OP NIVOLUMAB (EVERY 14 DAYS)

Types: ONCOLOGY TREATMENT

Synonyms: NEEV, OPDI, NIVO, NON, NSCL, LUNG, NIVOLUMAB, OPDIVO

Dose 1	Repeat 1 t	me Cycle length	: 14 days
Day 1			Perform every 1 day x1
App	ointment Requests INFUSION APPOINTME	NT REQUEST	
		Occurrences:	
Lab	S		
	CBC WITH PLATELET	AND DIFFERENTIAL	
		Occurrences:	
	COMPREHENSIVE MET		
	_	Occurrences:	
	✓ MAGNESIUM LEVEL		
		Occurrences:	
	☑ THYROID STIMULATIN	G HORMONE	
	Interval:	Occurrences:	
	☑ T3, FREE		
	Interval:	Occurrences:	
	☑ T4, FREE		
	Interval:	Occurrences:	
	□ LDH		
	Interval:	Occurrences:	
	☐ URIC ACID LEVEL		
	Interval:	Occurrences:	
Out	patient Electrolyte Replacemen		
	TREATMENT CONDITION Interval:	Dccurrences:	
		Potassium (Normal range 3.5 to 5.0ml	Ξq/L)
		Protocol applies for SCr less to MD/NP	han 1.5. Otherwise, contact
		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 3.2ml	Eq/L, give 40mEq KCL IV or PO
			Eq/L, give 20mEq KCL IV or PO
			or greater, do not give potassium
		replacement o If patient meets criteria, order	SmartSet called "Outpatient
		Electrolyte Replacement"	·
		 Sign electrolyte replacement or required 	order as Per protocol: cosign
	TREATMENT CONDITION		
		Occurrences: Magnesium (Normal range 1.6 to 2.6m	nEa/L)
	Commonto.	Protocol applies for SCr less to	

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 11

Interval: -- Occurrences: --

Comments: HOLD and notify provider if ANC LESS than 1000; Platelets LESS than

100,000; AST or ALT > 3 and up to 5x Upper Normal Limit or Total
Bilirubin > 1.5 and up to 3x Upper Normal Limit; Creatinine > 1.5 and up

to 6x Upper Normal Limit or > 1.5x from baseline.

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

diphenhydrAMINE (BENADRYL) injection 25

_l 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 Medications 50 mg Main No E 50 MG/ML Ingredient INJECTION

