

Optimmune (Intervet, Schering-Plough) contains 0.2% cyclosporine. Cyclosporine is a potent immune-suppressant. It is not cytotoxic but it inhibits T-cell activity, thus having anti-inflammatory activity. It also allows for regeneration of the lacrimal gland, which increases the physiological tears which are produced.

At the moment, there is a temporary world-wide shortage of Optimmune. In order to prevent a deterioration in the condition of dogs suffering from keratoconjunctivitis sicca or pannus which are being successfully controlled with Optimmune, an alternative should be given in the interim period until Optimmune is once again available.

Frequent use of artificial tears may be recommended. However, this is not a practical solution for many owners, and artificial tears do not contain the same physiological properties as natural tears.

In Ireland there are two main alternatives available. They are presented in the order recommended by the Department of Agriculture.

1. Pro-topic (Astellas) is a skin cream used in humans to control eczema. It contains the immunosuppressant tacrolimus. The paediatric strength 0.03% is recommended. It may be applied to the eye once or twice daily. The owner will need to wear gloves, and may find it easier to apply when a small amount is placed at the tip of a cotton ear bud. This is off-label use of the drug, and this needs to be made very clear. A consent form for the use of unlicensed medication is available on the Veterinary Defence Society website, and this should be used. Side effects are not known after topical application, but there has been limited testing done. It may cause a little irritation after it is applied, but this should abate in minutes. There is controversy that it may be linked with skin cancer in people but this has not been proven. A prescription may be written.
2. Cyclosporine eye drops may be manufactured extemporaneously only. Sandimmune 1ml ampoules (Novartis) are available in packets of ten (and cost €25.36 from Cahill May Roberts (CMR) 01 6305555 021 4965588). Each ml contains 50mg cyclosporine. It may be made up with oil (corn oil, castor oil (500ml costs €5 CMR), or vegetable oil, but not mineral oil. A recommended strength is 0.5% which is stronger than Optimmune which is 0.2%. In order to achieve this, one 1ml vial is mixed with 9.5ml oil and placed in an eye dropper bottle. These are available from McLernon's, The Packaging Centre Ltd, Fox & Geese House, Naas Road, Dublin 22 (01) 4508759 - plastic dropper bottles (minimum quantity 100) 5ml €0.0165 each; 10ml €0.19 each; 15ml €0.22 each. Ocular irritation with conjunctival hyperaemia, blepharitis and peri-ocular alopecia may occur. The owner should be advised to wear gloves, and a consent form for the use of an unlicensed medication is advisable.

It is recommended that animals are examined within the first week of product change-over, with regular examinations thereafter. Once Optimmune becomes available again, patients may be directly changed back to Optimmune with immediate cessation of the alternate product. A review is recommended after two weeks and six weeks, thereafter regular re-examinations as before should be carried out.

[Important legal information:](#)

Natasha Mitchell has written these guidelines in response to the need for animals to receive continued and appropriate treatment while Optimune (Intervet Schering-Plough) is unavailable. This is not a substitute for advice which may be given by Natasha Mitchell during clinical examination, and these guidelines do not, and cannot, provide advice appropriate to every case as each may be different. Natasha Mitchell can accept no responsibility whatsoever for the outcome of the preparation, application or results of treatment with the off-label use of these medications, and stresses that anecdotal reports of their effectiveness is no substitute for controlled clinical trials which have not been undertaken. Natasha Mitchell recommends that vets consider this advice when making their own decisions about treatment of the animals under their care, but excludes all liability and responsibility for the consequences of any such action or omission in reliance on that information.