## OP CAGT CYCLOPHOSPHAMIDE / FLUDARABINE/NIVOLUMAB LYMPHODEPLETION – HESTIA

## *Types:* ONCOLOGY TREATMENT

*Synonyms:* CAGT, CYCLOPHOSHAMIDE, CYTOXAN, MESNA, FLUDARABINE, FLUDARA, MESNEX, FLU, NIVOLUMAB

Cycle 1	Repeat 1	time	Cycle length: 55 days	
Day -4, 0			eyele longin. ee daye	Perform every 1 day x1
Ap	pointment Requests			
	INFUSION APPOINTM Interval:	ENT REQUEST Occurrences:		
Lin	e Flush			
	<b>sodium chloride 0.9 %</b> Dose: 20 mL Start: S	<b>flush 20 mL</b> Route: intravenous	PRN	
Nu	rsing Orders			
	sodium chloride 0.9 % Dose: 250 mL Start: S Instructions: To keep vein open.	<b>infusion 250 mL</b> Route: intravenous	once @ 30 mL/hr for 1	dose
Hyd	dration			
	<b>sodium chloride 0.9 %</b> Dose: 150 mL/hr	<b>infusion</b> Route: intravenous	once over 6 Hours for 1	dose
	Instructions: Start 1 hour prior to c	hemotherany		
Pre	-Medications	noniotapy.		
	ondansetron (ZOFRAI	N) tablet 16 mg		
	Dose: 16 mg	Route: oral	once for 1 dose Offset: 30 Minutes	
	Administer 30 minute	s before chemotherapy.		
Pre	-Medications			
	LORAZepam (ATIVAN Dose: 0.5 mg	) <b>tablet 0.5 mg</b> Route: oral	once for 1 dose Offset: 30 Minutes	
	Instructions: Administer 30 minute	s before chemotherapy.		
Ch	emotherapy			
	mesna (MESNEX) 250			
	<b>chloride 0.9 % 100 mL</b> Dose: 250 mg/m2	. <b>IVPB</b> Route: intravenous	once over 30 Minutes fo Offset: 1 Hours	or 1 dose
	infusion.	sna/Cyclophosphamide		
	Ingredients:	Name MESNA 100 MG/ML INTRAVENOUS SOLUTION	mg/m2	Selected Adds Vol. Main Yes Ingredient
		SODIUM CHLORIDE 0.9 % INTRAVENOUS	QS Base 100 mL	Yes Yes

		SOLUTION DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base		No	Yes
		CYTOXAN) 500 mg/m2, mg/m2 in dextrose 5%				
	Dose: 500 mg/m2	Route: intravenous	once over 2 H Offset: 1.5 Ho		dose	
	Ingredients:	Name CYCLOPHOSPHAN IDE 1 GRAM INTRAVENOUS SOLUTION	Туре	<b>Dose</b> 500 mg/m2	Selected Main Ingredient	Yes
		MESNA 100 MG/ML INTRAVENOUS SOLUTION	Medications	500 mg/m2	Yes	Yes
		DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base	500 mL	Yes	Yes
	fludarabine (FLUDAR) chloride 0.9 % 100 mL	A) 30 mg/m2 in sodium				
	Dose: 30 mg/m2	Route: intravenous	once over 30 Offset: 3.5 Ho		r 1 dose	
	Instructions: Use within 8 hours of	nreparation				
	Ingredients:	Name FLUDARABINE 50 MG INTRAVENOUS SOLUTION	<b>Type</b> Medications	<b>Dose</b> 30 mg/m2	<b>Selected</b> Main Ingredient	Yes
		SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	100 mL	Yes	Yes
		DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	100 mL	No	Yes
	mesna (MESNEX) ora	l solution 500 mg/m2				
	( <b>Treatment Plan)</b> Dose: 500 mg/m2	Route: oral	once for 1 do Offset: 5.5 Ho			
	Instructions: Administer TWO hou Mesna/Cyclophospha	rs AFTER amide infusion completed.				
	mesna (MESNEX) ora	l solution 500 mg/m2				
	( <b>Treatment Plan)</b> Dose: 500 mg/m2	Route: oral	once for 1 do Offset: 9.5 Ho			
	Instructions: Administer SIX hours Mesna/Cyclophospha	AFTER amide infusion completed.				
Suppo	ortive Care					
	promethazine (PHENE)	ERGAN) injection 25 mg				
	Dose: 25 mg Start: S	Route: intravenous	every 4 hours	S PRN		