SOLUTION

SODIUM Base 50 mL Yes Yes

CHLORIDE 0.9 % INTRAVENOUS SOLUTION

DEXTROSE 5 % IN Base 50 mL No Yes

WATER (D5W) INTRAVENOUS SOLUTION

☐ diphenhydrAMINE (BENADRYL) tablet 25 mg					
Dose: 25 mg	Route: oral				
Instructions: Administer 30 minute	es prior to chemotherapy.				
☐ diphenhydrAMINE (B	ENADRYL) tablet 50 mg				
Dose: 50 mg	Route: oral				
, ,	20 mg/2 mL injection 20				
Dose: 20 mg	Route: intravenous				
Instructions: Administer 30 minute	es prior to chemotherapy.				
☐ famotidine (PEPCID)	tablet 20 mg				
Dose: 20 mg	Route: oral				
	es prior to chemotherapy.				
	ENOL) tablet 650 mg				
Dose: 650 mg	Route: oral				
Administer 30 minute	es prior to chemotherapy.				
notherapy	3 ma/ka in sodium				
Dose: 3 mg/kg	Route: intravenous			or 1 dose	
	orotein hinding 0.22 micro	n			
in-line filter. Do not so other medications. F	shake. Do not mix with				
	Name	Type	Dose	Salactad	Adds Vol
ingredients.	NIVOLUMAB 40 MG/4 ML INTRAVENOUS			Main Ingredien	Yes
	SODIUM CHLORIDE 0.9 %	QS Base	100 mL	Yes	Yes
	INTRAVENOUS SOLUTION				
		g Order			
Comments:	Grade 1 - MILD Sympto				
		periorbital ede	ma, rash,	or runny no	ose)
	2. Place the patient on	continuous mo	nitoring.		
	4. Administer Normal S	aline at 50 mL	per hour u	ising a new	bag and new
	5. If greater than or equ				
	Instructions: Administer 30 minute diphenhydrAMINE (B Dose: 50 mg Instructions: Administer 30 minute famotidine (PEPCID) mg Dose: 20 mg Instructions: Administer 30 minute famotidine (PEPCID) Dose: 20 mg Instructions: Administer 30 minute acetaminophen (TYL Dose: 650 mg Instructions: Administer 30 minute acetaminophen (TYL Dose: 650 mg Instructions: Administer 30 minute notherapy nivolumab (OPDIVO) chloride 0.9% 100 ml Dose: 3 mg/kg Instructions: Administer with low in-line filter. Do not so ther medications. Fend of infusion. Ingredients: atology & Oncology Hyperse ONC NURSING COMI Interval:	Instructions: Administer 30 minutes prior to chemotherapy. diphenhydrAMINE (BENADRYL) tablet 50 mg Dose: 50 mg Route: oral Instructions: Administer 30 minutes prior to chemotherapy. famotidine (PEPCID) 20 mg/2 mL injection 20 mg Dose: 20 mg Route: intravenous Instructions: Administer 30 minutes prior to chemotherapy. famotidine (PEPCID) tablet 20 mg Dose: 20 mg Route: oral Instructions: Administer 30 minutes prior to chemotherapy. acetaminophen (TYLENOL) tablet 650 mg Dose: 650 mg Route: oral Instructions: Administer 30 minutes prior to chemotherapy. notherapy nivolumab (OPDIVO) 3 mg/kg in sodium chloride 0.9% 100 mL IVPB Dose: 3 mg/kg Route: intravenous Instructions: Administer with low protein binding 0.22 micro in-line filter. Do not shake. Do not mix with other medications. Flush IV line with NS at the end of infusion. Ingredients: Name NIVOLUMAB 40 MG/4 ML INTRAVENOUS SOLUTION SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION SOLUTION SOLUTION CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Dose: 25 mg Route: oral once for 1 do Offset: 0 Hou Offse	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. □ acetaminophen (TYLENOL) tablet 650 mg Dose: 650 mg Route: oral once for 1 dose Offset: 0 Hours Instructions: Administer 30 minutes prior to chemotherapy. ■ conce over 30 Minutes for Offset: 30 Minutes	Dose: 25 mg Route: oral Offset: 0 Hours Instructions: Administer 30 minutes prior to chemotherapy. diphenhydrAMINE (BENADRYL) tablet 50 mg

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 Start: S

Route: intravenous

PRN

fexofenadine (ALLEGRA) tablet 180 mg

PRN Dose: 180 mg Route: oral Start: S famotidine (PEPCID) 20 mg/2 mL injection 20 **PRN** Dose: 20 mg Route: intravenous Start: S hydrocortisone sodium succinate (Solu-CORTEF) injection 100 mg Route: intravenous **PRN** Dose: 100 mg 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 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. Dose 2 Cycle length: 14 days Repeat 1 time Day 1 Perform every 1 day x1 Appointment Requests **INFUSION APPOINTMENT REQUEST** Interval: --Occurrences: --Labs **☑ CBC WITH PLATELET AND DIFFERENTIAL** Interval: --Occurrences: --☑ COMPREHENSIVE METABOLIC PANEL Interval: --Occurrences: --MAGNESIUM LEVEL Interval: --Occurrences: --☑ THYROID STIMULATING HORMONE Interval: --Occurrences: --▼ T3, FREE Interval: --Occurrences: --Interval: --Occurrences: --

□ LDH Interval: --Occurrences: --**□ URIC ACID 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. 0 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: --Comments: 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. 0 Serum Magnesium less than 1.0mEg/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 0 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 11

Interval: -- Occurrences: --

Comments: HOLD and notify provider if ANC LESS than 1000; Platelets LESS than

100,000; AST or ALT > 3 and up to 5x Upper Normal Limit or Total Bilirubin > 1.5 and up to 3x Upper Normal Limit; Creatinine > 1.5 and up

to 6x Upper Normal Limit or > 1.5x from baseline.

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-M	ledications	NADDVIN'				
	☑ diphenhydrAMINE (BEI mg	NADRYL) injection 25				
	Dose: 25 mg Start: S	Route: intravenous	once for 1 dos	se		
	Instructions: Administer via slow IV chemotherapy.	push 30 minutes prior to				
	_ diphenhydrAMINE (BEI					
	□ sodium chloride 0.9 % Dose: 50 mg	50 mL IVPB Route: intravenous	once over 15	Minutos fo	r 1 dooo	
		End: S 11:45 AM	office over 15	wiiilutes 10	i i dose	
		prior to chemotherapy.	T	D	0-111	A -1 -1 - 1/-1
	Ingredients:	Name DIPHENHYDRAMIN E 50 MG/ML INJECTION SOLUTION	Type Medications	Dose 50 mg	Main Ingredient	Adds Vol. No
		SOLUTION SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Base	50 mL	Yes	Yes
		DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base	50 mL	No	Yes
	☐ diphenhydrAMINE (BEI					
		Route: oral	once for 1 dos Offset: 0 Hou			
	Instructions: Administer 30 minutes	prior to chemotherapy.				
	☐ diphenhydrAMINE (BEI	NADRYL) tablet 50 mg				
	Dose: 50 mg	Route: oral	once for 1 dos Offset: 0 Hou			
		prior to chemotherapy.				
	famotidine (PEPCID) 20	mg/2 mL injection 20				
	Dose: 20 mg	Route: intravenous	once for 1 dos Offset: 0 Hou			
	Instructions: Administer 30 minutes	prior to chemotherapy.				
	☐ famotidine (PEPCID) ta	blet 20 mg				
	S	Route: oral	once for 1 dos Offset: 0 Hour			
	Instructions: Administer 30 minutes	prior to chemotherapy.				
		NOL) tablet 650 mg				
	G	Route: oral	once for 1 dos Offset: 0 Hou			
	Instructions: Administer 30 minutes	prior to chemotherapy.				
Chem	notherapy					
	nivolumab (OPDIVO) 3	mg/kg in sodium				

chloride 0.9% 100 mL IVPB

Dose: 3 mg/kg Route: intravenous once over 30 Minutes for 1 dose

Offset: 30 Minutes

Instructions:

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

end of infusion.

Ingredients: Name Type Dose Selected Adds Vol.

NIVOLUMAB 40 Medications 3 mg/kg Main Yes MG/4 ML Ingredient

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. Otam the inferrior

- 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: -- Oscontinue 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.

Dose 3 Repeat 1 time Cycle length: 14 days

Day 1 Perform every 1 day x1

Appointment Requests

INFUSION APPOINTMENT REQUEST

Interval: -- Occurrences: --

Labs

☑ CBC WITH PLATELET AND DIFFERENTIAL

Interval: -- Occurrences: --

□ COMPREHENSIVE METABOLIC PANEL

Interval: -- Occurrences: --

☑ MAGNESIUM LEVEL

Interval: -- Occurrences: --

▼ THYROID STIMULATING HORMONE

Interval: -- Occurrences: --

√ T3, FREE

Interval: -- Occurrences: --

☑ T4, FREE

Interval: -- Occurrences: --

□ LDH

Interval: -- Occurrences: --

□ URIC ACID LEVEL

Interval: -- Occurrences: --

Outpatient Electrolyte Replacement Protocol

TREATMENT CONDITIONS 39

Interval: -- Occurrences: --

Comments: Potassium (Normal range 3.5 to 5.0mEg/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 3.2mEg/L, give 40mEg 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 11

Interval: -- Occurrences: --

Comments: HOLD and notify provider if ANC LESS than 1000; Platelets LESS than

100,000; AST or ALT > 3 and up to 5x Upper Normal Limit or Total Bilirubin > 1.5 and up to 3x Upper Normal Limit; Creatinine > 1.5 and up

to 6x Upper Normal Limit or > 1.5x from baseline.

