- **PREGNANCY** Avoid (limited experience suggests fetal harm; teratogenic in *animal* studies). See also *Pregnancy and reproductive function* in Cytotoxic drugs p. 551.
- **BREAST FEEDING** Discontinue breast-feeding.
- **HEPATIC IMPAIRMENT** Manufacturer advises caution in significantly impaired hepatic or biliary function.
  Dose adjustments Manufacturer advises consider initial dose reduction in significantly impaired hepatic or biliary function.

- **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug.
  Solution for injection
  - Vinblastine sulfate (Non-proprietary)
    Vinblastine sulfate 1 mg per 1 ml Vinblastine 10mg/10ml solution for injection vials | 5 vial PoM £85.00 (Hospital only)

Vincristine sulfate

- **INDICATIONS AND DOSE**

Acute leukaemias | Lymphomas | Paediatric solid tumours

- BY INTRAVENOUS INJECTION
- Child: (consult local protocol)

- **UNLICENSED USE** Licensed for use in children (age range not specified by manufacturer).

IMPORTANT SAFETY INFORMATION

Vincristine injections are for **intravenous administration only**. Inadvertent intrathecal administration can cause severe neurotoxicity, which is usually fatal.

The National Patient Safety Agency has advised (August 2008) that adult and teenage patients treated in an adult or adolescent unit should receive their vinca alkaloid dose in a 50 mL minibag. Teenagers and children treated in a child unit may receive their vinca alkaloid dose in a syringe.

- **CONTRA-INDICATIONS**

CONTRA-INDICATIONS, FURTHER INFORMATION

Intrathecal injection **contra-indicated**.

- **CAUTIONS** Caution in handling—irritant to tissues · ileus · neuromuscular disease
- **INTERACTIONS** → Appendix 1: vinca alkaloids
- **SIDE-EFFECTS**
- **Rare or very rare** Hypersensitivity · rash · SIADH
- **Frequency not known** Abdominal cramps · adrenal disorder · alopecia · anaemia · appetite decreased · azotaemia · bladder atony · bronchospasm · connective tissue disorders · constipation · coronary artery disease · dehydration · diarrhoea · dizziness · dyspnoea · eighth cranial nerve damage · eye disorders · fever · gait abnormalities · gastrointestinal disorders · haemolytic anaemia · headache · hearing impairment · hypertension · hyponatraemia · hypotension · infection · leucopenia · movement disorders · muscle atrophy · myalgia · myocardial infarction · nausea · neuromuscular effects (dose-limiting) · neutropenia · oedema · oral disorders · pain · paralysis · paresis · reflexes absent · renal disorder · secondary malignancy · seizure · sensation abnormal · sepsis · throat pain · thrombocytopenia · urinary disorders · vertigo · vestibular damage · vision loss · vomiting · weight decreased

SIDE-EFFECTS, FURTHER INFORMATION **Bronchospasm** Severe bronchospasm following administration is more common when used in combination with mitomycin-C.

Neurotoxicity Sensory and motor neuropathies are common and are cumulative. Manufacturer advises monitoring patients for symptoms of neuropathy, such as hypoesthesia, hyperesthesia, paresthesia, hyporeflexia, areflexia, neuralgia, jaw pain, decreased vibratory sense, cranial neuropathy, ileus, burning sensation, arthralgia, myalgia, muscle spasm, or weakness, both before and during treatment—requires dose reduction, treatment interruption or treatment discontinuation, depending on severity.

Motor weakness can also occur and dose reduction or discontinuation of therapy may be appropriate if motor weakness increases. Recovery from neurotoxic effects is usually slow but complete.

Constipation Prophylactic use of laxatives may be considered.

- **CONCEPTION AND CONTRACEPTION** Contraceptive advice required, see *Pregnancy and reproductive function* in Cytotoxic drugs p. 551.
- **PREGNANCY** Avoid (teratogenicity and fetal loss in *animal* studies). See also *Pregnancy and reproductive function* in Cytotoxic drugs p. 551.
- **BREAST FEEDING** Discontinue breast-feeding.
- **HEPATIC IMPAIRMENT** Manufacturer advises caution.
  Dose adjustments Manufacturer advises dose reduction.

- **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug.
  Solution for injection
  - Vincristine sulfate (Non-proprietary)
    Vincristine sulfate 1 mg per 1 ml Vincristine 1mg/1ml solution for injection vials | 1 vial PoM £13.47 (Hospital only) | 5 vial PoM £67.35 (Hospital only)
    Vincristine 2mg/2ml solution for injection vials | 1 vial PoM £26.66 (Hospital only) | 5 vial PoM £133.30 (Hospital only)
    Vincristine 5mg/5ml solution for injection vials | 5 vial PoM £329.50 (Hospital only)

ANTINEOPLASTIC DRUGS › OTHER

Asparaginase

11-Sep-2018

- **DRUG ACTION** Asparaginase is an enzyme which acts by breaking down L-asparagine to aspartic acid and ammonia, this disrupts protein synthesis of tumour cells.

- **INDICATIONS AND DOSE**

Acute lymphoblastic leukaemia (in combination with other antineoplastic drugs) (specialist use only)

- BY INTRAVENOUS INFUSION
- Neonate: (consult product literature or local protocols).
- Child 1–11 months: (consult product literature or local protocols)
- Child 1–17 years: 5000 units/m^2 every 3 days

- **CONTRA-INDICATIONS** History of pancreatitis related to asparaginase therapy · history of serious haemorrhage related to asparaginase therapy · history of serious thrombosis related to asparaginase therapy · pancreatitis · pre-existing known coagulopathy
- **CAUTIONS** Diabetes (may raise blood glucose) · hypersensitivity reactions · hypertriglyceridaemia (severe)—increased risk of acute pancreatitis

CAUTIONS, FURTHER INFORMATION

- Hypersensitivity reactions Serious hypersensitivity reactions, including life-threatening anaphylaxis, can occur—asparaginase should only be administered when appropriately trained staff and resuscitation facilities are immediately available; in the event of a hypersensitivity reaction, treatment should be stopped immediately and appropriate management initiated. Manufacturer advises an intracutaneous or small intravenous test dose can be used but is of limited value for predicting which patients will experience an allergic reaction.

- **INTERACTIONS** → Appendix 1: asparaginase