

OP NIVOLUMAB (FLAT DOSE)

Types: ONCOLOGY TREATMENT

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

Dose 1	Repeat 1 time	Cycle length: 14 days
Day 1	Perform every 1 day x1	
Appointment Requests		
INFUSION APPOINTMENT REQUEST		
Interval: -- Occurrences: --		
Labs		
<input checked="" type="checkbox"/> CBC WITH PLATELET AND DIFFERENTIAL		
Interval: -- Occurrences: --		
<input checked="" type="checkbox"/> COMPREHENSIVE METABOLIC PANEL		
Interval: -- Occurrences: --		
<input checked="" type="checkbox"/> MAGNESIUM LEVEL		
Interval: -- Occurrences: --		
<input checked="" type="checkbox"/> THYROID STIMULATING HORMONE		
Interval: -- Occurrences: --		
<input checked="" type="checkbox"/> T3, FREE		
Interval: -- Occurrences: --		
<input checked="" type="checkbox"/> T4, FREE		
Interval: -- Occurrences: --		
<input type="checkbox"/> LDH		
Interval: -- Occurrences: --		
<input type="checkbox"/> URIC ACID 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

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.

Chemotherapy

nivolumab (OPDIVO) 240 mg in sodium chloride 0.9% 100 mL IVPB

Dose: 240 mg Route: intravenous once over 30 Minutes for 1 dose
Start: S

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 240 MG/24 ML INTRAVENOUS SOLUTION	Medications	240 mg	Main Ingredient	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	76 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	100 mL	No	Yes

Hematology & Oncology Hypersensitivity Reaction Standing Order

ONC NURSING COMMUNICATION 82

Interval: -- Occurrences: --
Comments: Grade 1 - MILD Symptoms (cutaneous and subcutaneous symptoms)

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

ONC NURSING COMMUNICATION 4

Interval: --

Occurrences: --

Comments:

Grade 2 – MODERATE Symptoms (cardiovascular, respiratory, or gastrointestinal symptoms – shortness of breath, wheezing, nausea, vomiting, dizziness, diaphoresis, throat or chest tightness, abdominal or back pain)

1. Stop the infusion.
2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O₂ saturation of greater than or equal to 92%.
6. Administer Normal Saline at 150 mL per hour using a new bag and new intravenous tubing.
7. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous), Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.
8. If no improvement after 15 minutes, advance level of care to Grade 3 (Severe).
9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

ONC NURSING COMMUNICATION 83

Interval: --

Occurrences: --

Comments:

Grade 3 – SEVERE Symptoms (hypoxia, hypotension, or neurologic compromise – cyanosis or O₂ saturation less than 92%, hypotension with systolic blood pressure less than 90 mmHg, confusion, collapse, loss of consciousness, or incontinence)

1. Stop the infusion.
2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. If heart rate is less than 50 or greater than 120, or blood pressure is less than 90/50 mmHg, place patient in reclined or flattened position.
6. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O₂ saturation of greater than or equal to 92%.
7. Administer Normal Saline at 1000 mL intravenous bolus using a new bag and new intravenous tubing.
8. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous) and Famotidine 20 mg intravenous once.
9. Administer Epinephrine (1:1000) 0.3 mg subcutaneous.

10. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

diphenhydrAMINE (BENADRYL) injection 25 mg

Dose: 25 mg Route: intravenous PRN
Start: S

fexofenadine (ALLEGRA) tablet 180 mg

Dose: 180 mg Route: oral PRN
Start: S

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

Dose: 20 mg Route: intravenous PRN
Start: S

hydrocortisone sodium succinate (Solu-CORTEF) injection 100 mg

Dose: 100 mg Route: intravenous PRN

dexamethasone (DECADRON) injection 4 mg

Dose: 4 mg Route: intravenous PRN
Start: S

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

Dose: 0.3 mg Route: subcutaneous PRN
Start: S

Discharge Nursing Orders

ONC NURSING COMMUNICATION 76

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

Discharge Nursing Orders

sodium chloride 0.9 % flush 20 mL

Dose: 20 mL Route: intravenous PRN

HEParin, porcine (PF) injection 500 Units

Dose: 500 Units Route: intra-catheter once PRN
Start: S

Instructions:

Concentration: 100 units/mL. Heparin flush for Implanted Vascular Access Device maintenance.

