



VETERINARY ONCOLOGY CONSULTANTS

helping veterinarians treat pets with cancer

Drug Information Sheet

Vincristine

*** Use this sheet to review specific information on this chemotherapy drug***

Route:	1 mg/ml Intravenously with an over-the-needle catheter – CAUTION for extravasation (see below). Given as an IV bolus injection.
Storage:	Store in refrigerator and protect from light; a 1989 study suggested to discard after 30 days.
Dose:	Usually every 7-14 days (but see individual protocol as dose varies if given with other drugs, and by species)
Monitor:	Do not administer if neutrophil count is less than $3.0 \times 10^9/L$. CBC one week after therapy. Vincristine does not appear to cross the blood-brain barrier. Special attention to dosage and peripheral neurologic side effects should be given to patients with pre-existing neuromuscular disease and also when other drugs with neurotoxic potential are being used. Because vincristine is hepatically metabolized, doses should be adjusted for patients with liver dysfunction, particularly biliary obstruction.

Adverse Reactions

Generally, adverse reactions are reversible and dose related. When single weekly doses of the drug are employed, the adverse reactions of leukopaenia and gastrointestinal signs are usually of short duration (i.e. less than seven days). When dosage is reduced, these reactions may lessen or disappear.

Mucocutaneous:	Severe local inflammation if extravasation occurs. - apply moderate heat to the leakage area and infiltrate with 0.9% NaCl to help disperse the drug. This is thought to minimize discomfort and the possibility of cellulitis.
Hematologic:	Vincristine does not appear to have any constant or significant effect on platelets or red cells. Serious bone-marrow depression is uncommon. Thrombocytopenia, if present when therapy with vincristine is started, may actually improve.
Gastrointestinal:	Paralytic ileus, constipation and vomiting may occur, but are reversible upon temporary discontinuation of vincristine and with symptomatic care. Metoclopramide may reduce the risk, and severity, of this toxicity. Ileus is more common in cats than in dogs. Dose reduction may be necessary, and will usually prevent recurrent toxicity.
Neurologic:	Symptoms of peripheral neuropathy are uncommon. If they occur they may resolve 6 to 8 weeks after treatment is discontinued. There are no known treatments to reverse neuromuscular side effects. For neurologic effects of ataxia and weight loss, institute supportive care, monitor cardiovascular system and CBC. If ileus is present, parenteral fluids and possibly nutrition may be required.