

## Efficacy of friulimicin

Friulimicin offers the unique possibility to establish a new class of antibiotics without pre-existing levels of resistance for veterinary use and avoid all the issues generated by the massive utilization of drugs and drug classes already in use for humans.



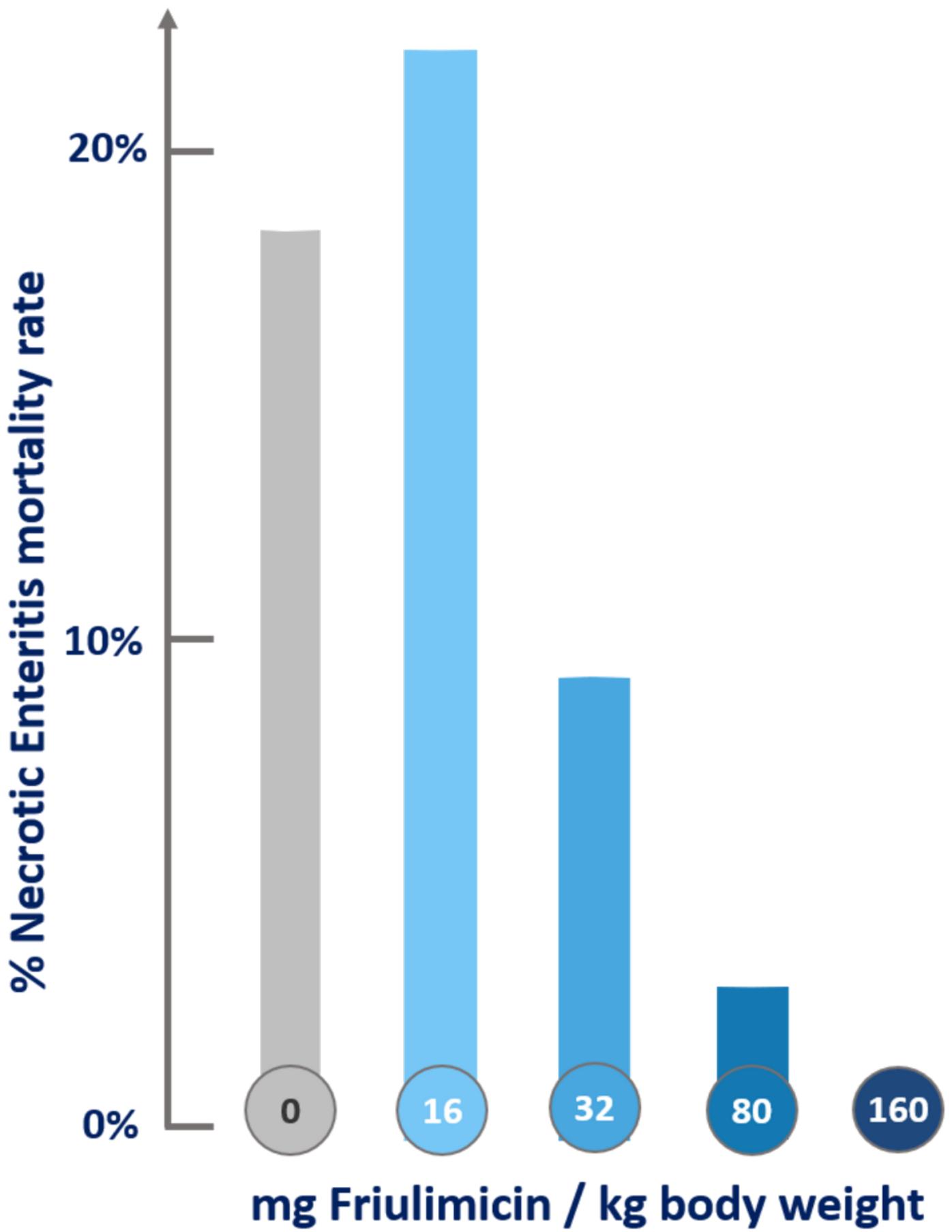
## Necrotic enteritis in poultry

Necrotic enteritis is an economically highly relevant disease in broiler chicken and turkeys, caused by the Gram-positive bacterium *Clostridium perfringens*. Toxins produced by this pathogen cause damage to the small intestine and liver lesions. Usually the course of the disease is very short, often with only signs of a severe depression quickly followed by a sudden increase in flock mortality. The disease is a worldwide problem, usually associated with outbreaks in chicken of two weeks of age and older. The mortality rate can range from 2% - 50% in untreated chicken; a depression of growth rate and feed efficiency of surviving birds becomes noticeable by day 35 due to intestinal damage and subsequent reduction in digestion and absorption of food. Outbreaks are usually prevented by adding antibiotics, such as penicillin, virginiamycin, lincomycin, bacitracin or avilamycin, to the feed. But reports indicate increasing levels of resistance for such drugs in farm animals. Necrotic enteritis is a costly disease, with economic damages of US\$ 6 billion in 2015 to producers.

