# ANNEX I

# SUMMARY OF PRODUCT CHARACTERISTICS

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

VETRIMOXIN 50mg/g Premix for medicated feeding stuff for pigs

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

*Each g contains:*

**Active substance** :
Amoxicillin (as trihydrate) 50 mg

**Excipients :**
Wheat starch qsp 1 g

For the full list of excipients, see section 6.1.

## 3. PHARMACEUTICAL FORM

Premix for medicated feeding stuff
White-ivory homogeneous granules

## 4. CLINICAL PARTICULARS

### 4.1 Target species

Pigs (weaned piglets)

### 4.2 Indications for use, specifying the target species

In weaned piglets: in herds where infection has been confirmed; treatment of infections caused by *Streptococcus suis* susceptible to amoxicillin.

### 4.3 Contraindications

Do not use in cases of hypersensitivity to penicillins, to other β-lactams or to the excipient.
Do not use orally to rabbits, guinea pigs, hamsters and horses since the amoxicillin, like all the aminopenicillins, has adverse impact on caecal microflora population.Do not use in the presence of ß-lactamase-producing bacteria.

### 4.4 Special warnings for each target species

Sick animals may have reduced feed intake and consequently, may require parenterally administered medication instead.

The intake of medicated feed depends on the clinical condition of the animals. In order to obtain the correct dosage the concentration of amoxicillin has to be adjusted accordingly.

## 4.5 Special precautions for use

**Special precautions for use in animals**

Official, national and regional antimicrobial policies should be taken into account when the product is used.
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.
Use of the product deviating from the instructions given in the SPC may increase the prevalence of bacteria resistant to the amoxicillin and may decrease the effectiveness of the treatment.
The prolonged or repeated use should be avoided by e.g. improving management practices, proper cleaning and disinfection. Particular attention should be paid to improvement of farming practices to avoid any stress condition.

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

Persons handling this product should avoid inhalation of any dust and contact with skin. Wear either a disposable half-mask respirator conforming to European Standard EN149 or a non-disposable respirator to European Standard to EN140 with filter EN143 when mixing or handling this product.
Rubber gloves should be worn when mixing or handling this product. Hands and exposed skin should be washed thoroughly after use.
Do not smoke, eat or drink while handling the product.
Penicillins and cephalosporins may cause hypersensitivity (allergy) following injection, inhalation, ingestion or skin contact. Hypersensitivity to penicillins may lead to cross reactions to cephalosporins and vice versa. Allergic reactions to these substances may occasionally be serious.

1. Do not handle this product if you know you are sensitised, or if you have been advised not to work with such preparations.
2. Handle this product with great care to avoid exposure, taking all recommended precautions.
3. If you develop symptoms following exposure such as a skin rash, you should seek medical advice and show the doctor this warning. Swelling of the face, lips or eyes or difficulty with breathing, are more serious symptoms and require urgent medical attention.

## 4.6 Adverse reactions (frequency and seriousness)

In very rare cases, the following adverse reactions may occur:
- Hypersensitivity reactions, the severity varying from skin rash to anaphylactic shock.
- Gastrointestinal symptoms (vomiting, diarrhoea).
- Haematology disturbances and colitis.

The frequency of adverse reactions is defined using the following convention:
- very common (more than 1 in 10 animals treated displaying adverse reaction(s))
- common (more than 1 but less than 10 animals in 100 animals treated)
- uncommon (more than 1 but less than 10 animals in 1,000 animals treated)
- rare (more than 1 but less than 10 animals in 10,000 animals treated)
- very rare (less than 1 animal in 10,000 animals treated, including isolated reports)

## 4.7 Use during pregnancy, lactation or lay

Not applicable.

## 4.8 Interaction with other medicinal products and other forms of interaction

Do not use simultaneously with neomycin since it blocks the absorption of oral penicillins.
Do not use jointly with antibiotics that inhibit the bacterial protein synthesis since they can antagonise the bactericidal action of penicillins.

### 4.9 Amounts to be administered and administration route

For oral administration only after incorporation in feed.In-feed use at the final dose 15 mg amoxicillin/ kg b.w./ day, during 14 consecutive days.
In the case of an altered feed intake (clinical status, weight class, age, environment), adjust the incorporation rate in order to guarantee an intake of 15 mg amoxicillin/kg b.w./day.
According to the recommended dose, the number and animals weight to be treated, the exact dose of medicinal product to be incorporated in the feed should be calculated using the following formula:

$$\frac{\text{0.3 g of medicinal product } \mathbf{X} \text{ Average bodyweight of treated animals (kg) / day}}{\text{Daily feed intake (kg)}} = \text{kg Vetrimoxin/ton of feed}$$

During the granulation, mixture should not reach a temperature above 60ºC.
Body weight should be evaluated accurately to avoid underdosing.

