Protocol Index

OP FOLFOXIRI / CETUXIMAB (EVERY 7 DAYS)

Types: ONCOLOGY TREATMENT

Synonyms: FOLFOXIRI, FLUOROURACIL, LEUCOVORIN, OXALIPLATIN, IIRINOTECAN, AGE, CAMPTOSAR,

ADRUCIL, ELOXATIN, FLOW, IRENE, CETUX, ERBIT

Appointment Requests INFUSION APPOINTMENT REQUEST Interval: Occurrences: Labs COMPREHENSIVE METABOLIC PANEL Interval: Occurrences: CBC WITH PLATELET AND DIFFERENTIAL Interval: Occurrences: MAGNESIUM LEVEL	Cycle 1	Repeat 1	time	Cycle length: 14 days				
INFUSION APPOINTMENT REQUEST Interval: Occurrences: Labs COMPREHENSIVE METABOLIC PANEL Interval: Occurrences: CBC WITH PLATELET AND DIFFERENTIAL Interval: Occurrences:	Day 1				Perform every 1 day x1			
Interval: Occurrences: Labs COMPREHENSIVE METABOLIC PANEL Interval: Occurrences: CBC WITH PLATELET AND DIFFERENTIAL Interval: Occurrences:	Appo	intment Requests						
Labs ✓ COMPREHENSIVE METABOLIC PANEL Interval: Occurrences: ✓ CBC WITH PLATELET AND DIFFERENTIAL Interval: Occurrences:		INFUSION APPOINTM	ENT REQUEST					
 ✓ COMPREHENSIVE METABOLIC PANEL Interval: Occurrences: ✓ CBC WITH PLATELET AND DIFFERENTIAL Interval: Occurrences: 		Interval:	Occurrences:					
Interval: Occurrences: CBC WITH PLATELET AND DIFFERENTIAL Interval: Occurrences:	Labs							
☑ CBC WITH PLATELET AND DIFFERENTIAL Interval: Occurrences:		☑ COMPREHENSIVE METABOLIC PANEL						
Interval: Occurrences:		Interval:	Occurrences:					
		☑ CBC WITH PLATELET AND DIFFERENTIAL						
☑ MAGNESIUM LEVEL		Interval:	Occurrences:					
		✓ MAGNESIUM LEVEL						
Interval: Occurrences:		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

Protocol applies only to same day lab value.

o Serum potassium less than 3.0mEg/L, give 40mEg KCL IV or

PO and contact MD/NP

o 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

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

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 4

Interval: -- 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

Provider Communication

ONC PROVIDER COMMUNICATION 2

Interval: -- Occurrences: --

Comments: Tumor KRAS gene status should be determined prior to initiation of

therapy. KRAS type: Please Push F2:115540219.

Line Flush

dextrose 5% flush syringe 20 mL

Dose: 20 mL Route: intravenous PRN

Start: S Instructions:

Administer ONLY for Oxaliplatin.

sodium chloride 0.9 % flush 20 mL

Dose: 20 mL Route: intravenous PRN

Start: S Instructions:

		Do NOT administer w	th Oxaliplatin.					
Nursi	ng O							
		dextrose 5% infusion 2 Dose: 250 mL Start: S Instructions: To keep vein open for	Route: intravenous	once @ 30 m	L/hr for 1 d	lose		
		sodium chloride 0.9 % Dose: 250 mL Start: S Instructions: To keep vein open. Oxaliplatin.	infusion 250 mL Route: intravenous Do NOT administer with	once @ 30 m	L/hr for 1 d	lose		
Pre-M	/ledic	ations						
	V		I) 16 mg, dexamethasor sodium chloride 0.9% Route: intravenous End: S 11:30 AM Name	once over 15 Minutes for 1 dose Type Dose Selected Adds Vol				
		HCL (PF) 4 MG/2 ML INJECTION SOLUTION DEXAMETHASONE 4 MG/ML INJECTION SOLUTION	Medications Medications	Č	Yes	No		
			Base	50 mL	Always	Yes		
			SOLUTION DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base		No	Yes	
	□ ondansetron (ZOFRAN) tablet 16 mg							
		Dose: 16 mg Start: S	Route: oral End: S 11:30 AM	once for 1 dos	se			
	□ dexamethasone (DECADRON) tablet 12 mg							
		Dose: 12 mg Start: S	Route: oral	once for 1 dos	se			
		palonosetron (ALOXI)	injection 0.25 mg					
		Dose: 250 mcg Start: S Instructions: For OUTPATIENT use	Route: intravenous End: S 3:00 PM	once for 1 dos	se			
		aprepitant (CINVANTI) (NON-PVC) 5% 130 mL	. IVPB					
	Dose: 130 mg Start: S	Route: intravenous End: S	once over 30 Minutes for 1 dose					
		Ingredients:	Name APREPITANT 7.2 MG/ML INTRAVENOUS EMULSION	Type Medications	Dose 130 mg	Selected Main Ingredient	Adds Vol. Yes	
			DEXTROSE 5 % IN	Base	130 mL	Yes	Yes	

