DESCRIPTION
Albunin (Human) 25%, USP (Plasbumin®-25) is made from large pools of human venous plasma by the Cohn cold ethanol fractionation process. Part of the fractionation may be performed by another licensed manufacturer. It is prepared in accordance with the applicable requirements established by the U.S. Food and Drug Administration.

Plasbumin-25 is a 25% sterile solution of albumin in an aqueous diluent. The preparation is stabilized with 0.02 M sodium caprylate and 0.02 M acethylorquinol. The aluminum content of the product is not more than 200 μg/mL. The approximate aluminum content of the product is 145 mg/mL. Plasbumin-25 is clear, slightly viscous, almost colorless to pale yellow amber, or green. It contains no preservative. Plasbumin-25 must be administered intravenously.

Each vial of Plasbumin-25 is heat-treate at 60°C for 10 hours against the possibility of transmitting the hepatitis viruses. Additionally, the manufacturing process was investigated for its capacity to decrease the infectivity of an experimental agent of transmissible spongiform encephalopathy (TSE), considered as a model for the variant Creutzfeldt-Jakob disease (vCJD) and Creutzfeldt-Jakob disease (CJD) agents.(11-14) The production steps from Pooled Plasma to Effluent IV-1 in the Plasbumin-25 manufacturing process have been shown to decrease TSE infectivity of that experimental model object of a total of (7 >0 logs). These studies provide reasonable assurance that low levels of vCJD/CJD agent infectivity, if present in the starting material, would be removed.

CLINICAL PHARMACOLOGY
Each 20 mL vial of Plasbumin-25 supplies the oncotic equivalent of approximately 100 mL citrated plasma; 50 mL supplies the oncotic equivalent of approximately 250 mL citrated plasma. When administered intravenously to an adequately hydrated subject, the oncotic (colloid osmotic) effect of 20 mL Plasbumin-25 (2 g) will raise plasma oncotic pressure approximately 70 μL of fluid from the extravascular to the intravascular space in circulation within 15 minutes,(1) thus increasing the total blood volume and reducing both hemoconcentration and whole blood viscosity. Accordingly, the main clinical indications are for hypoproteinemic states involving reduced oncotic pressure, with or without accompanying edema.(2) Plasbumin-25 can also be used in the rare case of hypoalbuminemia to increase colloid osmotic pressure and, theoretically, the Creutzfeldt-Jakob Disease (CJD) agent that can cause disease. The theoretical risk of transmission of CJD is considered extremely remote. No cases of transmission of viral diseases or CJD have ever been reported, even in cases of iatrogenic infections.
been identified for albumin. The risk that such products will transmit an infectious agent has been reduced by screening plasma donors for prior exposure to certain viruses, by testing for the presence of certain current viral infections, and by inactivating and/or removing certain viruses. Despite these measures, such products can still potentially transmit prion diseases. There is also the possibility that unknown infectious agents have been transmitted in such products. Individuals who receive infusions of blood or plasma products may develop signs and/or symptoms of some viral infections that are not currently detectable by the methods used to screen the donors. For this reason, this product should be reported by the physician or other healthcare provider to Grifols Therapeutics Inc. [1-800-520-3452].

The physician should discuss the risks and benefits of this product with the patient, before prescribing or administering it to the patient.

As with any hyperoncotic protein solution likely to be administered in large volumes, severe hemolysis and acute renal failure may result from the inappropriately use of Sterile Water for Injection as a diluent for Albumin (Human). (2) Acceptable diluents include 0.9% Sodium Chloride or 5% Dextrose in Water. Please refer to the DOSAGE AND ADMINISTRATION section for recommended diluents.

Solutions which have been frozen should not be used. Do not use if turbid. Do not begin administration more than 4 hours after the container has been entered. Partially used vials must be discarded. Do not use which have previously been opened or damaged should not be used, as this may have allowed the entry of microorganisms.

Aluminum (Human) 25%, USP (Plasbumin®-25) contains no preservative.

