr>
<tr>
<td>Concentration: 100 units/mL. Heparin flush for Implanted Vascular Access Device maintenance.</td>
</tr>
</tbody>
</table>

### Hematology & Oncology Hypersensitivity Reaction Standing Order

**ONC NURSING COMMUNICATION 82**

<table>
<thead>
<tr>
<th>Interval: --</th>
<th>Occurrences: --</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments:</td>
<td>Grade 1 - MILD Symptoms (cutaneous and subcutaneous symptoms only – itching, flushing, periorbital edema, rash, or runny nose)</td>
</tr>
<tr>
<td></td>
<td>1. Stop the infusion.</td>
</tr>
<tr>
<td></td>
<td>2. Place the patient on continuous monitoring.</td>
</tr>
<tr>
<td></td>
<td>3. Obtain vital signs.</td>
</tr>
<tr>
<td></td>
<td>4. Administer Normal Saline at 50 mL per hour using a new bag and new intravenous tubing.</td>
</tr>
<tr>
<td></td>
<td>5. If greater than or equal to 30 minutes since the last dose of Diphenhydramine, administer Diphenhydramine 25 mg intravenous once.</td>
</tr>
<tr>
<td></td>
<td>6. If less than 30 minutes since the last dose of Diphenhydramine, administer Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.</td>
</tr>
<tr>
<td></td>
<td>7. Notify the treating physician.</td>
</tr>
<tr>
<td></td>
<td>8. If no improvement after 15 minutes, advance level of care to Grade 2 (Moderate) or Grade 3 (Severe).</td>
</tr>
<tr>
<td></td>
<td>9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.</td>
</tr>
</tbody>
</table>

**ONC NURSING COMMUNICATION 82**

<table>
<thead>
<tr>
<th>Interval: --</th>
<th>Occurrences: --</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments:</td>
<td>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)</td>
</tr>
<tr>
<td></td>
<td>1. Stop the infusion.</td>
</tr>
<tr>
<td></td>
<td>2. Notify the CERT team and treating physician immediately.</td>
</tr>
<tr>
<td></td>
<td>3. Place the patient on continuous monitoring.</td>
</tr>
<tr>
<td></td>
<td>4. Obtain vital signs.</td>
</tr>
<tr>
<td></td>
<td>5. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O2 saturation of greater than or equal to 92%.</td>
</tr>
<tr>
<td></td>
<td>6. Administer Normal Saline at 150 mL per hour using a new bag and new intravenous tubing.</td>
</tr>
<tr>
<td></td>
<td>7. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg</td>
</tr>
</tbody>
</table>
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
Start: S

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