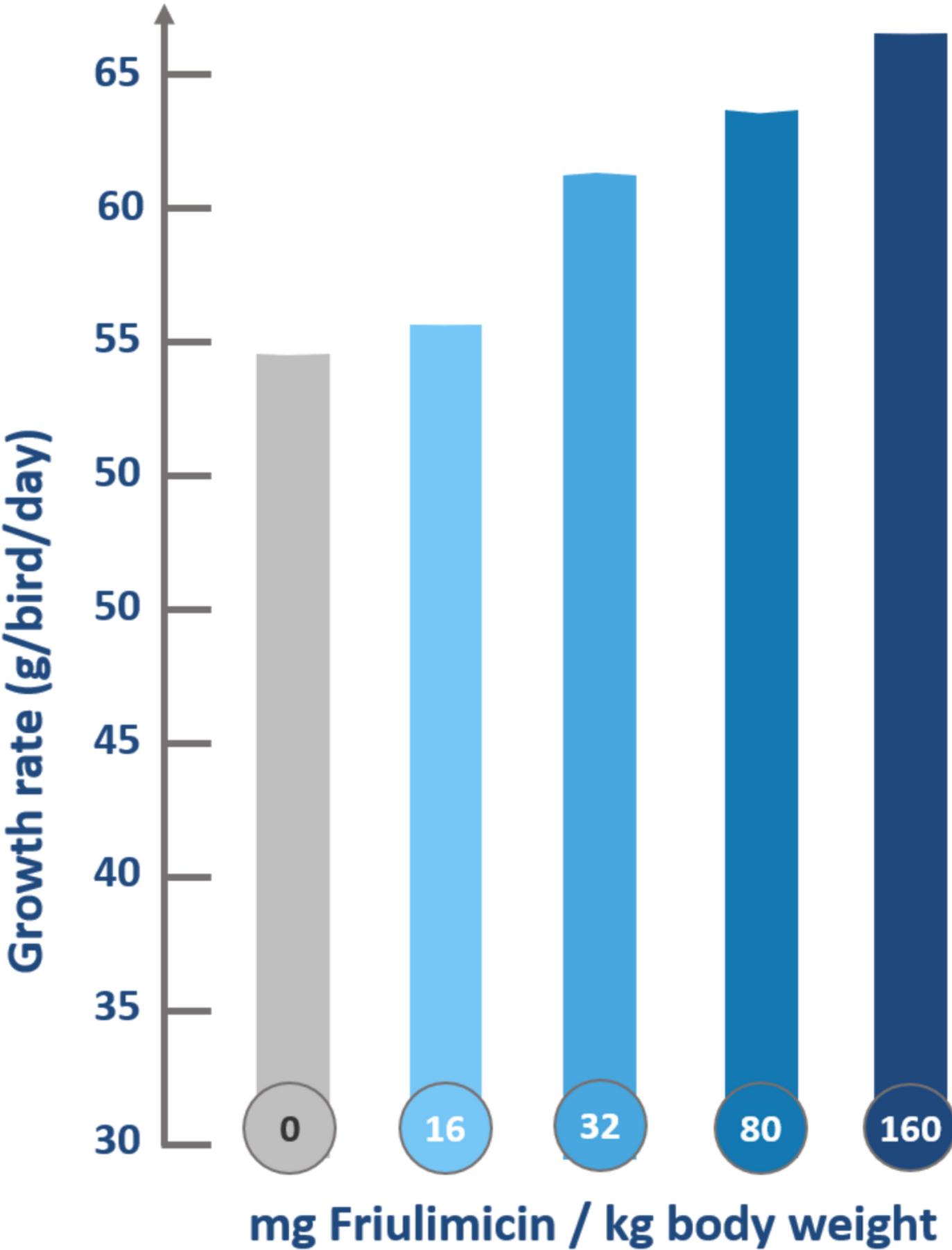
# Effect of friulimicin on mortality rate in chicken with necrotic enteritis

The efficacy of friulimicin for the treatment of necrotic enteritis in flocks of growing chicken was investigated in a pilot study. The infection was caused by oral administration of *Clostridium perfringens* to the diet of approximately 400 chickens. Mortality rates and intestinal lesion prevalence was compared between groups fed with different amounts of friulimicin and a non-medicated control. The study showed a significant linear effect ( $p=0.04$ ) in reducing the mortality due to necrotic enteritis for the treatment with friulimicin. Treatment with friulimicin also had a strong and significant dose-dependent effect on the necrotic enteritis lesion score reduction in the intestine and the growth rate of the animals.

Effect of friulimicin on mortality rate (days 14-21)



Effect of friulimicin on growth rate



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