PRECAUTIONS

General

Patients should be monitored carefully in order to guard against the possibility of circulatory overload. Plasbumin-25 is hyperoncotic, therefore, in the presence of dehydration, albumin must be given with or followed by additional fluids. (4) In hemorrhage the administration of albumin should be supplemented by the transfusion of whole blood to treat the relative anemia associated with hemorrhage. (8) When circulating blood volume has been reduced, hemodilution following the administration of albumin persists for many hours. In patients with a normal blood volume, hemodilution lasts for a much shorter period. (4, 9-10)

The rapid rise in blood pressure which may follow the administration of a colloid with positive oncotic activity necessitates careful observation to detect and treat severe blood vessels which may not have bloo at the lower blood pressures.

Drug Interactions

Plasbumin-25 is compatible with whole blood, packed red cells, as well as the standard carbohydrate and electrolyte solutions intended for intravenous use. It should, however, not be mixed with protein hydrolysates, amino acid solutions or those containing alcohol.

Pregnancy Category C

Animal reproduction studies have not been conducted with Plasbumin-25. It is also not known whether Plasbumin-25 can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Plasbumin-25 should be given to a pregnant woman only if clearly needed.

Pediatric Use

Safety and effectiveness in the pediatric population have not been established.

ADVERSE REACTIONS

Adverse reactions to albumin are rare. Such reactions may be allergic in nature or due to high plasma protein levels from excessive albumin administration. Allergic manifestations include urticaria, chills, fever, and changes in respiration, pulse and blood pressure.

DOSAGE AND ADMINISTRATION

Plasbumin-25 should always be administered by intravenous infusion. Plasbumin-25 may be administered either undiluted or diluted in 0.9% Sodium Chloride or 5% Dextrose in Water. If sodium restriction is required, Plasbumin-25 should only be administered either undiluted or diluted in a sodium-free carbohydrate solution such as 5% Dextrose in Water.

A number of factors beyond our control could reduce the efficacy of this product. These include improper storage and handling of the product after it leaves our hands, diagnosis, dosage, method of administration, biological differences in individual patients, and several others. It is important that this product be stored properly and that the directions be followed carefully during use.

Hypovolemic Shock—For treatment of hypovolemic shock, the volume administered and the speed of infusion should be adapted to the response of the individual patient.

Burns—After a burn injury (usually beyond 24 hours) there is a close correlation between the amount of albumin infused and the resultant increase in plasma colloid osmotic pressure. The amount should be to maintain the plasma albumin concentration of 5.2 g per 100 mL. (2) This is best achieved by the intravenous administration of Plasbumin-25.

The duration of therapy is decided by the loss of protein from the burned areas and in the urine. In addition, oral or parenteral feeding with amino acids should be initiated, as the long-term administration of albumin should not be considered as a source of nutrition.

Hypoproteinemina With or Without Edema—Unless the underlying pathology responsible for the hypoproteinemina can be corrected; the intravenous administration of Plasbumin-25 must be considered purely symptomatic or supportive (see section Situaciones en Which Albumin Administration is Not Warranted) (2) The usual daily dose of albumin for adults is 50 to 75 g and for children 25 g. Patients with severe hypoproteinemina who continue to lose albumin may require larger quantities. Since hypoproteinemina patients usually have approximately normal blood volumes, the rate of administration of Plasbumin-25 should not exceed 2 mL per minute, as more rapid injection may precipitate circulatory embarrassment and pulmonary edema.

Other dosage recommendations are given under the specific indications referred to above.

Preparation for Administration

Remove seal to expose stopper. Always swab stopper top immediately with a suitable antiseptic prior to entering vial.

Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit.

Plasbumin-25 should not exceed 2 mL per minute, as more rapid injection may precipitate circulatory embarrassment and pulmonary edema.

Storage

Plasbumin-25 is available in 20 mL, 50 mL, and 100 mL rubber-stoppered vials. Each single dose vial contains albumin in the following approximate amounts:

<table>
<thead>
<tr>
<th>NDC Number</th>
<th>Size</th>
<th>Grams Albumin</th>
</tr>
</thead>
<tbody>
<tr>
<td>13533-692-16</td>
<td>20 mL</td>
<td>5.0</td>
</tr>
<tr>
<td>13533-692-20</td>
<td>50 mL</td>
<td>12.5</td>
</tr>
<tr>
<td>13533-692-71</td>
<td>100 mL</td>
<td>25.0</td>
</tr>
</tbody>
</table>

STORAGE

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

CAUTION

U.S. federal law prohibits dispensing without prescription.

REFERENCES


Grifols Therapeutics Inc.
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