ANNEX III

LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGE

50 ml Glass Vial Carton Text
50 ml, 100 ml, 250 ml, 500 ml HDPE Vial Carton Text

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Norfenicol 300 mg/ml Solution for Injection for Cattle and Pigs
Florfenicol

2. STATEMENT OF ACTIVE AND OTHER SUBSTANCES

Each ml contains 300 mg Florfenicol.

3. PHARMACEUTICAL FORM

Solution for Injection

4. PACKAGE SIZE

50, 100, 250 and 500 ml.

5. TARGET SPECIES

Cattle and Pigs.

6. INDICATION(S)

Cattle:
Treatment of respiratory tract infections in clinically diseased cattle due to *Mannheimia haemolytica, Pasteurella multocida* and *Histophilus somni*, susceptible to florfenicol

Pigs:
Treatment of acute outbreaks of respiratory disease caused by strains of *Actinobacillus pleuropneumoniae* and *Pasteurella multocida* susceptible to Florfenicol.

7. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

8. WITHDRAWAL PERIOD

Cattle
Meat and offal:
By intramuscular injection (at 20 mg/kg, twice): 39 days
By subcutaneous injection (at 40 mg/kg, once): 44 days

Milk: Not permitted for use in lactating animals producing milk for human consumption.

Pigs
Meat and offal:
By intramuscular injection (at 15 mg/kg, twice): 22 days

9. SPECIAL WARNING(S), IF NECESSARY

Read the package leaflet before use.

10. EXPIRY DATE

EXP: mm/yyyy
Shelf-life after first opening the immediate packaging: 28 days
Once broached use by…….

11. SPECIAL STORAGE CONDITIONS

Protect from light. Keep container in the protective sleeve/outer carton.

12. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCTS OR WASTE MATERIALS, IF ANY

Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal products should be disposed of in accordance with local requirements.

13. THE WORDS "FOR ANIMAL TREATMENT ONLY" AND CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE, if applicable

For animal treatment only.

POM-V

14. THE WORDS "KEEP OUT OF THE REACH AND SIGHT OF CHILDREN"

Keep out of the reach and sight of children.

15. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Marketing authorisation holder
(EU)Norbrook Laboratories (Ireland) Limited
Rossmore Industrial Estate
Monaghan
Ireland

(UK) Norbrook Laboratories Limited
Station Works
Newry
Co. Down,
BT35 6JP
Northern Ireland

16. MARKETING AUTHORISATION NUMBER(S)

Vm 02000/4316

17. MANUFACTURER'S BATCH NUMBER

BN:

PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE

50 ml, 100 ml, 250 ml & 500 ml Base Glass & HDPE Vial Label Text

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Norfenicol 300 mg/ml Solution for Injection for Cattle and Pigs
Florfenicol

2. STATEMENT OF ACTIVE AND OTHER SUBSTANCES

Each ml contains 300 mg Florfenicol.

3. PHARMACEUTICAL FORM

Solution for Injection

4. PACKAGE SIZE

50, 100, 250 and 500 ml.

5. TARGET SPECIES

Cattle and Pigs.

6. INDICATION(S)

Read the <package leaflet><expanding label> before use.

7. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the <package leaflet><expanding label> before use.

8. WITHDRAWAL PERIOD

Cattle
Meat and offal:
By intramuscular injection (at 20 mg/kg, twice): 39 days
By subcutaneous injection (at 40 mg/kg, once): 44 days

Milk: Not permitted for use in lactating animals producing milk for human consumption.

Pigs
Meat and offal:
By intramuscular injection (at 15 mg/kg, twice): 22 days

9. SPECIAL WARNING(S), IF NECESSARY

Read the <package leaflet><expanding label> before use.

10. EXPIRY DATE

EXP: mm/yyyy
Shelf-life after first opening the immediate packaging: 28 days
Once broached use by……

11. SPECIAL STORAGE CONDITIONS

Protect from light. Keep container in the protective sleeve/outer carton.

12. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCTS OR WASTE MATERIALS, IF ANY

Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal products should be disposed of in accordance with local requirements.

13. THE WORDS "FOR ANIMAL TREATMENT ONLY" AND CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE, if applicable

For animal treatment only.

POM V

14. THE WORDS "KEEP OUT OF THE REACH AND SIGHT OF CHILDREN"

Keep out of the reach and sight of children.

15. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

(EU) Norbrook Laboratories (Ireland) Limited
Rossmore Industrial Estate
Monaghan
Ireland

(UK) Norbrook Laboratories Limited
Station Works
Newry
Co. Down
BT35 6JP
Northern Ireland

16. MARKETING AUTHORISATION NUMBER(S)

Vm 02000/4316

17. MANUFACTURER'S BATCH NUMBER

BN:

PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE

100 ml, 250 ml & 500 ml Expanding Vial Label Text Page 1

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Norfenicol 300 mg/ml Solution for Injection for Cattle and Pigs
Florfenicol

2. STATEMENT OF ACTIVE AND OTHER SUBSTANCES

Each ml contains 300 mg Florfenicol.

3. PHARMACEUTICAL FORM

Solution for Injection

4. PACKAGE SIZE

50, 100, 250 and 500 ml.

5. TARGET SPECIES

Cattle and Pigs.

6. INDICATION(S)

Cattle:
Treatment of respiratory tract infections in clinically diseased cattle due to *Mannheimia haemolytica, Pasteurella multocida* and *Histophilus somni*, susceptible to florfenicol

Pigs:
Treatment of acute outbreaks of respiratory disease caused by strains of *Actinobacillus pleuropneumoniae* and *Pasteurella multocida* susceptible to Florfenicol.

7. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the expanding label before use.

8. WITHDRAWAL PERIOD

Cattle
Meat and offal:
By intramuscular injection (at 20 mg/kg, twice): 39 days
By subcutaneous injection (at 40 mg/kg, once): 44 days

Milk: Not permitted for use in lactating animals producing milk for human consumption.

Pigs
Meat and offal:
By intramuscular injection (at 15 mg/kg, twice): 22 days

9. SPECIAL WARNING(S), IF NECESSARY

Read the expanding label before use.

10. EXPIRY DATE

EXP: mm/yyyy
Shelf-life after first opening the immediate packaging: 28 days
Once broached use by……

11. SPECIAL STORAGE CONDITIONS

Protect from light. Keep container in the protective sleeve/outer carton.

12. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCTS OR WASTE MATERIALS, IF ANY

Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal products should be disposed of in accordance with local requirements.

13. THE WORDS "FOR ANIMAL TREATMENT ONLY" AND CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE, if applicable

For animal treatment only.

POM-V

14. THE WORDS "KEEP OUT OF THE REACH AND SIGHT OF CHILDREN"

Keep out of the reach and sight of children.

15. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

(EU)Norbrook Laboratories (Ireland) Limited
Rossmore Industrial Estate
Monaghan
Ireland

(UK) Norbrook Laboratories Limited
Station Works
Newry
Co. Down
BT35 6JP
Northern Ireland

16. MARKETING AUTHORISATION NUMBER(S)

Vm 02000/4316

17. MANUFACTURER'S BATCH NUMBER

BN:

PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE

100 ml, 250 ml & 500 ml Expanding Vial Label Text Pages 2-8

1. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER AND OF THE MANUFACTURING AUTHORISATION HOLDER RESPONSIBLE FOR BATCH RELEASE, IF DIFFERENT

Marketing authorisation holder
(EU)Norbrook Laboratories (Ireland) Limited
Rossmore Industrial Estate
Monaghan
Ireland

(UK) Norbrook Laboratories Limited
Station Works
Newry
Co. Down
BT35 6JP
Northern Ireland

Manufacturer responsible for batch release:
Norbrook Manufacturing Ltd
Rossmore Industrial Estate
Monaghan
Ireland

Norbrook Laboratories Limited,
Station Works,
Newry,
Co. Down,
BT35 6JP,
Northern Ireland

2. NAME OF THE VETERINARY MEDICINAL PRODUCT

Norfenicol 300 mg/ml Solution for Injection for Cattle and Pigs
Florfenicol

3. STATEMENT OF THE ACTIVE SUBSTANCE(S) AND OTHER INGREDIENTS

Each ml contains 300 mg Florfenicol.
A light yellow to straw colour solution.

4. INDICATIONS

Cattle:
Treatment of respiratory tract infections in clinically diseased cattle due to *Mannheimia haemolytica, Pasteurella multocida* and *Histophilus somni*, susceptible to florfenicol

Pigs:
Treatment of acute outbreaks of respiratory disease caused by strains of *Actinobacillus pleuropneumoniae* and *Pasteurella multocida* susceptible to Florfenicol.

5. CONTRAINDICATIONS

Do not use in adult bulls or boars intended for breeding purposes.
Do not use in cases of hypersensitivity to the active substance or to any of the excipients.
Do not use in cases of known resistance.

6. ADVERSE REACTIONS

Cattle:
Administration of the product by the intramuscular or subcutaneous route may cause inflammatory lesions (swelling and hardness) at the injection site which may persist for 31 days.
A decrease in food consumption and transient softening of the faeces may occur during the treatment period. The treated animals recover quickly and completely upon termination of treatment.
In very rare cases, anaphylactic shock has been reported in cattle.

