**Document Information**

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<th>05</th>
<th>Vault: ABMT-General-rel</th>
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**Date Information**

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<th>Release Date: 11 Feb 2015</th>
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**Control Information**

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<th>JL26</th>
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ABMT-GEN-001
ELECTROLYTE SUPPLEMENTATION PROTOCOL

ELECTROLYTE SUPPLEMENTATION and BLOOD PRODUCT TRANSFUSION PROTOCOL ORDER SET FOR ADULT BLOOD AND MARROW TRANSPLANT PATIENTS:
If creatinine is ≥ 1.8 consult physician for electrolyte supplementation orders

Potassium (K+):
Consult H.O. for administration guidelines if patient does NOT have a central line in place. Maximum concentration for peripheral administration is 10 mEq/100 ml to infuse at rate of 10mEq per hour.

Replacement parameters for IV potassium (using minibags)
- If serum K+ ≤ 2.9 Notify H.O., obtain order for EKG and give potassium chloride 80 mEq over 4 hours; repeat serum K+ level 1 hour after completion of infusion
- If serum K+ 3.3-3.5 Give potassium chloride 40 mEq over 2 hours
- If serum K+ 3.6-3.8 Give potassium chloride 20 mEq over 1 hour
- If serum K+ 3.9-5 No supplement necessary
- If serum K+ > 5 Notify H.O.

Phosphate (PO4): If serum potassium is > 4.6, use sodium phosphate instead of potassium phosphate and supplement according to the following parameters:

Replacement parameters for IV phosphate
- If serum PO4+ ≤ 1.4 Notify H.O. and give sodium phosphate 30 mEq (10 ml) in 250 ml fluid 4 hours
- If serum PO4+ 1.5-2.3 Give sodium phosphate 15 mEq (5 ml) in 250 ml fluid over 3 hours
- If serum PO4+ ≥ 3.4 No supplement necessary

Magnesium (Mg2+):

Replacement parameters for IV magnesium
- If serum Mg2+ ≤ 1.1 Notify H.O. and give magnesium sulfate 6 gm over 90 minutes (minimum 90 ml fluid)
- If serum Mg2+ 1.2-1.5 Give magnesium sulfate 6 gm over 90 minutes (minimum 90 ml fluid)
- If serum Mg2+ 1.6-1.8 Give magnesium sulfate 4 gm over 60 minutes (minimum 60 ml fluid)
- If serum Mg2+ 1.9-2.4 No supplement necessary
- If serum Mg2+ ≥ 2.5 Notify H.O.

Calcium (Ca2+):
Prior to calcium replacement, check the most recent albumin level. If the serum albumin is < 4 gm/dL, use the adjusted calcium concentration to determine requirements for replacement. The following formula is to be used:
(4.0 - Serum Albumin) x 0.8 + measured Ca2+ = Adjusted Ca2+

Replacement parameters for IV calcium
- If serum Ca2+ ≤ 7.4 Notify H.O. and give calcium gluconate 2 gm over 1 hour (minimum 60 ml fluid)
- If serum Ca2+ 7.5-7.9 Give calcium gluconate 2 gm over 1 hour (minimum 60 ml fluid)
- If serum Ca2+ 8-8.5 Give calcium gluconate 1 gm over 30 minutes (minimum 30 ml fluid)
- If serum Ca2+ 8.6-10.2 No supplement necessary
- If serum Ca2+ ≥ 10.3 Notify H.O.

Transfusion parameters:
- Transfuse 1 unit PRBCs for Hgb < 8.0; for age 55 or older transfuse for Hgb ≤ 9.0
- Transfuse 2 units PRBCs for Hgb ≤ 7.0; for age 55 or older transfuse for Hgb ≤ 8.0
- Transfuse 1 unit single donor platelets for Plt ≤ 10,000 cells/mm³. Check post-platelet count 30 minutes after transfusion
- PRBCs and platelets should be filtered and irradiated

Premedication for blood products:
Acetaminophen 650 mg po**
Diphenhydramine 25 mg po
Do not give acetaminophen or diphenhydramine more frequently than every 4 hours
**Notify Attending MD prior to administration of acetaminophen in patients actively receiving Busulfan

Dr. Nelson Chao, Medical Director ABMT
ABMT-GEN-001 Electrolyte Supplementation Protocol
Duke University Medical Center
Durham, NC

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Page 1 of 1
# Signature Manifest

**Document Number:** ABMT-GEN-001  
**Title:** Electrolyte Supplementation Protocol  
**Revision:** 05  

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**All dates and times are in Eastern Time.**

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## ABMT-GEN-001 Electrolyte Supplementation Protocol

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<td>Jennifer Frith (JLF29)</td>
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