Protocol Index

IP CAGT ALLOGENEIC SCT CY-TBI

Types: ONCOLOGY TREATMENT
Synonyms: CY, TBI, MESNA, CYCLO, CYTOXAN, METHO, MTX, BMT, CAGT, ALLOGENEIC, SCT

Transplant Repeat 1 time Cycle length: 90 days

Day -7 through -1 Perform every 1 day x1

Labs

ECG 12-LEAD
Interval: Daily Occurrences: --
Comments: MUST be reviewed by physician daily prior to each cyclophosphamide dose

URINALYSIS, AUTOMATED WITH MICROSCOPY
Interval: Daily Occurrences: --

URINALYSIS, AUTOMATED WITH MICROSCOPY
Interval: Once Occurrences: --

Line Flush

sodium chloride 0.9 % flush 20 mL
Dose: 20 mL Route: intravenous PRN
Start: S

Pre-Medications

ondansetron (ZOFRAN) 16 mg, dexamethasone (DECADRON) 12 mg in sodium chloride 0.9% 50 mL IVPB
Dose: -- Route: intravenous every 24 hours over 15 Minutes
Start: S
Instructions:
Administer 30 minutes prior to treatment on Days -7, -6, -5, -4, -3, -2, -1.

Ingredients:

Name	Type	Dose	Selected	Adds Vol.
ONDANSETRON HCL (PF) 4 MG/2 ML INJECTION SOLUTION	Medications	16 mg	Yes	No
DEXAMETHASONE 4 MG/ML INJECTION SOLUTION	Medications	12 mg	Yes	No
SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Base	50 mL	Always	Yes
DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base		No	Yes

aprepitant (CINVANTI) 130 mg in dextrose (NON-PVC) 5% 130 mL IVPB
Dose: 130 mg Route: intravenous once over 30 Minutes for 1 dose
Start: S End: S
Instructions:
Administer 30 minutes prior to treatment on Days -7.

Ingredients:

Name	Type	Dose	Selected	Adds Vol.

APREPITANT 7.2 MG/ML INTRAVENOUS EMULSION	Medications	130 mg	Main Ingredient	Yes
DEXTROSE 5 % IN WATER (D5W) IV SOLP (EXCEL; NON-PVC)	Base	130 mL	Yes	Yes
SODIUM CHLORIDE 0.9 % IV SOLP (EXCEL;NON-PVC)	Base	130 mL	No	Yes

Antiemetics

promethazine (PHENERGAN) injection 25 mg
Dose: 25 mg Route: intravenous every 4 hours PRN
Start: S

Supportive Care

acyclovir (ZOVIRAX) 5 mg/kg (Ideal)
Dose: 5 mg/kg Route: intravenous every 8 hours
Start: S

levoFLOXacin (LEVAQUIN) tablet 500 mg
Dose: 500 mg Route: oral daily at 0600 (time critical)
Start: S

fluconazole (DIFLUCAN) tablet 200 mg
Dose: 200 mg Route: oral daily
Start: S

Chemotherapy

ONC NURSING COMMUNICATION 7
Interval: Until discontinued Occurrences: --
Comments: During CYCLOPHOSPHAMIDE:
-12 lead EKG must be ordered and reviewed by physician prior to each dose.
-Starting 4 hours PRIOR to cyclophosphamide, start Normal Saline at 125 mL/hr and continue for 24 hours after last dose of cyclophosphamide completes. (MAX total volume infusion rate during chemotherapy = 350 mL/hr).
-Instruct patient to void every 1-2 hours DAILY x 3 days.
-Urinalysis DAILY x 4 days.

mesna (MESNEX) 20 mg/kg in sodium chloride 0.9% 100 mL chemo IVPB
Dose: 20 mg/kg Route: intravenous once over 30 Minutes for 1 dose
Start: S
Instructions:
Day -7.

Ingredients:

Name	Type	Dose	Selected	Adds Vol.
MESNA 100 MG/ML INTRAVENOUS SOLUTION	Medications	20 mg/kg	Main Ingredient	Yes
SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Base	100 mL	Yes	Yes
DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base	100 mL	No	Yes

cyclophosphamide (CYTOXAN) 60 mg/kg in dextrose 5% 500 mL chemo IVPB

Dose: 60 mg/kg | Route: intravenous | every 24 hours over 2 Hours for 2 doses

Instructions:
Day -7, -6.

