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IONTOFOR-VET is an administration set design to deliver products into the cornea by IONTOPHORESIS.



**IONTOFOR-VET Electrode** 



K-IONO generator







- ✓ Quick Procedure
- ✓ Non-Invasive
- ✓ Short Anesthesia time
- ✓ Less Prescriptions
- ✓ Improved Compliance



#### What is IONTOFOR-VET Electrode?

IONTOFOR-VET Electrode is a device for the transepithelial delivery of Intravenous (I.V.) drug products or riboflavin into the corneal stroma by iontophoresis.

IONTOPHORESIS is a process of applying a low intensity electrical current on a tissue to increases the penetration of a charged substance.

IONTOFOR-VET Electrode is a corneal applicator with an electrode that enables the rapid passage of products into the corneal stroma by iontophoresis.

IONTOFOR-VET Electrode is connected to the electrical generator K-IONO.

A mild electric current from 1 to 4 mA is applied for 2.5 to 10 minutes.

### What is IONTOFOR-VET for CXL?

IONTOFOR-VET Electrode can be used to deliver Riboflavin (0.1%) in the cornea.

RIBOVET is a 0.1% Riboflavin solution, a chromophore photo-activated in-situ with UV-A at 365 nm wavelenght from a UV source.

A UV-A source delivering a minimum dose of energy of 5.4 J/cm² is needed to activate in-situ the Riboflavin.

Once photo-activated with UV-A light, Riboflavin acts as a disinfectant, creating locally massive amounts of reactive oxygen species that reduce the pathogen load.

Riboflavin also changes the structure of collagen fibers, reducing collagenase by cross-linking (CXL).

## What equipment is needed for IONTOPHORESIS?

IONTOFOR-VET Electrode, a sterile corneal iontophoresis applicator, to deliver I.V. products (not included) or IONTOFOR-VET kit that includes the IONTOFOR-VET Electrode and a RIBOVET vial (0.1% Riboflavin solution) for CXL procedures.

Both products are connected to K-IONO, a reusable iontophoresis generator delivering a fixed dose of 10 mA.min during 2.5 to 10 minutes (time adjust with current setting) with current from 1 to 4 mA.

Optional FOAM Insert accessory can be inserted into the Electrode for the treatment of standing animals, fragile corneas, or extended lesions.

# Which products can be delivered by IONTOPHORESIS?

IONTOFOR-VET electrode can be supplied alone for the administration of products listed below (not supplied, I.V. presentations mandatory) or in a kit with Riboflavin (formulated for Iontophoresis).

**Negatively** charged products (use **black** ION-CXL lead):

Antibiotics - Ceftazidime

CefazolinTobramycin

Antivirals - Foscarnet

- Ganciclovir

Anti-inflammatories - Dexamethasone

- Methylprednisolone

- Aspirin

Immunosuppressant - Methotrexate

CXL Agent - Riboflavine (vitamine B2)

Positively charged products (use red ION-CXL lead):

Antibiotics - Vancomycin

- Amikacin- Gentamicin- Ciprofloxacin- Ticarcillin

Antifungals - Ketoconazole

- Miconazole

#### **IONTOFOR-VET Electrode characteristics**

Diameter	9 mm
Surface	0.64 cm <sup>2</sup>
Volume	Min. 1 ml - Max. 2 ml



**OPIA Technologies** – 17 rue Moreau - 75012 Paris – France - www.opiatech.com IONTOFOR-VET, IONTOFOR\_VET Electrode, K-IONO and FOAM inserts are for veterinary use only.