

Hamilton Regional Laboratory Medicine Program - HRLMP (effective at Hamilton Health Sciences, St. Joseph's Healthcare and Associated Health Care Facilities)		
Initial Issue Date: Revision Date:	Administration Guidelines	Section: Laboratory Medicine Sub-Section: <i>Transfusion Medicine</i>
Title: ALBUMIN (HUMAN) 5%		Document Number:
Approved By: <i>Director, Laboratory Medicine Chair, Regional Transfusion Medicine Committee Head, Transfusion Medicine, HRLMP Manager, Transfusion Medicine, HRLMP Technical Specialist, Transfusion Medicine, HRLMP Chief of Nursing Practice, Hamilton Health Sciences Chief of Nursing Practice, St. Joseph's Healthcare</i>		Page 1 of 3

Purpose: To Establish the Indications and Administration of 5% Albumin

Scope: Applies to all patient care areas across HHS and St. Joseph's Healthcare

Definitions: Albumin is made from pooled human plasma using the Cohn cold ethanol fractionation process, heat-treated to 60°C for 10 hours to inactivate viruses. 5% albumin is osmotically and oncologically equivalent to plasma.

Other Names: PLASBUMIN - 5	Date Approved:	Pages: 1 of 3
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INDICATIONS:

- Severe jaundice in Hemolytic Disease of the Newborn or for acute renal failure where albumin may serve a dual role to bind to excessive plasma bilirubin and support plasma oncotic pressure
- Hypovolemic states to expand circulating blood volume
- Treatment of shock associated with surgery, hemorrhage, trauma, burns, bacterial sepsis, and cardiovascular collapse
- Use of albumin remains controversial in certain clinical conditions

DOSAGE:

- Neonates (10-20 mL/Kg equivalent to 0.5 - 1.0 g alb/Kg body weight)
- Must be administered intravenously
- Dosage patient dependent
- Amount administered varies with patient need
- Expands circulating blood volume by an amount approximately equal to volume infused
- Larger volume may be required for burn patients

SUPPLIED:

- Store at room temperature not exceeding 30°C (86°F)
- Do not freeze
- Do not use after expiration date

Size of Albumin VialsAlbumin content

50mL	2.5 grams
250mL	12.5 grams
500mL (not always available)	25.0 grams

RECONSTITUTION AND STABILITY:

- Must use within 4 hours after opening when maintained at room temperature
- If opened and maintained at 4°C in a monitored refrigerator, can be transfused up to 24 hours.
- Do not use past expiry date indicated on each vial

ADMINISTRATION:

- Product must not be further diluted
- Albumin need not be given through a filter
- Remove seal and expose stopper
- Swab stopper with suitable antiseptic prior to entering
- Inspect visually for particulate matter and discoloration

METHOD	WHO/WHERE	DILUTION	HOW TO ADMINISTER	INFUSION PUMP	PRECAUTIONS AND MONITORING
IV PUSH	N/A	N/A	N/A	N/A	N/A
MINIBAG/ BURETROL	RN	No	- May be administered with buretrol for pediatrics	Yes	- Observe and monitor for adverse reaction
PRIMARY IV BAG (LARGE VOLUME)	RN	No	- Administer intravenously using administration set supplied with albumin or a vented administration set	Yes	- Observe and monitor for adverse reaction
IM or SC	N/A	N/A	N/A	N/A	N/A

COMPATIBILITIES/INCOMPATIBILITIES:

Compatible with:

- Whole blood and red cell concentrate
- Standard carbohydrate and electrolyte solutions

Incompatible with:

- Protein hydrolysates, amino acid solutions or those containing alcohol
- It is not known whether it can cause fetal harm in pregnant women.
- It should only be given to pregnant women if clearly indicated.
- Certain patients, e.g.: those with history of congestive cardiac failure, renal insufficiency or elderly (>60 yrs) stabilized chronic anemia patients are at a special risk of developing circulatory overload.

ADVERSE EFFECTS:

- Adverse effects are rare
- Allergy (urticaria, chills, fever; changes in pulse, respiration rate and blood pressure)
- ↑ Plasma protein levels from excess albumin administration
- Patients should always be monitored carefully to guard against possibility of circulatory overload; especially, in patients with history of congestive heart failure, renal insufficiency or stabilized chronic anemia elderly patients

MANAGEMENT OF ADVERSE EFFECTS:

Notify physician
Notify Transfusion Medicine

NOTES:

- Manufactured by Bayer Corporation
- Distributed by Canadian Blood Services

Documentation:

Albumin use must be documented on patient's chart, including lot number of product.
Written consent for transfusion must be obtained prior to administration.

References:

Package Insert – Albumin (Human) 5%, USP, Plasbumin®-5, Bayer Corporation, November 1998
Blood Transfusion Therapy; A Physician's Handbook. 6th Edition AABB, 1999.

Developed By In Consultation With:

Transfusion Medicine Operations Group
Pediatric Clinical Nurse Educators
Adult Clinical Nurse Educators

REVIEW DATES:

REVISION DATES: