# ANNEX I SUMMARY OF PRODUCT CHARACTERISTICS

#### 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Dexamecine 2 mg/ml solution for injection for cattle, horses, pigs, dogs and cats

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

#### **Active substance:**

Dexamethasone 2 mg
As dexamethasone sodium phosphate 2.63 mg

#### **Excipients:**

Qualitative composition of excipients and other constituents	Quantitative composition if that information is essential for proper administration of the veterinary medicinal product
Benzyl alcohol (E 1519)	15.6 mg
Sodium chloride	
Sodium citrate	
Citric acid monohydrate (for pH adjustment)	
Sodium hydroxide (for pH adjustment)	
Water for injections	

Clear, colourless aqueous solution.

# 3. CLINICAL INFORMATION

# 3.1 Target species

Cattle, horses, pigs, dogs and cats

# 3.2 Indications for use for each target species

# **Horses**

Treatment of inflammation and allergic reactions.

Treatment of arthritis, bursitis or tenosynovitis.

#### Cattle

Treatment of inflammation and allergic reactions.

Induction of parturition.

Treatment of primary ketosis (acetonaemia).

#### **Pigs**

Treatment of inflammation and allergic reactions.

#### Dogs and cats

Treatment of inflammation and allergic reactions.

#### 3.3 Contraindications

Except in emergency situations the veterinary medicinal product should not be used in animals suffering from diabetes, chronic nephritis, renal disease, congestive heart failure and osteoporosis. For infectious diseases it is necessary that application of corticosteroids is associated with effective antibiotic or chemotherapeutic treatment.

Use of the veterinary medicinal product is contraindicated in immunodeficient animals, as well as in case of septic process, mycoses or parasitoses.

Do not use in animals affected by gastrointestinal or corneal ulcers, or demodecosis.

Do not use in case of aseptic bone necrosis, poor healing wounds or fractures.

Do not use in animals affected with Cushing's syndrome.

Do not use in animals suffering from cataract or glaucoma.

Do not use in pancreatitis, hypertonia, hypocalcaemia.

Do not use the veterinary medicinal product in the course of active vaccination.

Do not use in cases of known hypersensitivity to the active substance or to any of the excipients.

# 3.4 Special warnings

None.

#### 3.5 Special precautions for use

Special precautions for safe use in the target species:

The induction of parturition with corticosteroids may be associated with reduced viability of calves, an increased incidence of retained placentae and possible subsequent metritis and/or subfertility in cattle. Care should be taken when the veterinary medicinal product is used for the treatment of laminitis in horses, where there is the possibility that such treatment could worsen the condition. The use of the veterinary medicinal product in horses for other conditions could induce laminitis and careful observation during the treatment period should be made.

During therapy effective doses suppress the hypothalamo-pituitary-adrenal axis. Following cessation of treatment, symptoms of adrenal insufficiency extending to adrenocortical atrophy can arise and this may render the animal unable to deal adequately with stressful situations. Consideration should therefore be given to means of minimising problems of adrenal insufficiency following the withdrawal of treatment, e.g. dosing to coincide with the time of the endogenous cortisol peak (i.e. in the morning with regard to dogs and the evening regarding cats) and a gradual reduction of dosage.

Its use in younger or older individuals may be associated with an increased risk of side effects. Therefore, it is necessary to decrease the dose and clinical monitoring during treatment. During a course of treatment the situation should be reviewed frequently by close veterinary supervision.

In the presence of bacterial infection, antibacterial drug cover is usually required when steroids are

In the presence of infections, steroids may worsen or hasten the progress of the disease.

Except in cases of ketosis and induction of parturition, corticosteroid administration is to induce an improvement in clinical signs rather than a cure. The underlying disease should be further investigated.

Due to their immunosuppressive activity, corticosteroids can lead to a reduced response to vaccination. Therefore, it is recommended that the veterinary medicinal product should not be used in combination with vaccines.

In suckling animals, the veterinary medicinal product should be used only according to the benefit-risk assessment by the responsible veterinarian.

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

Care should be taken to avoid accidental self-injection as dexamethasone can cause allergic reactions in some people.

People with known hypersensitivity to dexamethasone should avoid contact with the veterinary medicinal product.

In case of accidental self-injection, seek medical advice immediately and show the package leaflet or the label to the physician.

Dexamethasone may affect fertility or the unborn child. To avoid the risk from accidental self-injection, pregnant women should not handle this veterinary medicinal product.