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

diphenhydrAMINE (BENADRYL) injection 25

^l 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 Medications 50 mg Main No E 50 MG/ML Ingredient

INJECTION SOLUTION

SODIUM Base 50 mL Yes Yes

CHLORIDE 0.9 % INTRAVENOUS SOLUTION

DEXTROSE 5 % IN Base 50 mL No Yes

WATER (D5W) INTRAVENOUS SOLUTION

☐ diphenhydrAMINE (BENADRYL) tablet 25 mg

Dose: 25 mg Route: oral once for 1 dose

Offset: 0 Hours

	Instructions: Administer 30 minu	tes prior to chemotherapy.				
		BENADRYL) tablet 50 mg				
	Dose: 50 mg	Route: oral	once for 1 do Offset: 0 Hou			
	Instructions: Administer 30 minu	tes prior to chemotherapy.	Ondet. o riod	113		
	_ famotidine (PEPCID) 20 mg/2 mL injection 20				
	□ mg					
	Dose: 20 mg	Route: intravenous	once for 1 do Offset: 0 Hou			
	Instructions: Administer 30 minu	tes prior to chemotherapy.				
	☐ famotidine (PEPCID)) tablet 20 mg				
	Dose: 20 mg	Route: oral	once for 1 do Offset: 0 Hou			
	Instructions: Administer 30 minu	tes prior to chemotherapy.				
		LENOL) tablet 650 mg				
	Dose: 650 mg	Route: oral	once for 1 do Offset: 0 Hou			
	Instructions: Administer 30 minu	tes prior to chemotherapy.	Oliset. o riou	115		
Chem	otherapy	too phor to one methorapy.				
0	nivolumab (OPDIVO					
	chloride 0.9% 100 m Dose: 3 mg/kg	Route: intravenous	once over 30		or 1 dose	
	Instructions:		Offset: 30 Min	nutes		
		protein binding 0.22 micro shake. Do not mix with	n			
	other medications.	Flush IV line with NS at the				
	end of infusion. Ingredients:	Name	Туре	Dose	Salaatad	Adds Vol.
	ingredients.	NIVOLUMAB 40 MG/4 ML				Yes
		INTRAVENOUS SOLUTION			· ·	
		SODIUM CHLORIDE 0.9 %	QS Base	100 mL	Yes	Yes
		INTRAVENOUS SOLUTION				
Hema	itology & Oncology Hypers	ensitivity Reaction Standing	g Order			
. 101116	ONC NURSING COM	MUNICATION 82	9 3140.			
	Interval: Comments:	Occurrences: Grade 1 - MILD Sympto	ıms (cutaneou	s and subc	rutaneous s	vmntoms
	Comments.	only - itching, flushing,				
		 Stop the infusion. Place the patient on one 	continuous mo	nitorina		
		Obtain vital signs.				
		 Administer Normal Sintravenous tubing. 	aline at 50 mL	per hour u	sing a new	bag and new
		5. If greater than or equ				
		Diphenhydramine, adm once.	inister Diphenh	nydramine	25 mg intra	avenous
	6. If lose than 30 minutes since the last dose of Dinhanhydramine					

