

IP CAGT ALLOGENEIC SCT BU-FLU (WITH TACROLIMUS & MINI METHOTREXATE GVHD PROPHYLAXIS)

Types: ONCOLOGY TREATMENT

Synonyms: BU, CY, BUSULFAN, CYTOXAN, CYCLOPHOSPHAMIDE, MTX, METHOTREXATE, BMT, CAGT, ALLOGENEIC, SCT

| | | |
|---|---|---|
| Transplant | Repeat 1 time | Cycle length: 90 days |
| Day -10 through -1 | | Perform every 1 day x1 |
| Line Flush | | |
| sodium chloride 0.9 % flush 20 mL | | |
| Dose: 20 mL Route: intravenous PRN | | |
| Start: S | | |
| Additional Orders | | |
| ONC NURSING COMMUNICATION 49 | | |
| Interval: Until discontinued Occurrences: -- | | |
| Comments: Do NOT administer Acetaminophen/Azoles for 48 hours after last busulfan dose. | | |
| Pre-Medications | | |
| ondansetron (ZOFTRAN) 16 mg, dexamethasone | | |
| <input checked="" type="checkbox"/> (DECADRON) 12 mg in sodium chloride 0.9% 50 mL IVPB | | |
| Dose: -- Route: intravenous every 24 hours over 15 Minutes | | |
| Start: S+1 | | |
| Instructions: | | |
| Administer 30 minutes prior to treatment on Days -9, -8, -7, -6. | | |
| 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 | | |
| <input checked="" type="checkbox"/> Dose: 130 mg Route: intravenous once over 30 Minutes for 1 dose | | |
| Start: S+1 | | |
| Instructions: | | |
| Administer 30 minutes prior to treatment on Day -9. | | |
| Ingredients: | Name | Type Dose Selected Adds Vol. |
| | APREPITANT 7.2 MG/ML INTRAVENOUS | Medications 130 mg Main Ingredient Yes |

EMULSION
 DEXTROSE 5 % IN Base 130 mL Yes Yes
 WATER (D5W) IV
 SOLP (EXCEL;
 NON-PVC)
 SODIUM Base 130 mL No Yes
 CHLORIDE 0.9 % IV
 SOLP
 (EXCEL;NON-PVC)

ondansetron (ZOFRAN) 16 mg in sodium chloride 0.9% 50 mL IVPB

Dose: 16 mg Route: intravenous every 24 hours over 15 Minutes
 Start: S+5

Instructions:

Administer 30 minutes prior to treatment on Days -5, -4, -3, -2, -1.

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 |

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+8
 Instructions:
 Start Day -2

Chemotherapy

ONC NURSING COMMUNICATION 30

Interval: Until discontinued Occurrences: --

Comments:

During IV Busulfan:

- INFUSE in the WHITE lumen on the TRIPLE lumen catheter
- LABEL the White lumen: Busulfan
- Prime tubing and filter with Normal Saline only
- Do NOT give any Acetaminophen (Tylenol) during Busulfan doses and for 48 hours following the last dose of Busulfan
- Record START and STOP time of EVERY Busulfan dose
- FLUSH tubing and filter with 20cc Normal Saline after each dose

Chemotherapy

busulfan (BUSULFEX) 0.8 mg/kg in sodium chloride 0.9 % chemo IVPB

Dose: 0.8 mg/kg Route: intravenous every 6 hours over 2 Hours for 16 doses
Start: S+1 8:00 AM
Instructions:
Day -9, -8, -7, -6.

| Ingredients: | Name | Type | Dose | Selected | Adds Vol. |
|--------------|--|-------------|-----------|-----------------|-----------|
| | BUSULFAN 60 MG/10 ML INTRAVENOUS SOLUTION | Medications | 0.8 mg/kg | Main Ingredient | No |
| | SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION | Base | | Yes | Yes |
| | DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION | Base | | No | Yes |

fludarabine (FLUDARA) 30 mg/m2 in sodium chloride 0.9 % 100 mL chemo IVPB

Dose: 30 mg/m2 Route: intravenous every 24 hours over 30 Minutes for 4 doses
Start: S+5
Instructions:
Day -5, -4, -3, -2.

| Ingredients: | Name | Type | Dose | Selected | Adds Vol. |
|--------------|--|-------------|----------|-----------------|-----------|
| | FLUDARABINE 50 MG INTRAVENOUS SOLUTION | Medications | 30 mg/m2 | Main Ingredient | Yes |
| | SODIUM CHLORIDE 0.9 % INTRAVENOUS SOLUTION | QS Base | 100 mL | Yes | Yes |
| | DEXTROSE 5 % IN WATER (D5W) INTRAVENOUS SOLUTION | QS Base | | No | Yes |

Line Flush

sodium chloride 0.9 % flush 20 mL

Dose: 20 mL Route: intravenous PRN

Pharmacokinetic Instructions

ONC NURSING COMMUNICATION 18

Interval: Until discontinued

Occurrences: --

Comments:

1. Infuse Busulfan through the White lumen of the TRIPLE lumen catheter
2. LABEL the White lumen: Busulfan
3. NO other fluids are to be infusing during the Busulfan infusion or the Pharmacokinetics period (Doses #1 and #9)
4. IVF may resume AFTER the last PK is drawn for dose #1 and #9
5. Busulfan infusion must be complete including flush. When infusion is finished, Disconnect & REMOVE Busulfan bag/tubing PRIOR to starting blood draws. (Does not matter if the post level is drawn 5 min after the infusion ends)
6. USE the same CLOCK / WATCH to document start and stop times, AND all blood draw times
7. ALL blood samples for Pharmacokinetics to be drawn from the RED lumen of the triple lumen CVC
8. FLUSH the RED lumen with 30 mL saline flush PRIOR to

- EVERY blood draw EXCEPT immediately after end of infusion
9. Use a green top, heparinized tube for all PK samples
 10. After sample is collected, label and place in a plastic biohazard lab bag (NO pre-labeling of tubes)
 11. Put sample on wet ice and place in the medication room refrigerator or in the medication room in a closed basin for pick up / transport to TCH lab
 12. DO NOT KEEP MULTIPLE SAMPLE at bedside

Seizure Prophylaxis

levETIRAcetam (KEPPRA) tablet

Dose: -- Route: oral 2 times daily
 Start: S

VOD Prophylaxis

ursodiol (ACTIGALL) capsule 300 mg

Dose: 300 mg Route: oral 3 times daily
 Start: S+1

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+8 4:00 PM

Instructions:
 Start 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 of Rest

ONC NURSING COMMUNICATION 48

Interval: Until discontinued
 Occurrences: --
 Comments: Day -1.

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 (ZOFTRAN) 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 | Base | 50 mL | No | Yes |

| | | | | |
|---|------|-------|-----|-----|
| WATER (D5W) INTRAVENOUS SOLUTION 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

Antiemetics

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) INTRAVENOUS SOLUTION | Base | | No | Yes |

Antiemetics

ondansetron ODT (ZOFTRAN-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 |