	ONC NURSING COMM			
	Interval: Comments:	Occurrences: Discontinue IV.		
	Comments.	Discontinue IV.		
Discha	ge Nursing Orders			
	✓ sodium chloride 0.9 %	flush 20 mL		
	Dose: 20 mL	Route: intravenous	PRN	
	Dose. 20 IIIL	noule. Intravenous		
	☑ HEParin, porcine (PF)	injection 500 Units		
	Dose: 500 Units	Route: intra-catheter	once PRN	
	Start: S			
	Instructions:	ite/ml. I lenewin fluch fer		
	Implanted Vascular Ad	hits/mL. Heparin flush for		
	maintenance.			
/ -3, Cycl				Perform every 1 day x1
	tment Requests			r enonn every r day xr
	INFUSION APPOINTME	ENT REQUEST		
	Interval:	Occurrences:		
Line Flu				
	sodium chloride 0.9 %			
	Dose: 20 mL	Route: intravenous	PRN	
	Start: S			
Nursing	) Orders	infusion OFO ml		
	sodium chloride 0.9 % Dose: 250 mL	Route: intravenous	once @ 30 mL/hr for 1 c	loso
	Start: S	noule. Intravenous		1036
	Instructions:			
	To keep vein open.			
Hydrati	on			
	sodium chloride 0.9 %			
	Dose: 150 mL/hr	Route: intravenous	once over 6 Hours for 1	dose
	Instructions:			
	Start 1 hour prior to ch	remotherapy		
Pro-Mo	dications	ioniotal py		
1 IE-IVIE	ondansetron (ZOFRAN	I) tablet 16 mg		
	Dose: 16 mg	Route: oral	once for 1 dose	
	5		Offset: 30 Minutes	
	Instructions:			
	Administer 30 minutes	before chemotherapy.		
Pre-Me	dications			
	LORAZepam (ATIVAN) Dose: 0.5 mg	tablet 0.5 mg Route: oral	once for 1 dose	
	Dose. 0.5 mg	noule. Urai	Offset: 30 Minutes	
	Instructions:			
		before chemotherapy.		
Chemo	therapy			
	mesna (MESNEX) 250			
	chloride 0.9 % 100 mL			
	Dose: 250 mg/m2	Route: intravenous	once over 30 Minutes fo	r 1 dose
	Instructions:		Offset: 1 Hours	
		sna/Cyclophosphamide		
	infusion.	sha oyolophosphamue		
	Ingredients:	Name	Type Dose	Selected Adds Vol.

	MESNA 100 MG/ML INTRAVENOUS SOLUTION	Medications	250 mg/m2	Main Ingredient	Yes
	SOLUTION SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	100 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base		No	Yes
cyclophosphamide (C					
mesna (MESNEX) 500 500 mL chemo IVPB					
Dose: 500 mg/m2	Route: intravenous	once over 2 H Offset: 1.5 Ho		dose	
Ingredients:	Name CYCLOPHOSPHAM IDE 1 GRAM INTRAVENOUS SOLUTION	<b>Type</b> Medications	<b>Dose</b> 500 mg/m2		<b>Adds Vol.</b> Yes
	MESNA 100 MG/ML INTRAVENOUS SOLUTION	Medications	500 mg/m2	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base	500 mL	Yes	Yes
fludarabine (FLUDARA					
chloride 0.9 % 100 mL Dose: 30 mg/m2	chemo IVPB Route: intravenous	once over 30		r 1 dose	
Instructions: Use within 8 hours of	preparation	Offset: 3.5 Ho	ours		
Ingredients:	Name FLUDARABINE 50 MG INTRAVENOUS	<b>Type</b> Medications	<b>Dose</b> 30 mg/m2		<b>Adds Vol.</b> Yes
	SOLUTION SODIUM CHLORIDE 0.9 % INTRAVENOUS	QS Base	100 mL	Yes	Yes
	SOLUTION DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	100 mL	No	Yes
	JULUTION				
mesna (MESNEX) oral					
<b>mesna (MESNEX) oral (Treatment Plan)</b> Dose: 500 mg/m2		once for 1 dos Offset: 5.5 Ho			
(Treatment Plan) Dose: 500 mg/m2 Instructions: Administer TWO hour	solution 500 mg/m2 Route: oral				
(Treatment Plan) Dose: 500 mg/m2 Instructions: Administer TWO hour Mesna/Cyclophospha mesna (MESNEX) oral	solution 500 mg/m2 Route: oral s AFTER mide infusion completed.				
(Treatment Plan) Dose: 500 mg/m2 Instructions: Administer TWO hour Mesna/Cyclophospha	solution 500 mg/m2 Route: oral s AFTER mide infusion completed.		se		

	Supp	ortive Care			
	Supp		CAN) inication OF ma		
		promethazine (PHENEF	· •		
		Dose: 25 mg Start: S	Route: intravenous	every 4 hours PRN	
	Disch	arge Nursing Orders			
		ONC NURSING COMMU	JNICATION 76 Occurrences:		
			Discontinue IV.		
	Disch	arge Nursing Orders			
		✓ sodium chloride 0.9 % f	flush 20 mL		
		Dose: 20 mL	Route: intravenous	PRN	
		☑ HEParin, porcine (PF) i	njection 500 Units		
		Dose: 500 Units Start: S Instructions:	Route: intra-catheter	once PRN	
		Concentration: 100 uni Implanted Vascular Ac maintenance.	ts/mL. Heparin flush for cess Device		
Day -	-2, Cy	cle 1			Perform every 1 day x1
		ntment Requests			, ,
		INFUSION APPOINTME Interval:	Occurrences:		
	Line F		Occurrences		
		sodium chloride 0.9 % f	<b>flush 20 mL</b> Route: intravenous	PRN	
	Nursi	ng Orders			
		sodium chloride 0.9 % i	infusion 250 mL Route: intravenous	once @ 30 mL/hr for 1 d	ose
	Hydra				
		<b>sodium chloride 0.9 %</b> i Dose: 150 mL/hr	<b>infusion</b> Route: intravenous	once over 6 Hours for 1	dose
		Instructions: Start 1 hour prior to ch	omothoropy		
	Pro-M	ledications	emourerapy.		
	116-10	ondansetron (ZOFRAN)	) tablet 16 mg		
			Route: oral	once for 1 dose Offset: 30 Minutes	
		Instructions: Administer 30 minutes	before chemotherapy.		
	Pre-M	ledications			
		Ŭ	tablet 0.5 mg Route: oral	once for 1 dose Offset: 30 Minutes	
		Instructions: Administer 30 minutes	before chemotherapy.		
	Chem	otherapy			
		mesna (MESNEX) 250 n chloride 0.9 % 100 mL l			