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

Route: intravenous **PRN** Dose: 20 mg 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 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. Dose 4 Repeat 1 time Cycle length: 14 days Day 1 Perform every 1 day x1 **Appointment Requests INFUSION APPOINTMENT REQUEST** Interval: --Occurrences: --Labs □ CBC WITH PLATELET AND DIFFERENTIAL Interval: --Occurrences: -- ☐ COMPREHENSIVE METABOLIC PANEL Interval: --Occurrences: --**☑ MAGNESIUM LEVEL** Interval: --Occurrences: -- ▼ THYROID STIMULATING HORMONE Interval: --Occurrences: --☑ T3, FREE Interval: --Occurrences: -- **☑** T4, FREE Interval: --Occurrences: --

famotidine (PEPCID) 20 mg/2 mL injection 20

□ LDH Interval: --Occurrences: --**□ URIC ACID 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. 0 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: --Comments: 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. 0 Serum Magnesium less than 1.0mEg/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 0 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 11

Interval: -- Occurrences: --

Comments: HOLD and notify provider if ANC LESS than 1000; Platelets LESS than

100,000; AST or ALT > 3 and up to 5x Upper Normal Limit or Total Bilirubin > 1.5 and up to 3x Upper Normal Limit; Creatinine > 1.5 and up

to 6x Upper Normal Limit or > 1.5x from baseline.

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-M	ledications	NADDVIN'				
	☑ diphenhydrAMINE (BEI mg	NADRYL) injection 25				
	Dose: 25 mg Start: S	Route: intravenous	once for 1 dos	se		
	Instructions: Administer via slow IV chemotherapy.	push 30 minutes prior to				
	_ diphenhydrAMINE (BEI					
	□ sodium chloride 0.9 % Dose: 50 mg	50 mL IVPB Route: intravenous	once over 15	Minutos fo	r 1 dooo	
		End: S 11:45 AM	office over 15	wiiilutes 10	i i dose	
		prior to chemotherapy.	T	D	0-111	A -1 -1 - 1/-1
	Ingredients:	Name DIPHENHYDRAMIN E 50 MG/ML INJECTION SOLUTION	Type Medications	Dose 50 mg	Main Ingredient	Adds Vol. No
		SOLUTION SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Base	50 mL	Yes	Yes
		DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base	50 mL	No	Yes
	☐ diphenhydrAMINE (BEI					
		Route: oral	once for 1 dos Offset: 0 Hou			
	Instructions: Administer 30 minutes	prior to chemotherapy.				
	☐ diphenhydrAMINE (BEI	NADRYL) tablet 50 mg				
	Dose: 50 mg	Route: oral	once for 1 dos Offset: 0 Hou			
		prior to chemotherapy.				
	famotidine (PEPCID) 20	mg/2 mL injection 20				
	Dose: 20 mg	Route: intravenous	once for 1 dos Offset: 0 Hou			
	Instructions: Administer 30 minutes	prior to chemotherapy.				
	☐ famotidine (PEPCID) ta	blet 20 mg				
	S	Route: oral	once for 1 dos Offset: 0 Hour			
	Instructions: Administer 30 minutes	prior to chemotherapy.				
		NOL) tablet 650 mg				
	G	Route: oral	once for 1 dos Offset: 0 Hou			
	Instructions: Administer 30 minutes	prior to chemotherapy.				
Chem	notherapy					
	nivolumab (OPDIVO) 3	mg/kg in sodium				

chloride 0.9% 100 mL IVPB

Dose: 3 mg/kg Route: intravenous once over 30 Minutes for 1 dose

Offset: 30 Minutes

Instructions:

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

end of infusion.

Ingredients: Name Type Dose Selected Adds Vol.

NIVOLUMAB 40 Medications 3 mg/kg Main Yes MG/4 ML Ingredient

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. Otam the inferrior

- 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: -- Oscontinue 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.

