

# Enroject

Enrofloxacin

## IMM INJECTOR

انروجیکٹ آئی۔ایم۔ایم انجیکٹر



## Out of Farm

Quinolones have excellent potential of drug distribution throughout the udder cells after Intramammary administration.

(Gruet et al. 2001)



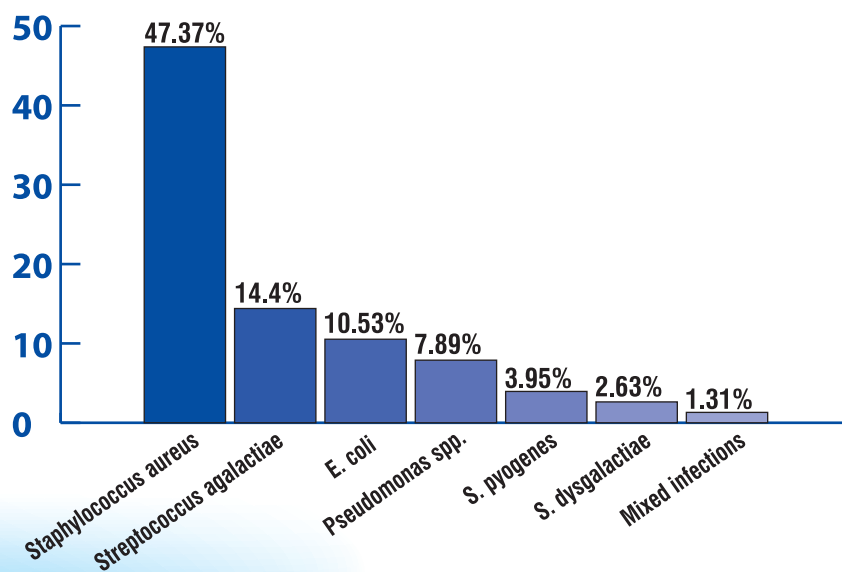
## Description

Enroject for Intramammary infusion into the Dairy Cow is a product which provides a wide range of bactericidal activity against Gram-Positive and Gram-negative organisms.

Enroject is a Stable, Non-Irritating Suspension of enrofloxacin containing the 300mg of enrofloxacin per disposable syringe.

Enrofloxacin (Quinolones) has highest potential of distribution throughout the udder after parenteral and intramammary administration. (Gruet et al., 2001)

## Mastitis Causing Bacteria



(Prabhakar et al., 1995)

## Indications

Enroject specially formulated for the treatment of acute and subacute mastitis in lactating dairy animals. It is active against gram-positive and gram-negative bacteria associated with mastitis. Enrofloxacin is a broad spectrum antibiotic in activity and non-irritant to udder cells.

## Powerful Quinolone

Covering many mastitis pathogens and mixed infections

	E. coli	Klebsiella spp.	Mycoplasma spp.	Streptococcus spp.	Staphylococcus spp.
<b>Enroject</b>	+++	+++	+++	+	+++
<b>β-lactams</b>	+	+	-	+++	+++
<b>Tetracyclines</b>	+	+	+	+	+
<b>Macrolides</b>	+	-	++	++	++
<b>Sulfonamides</b>	++	++	-	++	++

In lactating dairy cows and buffaloes Enroject provides bactericidal levels of the active antibiotic within short period of time. This rapid therapeutic Level of achievement is due to fast penetration and efficient absorption of enrofloxacin.

Enroject contains broad spectrum antibiotic which is effective against all major infectious mastitis pathogens *Staphylococcus aureus*, *Streptococcus agalactiae*, *E. coli*, *Pseudomonas* spp., *S. pyogenes*, *S. dysgalactiae* and *Mycoplasma* etc.

Mastitis therapy success depends upon certain factors like correct diagnosis, the drug selected, appropriateness of the route of administration, stage at which treatment is initiated, severity of udder pathology, supportive treatment, elimination of predisposing factors.

