DEMODICOSIS Sarcoptic Mange







VISIBLE EFFICACY IMPRESSIVE RESULTS





DEMODICOSIS: A COMMON DISEASE IN CANINE PRACTICE

A SEVERE AND COMPLEX DISEASE

- > Canine demodicosis is often a very severe parasitic skin disease which is challenging to treat
- > Signs develop after significant mite proliferation and vary greatly, depending on multiple factors:
 - Degree of mite proliferation
 - Dog susceptibility
 - Underlying conditions
 - Chronicity
- > The disease can be expressed as:
 - Localised form with superficial papules, pustules and focal alopecia
 - Generalised form involving large areas of the body. Severe secondary bacterial infections and life threatening systemic signs may occur



HOW TO DIAGNOSE DEMODICOSIS?

DIAGNOSIS⁽¹⁾ IS BASED ON

- > Medical history
- > Clinical signs
- > Detection of *Demodex* mites at different stages of their life cycle: more than one mite found is an indication of clinically relevant demodicosis
 - Method of choice: skin scrapings
 - Trichograms: useful in areas that are difficult to scrape (periocular and interdigital areas)
 - Tape strips (after skin squeezing) and examinations of exudate may be useful

DIFFERENTIAL DIAGNOSIS

- > Atopic dermatitis, deep pyoderma...
- > Other parasitic diseases (sarcoptic mange, dermatophytosis, leishmaniosis...)

SKIN SCRAPING TECHNIQUE





Primary lesions (follicular papules and pustules) should be selected in order to obtain the best yield. Ulcerated areas are not suited.

Press the skin to extrude the mites from the depth of the follicles to the surface.

Scrape the skin until capillary bleeding occurs (sufficient depth of the scraping).

Multiple scrapings of approximately 1 cm² of affected skin should be performed.

HAIR PLUCKING FOR TRICHOGRAM



An area of 1cm² should be plucked with forceps.

Sufficient number of hairs (50-100) should be plucked.

DEMODICOSIS TREATMENT AND FOLLOW-UP

Generalised demodicosis, with or without secondary bacterial infection, pododemodicosis and aural demodicosis, must be treated. Localised forms of demodicosis may resolve spontaneously but must be monitored closely.⁽¹⁾

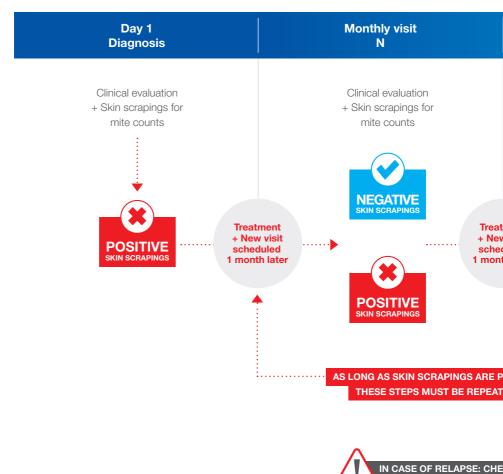
TREATMENT

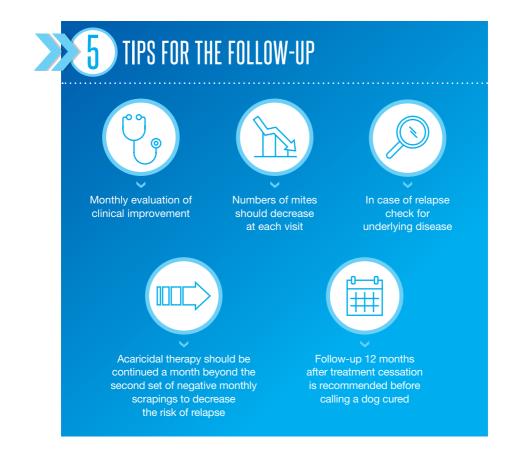
- Duration is often long, sometimes several months In a retrospective US study⁽²⁾, following various miticidal treatments of dogs diagnosed with generalised demodicosis, juvenile demodicosis was treated within 4.5 months. Adult demodicosis was treated within 5.9 months
- > Until recently, few effective acaricidal formulations were available

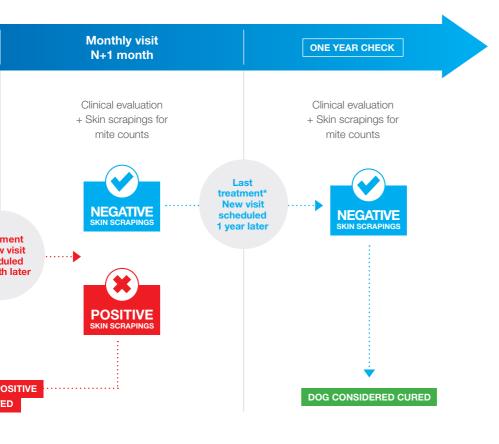
PRINCIPLES OF TREATMENT MONITORING FOR DEMODICOSIS

Monthly follow-up is recommended.