Dose: 250 mg/m2	Route: intravenous	once over 30 Offset: 1 Hour		r 1 dose	
Instructions: Administer before Mes infusion.	sna/Cyclophosphamide				
infusion. Ingredients:	<b>Name</b> MESNA 100 MG/ML INTRAVENOUS SOLUTION	<b>Type</b> Medications	<b>Dose</b> 250 mg/m2		<b>Adds Vol.</b> Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS	QS Base	100 mL	Yes	Yes
	SOLUTION DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base		No	Yes
cyclophosphamide (C) mesna (MESNEX) 500 500 mL chemo IVPB					
Dose: 500 mg/m2	Route: intravenous	once over 2 H Offset: 1.5 Ho		dose	
Ingredients:	Name CYCLOPHOSPHAM IDE 1 GRAM INTRAVENOUS SOLUTION	<b>Type</b> Medications	<b>Dose</b> 500 mg/m2		<b>Adds Vol.</b> Yes
	MESNA 100 MG/ML INTRAVENOUS SOLUTION	Medications	500 mg/m2	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base	500 mL	Yes	Yes
fludarabine (FLUDARA					
chloride 0.9 % 100 mL Dose: 30 mg/m2	chemo IVPB Route: intravenous	once over 30 Offset: 3.5 Ho		r 1 dose	
Instructions:					
Use within 8 hours of p Ingredients:	preparation. Name	Туре	Dose	Soloctod	Adds Vol.
ingreatents.	FLUDARABINE 50 MG INTRAVENOUS SOLUTION	Medications	30 mg/m2		Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	100 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	100 mL	No	Yes
mesna (MESNEX) oral	solution 500 mg/m2				
(Treatment Plan) Dose: 500 mg/m2	Route: oral	once for 1 dos Offset: 5.5 Ho			
Instructions: Administer TWO hours Mesna/Cyclophosphar	s AFTER mide infusion completed.				
mesna (MESNEX) oral (Treatment Plan)					

		Dose: 500 mg/m2	Route: oral	once for 1 dose Offset: 9.5 Hours		
		Instructions: Administer SIX hours Mesna/Cyclophospha	AFTER mide infusion completed.		5	
	Supportive					
		promethazine (PHENE	RGAN) injection 25 mg			
		Dose: 25 mg Start: S	Route: intravenous	every 4 hours Pl	RN	
	Discharge	Nursing Orders				
		ONC NURSING COMM Interval: Comments:	UNICATION 76 Occurrences: Discontinue IV.			
	Discharge	Nursing Orders				
	Ŭ	sodium chloride 0.9 %	flush 20 mL			
		Dose: 20 mL	Route: intravenous	PRN		
		HEParin, porcine (PF)	injection 500 Units			
		Dose: 500 Units Start: S	Route: intra-catheter	once PRN		
		Instructions: Concentration: 100 un Implanted Vascular Ac maintenance.	its/mL. Heparin flush for ccess Device			
Dav	-1, Cycle 1				Perform e	every 1 day x1
	Nursing C	rders				, ,
		TREATMENT CONDITIE Interval: Comments:	ONS 11 Occurrences: HOLD and notify provide 100,000; AST or ALT > Bilirubin > 1.5 and up to to 6x Upper Normal Lim	3 and up to 5x Up 3x Upper Norma	pper Normal Limit al Limit; Creatinine	or Total
	Line Flush	1				
		sodium chloride 0.9 % Dose: 20 mL Start: S	flush 20 mL Route: intravenous	PRN		
	Nursing C	rders				
		sodium chloride 0.9 % Dose: 250 mL Start: S Instructions: To keep vein open.	infusion 250 mL Route: intravenous	once @ 30 mL/h	nr for 1 dose	
	Chemothe					
		in-line filter. Do not sh	<b>VPB</b> Route: intravenous otein binding 0.22 micror	once over 30 Mi າ	inutes for 1 dose	
		end of infusion. Ingredients:	<b>Name</b> NIVOLUMAB 240	- 71	ose Selected 40 mg Main	<b>Adds Vol.</b> Yes

		MG/24 ML Ingredient INTRAVENOUS SOLUTION
		SOLUTION SODIUM QS Base 76 mL Yes Yes CHLORIDE 0.9 % INTRAVENOUS SOLUTION
		DEXTROSE 5 % IN QS Base 100 mL No Yes WATER (D5W) INTRAVENOUS SOLUTION
Hema	atology & Oncology Hyper ONC NURSING CO	ensitivity Reaction Standing Order
	Interval: Comments:	<ul> <li>Occurrences: Grade 1 - MILD Symptoms (cutaneous and subcutaneous symptoms only – itching, flushing, periorbital edema, rash, or runny nose)</li> <li>1. Stop the infusion.</li> <li>2. Place the patient on continuous monitoring.</li> <li>3. Obtain vital signs.</li> <li>4. Administer Normal Saline at 50 mL per hour using a new bag and new intravenous tubing.</li> <li>5. If greater than or equal to 30 minutes since the last dose of Diphenhydramine, administer Diphenhydramine 25 mg intravenous once.</li> <li>6. If less than 30 minutes since the last dose of Diphenhydramine, administer Fexofenadine 180 mg orally and Famotidine 20 mg intravenous once.</li> <li>7. Notify the treating physician.</li> <li>8. If no improvement after 15 minutes, advance level of care to Grade 2 (Moderate) or Grade 3 (Severe).</li> <li>9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.</li> </ul>
	ONC NURSING CO	
	Interval: Comments:	<ul> <li>Occurrences:</li> <li>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)</li> <li>1. Stop the infusion.</li> <li>2. Notify the CERT team and treating physician immediately.</li> <li>3. Place the patient on continuous monitoring.</li> <li>4. Obtain vital signs.</li> <li>5. Administer Oxygen at 2 L per minute via nasal cannula. Titrate to maintain O2 saturation of greater than or equal to 92%.</li> <li>6. Administer Normal Saline at 150 mL per hour using a new bag and new intravenous tubing.</li> <li>7. Administer Hydrocortisone 100 mg intravenous (if patient has allergy to Hydrocortisone, please administer Dexamethasone 4 mg intravenous once.</li> <li>8. If no improvement after 15 minutes, advance level of care to Grade 3 (Severe).</li> <li>9. Assess vital signs every 15 minutes until resolution of symptoms or otherwise ordered by covering physician.</li> </ul>
	ONC NURSING CO Interval:	IMUNICATION 83 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 mmHa. confusion. collapse.

			<ol> <li>Place the patient on of</li> <li>Obtain vital signs.</li> <li>If heart rate is less that less than 90/50 mmHg,</li> <li>Administer Oxygen at maintain O2 saturation of</li> <li>Administer Normal Sa bag and new intravenout</li> <li>Administer Hydrocort to Hydrocortisone, pleas and Famotidine 20 mg i</li> <li>Administer Epinephrin</li> </ol>	n and treating physician immediately. continuous monitoring. an 50 or greater than 120, or blood pressure is place patient in reclined or flattened position. t 2 L per minute via nasal cannula. Titrate to of greater than or equal to 92%. aline at 1000 mL intravenous bolus using a new is tubing. isone 100 mg intravenous (if patient has allergy se administer Dexamethasone 4 mg intravenous) ntravenous once. ne (1:1000) 0.3 mg subcutaneous. very 15 minutes until resolution of symptoms or
		diphenhydrAMINE (BE mg Dose: 25 mg	NADRYL) injection 25 Route: intravenous	PRN
		Start: S fexofenadine (ALLEGF Dose: 180 mg Start: S	<b>IA) tablet 180 mg</b> Route: oral	PRN
		famotidine (PEPCID) 20 mg Dose: 20 mg Start: S	0 mg/2 mL injection 20 Route: intravenous	PRN
		hydrocortisone sodiun (Solu-CORTEF) injectio Dose: 100 mg		PRN
		<b>dexamethasone (DEC</b> Dose: 4 mg Start: S	ADRON) injection 4 mg Route: intravenous	PRN
		epINEPHrine (ADRENA injection syringe 0.3 m Dose: 0.3 mg Start: S		- <b>T</b> PRN
	Disch	arge Nursing Orders		
		<b>ONC NURSING COMM</b> Interval: Comments:	Occurrences: Discontinue IV.	
	Disch	arge Nursing Orders		
		☑ sodium chloride 0.9 %	flush 20 mL	
		Dose: 20 mL	Route: intravenous	PRN
		HEParin, porcine (PF) i Dose: 500 Units Start: S Instructions: Concentration: 100 un Implanted Vascular Ac	Route: intra-catheter its/mL. Heparin flush for	once PRN
		maintenance.		
Dav 1	3. Cv	cle 1		Perform every 1 day x1

Nursin	g Orders					
	TREATMENT CONDIT Interval: Comments:	TIONS 11 Occurrences: HOLD and notify provide 100,000; AST or ALT > Bilirubin > 1.5 and up to to 6x Upper Normal Lim	3 and up to 5x 3x Upper Nor	Upper No mal Limit;	ormal Limit Creatinine	or Total
Line Fl	lush					
	<b>sodium chloride 0.9</b> % Dose: 20 mL Start: S	6 flush 20 mL Route: intravenous	PRN			
Nursin	g Orders					
	sodium chloride 0.9 % Dose: 250 mL Start: S Instructions: To keep vein open.	% infusion 250 mL Route: intravenous	once @ 30 m	IL/hr for 1	dose	
Chemo	otherapy					
	nivolumab (OPDIVO)					
	in-line filter. Do not s	IVPB Route: intravenous protein binding 0.22 micror hake. Do not mix with lush IV line with NS at the	once over 30 า	Minutes fo	or 1 dose	
	Ingredients:	Name NIVOLUMAB 240 MG/24 ML INTRAVENOUS SOLUTION SODIUM CHLORIDE 0.9 % INTRAVENOUS	<b>Type</b> Medications QS Base	<b>Dose</b> 240 mg 76 mL	Selected Main Ingredient Yes	Adds Vol. Yes Yes
		SOLUTION DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	100 mL	No	Yes
Hemat			g Order			
	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	
ONC	NURSING	COMMUNICATION 4	