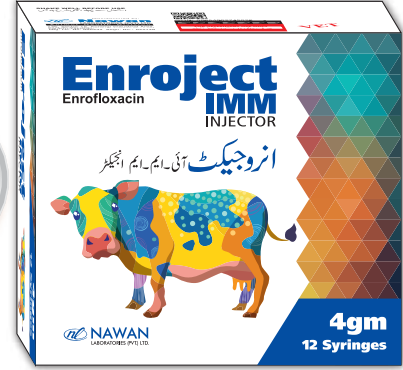
(Du Preez et al., 2000).

## Reasons for treatment failure

- 1 Lack of inadequate contact between bacteria and antibiotic.
- 2 Protection within Leukocytes.
- 3 Poor drug diffusion.
- 4 Microbial resistance to antibiotic.
- 5 Stopping treatment too early.

**Combination of Intramuscular or Intravenous injection with Intramammary infusion over 3 days period resulted in the highest mastitis cure rate.**

(Anderson. et al., 1982)



### HOW TO USE IT



1 After milking is complete, thoroughly clean and disinfect the end of the teat (e.g. with cotton wool soaked in methylated spirit)



2 Hold the barrel of the syringe firmly in one hand and gently twist and pull the protective cap in a straight line to remove it. DO NOT BEND THE NOZZLE. Take care not to contaminate the nozzle.



3 Insert the nozzle fully into the teat canal and apply steady pressure on the syringe plunger until the full dose has been delivered. Holding the end of the teat with one hand, gently massage upwards with the other to aid dispersion of the antibiotic into the quarter.



4 Finally immerse the teats in a teat dip.

**COMPOSITION:** Each 4 gm syringe contains:  
Enrofloxacin ..... 300 mg  
(Mfg. Nawan Specs.)

#### INDICATIONS:

Enroject specially formulated for the treatment of acute and subacute Mastitis in Lactating animals (Cattle & Buffaloes). Enrofloxacin has antibacterial activity against a broad spectrum of gram-negative and gram-positive bacteria associated with mastitis *Staphylococcus aureus*, *Streptococcus agalactiae*, *E. coli*, *Pseudomonas spp.*, *S. pyogenes*, *S. dysgalactiae* and *Mycoplasma* etc.

#### DOSAGE & ADMINISTRATION:

Infuse one syringe in each affected teat immediately after milking. Repeat after 12 hours interval if necessary. Clean and disinfect teat before each treatment.

#### WITHDRAWAL PERIOD:

Milk: 72 Hours, Meat: 4 Days

#### STORAGE CONDITIONS:

Store below 30°C in a dark and dry place away from children.

## انروجیکٹ آئی۔ایم۔ایم انجیکٹر

علامات:

انروجیکٹ دودھ دینے والے جانوروں (گائے، بھینس) میں ساڑھ کے علاج کے لئے خاص فارمولا ہے۔ انروفلوکساسین ایک وسیع الاثر اینٹی بائیوٹک ہے جو ساڑھ کا باعث بننے والے گرام مثبت اور گرام منفی بیکٹیریا اسٹیفیلوکوکس اور ایس، اسٹریپٹوکوکس اینڈکیشی، ای کولائی، سوڈوموناس، اسٹریپٹوکوکس پائوجینیس، اسٹریپٹوکوکس ڈسکلیش اور مائیکوپلازما وغیرہ کے خلاف انتہائی مؤثر ہے۔

خوراک اور طریقہ استعمال:

ایک سرخ متاثرہ تھن میں دودھ نکالنے کے فوراً بعد استعمال کریں۔ ضرورت پڑنے پر ۱۲ گھنٹے کے بعد دوبارہ استعمال کریں۔ سرخ استعمال کرنے سے پہلے تھنوں کو اچھی طرح صاف کر لیں۔

ودڈرال کا عرصہ: دودھ: ۷۲ گھنٹے، گوشت: ۴ دن

ہدایات: ۳۰ ڈگری سے کم درجہ حرارت پر خشک اور نسبتاً تاریک جگہ پر بچوں کی پہنچ سے دور رکھیں۔

MANUFACTURED BY:



**NAWAN**  
LABORATORIES (PVT) LTD.

Animal Health Division  
136-138, Sector 15, Korangi Industrial Area,  
Karachi-Pakistan.