# ANNEX I SUMMARY OF PRODUCT CHARACTERISTICS

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

SOLENSIA 7 mg/ml solution for injection for cats

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml of solution contains:

#### **Active substance:**

Frunevetmab\* 7 mg

#### **Excipients:**

Qualitative composition of excipients and	
other constituents	
Histidine hydrochloride monohydrate	
D-sorbitol	
Polysorbate 20	
Water for injections	
Hydrochloric acid (for pH adjustment)	
Sodium hydroxide (for pH adjustment)	

Clear to slightly opalescent solution.

### 3. CLINICAL INFORMATION

# 3.1 Target species

Cats

# 3.2 Indications for use for each target species

For the alleviation of pain associated with osteoarthritis in cats.

#### 3.3 Contraindications

Do not use in animals under 12 months and/or under 2.5 kg body weight.

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

Do not use in animals intended for breeding.

Do not use in pregnant and lactating animals.

#### 3.4 Special warnings

Continuation of treatment should be based on the individual response of each animal. If a positive response is not observed, consider alternative treatments.

This veterinary medicinal product may induce transient or persistent anti-drug antibodies. The induction of such antibodies may reduce the efficacy of the product although this was not observed during the 84 days of the pivotal clinical trial. No information is available for longer duration treatment.

<sup>\*</sup> Frunevetmab is a felinised monoclonal antibody (mAb) expressed through recombinant techniques in Chinese hamster ovary (CHO) cells.

# 3.5 Special precautions for use

Special precautions for safe use in the target species:

The safety and efficacy of this product has not been investigated in cats with kidney disease IRIS stages 3 and 4. Use of the product in such cases should be based on a benefit-risk assessment performed by the responsible veterinarian.

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

Hypersensitivity reactions, including anaphylaxis, could potentially occur in the case of accidental self-injection. Repeated accidental self-administration may increase the risk of hypersensitivity reactions.

The importance of Nerve Growth Factor (NGF) in ensuring normal foetal nervous system development is well-established and laboratory studies conducted on non-human primates with human anti-NGF antibodies have shown evidence of reproductive and developmental toxicity. Pregnant women, women trying to conceive, and breastfeeding women should take extreme care to avoid accidental self-injection.

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

Special precautions for the protection of the environment:

Not applicable.

#### 3.6 Adverse events

#### Cats:

Common	alopecia, dermatitis, pruritus
(1 to 10 animals / 100 animals	
treated):	
Rare (1 to 10 animals / 10,000	injection site reaction (e.g. pain and alopecia) <sup>1</sup>
animals treated):	skin disorders (e.g. skin scab, skin sore)
Very rare	Anaphylaxis <sup>2</sup>
(<1 animal / 10,000 animals treated, including isolated reports):	

<sup>&</sup>lt;sup>1</sup> Mild.

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 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

The safety of the veterinary medicinal product has not been established during pregnancy and lactation or in breeding cats. Laboratory studies with human anti-NGF antibodies in cynomolgus monkeys have shown evidence of teratogenic and foetotoxic effects.

<sup>&</sup>lt;sup>2</sup> In case of such reactions, appropriate symptomatic treatment should be administered.

#### Pregnancy and lactation:

Do not use in pregnant or lactating animals.

#### Fertility:

Do not use in breeding animals.

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

None known.

There are no safety data on the concurrent use of non-steroidal anti-inflammatory drugs (NSAIDs) and frunevetmab in the cat. In clinical trials in humans, rapidly progressive osteoarthritis has been reported in patients receiving humanised anti-Nerve Growth Factor (NGF) monoclonal antibody therapy. The incidence of these events increased with high doses and in those human patients that received long-term (more than 90 days) non-steroidal anti-inflammatory drugs (NSAIDs) concomitantly with an anti-NGF monoclonal antibody. Cats have no reported equivalent of human rapidly progressive osteoarthritis.

If a vaccine is to be administered at the same time as treatment with frunevetmab, the vaccine should be administered at a different site to that of frunevetmab administration to reduce any potential recruitment of immunogenicity (formation of anti-drug antibodies) to the mAb.

# 3.9 Administration routes and dosage

Subcutaneous use.

Avoid excessive shaking or foaming of the solution. Administer the entire content (1 ml) of the vial.

#### Dosage and treatment schedule:

The recommended dose is 1-2.8 mg/kg bodyweight, once a month.

Dose according to the dosing chart below.

Bodyweight (kg) of cat	SOLENSIA (7 mg/ml) volume to be administered
2.5 - 7.0	1 vial
7.1 - 14.0	2 vials

For cats greater than 7 kg, withdraw the full contents of two vials into the same syringe and administer as a single dose.

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

No adverse reactions were observed in laboratory overdose studies when Solensia was administered for 6 consecutive monthly doses at 5 times the maximum recommended dose. In case of adverse clinical signs after an overdose the cat should be treated symptomatically.

# 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

Not applicable.

#### 4. PHARMACOLOGICAL INFORMATION

**4.1 ATCvet code:** QN02BG90

#### 4.2 Pharmacodynamics

# **Mechanism of action**

Frunevetmab is a felinised monoclonal antibody (mAb) targeting Nerve Growth Factor (NGF). The inhibition of NGF mediated cell signalling has been demonstrated to provide relief from pain associated with osteoarthritis.

#### **Onset of effect**

Frunevetmab was demonstrated to provide analgesic effect within 6 days in an acute inflammatory pain laboratory model.

#### 4.3 Pharmacokinetics

In a 6-month laboratory study of healthy, adult cats administered frunevetmab every 28 days at doses ranging from 2.8-14 mg/kg, AUC and  $C_{max}$  increased slightly less than in proportion to dose. In a laboratory pharmacokinetic study at 3.0 mg/kg bw in cats diagnosed with osteoarthritis, peak plasma drug levels were observed at 3-7 days ( $t_{max} = 6.2$  days) after subcutaneous dosing, the bioavailability was approximately 60% and the elimination half-life was approximately 10 days.

In a field effectiveness study at the label dose in cats with osteoarthritis, steady-state was achieved after 2 doses.

Frunevetmab, like endogenous proteins, is expected to be degraded into small peptides and amino acids via normal catabolic pathways. Frunevetmab is not metabolised by cytochrome P450 enzymes; therefore, interactions with concomitant medications that are substrates, inducers, or inhibitors of cytochrome P450 enzymes are unlikely.

# Field trials

In clinical trials up to 3 months, treatment of cats with osteoarthritis was demonstrated to have a favourable effect on the reduction of pain assessed by CSOM (Client-Specific Outcome Measures). CSOM is an assessment of an individual cat's response to pain treatment, as assessed by performance of physical activities, sociability and quality of life. The maximum total CSOM score was 15. A total of 182 animals were enrolled in the frunevetmab treatment group and 93 animals included in the placebo group, in the pivotal field trial. Treatment success, defined as a reduction of  $\geq 2$  in the total CSOM score and no increase in any individual score, was achieved in 66.70%, 75.91% and 76.47% of the frunevetmab-treated cats and in 52.06%, 64.65% and 68.09% of placebo-treated cats after one, two and three monthly treatments, respectively. Statistically significant difference (p<0.05) compared to placebo-treatment was demonstrated after the first and second treatment, but not after the third treatment.

#### 5. PHARMACEUTICAL PARTICULARS

#### 5.1 Major incompatibilities

Do not mix with any other veterinary medicinal product.

#### 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: use immediately.

# 5.3 Special precautions for storage

Store in a refrigerator (2  $^{\circ}$ C – 8  $^{\circ}$ C). Do not freeze. Store in the original package. Protect from light.

# 5.4 Nature and composition of immediate packaging

Clear glass Type I vials with bromobutyl rubber stoppers and aluminium overseals.

Cardboard box with 1, 2 or 6 vials.

Not all pack sizes may be marketed.

# 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

Zoetis Belgium

### 7. MARKETING AUTHORISATION NUMBER(S)

EU/2/20/269/001-003

#### 8. DATE OF FIRST AUTHORISATION

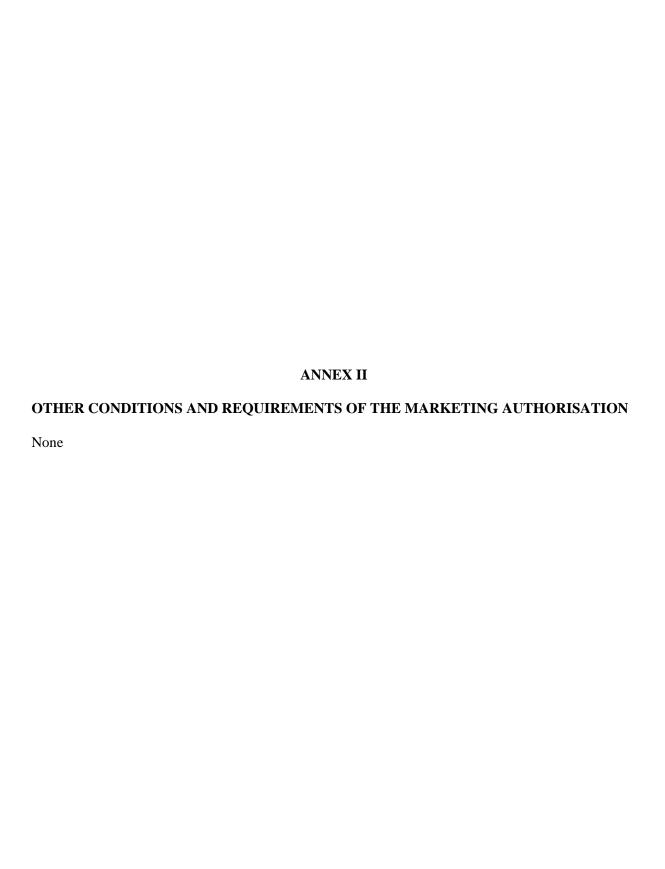
Date of first authorisation: 17/02/2021

# 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 Union Product Database (<a href="https://medicines.health.europa.eu/veterinary">https://medicines.health.europa.eu/veterinary</a>).



# ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGE			
CARDBOARD BOX			
1. NAME OF THE VETERINARY MEDICINAL PRODUCT			
SOLENSIA 7 mg/ml solution for injection			
2. STATEMENT OF ACTIVE SUBSTANCES			
Each vial of 1 ml contains 7 mg frunevetmab			
3. PACKAGE SIZE			
1 x 1 ml 2 x 1 ml 6 x 1 ml			
4. TARGET SPECIES			
Cats			
5. INDICATIONS			
6. ROUTES OF ADMINISTRATION			
Subcutaneous use.			
7. WITHDRAWAL PERIODS			
8. EXPIRY DATE			
Exp. {mm/yyyy} Once broached use immediately.			
9. SPECIAL STORAGE PRECAUTIONS			
Store in a refrigerator. Do not freeze. Store in the original package. Protect from light.			

# 10. THE WORDS "READ THE PACKAGE LEAFLET BEFORE USE"

Read the package leaflet before use.

# 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

Zoetis Belgium

# 14. MARKETING AUTHORISATION NUMBERS

EU/2/20/269/001 7 mg/ml 1 vial EU/2/20/269/002 7 mg/ml 2 vials EU/2/20/269/003 7 mg/ml 6 vials

# 15. BATCH NUMBER

Lot {number}

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS					
VIA	VIAL - 1 ml				
1.	NAME OF THE VETERINARY MEDICINAL PRODUCT				
SOI	I FNSIA				

SOLENSIA



#### 2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES

frunevetmab 7 mg/ml

#### **BATCH NUMBER 3.**

Lot {number}

#### EXPIRY DATE 4.

Exp. {mm/yyyy}

Once broached use immediately.

**B. PACKAGE LEAFLET** 

#### PACKAGE LEAFLET

# 1. Name of the veterinary medicinal product

SOLENSIA 7 mg/ml solution for injection for cats

# 2. Composition

Each ml of solution contains:

#### **Active substance:**

Frunevetmab\* 7 mg

\* Frunevetmab is a felinised monoclonal antibody (mAb) expressed through recombinant techniques in Chinese hamster ovary (CHO) cells.

The product should appear clear to slightly opalescent solution.

# 3. Target species

Cats.

# 4. Indications for use

For the alleviation of pain associated with osteoarthritis in cats.

# 5. Contraindications

Do not use in animals under 12 months and/or under 2.5 kg body weight.

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

Do not use in animals intended for breeding.

Do not use in pregnant and lactating animals.

# 6. Special warnings

#### Special warnings:

Continuation of treatment should be based on the individual response of each animal. If a positive response is not observed, consider alternative treatments.

This veterinary medicinal product may induce transient or persistent anti-drug antibodies. The induction of such antibodies may reduce the efficacy of the product although this was not observed during the 84 days of the pivotal clinical trial. No information is available for longer duration treatment.

# Special precautions for safe use in the target species:

The safety and efficacy of this product has not been investigated in cats with kidney disease IRIS stages 3 and 4. Use of the product in such cases should be based on a benefit-risk assessment performed by the responsible veterinarian.

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

Hypersensitivity reactions, including anaphylaxis, could potentially occur in the case of accidental self-injection. Repeated accidental self-administration may increase the risk of hypersensitivity reactions.

The importance of Nerve Growth Factor (NGF) in ensuring normal foetal nervous system development is well-established and laboratory studies conducted on non-human primates with human anti-NGF antibodies have shown evidence of reproductive and developmental toxicity. Pregnant women, women trying to conceive, and breastfeeding women should take extreme care to avoid accidental self-injection.

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

# Special precautions for the protection of the environment:

Not applicable

#### Pregnancy and lactation:

The safety of the veterinary medicinal product has not been established during pregnancy and lactation or in breeding cats. Laboratory studies with human anti-NGF antibodies in cynomolgus monkeys have shown evidence of teratogenic and foetotoxic effects.

Do not use in pregnant and lactating animals.

#### Fertility:

Do not use in breeding animals.

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

None known.

There are no safety data on the concurrent use of non-steroidal anti-inflammatory drugs (NSAIDs) and frunevetmab in the cat. In clinical trials in humans, rapidly progressive osteoarthritis has been reported in patients receiving humanised anti-Nerve Growth Factor (NGF) monoclonal antibody therapy. The incidence of these events increased with high doses and in those human patients that received long-term (more than 90 days) non-steroidal anti-inflammatory drugs (NSAIDs) concomitantly with an anti-NGF monoclonal antibody. Cats have no reported equivalent of human rapidly progressive osteoarthritis.

If a vaccine is to be administered at the same time as treatment with frunevetmab, the vaccine should be administered at a different site to that of frunevetmab administration to reduce any potential recruitment of immunogenicity (formation of anti-drug antibodies) to the mAb.

#### Overdose:

No adverse reactions were observed in laboratory overdose studies when Solensia was administered for 6 consecutive monthly doses at 5 times the maximum recommended dose.

In case of adverse clinical signs after an overdose the cat should be treated symptomatically.

#### Special restrictions for use and special conditions for use:

Not applicable.

#### Major incompatibilities:

Do not mix with any other veterinary medicinal product.

#### 7. Adverse events

#### Cats:

Common	alopecia, dermatitis, pruritus
(1 to 10 animals / 100 animals	
treated):	
Rare (1 to 10 animals / 10,000	injection site reaction (e.g. pain and alopecia) <sup>1</sup>
animals treated):	skin disorders (e.g. skin scab, skin sore)
Very rare	Anaphylaxis (severe allergic reaction) <sup>2</sup>
(<1 animal / 10,000 animals	
treated, including isolated reports):	

<sup>&</sup>lt;sup>1</sup> Mild.

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 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

Subcutaneous use.

Avoid excessive shaking or foaming of the solution. Administer the entire content (1 ml) of the vial.

# Dosage and treatment schedule:

The recommended dose is 1-2.8 mg/kg bodyweight, once a month.

Dose according to the dosing chart below.

Bodyweight (kg) of cat	SOLENSIA (7 mg/ml) volume to be administered
2.5 - 7.0	1 vial
7.1 - 14.0	2 vials

For cats greater than 7 kg, withdraw the full contents of two vials into the same syringe and administer as a single dose.

### 9. Advice on correct administration

Avoid excessive shaking or foaming.

#### 10. Withdrawal periods

Not applicable.

<sup>&</sup>lt;sup>2</sup> In case of such reactions, appropriate symptomatic treatment should be administered.

# 11. Special storage precautions

Keep out of the sight and reach of children.

Store in a refrigerator (2  $^{\circ}$ C – 8  $^{\circ}$ C). Do not freeze. Store in the original package. Protect from light.

Do not use this veterinary medicinal product after the expiry date which is stated on the label after Exp.

Shelf life after first opening the immediate packaging: use immediately.

# 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. Ask your veterinary surgeon or pharmacist how to dispose of medicines no longer required. These measures should help to protect the environment.

# 13. Classification of veterinary medicinal products

Veterinary medicinal product subject to prescription.

# 14. Marketing authorisation numbers and pack sizes

EU/2/20/269/001-003

Clear glass Type I vials with bromobutyl rubber stopper and aluminium overseals. Cardboard box with 1, 2 or 6 vials.

Not all pack sizes may be marketed.

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

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

#### 16. Contact details

Marketing authorisation holder and contact details to report suspected adverse reactions:

Zoetis Belgium Rue Laid Burniat 1 1348 Louvain-La-Neuve Belgium

België/Belgique/Belgien

Tél/Tel: +32 (0) 800 99 189 pharmvig-belux@zoetis.com Lietuva

Tel: +370 610 05088

zoetis.lithuania@zoetis.com

Република България

Тел: +359 888 51 30 30 zoetisromania@zoetis.com

Česká republika

Tel: +420 257 101 111 infovet.cz@zoetis.com

**Danmark** 

Tlf: +45 70 20 73 05

adr.scandinavia@zoetis.com

**Deutschland** 

Tel: +49 30 2020 0049

tierarzneimittelsicherheit@zoetis.com

**Eesti** 

Tel: +370 610 05088 zoetis.estonia@zoetis.com

Ελλάδα

Tηλ: +30 210 6791900 infogr@zoetis.com

España

Tel: +34 91 4191900 regulatory.spain@zoetis.com

France

Tél: +33 (0)800 73 00 65 contacteznous@zoetis.com

Hrvatska

Tel: +385 1 6441 462

pv.westernbalkans@zoetis.com

**Ireland** 

Tel: +353 (0) 1 256 9800 pvsupportireland@zoetis.com

Ísland

Sími: +354 540 8000 icepharma@icepharma.is

Italia

Tel: +39 06 3366 8111

farmacovigilanza.italia@zoetis.com

Κύπρος

Tηλ: +30 210 6791900 infogr@zoetis.com

Latvija

Tel: +370 610 05088 zoetis.latvia@zoetis.com

Luxembourg/Luxemburg

Tél/Tel: +32 (2) 746 80 11 pharmvig-belux@zoetis.com

Magyarország

Tel.: +36 1 224 5200 hungary.info@zoetis.com

Malta

Tel: +356 21 465 797 info@agrimedltd.com

**Nederland** 

Tel: +31 (0)10 714 0900 pharmvig-nl@zoetis.com

Norge

Tlf: +47 23 29 86 80 adr.scandinavia@zoetis.com

Österreich

Tel: +43 (0)1 2701100 100

tierarzneimittelsicherheit@zoetis.com

Polska

Tel.: +48 22 2234800 pv.poland@zoetis.com

**Portugal** 

Tel: +351 21 042 72 00 zoetis.portugal@zoetis.com

România

Tel: +40785019479 zoetisromania@zoetis.com

Slovenija

Tel: +385 1 6441 462

pv.westernbalkans@zoetis.com

Slovenská republika

Tel: +420 257 101 111 infovet.cz@zoetis.com

Suomi/Finland

Puh/Tel: +358 10 336 7000 laaketurva@zoetis.com

**Sverige** 

Tel: +46 (0) 76 760 0677 adr.scandinavia@zoetis.com

**United Kingdom (Northern Ireland)** 

Tel: +353 (0) 1 256 9800 pvsupportireland@zoetis.com

#### Manufacturer responsible for batch release:

Zoetis Belgium Rue Laid Burniat 1 1348 Louvain-La-Neuve Belgium

or

Zoetis Belgium SA Unit 5, Sragh Technology Park Tullamore Co. Offaly Ireland

or

Corden Pharma S.p.A, Via Dell' Industria 3 20867 Caponago Monza Brianza Italy

# 17. Other information

#### Field trials

In clinical trials up to 3 months, treatment of cats with osteoarthritis was demonstrated to have a favourable effect on the reduction of pain assessed by CSOM (Client-Specific Outcome Measures). CSOM is an assessment of an individual cat's response to pain treatment, as assessed by performance of physical activities, sociability and quality of life. The maximum total CSOM score was 15. A total of 182 animals were enrolled in the frunevetmab treatment group and 93 animals included in the placebo group, in the pivotal field trial. Treatment success, defined as a reduction of  $\geq$ 2 in the total CSOM score and no increase in any individual score, was achieved in 66.70%, 75.91% and 76.47% of the frunevetmab-treated cats and in 52.06%, 64.65% and 68.09% of placebo-treated cats after one, two and three monthly treatments, respectively. Statistically significant difference (p<0.05) compared to placebo-treatment was demonstrated after the first and second treatment, but not after the third treatment.