This veterinary medicinal product is a skin and eye irritant. Avoid contact with skin and eyes. In case of accidental eye or skin contact, wash/irrigate the area with clean running water. Seek medical attention if irritation persists. Wash hands after use.

Special precautions for the protection of the environment:

Not applicable.

#### 3.6 Adverse events

Cattle, horses, pigs, dogs and cats:

V	г і :
Very rare	Euphoria
(<1 animal / 10,000 animals treated,	Hypersensitivity reaction
including isolated reports):	Immunosuppression, weakened resistance to or
	exacerbation of existing infections
	Polydipsia <sup>1</sup> , polyphagia <sup>1</sup>
	Reduced growth rate <sup>2</sup> , delayed wound healing
	Polyuria <sup>1</sup>
	Hepatomegaly
	Elevated liver enzymes, sodium and water retention <sup>3</sup> ,
	hypokalaemia <sup>3</sup>
	Cutaneous calcinosis <sup>4</sup> , skin atrophy
	Acute pancreatitis, gastro-intestinal ulceration <sup>5</sup>
	Cushings disease <sup>6</sup> (e.g. redistribution of body fat, muscle
	weakness, muscle wasting and osteoporosis), diabetes
	mellitus <sup>7</sup>
Undetermined frequency	Abnormal behaviour <sup>8</sup> (e.g. depression <sup>8</sup> , aggression <sup>9</sup> ),
(cannot be estimated from the	excitation
available data):	Thrombosis
avanaore data).	Delayed bone healing
	Adrenocorticotropic hormone (ACTH) suppression, adrenal
	gland disorder (atrophy) <sup>10</sup>
	Glucose intolerance, hypocalcaemia
	Eye disorders (glaucoma, cataract)
	Oedema
	Arthropathy
	Convulsion <sup>11</sup> , epileptic seizure <sup>12</sup> , hypertonia
	Retained placenta <sup>13</sup> , metritis <sup>13,14</sup> , subfertility <sup>13,14</sup>

<sup>&</sup>lt;sup>1</sup> after systemic administration and particularly during the early stages of therapy

<sup>&</sup>lt;sup>2</sup> with disruptive bone growth and damage of bone matrix

<sup>&</sup>lt;sup>3</sup> in long term use

<sup>&</sup>lt;sup>4</sup> caused by systemic corticosteroids

<sup>&</sup>lt;sup>5</sup> May be exacerbated by steroids in patients given non-steroidal anti-inflammatory drugs and in animals with spinal cord trauma.

<sup>&</sup>lt;sup>6</sup> Cushingoid symptoms, involving significant alteration of fat, carbohydrate, protein and mineral metabolism.

Corticosteroids, such as dexamethasone, are known to exert a wide range of side effects. Whilst single high doses are generally well tolerated, they may induce severe side-effects in long term use and when esters possessing a long duration of action are administered. Dosage in medium to long term use should therefore generally be kept to the minimum necessary to control symptoms.

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:

Apart from the use of veterinary medicinal product to induce parturition in cattle, corticosteroids are not recommended for use in pregnant animals. Administration in early pregnancy is known to have caused fetal abnormalities in laboratory animals. Administration in late pregnancy may cause early parturition or abortion. If the veterinary medicinal product is used for induction of parturition in cattle, then a high incidence of retained placentae may be experienced and possible subsequent metritis and/or subfertility.

Use of the product corticosteroids in lactating cows may cause a temporary reduction in milk yield.

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

Because corticosteroids can reduce the immune response to vaccination, the veterinary medicinal product should not be used in combination with vaccines.

Dexamethasone should not be administered in conjunction with other anti-inflammatory substances since it increases the risk for gastric ulcers or intestinal bleeding.

Veterinary medicinal product administration may cause hypokalaemia thus increasing the risk of toxicity of cardiac glycosides.

The risk of hypokalaemia can increase when dexamethasone is administered in conjunction with diuretics which influence on excretion of potassium.

Co-administration with cholinesterase inhibitors can lead to muscle weakness in patients suffering from myasthenia gravis.

Glucocorticoids antagonize insulin.

Co-administration of phenobarbital, phenytoin and rifampicin can suppress the effect of dexamethasone.

Increased intraocular pressure may occur when anticholinergic drugs such as atropine are administered simultaneously with dexamethasone.

Dexamethasone reduces effect of anticoagulants.

