PENNSTATE HERSHEY
Cancer Institute

BMT: Auto Transplant Melphalan
Revised 11/29/12
Date Written _____ For _____

Admit BMT/Dr._____ Transplant # _____ of _____
Diagnosis_____
Allergies _____

Actual weight_____kg Height_____cm
Ideal weight _____kg Actual BSA_____m^2

Protocol:
No
Source of Drug:
Routine Supply

Use the following for chemotherapy dosing:
Adjusted weight*_____kg Adjusted BSA_____m^2
*Adjusted weight = ideal weight + .25 (actual – ideal weight) using Cockcroft scale
Estimated creatinine clearance= _____mL/min/1.73 m^2

Verify height and weight upon admission; if >10% difference from above (actual) values, notify attending physician to recalculate doses (for drugs other than chemotherapy, use actual body weight)

_____CD34 +cell/kg collected
_____CD34 +cell/kg remaining in Storage
Adequate for engraftment, proceed with autologous transplant._____
MD signature

Activate Order Set: BMT Auto Melphalan Adult

Draw Admission Labs (See lab orders)
Catheter care for appropriate device per protocol
(Central venous catheter must be in place prior to start of infusion)
All Blood Products must be leukopoor, irradiated

Diet: Regular until Day 0; then neutropenic
Activity: As tolerated. Starting after stem cell infusion: BMT precautions (mask) for visitors, mask for patient when out of room
Strict I & O & call H.O. if positive fluid balance over any 8 hour period
Daily AM weight

Prepared by _____ Date _____

Ordered by_____ Date _____ Noted/Time/Initial_____

MR CHEMO ORDER

PENNSTATE HERSHEY
Cancer Institute

BMT: Auto Transplant Melphalan

Date Written _____ For _____

Medications:

Ciprofloxacin 500 mg po bid (until ANC>500 after nadir)
(Suggested IV alternative: Ciprofloxacin 400 mg IV every 12 hours)

HSV status _____
CMV status _____

☐ Acyclovir 400 mg po TID (usual dose 400 mg po TID)
(Suggested IV alternative: Acyclovir 250 mg/m^2 = _____ mg IV every 12 hours)

Doxycycline 100 mg PO BID

Fluconazole 200 mg po daily, begin day 0

Provera 10mg po daily (for females having periods)

Prochlorperazine 10 mg po every 4 hours prn for nausea
Prochlorperazine 10 mg IV every 4 hours prn for nausea if not tolerating oral meds

Diphenhydramine 25 mg po every 4 hours prn itching or sleeplessness
Diphenhydramine 25 mg IV every 4 hours prn itching or sleeplessness if not tolerating oral medications

Lorazepam 1mg po every 4 hours prn nausea or anxiety
Lorazepam 1 mg IV every 4 hours prn nausea or anxiety if not tolerating oral meds

Chemotherapy:

Review admission labs
☐ If labs normal – Proceed with Chemo, if abnormal call attending physician before proceeding with chemo
☐ Review labs with attending physician before proceeding with chemo

Day – 1_____
date

Start IV hydration on admission: D5 ½ NS at 125 mL/hour. Continue for 24 hours after Melphalan has finished

Ondansetron 16 mg IV over 15 minutes every 12 hours times four doses, begin thirty minutes before Melphalan on day – 1. Discontinue if patient discharged.

Prepared by _____ Date _____

Ordered by_____ Date _____ Noted/Time/Initial_____

MR CHEMO ORDER

PENNSTATE HERSHEY
Cancer Institute

PHYSICIAN'S ORDER SHEET

BMT: Auto Transplant Melphalan

Date Written _____ For _____

Dexamethasone 10 mg po, thirty minutes before melphalan on day – 1

Crushed ice to keep oral mucosa cold: 30mL to dissolve in patient's mouth, starting 15 minutes before melphalan infusion and repeat as needed until 30 minutes after infusion

For creatinine clearance ≥ 50 (estimated)

☐ **melphalan 200 mg/m^2 =_____mg IV infused over 15 minutes (within 30 minutes of reconstitution) via central line. Administer on day -1 (_____)**
date

For creatinine clearance 40-49 (estimated) or age >70, regardless of creatinine clearance

☐ **melphalan 140 mg/m^2 =_____mg IV infused over 15 minutes (within 30 minutes of reconstitution) <u>via central line only!!</u> Administer on day -1(_____)**
date

For creatinine clearance <40 (estimated)

☐ **melphalan 100 mg/m^2 =_____mg IV infused over 15 minutes (within 30 minutes of reconstitution) via central line Administer on day -1(_____)**
date

Day 0 _____
date

Total amount of CD34+ cells /kg collected _____

Total amount of CD34+ cells / kg remaining in Storage _____

Infuse _____ of CD34+ cell /kg to be infused Day 0 (_____)
date

Reinfusion orders for autologous peripheral stem cells

1. **Scheduled for _____. At 9AM call _____ to arrange time of infusion. Call 7298 with time when established**

Prepared by _____ Date _____

Ordered by_____ Date _____ Noted/Time/Initial_____

MR CHEMO ORDER

PENNSTATE HERSHEY
Cancer Institute

PHYSICIAN'S ORDER SHEET

BMT: Auto Transplant Melphalan

Date Written _____ For _____

2. **Have available in room:**
   a. **Diphenhydramine 50 mg IV**
   b. **Epinephrine 10 ml syringe 1:10,000**
   c. **Furosemide 80 mg IV**
   d. **Connect a 500 ml bag of normal saline via Clear-link system, administer at KVO. Discontinue upon completion of transplant**

3. **Cardiac monitor with continuous O_2 monitoring with every 5 minute blood pressures during infusion then every 15 minutes; continue for 1 hour post-infusion.**

4. **Sterile gloves, sterile barrier, alcohol wipes in room.**

5. **After infusion:**
   a. **D5½ NS with 50 mEq of $NaHCO_3$ per liter and 20 mEq potassium chloride per liter to run at 150 ml per hour for six hours.**
   b. Begin BMT isolation**.**

Day +6 _____
date

Filgrastim (GCSF) 5 mcg/kg subcutaneous daily = _____ (Round to nearest 300/480). Discontinue GCSF when 1 lab value of ANC is >500.

Lab Orders:
On admission & Daily: CBC, differential (no differential if WBC < 500), retic count, CMP, Mg, Phos, LDH, uric acid, PT, INR, PTT, Serum immunofixation, Serum quantitative Immunoglobulins (IgG, A, M), Quantitative M protein (QMP), Serum free light chains, Random urine for immunofixation, Random urine for BJ protein panel (test code 17405)
Specimen to Blood Bank for Type and Cross (Autologous Donor)

Prepared by _____ Date _____

Ordered by_____ Date _____ Noted/Time/Initial_____

MR CHEMO ORDER