PACKAGE LEAFLET

VALEMAS
50 mg/ml solution for injection for cattle, sheep, goats, pigs, dogs and cats

1. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER AND OF THE MANUFACTURING AUTHORISATION HOLDER RESPONSIBLE FOR BATCH RELEASE, IF DIFFERENT

Marketing authorisation holder and manufacturer responsible for batch release:
Fatro S.p.A.
Via Emilia 285
I-40064 Ozzano dell'Emilia BO
Italy

2. NAME OF THE VETERINARY MEDICINAL PRODUCT

VALEMAS 50 mg/ml solution for injection for cattle, sheep, goats, pigs, dogs and cats.
Enrofloxacin

3. STATEMENT OF THE ACTIVE SUBSTANCE AND OTHER INGREDIENT

1 ml contains:
Active substance: enrofloxacin 50 mg
Excipients: n-Butyl alcohol 30 mg

Clear, pale yellow to yellow solution.

4. INDICATIONS

Calves
Treatment of infections of the respiratory tract caused by enrofloxacin susceptible strains of *Pasteurella multocida, Mannheimia haemolytica* and *Mycoplasma* spp.
Treatment of infections of the alimentary tract caused by enrofloxacin susceptible strains of *Escherichia coli.*
Treatment of septicaemia caused by enrofloxacin susceptible strains of *Escherichia coli.*
Treatment of acute mycoplasma-associated arthritis due to enrofloxacin susceptible strains of *Mycoplasma bovis.*

Sheep
Treatment of infections of the alimentary tract caused by enrofloxacin susceptible strains of *Escherichia coli.*
Treatment of septicaemia caused by enrofloxacin susceptible strains of *Escherichia coli.*
Treatment of mastitis caused by enrofloxacin susceptible strains of *Staphylococcus aureus* and *Escherichia coli.*

Goats
Treatment of infections of the respiratory tract caused by enrofloxacin susceptible strains of *Pasteurella multocida* and *Mannheimia haemolytica*.
Treatment of infections of the alimentary tract caused by enrofloxacin susceptible strains of *Escherichia coli.*
Treatment of septicaemia caused by enrofloxacin susceptible strains of *Escherichia coli*.
Treatment of mastitis caused by enrofloxacin susceptible strains of *Staphylococcus aureus* and *Escherichia coli.*

Pigs
Treatment of infections of the respiratory tract caused by enrofloxacin susceptible strains of *Pasteurella multocida*, *Mycoplasma* spp. and *Actinobacillus pleuropneumoniae.*
Treatment of infections of the alimentary tract caused by enrofloxacin susceptible strains of *Escherichia coli.*
Treatment of septicaemia caused by enrofloxacin susceptible strains of *Escherichia coli.*

Dogs
Treatment of infections of the alimentary, respiratory and urogenital tracts (including prostatitis, adjunctive antibiotic therapy for pyometra), skin and wound infections, otitis (externa/media) caused by enrofloxacin susceptible strains of *Staphylococcus* spp., *Escherichia coli*, *Pasteurella* spp., *Klebsiella s*pp., *Bordetella s*pp., *Pseudomonas* spp. and *Proteus* spp.

Cats
Treatment of infections of the alimentary, respiratory and urogenital tracts (as adjunctive antibiotic therapy for pyometra), skin and wound infections, caused by enrofloxacin susceptible strains of, e.g.: *Staphylococcus* spp., *Escherichia coli*, *Pasteurella* spp., *Klebsiella* spp., *Bordetella* spp., *Pseudomonas* spp. and *Proteus* spp.

5. CONTRAINDICATIONS

Do not use in animals with known hypersensitivity to enrofloxacin or other fluoroquinolones or to any of the excipients.
Do not use in animals that are epileptic or suffer from seizures since enrofloxacin may cause CNS stimulation.
Do not use in young dogs during their growth, i.e. in small breeds of dogs less than 8 months of age, in big breeds of dogs less than 12 months of age, in giant breeds of dogs less than 18 months of age.
Do not use in cats less than 8 weeks of age.
Do not use in growing horses because of possible deleterious damage on articular cartilage.

6. ADVERSE REACTIONS

Digestive tract disorders (e.g. diarrhoea) may occur in very rare cases. These signs are generally mild and transient.

Local reactions at injection site
In calves, transient local tissue reactions may occur in very rare cases and may be observed up to 14 days.
In pigs, after intramuscular administration of the product, inflammatory reactions may occur. They may persist up to 28 days after the injection.
In dogs, a moderate and transient local reaction (such as oedema) may occur.
The frequency of adverse reactions is defined using the following convention:
- very common (more than 1 in 10 animals treated displaying adverse reaction(s));
- common (more than 1 but less than 10 animals in 100 animals treated);
- uncommon (more than 1 but less than 10 animals in 1,000 animals treated);
- rare (more than 1 but less than 10 animals in 10,000 animals treated);
- very rare (less than 1 animal in 10,000 animals treated, including isolated reports).

If you notice any side effects, even those not already listed in this package leaflet or you think that the medicine has not worked, please inform your veterinary surgeon.

7. TARGET SPECIES

Cattle (calves), sheep, goats, pigs, dogs and cats.

8. DOSAGE FOR EACH SPECIES, ROUTE AND METHOD OF ADMINISTRATION

Intravenous, subcutaneous or intramuscular use.
Repeated injections should be made at different injection sites.
To ensure a correct dosage, body weight (bw) should be determined as accurately as possible to avoid underdosing.

Calves:
5 mg of enrofloxacin/kg bw, corresponding to 1 ml/10 kg bw, once daily for 3-5 days.
Acute mycoplasma-associated arthritis due to enrofloxacin susceptible strains of *Mycoplasma bovis*: 5 mg of enrofloxacin/kg bw, corresponding to 1 ml/10 kg bw, once daily for 5 days.
The product can be administered by slow intravenous or subcutaneous administration.
Not more than 10 ml should be administered at one subcutaneous injection site.

Sheep and goats
5 mg of enrofloxacin/kg bw, corresponding to 1 ml/10 kg bw, once daily by subcutaneous injection for 3 days.
Not more than 6 ml should be administered at one subcutaneous injection site.

Pigs:
2.5 mg enrofloxacin/ kg bw corresponding to 0.5 ml/10 kg bw once daily by intramuscular injection for 3 days.

Alimentary tract infection or septicaemia caused by *Escherichia coli*: 5 mg of enrofloxacin/kg bw, corresponding to 1 ml/10 kg bw, once daily by intramuscular injection for 3 days.
In pigs, the injection should be made in the neck at the ear base
Not more than 3 ml should be administered at one intramuscular site.

Dogs and cats:
5 mg enrofloxacin/kg bw corresponding to 1 ml/10 kg bw once daily by subcutaneous injection for up to 5 days.

As the vials should not be broached more than 40 times the user should select the most appropriate vial size according to the target species to be treated.

9. ADVICE ON CORRECT ADMINISTRATION

To ensure a correct dosage body weight of the animals should be determined as accurately as possible to avoid underdosing.

10. WITHDRAWAL PERIOD(S)

Calves:
Following intravenous injection: Meat and offal: 5 days.
Following subcutaneous injection: Meat and offal: 12 days.

Not authorised for use in animals producing milk for human consumption.

Sheep:
Meat and offal: 4 days.
Milk: 72 hours.

Goats:
Meat and offal: 6 days.
Milk: 96 hours.

Pigs:
Meat and offal: 13 days.

11. SPECIAL STORAGE PRECAUTIONS

Keep out of the sight and reach of children.
This veterinary medicinal product does not require any special storage conditions.
Do not use this veterinary medicinal product after the expiry date which is stated on the label after EXP. The expiry date refers to the last day of that month.
Shelf life after first opening the container: 28 days

When the container is broached for the first time, using the in-use shelf life which is specified on this package leaflet, the date on which any product remaining in the container should be discarded should be determined. This discard date should be written in the space provided on the label.

12. SPECIAL WARNINGS

Special warnings for each target species:
None.

Special precaution for use in animals:
Official and local antimicrobial policies should be taken into account when the product is used.
Fluoroquinolones should be reserved for the treatment of clinical conditions which have responded poorly, or are expected to respond poorly, to other classes of antimicrobials. Whenever possible fluoroquinolones should only be used based on susceptibility testing.
Use of the product including use deviating from the instructions given in the SPC may increase the prevalence of bacteria resistant to enrofloxacin and may decrease the effectiveness of treatment with all fluoroquinolones due to the potential for cross-resistance.

Special caution should be taken when using enrofloxacin in animals with impaired renal function.
Special caution should be taken when using enrofloxacin in cats because higher doses than recommended can cause retinal damage and blindness. For cats weighting less than 5 kg, the dosage of 25 mg/ml is more appropriate to avoid risk of overdosage.
Degenerative changes of articular cartilage were observed in calves treated orally with 30 mg enrofloxacin/kg body weight during 14 days.
The use of enrofloxacin in growing lambs at the recommended dose for 15 days caused histological changes in the articular cartilage, not associated to clinical signs.

Special precautions to be taken by person administering the veterinary medicinal product to animals:
People with known hypersensitivity to (fluoro)quinolones should avoid any contact with the product.
Valemas may cause skin and eye irritation. Avoid skin and eye contact. Wash any splashes from skin or eyes immediately with water.
Do not eat, drink or smoke whilst handling the product.
Care should be taken to avoid accidental self-injection. In case of accidental self-injection seek medical advice immediately and show the package leaflet or label to the physician
Wash hands after use.

Other precautions
In countries where feeding of fallen stock to scavenger bird populations is permitted as a conservation measure (see Commission Decision 2003/322/EC), the possible risk to hatching success should be considered before feeding carcasses of livestock recently treated with this product.

Use during pregnancy, lactation or lay
Laboratory studies in rats and rabbits have not produced any evidence of teratogenic effects but have shown evidence of foetotoxic effects at maternotoxic doses.

Mammals
The safety of the veterinary medicinal product has not been established during pregnancy and lactation. Use only accordingly to the benefit/risk assessment by the responsible veterinarian.

Interaction with other medicinal products and other forms of interaction
Do not use enrofloxacin concomitantly with antimicrobial substances acting antagonistically to quinolones (e.g. macrolides, tetracyclines or phenicols).
Do not use concurrently with theophylline as the elimination of theophylline may be delayed.
Care should be taken during the concomitant use of flunixin and enrofloxacin in dogs to avoid adverse drug reactions. The decrease in drug clearances as a result of co-administration of flunixin and enrofloxacin indicates that these substances interact during the elimination phase. Thus, in dogs, the co-administration of enrofloxacin and flunixin increased the AUC and the elimination half-life of flunixin and increased the elimination half-life and reduced the C_{max} of enrofloxacin.

Overdose (symptoms, emergency procedures, antidotes):
In cases of accidental overdoses digestive tract disorders (e.g. vomiting, diarrhoea) and neurological disorders may occur.
In pigs, no adverse effects were reported after the administration of 5 times the recommended dose.
Cats have been shown to suffer ocular damage after receiving doses of more than 15 mg/kg once daily for 21 consecutive days. Doses of 30 mg/kg given once daily for 21 consecutive days have been shown to cause irreversible ocular damage.
At 50 mg/kg given once daily for 21 consecutive days, blindness can occur.
In dogs, cattle, sheep and goats, overdose has not been documented.
In accidental overdose there is no antidote and treatment should be symptomatic.

Incompatibilities
In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products.

13. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCT OR WASTE MATERIALS, IF ANY

Medicines should not be disposed via wastewater or household waste.
Ask your veterinary surgeon how to dispose of medicines no longer required.
These measures should help to protect the environment.

14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED

15. OTHER INFORMATION

Pharmacodynamic properties

Mode of action

Two enzymes essential in DNA replication and transcription, DNA gyrase and topoisomerase IV, have been identified as the molecular targets of fluoroquinolones. Target inhibition is caused by non-covalent binding of fluoroquinolone molecules to these enzymes. Replication forks and translational complexes cannot proceed beyond such enzyme-DNAfluoroquinolone complexes, and inhibition of DNA and mRNA synthesis triggers events resulting in a rapid, drug concentration-dependent killing of pathogenic bacteria. The mode of action of enrofloxacin is bactericidal and bactericidal activity is concentration dependent.

Antibacterial spectrum

Enrofloxacin is active against many Gram-negative bacteria such as *Escherichia coli, Klebsiella* spp., *Actinobacillus pleuropneumoniae, Mannheimia haemolytica, Pasteurella* spp. (e.g. *Pasteurella multocida*), *Bordetella* spp., *Proteus* spp., *Pseudomonas* spp., against Gram-positive bacteria such as *Staphylococcus* spp. (e.g. *Staphylococcus aureus*) and against *Mycoplasma* spp. at the recommended therapeutic doses.

Types and mechanisms of resistance

Resistance to fluoroquinolones has been reported to arise from five sources, (i) point mutations in the genes encoding for DNA gyrase and/or topoisomerase IV leading to alterations of the respective enzyme, (ii) alterations of drug permeability in Gram-negative bacteria, (iii) efflux mechanisms, (iv) plasmid mediated resistance and (v) gyrase protecting proteins. All mechanisms lead to a reduced susceptibility of the bacteria to fluoroquinolones. Cross-resistance within the fluoroquinolone class of antimicrobials is common.

Pharmacokinetic particulars

Enrofloxacin is rapidly absorbed after parenteral injection. Bioavailability is high (approximately 100% in pig and cattle) with a low to moderate plasma protein binding (approximately 20 to 50%). Enrofloxacin is metabolized to the active substance ciprofloxacin at approximately 40 % in dogs and ruminants, less than 10 % in pigs and cats.

Enrofloxacin and ciprofloxacin distribute well into all target tissues, e.g. lung, kidney, skin, and liver, reaching 2- to 3-fold higher concentrations than in plasma. Parent substance and active metabolite are cleared from the body via urine and faeces.

Accumulation in plasma does not occur following a treatment interval of 24 h.

In milk, most of drug activity consists on ciprofloxacin. Overall drug concentrations peak at 2 hours after treatment showing an approximately 3-fold higher total exposure over the 24 hours dosing interval compared to plasma.

	Dogs	Cats	Pigs	Pigs	Cattle	Calves
Dose rate (mg/kg bw)	5	5	2.5	5.0	5.0	5.0
Route of administration	sc	sc	im	im	iv	sc
T_{max} (h)	0.5	2	2	2	/	1.2
C_{max} (µg/ml)	1.8	1.3	0.7	1.6	/	0.73
AUC (µg·h/ml)	/	/	6.6	15.9	7.11	3.09
Terminal half-life (h)	/	/	13.12	8.10	/	2.34
Elimination half-life (h)	4.4	6.7	7.73	7.73	2.2	/
F (%)	/	/	95.6	/	/	/

Pack-sizes:
1 x 50 ml
1 x 100 ml
1 x 250 ml

Not all pack sizes may be marketed.
For animal treatment only
To be supplied only on veterinary prescription.

UK and IE authorised veterinary medicinal product.

IE: POM Prescription Only Medicine
VPA 10836/005/001

UK: POM-V
Vm 11557/4003

Distributed in the UK and Ireland by:
Duggan Veterinary Supplies Ltd.
Holycross, Thurles,
Co. Tipperary, E41A093, Ireland

PARTICULARS TO APPEAR ON THE OUTER PACKAGE

Cardboard box 50 ml bottle
100 ml bottle
250 ml bottle

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

VALEMAS 50 mg/ml solution for injection for cattle, sheep, goats, pigs, dogs and cats
Enrofloxacin

2. STATEMENT OF ACTIVE SUBSTANCES

1 ml contains:
Active substance: enrofloxacin 50 mg
Excipient: n-Butyl alcohol.

3. PHARMACEUTICAL FORM

Solution for injection.

4. PACKAGE SIZE

1 x 50 ml
1 x 100 ml
1 x 250 ml

5. TARGET SPECIES

Cattle (calves), sheep, goats, pigs, dogs and cats.

6. INDICATION(S)

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7. METHOD AND ROUTE(S) OF ADMINISTRATION

Intravenous, subcutaneous or intramuscular use.
Read the package leaflet before use.

8. WITHDRAWAL PERIOD(S)

Calves:
Following intravenous injection: Meat and offal: 5 days.
Following subcutaneous injection: Meat and offal: 12 days.
Not authorised for use in animals producing milk for human consumption.

Sheep:
Meat and offal: 4 days.
Milk: 72 hours.

Goats:
Meat and offal: 6 days.
Milk: 96 hours.

Pigs:
Meat and offal: 13 days.

9. SPECIAL WARNING, IF NECESSARY

Read the package leaflet before use.

10. EXPIRY DATE

EXP. {month/year}
Shelf life after first opening the container: 28 days
Once opened use by: _____

11. SPECIAL STORAGE CONDITIONS

12. SPECIFIC PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCTS OR WASTE MATERIALS, IF ANY

Dispose of waste materials in accordance with local requirements.

13. THE WORDS "FOR ANIMAL TREATMENT ONLY" AND CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE, IF APPLICABLE

For animal treatment only
To be supplied only on veterinary prescription.
IE: POM

UK: POM-V

14. THE WORDS “KEEP OUT OF THE SIGHT AND REACH OF CHILDREN”

Keep out of the sight and reach of children.

15. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Marketing authorisation holder:
Fatro S.p.A.
Via Emilia 285
I-40064 Ozzano dell'Emilia BO
Italy

Distributed in the UK and Ireland by:
Duggan Veterinary Supplies Ltd.
Holycross, Thurles,
Co. Tipperary, E41A093, Ireland

16. MARKETING AUTHORISATION NUMBERS

Vm 11557/4003

17. MANUFACTURER’S BATCH NUMBER

Lot. {number}

PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE
100 ml label
250 ml label

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

VALEMAS 50 mg/ml solution for injection for cattle, sheep, goats, pigs, dogs and cats
Enrofloxacin

2. STATEMENT OF ACTIVE SUBSTANCES

1 ml contains:
Active substance: enrofloxacin 50 mg
Excipient: n-Butyl alcohol

3. PHARMACEUTICAL FORM

Solution for injection.

4. PACKAGE SIZE

100 ml
250 ml

5. TARGET SPECIES

Cattle (calves), sheep, goats, pigs, dogs and cats.

6. INDICATION(S)

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7. METHOD AND ROUTE(S) OF ADMINISTRATION

Intravenous, subcutaneous or intramuscular use.
Read the package leaflet before use.

8. WITHDRAWAL PERIOD(S)

Calves:
Following intravenous injection: Meat and offal: 5 days.

Following subcutaneous injection: Meat and offal: 12 days.
Not authorised for use in animals producing milk for human consumption.

Sheep:
Meat and offal: 4 days.
Milk: 72 hours.

Goats:
Meat and offal: 6 days.
Milk: 96 hours.

Pigs:
Meat and offal: 13 days.

9. SPECIAL WARNING, IF NECESSARY

Read the package leaflet before use.

10. EXPIRY DATE

EXP. {month/year}
Shelf life after first opening the container: 28 days
Once opened use by: _____

11. SPECIAL STORAGE CONDITIONS

12. SPECIFIC PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCTS OR WASTE MATERIALS, IF ANY

Dispose of waste materials in accordance with local requirements.

13. THE WORDS "FOR ANIMAL TREATMENT ONLY" AND CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE, IF APPLICABLE

For animal treatment only
To be supplied only on veterinary prescription.
IE: POM

UK: POM-V

14. THE WORDS "KEEP OUT OF THE SIGHT AND REACH OF CHILDREN"

Keep out of the sight and reach of children.

15. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Marketing autorisation holder:
Fatro S.p.A.
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I-40064 Ozzano dell'Emilia BO
Italy

Distributed in the UK and Ireland by:
Duggan Veterinary Supplies Ltd.
Holycross, Thurles,
Co. Tipperary, E41A093, Ireland

16. MARKETING AUTHORISATION NUMBERS

Vm 11557/4003

17. MANUFACTURER'S BATCH NUMBER

Lot. {number}

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS
50 ml label

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

VALEMAS 50 mg/ml solution for injection for cattle, sheep, goats, pigs, dogs and cats
Enrofloxacin

2. QUANTITY OF THE ACTIVE SUBSTANCE(S)

1 ml contains:
Active substance: enrofloxacin 50 mg

3. CONTENTS BY WEIGHT, BY VOLUME OR BY NUMBER OF DOSES

50 ml

4. ROUTE(S) OF ADMINISTRATION

Intravenous, subcutaneous or intramuscular use.

5. WITHDRAWAL PERIOD(S)

Calves:
Following intravenous injection: Meat and offal: 5 days.
Following subcutaneous injection: Meat and offal: 12 days.
Not authorised for use in animals producing milk for human consumption.

Sheep:
Meat and offal: 4 days.
Milk: 72 hours.

Goats:
Meat and offal: 6 days.
Milk: 96 hours.

Pigs:
Meat and offal: 13 days.

6. BATCH NUMBER

Lot {number}

7. EXPIRY DATE

EXP. {month/year}
Shelf life after first opening the container: 28 days
Once opened use by:_____

8. THE WORDS "FOR ANIMAL TREATMENT ONLY"

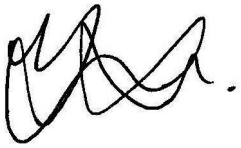
For animal treatment only.

UK and IE authorised veterinary medicinal product

POM

POM-V

Distributed in the UK and Ireland by:
Duggan Veterinary Supplies Ltd.



Approved: 07 September 2023