CSL Behring

“愛瑞” 人類血清白蛋白20%注射液 AlbuRx™ 20

衛部菌疫輸字第 000959 號

使用藥品前，請先仔細閱讀此說明書的所有資訊。
- 請妥善保管說明書，以便日後若有需要時參考。
- 若有任何其他的疑慮，請詢問你的醫師或藥師。
- 此藥品為處方用藥，即使其他人的症狀與你相似，也不要將此藥品轉讓給他人，可能會對他人造成傷害。
- 若副作用加劇，或任何說明書上沒有載明的副作用發生，請告知你的醫生或藥師。

組成

a.主成分

人體白蛋白

b.賦型劑

Sodium N- acetyltryptophanate	16 mmol/l
Sodium caprylate	16 mmol/l
Sodium chloride	適量至鈉含量為140 mmol/l
注射用水	適量至1升

劑型和每單位主成分含量

靜脈輸注用溶液。
本溶液含有200克/升的總蛋白，其中至少96%是人體白蛋白。
AlbuRx 20為幾乎無色、黃色、琥珀色、或綠色的輸注用溶液。
AlbuRx 20對正常血漿是高膠體滲透壓的。
AlbuRx 20每毫升溶液含有約3.2毫克的鈉(140 mmol/l)。

適應症

低蛋白血症、休克、燒傷。

說明

適用於血量不足而需使用膠體溶液來恢復和維持血液循環量的病患。
決定使用白蛋白而非人工膠體溶液，取決於個別病患的臨床情況。

劑量/投與方式

白蛋白溶液的使用濃度、劑量和輸注速率應視病人個別需求調整。

劑量

投與的劑量視病人的體型、創傷或疾病嚴重度以及持續性的體液或蛋白質流失而定。應測量循環血液容量來確定所需劑量，而非只依據血漿白蛋白的含量。

施打人體白蛋白時，應小心地監測血液動力學，其測量數值包括：
- 動脈血壓和心搏率
- 中央靜脈壓
- 肺動脈楔壓
- 排尿量
- 電解質
- 血球容積比/血紅素

<u>小兒族群(Paediatric population)</u>

兒童與青少年(0-18歲)之劑量應須視患者個體之需求調整。

投與方式

AlbuRx 20為靜脈注射。

本產品可直接施打，也可以先用等滲壓溶液進行稀釋（如5%葡萄糖或0.9%氯化鈉）。輸注速率應根據個人的情況和微兆調整，但是一般應不超過1-2毫升/分鐘。
血漿交換時輸注速率應調整為移除率。

禁忌症

對白蛋白製劑或本品賦型劑過敏者。

警語及使用注意事項

如果產生過敏或過敏性反應必須立即停止輸注且必須施以適當的治療。一旦發生過敏性休克，應該遵循現行的休克醫學指引加以照護。

若血容積增加及其後果或血液稀釋可能導致對患者產生特殊的風險時，應謹慎使用白蛋白製劑。例如下列的情況：
- 鬱血性心臟衰竭
- 高血壓
- 食道靜脈曲張
- 肺水腫
- 出血性素質（hemorrhagic diathesis）
- 嚴重貧血
- 腎性或腎後性尿閉 (anuria)

200克/升的人體白蛋白的膠體滲透作用大約是血漿的4倍。因此，當施打濃縮的白蛋白時，必須小心確保患者有充足的水分。患者應接受仔細的監測，以防止循環過載和水分過多。

200-250克/升的人體白蛋白溶液比40-50克/升的白蛋白溶液有相對較低的電解質。當投與白蛋白時應監測患者的電解質狀態，並採取適當措施以恢復或維持電解質的平衡。

白蛋白溶液絕對不能以注射用水稀釋，因其可能會導致患者溶血。
如果需要替換的容量較大，控制凝血和血球比容是必要的。以小心確保適當補充其他血液成分（如凝血因子、電解質、血小板和紅血球）。