ONC NURSING COMM	UNICATION 4	
Interval: Comments:	gastrointestinal symptor	Symptoms (cardiovascular, respiratory, or ms – shortness of breath, wheezing, nausea,
	back pain)	phoresis, throat or chest tightness, abdominal or
	3. Place the patient on o	n and treating physician immediately. continuous monitoring.
	maintain O2 saturation	t 2 L per minute via nasal cannula. Titrate to of greater than or equal to 92%. aline at 150 mL per hour using a new bag and
	new intravenous tubing. 7. Administer Hydrocort	isone 100 mg intravenous (if patient has allergy
		se administer Dexamethasone 4 mg dine 180 mg orally and Famotidine 20 mg
		er 15 minutes, advance level of care to Grade 3
		ery 15 minutes until resolution of symptoms or overing physician.
ONC NURSING COMM	UNICATION 83	
Interval: Comments:	Occurrences:	nptoms (hypoxia, hypotension, or neurologic
Comments.	compromise – cyanosis	or O2 saturation less than 92%, hypotension sure less than 90 mmHg, confusion, collapse,
	<ol> <li>Notify the CERT team</li> <li>Place the patient on c</li> </ol>	n and treating physician immediately. continuous monitoring.
		an 50 or greater than 120, or blood pressure is
	6. Administer Oxygen at	place patient in reclined or flattened position. t 2 L per minute via nasal cannula. Titrate to of greater than or equal to 92%.
		aline at 1000 mL intravenous bolus using a new
	8. Administer Hydrocort to Hydrocortisone, pleas	isone 100 mg intravenous (if patient has allergy se administer Dexamethasone 4 mg intravenous)
		ne (1:1000) 0.3 mg subcutaneous.
	otherwise ordered by co	very 15 minutes until resolution of symptoms or overing physician.
	NADRYL) injection 25	
<b>mg</b> Dose: 25 mg Start: S	Route: intravenous	PRN
fexofenadine (ALLEG Dose: 180 mg Start: S	Route: oral	PRN
	0 mg/2 mL injection 20	
<b>mg</b> Dose: 20 mg Start: S	Route: intravenous	PRN