Dose 5 Repeat 1 time Cycle length: 14 days

Appointment Requests

INFUSION APPOINTMENT REQUEST Interval: -- Occurrences: --

Labs

Day 1

☑ CBC WITH PLATELET AND DIFFERENTIAL

Interval: -- Occurrences: --

□ COMPREHENSIVE METABOLIC PANEL

Interval: -- Occurrences: --

☑ MAGNESIUM LEVEL

Interval: -- Occurrences: --

▼ THYROID STIMULATING HORMONE

Interval: -- Occurrences: --

▼ T3, FREE

Interval: -- Occurrences: --

✓ T4, FREE

Interval: -- Occurrences: --

□ LDH

Interval: -- Occurrences: --

□ URIC ACID LEVEL

Interval: -- Occurrences: --

Outpatient Electrolyte Replacement Protocol

TREATMENT CONDITIONS 39

Interval: -- Occurrences: --

Comments: Potassium (Normal range 3.5 to 5.0mEg/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

Perform every 1 day x1

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 11

Interval: -- Occurrences: --

Comments: HOLD and notify provider if ANC LESS than 1000; Platelets LESS than

100,000; AST or ALT > 3 and up to 5x Upper Normal Limit or Total Bilirubin > 1.5 and up to 3x Upper Normal Limit; Creatinine > 1.5 and up

to 6x Upper Normal Limit or > 1.5x from baseline.

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

diphenhydrAMINE (BENADRYL) injection 25

^l 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 Medications 50 mg Main No E 50 MG/ML Ingredient

INJECTION SOLUTION

SODIUM Base 50 mL Yes Yes

CHLORIDE 0.9 % INTRAVENOUS SOLUTION

DEXTROSE 5 % IN Base 50 mL No Yes

WATER (D5W) INTRAVENOUS SOLUTION

☐ diphenhydrAMINE (BENADRYL) tablet 25 mg

Dose: 25 mg Route: oral once for 1 dose

Offset: 0 Hours

	Instructions: Administer 30 minu	tes prior to chemotherapy.				
	☐ diphenhydrAMINE (I	BENADRYL) tablet 50 mg				
	Dose: 50 mg	Route: oral	once for 1 do			
	Instructions: Administer 30 minu	tes prior to chemotherapy.				
	famotidine (PEPCID)	20 mg/2 mL injection 20				
	□ mg Dose: 20 mg	Route: intravenous	once for 1 do	SP.		
	Instructions:	riodic. miraverious	Offset: 0 Hou			
		tes prior to chemotherapy.				
	☐ famotidine (PEPCID)	tablet 20 mg				
	Dose: 20 mg	Route: oral	once for 1 do			
	Instructions: Administer 30 minu	tes prior to chemotherapy.				
		ENOL) tablet 650 mg				
	Dose: 650 mg	Route: oral	once for 1 do			
	Instructions: Administer 30 minu	tes prior to chemotherapy.				
Chem	otherapy					
	nivolumab (OPDIVO chloride 0.9% 100 m					
	Dose: 3 mg/kg	Route: intravenous	once over 30 Offset: 30 Mi		or 1 dose	
	Instructions:			nates		
		protein binding 0.22 micro shake. Do not mix with	n			
		Flush IV line with NS at the				
	end of infusion. Ingredients:	Name	Type	Dose	Salacted	Adds Vol.
	ingredients.	NIVOLUMAB 40 MG/4 ML	, ,		Main	Yes
		INTRAVENOUS			Ingredien	l.
		SOLUTION SODIUM	QS Base	100 mL	Yes	Yes
		CHLORIDE 0.9 %	Q5 base	100 IIIL	res	res
		INTRAVENOUS SOLUTION				
Hema	atology & Oncology Hypers	ensitivity Reaction Standing	a Order			
1161116	ONC NURSING COM		y Oldel			
	Interval: Comments:	Occurrences: Grade 1 - MILD Sympto	ome (cutanoou	e and cube	sutanoous (evmntome
	Comments.	only – itching, flushing,				
		 Stop the infusion. Place the patient on one 	oontinuous ma	nitoring		
		3. Obtain vital signs.	บบานเทนบนร เทบ	mioning.		
		4. Administer Normal S	aline at 50 mL	per hour u	ising a new	bag and new
		intravenous tubing. 5. If greater than or equ	al to 30 minute	es since th	e last dose	of
		Diphenhydramine, adm				
	Once. 6. If less than 30 minutes since the last dose of Diphenhydramine					