如果未依照患者的身體循環狀況調整劑量和輸注速率時，可能發生多血症。在心血管過載（如頭痛、呼吸困難、頸靜脈阻塞）的臨床症狀剛發現時，或在血壓升高、中央靜脈壓上升或肺水腫的情況下，必須立即停止輸注而且必須對患者的血液動力學參數進行仔細的監測。

AlbuRx 20每毫升溶液含有約3.2毫克的鈉(140 mmol/l)。限鈉飲食之患者應考量此特性。

<u>傳染性媒介相關安全資訊</u>

使用由人體血液或血漿製備而成的藥劑時，為了避免傳染症，採取的標準措施包括挑選捐贈者、針對個別捐贈及混合血漿作特定感染指標檢測、使用有效的製造程序去活化／去除病毒（請參見《屬性／效果》章節）。除此之外，當投與由人體血液或血漿配製而成的藥品，其傳輸感染媒介的可能性是無法被完全排除的。這也適用於未知或新興的病毒或其他病原體。

根據歐洲藥典規範所生產的白蛋白被認為具有可靠的病毒安全性。

在此建議每一次對患者投與AlbuRx 20時，產品的名稱和批號應該被記錄下來以便建立患者和產品批次之間的關聯。

交互作用

人體白蛋白和其他藥品之間的交互作用並無已知具體案例。然而，應當記住的是，與白蛋白牢固結合的藥物，其藥效可能會受到白蛋白量變化的影響。

懷孕及哺乳

對於懷孕婦女在使用AlbuRx 20上尚無對照的臨床研究。然而，根據白蛋白的臨床經驗，在懷孕的過程中、對胎兒、或新生兒尚無產生任何有害影響的證據。AlbuRx 20還未曾進行動物繁殖的研究。無論如何，人體白蛋白是人類血液中的一種正常成分。

對駕駛和操作機械能力的影響

沒有證據顯示對駕駛或使用機械的能力有不良的影響。

不良反應

輕微的症狀反應如發紅、蕁麻疹、發燒和噁心很少發生。這些反應通常在輸注速率變慢或停止輸注後很快消失。在非常罕見的情況下，嚴重的過敏反應如過敏性休克可能會發生。在這些案例中，必須停止輸注並開始妥善的治療。

關於傳染性媒介的安全性資訊，請參見**《警語及使用注意事項》**章節。

用藥過量

如果劑量和輸注速率過高則可能發生多血症。一旦發現有心血管過載（如頭痛、呼吸困難、頸靜脈阻塞）的臨床症狀，或有血壓升高、中央靜脈壓上升或肺水腫的情況，輸注必須立即停止而且必須對患者的血液動力學參數進行仔細的監測。

屬性/效果

ATC代碼：B05AA01。
藥理治療分類：血漿替代品與血漿蛋白分餾物。

白蛋白的數量佔血漿中總蛋白質的50%以上，而且約佔肝臟中蛋白質合成活動的10%。

作用機制/藥效學

白蛋白最重要的生理功能在於它對血液的膠脹壓和運輸功能的貢獻。白蛋白能穩定循環血液量，並且是一個激素、酶、藥物和毒素的載運者。

藥物動力學

<u>分佈</u>

在正常的情況下，總共可交換的白蛋白總量約是4-5克/每公斤的體重，其中40 - 45%存在血管內，55%-60%在血管外的空間。增加毛細血管滲透性會改變白蛋白的動力學。白蛋白分佈異常可能發生在病理性情況下，如嚴重燒傷後和敗血性休克時。

<u>排除</u>

在正常情況下，白蛋白的平均半衰期約19天。合成和分解之間的平衡通常經由一個回饋機制達成。排除主要經由細胞內的溶小體蛋白酶。

在健康的受試者中，在輸注後的前2小時內，離開血管內室的輸注白蛋白少於10%。個體間的差異對血漿容量影響相當的大。某些患者的血漿容量呈現增高的狀態達數小時。然而，在危重病患者中，白蛋白會以一個不可預測的速度大量地漏出血管系統。

臨床前資料

人體白蛋白是人體血漿的一個正常成分，而它的作用與生理性白蛋白沒有不同。

動物的單劑毒性試驗未呈現關聯性，無法評估有毒或致死劑量的劑量效應關係。由於異源蛋白質的抗體產生，無法進行動物的重複劑量毒性試驗。

迄今為止，人體白蛋白尚未被報告有胚胎毒性、導致突變或致癌的可能性。在動物模式中未顯示有急性中毒的跡象。

其他資料

不相容性

AlbuRx 20不能與其他藥物混合，包括全血及紅血球濃縮液。

有效期限和特殊的儲存條件

3年。
超過有效期限之後請勿使用AlbuRx 20。有效期限列印於外盒和藥瓶標籤的《EXP》之後。勿存儲AlbuRx 20於30°C以上。勿冷凍。將小瓶存放在外盒中，以避免光害。
請儲存在兒童無法取得處。

使用和處理的說明

AlbuRx 20可靜脈注射。

本溶液可直接施打，也可以先用等滲透壓溶液稀釋（如5%葡萄糖或0.9%氯化鈉）。白蛋白溶液不能以注射用水稀釋，因其可能會導致患者溶血現象。

如果投與大劑量時，本產品應在使用前回溫到室溫或體溫。

本溶液是透明的且稍帶粘性。
若輸注溶液呈現混濁或含沉澱物，可能是內含蛋白質不穩定或是溶液已受污染導致，則不可使用。

一旦容器開封後，內容物應立即使用。任何未使用的產品或廢棄物應該按照當地法規處理。

包裝

AlbuRx 20為單次使用的Type II玻璃小瓶（歐洲藥典）
- 10 克 / 50毫升
- 20克 / 100毫升

製造廠：CSL Behring AG
地　址：Wankdorfstrasse 10, 3014 Bern, Switzerland

製造廠：CSL Behring LLC
地　址：Route 50 North, 1201N. Kinzie, Bradley, IL 60915, USA

藥　商：吉發企業股份有限公司
地　址：台北市愛國西路九號二樓之九
電　話：(02) 2361-3040、0800-231956

本文的修訂日期

2016年12月
附註：AlbuRx®是CSL Behring AG在許多國家的註冊商標。

CSL Behring

AlbuRx™ 20

MoHW-Biologics-Import-Reg. No. 000959

Read all of this leaflet carefully before you start using this medicine.
- Keep this leaflet. You may need to read it again.
- If you have further questions, ask your doctor or pharmacist.
- This medicine has been prescribed for you. Do not pass it on to others. It may harm them, even if their symptoms are the same as yours.
- If any of the side effects gets serious, or if you notice any side effects not listed in this leaflet, please tell your doctor or pharmacist.

Composition

a. Active substance

Human albumin

b. Excipients

Sodium N-acetyltryptophanate	16 mmol/l
Sodium caprylate	16 mmol/l
Sodium chloride	q.s. to a sodium content of 140 mmol/l
Water for injections	q.s. to 1 l

Pharmaceutical form and active substance content per unit

Solution for infusion for intravenous use.

The solution contains 200 g/l of human plasma protein, of which at least 96% is human albumin.

AlbuRx 20 is an almost colourless, yellow, amber, or green solution for infusion.

AlbuRx 20 is hyperoncotic to normal plasma.

AlbuRx 20 contains approximately 3.2 mg sodium per ml of solution (140 mmol/l).

Therapeutic indications

Hypoproteinemia, shock, burns.

Description

Restoration and maintenance of circulating blood volume in cases of volume deficiency where the use of a colloid is indicated.

The choice of albumin rather than artificial colloid will depend on the clinical situation of the individual patient, based on official recommendations.

Posology/ Method of administration

The concentration of the albumin solution used, the dosage and the infusion rate should be adjusted to the patient's individual requirements.

Posology

The dose required depends on the size of the patient, the severity of trauma or illness and on continuing fluid or protein losses. Measurements of the circulating blood volume, and not just of the plasma albumin level, should be used to determine the dose required.

