### BLOOD PRODUCT FACT SHEET: ALBUMIN 25%

**DOCUMENT TYPE:** PROTOCOL

<table>
<thead>
<tr>
<th>Other Names</th>
<th>Alburex-25,</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consent Required</td>
<td>Yes</td>
</tr>
<tr>
<td>Pre-Transfusion Sample</td>
<td>Not Required</td>
</tr>
<tr>
<td>Approval Requirements</td>
<td>NA</td>
</tr>
</tbody>
</table>
| Product Description | • Albumin is a Plasma Protein Product.  
• Contains no preservatives.  
• Supplied in 50 mL and 100 mL bottles.  

1 gram = 4 mL  
• Oncotically equivalent to four times its volume of human plasma. |
| Alburex-25 | • Alburex-25, solution for infusion is hyperoncotic to normal human plasma and contains 25 grams of protein in 100 mL, of which at least 96% is human albumin.  
• The sodium caprylate release specification is 18.0 – 22.0 mmol/L and the sodium release specification is 130 – 150 mmol/L.  
• Based on a limited data set, the calculated osmolarity of Alburex 25 is 241 mOsmol/L, approximately.  
• The pH of the solution is adjusted as needed with hydrochloric acid or sodium hydroxide. Approximate concentrations of sodium per liter is 0.14 M; and the potassium content is ≤ 0.002M.  
• The aluminum content is below 200 mcg/L, which respects current European Pharmacopoeia requirements. |
| Clinical Indications | Conflicting recommendations exist for and against the use of albumin in a variety of clinical situations; this should be borne in mind by the prescribing physician. A variety of clinical indications have been described, see below. |

### Reference Documents

| Hypoalbuminemia and edema | May be considered (ORBcON) | In patients with treatment-resistant pulmonary edema or marked edema, the use of a hypertonic albumin product is considered only in the case of marked hypoalbuminemia (2B). |
| Paracentesis | Large volume (>70mL/kg) withdrawal of fluid only | When a larger volume of ascitic fluid is removed, a hypertonic albumin solution at a dose of 8 to 10 g per l of ascitic fluid is effective. |
| Spontaneous bacterial peritonitis | In conjunction with antibiotics | Spontaneous bacterial peritonitis with renal impairment benefits from the treatment with a hypertonic albumin solution at a 1.5 g/kg body weight within 6 hours after diagnosis, following by 1 g/kg body weight on day 3 of illness (1A). |
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## Nephritic Syndrome with refractory edema or pulmonary edema

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<td>In nephritic syndrome with refractory edema or pulmonary edema, hypertonic albumin is expected to show only transient efficacy and is not recommended with the exception of use as an act of necessity (2D) 649</td>
</tr>
</tbody>
</table>

## Acute Lung Injury Use with Lasix

| Improves fluid balance, oxygenation and hemodynamics |
| Improves oxygenation, greater net negative fluid balance and hemodynamic stability |

## Hypotension during dialysis

| These are other options: saline infusions, adjust anti-hypertensives, caffeine midodrine, extend dialysis duration |
| In principle, the use of isotonic albumin is not recommended during extracorporeal circulation, such as hemodialysis in cases with unstable hemodynamics (e.g., in patients with diabetes) (weak recommendation against use, 2C). |

## Contraindications

- Albumin 25% should not be given to patients at risk of developing circulatory overload i.e., those with a history of congestive cardiac failure, renal insufficiency or stabilized chronic anemia.
- Patients who would not tolerate a rapid increase in circulating blood volume.
- Patients who are hypersensitive to albumin or to any ingredient in the formulation or component of the container.

## Risks

- **Administration of 25% Albumin in error, instead of 5% Albumin, could result in circulatory overload.**
  - The colloid-osmotic effect of 25% Albumin is approximately four times that of blood plasma. Therefore, when concentrated albumin is administered, care must be taken to assure adequate hydration of the patient. Patients should be monitored carefully to guard against circulatory overload and hyper-hydration.
  - Dilutional anemia may occur when Albumin is administered for hypovolemic shock following hemorrhage. Red blood cell transfusion may be indicated.

## Dosage

- Dependent on patient’s clinical condition.
- Refer to product monograph.

## Administration

- Refer to relevant albumin administration procedure.
- No inline filter required for administration of albumin.
- Administer pre medications as ordered.

## Compatible Solution

- 0.9% Normal Saline and D5W.
- Compatible with standard carbohydrate and electrolyte solutions intended for intravenous use.
- Do not mix with
  - water for injection as this may result in hemolysis and acute renal failure
  - protein hydrolysates, amino acid solutions or solutions containing alcohol

**Exception:**

- If approved by a physician, co-administration of Furosemide and albumin can be considered for:
### Infusion Rates
- Refer to the administration procedure.
- **Infusion rate** should be adjusted to individual requirements, based on initial assessment and monitoring of the patient’s status.
- The **maximum infusion rates** for 5% albumin can be exceeded in an emergency.

### Monitoring
- Refer to administration procedure.
- In the event of a suspected transfusion reaction, **STOP** the transfusion and refer to [Transfusion Reaction Procedure](#) & Reference guide and complete [Transfusion Reaction Report Form](#).

### Storage Conditions
- Stored at room temperature, not to exceed 30 C.
- Must be protected from light during storage.
- Must be used within 4 hours of spiking the bottle.
- **Return** albumin and Transfusion Record /Product Tag to TML as soon as possible if the transfusion is cancelled.
- **DO NOT** store on nursing unit.

### References
- Alburex-25, CSL Behring Canada Inc, May 2016
- Canadian Blood Services (2017) *Clinical Guide to Transfusion*
- ORBCoN *Ontario Albumin Administration Recommendations* 2012 Version 1.0
- Evidence-based Guidelines for Use of Albumin Products Japan Society of TM & Cell Therapy 2017

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**Developed By**

Transfusion Medicine – Transfusion Safety Nurse Clinician

**Version History**

<table>
<thead>
<tr>
<th>DATE</th>
<th>DOCUMENT NUMBER and TITLE</th>
<th>ACTION TAKEN</th>
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<tbody>
<tr>
<td>26-Aug-2020</td>
<td>C-0506-14-60815 Blood Product Fact Sheet: Albumin 25%</td>
<td>Approved at: Transfusion Safety Committee</td>
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