Dose 2

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

TREATMENT CONDITIONS 40

Interval: -- Occurrences: --

Comments:

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

Nursing Orders

TREATMENT CONDITIONS 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.

Chemotherapy

nivolumab (OPDIVO) 240 mg in sodium chloride 0.9% 100 mL IVPB

Dose: 240 mg Route: intravenous once over 30 Minutes for 1 dose
Start: S
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 240 MG/24 ML INTRAVENOUS SOLUTION	Medications	240 mg	Main Ingredient	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	76 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	100 mL	No	Yes

Hematology & Oncology Hypersensitivity Reaction Standing Order

ONC NURSING COMMUNICATION 82

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

ONC NURSING COMMUNICATION 4

Interval: -- Occurrences: --
Comments: Grade 2 – MODERATE Symptoms (cardiovascular, respiratory, or gastrointestinal symptoms – shortness of breath, wheezing, nausea, vomiting, dizziness, diaphoresis, throat or chest tightness, abdominal or

back pain)

1. Stop the infusion.
2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O₂ saturation of greater than or equal to 92%.
6. Administer Normal Saline at 150 mL per hour using a new bag and new intravenous tubing.
7. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous), Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.
8. If no improvement after 15 minutes, advance level of care to Grade 3 (Severe).
9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

ONC NURSING COMMUNICATION 83

Interval: --

Comments:

Occurrences: --

Grade 3 – SEVERE Symptoms (hypoxia, hypotension, or neurologic compromise – cyanosis or O₂ saturation less than 92%, hypotension with systolic blood pressure less than 90 mmHg, confusion, collapse, loss of consciousness, or incontinence)

1. Stop the infusion.
2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. If heart rate is less than 50 or greater than 120, or blood pressure is less than 90/50 mmHg, place patient in reclined or flattened position.
6. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O₂ saturation of greater than or equal to 92%.
7. Administer Normal Saline at 1000 mL intravenous bolus using a new bag and new intravenous tubing.
8. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous) and Famotidine 20 mg intravenous once.
9. Administer Epinephrine (1:1000) 0.3 mg subcutaneous.
10. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

diphenhydramine (BENADRYL) injection 25

mg

Dose: 25 mg

Route: intravenous

PRN

Start: S

fexofenadine (ALLEGRA) tablet 180 mg

Dose: 180 mg

Route: oral

PRN

Start: S

famotidine (PEPCID) 20 mg/2 mL injection 20

mg

Dose: 20 mg

Route: intravenous

PRN

Start: S

hydrocortisone sodium succinate (Solu-CORTEF) injection 100 mg

Dose: 100 mg

Route: intravenous

PRN

dexamethasone (DECADRON) injection 4 mg

Dose: 4 mg

Route: intravenous

PRN

Start: S

epINEPHrine (ADRENALIN) 1 mg/10 mL ADULT

- 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.

Chemotherapy

nivolumab (OPDIVO) 240 mg in sodium chloride 0.9% 100 mL IVPB
 Dose: 240 mg Route: intravenous once over 30 Minutes for 1 dose
 Start: S
 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 240 MG/24 ML	Medications	240 mg	Main	Yes
	INTRAVENOUS			Ingredient	

SOLUTION SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	76 mL	Yes	Yes
DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	100 mL	No	Yes

Hematology & Oncology Hypersensitivity Reaction Standing Order

ONC NURSING COMMUNICATION 82

Interval: -- Occurrences: --
 Comments: Grade 1 - MILD Symptoms (cutaneous and subcutaneous symptoms only – itching, flushing, periorbital edema, rash, or runny nose)

1. Stop the infusion.
2. Place the patient on continuous monitoring.
3. Obtain vital signs.
4. Administer Normal Saline at 50 mL per hour using a new bag and new intravenous tubing.
5. If greater than or equal to 30 minutes since the last dose of Diphenhydramine, administer Diphenhydramine 25 mg intravenous once.
6. If less than 30 minutes since the last dose of Diphenhydramine, administer Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.
7. Notify the treating physician.
8. If no improvement after 15 minutes, advance level of care to Grade 2 (Moderate) or Grade 3 (Severe).
9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

ONC NURSING COMMUNICATION 4

Interval: -- Occurrences: --
 Comments: Grade 2 – MODERATE Symptoms (cardiovascular, respiratory, or gastrointestinal symptoms – shortness of breath, wheezing, nausea, vomiting, dizziness, diaphoresis, throat or chest tightness, abdominal or back pain)

1. Stop the infusion.
2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O2 saturation of greater than or equal to 92%.
6. Administer Normal Saline at 150 mL per hour using a new bag and new intravenous tubing.
7. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous), Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.
8. If no improvement after 15 minutes, advance level of care to Grade 3 (Severe).
9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

ONC NURSING COMMUNICATION 83

Interval: -- Occurrences: --
 Comments: Grade 3 – SEVERE Symptoms (hypoxia, hypotension, or neurologic compromise – cyanosis or O2 saturation less than 92%, hypotension with systolic blood pressure less than 90 mmHg, confusion, collapse, loss of consciousness, or incontinence)

1. Stop the infusion.

2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. If heart rate is less than 50 or greater than 120, or blood pressure is less than 90/50 mmHg, place patient in reclined or flattened position.
6. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O2 saturation of greater than or equal to 92%.
7. Administer Normal Saline at 1000 mL intravenous bolus using a new bag and new intravenous tubing.
8. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous) and Famotidine 20 mg intravenous once.
9. Administer Epinephrine (1:1000) 0.3 mg subcutaneous.
10. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

diphenhydramine (BENADRYL) injection 25 mg

Dose: 25 mg Route: intravenous PRN
Start: S

fexofenadine (ALLEGRA) tablet 180 mg

Dose: 180 mg Route: oral PRN
Start: S

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

Dose: 20 mg Route: intravenous PRN
Start: S

hydrocortisone sodium succinate (Solu-CORTEF) injection 100 mg

Dose: 100 mg Route: intravenous PRN

dexamethasone (DECADRON) injection 4 mg

Dose: 4 mg Route: intravenous PRN
Start: S

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

Dose: 0.3 mg Route: subcutaneous PRN
Start: S

Discharge Nursing Orders

ONC NURSING COMMUNICATION 76

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

Discharge Nursing Orders

sodium chloride 0.9 % flush 20 mL

Dose: 20 mL Route: intravenous PRN

HEParin, porcine (PF) injection 500 Units

Dose: 500 Units Route: intra-catheter once PRN
Start: S

Instructions:

Concentration: 100 units/mL. Heparin flush for Implanted Vascular Access Device maintenance.

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: --

 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)

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

TREATMENT CONDITIONS 40

Interval: -- Occurrences: --

Comments: Magnesium (Normal range 1.6 to 2.6mEq/L)

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

o Sign electrolyte replacement order as Per protocol: cosign required

Nursing Orders

TREATMENT CONDITIONS 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.

Chemotherapy

nivolumab (OPDIVO) 240 mg in sodium chloride 0.9% 100 mL IVPB

Dose: 240 mg Route: intravenous once over 30 Minutes for 1 dose
Start: S

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 240 MG/24 ML INTRAVENOUS SOLUTION	Medications	240 mg	Main Ingredient	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	76 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	100 mL	No	Yes

Hematology & Oncology Hypersensitivity Reaction Standing Order

ONC NURSING COMMUNICATION 82

Interval: -- Occurrences: --
Comments: Grade 1 - MILD Symptoms (cutaneous and subcutaneous symptoms only – itching, flushing, periorbital edema, rash, or runny nose)
1. Stop the infusion.
2. Place the patient on continuous monitoring.
3. Obtain vital signs.
4. Administer Normal Saline at 50 mL per hour using a new bag and new intravenous tubing.
5. If greater than or equal to 30 minutes since the last dose of Diphenhydramine, administer Diphenhydramine 25 mg intravenous once.
6. If less than 30 minutes since the last dose of Diphenhydramine, administer Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.

7. Notify the treating physician.
8. If no improvement after 15 minutes, advance level of care to Grade 2 (Moderate) or Grade 3 (Severe).
9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

ONC NURSING COMMUNICATION 4

Interval: --

Occurrences: --

Comments:

Grade 2 – MODERATE Symptoms (cardiovascular, respiratory, or gastrointestinal symptoms – shortness of breath, wheezing, nausea, vomiting, dizziness, diaphoresis, throat or chest tightness, abdominal or back pain)

1. Stop the infusion.
2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O₂ saturation of greater than or equal to 92%.
6. Administer Normal Saline at 150 mL per hour using a new bag and new intravenous tubing.
7. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous), Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.
8. If no improvement after 15 minutes, advance level of care to Grade 3 (Severe).
9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

ONC NURSING COMMUNICATION 83

Interval: --

Occurrences: --

Comments:

Grade 3 – SEVERE Symptoms (hypoxia, hypotension, or neurologic compromise – cyanosis or O₂ saturation less than 92%, hypotension with systolic blood pressure less than 90 mmHg, confusion, collapse, loss of consciousness, or incontinence)

1. Stop the infusion.
2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. If heart rate is less than 50 or greater than 120, or blood pressure is less than 90/50 mmHg, place patient in reclined or flattened position.
6. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O₂ saturation of greater than or equal to 92%.
7. Administer Normal Saline at 1000 mL intravenous bolus using a new bag and new intravenous tubing.
8. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous) and Famotidine 20 mg intravenous once.
9. Administer Epinephrine (1:1000) 0.3 mg subcutaneous.
10. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

diphenhydramine (BENADRYL) injection 25 mg

Dose: 25 mg

Route: intravenous

PRN

Start: S

fexofenadine (ALLEGRA) tablet 180 mg

Dose: 180 mg

Route: oral

PRN

Start: S

famotidine (PEPCID) 20 mg/2 mL injection 20

mg

Dose: 20 mg Route: intravenous PRN
Start: S

hydrocortisone sodium succinate (Solu-CORTEF) injection 100 mg

Dose: 100 mg Route: intravenous PRN

dexamethasone (DECADRON) injection 4 mg

Dose: 4 mg Route: intravenous PRN
Start: S

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

Dose: 0.3 mg Route: subcutaneous PRN
Start: S

Discharge Nursing Orders

ONC NURSING COMMUNICATION 76

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

Discharge Nursing Orders

sodium chloride 0.9 % flush 20 mL

Dose: 20 mL Route: intravenous PRN

HEParin, porcine (PF) injection 500 Units

Dose: 500 Units Route: intra-catheter once PRN
Start: S

Instructions:

Concentration: 100 units/mL. Heparin flush for Implanted Vascular Access Device maintenance.

Dose 5

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 5.0mEq/L)

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

TREATMENT CONDITIONS 40

Interval: -- Occurrences: --
Comments: Magnesium (Normal range 1.6 to 2.6mEq/L)

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

Nursing Orders

TREATMENT CONDITIONS 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.

Chemotherapy

nivolumab (OPDIVO) 240 mg in sodium

chloride 0.9% 100 mL IVPB

Dose: 240 mg Route: intravenous once over 30 Minutes for 1 dose

Start: S

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 240 MG/24 ML INTRAVENOUS SOLUTION	Medications	240 mg	Main Ingredient	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	76 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	100 mL	No	Yes

Hematology & Oncology Hypersensitivity Reaction Standing Order**ONC NURSING COMMUNICATION 82**

Interval: --

Occurrences: --

Comments:

Grade 1 - MILD Symptoms (cutaneous and subcutaneous symptoms only – itching, flushing, periorbital edema, rash, or runny nose)

