

<b>Hamilton Regional Laboratory Medicine Program - HRLMP</b> (effective at Hamilton Health Sciences, St. Joseph's Hospital and Associated Health Care Facilities)			
Initial Issue Date: Revision Date:	<b>Administration Guidelines</b>	Section: Sub-Section:	<b>Laboratory Medicine</b> <i>Transfusion Medicine</i>
Title: <b>PENTASPAN</b>		Document Number:	
Approved By: <i>Director, Laboratory Medicine</i> <i>Chair, Regional Transfusion Medicine Committee</i> <i>Head, Transfusion Medicine, HRLMP</i> <i>Manager, Transfusion Medicine, HRLMP</i> <i>Technical Specialist, Transfusion Medicine, HRLMP</i> <i>Chief of Nursing Practice, Hamilton Health Sciences</i> <i>Chief of Nursing Practice, St. Joseph's Healthcare</i>		Page 1 of 3	

**Purpose:** To Establish the Indications and Administration of Pentaspan

**Scope:** All patient care areas across HHS and St. Joseph's Healthcare

**Definitions:** Pentaspan is 10% pentastarch in 0.9% sodium chloride(non-human source)

<b>Other Names:</b> Pentaspan	<b>Date Approved:</b>	<b>Pages:</b> 1 of 3
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<p><b>INDICATIONS:</b></p> <ul style="list-style-type: none"> <li>- Plasma volume expander for use in the management of shock due to hemorrhage, surgery, sepsis, burns or other trauma</li> <li>- Expansion persists for approximately 18 to 24 hours</li> <li>- Expected to improve the hemodynamic status for 12 to 18 hours</li> </ul>
<p><b>DOSAGE:</b></p> <ul style="list-style-type: none"> <li>- Recommendation is to administer no more than 2000 mL in 24 hours, i.e. about or 28 mL/Kg of body weight for the typical 70Kg patient</li> <li>- For hemorrhagic shock, an administration rate of 20 mL/Kg/hr may be used</li> </ul>
<p><b>SUPPLIED:</b></p> <ul style="list-style-type: none"> <li>- 250 mL intravenous infusion bags</li> <li>- 500 mL intravenous infusion bags</li> </ul>
<p><b>RECONSTITUTION AND STABILITY:</b></p> <ul style="list-style-type: none"> <li>- Recommended storage 15 to 25°C</li> <li>- No reconstitution needed</li> <li>- Do not use past expiry date</li> </ul>

**ADMINISTRATION:**

<b>METHOD</b>	<b>WHO/WHERE</b>	<b>DILUTION</b>	<b>HOW TO ADMINISTER</b>	<b>INFUSION PUMP</b>	<b>PRECAUTIONS AND MONITORING</b>
<b>IV PUSH</b>	No	N/A	N/A	N/A	N/A
<b>MINIBAG/ BURETROL</b>	No	N/A	N/A	N/A	N/A
<b>PRIMARY IV BAG</b>	RN	No	- As ordered by physician	Can be used	- Observe and monitor for adverse reactions
<b>IM or SC</b>	N/A	N/A	N/A	N/A	N/A

- COMPATIBILITIES/INCOMPATIBILITIES:**
- Indicated when plasma volume expansion is desired
  - Contra indicated in patients with known hypersensitivity to hydroxyethyl starch, or with bleeding disorders, or with congestive heart failure where volume overload is a potential problem
  - Pentaspan should not be used in renal disease with oliguria or anuria not related to hypovolemia
  - Effectiveness of pentaspan in children has not been studied
  - There are no adequate and well-controlled clinical studies using Pentaspan in pregnant women or nursing mothers

**ADVERSE EFFECTS:**

- Large volumes will alter coagulation mechanisms
- Circulatory overload a possibility
- Coagulation disorders or hemorrhage have been reported
- Headache, diarrhea, nausea, weakness, temporary weight gain, insomnia, fatigue, fever, edema, malaise, dizziness, chest pain, chills, anxiety, tachycardia urticaria, wheezing

**MANAGEMENT OF ADVERSE EFFECTS:**

- Notify physician
- Notify Transfusion Medicine
- Administration of Antihistamines

**NOTES:**

- Supplied by Bristol - Myers Squibb
- Distributed by Canadian Blood Services

**Documentation**

Administration must be documented in patient's chart.

**References**

Package Insert, Pentaspan (10% Pentastarch in 0.9% Sodium Chloride Injection), Bristol Myers Squibb

**Developed By In Consultation With**

Transfusion Medicine Operations Group  
Pediatric Clinical Nurse Educator

REVIEW DATES:

REVISION DATES: