

Over **10 million** cows treated in the UK & ROI since 2000*

Trials in **8,000** cows over 12 years

EPRINEX® has been in the market for **over 2 decades**

12 separate research studies...

...in **8** different countries

Up to **2.6** additional litres of milk per cow, per day¹

Delivering results for **1,000's** of farmers



BEAT THE PARASITES .COM



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The Volume of Evidence Factsheet

- 1 Sanchez, J. *et al.* (2002). The effect of eprinomectin treatment at calving on reproduction parameters in adult dairy cows in Canada. *Preventative Veterinary Medicine*, 56, pp. 165-177.
- 2 Paul, A. *et al.* (2000). Proceedings of the 45th American Association of Veterinary Parasitologists Annual Meeting, Salt Lake City, p68.
- 3 Reist, M. *et al.* (2011). Effect of eprinomectin treatment on milk yield and quality in dairy cows in South Tyrol, Italy. *Veterinary Record*, 168, pp. 484-487.
- 4 Gogolewski, R.P. *et al.* (1997). Effect of simulated rain, coat length and exposure to natural climatic conditions on the efficacy of a topical formulation of eprinomectin against endoparasites of cattle. *Veterinary Parasitology*, 69, pp. 95-102.
- 5 Forbes, A. *et al.* (2004). Impact of eprinomectin on grazing behaviour and performance in dairy cattle with sub-clinical gastrointestinal nematode infections under continuous stocking management. *Veterinary Parasitology*, 125, pp. 353-364.
- 6 Charlier, C. *et al.* (2007). Predicting milk-production responses after an autumn treatment of pastured dairy herds with eprinomectin. *Veterinary Parasitology*, 143, pp. 322-328.
- 7 Reist, M. *et al.* (2002). Effect of a treatment with eprinomectin or trichlorfon on the yield and quality of milk produced by multiparous dairy cows. *Veterinary Record*, 151, pp. 377-380.
- 8 Nodtvelt, A. *et al.* (2002). Increase in milk yield following eprinomectin treatment at calving in pastured dairy cattle. *Veterinary Parasitology*, 105, pp. 191-206.
- 9 McPherson, M.B. *et al.* (2001). Effect of a peri-parturient eprinomectin treatment of dairy cows on milk production. *New Zealand Veterinary Journal*, 49, pp. 106-110.
- 10 Little, G. *et al.* (2002). Effect of eprinomectin at calving on milk production of dairy cows. Proceedings of the 22nd World Buiatrics Congress, Hannover.
- 11 Schoett, S. *et al.* (2002). Eradication of chorioptic mange in two dairy farms. Proceedings of the 22nd World Buiatrics Congress, Hannover.
- 12 Watson, C.L. and Forbes A.B. (2000). An outbreak of sarcoptic mange in dairy cows. *UK Vet Livestock*, 5(4), pp. 48-50.
- 13 Verschave, S.H. *et al.* (2004). Non-invasive indicators associated with the milk yield response after anthelmintic treatment at calving in dairy cows. *BMC Veterinary Research*, 10, 264.

*Assuming 1 dose per cow, per year at 65mls per dose. Based on sales of EPRINEX products, UK & ROI, Kynectec data 2000-2020. Based on treating cows weighing 650kg

Studies carried out using EPRINEX Pour On for Beef and Dairy Cattle (eprinomectin). EPRINEX products have the same formulation, see HPR (2018) IPAR. Available at: https://www.hpra.ie/img/uploaded/swedocuments/Public_AR_VPA10454-034-001_07122018154613.pdf [Accessed 13 May 2020].

EPRINEX® contains eprinomectin. UK: POM-VPS; IE: LM. Further information available in the SPCs or from Boehringer Ingelheim Animal Health UK Ltd, RG12 8YS, UK. Tel: 01344 746960 (sales) or 01344 746957 (technical) IE Tel: 01 291 3985 Email: vetenquiries@boehringer-ingelheim.com. EPRINEX® and the Steerhead® logo are registered trademarks of the Boehringer Ingelheim Group. ©2020 Boehringer Ingelheim Animal Health UK Ltd. All rights reserved. Date of preparation: August 2020. UI-BOV-0125-2020. Use medicines responsibly.



Eprinex
(eprinomectin)



EPRINEX[®] delivers in the field



EPRINEX has a heritage of over 2 decades of proven use by thousands of farmers who have successfully treated millions of cows all over the world.

It is trusted by farmers to deliver the benefits that we know you are looking for:

- Prolonged effectiveness against a broad spectrum of worms
- Improved calving to conception intervals compared to animals not treated with **EPRINEX**¹
- Fast acting – 88% of cattle are free from worm eggs three days after treatment²

And it is brought to you by Boehringer Ingelheim Animal Health, manufacturers of leading parasite treatments.

