

Cyclophosphamide

- Keep this leaflet safe, as you may need to refer to it again.
- Please ask your vet or veterinary nurse if you have any further questions.
- This medicine has been prescribed for *your* pet ONLY. Do not take it yourself or give it to another person or any other animal; it may harm them even if their symptoms appear to be the same.

The medicine you have been given for your dog or cat is called cyclophosphamide. It may have a trade name such as Endoxana®, but often will just be called cyclophosphamide.

What is cyclophosphamide?

Cyclophosphamide belongs to a group of medicines called *alkylating drugs*, which are a type of *cytotoxic* drug. Cytotoxic drugs have both anti-cancer activity, and the potential to damage normal tissue; their use is sometimes referred to as 'chemotherapy'. They may be used to help manage/treat cancer. Cytotoxic drugs are often used in combination with several other drugs and may be used alongside radiotherapy or surgery to treat cancer.

Why has my pet been prescribed cyclophosphamide?

Cyclophosphamide is used in veterinary patients to help treat certain types of cancer including those affecting bone marrow, blood cells and lymphoid tissue and for some solid tumours (as part of a 'metronomic' regime). Lymphoid tissue includes small glands around the body (lymph nodes), the spleen and tonsils. These are part of the body's immune system, helping to protect it against infections.

How should I store cyclophosphamide?

This medicine does not require special storage conditions. For safety, **all medicines should be kept out of the reach and sight of children in a childproof container.**

How do I give cyclophosphamide tablets to my pet?

Disposable gloves should be worn at all times when handling and administering this drug. DO NOT split or crush these tablets; only use whole ones. Disguise the tablets in small quantities of a strongly flavoured food that your pet likes. Giving cyclophosphamide in the morning, ensuring your pet drinks plenty of water, and encouraging or allowing them to urinate frequently is recommended to help prevent cystitis. To increase urination, a diuretic tablet (e.g. furosemide) may be recommended by your veterinary surgeon to give alongside Cyclophosphamide. Pregnant or breastfeeding women, children, the elderly and immunosuppressed individuals should not handle chemotherapy drugs. If you are unsure, please discuss this with your veterinary surgeon. **Faeces,**

urine and saliva from dogs and cats taking cyclophosphamide will contain small traces of the drug. Therefore, do not allow your pet to lick your skin (including hands and face) and make sure they go to the toilet well away from other pets and from people. Wear disposable gloves when picking up faeces in bags. Dispose of faeces in domestic waste. Dogs should be walked in quiet areas. Do not allow them to soil areas where children will be playing or where there is a high dog population. Use a bottle of water to dilute down any urine passed on solid surfaces (e.g. pavements or concrete).

How long will my pet need to take cyclophosphamide?

Your vet will advise you on the length of time for which you will need to give this medicine. This may vary between patients. Unused tablets and empty containers should be returned to your veterinary practice for safe disposal.

What should I do if I run out of tablets?

Try not to run out of tablets. Make sure you order more from your vet if your supply is getting low. If you do run out, contact your own vet for further advice and restart the course as soon as possible.

What should I do if I miss a dose?

If a dose is missed, give the medication as soon as possible. However, it is best to skip the missed dose if it is almost time for your pet's next scheduled dose. **DO NOT** give a double dose to make up for the missed dose and do not exceed the total stated dose in any one 24-hour period.

What should I do if my pet is accidentally given too many doses?

Contact your vet immediately if your pet is given an overdose of cyclophosphamide.

Can my pet take cyclophosphamide if I am already giving them other drugs?

Tell your vet if you are giving your pet any other medications, even if you think they already know. This includes herbal or off-the-shelf remedies from a pet

shop or pharmacy. Do not give your pet cyclophosphamide if they are already taking thiazide diuretics or digoxin (both used in heart problems), or chloramphenicol (an antibiotic). Cyclophosphamide will change the required dose of insulin when administered to diabetic pets.

What are the possible side effects of cyclophosphamide for my pet?

Cytotoxic drugs, such as cyclophosphamide, have the potential to cause nausea and vomiting. Additional drugs are available to prevent the nausea and vomiting, or treat it if it arises. During treatment your pet will require regular blood tests to monitor their blood cell levels, which can become extremely low in number during treatment. In addition, cyclophosphamide may also cause severe inflammation of the lining of the bladder (haemorrhagic cystitis), resulting in bloody urine. Other possible side effects include diarrhoea, liver and kidney damage and a loss of appetite (more common in cats than in dogs). Cyclophosphamide slows down hair growth, and alopecia (hair loss) may be seen in some dogs. Although alopecia is unlikely in cats, some may lose their whiskers. If your pet shows any unusual symptoms whilst taking this medication, please contact your vet.

What should I do if my pet is unwell while taking cyclophosphamide?

If your pet is unwell while receiving medication, you should not give any further doses and should contact your vet as soon as possible for advice.

What should I do if a person accidentally takes this drug?

If a person accidentally takes your pet's tablets, the person should be taken to the local hospital **immediately**. Take this leaflet and any remaining tablets plus their container (even if it is empty) with you.

Whom do I contact if I want to know more?

If you have any questions about this drug, or concerns about your pet's health, contact your own vet. They will know your pet's medical history and will know about cyclophosphamide.

The Prescribing Cascade

This medicine is authorized for use in human patients and is used by vets under the 'prescribing cascade'. The medicine is not authorized by the Veterinary Medicines Directorate (VMD), an executive agency of the Department for Environment, Food and Rural Affairs (Defra), for use in dogs/cats/pets. Your vet can explain the 'prescribing cascade' in further detail to you and also explain why they are prescribing this drug for your pet. You will be asked to sign a consent form stating that you understand the reasons that the drug is being prescribed and its possible complications, before the treatment is issued.

© British Small Animal Veterinary Association 2020. While the editors and the BSAVA have made every effort in preparing this information leaflet, the contents and any statements are made in good faith purely for general guidance and cannot be regarded as substitute for professional advice. The publishers, contributors and the BSAVA do not take responsibility for the information provided on this leaflet and hence do not accept any liability for loss or expense incurred (by you or persons that you disseminate the materials to) as a result of relying on content in this leaflet. To this end, you are advised to consult your vet and seek their professional advice before taking any steps set out in this leaflet. If you are a vet, you must not rely on the contents in this leaflet without independently verifying the correctness and veracity of the contents. BSAVA is not responsible for any alterations made to this document from the version supplied.