

cardiac failure, and monitor cardiovascular and respiratory function) · history of circulatory disease (administer slowly to avoid rapid rise in blood pressure and cardiac failure, and monitor cardiovascular and respiratory function) · increased capillary permeability

● **SIDE-EFFECTS**

▶ Rare or very rare Fever · flushing · nausea · shock · urticaria

● **MONITORING REQUIREMENTS** Plasma and plasma substitutes are often used in very ill patients whose condition is unstable. Therefore, close monitoring is required and fluid and electrolyte therapy should be adjusted according to the patient's condition at all times.

● **PRESCRIBING AND DISPENSING INFORMATION** A solution containing protein derived from plasma, serum, or normal placentas; at least 95% of the protein is albumin. The solution may be isotonic (containing 3.5–5% protein) or concentrated (containing 15–25% protein).

● **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug.

**Infusion**

▶ **Flexbumin** (Baxalta UK Ltd)

**Albumin solution human 200 gram per 1 litre** Flexbumin 20% infusion 100ml bags | 1 bag [PoM](#) [S](#)  
Flexbumin 20% infusion 50ml bags | 1 bag [PoM](#) [S](#)

**Solution for infusion**

▶ **Alburnorm** (Octapharma Ltd)

**Albumin solution human 50 mg per 1 ml** Alburnorm 5% solution for infusion 250ml bottles | 1 bottle [PoM](#) £33.75

Alburnorm 5% solution for infusion 100ml bottles | 1 bottle [PoM](#) £13.50

Alburnorm 5% solution for infusion 500ml bottles | 1 bottle [PoM](#) £67.50

**Albumin solution human 200 mg per 1 ml** Alburnorm 20% solution for infusion 100ml bottles | 1 bottle [PoM](#) £54.00

Alburnorm 20% solution for infusion 50ml bottles | 1 bottle [PoM](#) £27.00

▶ **Alburex** (CSL Behring UK Ltd)

**Albumin solution human 50 mg per 1 ml** Alburex 5% solution for infusion 500ml vials | 1 vial [PoM](#) £50.00

**Albumin solution human 200 mg per 1 ml** Alburex 20% solution for infusion 100ml vials | 1 vial [PoM](#) £40.00

▶ **Albutein** (Grifols UK Ltd)

**Albumin solution human 50 mg per 1 ml** Albutein 5% solution for infusion 500ml vials | 1 vial [PoM](#) [S](#)

Albutein 5% solution for infusion 250ml vials | 1 vial [PoM](#) [S](#)

**Albumin solution human 200 mg per 1 ml** Albutein 20% solution for infusion 100ml vials | 1 vial [PoM](#) [S](#)

Albutein 20% solution for infusion 50ml vials | 1 vial [PoM](#) [S](#)

▶ **Biotest** (Biotest (UK) Ltd)

**Albumin solution human 50 mg per 1 ml** Human Albumin Biotest 5% solution for infusion 250ml vials | 1 vial [PoM](#) [S](#)

**Albumin solution human 200 mg per 1 ml** Human Albumin Biotest 20% solution for infusion 50ml vials | 1 vial [PoM](#) [S](#)

Human Albumin Biotest 20% solution for infusion 100ml vials | 1 vial [PoM](#) [S](#)

▶ **Grifols** (Grifols UK Ltd)

**Albumin solution human 50 mg per 1 ml** Human albumin Grifols 5% solution for infusion 500ml bottles | 1 bottle [PoM](#) £42.75

Human albumin Grifols 5% solution for infusion 250ml bottles | 1 bottle [PoM](#) £21.38

Human albumin Grifols 5% solution for infusion 100ml bottles | 1 bottle [PoM](#) £9.90

**Albumin solution human 200 mg per 1 ml** Human Albumin Grifols 20% solution for infusion 50ml vials | 1 vial [PoM](#) £23.40

Human Albumin Grifols 20% solution for infusion 100ml vials | 1 vial [PoM](#) £46.80

▶ **Zenalb** (Bio Products Laboratory Ltd)

**Albumin solution human 45 mg per 1 ml** Zenalb 4.5% solution for infusion 250ml bottles | 1 bottle [PoM](#) £27.51

Zenalb 4.5% solution for infusion 500ml bottles | 1 bottle [PoM](#) £55.02

**Albumin solution human 200 mg per 1 ml** Zenalb 20% solution for infusion 100ml bottles | 1 bottle [PoM](#) £54.00

Zenalb 20% solution for infusion 50ml bottles | 1 bottle [PoM](#) £27.00

## PLASMA SUBSTITUTES

### Gelatin

● **INDICATIONS AND DOSE**

**Low blood volume in hypovolaemic shock, burns and cardiopulmonary bypass**

▶ BY INTRAVENOUS INFUSION

▶ Child: Initially 10–20 mL/kilogram, use 3.5–4% solution

● **CAUTIONS** Cardiac disease · severe liver disease

**CAUTIONS, FURTHER INFORMATION** The use of plasma substitutes in children requires specialist supervision due to the risk of fluid overload; use is best restricted to an intensive care setting.

● **SIDE-EFFECTS**

▶ Rare or very rare Chills · dyspnoea · fever · hyperhidrosis · hypersensitivity · hypotension · hypoxia · tachycardia · tremor · urticaria · wheezing

● **PREGNANCY** Manufacturer of *Geloplasma*® advises avoid at the end of pregnancy.

● **HEPATIC IMPAIRMENT** Manufacturers advise avoid preparations that contain lactate (risk of impaired lactate metabolism).

● **RENAL IMPAIRMENT** Use with caution in renal impairment.

● **MONITORING REQUIREMENTS**

▶ Urine output should be monitored. Care should be taken to avoid haematocrit concentration from falling below 25–30% and the patient should be monitored for hypersensitivity reactions.

▶ Plasma and plasma substitutes are often used in very ill patients whose condition is unstable. Therefore, close monitoring is required and fluid and electrolyte therapy should be adjusted according to the patient's condition at all times.

● **PRESCRIBING AND DISPENSING INFORMATION** The gelatin is partially degraded.

*Gelaspan*® contains succinylated gelatin (modified fluid gelatin, average molecular weight 26 500) 40 g, Na<sup>+</sup> 151 mmol, K<sup>+</sup> 4 mmol, Mg<sup>2+</sup> 1 mmol, Cl<sup>-</sup> 103 mmol, Ca<sup>2+</sup> 1 mmol, acetate 24 mmol/litre; *Gelofusine*® contains succinylated gelatin (modified fluid gelatin, average molecular weight 30 000) 40 g (4%), Na<sup>+</sup> 154 mmol, Cl<sup>-</sup> 124 mmol/litre; *Geloplasma*® contains partially hydrolysed and succinylated gelatin (modified liquid gelatin) (as anhydrous gelatin) 30 g (3%), Na<sup>+</sup> 150 mmol, K<sup>+</sup> 5 mmol, Mg<sup>2+</sup> 1.5 mmol, Cl<sup>-</sup> 100 mmol, lactate 30 mmol/litre; *Isoplex*® contains succinylated gelatin (modified fluid gelatin, average molecular weight 30 000) 40g (4%), Na<sup>+</sup> 145 mmol, K<sup>+</sup> 4 mmol, Mg<sup>2+</sup> 0.9 mmol, Cl<sup>-</sup> 105 mmol, lactate 25 mmol/litre; *Volplex*® contains succinylated gelatin (modified fluid gelatin, average molecular weight 30 000) 40 g (4%), Na<sup>+</sup> 154 mmol, Cl<sup>-</sup> 125 mmol/litre.

● **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug.

**Infusion**

▶ **Gelaspan** (B.Braun Medical Ltd)

**Gelatin 40 mg per 1 ml** Gelaspan 4% infusion 500ml Ecobags | 1 bag [PoM](#) £5.95 (Hospital only)

▶ **Gelofusine** (B.Braun Medical Ltd)

**Gelatin 40 mg per 1 ml** Gelofusine 4% infusion 1litre Ecobags | 1 bag [PoM](#) £9.31

Gelofusine 4% infusion 500ml Ecobags | 1 bag [PoM](#) £4.97

▶ **Geloplasma** (Fresenius Kabi Ltd)

**Gelatin 30 mg per 1 ml** Geloplasma 3% infusion 500ml Freeflex bags | 20 bag [PoM](#) [S](#)

▶ **Isoplex** (Kent Pharmaceuticals Ltd)

**Gelatin 40 mg per 1 ml** Isoplex 4% infusion 500ml bags | 10 bag [PoM](#) £75.00 (Hospital only)