EPRINEX is a pioneer product that was developed and brought to the market in 1998. It is the only zero milk-withhold wormer for dairy cows that has been used in research studies over a period of 12 years on more than 8,000 dairy cows, and is proven to remove damaging gutworms and thus increase yields by up to 2.6 litres per cow per day³.

EPRINEX:

- Effective against multiple stages of gastrointestinal nematodes and lungworm
- Controls external parasites including biting and sucking lice, and chorioptic and sarcoptic mange mites
- Is weatherproof⁴
- Zero milk withhold means it can be used at any stage of production
- Removes damaging gutworms and lungworm and their negative impact on performance

That's why so many farmers trust it to deliver results.

Millions of cows in the field and over 8,000 cows in twelve separate trials can't be wrong!

Although adult cattle tend not to suffer clinical disease or show any external clinical signs associated with gutworm infection, the past decade has produced a wealth of evidence to show that parasites do indeed have an impact and that treating dairy cows can improve productivity.

It has also been demonstrated that treating infected cattle with EPRINEX has a significant impact on cattle eating habits, increasing their consumption of grass by increasing grazing time.⁵

In study after study, by removing damaging gutworms, **EPRINEX** has been shown to increase milk yield. Highlights of these clinical studies are included below:

Number of cows	Country	Yield increases	Author(s)
119 herds	Belgium	1.20kg/cow/day	Charlier et al (2007) ⁶

Belgian study with EPRINEX

One hundred and nineteen herds in Flanders were randomly assigned to treatment with EPRINEX or a placebo. The group treated with EPRINEX yielded an estimated 1.2 kg/cow/day more milk than the control group. This study showed that treating cows with eprinomectin in the autumn reduces the level of antibodies to *Ostertagia ostertagi* (gutworm) in the bulk milk tank, demonstrating the link between a reduced internal parasite burden and increased production.

Number of cows	Country	Yield increases	Author(s)
742 cows	Switzerland	2.14kg/cow/day	Reist et al (2002) ⁷

A rapid and sustained increase in milk production

In a study carried out across 79 farms in an Alpine region of Switzerland, cows treated with EPRINEX around the time of calving produced on average 2.14 kg/day more milk. This effect was sustained throughout the lactation.

Number of cows	Country	Yield increases	Author(s)
942 cows & heifers	Canada	0.94kg/cow/day	Nodtvet et al (2002) ⁸

More milk for seven months after treatment

Cows treated at calving in a Canadian study produced 0.94 kg more milk per day for the seven month duration of the study, compared to those treated with a placebo.

Number of cows	Country	Yield increases	Author(s)
105 cows	Italy	2.63ltrs/cow/day	Reist et al (2011) ⁹

Improved milk yield and lower somatic cell count

In a study in northern Italy, cows treated with EPRINEX produced more milk at 22, 62 and 131 days after treatment than untreated controls. A trend towards lower somatic cell count in treated cows was also detected in this study.

Number of cows	Country	Yield increases	Author(s)
849 cows & heifers	New Zealand	0.42ltrs/cow/day	McPherson et al (2001) ⁹

Increased milk solids

In a study carried out in New Zealand, cows and heifers from three spring calving dairy herds were treated with EPRINEX around the time of calving. Overall, treated animals produced significantly more milk than untreated controls; 19.28 litres/day against 18.86 litres/day. The increase was more pronounced in multiparous cows. Significant increases in milk solids were also observed.

Number of cows	Country	Yield increases	Author(s)
2,500 cows & heifers	Australia	0.47ltrs/cow/day	Little et al (2002) ¹⁰

Milk up down under

In Australia, increases in milk production have been reported in cows treated with EPRINEX at calving versus animals treated with placebo. At 100 days of lactation treated cows had produced significantly more milk and increases in the fat and protein content of the milk produced were also reported.

Number of cows	Country	Yield increases	Author(s)
930 cows/1,100 cows	Germany	1.00ltrs/cow/day & 0.8ltrs/cow/day	Schoet et al (2000) ¹¹

German cows deliver

In Germany, a single herd treatment with EPRINEX at the end of the grazing season on two farms with a high prevalence of chorioptic mange increased milk production by 1 litre per day on one farm and 0.8 litres on a second.

Number of cows	Country	Yield increases	Author(s)
120 cows	UK	2.00kg/cow/day	Watson & Forbes (2000) ¹²

Up by 2kg per cow in the UK

In a UK herd, milk production increased by approximately 2 kg/cow/day after a single treatment with EPRINEX to control an outbreak of sarcoptic mange.

Number of cows	Country	Yield increases	Author(s)
477 cows and heifers	Belgium	0.97kg/cow/day	Verschave et al., (2004) ¹³

Sustained milk increase for an average of 274 days

234 grazing heifers and cows were treated with EPRINEX within 15 days of calving. The trial found through individual milk sampling of each animal that milk yield increased by 0.97kg/day/cow in the treated versus control animals. This milk increase was sustained throughout the lactation for an average of 274 days.