1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Tilmovet 250 mg/ml Concentrate for Oral Solution for pigs, chickens, turkeys *and cattle (calves)*

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

Active substance:

Tilmicosin: 250 mg

Excipients:

Qualitative composition of excipients and other constituents
Propyl gallate (E310)
Disodium edetate
Phosphoric acid concentrated
Purified water

Clear yellow to amber solution

3. CLINICAL INFORMATION

3.1 Target species

Chickens (broilers and pullets), turkeys, pigs and cattle (calves).

3.2 Indications for use for each target species

Pigs: For the treatment and metaphylaxis of respiratory infections associated with *Mycoplasma hyopneumoniae*, *Pasteurella multocida and Actinobacillus pleuropneumoniae*. The presence of the disease in the herd must be established before the veterinary medicinal product is used.

Chickens:
For the treatment and metaphylaxis of respiratory infections in poultry flocks associated with *Mycoplasma gallisepticum and Mycoplasma synoviae.* The presence of the disease in the herd must be established before the veterinary medicinal product is used.

Turkeys: For the treatment and metaphylaxis of respiratory infections in turkey flocks associated with *Mycoplasma gallisepticum* and *Mycoplasma synoviae.* The presence of the disease in the herd must be established before the veterinary medicinal product is used.

Cattle (calves): For the treatment and metaphylaxis of respiratory infections associated with *Mannheimia haemolytica, Pasteurella multocida, Mycoplasma bovis and Mycoplasma dispar.* The presence of the disease in the herd must be established before the veterinary medicinal product is used.

3.3 Contraindications

Do not administer to ruminating animals with active rumen function.

Do not use in cases of hypersensitivity to the active substance or to any of the excipients.
Do not allow horses or other equines access to drinking water containing tilmicosin..
Horses fed with water containing tilmicosin may present signs of toxicity with lethargy, anorexia, reduction of feed consumption, loose stools, colic, distension of the abdomen and death.

3.4 Special warnings

Tilmicosin should not be administered by injection to pigs. The veterinary medicinal product contains disodium edetate. The uptake of medicated water can be altered as a consequence of illness. If the uptake is insufficient alternative treatment may be required.

Repeated use of the veterinary medicinal product should be avoided by improving management practices and thorough cleansing and disinfection.

Cross-resistance has been shown between tilmicosin and other macrolides (like tylosin, erythromycin) or lincomycin. Use of the veterinary medicinal product should be carefully considered when susceptibility testing has shown resistance to other macrolides or lincosamides because its effectiveness may be reduced.

3.5 Special precautions for use

Special precautions for safe use in the target species:

Do not use when there is resistance to tilmicosin or cross resistance to other macrolides (like tylosin, erythromycin) or lincomycin.

Inappropriate use of the veterinary medicinal product may increase the prevalence of bacteria resistant to tilmicosin and may decrease the effectiveness of treatment with tilmicosin related substances.

Use of the veterinary medicinal product should be based on identification and susceptibility testing of the target pathogen(s). If this is not possible, therapy should be based on epidemiological information and knowledge of susceptibility of the target pathogens at farm level, or at local/regional level.

Use of the veterinary medicinal product should be in accordance with official, national and regional antimicrobial policies.

An antibiotic with a lower risk of antimicrobial resistance selection (lower AMEG category) should be used for first line treatment where susceptibility testing suggests the likely efficacy of this approach.

Special precautions to be taken by the person administering the veterinary medicinal product to animals:

People with known hypersensitivity to tilmicosin should avoid contact with the veterinary medicinal product. The veterinary medicinal product may cause irritation or sensitisation by skin contact.
Avoid skin and ocular contact. Personal protective equipment consisting of protective gloves and protective clothes should be worn when handling the veterinary medicinal product.
Do not eat, drink or smoke when handling this product.
In case of contact with skin or eyes, rinse abundantly with fresh water. If irritation persists and in case of accidental ingestion, seek medical advice immediately and show the package leaflet or the label to the physician, or call a poison center (dangers linked to disturbances in cardiac conduction).
Wash hands after use.

