

**COMPLETE OR REVIEW ALLERGY STATUS PRIOR TO WRITING ORDERS**

**BMT MA BU4FLUATG**  
**RELATED OR UNRELATED DONOR ALLOGENEIC STEM CELL TRANSPLANT**  
**MYELOABLATIVE CONDITIONING with BUSULFAN, FLUDARABINE and ANTI-THYMOCYTE GLOBULIN**  
(items with check boxes must be selected to be ordered) (Page 1 of 4)

Date: \_\_\_\_\_ Time: \_\_\_\_\_

☐ **Consent signed for chemotherapy**

**Must be completed prior to ordering chemotherapy:** This person of child bearing potential has been assessed for the possibility of pregnancy.

\_\_\_\_\_  
Prescriber's signature

\_\_\_\_\_  
Printed name

\_\_\_\_\_  
College ID

Time  
Processed  
RN/LPN Initials  
Comments

**Chemotherapy Dosing Calculations**

<b>Height:</b> _____ <b>cm</b>	<b>Actual Weight:</b> _____ <b>kg</b>
▪ Document height and weight on Nursing Assessment Form and must be co-signed by 2 RNs	
$BMI(kg/m^2) = \frac{Weight(kg)}{[Height(m)]^2}$ <b>OR</b> <a href="https://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmi-m.htm">https://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmi-m.htm</a>	<b>BMI =</b> _____ <b>kg/m<sup>2</sup></b>
<b>Ideal Body Weight:</b>	<b>Ideal Body Weight =</b> _____ <b>kg</b>
Male = 50 + 0.91 (height in cm – 152.4) Female = 45.5 + 0.91 (height in cm – 152.4)	
<b>Adjusted Body Weight :</b>	<b>Adjusted Body Weight =</b> _____ <b>kg</b>
ABW = Ideal Body Weight (IBW) + 0.4(Actual Body Weight – IBW)	
$BSA(m^2) = \sqrt{\frac{Height(cm) \times Weight(kg)}{3600}}$	<b>BSA =</b> _____ <b>m<sup>2</sup></b>
Round all BSA calculations to 2 decimal places	<b>Adjusted BSA =</b> _____ <b>m<sup>2</sup></b>

Use Adjusted body weight or Adjusted BSA to calculate chemotherapy doses when Ideal Body Weight is less than Actual Weight

**MONITORING:**

During each anti-thymocyte globulin (rabbit) infusion: Monitor vital signs Q15MIN x 4; then Q30MIN x 4; then Q4H.

**LABORATORY:**

Serum creatinine and bilirubin (total and direct) level in AM of each methotrexate dose.

Day +2 (date): \_\_\_\_\_ draw cyclosporine trough level at 05:30 and repeat every Monday and Thursday.

Day +7 (date): \_\_\_\_\_ draw CMV PCR then repeat every Monday through day +100 or longer if indicated.

Day +7 (date): \_\_\_\_\_ draw EBV PCR then repeat every Monday through day +100 or longer if indicated.

\_\_\_\_\_  
Prescriber's Signature

\_\_\_\_\_  
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**Vancouver Coastal Health**  
 VA: VGH / UBC / GFS  
 VC: BP / Purdy / GPC

ADDRESSOGRAPH

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**MEDICATIONS:**

**Premedications:**

Starting day -6 (date) \_\_\_\_\_, to day -3 (date) \_\_\_\_\_, 30 minutes prior to first dose of chemotherapy, give  
 ondansetron 8 mg PO BID \*AND\*  
 dexamethasone 8 mg PO daily

**Breakthrough nausea and vomiting anti-emetics:**

- ☐ prochlorperazine 10 mg PO Q6H PRN
- ☐ metoclopramide 10 to 20 mg PO/IV Q6H PRN
- ☐ LORazepam 1 mg PO/IV Q6H PRN

**Chemotherapy:**

BCCA Code for PCIS order entry: BMTNOS

*All intensive chemotherapy and transplant chemotherapy orders require 2 prescriber signatures, one of whom must be an attending physician.*

fludarabine \_\_\_\_\_mg (50 mg/m<sup>2</sup>, round to nearest 5 mg) in dextrose 5% (D5W) IV daily over 60 minutes at 09:00.  
 Adjust dose when CrCl is 70 mL/min or less. Refer to Notes to Prescriber.

Start day -6 (date): \_\_\_\_\_ to day -3 (date): \_\_\_\_\_. Total of 4 doses.

LORazepam 1 mg SL/IV Q6H (at 09:00, 15:00, 21:00, 03:00) for seizure prophylaxis. Start at 09:00.

Start day -6 (date): \_\_\_\_\_ to day -2 (date): \_\_\_\_\_.

busulfan \_\_\_\_\_mg (3.2 mg/kg, round to nearest 5 mg) in sodium chloride 0.9% (NS) IV daily over 3 hours at 10:00.

Start day -6 (date): \_\_\_\_\_ to day -3 (date): \_\_\_\_\_. Total of 4 doses.

Prescriber's Signature \_\_\_\_\_

Printed Name \_\_\_\_\_  
 VCH.VA.PPO.1012 | Rev.JUN.2022

College ID \_\_\_\_\_

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Date: \_\_\_\_\_ Time: \_\_\_\_\_

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**MEDICATIONS:**

**Chemotherapy continued:**

anti-thymocyte globulin (rabbit, THYMOGLOBULIN) (use actual body weight)

Give on day -3 (date): \_\_\_\_\_ (dose) \_\_\_\_\_ mg (0.5 mg/kg, round to nearest 1 mg) IV x 1 dose at 10:00.

Give on day -2 (date): \_\_\_\_\_ (dose) \_\_\_\_\_ mg (2 mg/kg, round to nearest 5 mg) IV x 1 dose at 10:00.

Give on day -1 (date): \_\_\_\_\_ (dose) \_\_\_\_\_ mg (2 mg/kg, round to nearest 5 mg) IV x 1 dose at 10:00.

Total of 3 doses (4.5 mg/kg total)

Premedications for each anti-thymocyte globulin (rabbit) infusion:

diphenhydramine 50 mg PO x 1 dose one hour prior to, and Q4H during the infusion

acetaminophen 650 mg PO x 1 dose once hour prior to, and Q4H during the infusion

hydrocortisone 100 mg IV x 1 dose one hour prior

Infuse anti-thymocyte globulin (rabbit) through an in-line 0.2 micron filter. Initial dose (day-2) to be infused over 8 to 12 hours (up to 24 hours). If no reaction, subsequent doses can be infused over a minimum of 4 hours.

**Confirm the need for each dose with Pharmacy.**

Hematopoietic progenitor cells to be infused on day 0 (date): \_\_\_\_\_

**GRAFT VERSUS HOST DISEASE PROPHYLAXIS:**

BCCA Code for PCIS order entry: NOT COVERED

*All intensive chemotherapy and transplant chemotherapy orders require 2 prescriber signatures, one of whom must be an attending physician.*

cycloSPORINE \_\_\_\_\_ mg (1.5 mg/kg, use actual weight, round dose to nearest 5 mg) in dextrose 5% (D5W) IV Q12H at 06:00 and 18:00. Infuse over 4 hours. Start at 18:00 on Day -2 (date) \_\_\_\_\_

methotrexate:

Use Adjusted BSA to calculate methotrexate dose when Ideal Body Weight is less than Actual Weight Check with prescriber prior to giving each dose of methotrexate.

methotrexate \_\_\_\_\_ mg (15 mg/m<sup>2</sup>, round to nearest 1 mg) IV over 20 minutes. Administer at least 24 hours after hematopoietic progenitor cell infusion.

Start on Day +1 (date) \_\_\_\_\_

methotrexate \_\_\_\_\_ mg (10 mg/m<sup>2</sup>, round to nearest 1 mg) IV over 20 minutes.

Give on Day +3 (date) \_\_\_\_\_, Day +6 (date) \_\_\_\_\_, and Day +11 (date) \_\_\_\_\_.

Prescriber's Signature

Printed Name

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**SUPPORTIVE CARE:**

ursodiol (choose ONE dosing regimen only):

- ☐ 250 mg PO BID (for actual weight less than 40 kg)  
☐ 250 mg PO AM and 500 mg PO PM (for actual weight 40 kg to 70 kg)  
☐ 500 mg PO BID (for actual weight greater than 70 kg)

Start on day -7 (date): \_\_\_\_\_ and continue until day +90 (date): \_\_\_\_\_

- ☐ allopurinol 300 mg PO daily for 10 days for all patients NOT in remission at time of hematopoietic progenitor cell infusion. Start day -6 (date): \_\_\_\_\_.

micafungin 100 mg IV daily. Start day +1 (date): \_\_\_\_\_

If HSV seropositive recipient give:

- ☐ valACYclovir 500 mg PO BID \*OR\* acyclovir \_\_\_\_\_ mg (5 mg/kg, round to nearest 25 mg, use ideal body weight if patient BMI of 30 or greater) IV Q12H.

Start day +1 (date): \_\_\_\_\_

**Fever orders:** as per completed FEBRILE NEUTROPENIA – INPATIENT INITIAL MANAGEMENT (#302) PRE-PRINTED ORDERS.

**Cell Infusion:** as per completed INFUSION of HEMATOPOIETIC PROGENITOR CELLS or THERAPEUTIC CELLS (# 503) PRE-PRINTED ORDERS.

**NOTES TO PRESCRIBER** (Unit Clerk/Pharmacy do not process – reminders for Prescriber only).

If CrCl is 70 mL/min or lower, decrease fludarabine dose by 20%. Reassess need for dose adjustment daily.  
If HBsAg or Anti-HBc positive start lamivudine 100 mg PO daily (complete Special Authority Form) and continue until at least 12 months post-transplant or longer if patient continues immunosuppressive drugs.  
PJP prophylaxis should be started by day +28 and continue until at least 12 months post transplant or longer if patient continues immunosuppressive drugs.  
Continue VZV prophylaxis until at least 12 months post transplant or longer if patient continues immunosuppressive drugs.  
Refer to L/BMT manual for methotrexate dosing guidelines.