Pigs:
Commonly observed adverse effects are transient diarrhoea and/or peri-anal and rectal erythema/oedema which may affect 50 % of the animals. These effects can be observed for one week.
Under field conditions approximately 30 % of treated pigs presented with pyrexia (40 °C) associated with either moderate depression or moderate dyspnea a week or more after administration of the second dose.

If you notice any serious effects or other effects not mentioned in this leaflet, please inform your veterinary surgeon.

7. TARGET SPECIES

Cattle and Pigs

8. DOSAGE FOR EACH SPECIES, ROUTE(S) AND METHOD OF ADMINISTRATION

To ensure administration of a correct dose, body weight should be determined as accurately as possible.

Cattle:
Intramuscular Injection: 20 mg/kg bodyweight (1 ml/15 kg) to be administered twice 48 hours apart using a 16-gauge needle.
Subcutaneous Injection: 40 mg/kg bodyweight (2 ml/15 kg) to be administered once only using a 16-gauge needle.

Pigs:
Intramuscular Injection:15 mg/kg bodyweight (1 ml per 20 kg) into the neck muscle twice at 48 hour intervals using a 16-gauge needle.

9. ADVICE ON CORRECT ADMINISTRATION

When administering to cattle the dose volume given at any one injection site should not exceed 10 ml; the injection should only be given in the neck.
When administering to pigs the volume administered per injection site should not exceed 3 ml.
Swab septum before removing each dose.
Use a dry sterile needle and syringe.
Do not broach the vial more than 25 times.
It is recommended to treat animals in the early stages of disease and to evaluate the response to treatment within 48 hours after the second injection. If clinical signs of respiratory disease persist 48 hours after the last injection, treatment should be changed using another formulation or another antibiotic and continued until clinical signs have resolved.

10. WITHDRAWAL PERIOD

Cattle
Meat and offal:
By intramuscular injection (at 20 mg/kg, twice): 39 days
By subcutaneous injection (at 40 mg/kg, once): 44 days

Milk: Not permitted for use in lactating animals producing milk for human consumption.

Pigs
Meat and offal:
By intramuscular injection (at 15 mg/kg, twice): 22 days

11. SPECIAL STORAGE PRECAUTIONS

Protect from light. Keep container in the protective sleeve/outer carton.
Shelf-life after first opening the immediate packaging: 28 days
Do not use after the expiry date stated on the label after EXP
Keep out of the reach and sight of children.

12. SPECIAL WARNINGS

Do not use in piglets of less than 2 kg.
Use a suitable draw-off needle or automatic dosing syringe to avoid excessive puncturing of the closure.
In pigs administration of three times the recommended dose or more, a reduction in feeding, hydration and weight gain may occur and after administration of five times the recommended dose or more, vomiting may also occur.
Florfenicol should be used for treatment of severe infections only.
Use of the product should be based on susceptibility testing of the bacteria isolated from the animal. If this is not possible, therapy should be based on local (regional, farm level) epidemiological information about susceptibility of the target bacteria.
Official national and regional antimicrobial policies should be taken into account when the product is used.
Use of the product deviating from the instructions given in the SPC may increase the prevalence of bacteria resistant to the florfenicol and may decrease the effectiveness of treatment with other antimicrobials (e.g. Ceftiofur) due to the potential for crossresistance.
Studies in laboratory animals have not revealed any evidence of embryo- or foeto-toxic effects for florfenicol. However, safety during pregnancy and lactation has not been investigated in the target species. Use only accordingly to the benefit/risk assessment by the responsible veterinarian.
In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products.

User Warnings:
Do not use the product in known cases of sensitivity to the active substance or to any of the excipients.
Care should be taken to avoid accidental self-injection

For Animal Treatment Only.

13. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCT OR WASTE MATERIALS, IF ANY

Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal products should be disposed of in accordance with local requirements.

14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED

July 2019

15. OTHER INFORMATION

POM-V

Manufacturing Authorisation Number: ManA 2000

Marketing Authorisation Number: Vm 02000/4316

Mode of Action
Florfenicol is a synthetic broad spectrum antibiotic effective against most Gram-positive and Gram-negative bacteria isolated from domestic animals. Florfenicol acts by inhibiting protein synthesis at the ribosomal level and is bacteriostatic. However, *in vitro* studies of florfenicol demonstrate bactericidal activity against *Mannheimia haemolytica, Pasteurella multocida, Actinobacillus pleuropneumoniae* and *Histophilus somni.*

In vitro testing has shown that florfenicol is active against the bacterial pathogens most commonly isolated in respiratory diseases in cattle (including *Pasteurella multocida*, *Mannheimia haemolytica*, and *Histophilus somni*) and in pigs (including *Actinobacillus pleuropneumoniae* and *Pasteurella multicida*).