Special precautions for the protection of the environment:

Not applicable

3.6 Adverse events

Chickens (broilers and pullets), turkeys, pigs and cattle (calves):

Very rare (<1 animal / 10,000 animals treated, including isolated reports)	Decreased drinking

Reporting adverse events is important. It allows continuous safety monitoring of a veterinary medicinal product. Reports should be sent, preferably via a veterinarian, to either the marketing authorisation holder or its local representative or the national competent authority via the national reporting system. See the package leaflet for respective contact details.

3.7 Use during pregnancy, lactation or lay

Pregnancy and lactation:
The safety of the veterinary medicinal product has not been established during pregnancy and lactation.. Use only according to the benefit-risk assessment by the responsible veterinarian.

3.8 Interaction with other medicinal products and other forms of interaction

Tilmicosin may lessen the antibacterial activity of β-lactam antibiotics

Do not use simultaneously with bacteriostatic antimicrobial agents.

3.9 Administration routes and dosage

For oral use only. The veterinary medicinal product must be diluted in drinking water or milk replacer before administration.

To ensure a correct dosage, body weight should be determined as accurately as possible. The intake of medicated water depends on the clinical condition of the animals. In order to obtain the correct dosage the concentration of tilmicosin may need to be adjusted accordingly.

Pigs:
15-20 mg tilmicosin per kg body weight for 5 days, i.e. 6-8 ml of veterinary medicinal product for 100 kg body weight corresponding to 80 ml of veterinary medicinal product per 100 litres of drinking water for 5 days.
Chickens (broilers and pullets):
15-20 mg tilmicosin per kg body weight for 3 days, i.e. 6-8 ml of veterinary medicinal product for 100 kg body weight corresponding to 30 ml of veterinary medicinal product per 100 litres of drinking water for 3 days.
Turkeys:
10-27 mg tilmicosin per kg body weight for 3 days, i.e. 4-11 ml of veterinary medicinal product for 100 kg body weight corresponding to 30 ml of veterinary medicinal product per 100 litres of drinking water for 3 days.
Calves:
12.5 mg tilmicosin per kg body weight two times per day for 3-5 days, i.e. 1 ml of veterinary medicinal product for 20 kg body weight two times per day for 3-5 days.

One 960 ml bottle is sufficient to medicate 1200 liters of drinking water for pigs or 3200 liters of drinking water for broilers, turkeys and pullets.
One 960 ml bottle is sufficient to medicate drinking water or milk replacer for 48 – 80 calves (40 kg b.w.).
One 240 ml bottle is sufficient to medicate drinking water or milk replacer for 8 calves (60 kg b.w.).

Medicated drinking water should be prepared fresh every 24 hours using only clean water.
Medicated milk replacer should be prepared fresh every 4 hours using only clean water.

If signs of disease do not significantly improve within 3-5 days, the diagnosis should be re-evaluated and treatment changed.

Do not administer to pigs in a wet feeding system.

3.10 Symptoms of overdose (and where applicable, emergency procedures and antidotes)

Pigs drink less water when a dose of 300 to 400 mg/liter (1.5 to 2 times the recommended dose) is administered. Although this will result in less intake of tilmicosin, it might lead to dehydration of the animals. Replace with untreated water when needed.

No symptoms were seen in poultry treated at 375 mg/liter for 5 days. A dose of 75 mg/liter for 10 days resulted in less consistent faeces.

No symptoms of overdose were noticed in turkeys treated at 375 mg/liter of drinking water for 3 days. No symptoms were noticed at 75 mg/liter for 6 days.

Except for a slight decrease in milk intake, no symptoms of overdose were seen in calves treated at 5 times the recommended dose or for twice the recommended treatment period.

3.11 Special restrictions for use and special conditions for use, including restrictions on the use of antimicrobial and antiparasitic veterinary medicinal products in order to limit the risk of development of resistance.