WATER (D5W) IV SOLP (EXCEL; NON-PVC) 130 mL SODIUM Base No Yes CHLORIDE 0.9 % IV SOLP (EXCEL;NON-PVC) **Pre-Medications** atropine injection 0.25 mg Dose: 0.25 mg once PRN Route: intravenous Start: S **Pre-Medications** diphenhydrAMINE (BENADRYL) injection 25 Dose: 25 mg Route: intravenous once for 1 dose Start: S Instructions: Give 30 minutes prior to cetuximab. Supportive Care ○ LORAZepam (ATIVAN) injection 1 mg Route: intravenous once PRN Dose: 1 mg Start: S LORAZepam (ATIVAN) tablet 1 mg Dose: 1 mg Route: oral once PRN Start: S Chemotherapy cetuximab (ERBITUX) 400 mg/m2 in 0 mL Dose: 400 mg/m2 Route: intravenous once over 120 Minutes for 1 dose Offset: 30 Minutes Instructions: Administer with low protein binding 0.22 micron filter. Do not shake. Do not mix with other medications. Flush IV line with NS at the end of infusion. 1st infusion: Infuse first 10 mL over 10 minutes and observe patient for 30 minutes for allergic reactions if infusion tolerated, infuse loading dose over 120 minutes. Rate of infusion not to exceed 10 mg/minute (5 mL/minute) Selected Adds Vol. Ingredients: Name Type Dose **CETUXIMAB 100** Medications 400 Main Yes MG/50 ML mg/m2 Ingredient **INTRAVENOUS** SOLUTION leucovorin 200 mg/m2 in dextrose 5% 250 mL chemo IVPB Dose: 200 mg/m2 Route: intravenous once over 90 Minutes for 1 dose Offset: 2.5 Hours **Type** Ingredients: Name Dose Selected Adds Vol. LEUCOVORIN Medications 200 Main Yes CALCIUM 350 MG mg/m2 Ingredient SOLUTION FOR

INJECTION

DEXTROSE 5 % IN QS Base

Yes

250 mL

Yes

		WATER (D5W) INTRAVENOUS SOLUTION SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	250 mL	No	Yes	
	irinotecan (CAMPTOS dextrose 5% 500 mL c Dose: 165 mg/m2 Instructions:		once over 90 Offset: 2.5 Ho		r 1 dose		
	Protect from light Ingredients:	Name IRINOTECAN 100 MG/5 ML INTRAVENOUS SOLUTION	Type Medications	Dose 165 mg/m2		Adds Vol. Yes	
		DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS	QS Base	500 mL	Yes	Yes	
		SOLUTION SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	500 mL	No	Yes	
	OXALIplatin (FLOXAT	IN) 85 mg/m2 in dextros	e				
	5% 500 mL chemo IVP Dose: 85 mg/m2		once over 2 Hours for 1 dose Offset: 4 Hours				
	Irritant - avoid extrava	Instructions: Irritant - avoid extravasation. Flush line with D5W before and after oxaliplatin infusion.					
	Ingredients:	Name OXALIPLATIN 100 MG/20 ML INTRAVENOUS SOLUTION	Type Medications	Dose 85 mg/m2		Adds Vol. Yes	
		DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	500 mL	Yes	Yes	
	fluorouracil (ADRUCIL chloride 0.9 % 100 mL	n					
	Instructions: Nurses to chart as GIVEN on the MAR. Administer via CADD pump.		once over 48 Offset: 6 Hou		I dose		
	Ingredients:	Name	Type	Dose	Selected	Adds Vol.	
		FLUOROURACIL 5 GRAM/100 ML INTRAVENOUS SOLUTION	Medications	3,200 mg/m2		Yes	
		DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	100 mL	No	Yes	
		SODIUM CHLORIDE 0.9 %	QS Base	100 mL	Yes	Yes	
		OHLONIDE 0.9 /6					