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	CYCLOPHOSPHAMIDE 1 GRAM INTRAVENOUS SOLUTION	Medications	60 mg/kg	Main Ingredient	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	500 mL	No	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	500 mL	Yes	Yes

mesna (MESNEX) 10 mg/kg in sodium chloride 0.9% 100 mL chemo IVPB

Dose: 10 mg/kg | Route: intravenous | every 4 hours over 30 Minutes for 12 doses
Start: S
Instructions:
Day -7, -6.
Start 4 hours after loading dose of Mesna.

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	MESNA 100 MG/ML INTRAVENOUS SOLUTION	Medications	10 mg/kg	Main Ingredient	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Base	100 mL	Yes	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base	100 mL	No	Yes

Nursing Orders

ONC NURSING COMMUNICATION 40

Interval: Until discontinued | Occurrences: --
Comments: Notify TMH Radiation Oncology (713-441-4800) of patient's admission and obtain time of TBI.

2-4 Gy/day for Day -4, -3, -2, -1.

Additional Orders

sodium chloride 0.9% infusion

Dose: 125 mL/hr | Route: intravenous | continuous

Instructions:
Max total volume infusion rate during chemotherapy = 350 mL/hr.

furosemide (LASIX) injection 20 mg

Dose: 20 mg | Route: intravenous | every 24 hours
Offset: 3 Hours

Instructions:
-Give at completion of each dose of cyclophosphamide infusion

furosemide (LASIX) injection 20 mg

Dose: 20 mg | Route: intravenous | every 24 hours

Offset: 9 Hours

Instructions:
-Give 6 hours after above dose DAILY x 2 days

Line Flush

sodium chloride 0.9 % flush 20 mL
Dose: 20 mL | Route: intravenous | PRN

Acute Graft Versus Host Prophylaxis

tacrolimus (PROGRAF) 0.02 mg/kg in sodium chloride (NON-PVC) 0.9 % 250 mL infusion
Dose: 0.02 mg/kg | Route: intravenous | every 24 hours over 24 Hours
Start: S+5 4:00 PM
Instructions:
Start on Day -2.

Ingredients:

Name	Type	Dose	Selected	Adds Vol.
TACROLIMUS 5 MG/ML INTRAVENOUS SOLUTION	Medications	0.02 mg/kg	Main Ingredient	No
SODIUM CHLORIDE 0.9 % IV SOLP (EXCEL;NON-PVC)	Base	250 mL	Yes	Yes
DEXTROSE 5 % IN WATER (D5W) IV SOLP (EXCEL; NON-PVC)	Base	250 mL	No	Yes

Day 0 — Perform every 1 day x1

Line Flush

sodium chloride 0.9 % flush 20 mL
Dose: 20 mL | Route: intravenous | PRN
Start: S

Antiemetics

ondansetron (ZOFRAN) 16 mg in sodium chloride 0.9 % 50 mL IVPB
Dose: 16 mg | Route: intravenous | once over 15 Minutes for 1 dose
Start: S

Ingredients:

Name	Type	Dose	Selected	Adds Vol.
ONDANSETRON HCL (PF) 4 MG/2 ML INJECTION SOLUTION	Medications	16 mg	Main Ingredient	No
DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	Base	50 mL	No	Yes
SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Base	50 mL	Yes	Yes

Pre-Medications

acetaminophen (TYLENOL) tablet 650 mg
Dose: 650 mg | Route: oral | once for 1 dose
Start: S
Instructions:
Premed for TRANSPLANT

diphenhydrAMINE (BENADRYL) injection 25 mg
Dose: 25 mg | Route: intravenous | once for 1 dose

Start: S
Instructions:
Premed for TRANSPLANT

hydrocortisone sodium succinate (Solu-CORTEF) injection 100 mg
Dose: 100 mg Route: intravenous once for 1 dose

Instructions:
Premed for TRANSPLANT

Transplant Orders

ONC NURSING COMMUNICATION 55
Interval: Once Occurrences: --
Comments: -Oxygen at bedside during transplantation
-Anaphylaxis precautions at bedside during transplant:

meperidine (DEMEROL) injection 12.5 mg
Dose: 12.5 mg Route: intravenous every 15 min PRN for 3 doses
Start: S
Instructions:
Administer every 15 minutes x 3 doses PRN for each episode of rigors (if rigors persist, call MD).

epINEPHrine (ADRENALIN) 1 mg/1 mL injection 0.3 mg
Dose: 0.3 mg Route: subcutaneous PRN
Start: S End: S+1

diphenhydrAMINE (BENADRYL) injection 25 mg
Dose: 25 mg Route: intravenous PRN
Start: S End: S+1

hydrocortisone sodium succinate (Solu-CORTEF) injection 100 mg
Dose: 100 mg Route: intravenous PRN

Day 1 through 11 Perform every 1 day x1

Line Flush

sodium chloride 0.9 % flush 20 mL
Dose: 20 mL Route: intravenous PRN
Start: S

Pre-Medications

☑ **ondansetron (ZOFRAN) 16 mg in sodium chloride 0.9 % 50 mL IVPB**
Dose: -- Route: intravenous once over 15 Minutes for 1 dose
Start: S

Ingredients:

Name	Type	Dose	Selected	Adds Vol.
ONDANSETRON HCL (PF) 4 MG/2 ML INJECTION SOLUTION	Medications	16 mg	Yes	No
DEXAMETHASONE 4 MG/ML INJECTION SOLUTION	Medications	12 mg	No	No
SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	Base	50 mL	Always	Yes
DEXTROSE 5 % IN WATER (D5W)	Base		No	Yes

INTRAVENOUS SOLUTION

Antiemetics

ondansetron ODT (ZOFRAN-ODT) disintegrating tablet 8 mg

Dose: 8 mg | Route: oral | every 8 hours PRN
Start: S+1
Instructions:
Start Day +2

Post-Transplant Orders

ONC NURSING COMMUNICATION 56

Interval: Once | Occurrences: --
Comments: -Oxygen at bedside 24 hours after transplantation
-Anaphylaxis precautions at bedside 24 hours after transplant:

meperidine (DEMEROL) injection 12.5 mg

Dose: 12.5 mg | Route: intravenous | every 15 min PRN for 3 doses
Start: S
Instructions:
Administer every 15 minutes x 3 doses PRN for each episode of rigors (if rigors persist, call MD).

epINEPHrine (ADRENALIN) 1 mg/1 mL injection 0.3 mg

Dose: 0.3 mg | Route: subcutaneous | PRN
Start: S | End: S+1

diphenhydrAMINE (BENADRYL) injection 25 mg

Dose: 25 mg | Route: intravenous | PRN
Start: S | End: S+1

hydrocortisone sodium succinate (Solu-CORTEF) injection 100 mg

Dose: 100 mg | Route: intravenous | PRN

Acute Graft Versus Host Prophylaxis

methotrexate PF 5 mg/m2 in sodium chloride 0.9% 50 mL chemo IVPB

Dose: 5 mg/m2 | Route: intravenous | once over 15 Minutes for 1 dose
Start: S
Instructions:
HOLD UNTIL APPROVED BY CAGT.

Day +1.

Ingredients:

Name	Type	Dose	Selected	Adds Vol.
METHOTREXATE SODIUM (PF) 25 MG/ML INJECTION SOLUTION	Medications	5 mg/m2	Main Ingredient	Yes
DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	50 mL	No	Yes
SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	50 mL	Yes	Yes

methotrexate PF 5 mg/m2 in sodium chloride 0.9% 50 mL chemo IVPB

Dose: 5 mg/m2 | Route: intravenous | once over 15 Minutes for 1 dose

Start: S+2
Instructions:
HOLD UNTIL APPROVED BY CAGT.

Day +3.

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	METHOTREXATE SODIUM (PF) 25 MG/ML INJECTION SOLUTION	Medications	5 mg/m2	Main Ingredient	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	50 mL	No	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	50 mL	Yes	Yes

methotrexate PF 5 mg/m2 in sodium chloride 0.9% 50 mL chemo IVPB
Dose: 5 mg/m2 Route: intravenous once over 15 Minutes for 1 dose
Start: S+5
Instructions:
HOLD UNTIL APPROVED BY CAGT.

Day +6.

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	METHOTREXATE SODIUM (PF) 25 MG/ML INJECTION SOLUTION	Medications	5 mg/m2	Main Ingredient	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	50 mL	No	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	50 mL	Yes	Yes

methotrexate PF 5 mg/m2 in sodium chloride 0.9% 50 mL chemo IVPB
Dose: 5 mg/m2 Route: intravenous once over 15 Minutes for 1 dose
Start: S+10
Instructions:
HOLD UNTIL APPROVED BY CAGT.

Day +11.

Ingredients:	Name	Type	Dose	Selected	Adds Vol.
	METHOTREXATE SODIUM (PF) 25 MG/ML INJECTION SOLUTION	Medications	5 mg/m2	Main Ingredient	Yes
	DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION	QS Base	50 mL	No	Yes
	SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION	QS Base	50 mL	Yes	Yes