

## OP CARBOPLATIN / GEMCITABINE (EVERY 7 DAYS)

Types: ONCOLOGY TREATMENT

Synonyms: GEM, GEMCITABINE, GEMZAR, CARBO, CARBOPLATIN, PARAPLATIN, PARA, CAR, BREAST

Cycles 1 to 4	Repeat 4 times	Cycle length: 21 days
<b>Day 1</b>		Perform every 1 day x1
<b>Appointment Requests</b>		
<b>INFUSION APPOINTMENT REQUEST</b>		
Interval: -- Occurrences: --		
<b>Labs</b>		
<input checked="" type="checkbox"/> <b>COMPREHENSIVE METABOLIC PANEL</b>		
Interval: -- Occurrences: --		
<input checked="" type="checkbox"/> <b>CBC WITH PLATELET AND DIFFERENTIAL</b>		
Interval: -- Occurrences: --		
<input checked="" type="checkbox"/> <b>MAGNESIUM LEVEL</b>		
Interval: -- Occurrences: --		
<input type="checkbox"/> <b>URINALYSIS, AUTOMATED WITH MICROSCOPY</b>		
Interval: -- Occurrences: --		
<input type="checkbox"/> <b>CANCER ANTIGEN 27-29 (CA BR)</b>		
Interval: -- Occurrences: --		
<b>Outpatient Electrolyte Replacement Protocol</b>		
<b>TREATMENT CONDITIONS 39</b>		
Interval: -- Occurrences: --		
Comments: Potassium (Normal range 3.5 to 5.0mEq/L)		
o Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP		
o Protocol applies only to same day lab value.		
o Serum potassium less than 3.0mEq/L, give 40mEq KCL IV or PO and contact MD/NP		
o Serum potassium 3.0 to 3.2mEq/L, give 40mEq KCL IV or PO		
o Serum potassium 3.3 to 3.4mEq/L, give 20mEq KCL IV or PO		
o Serum potassium 3.5 mEq/L or greater, do not give potassium replacement		
o If patient meets criteria, order SmartSet called "Outpatient Electrolyte Replacement"		
o Sign electrolyte replacement order as Per protocol: cosign required		
<b>TREATMENT CONDITIONS 40</b>		
Interval: -- Occurrences: --		
Comments: Magnesium (Normal range 1.6 to 2.6mEq/L)		
o Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP		
o Protocol applies only to same day lab value.		
o Serum Magnesium less than 1.0mEq/L, give 2 gram magnesium sulfate IV and contact MD/NP		
o Serum Magnesium 1.0 to 1.2mEq/L, give 2 gram magnesium sulfate IV		
o Serum Magnesium 1.3 to 1.5mEq/L, give 1 gram magnesium sulfate IV		
o Serum Magnesium 1.6 mEq/L or greater, do not give		

- magnesium replacement
  - o If patient meets criteria, order SmartSet called "Outpatient Electrolyte Replacement"
  - o Sign electrolyte replacement order as Per protocol: cosign required

**Nursing Orders**

**TREATMENT CONDITIONS 7**

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

**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 (ZOFTRAN) 16 mg, dexamethasone (DECADRON) 12 mg in sodium chloride 0.9% 50 mL IVPB**  
 Dose: -- Route: intravenous once over 15 Minutes for 1 dose  
 Start: S End: S 11:30 AM

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	Yes	No
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Base	50 mL	Always	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base		No	Yes

**ondansetron (ZOFTRAN) 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  
 Instructions:  
 For OUTPATIENT use only.

**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	Medications	130 mg	Main Ingredient	Yes
	INTRAVENOUS EMULSION 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

Supportive Care

**LORAZepam (ATIVAN) injection 1 mg**

Dose: 1 mg      Route: intravenous      once PRN  
 Start: S

**LORAZepam (ATIVAN) tablet 1 mg**

Dose: 1 mg      Route: oral      once PRN  
 Start: S

Antiemetics

**promethazine (PHENERGAN) injection 12.5 mg**

Dose: 12.5 mg      Route: injection      once PRN  
 Start: S

Chemotherapy

**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: 30 Minutes

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	GEMCITABINE 200 MG/5.26 ML (38 MG/ML)	Medications	1,000 mg/m2	Main Ingredient	Yes
	INTRAVENOUS SOLUTION SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	250 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base		No	Yes