INTRAVENOUS SOLUTION

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 Sympton

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 F

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

Nursing Orders

ONC NURSING COMMUNICATION 11

Interval: -- Occurrences: --

Comments: Exposure to cold may exacerbate oxaliplatin-induced neuropathy

(including pharyngolaryngeal dysesthesia). Encourage patient to keep blanket on their chest and/or throat during oxaliplatin infusion. Educate patient to avoid cold drinks/foods, ice chips or exposure to cold water or

air for 7 days after oxaliplatin infusion.

ONC NURSING COMMUNICATION 12

Interval: -- Occurrences: --

Comments: Assess and notify provider for persistent neuropathy (Grade 2).

Nursing Orders

ONC NURSING COMMUNICATION 14

Interval: -- Occurrences: --

Comments: Contact Provider if drug-induced acneiform rash develops and covers

more than 25 per cent of the body.

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

Dose: 500 Units Route: intra-catheter once PRN

Start: S Instructions:

Concentration: 100 units/mL. Heparin flush for

Implanted Vascular Access Device

maintenance.

Day 3 Perform every 1 day x1

Appointment Requests

ONC PUMP DISCONNECT APPOINTMENT REQUEST

Interval: -- Occurrences: --

Discharge Nursing Orders

DISCONNECT CONTINUOUS INFUSION PUMP

Interval: -- Occurrences: --

Comments: Disconnect patient from continuous infusion pump.

Discharge Nursing Orders

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

opegfilgrastim (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: --

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

Line Flush

sodium chloride 0.9 % flush 20 mL

Dose: 20 mL Start: S Route: intravenous

PRN

Pre-Medications

diphenhydrAMINE (BENADRYL) injection 25

ma

Dose: 25 mg

Route: intravenous

once for 1 dose

Start: S Instructions:

Give 30 minutes prior to cetuximab.

Supportive Care

LORAZepam (ATIVAN) injection 1 mg

Dose: 1 mg R

Route: intravenous once PRN

Start: S

○ LORAZepam (ATIVAN) tablet 1 mg

Dose: 1 mg

Route: oral once PRN

Start: S

Chemotherapy

cetuximab (ERBITUX) 250 mg/m2 in 0 mL

Dose: 250 mg/m2 Route: intravenous

once over 60 Minutes for 1 dose

Offset: 30 Minutes

Instructions:

Administer with low protein binding 0.22 micron filter. Do not shake. Do not mix with other medications. Flush IV line with NS at the end of infusion.

Rate of infusion not to exceed 10 mg/minute (5

mL/minute)

Ingredients: Name Type Dose Selected Adds Vol.

CETUXIMAB 100 Medications 250 Main Yes MG/50 ML mg/m2 Ingredient

INTRAVENOUS SOLUTION

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 - cvanosis 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

Nursing Orders

ONC NURSING COMMUNICATION 14

Interval: -- Occurrences: --

Comments: Contact Provider if drug-induced acneiform rash develops and covers

more than 25 per cent of the body.

Discharge Nursing Orders

ONC NURSING COMMUNICATION 76

Interval: -- Occurrences: -- Comments: Discontinue IV.

Discharge Nursing Orders

Dose: 20 mL Route: intravenous PRN

Dose: 500 Units Route: intra-catheter once PRN

Start: S Instructions:

Concentration: 100 units/mL. Heparin flush for

Implanted Vascular Access Device

maintenance.

Cycles 2 to 6 Repeat 5 times Cycle length: 14 days

Day 1 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: --

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

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

Serum potassium 3.5 mEq/L or greater, do not give potassium

replacement

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 1.5mEg/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"

o Sign electrolyte replacement order as Per protocol: cosign

required

Nursing Orders

TREATMENT CONDITIONS 4

Interval: -- 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

dextrose 5% flush syringe 20 mL

Dose: 20 mL Route: intravenous PRN

Start: S Instructions:

Administer ONLY for Oxaliplatin.

sodium chloride 0.9 % flush 20 mL

Dose: 20 mL Route: intravenous PRN

Start: S Instructions:

Do NOT administer with Oxaliplatin.