Acquired resistance to Florfenicol is mediated by efflux pump resistance associated with a *floR* gene. Such resistance has not yet been identified in the target pathogens except for *Pasteurella multocida*. Resistance to Florfenicol and other antimicrobials has been identified in the food-borne pathogen *Salmonella typhimurium* and co-resistance to florfenicol and other antimicrobials (e.g. ceftiofur) has been identified in the microrganisms from the family *Enterobacteriaceae.*

Package Information
Available in 50, 100, 250 and 500 ml clear type I glass vials and HDPE plastic vials with bromobutyl rubber bungs and aluminium seal.

50 ml clear type I glass vials as well as the 50 ml, 100ml, 250 ml and 500 ml HDPE plastic vials are presented in a cardboard box.

100 ml, 250 ml and 500 ml glass vials are accompanied by a protective sleeve.

Not all pack sizes may be marketed.

B. PACKAGE LEAFLET

PACKAGE LEAFLET:

Norfenicol 300 mg/ml Solution for Injection for Cattle and Pigs

1. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER AND OF THE MANUFACTURING AUTHORISATION HOLDER RESPONSIBLE FOR BATCH RELEASE, IF DIFFERENT

Marketing authorisation holder
(EU)Norbrook Laboratories (Ireland) Limited
Rossmore Industrial Estate
Monaghan
Ireland

(UK) Norbrook Laboratories Limited
Station Works
Newry
Co. Down
BT35 6JP
Northern Ireland

Manufacturer responsible for batch release:
Norbrook Manufacturing Ltd
Rossmore Industrial Estate
Monaghan
Ireland

Norbrook Laboratories Limited,
Station Works,
Newry,
Co. Down,
BT35 6JP,
Northern Ireland

2. NAME OF THE VETERINARY MEDICINAL PRODUCT

Norfenicol 300 mg/ml Solution for Injection for Cattle and Pigs
Florfenicol

3. STATEMENT OF THE ACTIVE SUBSTANCE(S) AND OTHER INGREDIENTS

Each ml contains 300 mg Florfenicol.
A light yellow to straw colour solution.

4. INDICATIONS

Cattle:
Treatment of respiratory tract infections in clinically diseased cattle due to *Mannheimia haemolytica, Pasteurella multocida* and *Histophilus somni*, susceptible to florfenicol

Pigs:
Treatment of acute outbreaks of respiratory disease caused by strains of *Actinobacillus pleuropneumoniae* and *Pasteurella multocida* susceptible to Florfenicol.

5. CONTRAINDICATIONS

Do not use in adult bulls or boars intended for breeding purposes.
Do not use in cases of hypersensitivity to the active substance or to any of the excipients.
Do not use in cases of known resistance.

6. ADVERSE REACTIONS

Cattle:
Administration of the product by the intramuscular or subcutaneous route may cause inflammatory lesions (swelling and hardness) at the injection site which may persist for 31 days.
A decrease in food consumption and transient softening of the faeces may occur during the treatment period. The treated animals recover quickly and completely upon termination of treatment.
In very rare cases, anaphylactic shock has been reported in cattle.

Pigs:
Commonly observed adverse effects are transient diarrhoea and/or peri-anal and rectal erythema/oedema which may affect 50 % of the animals.These effects can be observed for one week.
Under field conditions approximately 30 % of treated pigs presented with pyrexia (40 °C) associated with either moderate depression or moderate dyspnea a week or more after administration of the second dose.

If you notice any serious effects or other effects not mentioned in this leaflet, please inform your veterinary surgeon.

7. TARGET SPECIES

Cattle and Pigs

8. DOSAGE FOR EACH SPECIES, ROUTE(S) AND METHOD OF ADMINISTRATION

To ensure administration of a correct dose, body weight should be determined as accurately as possible.

Cattle:
Intramuscular Injection: 20 mg/kg bodyweight (1 ml/15 kg) to be administered twice 48 hours apart using a 16-gauge needle.
Subcutaneous Injection: 40 mg/kg bodyweight (2 ml/15 kg) to be administered once only using a 16-gauge needle.

Pigs:
Intramuscular Injection:15 mg/kg bodyweight (1 ml per 20 kg) into the neck muscle twice at 48 hour intervals using a 16-gauge needle.