Human albumin should be administered under careful haemodynamic monitoring; the parameters include:
- arterial blood pressure and heart rate
- central venous pressure
- pulmonary artery wedge pressure
- urine output
- electrolytes

- haematocrit / haemoglobin

Paediatric population

The posology in children and adolescents (0-18 years) should be adjusted to the patient's individual requirements.

Method of administration

AlbuRx 20 is administered intravenously.

The product is ready for use and can be administered either directly or it can first be diluted with an isotonic solution (e.g. 5% glucose or 0.9% sodium chloride). The infusion rate should be adjusted according to the individual circumstances and the indication, but should normally not exceed 1 - 2 ml/min.

In plasma exchange the infusion rate should be adjusted to the rate of removal.

Contraindications

Patient who has hypersensitivity to albumin preparations or to any of the excipients.

Warnings and precautions for use

In the event of allergic or anaphylactic type reactions the infusion must be discontinued immediately and appropriate treatment must be instituted. In case of anaphylactic shock, the current medical guidelines for shock should be followed to care.

Albumin should be used with caution in all conditions where hypervolaemia and its consequences or haemodilution could represent a special risk for the patient. Examples of such conditions are:
- congestive cardiac failure
- hypertension
- oesophageal varices
- pulmonary oedema
- hemorrhagic diathesis
- severe anaemia
- renal or postrenal anuria

The colloid-osmotic effect of human albumin 200 g/l 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 hyperhydration.

200 - 250 g/l human albumin solutions are relatively low in electrolytes compared to the 40 - 50 g/l albumin solutions. When albumin is given, the electrolyte status of the patient should be monitored and appropriate steps taken to restore or maintain the electrolyte balance.

Albumin solutions must not be diluted with water for injections as this may cause haemolysis in patients.

If comparatively large volumes are to be replaced, controls of coagulation and haematocrit are necessary. Care must be taken to ensure adequate substitution of other blood constituents (coagulation factors, electrolytes, platelets and erythrocytes).

Hypervolaemia may occur if the dosage and infusion rate are not adjusted to the patient's circulatory situation. At the first clinical signs of cardiovascular overload (headache, dyspnoea, jugular vein congestion), or in the event of increased blood pressure, raised central venous pressure or pulmonary oedema, the infusion must be stopped immediately and the patient's haemodynamic parameters must be carefully monitored.

AlbuRx 20 contains approximately 3.2 mg sodium per ml of solution (140 mmol/l). That should be taken into consideration for patients on a controlled sodium diet.

Information on safety in regard to transmissible agents

Standard measures to prevent infections resulting from the use of medicinal products prepared from human blood or plasma include selection of donors, screening of individual donations and plasma pools for specific markers of infection and the inclusion of effective manufacturing steps for the inactivation/removal of viruses (see also section "Properties/effects"). Despite this, when medicinal products prepared from human blood or plasma are administered, the possibility of transmitting infective agents cannot be totally excluded. This also applies to unknown or emerging viruses and other pathogens.

Albumin manufactured to European Pharmacopoeia specifications is regarded as having reliable viral safety.

It is recommended that every time AlbuRx 20 is administered to a patient, the name and batch number of the product should be recorded in order to create a link between the patient and the batch of the product.

Interactions

No specific interactions between human albumin and other medicinal products are known. However, it should be borne in mind that the effects of medicinal products that bind strongly to albumin may be influenced by changes in the albumin level.

Pregnancy and lactation

No controlled clinical studies on the use of AlbuRx 20 in women during pregnancy are available. However, clinical experience with albumin has not yet given rise to any evidence of harmful effects on the course of pregnancy, to the fetus, or to the neonate. No animal reproduction studies have been conducted with AlbuRx 20. However, human albumin is a normal constituent of human blood.

Effect on the ability to drive and use machines

There is no evidence of adverse effects affecting the ability to drive or use machines.

Undesirable effects

Mild reactions such as flush, urticaria, fever and nausea occur rarely. These reactions normally disappear rapidly when the infusion rate is slowed down or the infusion is stopped. In very rare cases, severe allergic reactions such as anaphylactic shock can occur. In these cases, the infusion must be stopped and an appropriate treatment must be initiated.

For safety information with respect to transmissible agents, see section "Warnings and precautions for use".

Overdose

Hypervolaemia may occur if the dosage and infusion rate are too high. At the first clinical signs of cardiovascular overload (headache, dyspnoea, jugular vein congestion), or in the event of increased blood pressure, raised central venous pressure or pulmonary oedema, the infusion must be stopped immediately and the patient's haemodynamic parameters must be carefully monitored.

Properties/effects

ATC code: B05AA01.

Pharmacotherapeutic group: Plasma substitutes and plasma protein fractions.

Albumin accounts quantitatively for more than 50% of the total protein in the plasma and represents about 10% of the protein synthesis activity of the liver.

Mechanism of action/ Pharmacodynamics

The most important physiological functions of albumin results from its contribution to oncotic pressure of the blood and its transport function. Albumin stabilizes circulating blood volume and is a carrier of hormones, enzymes, drugs, and toxins.

Pharmacokinetics

Distribution

Under normal conditions, the total exchangeable albumin pool is 4 – 5 g/kg body weight, of which 40 – 45% is present intravascularly and 55 – 60% in the extravascular space. Increased capillary permeability alters albumin kinetics. Abnormal distribution can occur under pathological conditions, e.g. after severe burns and in septic shock.

Elimination

Under normal conditions, the average half-life of albumin is about 19 days. The balance between synthesis and breakdown is normally achieved by a feedback mechanism. Elimination is predominantly intracellular and due to lysosomal proteases.

In healthy subjects, less than 10% of infused albumin leaves the intravascular compartment during the first 2 hours following infusion. There is considerable individual variation in the effect on plasma volume. In some patients the plasma volume remains increased for several hours. However, in critically ill patients, albumin can leak out of the vascular system in substantial amounts at an unpredictable rate.

Preclinical data

Human albumin is a normal constituent of human plasma and its action does not differ from that of physiological albumin.

Single dose toxicity testing in animals is of little relevance and does not permit the evaluation of toxic or lethal doses or of a dose-effect relationship. It is not possible to carry out repeated dose toxicity testing in animals due to the development of antibodies to heterologous proteins.

To date, human albumin has not been reported to be associated with embryo-fetal toxicity, mutagenic, or carcinogenic potential. No signs of acute toxicity have been described in animal models.

Other information

Incompatibilities

AlbuRx 20 must not be mixed with other medicinal products, including whole blood and packed red cells.

Shelf life and special storage conditions

3 years.

Do not use AlbuRx 20 after the expiry date which is stated on the outer carton and the vial label after "EXP". Do not store AlbuRx 20 above 30°C. Do not freeze. Keep the vial in the outer carton in order to protect from light. Keep out of the reach of children.

Instructions for use and handling

AlbuRx 20 is administered intravenously.

The solution can be administered either directly or can first be diluted with an isotonic solution (e.g. 5% glucose or 0.9% sodium chloride). Albumin solutions must not be diluted with water for injections as this may cause haemolysis in patients.

If large volumes are administered, the product should be warmed to room or body temperature before use.

The solution is clear and slightly viscous. Do not use infusion solutions that are cloudy or have deposits. This may indicate that the protein is unstable or that the solution has become contaminated.

Once the container has been opened, the contents should be used immediately. Any unused product or waste material should be disposed of in accordance with local regulations.

Packs

AlbuRx 20 single use vial glass type II (Ph. Eur.)
- 10 g/ 50 ml
- 20 g/ 100 ml

Manufacturer: CSL Behring AG
Address: Wankdorfstrasse 10, 3014 Bern, Switzerland

Manufacturer: CSL Behring LLC
Address: Route 50 North, 1201N. Kinzie, Bradley, IL 60915, USA

Pharmaceutical agent: Giraffes Pharmaceutical Co., Ltd
Address: Rm 9, 2F, No.9, Ai-kuo W. Road, Taipei
Telephone number: (02) 2361-3040, 0800-231956

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