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 Oxaliplatin.

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

Oxaliplatin.

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

DEXAMETHASONE Medications 12 mg Yes No

Medications 16 mg

Yes

No

4 MG/ML INJECTION SOLUTION

SODIUM Base 50 mL Always Yes

CHLORIDE 0.9 % INTRAVENOUS SOLUTION

DEXTROSE 5 % IN Base No Yes

WATER (D5W) INTRAVENOUS SOLUTION

☐ 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 Start: S Instructions: For OUTPATIENT use	Route: intravenous End: S 3:00 PM	once for 1 dos	se		
	□ aprepitant (CINVANTI) □ (NON-PVC) 5% 130 mL	130 mg in dextrose IVPB				
	Dose: 130 mg Start: S	Route: intravenous End: S	once over 30	Minutes fo	r 1 dose	
	Ingredients:	Name APREPITANT 7.2 MG/ML INTRAVENOUS EMULSION	Type Medications	Dose 130 mg		Adds Vol. 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-M	edications					
	atropine injection 0.25 Dose: 0.25 mg Start: S	mg Route: intravenous	once PRN			
Pre-M	edications					
	diphenhydrAMINE (BE	NADRYL) injection 25				
	mg Dose: 25 mg Start: S Instructions: Give 30 minutes prior	Route: intravenous to cetuximab.	once for 1 dos	se		
Suppo	ortive Care					
	○ LORAZepam (ATIVAN)	injection 1 mg				
	Dose: 1 mg Start: S	Route: intravenous	once PRN			
	○ LORAZepam (ATIVAN) tablet 1 mg					
	Dose: 1 mg Start: S	Route: oral	once PRN			
Chem	otherapy					

cetuximab (ERBITUX) 250 mg/m2 in 0 mL Dose: 250 mg/m2 Route: intravenous once over 60 Minutes for 1 dose Offset: 30 Minutes Instructions: Administer with low protein binding 0.22 micron filter. Do not shake. Do not mix with other medications. Flush IV line with NS at the end of infusion. Rate of infusion not to exceed 10 mg/minute (5 mL/minute) Ingredients: Dose Selected Adds Vol. Name **Type CETUXIMAB 100** Medications 250 Main Yes MG/50 ML mg/m2 Ingredient **INTRAVENOUS** SOLUTION leucovorin 200 mg/m2 in dextrose 5% 250 mL chemo IVPB Dose: 200 mg/m2 once over 90 Minutes for 1 dose Route: intravenous Offset: 1.5 Hours Selected Adds Vol. Ingredients: Name Type Dose LEUCOVORIN Medications 200 Main Yes CALCIUM 350 MG mg/m2 Ingredient SOLUTION FOR INJECTION DEXTROSE 5 % IN QS Base 250 mL Yes Yes WATER (D5W) **INTRAVENOUS** SOLUTION SODIUM QS Base 250 mL No Yes CHLORIDE 0.9 % **INTRAVENOUS** SOLUTION irinotecan (CAMPTOSAR) 165 mg/m2 in dextrose 5% 500 mL chemo IVPB Dose: 165 mg/m2 Route: intravenous once over 90 Minutes for 1 dose Offset: 3 Hours Instructions: Protect from light Selected Adds Vol. Ingredients: Name Type Dose **IRINOTECAN 100** Medications 165 Main Yes Ingredient MG/5 ML mg/m2 **INTRAVENOUS** SOLUTION DEXTROSE 5 % IN QS Base Yes 500 mL Yes WATER (D5W) **INTRAVENOUS** SOLUTION SODIUM QS Base 500 mL No Yes CHLORIDE 0.9 % INTRAVENOUS SOLUTION OXALIplatin (ELOXATIN) 85 mg/m2 in dextrose 5% 500 mL chemo IVPB

Dose: 85 mg/m2 Route: intravenous once over 2 Hours for 1 dose

Offset: 4.5 Hours

Instructions:

Irritant - avoid extravasation. Flush line with D5W before and after oxaliplatin infusion.

Selected Adds Vol. Ingredients: Name Type Dose OXALIPLATIN 100 Medications 85 mg/m2 Main Yes

MG/20 ML Ingredient

INTRAVENOUS SOLUTION

Yes DEXTROSE 5 % IN QS Base 500 mL Yes

WATER (D5W) **INTRAVENOUS** SOLUTION

fluorouracil (ADRUCIL) 3,200 mg/m2 in sodium

chloride 0.9 % 100 mL chemo infusion -

AMBULATORY PUMP

Dose: 3,200 mg/m2 Route: intravenous once over 48 Hours for 1 dose

Offset: 6.5 Hours

Instructions:

Nurses to chart as GIVEN on the MAR.

Administer via CADD pump.

Selected Adds Vol. Ingredients: **Type** Dose Name

FLUOROURACIL 5 Medications 3.200 Main Yes GRAM/100 ML mg/m2 Ingredient

INTRAVENOUS SOLUTION

DEXTROSE 5 % IN QS Base 100 mL No Yes

WATER (D5W) **INTRAVENOUS** SOLUTION

SODIUM QS Base 100 mL Yes Yes

CHLORIDE 0.9 % INTRAVENOUS SOLUTION

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

Nursing Orders

ONC NURSING COMMUNICATION 11

Interval: -- Occurrences: --

Comments: Exposure to cold may exacerbate oxaliplatin-induced neuropathy

(including pharyngolaryngeal dysesthesia). Encourage patient to keep blanket on their chest and/or throat during oxaliplatin infusion. Educate patient to avoid cold drinks/foods, ice chips or exposure to cold water or

air for 7 days after oxaliplatin infusion.

ONC NURSING COMMUNICATION 12

Interval: -- Occurrences: --

Comments: Assess and notify provider for persistent neuropathy (Grade 2).

Nursing Orders

ONC NURSING COMMUNICATION 14

Interval: -- Occurrences: --

Comments: Contact Provider if drug-induced acneiform rash develops and covers

more than 25 per cent of the body.

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.

Day 3 Perform every 1 day x1

Appointment Requests

ONC PUMP DISCONNECT APPOINTMENT

REQUEST

Interval: -- Occurrences: --

Discharge Nursing Orders

DISCONNECT CONTINUOUS INFUSION PUMP

Interval: -- Occurrences: --

Comments: Disconnect patient from continuous infusion pump.

Discharge Nursing Orders

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: --

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

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

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

o If patient meets criteria, order SmartSet called "Outpatient

Electrolyte Replacement"

o Sign electrolyte replacement order as Per protocol: cosign

required

Line Flush

sodium chloride 0.9 % flush 20 mL

Dose: 20 mL Start: S Route: intravenous

PRN

Pre-Medications

diphenhydrAMINE (BENADRYL) injection 25

mg

Dose: 25 mg

Route: intravenous

once for 1 dose

Start: S Instructions:

Give 30 minutes prior to cetuximab.

Supportive Care

○ LORAZepam (ATIVAN) injection 1 mg

Dose: 1 mg Route: intravenous

once PRN

Start: S

LORAZepam (ATIVAN) tablet 1 mg

Dose: 1 mg Start: S Route: oral

once PRN

Chemotherapy

cetuximab (ERBITUX) 250 mg/m2 in 0 mL

Dose: 250 mg/m2 Route: intravenous once ov

once over 60 Minutes for 1 dose

Offset: 30 Minutes

Instructions:

Administer with low protein binding 0.22 micron filter. Do not shake. Do not mix with other medications. Flush IV line with NS at the end of infusion.

Rate of infusion not to exceed 10 mg/minute (5

mL/minute)

Ingredients: Name Type Dose Selected Adds Vol.

CETUXIMAB 100 MG/50 ML INTRAVENOUS SOLUTION Medications 250 Main Yes

250 Main Yemg/m2 Ingredient

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

mq

Dose: 20 mg Start: S

Route: intravenous

PRN

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

Nursing Orders

ONC NURSING COMMUNICATION 14
Interval: -- Occurrences: --

Comments: Contact Provider if drug-induced acneiform rash develops and covers

more than 25 per cent of the body.

Discharge Nursing Orders

ONC NURSING COMMUNICATION 76
Interval: -- Occurrences: -Comments: Discontinue IV.

Discharge Nursing Orders

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.