

## IP FOLFIRI / RAMUCIRUMAB

Types: ONCOLOGY TREATMENT

Synonyms: FOLFIRI, IRINOTECAN, LEUCOVORIN, 5FU, 5-FLUOROURACIL, FLUOROURACIL, LEUCO, IRIN, CAMPTOSAR, CAMP, CET, CYRAM, PSY, RAMU, RAMI, COLORECTAL, GI, GASTR

Cycle 1	Repeat 1 time	Cycle length: 14 days
<b>Day 1</b> Perform every 1 day x1		
Nursing Orders		
<b>TREATMENT CONDITIONS</b>		
Interval: Until discontinued	Occurrences: --	
Comments:	Do NOT administer within 28 days of surgery/procedure and until the surgical wound is fully healed or within 14 days of port placement.	
Labs		
<input checked="" type="checkbox"/> <b>COMPREHENSIVE METABOLIC PANEL</b>		
Interval: Once	Occurrences: --	
<input checked="" type="checkbox"/> <b>CBC WITH PLATELET AND DIFFERENTIAL</b>		
Interval: Once	Occurrences: --	
<input checked="" type="checkbox"/> <b>MAGNESIUM LEVEL</b>		
Interval: Once	Occurrences: --	
<input type="checkbox"/> <b>LDH</b>		
Interval: Once	Occurrences: --	
<input type="checkbox"/> <b>URIC ACID LEVEL</b>		
Interval: Once	Occurrences: --	
<input checked="" type="checkbox"/> <b>URINALYSIS, AUTOMATED WITH MICROSCOPY</b>		
Interval: Once	Occurrences: --	
Nursing Orders		
<b>TREATMENT CONDITIONS 5</b>		
Interval: Until discontinued	Occurrences: --	
Comments:	HOLD and notify provider if PROTEIN 2+ is detected in Urine.	
Nursing Orders		
<b>TREATMENT CONDITIONS 4</b>		
Interval: Until discontinued	Occurrences: --	
Comments:	HOLD and notify provider if ANC LESS than 1000; Platelets LESS than 100,000; Total Bilirubin GREATER than 1.5; ALT/AST GREATER than 3 times upper normal limit; or Serum Creatinine GREATER than 1.2	
Line Flush		
<b>sodium chloride 0.9 % flush 20 mL</b>		
Dose: 20 mL	Route: intravenous	PRN
Start: S		
Nursing Orders		
<b>sodium chloride 0.9 % infusion 250 mL</b>		
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) 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 (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

**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

**diphenhydrAMINE (BENADRYL) injection 25 mg**

Dose: 25 mg                      Route: intravenous                      once for 1 dose  
Start: S

Instructions:  
Administer via slow IV push 30 minutes prior to chemotherapy.

**diphenhydrAMINE (BENADRYL) 50 mg in sodium chloride 0.9 % 50 mL IVPB**

Dose: 50 mg      Route: intravenous      once over 15 Minutes for 1 dose

Start: S      End: S 11:45 AM

Instructions:

Administer 30 minutes prior to chemotherapy.

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	DIPHENHYDRAMIN E 50 MG/ML INJECTION SOLUTION	Medications	50 mg	Main Ingredient	No
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Base	50 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base	50 mL	No	Yes

**diphenhydrAMINE (BENADRYL) tablet 25 mg**

Dose: 25 mg      Route: oral      once for 1 dose  
Offset: 0 Hours

Instructions:

Administer 30 minutes prior to chemotherapy.

**diphenhydrAMINE (BENADRYL) tablet 50 mg**

Dose: 50 mg      Route: oral      once for 1 dose  
Offset: 0 Hours

Instructions:

Administer 30 minutes prior to chemotherapy.

**famotidine (PEPCID) 20 mg/2 mL injection 20 mg**

Dose: 20 mg      Route: intravenous      once for 1 dose  
Offset: 0 Hours

Instructions:

Administer 30 minutes prior to chemotherapy.

**famotidine (PEPCID) tablet 20 mg**

Dose: 20 mg      Route: oral      once for 1 dose  
Offset: 0 Hours

Instructions:

Administer 30 minutes prior to chemotherapy.

**acetaminophen (TYLENOL) tablet 650 mg**

Dose: 650 mg      Route: oral      once for 1 dose  
Offset: 0 Hours

Instructions:

Administer 30 minutes prior to chemotherapy.

Pre-Medications

**atropine injection 0.25 mg**

Dose: 0.25 mg      Route: intravenous      PRN  
Start: S

Supportive Care

**LORAZepam (ATIVAN) injection 1 mg**

Dose: 1 mg      Route: intravenous      PRN  
Start: S

**LORAZepam (ATIVAN) tablet 1 mg**

Dose: 1 mg      Route: oral      PRN  
Start: S

Chemotherapy

**ramucirumab (CYRAMZA) 8 mg/kg in sodium chloride 0.9 % 250 mL IVPB**

Dose: 8 mg/kg      Route: intravenous      once over 60 Minutes for 1 dose  
Offset: 30 Minutes

Instructions:  
Use of a 0.22 micron protein sparing filter is recommended.

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	RAMUCIRUMAB 10 MG/ML INTRAVENOUS SOLUTION	Medications	8 mg/kg	Main Ingredient	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	250 mL	Yes	Yes

**leucovorin 400 mg/m2 in dextrose 5% 250 mL chemo IVPB**

Dose: 400 mg/m2      Route: intravenous      once over 90 Minutes for 1 dose  
Offset: 1.5 Hours

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	LEUCOVORIN CALCIUM 350 MG SOLUTION FOR INJECTION	Medications	400 mg/m2	Main Ingredient	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	250 mL	Yes	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	250 mL	No	Yes

**irinotecan (CAMPTOSAR) 180 mg/m2 in dextrose 5% 500 mL chemo IVPB**

Dose: 180 mg/m2      Route: intravenous      once over 90 Minutes for 1 dose  
Offset: 1.5 Hours

Instructions:  
Protect from light

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	IRINOTECAN 100 MG/5 ML INTRAVENOUS SOLUTION	Medications	180 mg/m2	Main Ingredient	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	500 mL	Yes	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	500 mL	No	Yes

**fluorouracil (ADRUCIL) 400 mg/m2 in sodium chloride 0.9 % 50 mL chemo IVPB**

Dose: 400 mg/m2      Route: intravenous      once over 15 Minutes for 1 dose  
Offset: 3 Hours

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	FLUOROURACIL 500 MG/10 ML INTRAVENOUS	Medications	400 mg/m2	Main Ingredient	Yes

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

**fluorouracil (ADRUCIL) 1,200 mg/m2 in sodium chloride 0.9 % 500 mL chemo IVPB**

Dose: 1,200 mg/m2      Route: intravenous      once over 23 Hours for 1 dose  
Offset: 3.25 Hours

<b>Ingredients:</b>	<b>Name</b>	<b>Type</b>	<b>Dose</b>	<b>Selected</b>	<b>Adds Vol.</b>
	FLUOROURACIL 500 MG/10 ML INTRAVENOUS SOLUTION	Medications	1,200 mg/m2	Main Ingredient	Yes
	SOLUTION DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	500 mL	No	Yes
	SOLUTION SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	500 mL	Yes	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 Oxvaen 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  
 Comments:

Occurrences: --

- 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 2**

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 (ZOFTRAN) 16 mg in sodium chloride 0.9 % 50 mL IVPB**

Dose: --                      Route: intravenous                      once over 15 Minutes for 1 dose

Start: S                      End: S 10:00 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

No

No

SODIUM  
CHLORIDE 0.9 %  
INTRAVENOUS  
SOLUTION  
DXTROSE 5 % IN  
WATER (D5W)  
INTRAVENOUS  
SOLUTION

Base

50 mL

Always

Yes

Base

No

Yes

**Chemotherapy**

**fluorouracil (ADRUCIL) 1,200 mg/m2 in sodium chloride 0.9 % 500 mL chemo IVPB**

Dose: 1,200 mg/m2                      Route: intravenous                      once over 23 Hours for 1 dose

**Ingredients:**

**Name**

**Type**

**Dose**

**Selected**

**Adds Vol.**

FLUOROURACIL  
500 MG/10 ML  
INTRAVENOUS  
SOLUTION

Medications

1,200  
mg/m2

Main

Ingredient

Yes

DEXTROSE 5 % IN  
WATER (D5W)  
INTRAVENOUS  
SOLUTION

QS Base

500 mL

No

Yes

SODIUM  
CHLORIDE 0.9 %  
INTRAVENOUS  
SOLUTION

QS Base

500 mL

Yes

Yes