	hydrocortisone sodi			
	(Solu-CORTEF) inject Dose: 100 mg	Route: intravenous	PRN	
	Dose. Too mg	noule. Initavenous	1 1 0 1	
	<b>dexamethasone (DE</b> Dose: 4 mg Start: S	CADRON) injection 4 mg Route: intravenous	PRN	
		NALIN) 1 mg/10 mL ADUI	.T	
	injection syringe 0.3 Dose: 0.3 mg Start: S	<b>mg</b> Route: subcutaneous	PRN	
Diach	arge Nursing Orders			
DISCH	ONC NURSING COM	MUNICATION 76		
	Interval:	Occurrences:		
	Comments:	Discontinue IV.		
Diach	are a Nurraina Ordana			
Discha	arge Nursing Orders			
	✓ sodium chloride 0.9	% flush 20 mL		
	Dose: 20 mL	Route: intravenous	PRN	
	☑ HEParin, porcine (PF	F) injection 500 Units		
	Dose: 500 Units	Route: intra-catheter	once PRN	
	Start: S			
	Instructions:			
		units/mL. Heparin flush for		
	Implanted Vascular	Access Device		
	maintenance.			
27 Cv	nia 1			
27, Cy			Perforr	m every 1 day:
	ng Orders	TIONS 11	Perforr	n every 1 day
		Occurrences: HOLD and notify provid 100,000; AST or ALT > Bilirubin > 1.5 and up to	Perforr er if ANC LESS than 1000; Plate 3 and up to 5x Upper Normal Lin 3x Upper Normal Limit; Creatinin it or > 1.5x from baseline.	lets LESS thar nit or Total
Nursir	ng Orders TREATMENT CONDI Interval: Comments:	Occurrences: HOLD and notify provid 100,000; AST or ALT > Bilirubin > 1.5 and up to	er if ANC LESS than 1000; Plate 3 and up to 5x Upper Normal Lin 3x Upper Normal Limit; Creatinii	lets LESS thar nit or Total
	ng Orders <b>TREATMENT CONDI</b> Interval: Comments: <sup>T</sup> lush	Occurrences: HOLD and notify provid 100,000; AST or ALT > Bilirubin > 1.5 and up to to 6x Upper Normal Lim	er if ANC LESS than 1000; Plate 3 and up to 5x Upper Normal Lin 3x Upper Normal Limit; Creatinii	lets LESS thar nit or Total
Nursir	ng Orders TREATMENT CONDI Interval: Comments:	Occurrences: HOLD and notify provid 100,000; AST or ALT > Bilirubin > 1.5 and up to to 6x Upper Normal Lim	er if ANC LESS than 1000; Plate 3 and up to 5x Upper Normal Lin 3x Upper Normal Limit; Creatinii	lets LESS thar nit or Total
Nursir Line F	ig Orders <b>TREATMENT CONDI</b> Interval: Comments: Flush <b>sodium chloride 0.9</b> Dose: 20 mL Start: S	Occurrences: HOLD and notify provid 100,000; AST or ALT > Bilirubin > 1.5 and up to to 6x Upper Normal Lim % flush 20 mL	er if ANC LESS than 1000; Plate 3 and up to 5x Upper Normal Lin 3x Upper Normal Limit; Creatinii it or > 1.5x from baseline.	lets LESS thar nit or Total
Nursir Line F	ing Orders TREATMENT CONDI Interval: Comments: ilush sodium chloride 0.9 Dose: 20 mL Start: S ng Orders sodium chloride 0.9 Dose: 250 mL Start: S Instructions:	Occurrences: HOLD and notify provid 100,000; AST or ALT > Bilirubin > 1.5 and up to to 6x Upper Normal Lim <b>% flush 20 mL</b> Route: intravenous	er if ANC LESS than 1000; Plate 3 and up to 5x Upper Normal Lin 3x Upper Normal Limit; Creatinii it or > 1.5x from baseline.	lets LESS thar nit or Total
Nursir	TREATMENT CONDI Interval: Comments: Sodium chloride 0.9 Dose: 20 mL Start: S ng Orders Sodium chloride 0.9 Dose: 250 mL Start: S Instructions: To keep vein open.	Occurrences: HOLD and notify provid 100,000; AST or ALT > Bilirubin > 1.5 and up to to 6x Upper Normal Lim % flush 20 mL Route: intravenous % infusion 250 mL	er if ANC LESS than 1000; Plate 3 and up to 5x Upper Normal Lin 3x Upper Normal Limit; Creatinin it or > 1.5x from baseline. PRN	lets LESS thar nit or Total
Nursir	TREATMENT CONDI Interval: Comments: Sodium chloride 0.9 Dose: 20 mL Start: S Orders Sodium chloride 0.9 Dose: 250 mL Start: S Instructions: To keep vein open. otherapy	Occurrences: HOLD and notify provid 100,000; AST or ALT > Bilirubin > 1.5 and up to to 6x Upper Normal Lim % flush 20 mL Route: intravenous % infusion 250 mL Route: intravenous	er if ANC LESS than 1000; Plate 3 and up to 5x Upper Normal Lin 3x Upper Normal Limit; Creatinin it or > 1.5x from baseline. PRN	lets LESS thar nit or Total
Nursir	TREATMENT CONDI Interval: Comments: Sodium chloride 0.9 Dose: 20 mL Start: S ng Orders Sodium chloride 0.9 Dose: 250 mL Start: S Instructions: To keep vein open.	Occurrences: HOLD and notify provid 100,000; AST or ALT > Bilirubin > 1.5 and up to to 6x Upper Normal Lim % flush 20 mL Route: intravenous % infusion 250 mL Route: intravenous	er if ANC LESS than 1000; Plate 3 and up to 5x Upper Normal Lin 3x Upper Normal Limit; Creatinin it or > 1.5x from baseline. PRN	lets LESS thar nit or Total
Nursir	ing Orders TREATMENT CONDI Interval: Comments: ilush sodium chloride 0.9 Dose: 20 mL Start: S ing Orders sodium chloride 0.9 Dose: 250 mL Start: S Instructions: To keep vein open. otherapy nivolumab (OPDIVO) chloride 0.9% 100 m Dose: 240 mg	Occurrences: HOLD and notify provid 100,000; AST or ALT > Bilirubin > 1.5 and up to to 6x Upper Normal Lim % flush 20 mL Route: intravenous % infusion 250 mL Route: intravenous	er if ANC LESS than 1000; Plate 3 and up to 5x Upper Normal Lin 3x Upper Normal Limit; Creatinin it or > 1.5x from baseline. PRN	lets LESS thar nit or Total ne > 1.5 and u
Nursir	ing Orders TREATMENT CONDI Interval: Comments: ilush sodium chloride 0.9 Dose: 20 mL Start: S ng Orders sodium chloride 0.9 Dose: 250 mL Start: S Instructions: To keep vein open. otherapy nivolumab (OPDIVO) chloride 0.9% 100 m Dose: 240 mg Start: S	Occurrences: HOLD and notify provid 100,000; AST or ALT > Bilirubin > 1.5 and up to to 6x Upper Normal Lim % flush 20 mL Route: intravenous % infusion 250 mL Route: intravenous	er if ANC LESS than 1000; Plate 3 and up to 5x Upper Normal Lin 3x Upper Normal Limit; Creatinin it or > 1.5x from baseline. PRN once @ 30 mL/hr for 1 dose	lets LESS than nit or Total ne > 1.5 and u
Nursir	Interval: Comments: Sodium chloride 0.9 Dose: 20 mL Start: S Orders Sodium chloride 0.9 Dose: 250 mL Start: S Instructions: To keep vein open. Start: S Instructions: To keep vein open. Otherapy Nivolumab (OPDIVO) chloride 0.9% 100 m Dose: 240 mg Start: S Instructions: Administer with low in-line filter. Do not s	Occurrences: HOLD and notify provid 100,000; AST or ALT > Bilirubin > 1.5 and up to to 6x Upper Normal Lim % flush 20 mL Route: intravenous % infusion 250 mL Route: intravenous	er if ANC LESS than 1000; Plate 3 and up to 5x Upper Normal Lim 3x Upper Normal Limit; Creatinin it or > 1.5x from baseline. PRN once @ 30 mL/hr for 1 dose once over 30 Minutes for 1 dose	lets LESS than nit or Total ne > 1.5 and u
Nursir	Interval: Comments: Sodium chloride 0.9 Dose: 20 mL Start: S Orders Sodium chloride 0.9 Dose: 250 mL Start: S Instructions: To keep vein open. Start: S Instructions: To keep vein open. Otherapy Nivolumab (OPDIVO) chloride 0.9% 100 m Dose: 240 mg Start: S Instructions: Administer with low in-line filter. Do not s	Occurrences: HOLD and notify provid 100,000; AST or ALT > Bilirubin > 1.5 and up to to 6x Upper Normal Lim % flush 20 mL Route: intravenous % infusion 250 mL Route: intravenous ) 240 mg in sodium L IVPB Route: intravenous protein binding 0.22 micro shake. Do not mix with	er if ANC LESS than 1000; Plate 3 and up to 5x Upper Normal Lim 3x Upper Normal Limit; Creatinin it or > 1.5x from baseline. PRN once @ 30 mL/hr for 1 dose once over 30 Minutes for 1 dose	lets LESS thar nit or Total ne > 1.5 and u