**CARBOplatin (PARAplatin) in sodium chloride 0.9 % 250 mL chemo IVPB**

AUC: 2 Use AUC      Route: intravenous      once over 60 Minutes for 1 dose  
 Offset: 1 Hours

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	CARBOPLATIN 10 MG/ML	Medications		Main Ingredient	Yes
	INTRAVENOUS SOLUTION				

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

Hematology & Oncology Hypersensitivity Reaction Standing Order

**ONC NURSING COMMUNICATION 82**

Interval: -- 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 4**

Interval: -- 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 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

**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

**ONC NURSING COMMUNICATION 76**

Interval: --                      Occurrences: --  
Comments:                      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.

Post-Medications

**pegfilgrastim (NEULASTA) on-body injection kit 6 mg**

Dose: 6 mg                      Route: subcutaneous                      once for 1 dose

Start: S End: S

Instructions:

Apply to intact, nonirritated skin on the back of the arm or abdomen (only use the back of the arm if caregiver is available to monitor On-body injection status).

Day 8

Perform every 1 day x1

Appointment Requests

**INFUSION APPOINTMENT REQUEST**

Interval: -- Occurrences: --

Labs

**COMPREHENSIVE METABOLIC PANEL**

Interval: -- Occurrences: --

**CBC WITH PLATELET AND DIFFERENTIAL**

Interval: -- Occurrences: --

**MAGNESIUM LEVEL**

Interval: -- Occurrences: --

**URINALYSIS, AUTOMATED WITH MICROSCOPY**

Interval: -- Occurrences: --

**CANCER ANTIGEN 27-29 (CA BR)**

Interval: -- Occurrences: --

Outpatient Electrolyte Replacement Protocol

**TREATMENT CONDITIONS 39**

Interval: -- Occurrences: --

Comments:

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

**TREATMENT CONDITIONS 40**

Interval: -- Occurrences: --

Comments:

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

o Sign electrolyte replacement order as Per protocol: cosign required

Nursing Orders

**TREATMENT CONDITIONS 7**

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

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

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Dose: -- Route: intravenous once over 15 Minutes for 1 dose  
Start: S End: S 11:30 AM  
**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	Yes	No
SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Base	50 mL	Always	Yes
DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base		No	Yes

**ondansetron (ZOFTRAN) 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  
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**palonosetron (ALOXI) injection 0.25 mg**  
Dose: 250 mcg Route: intravenous once for 1 dose  
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For OUTPATIENT use only.

**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	Medications	130 mg	Main Ingredient	Yes
	INTRAVENOUS EMULSION				
	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

Antiemetics

**promethazine (PHENERGAN) injection 12.5 mg**

Dose: 12.5 mg      Route: injection      once PRN  
Start: S

Chemotherapy

**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: 30 Minutes

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	GEMCITABINE 200 MG/5.26 ML (38 MG/ML)	Medications	1,000 mg/m2	Main Ingredient	Yes
	INTRAVENOUS SOLUTION				
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	250 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base		No	Yes

**CARBOplatin (PARAplatin) in sodium chloride 0.9 % 250 mL chemo IVPB**

AUC: 2 Use AUC      Route: intravenous      once over 60 Minutes for 1 dose  
Offset: 1 Hours

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	CARBOPLATIN 10 MG/ML	Medications		Main Ingredient	Yes
	INTRAVENOUS SOLUTION				
	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

Hematology & Oncology Hypersensitivity Reaction Standing Order

**ONC NURSING COMMUNICATION 82**

Interval: --      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 4**

Interval: --

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 83**

Interval: --

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

**ONC NURSING COMMUNICATION 76**

Interval: --                      Occurrences: --  
Comments:                      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.

Post-Medications

**pegfilgrastim (NEULASTA) on-body injection kit 6 mg**

Dose: 6 mg                      Route: subcutaneous                      once for 1 dose

Start: S                      End: S

Instructions:

Apply to intact, nonirritated skin on the back of the arm or abdomen (only use the back of the arm if caregiver is available to monitor On-body injection status).