1. Stop the infusion.
2. Place the patient on continuous monitoring.
3. Obtain vital signs.
4. Administer Normal Saline at 50 mL per hour using a new bag and new intravenous tubing.
5. If greater than or equal to 30 minutes since the last dose of Diphenhydramine, administer Diphenhydramine 25 mg intravenous once.
6. If less than 30 minutes since the last dose of Diphenhydramine, administer Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.
7. Notify the treating physician.
8. If no improvement after 15 minutes, advance level of care to Grade 2 (Moderate) or Grade 3 (Severe).
9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

ONC NURSING COMMUNICATION 4

Interval: --

Occurrences: --

Comments:

Grade 2 – MODERATE Symptoms (cardiovascular, respiratory, or gastrointestinal symptoms – shortness of breath, wheezing, nausea, vomiting, dizziness, diaphoresis, throat or chest tightness, abdominal or back pain)

1. Stop the infusion.
2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O2 saturation of greater than or equal to 92%.
6. Administer Normal Saline at 150 mL per hour using a new bag and new intravenous tubing.
7. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous), Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.

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 6 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 5.0mEq/L)
o Protocol applies for SCr less than 1.5. Otherwise, contact MD/NP
o Protocol applies only to same day lab value.
o Serum potassium less than 3.0mEq/L, give 40mEq KCL IV or PO and contact MD/NP
o Serum potassium 3.0 to 3.2mEq/L, give 40mEq KCL IV or PO
o Serum potassium 3.3 to 3.4mEq/L, give 20mEq KCL IV or PO
o Serum potassium 3.5 mEq/L or greater, do not give potassium replacement
o If patient meets criteria, order SmartSet called "Outpatient Electrolyte Replacement"
o Sign electrolyte replacement order as Per protocol: cosign required

TREATMENT CONDITIONS 40

Interval: -- Occurrences: --
Comments: Magnesium (Normal range 1.6 to 2.6mEq/L)
o Protocol applies for SCr less than 1.5. Otherwise, contact

MD/NP

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

Nursing Orders

TREATMENT CONDITIONS 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.

Chemotherapy

nivolumab (OPDIVO) 240 mg in sodium chloride 0.9% 100 mL IVPB

Dose: 240 mg

Route: intravenous

once over 30 Minutes for 1 dose

Start: S

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 240 MG/24 ML

Medications

240 mg

Main

Yes

INTRAVENOUS SOLUTION

Ingredient

SODIUM CHLORIDE 0.9 %

QS Base

76 mL

Yes

Yes

INTRAVENOUS SOLUTION

DEXTROSE 5 % IN WATER (D5W)

QS Base

100 mL

No

Yes

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: --

Comments:

Occurrences: --

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: --

Comments:

Occurrences: --

Grade 3 – SEVERE Symptoms (hypoxia, hypotension, or neurologic compromise – cyanosis or O₂ saturation less than 92%, hypotension with systolic blood pressure less than 90 mmHg, confusion, collapse, loss of consciousness, or incontinence)

1. Stop the infusion.
2. Notify the CERT team and treating physician immediately.
3. Place the patient on continuous monitoring.
4. Obtain vital signs.
5. If heart rate is less than 50 or greater than 120, or blood pressure is less than 90/50 mmHg, place patient in reclined or flattened position.
6. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O₂ saturation of greater than or equal to 92%.
7. Administer Normal Saline at 1000 mL intravenous bolus using a new bag and new intravenous tubing.
8. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous) and Famotidine 20 mg intravenous once.
9. Administer Epinephrine (1:1000) 0.3 mg subcutaneous.

10. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.

diphenhydramine (BENADRYL) injection 25 mg

Dose: 25 mg Route: intravenous PRN
Start: S

fexofenadine (ALLEGRA) tablet 180 mg

Dose: 180 mg Route: oral PRN
Start: S

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

Dose: 20 mg Route: intravenous PRN
Start: S

hydrocortisone sodium succinate (Solu-CORTEF) injection 100 mg

Dose: 100 mg Route: intravenous PRN

dexamethasone (DECADRON) injection 4 mg

Dose: 4 mg Route: intravenous PRN
Start: S

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

Dose: 0.3 mg Route: subcutaneous PRN
Start: S

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.