#### 3.9 Administration routes and dosage

#### Horses

Intramuscular or intraarticular use.

Cattle, pigs, dogs and cats

Intramuscular use.

<sup>&</sup>lt;sup>7</sup> steroid induced or deterioration of existing

<sup>&</sup>lt;sup>8</sup> in dogs and cats

<sup>&</sup>lt;sup>9</sup> in dogs

<sup>&</sup>lt;sup>10</sup> reversible, caused by inactivity

<sup>&</sup>lt;sup>11</sup> due to lowering of convulsive threshold

<sup>&</sup>lt;sup>12</sup> possible manifestation of latent epilepsy

<sup>&</sup>lt;sup>13</sup> in cattle, when use for induction of parturition

<sup>&</sup>lt;sup>14</sup> subsequent to retained placenta

<u>For the treatment of inflammatory or allergic conditions</u> the following doses administered as single intramuscular injection are advised:

Species	Dosage
	(i.m.)
Horses, cattle, pigs	0.06 mg of dexamethasone/kg bw (1.5 ml of veterinary medicinal product /50 kg bw)
Dogs, cats	0.1 mg of dexamethasone/kg bw (0.5 ml of veterinary medicinal product /10 kg bw)

For the treatment of primary ketosis in cattle a dose of 0.02-0.04 mg of dexamethasone/kg bw (5-10 ml of veterinary medicinal product per animal) given by single intramuscular injection is advocated dependent on the size of the cow and the duration of the signs. Care should be taken not to overdose Channel Island breeds. Larger doses (i.e. 0.04 mg/kg) will be required if the signs have been present for some time or if relapsed animals are being treated.

<u>For the induction of parturition</u> - to avoid foetal oversize and mammary oedema in cattle. A single intramuscular injection of 10 ml of veterinary medicinal product after day 260 of pregnancy. Parturition will normally occur within 48-72 hours.

For the treatment of arthritis, bursitis or tenosynovitis by intra-articular injection in the horse. Dose 1-5 ml of veterinary medicinal product *pro toto* 

These quantities are not specific and are quoted purely as a guide. Injections into joint spaces or bursae should be preceded by the removal of an equivalent volume of synovial fluid. Strict asepsis is essential.

To ensure a correct dosage, body weight should be determined as accurately as possible.

Normal aseptic technique should be observed. To measure small volumes of less than 1 ml, a suitably graduated syringe should be used to ensure accurate administration of the correct dose.

The cap should not be punctured more than 125 times. When treating groups of animals in one run, it is recommended to use a draw-off needle that has been placed in the vial stopper to avoid excess broaching of the stopper.

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

High doses of corticosteroids may cause apathy and lethargy in the horses. High doses may cause thrombosis due to a higher tendency to blood clotting. Continuous overdosing may result in development of Cushing syndrome. See section 3.6.

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

Cattle:

Meat and offal: 8 days

Milk: 72 hours

Pigs:

Meat and offal: 2 days

**Horses:** 

Meat and offal: 8 days

Not authorized for use in horses producing milk for human consumption.

#### 4. PHARMACOLOGICAL INFORMATION

#### **4.1 ATCvet code:** QH02AB02

#### 4.2 Pharmacodynamics

Dexamethasone is a fluoro-methyl derivative of prednisolone, with anti-inflammatory, anti-allergic and immunosuppressive effect. Dexamethasone stimulates gluconeogenesis, which leads to an increase in blood sugar levels. Relative potency expressed by anti-inflammatory effect of dexamethasone is about 25 times higher than hydrocortisone, while its mineralocorticoid effect is minimal. Dexamethasone has shock preventing and parturition inducing effects.

#### 4.3 Pharmacokinetics

The veterinary medicinal product is a short acting dexamethasone preparation with a rapid onset of activity. It contains the disodium phosphate ester of dexamethasone. After extravascular (intramuscular, intra-articular) administration, the ester is rapidly resorbed from the injection site followed by immediate hydrolysation into the parent compound, dexamethasone. The time to reach maximum plasma concentrations ( $C_{max}$ ) of dexamethasone in cattle, horse, pig and dog is within 20 min after administration. Bioavailability following i.m. administration approximately 100%. The half-lives of elimination after intravenous and intramuscular administration are 5-20 hours depending on the species.

#### 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: 36 months. Shelf life after first opening the immediate packaging: 28 days.

#### 5.3 Special precautions for storage

Keep the vial in the outer carton in order to protect from light.

# 5.4 Nature and composition of immediate packaging

100 ml amber co-ex plastic (polypropylene) vials closed with bromobutyl rubber stoppers and aluminium caps.

The vials are individually packaged in a cardboard box, the package leaflet is enclosed.

# 5.5 Special precautions for the disposal of unused veterinary medicinal products 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 systems applicable to the veterinary medicinal product concerned.

# 6. NAME OF THE MARKETING AUTHORISATION HOLDER

Vet-Agro Trading Sp. z o.o.

- 7. MARKETING AUTHORISATION NUMBER(S)
- 8. DATE OF FIRST AUTHORISATION
- 9. DATE OF THE LAST REVISION OF THE SUMMARY OF THE PRODUCT CHARACTERISTICS

#### 10. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCTS

Veterinary medicinal product subject to prescription.

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

# ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

# PARTICULARS TO APPEAR ON THE OUTER PACKAGE

#### Cardboard box

#### 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Dexamecine 2 mg/ml solution for injection

# 2. STATEMENT OF ACTIVE SUBSTANCES

Each ml contains:

**Active substance:** 

Dexamethasone 2 mg
As dexamethasone sodium phosphate 2.63 mg

# 3. PACKAGE SIZE

100 ml

# 4. TARGET SPECIES

Cattle, horses, pigs, dogs and cats

# 5. INDICATIONS

## 6. ROUTES OF ADMINISTRATION

Horses

Intramuscular or intraarticular use.

Cattle, pigs, dogs and cats

Intramuscular use.

# 7. WITHDRAWAL PERIODS

Withdrawal periods:

Cattle:

Meat and offal: 8 days

Milk: 72 hours

Pigs:

Meat and offal: 2 days

**Horses:** 

Meat and offal: 8 days

Not authorized for use in horses producing milk for human consumption.

8. EXPIRY DATE		
Exp. {mm/yyyy} Once opened use within 28 days. Once opened use by		
9. SPECIAL STORAGE PRECAUTIONS		
Keep the vial in the outer carton in order to protect from light.		
10. THE WORDS "READ THE PACKAGE LEAFLET BEFORE USE"		
Read the package leaflet before use.		
Pregnant women should not handle this product.		
11. THE WORDS "FOR ANIMAL TREATMENT ONLY"		
For animal treatment only.		
12. THE WORDS "KEEP OUT OF THE SIGHT AND REACH OF CHILDREN"		
Keep out of the sight and reach of children.		
13. NAME OF THE MARKETING AUTHORISATION HOLDER		
{logo name of the marketing authorisation holder}		
14. MARKETING AUTHORISATION NUMBERS		
15. BATCH NUMBER		
Lot {number}		

#### PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE

Vial 100 ml

#### 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Dexamecine 2 mg/ml solution for injection

# 2. STATEMENT OF ACTIVE SUBSTANCES

Each ml contains:

**Active substance:** 

Dexamethasone 2 mg
As dexamethasone sodium phosphate 2.63 mg

#### 3. TARGET SPECIES

Cattle, horses, pigs, dogs and cats

#### 4. ROUTES OF ADMINISTRATION

Horses: Intramuscular or intraarticular use.

Cattle, pigs, dogs and cats: Intramuscular use.

Read the package leaflet before use.

#### 5. WITHDRAWAL PERIODS

Withdrawal periods:

Cattle:

Meat and offal: 8 days

Milk: 72 hours

Pigs:

Meat and offal: 2 days

Horses:

Meat and offal: 8 days

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

# 6. EXPIRY DATE

Exp. {mm/yyyy}

Once opened use within 28 days.

# 7. SPECIAL STORAGE PRECAUTIONS

Keep the vial in the outer carton in order to protect from light.

# 8. NAME OF THE MARKETING AUTHORISATION HOLDER

 $\{logo\ name\ of\ the\ marketing\ authorisation\ holder\}$ 

# 9. BATCH NUMBER

Lot {number}

**B. PACKAGE LEAFLET** 

#### PACKAGE LEAFLET

# 1. Name of the veterinary medicinal product

Dexamecine 2 mg/ml solution for injection for cattle, horses, pigs, dogs and cats

# 2. Composition

Each ml contains:

# **Active substance:**

Dexamethasone 2 mg
As dexamethasone sodium phosphate 2.63 mg

#### **Excipient:**

Qualitative composition of excipients and other constituents	Quantitative composition if that information is essential for proper administration of the veterinary medicinal product
Benzyl alcohol (E 1519)	15.6 mg

Clear, colourless aqueous solution.