Feed intake depends on the clinical condition of the animal, thus the concentration in the feed should be adjusted to assure the correct dosage. Mix well to ensure homogeneous distribution.
The medicated feed should be the only source of feed during the 14 days of treatment, which represents the maximum period of treatment with the product.
A manufacturer who is approved to incorporate directly at any concentration, veterinary medicinal products or premixtures containing such products must be responsible for mixing when incorporation is less than 2 kg per tonne for final feed.

### 4.10 Overdose (symptoms, emergency procedures, antidotes), if necessary

In the event of severe allergic reactions stop the treatment and administer corticosteroids and adrenaline.
In other cases administer symptomatic treatment.

### 4.11 Withdrawal period(s)

Meat and offal**:** 3 days

## 5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: antibacterials for systemic use, penicillins with extended spectrum
ATCvet code: QJ01CA04

### 5.1 Pharmacodynamic properties

Amoxicillin is a ß-lactam bactericidal antibiotic. It inhibits biosynthesis of bacterial cell wall through inhibition of the synthesis of peptidoglycan, rendering cell more fragile and, therefore, unable to support endocellular osmotic pressure and, therefore, subject to lyses.

The main mechanism of bacterial resistance to the amoxicillin is the production of ß-lactamases, enzymes that in this way cause the inactivation of the antibacterial via hydrolysis of the ß- lactam ring obtaining penicilloic acid, stable but inactive compound. Resistance to ß-lactams can be transferred **horizontally via**

**plasmids** or **vertically (genes localized on bacterial chromosome)**. Cross-resistance between the amoxicillin and other penicillin exists, particularly, with other aminopenicillins (ampicillin).

### 5.2 Pharmacokinetic particulars

In the pig, per os administration has a bioavailability of 47%, reaching the maximum serum concentration of 3 µg/ml one hour after the injection. After the administration per os, the plasma concentration (>2.5 µg/ml) is obtained in 1.5-2 hours. Amoxicillin is well distributed in the entire organism, reaching high concentrations in muscle, liver, gastrointestinal tract and kidney because of low percentage of plasmatic protein biding (17- 20%). It is little distributed in brain and spinal fluids, except when meninges are inflamed.
The metabolism of the amoxicillin is limited to the hydrolysis of the ß-lactam ring, which leads to inactive the penicilloic acid liberation (20%). The biotransformation takes place in the liver.
Amoxicillin crosses the placental barrier. It is metabolised to a small extent; it is excreted mainly by the urine, and in smaller proportion by milk and bile (enterohepatic cycle).

## 6. PHARMACEUTICAL PARTICULARS

### 6.1 List of excipients

Wheat starch
Liquid paraffin

### 6.2 Major incompatibilities

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

### 6.3 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 incorporation into meal or pelleted feed: **3 months**

### 6.4. Special precautions for storage

This veterinary medicinal product does not require any special storage conditions.

### 6.5 Nature and composition of immediate packaging

White 10 or 25 kg polyethylene paper bag

Sewing with paper and white cotton thread closes the bags; a rod is added to the sewing cotton thread.

Not all pack size may be marketed

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

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

## 7. MARKETING AUTHORISATION HOLDER

## 8. MARKETING AUTHORISATION NUMBER(S)

## 9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

## 10 DATE OF REVISION OF THE TEXT

## PROHIBITION OF SALE, SUPPLY AND/OR USE

Consideration should be given to official guidance on the incorporation of medicated premixes into final feeds.
To be supplied only on veterinary prescription.

**LABELLING AND PACKAGE LEAFLET**

**PACKAGE LEAFLET / IMMEDIATE LABEL**

Vetrimoxin 50mg/g Premix for medicated feeding stuff for 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

Manufacturer responsible for the batch release:
Ceva Salute Animale S.p.a – Via Leopardi, 2/c – 42025 Cavriago (RE) – Italy

## 2. NAME OF THE VETERINARY MEDICINAL PRODUCT

Vetrimoxin 50mg/g Premix for medicated feeding stuff for pigs
Amoxicillin (trihydrate)

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

*Each g contains:*
**Active substance:**
Amoxicillin (as trihydrate) 50 mg
**Excipients :**
Wheat starch qsp 1 g

White-ivory homogeneous granules.

## 4. INDICATION(S)

In weaned piglets in herds where infection has been confirmed; treatment of infections caused by *Streptococcus suis* susceptible to amoxicillin.

## 5. CONTRAINDICATIONS

Do not use in cases of hypersensitivity to penicillins, to other β-lactams or to the excipient;
Do not use orallyto rabbits, guinea pigs, hamsters and horses since the amoxicillin, like all the aminopenicillins, has adverse impact on caecum microflora population.
Do not use in the presence of ß-lactamase-producing bacteria;

## 6. ADVERSE REACTIONS

In very rare cases, the following adverse reactions may occur:
- Hypersensitivity reactions, the severity varying from skin rash to anaphylactic shock.
- Gastrointestinal symptoms (vomiting, diarrhoea).
- Haematology disturbances and colitis.

