**A**lg**b**um (Human, USP), 25% Solution

**SUMMARY OF PREPARATION FACTORS**

**VIAL**

**CLINICAL PHARMACOLOGY**

Albumin is a highly soluble, ellipsoidal protein (MW 66,500), accounting for 70-80% of the total plasma proteins. Albumin is distributed throughout the extracellular water and more than 60% of the total serum albumin is bound to negatively charged proteins. The minimum serum albumin level necessary to prevent or reverse peripheral edema is 2.5 g/dL. Daily doses should not exceed 2 g of albumin per kilogram body weight.

**4. Hemolytic Disease of the Newborn (HDN)**

HDN is an acquired form of 5% Albumin (Human). The optimal mix of crystalloid and colloid solutions which should be administered depends on the hemodynamic state, oncotic deficit and fluid balance. The degree and duration of volume hemoconcentration and decreases blood viscosity. The effect of infused albumin may persist for many hours.

**5. Respiratory Failure**

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**6. Hypoalbuminemia With or Without Edema**

Hypoalbuminemia is usually accompanied by a hidden extravascular albumin deficit which results in reduced tissue fluid osmolality. When hypoalbuminemia exists in the presence of hypovolemia, the administration of 25% albumin together with crystalloid solutions is indicated to reverse the intrafollicular albumin deficit. Fluid replacement should be continued in an attempt to decrease the extravascular, interstitial fluid deficit and to increase capillary oncotic pressure. The optimal mix of crystalloid and colloid solutions which should be administered depends on the hemodynamic state, oncotic deficit and fluid balance. The degree and duration of volume hemoconcentration and decreases blood viscosity. The effect of infused albumin may persist for many hours.

**7. Shock**

Hypovolemic shock: infusion of 25% albumin solution may be given intravenously. Use only if it is necessary to support the circulation. Use caution in patients on diuretics or with existing edema. Hypovolemic shock is treated with crystalloid solutions.

**8. Burns**

There may be additional factors that may influence the appropriate dose of albumin. The use of albumin in severe burns has been recommended although there are no clear data indicating its advantage over other therapeutic agents. Several investigators have recommended the use of 25% albumin to reverse the hemoconcentration seen in severe burns. However, if the patient has been adequately hydrated, the use of albumin to increase plasma oncotic pressure may be contraindicated.

**9. Major Injury, Congenital Analbuminemia**

Transfusion of 5% albumin may be used to correct the coagulopathy associated with major injury, congenital analbuminemia, or other situations in which plasma coagulation factors are not adequate. Albumin is a highly soluble, ellipsoidal protein (MW 66,500), accounting for 70-80% of the total plasma proteins. The use of albumin in severe burns has been recommended although there are no clear data indicating its advantage over other therapeutic agents. Several investigators have recommended the use of 25% albumin to reverse the hemoconcentration seen in severe burns. However, if the patient has been adequately hydrated, the use of albumin to increase plasma oncotic pressure may be contraindicated.

**VITAL FUNCTION FACTORS**

**1. Cardiac Output**

Although 25% albumin solution is a colloid-forming plasma expander, its effect may be augmented by fluid restriction. When a fluid deficit has resulted from hemorrhage, replacement with colloid and crystalloid solutions is mandatory. The use of albumin in severe burns has been recommended although there are no clear data indicating its advantage over other therapeutic agents. Several investigators have recommended the use of 25% albumin to reverse the hemoconcentration seen in severe burns. However, if the patient has been adequately hydrated, the use of albumin to increase plasma oncotic pressure may be contraindicated.

**2. Hypovolemic Shock**

25% albumin solution may be used to expand the circulating volume if a hidden extravascular albumin deficit is suspected or if other causes of hypovolemia have been ruled out. Albumin is a highly soluble, ellipsoidal protein (MW 66,500), accounting for 70-80% of the total plasma proteins. The use of albumin in severe burns has been recommended although there are no clear data indicating its advantage over other therapeutic agents. Several investigators have recommended the use of 25% albumin to reverse the hemoconcentration seen in severe burns. However, if the patient has been adequately hydrated, the use of albumin to increase plasma oncotic pressure may be contraindicated.