

"Controlled release ivermectin emulgel pharmaceutical product as antiparasitic for veterinary use"

MX/a/2014/009688

# **Technology description**

This invention refers to an ivermectin emulgel pharmaceutical composition combining an aqueous phase with bio-adhesive and promoting properties with an oil phase containing ivermectin dissolved in oil for pharmaceutical use. The oil phase is the oil phase is dispersed into tiny globules in the aqueous phase, whereby an efficient topical controlled release system is obtained.

### Applications, usage and benefits of the technology

lvermectin is used as internal antiparasitic against intestinal and pulmonary nematodes, as well as external antiparasitic for lice, ticks, mange mites, notoedrica and otodectica, besides the prophylactic use of heartworm disease. Ivermectin is used in dogs, cats, horses, cattle, wildlife species, rabbits, rodents, sheep, goats, swine and reptiles.

Ivermectin stimulates the release of GABA (gamma-amino-butyric acid), an inhibitory neurotransmitter agent that acts at the level of parasitic presynaptic neurons, resulting in death by flaccid paralysis.

## **Technology readiness Level**

The invention's antiparasitic efficiency, as well as bioavailability, have been tested in dogs.

## Market information



Ivermectin is the veterinary antiparasitic with the broadest action spectrum. Currently ivermectin reaches sales for more than a billion USD.