Adapted from the WAVD Clinical Consensus Guidelines for Demodicosis⁽¹⁾.







CK FOR UNDERLYING CONDITIONS

* In dogs responding very slowly to therapy, treatment may be extended even further.

DEMODICOSIS: EFFICACY OF NEXGARD® AND NEXGARD SPECTRA®

SUMMARY OF STUDY DESIGNS

- > Two experimental controlled studies^(3,4) and one field study⁽⁵⁾ were conducted
- The European multicentric field efficacy trial was conducted in 6 dermatology referral centers from France, Italy and Poland⁽⁵⁾
- > A total of 74 dogs were treated with afoxolaner in these studies:
 - 47 treated with afoxolaner alone (NexGard®)^(3, 5)
 - 27 treated with afoxolaner + milbemycin oxime (NexGard Spectra®)^(4,5)
- > All the studies had a duration of 3 months

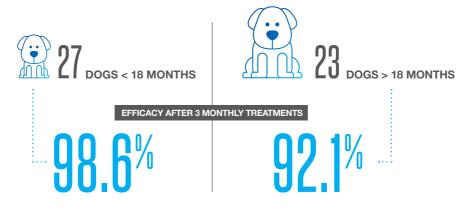
SUMMARY OF RESULTS

and the	REDUCTION IN MITE COUNTS AFTER 3 MONTHLY TREATMENTS		
	Ne xGard [®]	NexGard SPECTRA	
STUDY 1 ⁽³⁾	100%	Not tested	
STUDY 2 ⁽⁴⁾	99.9%	100%	
STUDY 3 (5)	98.2%	97.5%	



EUROPEAN PICTURE OF DEMODICOSIS IN THE FIELD STUDY

HIGHLIGHT OF THE STUDY



> Breeds

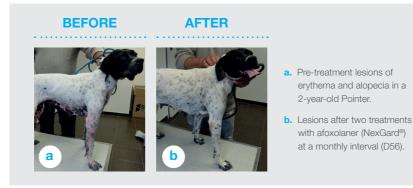
Enrolled dog population reflected the profile of dogs usually presented for demodicosis in veterinary practices

> Demodectic podal dermatitis was more difficult to cure

14 dogs enrolled had demodectic podal dermatitis. Seven of these dogs were among the dogs still harboring live mites at the end of the study

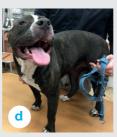
IMPROVEMENT OF CLINICAL SIGNS

Clinical evolution after monthly administrations of afoxolaner in two dogs with generalised demodicosis⁽⁵⁾



BEFORE





AFTER

- Pretreatment lesions of multifocal alopecia and erythema in an 11-month-old American Staffordshire Terrier.
- Lesions after two treatments with afoxolaner (NexGard Spectra[®]) at a monthly interval (D56).



SARCOPTIC MANGE

A HIGHLY CONTAGIOUS, INTENSELY PRURITIC PARASITIC SKIN DISEASE

Caused by infestation with the epidermal mite Sarcoptes scabiei var. canis.

DIAGNOSIS IS BASED ON

> Clinical signs

- Severe pruritus
- Erythematous rash and yellowish crusts on the skin, starting with ear tips, elbows, hocks (ankles), belly and chest
- > Detection of mites, but even deep skin scrapings do not always reveal their presence
- > Serology may be of interest to confirm clinical suspicion in case of negative scrapings

FURTHER CONSIDERATIONS

> Due to the contagious nature of disease, all in-contact dogs should be treated

> Maintaining skin health

Shampooing or bathing with medicated or non-medicated formulations to rehydrate the skin and treat seborrhea.

These procedures may reduce the efficacy or shorten the activity of topical products



EFFICACY OF NEXGARD[®] AND NEXGARD SPECTRA[®] AGAINST SARCOPTES SCABIEI INFESTATION

- Study 1: Initial controlled field study conducted with afoxolaner (NexGard[®]) in 10 client owned dogs⁽⁶⁾
- Study 2: Large scale field study using afoxolaner involving 8 clinical centers in Portugal and Germany, with 80 client owned dogs enrolled⁽⁷⁾ treated either with afoxolaner (NexGard[®]) or afoxolaner + milbemycin oxime (NexGard Spectra[®])

> Results:

- ≥98.9% efficacy obtained against mites as soon as after the first treatment ⁽⁶⁻⁷⁾
- High score of resolution in skin lesions and pruritus in 2 months



and the second s	REDUCTION IN MITE COUNTS AT THE END OF EACH 2 MONTHS STUDY		
	Ne xGard [®]	NexGard SPECTRA	
STUDY 1 ⁽⁶⁾	100%	Not tested	
STUDY 2 ⁽⁷⁾	99.7%	100%	

IMPROVEMENT OF CLINICAL SIGNS



Study 1

Clinical appearance of a dog with sarcoptic mange: Left: pretreatment (Day 0) Right: day 56

DAY 0

DAY 28





DAY 56



Study 2

Clinical evolution from day 0 (pretreatment) to day 28 (after one NexGard® treatment) and day 56 (after 2 NexGard® treatments)

NEXGARD® & NEXGARD SPECTRA®: MONTHLY DOSING FOR CONVENIENT MITE TREATMENT

MONTHLY TREATMENTS OF MITE INFESTATIONS

- > A treatment administrated at a monthly interval:
 - Fits with monthly re-check of mite infestation
- NexGard Spectra[®] allows veterinarians to adapt the treatment of demodicosis or sarcoptic mange to specific epidemiological situations:

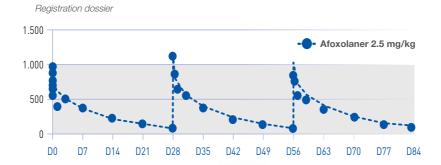


Heartworm or lungworm disease enzootic areas

• Deworming against gastrointestinal worms, including roundworms, hookworms, whipworm

NEXGARD[®] & NEXGARD SPECTRA[®]: THE RIGHT DOSE AT THE RIGHT TIME

Controlled dosage: no great variation in Cmax during treatment, regulated plasma concentration and speed of elimination



No significant variation of bioavailability after administration: the treatment can be administered with or without food

REFERENCES

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NexGard® 11 mg chewable tablets for dogs 2-4 kg, 28 mg chewable tablets for dogs > 4-10 kg, 68 mg chewable tablets for dogs > 10-25 kg, 136 mg chewable tablets for dogs > 25-50 kg. Each tablet contains afoxolaner. UK: POM-V IE: POM. Indications for use: Treatment of flea infestation in dogs (*Ctenocephalides felis* and *C. canis*) for at least 5 weeks, can be used as part of a treatment strategy for the control of flea allergy dermatitis (FAD). Treatment of tick infestation in dogs (*Dermacentor reticulatus, Ixodes ricinus, Ixodes hexagonus, Rhipicephalus sanguineus*). One treatment kills ticks for up to one month. Fleas and ticks must attach to the host and commence feeding in order to be exposed to the active substance. Treatment of demodicosis (caused by *Demodex canis*). Treatment of sarcoptic mange (caused by *Sarcoptes scabiei var. canis*). **For information about side effects, precautions, warnings and contraindications please refer to the product packaging and package leaflet. Use medicines responsibly.**

NexGard Spectra[®] 9 mg / 2 mg chewable tablets for dogs 2-3.5 kg; 19 mg / 4 mg chewable tablets for dogs >3.5-7.5 kg; 38 mg / 8 mg chewable tablets for dogs >7.5-15 kg; 75 mg / 15 mg chewable tablets for dogs >15-30 kg; 150 mg / 30 mg chewable tablets for dogs >30-60 kg. Each chewable tablet contains Afoxolaner and Milbemycin oxime. UK: POM-V IE: POM. Indications for use: For the treatment of flea and tick infestations in dogs when the concurrent prevention of heartworm disease (*Dirofilaria immitis* larvae), angiostrongylosis (reduction in level of immature adults (L5) and adults of *Angiostrongylus vasorum*), thelaziosis (adult *Thelazia callipaeda*) and/or treatment of gastrointestinal nematode infestations (*Dermacentor reticulatus, kodes ricinus, kodes hexagonus, Rhipicephalus sanguineus*) in dogs for 5 weeks. Treatment of tick infestations (*Dermacentor reticulatus, kodes nexagonus, Rhipicephalus sanguineus*) in dogs for 4 weeks. Fleas and ticks must attach to the host and commence feeding in order to be exposed to the active substance. Treatment of infestations with adult gastrointestinal nematodes of the following species: roundworms (*Toxocara canis*). Treatment of heartworm disease (*Dirofilaria immitis* larvae) with monthly administration. Prevention of heartworm disease (*Dirofilaria immitis* larvae) with monthly administration. Prevention of establishment of thelaziosis (adult Thelazia callipaeda evevorm infection) with monthly administration.

For information about side effects, precautions, warnings and contraindications please refer to the product packaging and package leaflet. Advice on the use of these or alternative medicines must be sought from the medicine prescriber. Use medicines responsibly

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NEXGARD® RANGE:

CONVENIENCE, TASTY, EFFICACY