Not applicable.

3.12 Withdrawal periods

Meat and offal:
Pigs: 14 days
Cattle (calves): 42 days.
Chickens (broilers and pullets): 12 days
Turkeys: 19 days

Not for use in birds producing eggs for human consumption.

Do not use within 2 weeks before the start of the laying period.

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

4. PHARMACOLOGICAL INFORMATION

4.1 ATCvet code:

QJ01FA91

4.2 Pharmacodynamics

Tilmicosin is a mainly bactericidal semi-synthetic antibiotic of the macrolide group. It is believed to affect bacterial protein synthesis.

Tilmicosin has a wide spectrum of activity against Gram-positive organisms and is particularly active against Pasteurella, Actinobacillus (Haemophilus) and Mycoplasma organisms of bovine, porcine and avian origin. Tilmicosin has some activity against certain Gram-negative micro-organisms. Cross resistance between tilmicosin and other macrolide antibiotics has been observed. Macrolides inhibit protein synthesis by reversibly binding to the 50S ribosomal subunit. Bacterial growth is inhibited by induction of the separation of peptidyl transfer RNA from the ribosome during the elongation phase.

Ribosomal methylase, encoded by the erm gene, can precipitate resistance to macrolides by alteration of the ribosomal binding site.

The gene that encodes for an efflux mechanism, mef, also brings about a moderate degree of resistance.

Resistance is also brought about by an efflux pump that actively rids the cells of the macrolide. This efflux pump is chromosomally mediated by genes referred to as acrAB genes. Resistance of Pseudomonas species and other Gramnegative bacteria, enterococci and staphylococci may be precipitated by chromosomally controlled alteration of permeability or uptake of the drug.

4.3 Pharmacokinetics

When administered orally to chickens, turkeys and pigs with drinking water and to calves with milk replacer, tilmicosin is absorbed and moves rapidly out of the serum into areas of low pH. This results in very low serum concentrations, but detectable levels of tilmicosin are found in lung tissue as early as 6 hours after starting the treatment. In chicken or turkeys, tilmicosin is also detected in pooled air sac tissue as early as 6 hours after starting the treatment. It is also known that tilmicosin is concentrated in alveolar macrophages of swine. When administered orally to calves tilmicosin is detected in lungs after 6 hours and remains at the therapeutic level up to 60 hours from the last dose.

5. PHARMACEUTICAL PARTICULARS

5.1 Major incompatibilities

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

5.2 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 2 years
Shelf life after first opening the immediate packaging: 3 months
Shelf life after dilution in drinking water: 24 hours
Shelf life after reconstitution in milk replacer: 4 hours

5.3 Special precautions for storage

As packaged for sale: Do not store above 30°C. Protect from frost. Protect from light.

After dilution in drinking water / milk replacer: Protect from light.

5.4 Nature and composition of immediate packaging

960 ml is presented in a white high density polyethylene bottle with white polypropylene or high density polyethylene, tamper-evident cap; 240 ml is presented in high density polyethylene (HDPE) bottle with a tamper-evident screw closure made of polypropylene (PP).

Not all pack sizes may be marketed.

5.5 Special precautions for the disposal of unused veterinary medicinal product or waste materials derived from the use of such products

Medicines should not be disposed of via wastewater or household waste.

Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any national collection system applicable to the veterinary medicinal product concerned.

6. NAME OF THE MARKETING AUTHORISATION HOLDER

Huvepharma NV

7. MARKETING AUTHORISATION NUMBER(S)

VPA10782/003/001

8. DATE OF FIRST AUTHORISATION

24/10/2008

9. DATE OF THE LAST REVISION OF THE SUMMARY OF THE PRODUCT CHARACTERISTICS

13/11/2024

CLASSIFICATION OF VETERINARY MEDICINAL PRODUCTS

10.

Veterinary medicinal product subject to prescription.

Detailed information on this veterinary medicinal product is available in the Union Product Database (https://medicines.health.europa.eu/veterinary).