9. ADVICE ON CORRECT ADMINISTRATION

When administering to cattle the dose volume given at any one injection site should not exceed 10ml; the injection should only be given in the neck.
When administering to pigs the volume administered per injection site should not exceed 3 ml.
Swab septum before removing each dose.
Use a dry sterile needle and syringe.
Do not broach the vial more than 25 times.
It is recommended to treat animals in the early stages of disease and to evaluate the response to treatment within 48 hours after the second injection. If clinical signs of respiratory disease persist 48 hours after the last injection, treatment should be changed using another formulation or another antibiotic and continued until clinical signs have resolved.

10. WITHDRAWAL PERIOD

Cattle
Meat and offal:
By intramuscular injection (at 20 mg/kg, twice): 39 days
By subcutaneous injection (at 40 mg/kg, once): 44 days

Milk: Not permitted for use in lactating animals producing milk for human consumption.

Pigs
Meat and offal:
By intramuscular injection (at 15 mg/kg, twice): 22 days

11. SPECIAL STORAGE PRECAUTIONS

Protect from light. Keep container in the protective sleeve/outer carton.
Shelf-life after first opening the immediate packaging: 28 days
Do not use after the expiry date stated on the label
Keep out of the reach and sight of children.

12. SPECIAL WARNINGS

Do not use in piglets of less than 2 kg.
Use a suitable draw-off needle or automatic dosing syringe to avoid excessive puncturing of the closure.
In pigs administration of three times the recommended dose or more, a reduction in feeding, hydration and weight gain may occur and after administration of five times the recommended dose or more, vomiting may also occur.
Florfenicol should be used for treatment of severe infections only.
Use of the product should be based on susceptibility testing of the bacteria isolated from the animal. If this is not possible, therapy should be based on local (regional, farm level) epidemiological information about susceptibility of the target bacteria.
Official national and regional antimicrobial policies should be taken into account when the product is used.
Use of the product deviating from the instructions given in the SPC may increase the prevalence of bacteria resistant to the florfenicol and may decrease the effectiveness of treatment with other antimicrobials (e.g. Ceftiofur) due to the potential for crossresistance.
Studies in laboratory animals have not revealed any evidence of embryo- or foeto-toxic effects for florfenicol. However, safety during pregnancy and lactation has not been investigated in the target species. Use only accordingly to the benefit/risk assessment by the responsible veterinarian.In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products.

User Warnings:
Do not use the product in known cases of sensitivity to the active substance or to any of the excipients.
Care should be taken to avoid accidental self-injection

For Animal Treatment Only.

13. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCT OR WASTE MATERIALS, IF ANY

Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal products should be disposed of in accordance with local requirements.

14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED

July 2019

15. OTHER INFORMATION

Manufacturing Authorisation Number: ManA 2000

Marketing Authorisation Number: Vm 02000/4316

Mode of Action
Florfenicol is a synthetic broad spectrum antibiotic effective against most Gram-positive and Gram-negative bacteria isolated from domestic animals. Florfenicol acts by inhibiting protein synthesis at the ribosomal level and is bacteriostatic. However, *in vitro* studies of florfenicol demonstrate bactericidal activity against *Mannheimia haemolytica, Pasteurella multocida, Actinobacillus pleuropneumoniae* and *Histophilus somni.*

In vitro testing has shown that florfenicol is active against the bacterial pathogens most commonly isolated in respiratory diseases in cattle (including *Pasteurella multocida*, *Mannheimia haemolytica*, and *Histophilus somni*) and in pigs (including *Actinobacillus pleuropneumoniae* and *Pasteurella multicida*).

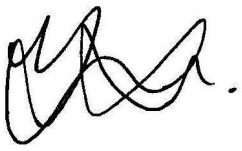
Acquired resistance to Florfenicol is mediated by efflux pump resistance associated with a *floR* gene. Such resistance has not yet been identified in the target pathogens except for *Pasteurella multocida*.. Resistance to Florfenicol and other antimicrobials has been identified in the food-borne pathogen *Salmonella typhimurium* and co-resistance to florfenicol and other antimicrobials (e.g. ceftiofur) has been identified in the microrganisms from the family *Enterobacteriaceae.*

Package Information
Available in 50, 100, 250 and 500 ml clear type I glass vials and HDPE plastic vials with bromobutyl rubber bungs and aluminium seal.

50 ml clear type I glass vials as well as the 50 ml, 100ml, 250 ml and 500 ml HDPE plastic vials are presented in a cardboard box.

100 ml, 250 ml and 500 ml glass vials are accompanied by a protective sleeve.

Not all pack sizes may be marketed.



Approved: 04 December 2019