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

Route: intravenous **PRN** Dose: 20 mg 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 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. Repeat 1 time Dose 6 Cycle length: 14 days Day 1 Perform every 1 day x1 **Appointment Requests INFUSION APPOINTMENT REQUEST** Interval: --Occurrences: --Labs □ CBC WITH PLATELET AND DIFFERENTIAL Interval: --Occurrences: -- ☐ COMPREHENSIVE METABOLIC PANEL Interval: --Occurrences: --**☑ MAGNESIUM LEVEL** Interval: --Occurrences: -- ▼ THYROID STIMULATING HORMONE Interval: --Occurrences: --☑ T3, FREE Interval: --Occurrences: --

Occurrences: --

☑ T4, FREE

Interval: --

famotidine (PEPCID) 20 mg/2 mL injection 20

□ LDH Interval: --Occurrences: --**□ URIC ACID 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. 0 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: --Comments: 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. 0 Serum Magnesium less than 1.0mEg/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 0 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 11

Interval: -- Occurrences: --

Comments: HOLD and notify provider if ANC LESS than 1000; Platelets LESS than

100,000; AST or ALT > 3 and up to 5x Upper Normal Limit or Total Bilirubin > 1.5 and up to 3x Upper Normal Limit; Creatinine > 1.5 and up

to 6x Upper Normal Limit or > 1.5x from baseline.

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-M	ledications	NADDVIN'				
	☑ diphenhydrAMINE (BEI mg	NADRYL) injection 25				
	Dose: 25 mg Start: S	Route: intravenous	once for 1 dos	se		
	Instructions: Administer via slow IV chemotherapy.	push 30 minutes prior to				
	_ diphenhydrAMINE (BEI					
	□ sodium chloride 0.9 % Dose: 50 mg	50 mL IVPB Route: intravenous	once over 15	Minutos fo	r 1 dooo	
		End: S 11:45 AM	office over 15	wiiilutes 10	i i dose	
		prior to chemotherapy.	T	D	0-111	A -1 -1 - 1/-1
	Ingredients:	Name DIPHENHYDRAMIN E 50 MG/ML INJECTION SOLUTION	Type Medications	Dose 50 mg	Main Ingredient	Adds Vol. No
		SOLUTION SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Base	50 mL	Yes	Yes
		DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base	50 mL	No	Yes
	☐ diphenhydrAMINE (BEI					
		Route: oral	once for 1 dos Offset: 0 Hou			
	Instructions: Administer 30 minutes	prior to chemotherapy.				
	☐ diphenhydrAMINE (BEI	NADRYL) tablet 50 mg				
	Dose: 50 mg	Route: oral	once for 1 dos Offset: 0 Hou			
		prior to chemotherapy.				
	famotidine (PEPCID) 20	mg/2 mL injection 20				
	Dose: 20 mg	Route: intravenous	once for 1 dos Offset: 0 Hou			
	Instructions: Administer 30 minutes	prior to chemotherapy.				
	☐ famotidine (PEPCID) ta	blet 20 mg				
	S	Route: oral	once for 1 dos Offset: 0 Hour			
	Instructions: Administer 30 minutes	prior to chemotherapy.				
		NOL) tablet 650 mg				
	G	Route: oral	once for 1 dos Offset: 0 Hou			
	Instructions: Administer 30 minutes	prior to chemotherapy.				
Chem	notherapy					
	nivolumab (OPDIVO) 3	mg/kg in sodium				

chloride 0.9% 100 mL IVPB

Dose: 3 mg/kg Route: intravenous once over 30 Minutes for 1 dose

Offset: 30 Minutes

Instructions:

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

end of infusion.

Ingredients: Name Type Dose Selected Adds Vol.

NIVOLUMAB 40 Medications 3 mg/kg Main Yes MG/4 ML Ingredient

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. Otam the inferrior

- 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 F

Route: subcutaneous PRN

Start: S

Discharge Nursing Orders

ONC NURSING COMMUNICATION 76

Interval: -- Occurrences: -- Omments: 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.