# 3. Target species

Cattle, horses, pigs, dogs and cats

# 4. Indications for use

#### <u>Horses</u>

Treatment of inflammation and allergic reactions.

Treatment of arthritis, bursitis or tenosynovitis.

#### Cattle

Treatment of inflammation and allergic reactions.

Induction of parturition.

Treatment of primary ketosis (acetonaemia).

# <u>Pigs</u>

Treatment of inflammation and allergic reactions.

#### Dogs and cats

Treatment of inflammation and allergic reactions.

#### 5. Contraindications

Except in emergency situations the veterinary medicinal product should not be used in animals suffering from diabetes, chronic nephritis, renal disease, congestive heart failure and osteoporosis. For infectious diseases it is necessary that application of corticosteroids is associated with effective antibiotic or chemotherapeutic treatment.

Use of the veterinary medicinal product is contraindicated in immunodeficient animals, as well as in case of septic process, mycoses or parasitoses.

Do not use in animals affected by gastrointestinal or corneal ulcers, or demodecosis.

Do not use in case of aseptic bone necrosis, poor healing wounds or fractures.

Do not use in animals affected with Cushing's syndrome.

Do not use in animals suffering from cataract or glaucoma.

Do not use in pancreatitis, hypertonia, hypocalcaemia.

Do not use the veterinary medicinal product in the course of active vaccination.

Do not use in cases of known hypersensitivity to the active substance or to any of the excipients.

# 6. Special warnings

#### Special warnings:

None.

#### Special precautions for safe use in the target species:

The induction of parturition with corticosteroids may be associated with reduced viability of calves, an increased incidence of retained placentae and possible subsequent metritis and/or subfertility in cattle. Care should be taken when the veterinary medicinal product is used for the treatment of laminitis in horses, where there is the possibility that such treatment could worsen the condition. The use of the veterinary medicinal product in horses for other conditions could induce laminitis and careful observation during the treatment period should be made.

During therapy effective doses suppress the hypothalamo-pituitary-adrenal axis. Following cessation of treatment, symptoms of adrenal insufficiency extending to adrenocortical atrophy can arise and this may render the animal unable to deal adequately with stressful situations. Consideration should therefore be given to means of minimising problems of adrenal insufficiency following the withdrawal of treatment, e.g. dosing to coincide with the time of the endogenous cortisol peak (i.e. in the morning with regard to dogs and the evening regarding cats) and a gradual reduction of dosage.

Its use in younger or older individuals may be associated with an increased risk of side effects. Therefore, it is necessary to decrease the dose and clinical monitoring during treatment. During a course of treatment the situation should be reviewed frequently by close veterinary supervision.

In the presence of bacterial infection, antibacterial drug cover is usually required when steroids are used.

In the presence of infections, steroids may worsen or hasten the progress of the disease.

Except in cases of ketosis and induction of parturition, corticosteroid administration is to induce an improvement in clinical signs rather than a cure. The underlying disease should be further investigated.

Due to their immunosuppressive activity, corticosteroids can lead to a reduced response to vaccination. Therefore, it is recommended that the veterinary medicinal product should not be used in combination with vaccines.

In suckling animals, the veterinary medicinal product should be used only according to the benefit-risk assessment by the responsible veterinarian.

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

Care should be taken to avoid accidental self-injection as dexamethasone can cause allergic reactions in some people.

People with known hypersensitivity to dexamethasone should avoid contact with the veterinary medicinal product.

In case of accidental self-injection, seek medical advice immediately and show the package leaflet or the label to the physician.

Dexamethasone may affect fertility or the unborn child. To avoid the risk from accidental self-injection, pregnant women should not handle this veterinary medicinal product.

This veterinary medicinal product is a skin and eye irritant. Avoid contact with skin and eyes. In the case of accidental eye or skin contact, wash/irrigate the area with clean running water. Seek medical attention if irritation persists. Wash hands after use.

#### Pregnancy and lactation:

Apart from the use of veterinary medicinal product to induce parturition in cattle, corticosteroids are not recommended for use in pregnant animals. Administration in early pregnancy is known to have caused fetal abnormalities in laboratory animals. Administration in late pregnancy may cause early parturition or abortion. If the veterinary medicinal product is used for induction of parturition in cattle, then a high incidence of retained placentae may be experienced and possible subsequent metritis and/or subfertility.

Use of the product corticosteroids in lactating cows may cause a temporary reduction in milk yield.

#### <u>Interaction</u> with other medicinal products and other forms of interaction:

Because corticosteroids can reduce the immune response to vaccination, the veterinary medicinal product should not be used in combination with vaccines.

Dexamethasone should not be administered in conjunction with other anti-inflammatory substances since it increases the risk for gastric ulcers or intestinal bleeding.

Veterinary medicinal product administration may cause hypokalaemia thus increasing the risk of toxicity of cardiac glycosides.

The risk of hypokalemia can increase when dexamethasone is administered in conjunction with diuretics which influence on excretion of potassium.

Co-administration with cholinesterase inhibitors can lead to muscle weakness in patients suffering from myasthenia gravis.

Glucocorticoids antagonize insulin.

Co-administration of phenobarbital, phenytoin and rifampicin can suppress the effect of dexamethasone.

Increased intraocular pressure may occur when anticholinergic drugs such as atropine are administered simultaneously with dexamethasone.

Dexamethasone reduces effect of anticoagulants.

#### Overdose:

High doses of corticosteroids may cause apathy and lethargy in the horses. High doses may cause thrombosis due to a higher tendency to blood clotting. Continuous overdosing may result in development of Cushing syndrome. See section 'Adverse events'.

#### Major incompatibilities:

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

#### 7. Adverse events

Cattle, horses, pigs, dogs and cats:

Very rare	Euphoria
(<1 animal / 10,000 animals treated,	Hypersensitivity reaction
including isolated reports):	Immunosuppression, weakened resistance to or
	exacerbation of existing infections
	Polydipsia <sup>1</sup> , polyphagia <sup>1</sup>
	Reduced growth rate <sup>2</sup> , delayed wound healing
	Polyuria <sup>1</sup>
	Hepatomegaly
	Elevated liver enzymes, sodium and water retention <sup>3</sup> ,
	hypokalaemia <sup>3</sup>

	Cutaneous calcinosis <sup>4</sup> , skin atrophy Acute pancreatitis, gastro-intestinal ulceration <sup>5</sup> Cushings disease <sup>6</sup> (e.g. redistribution of body fat, muscle weakness, muscle wasting and osteoporosis), diabetes mellitus <sup>7</sup>
Undetermined frequency (cannot be estimated from the available data):	Abnormal behaviour <sup>8</sup> (e.g. depression <sup>8</sup> , aggression <sup>9</sup> ), excitation Thrombosis Delayed bone healing Adrenocorticotropic hormone (ACTH) suppression, adrenal gland disorder (atrophy) <sup>10</sup> Glucose intolerance, hypocalcaemia
	Eye disorders (glaucoma, cataract) Oedema Arthropathy Convulsion <sup>11</sup> , epileptic seizure <sup>12</sup> , hypertonia Retained placenta <sup>13</sup> , metritis <sup>13,14</sup> , subfertility <sup>13,14</sup>

<sup>&</sup>lt;sup>1</sup> after systemic administration and particularly during the early stages of therapy

Corticosteroids, such as dexamethasone, are known to exert a wide range of side effects. Whilst single high doses are generally well tolerated, they may induce severe side-effects in long term use and when esters possessing a long duration of action are administered. Dosage in medium to long term use should therefore generally be kept to the minimum necessary to control symptoms.

Reporting adverse events is important. It allows continuous safety monitoring of a product. 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 contact, in the first instance, your veterinarian. You can also report any adverse events to the marketing authorisation holder <or the local representative of the marketing authorisation holder> using the contact details at the end of this leaflet, or via your national reporting system: {national system details}

#### 8. Dosage for each species, routes and method of administration

#### <u>Horses</u>

Intramuscular or intraarticular use.

#### Cattle, pigs, dogs and cats

Intramuscular use.

<sup>&</sup>lt;sup>2</sup> with disruptive bone growth and damage of bone matrix

<sup>&</sup>lt;sup>3</sup> in long term use

<sup>&</sup>lt;sup>4</sup> caused by systemic corticosteroids

<sup>&</sup>lt;sup>5</sup> May be exacerbated by steroids in patients given non-steroidal anti-inflammatory drugs and in animals with spinal cord trauma.