	NIVOLUMAB 240 MG/24 ML INTRAVENOUS SOLUTION	Medications	240 mg	Main Ingredient	Yes t
		QS Base	76 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	100 mL	No	Yes
Hematology & Oncology Hyperser		Order			
ONC NURSING COMM Interval: Comments:			s and subc	utaneous s	symptoms
	only – itching, flushing, p 1. Stop the infusion. 2. Place the patient on c			or runny no	ese)
	<ol> <li>Obtain vital signs.</li> <li>Administer Normal Sa intravenous tubing.</li> </ol>		•	U U	J
	5. If greater than or equa Diphenhydramine, admir once.	nister Diphenh	lydramine	25 mg intra	avenous
	6. If less than 30 minutes administer Fexofenadine intravenous once.	180 mg orall			
	7. Notify the treating phy 8. If no improvement after (Moderate) or Grade 3 (\$	er 15 minutes, Severe).			
	9. Assess vital signs eve otherwise ordered by cov			ution of syi	mptoms or
ONC NURSING COMM	IUNICATION 4 Occurrences:				
Comments:	Grade 2 – MODERATE s gastrointestinal symptom vomiting, dizziness, diap back pain)	ns – shortness	of breath,	wheezing,	, nausea,
	<ol> <li>Stop the infusion.</li> <li>Notify the CERT team</li> <li>Place the patient on control 4. Obtain vital signs.</li> </ol>			mmediately	y.
	<ol> <li>5. Administer Oxygen at maintain O2 saturation o</li> <li>6. Administer Normal Sa</li> </ol>	f greater than	or equal to	o 92%.	
	new intravenous tubing. 7. Administer Hydrocortis to Hydrocortisone, pleas	e administer [	Dexametha	sone 4 mg	)
	intravenous), Fexofenad intravenous once. 8. If no improvement after				
	(Severe). 9. Assess vital signs eve otherwise ordered by cov			ution of sy	mptoms or
	IUNICATION 83				
Interval:	Occurrences:				
Comments:	Grade 3 – SEVERE Sym compromise – cvanosis				

			<ol> <li>loss of consciousness, of</li> <li>Stop the infusion.</li> <li>Notify the CERT team</li> <li>Place the patient on of</li> <li>Obtain vital signs.</li> <li>If heart rate is less that less than 90/50 mmHg,</li> <li>Administer Oxygen at maintain O2 saturation of</li> <li>Administer Normal Sabag and new intravenout</li> <li>Administer Hydrocorti to Hydrocortisone, pleas and Famotidine 20 mg in</li> <li>Administer Epinephrin</li> </ol>	a and treating physician important of the second se	mediately. or blood pressure is flattened position. annula. Titrate to 92%. us bolus using a new (if patient has allergy one 4 mg intravenous)
		diphenhydrAMINE (BE mg	NADRYL) injection 25		
		Dose: 25 mg Start: S	Route: intravenous	PRN	
		fexofenadine (ALLEGI Dose: 180 mg Start: S	RA) tablet 180 mg Route: oral	PRN	
		famotidine (PEPCID) 2 mg	0 mg/2 mL injection 20		
		Dose: 20 mg Start: S	Route: intravenous	PRN	
		hydrocortisone sodiu (Solu-CORTEF) injecti Dose: 100 mg		PRN	
		<b>dexamethasone (DEC</b> Dose: 4 mg Start: S	ADRON) injection 4 mg Route: intravenous	PRN	
		epINEPHrine (ADREN/ injection syringe 0.3 n Dose: 0.3 mg Start: S	ALIN) 1 mg/10 mL ADUL ng Route: subcutaneous	. <b>T</b> PRN	
	Disch	arge Nursing Orders			
		<b>ONC NURSING COMM</b> Interval: Comments:	Occurrences: Discontinue IV.		
	Disch	arge Nursing Orders			
		🗹 sodium chloride 0.9 %			
		Dose: 20 mL	Route: intravenous	PRN	
		IEParin, porcine (PF)	injection 500 Units		
		Implanted Vascular A	Route: intra-catheter hits/mL. Heparin flush for ccess Device	once PRN	
-	av 41. Cv	maintenance.		C C	Perform every 1 day x1
L	av 41. GV			F	enomineverv i uav XI