The frequency of adverse reactions is defined using the following convention:
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- rare (more than 1 but less than 10 animals in 10,000 animals treated)
- very rare (less than 1 animal in 10,000 animals treated, including isolated reports)

If you notice any side effects, even those not already listed in this package leaflet or you think that the medicine has not worked, please inform your veterinary surgeon

## 7. TARGET SPECIES

Pigs (weaned piglets)

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

For oral administration only after incorporation in feed.
In-feed use at the final dose 15 mg amoxicillin/ kg b.w./ day, during 14 consecutive days.
In the case of an altered feed intake (clinical status, weight class, age, environment), adjust the incorporation rate in order to guarantee an intake of 15 mg amoxicillin/kg b.w./day.
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During the granulation, mixture should not reach a temperature above 60ºC.
A manufacturer who is approved to incorporate directly at any concentration, veterinary medicinal products or premixtures containing such products must be responsible for mixing when incorporation is less than 2 kg per tonne for final feed.

## 9. ADVICE ON CORRECT ADMINISTRATION

Body weight should be evaluated accurately to avoid underdosing.

Feed intake depends on the clinical condition of the animal, thus the concentration in the feed should be adjusted to assure the correct dosage. Mix well to ensure homogeneous distribution.
The medicated feed should be the only source of feed during the 14 days of treatment, which represents the maximum period of treatment with the product.

## 10. WITHDRAWAL PERIOD

Meat and offal**:** 3 days

## 11. SPECIAL STORAGE PRECAUTIONS

Keep out of the sight and reach of children.

This veterinary medicinal product does not require any special storage conditions
Do not use this veterinary medicinal product after the expiry date which is stated on the label. *The expiry date refers to the last day of that month*'
Shelf life after first opening the container: 3 months
Shelf life after incorporation into meal or pelleted feed: 3 months.
Once opened, use by:

## 12. SPECIAL WARNING(S)

Special warnings for each target species:
Sick animals may have reduced feed intake and consequently, may require parenterally administered medication instead.
The intake of medicated feed depends on the clinical condition of the animals. In order to obtain the correct dosage the concentration of amoxicillin has to be adjusted accordingly.

Special precautions for use in animals
Official, national and regional antimicrobial policies should be taken into account when the product is used. 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.
Use of the product deviating from the instructions given in the SPC may increase the prevalence of bacteria resistant to the amoxicillin and may decrease the effectiveness of the treatment.
The prolonged or repeated use should be avoided by e.g. improving management practices, proper cleaning and disinfection. Particular attention should be paid to improvement of farming practices to avoid any stress condition.

Special precautions to be taken by the person administering the veterinary medicinal product to animals
Persons handling this product should avoid inhalation of any dust and contact with skin. Wear either a disposable half-mask respirator conforming to European Standard EN149 or a non-disposable respirator to European Standard to EN140 with filter EN143 when mixing or handling this product.
Rubber gloves should be worn when mixing or handling this product. Hands and exposed skin should be washed thoroughly after use.
Do not smoke, eat or drink while handling the product.
Penicillins and cephalosporins may cause hypersensitivity (allergy) following injection, inhalation, ingestion or skin contact. Hypersensitivity to penicillins may lead to cross reactions to cephalosporins and vice versa. Allergic reactions to these substances may occasionally be serious.

1. Do not handle this product if you know you are sensitised, or if you have been advised not to work with such preparations.
2. Handle this product with great care to avoid exposure, taking all recommended precautions.
3. If you develop symptoms following exposure such as a skin rash, you should seek medical advice and show the doctor this warning. Swelling of the face, lips or eyes or difficulty with breathing, are more serious symptoms and require urgent medical attention.

**I**nteraction with other medicinal products and other forms of interaction
Do not use simultaneously with neomycin since it blocks the absorption of oral penicillins.
Do not use jointly with antibiotics that inhibit the bacterial protein synthesis since they can antagonise the bactericidal action of penicillins.

Overdose (symptoms, emergency procedures, antidotes)In the event of severe allergic reactions stop the treatment and administer corticosteroids and adrenaline.
In other cases administer symptomatic treatment.

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

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

Medicines should not be disposed of via wastewater or household waste. Ask your veterinary surgeon or pharmacist how to dispose of medicines no longer required. These measures should help to protect the environment

## 14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED

## 15. OTHER INFORMATION

*Pack size:*
Bags of 10 and 25kg
Not all pack sizes may be marketed.

For Animal treatment only
To be supply only on veterinary prescription.
Administration by a veterinary surgeon or under their direct responsibility.

Consideration should be given to official guidance on the incorporation of medicated premixes into final feeds.

MA number:
Lot:
Exp: