

SEAOHUN Meeting Hanoi

GLOBAL RESPONSIBLE USE OF FLUOROQUINOLONES IN VETERINARY MEDICINE

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Hanoi November 14th 2018





Protecting and improving the health of animals



- > Animal Health Industry contributes especially to:
 - > #2 "Zero Hunger" & #3 "Good Health and Well-Being" (further: #8, 9 & 12)
 - ...ensuring long-term business success
 - ...generating a positive societal impact
 - ...acting responsibly in everything we do

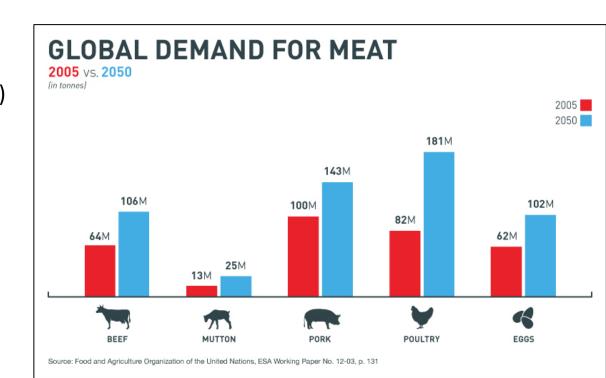


The world around us:

how the Animal Health industry contribute to health and well-being of animals

Food source and our contribution:

- Better secured and safer food = better nutrition and health
- Increased productivity needed = economic growth
- **Facts:**
 - Livestock provides:
 - ➤ 18% of global calories
 - > 25% of global proteins
 - Animal products (milk, egg, honey, meat etc.) basis of human nutrition
 - Increasing demand for animal protein.



The world around us:



how the Animal Health industry contribute to health and well-being of animals

Our contribution:

- Responsible use of veterinary medicinal products,
 - > esp. responsible use of antimicrobials.
- Responsible use of antibiotics reduces animal losses, thus increases availability of animal protein.
 - > Resulting in efficient and sustainable animal production.
- Prevention of animal infections and subsequent diseases:
 - > Animal Management, Hygiene, vaccination.
- > Services and products to increase productivity (training, innovation, technologies etc.)
 - Increase resilience in livestock farming (smallholders, women farmers).



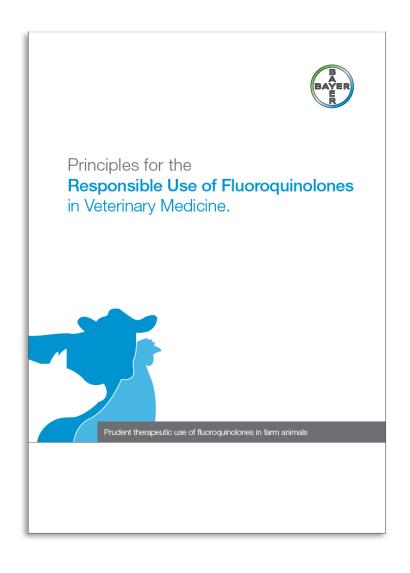
Animal Health Commitments & Actions: Antimicrobial Use

Interconnected challenges – commitment to five principles:

- 1) Protect animal health and welfare in a unified One Health approach
- 2) Use antibiotics judiciously and responsibly
- 3) Invest in development of products for prevention and treatment
- 4) Promote disease prevention and increase access to products and expertise
- 5) Increase knowledge, transparency and communications

B A BAYER E R

Bayer Animal Health Commitments & Actions: Principles on Antimicrobial Use

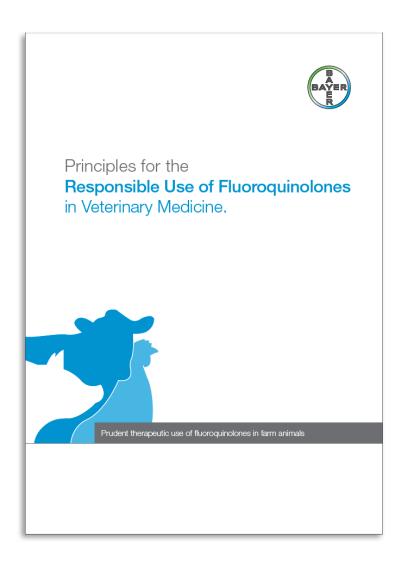


Objection of fluoroquinolone use in farm animals:

- Use as performance enhancer/ growth promoter in animal production
- Use in aquaculture.
- In feed use.
- Use for viral infections and trivial bacterial infections.
- Routine prophylactic use in healthy animals.
- Any use deviating from the prudent use principles.
- Any use of unregistered products or counterfeits.



Bayer Animal Health Commitments & Actions: Principles on Antimicrobial Use



- Fluoroquinolones available by veterinary prescription only and under veterinary supervision.
- FQs used after the diagnosis of a bacterial infection
- Only fluoroquinolones that have been registered for veterinary use by competent authorities,
- Fluoroquinolones should only be used as directed on the product label
- Whenever possible, fluoroquinolones should only be used after isolation and determination of the susceptibility of the causative bacteria. As this is not always feasible for the individual animal due to unacceptable suffering, distress or lasting harm, the susceptibility profile of the bacterial pathogens should be regularly monitored on farm level.
- Records of all antimicrobial usage in food producing animals should be kept by the veterinarian or the farmer.



Responsible use leads to healthy animals & sustainable use of antimicrobials





Baytril for farm animals

Rapid results to assure your success





Active ingredient:
Enrofloxacin
(Fluoroquinolone of 2nd generation)

Most extensively documented product with more than 3000 published papers

For Cattle, Swine and Poultry

Fast acting and quick recovery after administration

Broad spectrum, rapidly kill G(+), G(-) and Mycoplasma

Tailor-made formulation, has **8** different presentations

Proven efficacy with more than 27 years experiences

BAYER E R

Bayer Animal Health Commitments & Actions: Principles on Antimicrobial Use

> Fluoroquinolone (enrofloxacin) susceptibility data for porcine respiratory

pathogens

| Species | Region / Program (Years) | n | MIC ₅₀ | MIC ₉₀ | R (%) |
|--------------------------|-----------------------------|-----|-------------------|-------------------|--------|
| P. multocida | D, Bayer Monitoring (07-18) | 386 | 0.015 | 0.03 | 0.0 |
| | D, GERM-Vet (12/13) | 150 | 0.008 | 0.03 | 0.0 |
| | D, GERM-Vet (14/15) | 145 | 0.008 | 0.015 | 0.7 |
| | EU, VetPath III (09-12) | 152 | 0.015 | 0.03 | 0.0 |
| S. suis | D, Bayer Monitoring (07-18) | 376 | 0.5 | 1 | 1.3 |
| | D, GERM-Vet (14/15) | 147 | 0.5 | 0.5 | 0.0 |
| | EU, VetPath III (09-12) | 151 | 0.5 | 0.5 | 0.7 |
| B. bronchiseptica | D, Bayer Monitoring (07-18) | 261 | 0.5 | 1 | (1.2)* |
| | D, GERM Vet (11/12) | 90 | 0.5 | 0.5 | (0.0)* |
| | D, GERM-Vet (14/15) | 166 | 0.5 | 0.5 | (3.6)* |
| | EU, VetPath III (09-12) | 118 | 0.5 | 1 | (5.1)* |
| A. pleuro- pneumoniae | D, Bayer Monitoring (07-18) | 179 | 0.06 | 0.06 | 0.0 |
| | D, GERM-Vet (12/13) | 102 | 0.06 | 0.06 | 0.0 |
| | D, GERM-Vet (14/15) | 101 | 0.06 | 0.12 | 0.0 |
| | EU, VetPath III (09-12) | 158 | 0.03 | 0.06 | 1.3 |
| H. parasuis | D, Bayer Monitoring (07-18) | 113 | 0.06 | 0.03 | (1.8)* |
| | EU, VetPath III (09-12) | 68 | 0.008 | 0.06 | (0.0)* |



Bayer Animal Health Commitments & Actions: Principles on Antimicrobial Use

Fluoroquinolone (enrofloxacin) susceptibility data for bovine respiratory pathogens

| Species | Region / Program (Years) | n | MIC ₅₀ | MIC ₉₀ | R (%) |
|----------------|-----------------------------|-----|-------------------|-------------------|-------|
| P. multocida | D, Bayer Monitoring (07-18) | 111 | 0.015 | 0.03 | 0.0 |
| | D, GERM-Vet (12/13) | 20 | 0.015 | 0.03 | 0.0 |
| | D, GERM-Vet (14/15) | 75 | 0.008 | 0.03 | 1.3 |
| | EU, VetPath III (09-12) | 134 | 0.015 | 0.03 | 3.0 |
| M. haemolytica | D, Bayer Monitoring (07-18) | 69 | 0.03 | 0.5 | 0.0 |
| | D, GERM-Vet (12/13) | 35 | 0.03 | 0.5 | 0.0 |
| | D, GERM-Vet (14/15) | 66 | 0.06 | 0.5 | 0.0 |
| | EU, VetPath III (09-12) | 149 | 0.03 | 0.25 | 0.7 |



Conclusion

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Animal Health Commitments & Actions: Antimicrobial Use

- > With support from and working together with the animal health industry, we:
 - > support veterinarians, farmers and all animal caretakers with the aim to protect the health and well-being of animals. Prerequisites are:
 - Antimicrobials to be available for veterinary use
 - Veterinary oversight, antimicrobial use data collection & national surveillance
 - Antimicrobials seen as an essential part of sustainable livestock production,
 - > supply products and services to assure food security (healthy animals safe food source),
 - communicate and cooperate in the frame of the 'One Health' concept,
 - support national responsibilities
 - contribute to the SGDs, esp. #2 (Zero Hunger) & 3 (Health and Well-being),
 - invest in Innovation to find new antimicrobials and other treatment options.



Because healthy animals make the world a better place

Thank you!