Nursin	g Orders					
	TREATMENT CONDIT Interval: Comments:	FIONS 11 Occurrences: HOLD and notify provide 100,000; AST or ALT > Bilirubin > 1.5 and up to to 6x Upper Normal Lim	3 and up to 5x 3x Upper Nor	Upper No mal Limit;	ormal Limit Creatinine	or Total
Line Fl	ush					
	<b>sodium chloride 0.9</b> 9 Dose: 20 mL Start: S	% flush 20 mL Route: intravenous	PRN			
<b>Nursin</b>	g Orders					
	sodium chloride 0.9 9 Dose: 250 mL Start: S Instructions: To keep vein open.	% infusion 250 mL Route: intravenous	once @ 30 m	L/hr for 1	dose	
Chemo	otherapy					
	nivolumab (OPDIVO)					
	in-line filter. Do not s	. IVPB Route: intravenous protein binding 0.22 micron hake. Do not mix with lush IV line with NS at the		Minutes fo	or 1 dose	
	Ingredients:	Name NIVOLUMAB 240 MG/24 ML INTRAVENOUS SOLUTION SODIUM CHLORIDE 0.9 % INTRAVENOUS	<b>Type</b> Medications QS Base	<b>Dose</b> 240 mg 76 mL	Selected Main Ingredient Yes	Adds Vol. Yes Yes
		SOLUTION DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	100 mL	No	Yes
Hemat	ology & Oncology Hyperse	nsitivity Reaction Standing	g Order			
	ONC NURSING COMI Interval: Comments:		ms (cutaneous periorbital ede continuous mo aline at 50 mL al to 30 minute nister Diphent s since the las e 180 mg orall ysician.	ma, rash, nitoring. per hour u es since th hydramine st dose of l y and Fam	or runny no using a new e last dose 25 mg intra Diphenhydr notidine 20	bag and new of avenous amine, mg

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

ONC NURSING COMMUNICATION 4
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<b>ONC NURSING COMM</b>	UNICATION 4	
Interval: Comments:	gastrointestinal symptor	Symptoms (cardiovascular, respiratory, or ms – shortness of breath, wheezing, nausea,
	back pain)	phoresis, throat or chest tightness, abdominal or
	3. Place the patient on o	n and treating physician immediately. continuous monitoring.
	maintain O2 saturation	t 2 L per minute via nasal cannula. Titrate to of greater than or equal to 92%. aline at 150 mL per hour using a new bag and
	new intravenous tubing. 7. Administer Hydrocort	isone 100 mg intravenous (if patient has allergy
		se administer Dexamethasone 4 mg dine 180 mg orally and Famotidine 20 mg
		er 15 minutes, advance level of care to Grade 3
		ery 15 minutes until resolution of symptoms or overing physician.
ONC NURSING COMM	UNICATION 83	
Interval: Comments:	Occurrences:	nptoms (hypoxia, hypotension, or neurologic
Comments.	compromise – cyanosis	or O2 saturation less than 92%, hypotension sure less than 90 mmHg, confusion, collapse,
	<ol> <li>Notify the CERT team</li> <li>Place the patient on c</li> </ol>	n and treating physician immediately. continuous monitoring.
		an 50 or greater than 120, or blood pressure is
	6. Administer Oxygen at	place patient in reclined or flattened position. t 2 L per minute via nasal cannula. Titrate to of greater than or equal to 92%.
		aline at 1000 mL intravenous bolus using a new
	8. Administer Hydrocort to Hydrocortisone, pleas	isone 100 mg intravenous (if patient has allergy se administer Dexamethasone 4 mg intravenous)
		ne (1:1000) 0.3 mg subcutaneous.
	otherwise ordered by co	very 15 minutes until resolution of symptoms or overing physician.
	NADRYL) injection 25	
<b>mg</b> Dose: 25 mg Start: S	Route: intravenous	PRN
fexofenadine (ALLEG Dose: 180 mg Start: S	Route: oral	PRN
	0 mg/2 mL injection 20	
<b>mg</b> Dose: 20 mg Start: S	Route: intravenous	PRN

	hydrocortisone sod (Solu-CORTEF) inje Dose: 100 mg		PRN
	<b>dexamethasone (DE</b> Dose: 4 mg Start: S	CADRON) injection 4 mg Route: intravenous	g PRN
	epINEPHrine (ADRE injection syringe 0.3 Dose: 0.3 mg Start: S	<b>E</b>	PRN
Disch	arge Nursing Orders		
	ONC NURSING COM Interval: Comments:	IMUNICATION 76 Occurrences: Discontinue IV.	
Disch	arge Nursing Orders		
	✓ sodium chloride 0.9	% flush 20 mL	
	Dose: 20 mL	Route: intravenous	PRN
	HEParin, porcine (P	F) injection 500 Units	
	Dose: 500 Units Start: S Instructions: Concentration: 100 Implanted Vascular maintenance.	Route: intra-catheter units/mL. Heparin flush fo Access Device	once PRN r