<sup>&</sup>lt;sup>6</sup> Cushingoid symptoms, involving significant alteration of fat, carbohydrate, protein and mineral metabolism.

<sup>&</sup>lt;sup>7</sup> steroid induced or deterioration of existing

<sup>&</sup>lt;sup>8</sup> in dogs and cats

<sup>&</sup>lt;sup>9</sup> in dogs

<sup>&</sup>lt;sup>10</sup> reversible, caused by inactivity

<sup>&</sup>lt;sup>11</sup> due to lowering of convulsive threshold

<sup>&</sup>lt;sup>12</sup> possible manifestation of latent epilepsy

<sup>&</sup>lt;sup>13</sup> in cattle, when use for induction of parturition

<sup>&</sup>lt;sup>14</sup> subsequent to retained placenta

<u>For the treatment of inflammatory or allergic conditions</u> the following doses administered as single intramuscular injection are advised:

Species

Dosage
(i.m.)

Horses, cattle, pigs

0.06 mg of dexamethasone/kg bw (1.5 ml of veterinary medicinal product/50 kg bw)

Dogs, cats

0.1 mg of dexamethasone/kg bw (0.5 ml of veterinary medicinal product/10 kg bw)

For the treatment of primary ketosis in cattle a dose of 0.02-0.04 mg of dexamethasone/kg bw (5-10 ml of veterinary medicinal product per animal) given by single intramuscular injection is advocated dependent on the size of the cow and the duration of the signs. Care should be taken not to overdose Channel Island breeds. Larger doses (i.e. 0.04 mg/kg) will be required if the signs have been present for some time or if relapsed animals are being treated.

<u>For the induction of parturition</u> - to avoid foetal oversize and mammary oedema in cattle. A single intramuscular injection of 10 ml of veterinary medicinal product after day 260 of pregnancy. Parturition will normally occur within 48-72 hours.

For the treatment of arthritis, bursitis or tenosynovitis by intra-articular injection in the horse.

Dose 1 - 5 ml of veterinary medicinal product *pro toto* 

These quantities are not specific and are quoted purely as a guide.

#### 9. Advice on correct administration

To ensure a correct dosage, body weight should be determined as accurately as possible.

Injections into joint spaces or bursae should be preceded by the removal of an equivalent volume of synovial fluid. Strict asepsis is essential.

Normal aseptic technique should be observed. To measure small volumes of less than 1 ml, a suitably graduated syringe should be used to ensure accurate administration of the correct dose.

The cap should not be punctured more than 125 times. When treating groups of animals in one run, it is recommended to use a draw-off needle that has been placed in the vial stopper to avoid excess broaching of the stopper.

#### 10. Withdrawal periods

Cattle:

Meat and offal: 8 days

Milk: 72 hours

Pigs:

Meat and offal: 2 days

Horses:

Meat and offal: 8 days

Not authorized for use in horses producing milk for human consumption.

#### 11. Special storage precautions

Keep out of the sight and reach of children.

Keep the vial in the outer carton in order to protect from light.

Do not use this veterinary medicinal product after the expiry date which is stated on the label after Exp. The expiry date refers to the last day of that month.

Shelf life after first opening the immediate packaging: 28 days.

# 12. Special precautions for disposal

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 applicable national collection systems. These measures should help to protect the environment.

Ask your veterinary surgeon or pharmacist how to dispose of medicines no longer required.

# 13. Classification of veterinary medicinal products

Veterinary medicinal product subject to prescription.

# 14. Marketing authorisation numbers and pack sizes

Package size:

Cardboard box containing 100 ml vial.

# 15. Date on which the package leaflet was last revised

Detailed information on this veterinary medicinal product is available in the <u>Union Product Database</u> (<a href="https://medicines.health.europa.eu/veterinary">https://medicines.health.europa.eu/veterinary</a>).

#### 16. Contact details

Marketing authorisation holder:

Vet-Agro Trading Sp. z o.o.

Mełgiewska str. 18, 20-234 Lublin, Poland

Manufacturer responsible for batch release:

Vet-Agro Multi-Trade Company Sp. z o.o.

Gliniana 32, 20-616 Lublin, Poland

Contact details to report suspected adverse reactions:

Local representatives and contact details to report suspected adverse reactions:

For any information about this veterinary medicinal product, please contact the local representative of the marketing authorisation holder.

# 17. Other information