1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Versican Plus DHPPi/L4 lyophilisate and suspension for suspension for injection for dogs

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each dose of 1 ml contains:

Active substances:

Minimum	Maximum
$10^{3.6} \text{ TCID}_{50}*$	$10^{5.3} \text{TCID}_{50} *$
10 ^{4.3} TCID ₅₀ *	10 ^{6.6} TCID ₅₀ *
$10^{3.1} \text{ TCID}_{50}*$	$10^{5.1} \text{ TCID}_{50}*$
	10 ^{3.1} TCID ₅₀ * 10 ^{3.6} TCID ₅₀ * 10 ^{4.3} TCID ₅₀ *

Suspension (inactivated):

Leptospira interrogans serogroup Icterohaemorrhagiaeserovar Icterohaemorrhagiae strain MSLB 1089ALR** titre $\geq 1:51$ Leptospira interrogans serogroup CanicolaALR** titre $\geq 1:51$ serovar Canicola, strain MSLB 1090ALR** titre $\geq 1:51$ Leptospira kirschneri serogroup GrippotyphosaALR** titre $\geq 1:40$ Leptospira interrogans serogroup AustralisALR** titre $\geq 1:51$

- * Tissue culture infectious dose 50%.
- ** Antibody micro agglutination-lytic reaction.

Adjuvant:

Aluminium hydroxide 1.8–2.2 mg.

Excipients:

Qualitative composition of excipients and other constituents
Lyophilisate:
Trometamol
Edetic Acid
Sucrose
Dextran 70
Suspension:
Sodium chloride
Potassium chloride
Potassium dihydrogen phosphate
Disodium phosphate dodecahydrate
Water for injections

The visual appearance is as follows:

Lyophilisate: spongy matter of white colour. Suspension: whitish colour with fine sediment.

3. CLINICAL INFORMATION

3.1 Target species

Dogs.

3.2 Indications for use for each target species

Active immunisation of dogs from 6 weeks of age:

- to prevent mortality and clinical signs caused by canine distemper virus,
- to prevent mortality and clinical signs caused by canine adenovirus type 1,
- to prevent clinical signs and reduce viral excretion caused by canine adenovirus type 2,
- to prevent clinical signs, leucopoenia and viral excretion caused by canine parvovirus,
- to prevent clinical signs (nasal and ocular discharge) and reduce viral excretion caused by canine parainfluenza virus,
- to prevent clinical signs, infection and urinary excretion caused by L. interrogans serogroup Australis serovar Bratislava,
- to prevent clinical signs and urinary excretion and reduce infection caused by *L. interrogans* serogroup Canicola serovar Canicola and *L. interrogans* serogroup Icterohaemorrhagiae serovar Icterohaemorrhagiae and
- to prevent clinical signs and reduce infection and urinary excretion caused by *L. kirschneri* serogroup Grippotyphosa serovar Grippotyphosa.

Onset of immunity:

- 3 weeks after the first vaccination for CDV, CAV, CPV,
- 3 weeks after completion of the primary course for CPiV and
- 4 weeks after completion of the primary course for *Leptospira* components.

Duration of immunity:

At least three years following the primary vaccination course for canine distemper virus, canine adenovirus type 1, canine adenovirus type 2 and canine parvovirus. The duration of immunity against CAV-2 was not established by challenge. It was shown that 3 years after the vaccination CAV-2 antibodies are still present. Protective immune response against CAV-2 associated respiratory disease is considered to last at least 3 years. At least one year following the primary vaccination course for canine parainfluenza virus and *Leptospira* components.

3.3 Contraindications

None.

3.4 Special warnings

A good immune response is reliant on a fully competent immune system. Immunocompetence of the animal may be compromised by a variety of factors including poor health, nutritional status, genetic factors, concurrent medicinal therapy and stress.

Immunological responses to the CDV, CAV and CPV components of the vaccine may be delayed due to maternally derived antibody interference. However, the vaccine has been proven to be protective against virulent challenge in the presence of maternally derived antibodies to CDV, CAV and CPV at levels equal or higher to those likely to be encountered under field conditions. In situations where very high maternally derived antibody levels are expected, the vaccination protocol should be planned accordingly.

Vaccinate healthy animals only.

3.5 Special precautions for use

Special precautions for safe use in the target species:

The live attenuated virus vaccine strains CAV-2, CPiV and CPV-2b may be shed by vaccinated dogs following vaccination, shedding of CPV has been shown for up to 10 days. However, due to the low pathogenicity of these strains, it is not necessary to keep vaccinated dogs separated from non-vaccinated dogs and domestic cats. The vaccine virus strain CPV-2b has not been tested in other carnivores (except dogs and domestic cats) that are known to be susceptible to canine parvoviruses and therefore vaccinated dogs should be separated from them after vaccination.

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

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

Dogs:

Common	injection site swelling ¹
(1 to 10 animals / 100 animals treated):	
Rare	hypersensitivity reaction ² (anaphylaxis, angioedema,
(1 to 10 animals / 10,000 animals	circulatory shock, collapse, diarrhoea, dyspnoea,
treated):	vomiting)
	anorexia, decreased activity
Very rare	hyperthermia, lethargy, malaise
(<1 animal / 10,000 animals treated,	immune mediated haemolytic anaemia, immune
including isolated reports):	mediated haemolytic thrombocytopenia, immune
	mediated polyarthritis

¹A transient swelling (up to 5 cm) which can be painful, warm or reddened. Any such swelling will either have spontaneously resolved or be greatly diminished by 14 days after vaccination.

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:

Can be used during the second and third stages of pregnancy. Safety of the product during the early stage of pregnancy and during lactation has not been investigated.

²If a hypersensitivity reaction occurs, appropriate treatment should be administered without delay. Such reactions may evolve to a more severe condition which may be life-threatening.

3.8 Interaction with other medicinal products and other forms of interaction

No information is available on the safety and efficacy of this vaccine when used with any other veterinary medicinal product. A decision to use this vaccine before or after any other veterinary medicinal product therefore needs to be made on a case by case basis.

Rabies:

If protection against Rabies is required:

First dose: Versican Plus DHPPi/L4 from 8-9 weeks of age.

Second dose: Versican Plus DHPPi/L4R 3–4 weeks later but not before 12 weeks of age. The efficacy of the rabies fraction is proven after a single dose from 12 weeks of age in laboratory studies. However, in field studies 10% of sero-negative dogs did not show seroconversion (>0.1 IU/ml) 3–4 weeks after single primary vaccination against rabies. Some animals may also not show titres > 0.5 IU/ml after the primary vaccination. Antibody titres drop over the course of the 3-year duration of immunity, although dogs are protected when challenged. In case of travelling to risk areas or outside the EU, veterinary surgeons may wish to give additional rabies vaccinations after 12 weeks of age to ensure that the vaccinated dogs have an antibody titre of \geq 0.5 IU/ml, which is generally regarded as sufficiently protective and that they meet the travel test requirements (antibody titres \geq 0.5 IU/ml).

In case of need, dogs younger than 8 weeks can be vaccinated as safety of Versican Plus DHPPi/L4R has been demonstrated in 6-week old dogs.

3.9 Administration routes and dosage

Subcutaneous use.

Dosage and route of administration:

Aseptically reconstitute the lyophilisate with the suspension. Shake well and administer immediately the entire content (1 ml) of the reconstituted product.

Appearance of the reconstituted vaccine: pinkish or yellowish colour with light opalescence.

Primary vaccination scheme:

Two doses of Versican Plus DHPPi/L4 3-4 weeks apart from 6 weeks of age.

Re-vaccination scheme:

A single dose of Versican Plus DHPPi/L4 should be given every 3 years. Annual re-vaccination is required for Parainfluenza and *Leptospira* components. Therefore a single dose of compatible vaccine Versican Plus Pi/L4 can be used annually as required.

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

No adverse events other than those mentioned in section 3.6 were observed after administration of a 10-fold overdose of the vaccine. However, in a minority of animals pain was observed at the injection site immediately after administration of a 10-fold overdose of the vaccine.

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. IMMUNOLOGICAL INFORMATION

4.1 ATCvet code: QI07AI02

The vaccine is intended for the active immunisation of healthy puppies and dogs against diseases caused by canine distemper virus, canine parvovirus, canine adenovirus type 1 and 2, canine parainfluenza virus, *Leptospira interrogans* serogroup Australis serovar Bratislava, *Leptospira interrogans* serogroup Canicola serovar Canicola, *Leptospira kirschneri* serogroup Grippotyphosa serovar Grippotyphosa and *Leptospira interrogans* serogroup Icterohaemorrhagiae serovar Icterohaemorrhagiae.

5. PHARMACEUTICAL PARTICULARS

5.1 Major incompatibilities

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

5.2 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 2 years. Shelf life after reconstitution according to directions: use immediately.

5.3 Special precautions for storage

Store and transport refrigerated (2 $^{\circ}$ C – 8 $^{\circ}$ C). Do not freeze. Protect from light.

5.4 Nature and composition of immediate packaging

Type I glass vial containing 1 dose of lyophilisate closed with a bromobutyl rubber stopper and aluminium cap.

Type I glass vial containing 1 ml of suspension closed with a chlorobutyl rubber stopper and aluminium cap.

Pack sizes:

Plastic box containing 25 vials (1 dose) of lyophilisate and 25 vials (1 ml) of suspension. Plastic box containing 50 vials (1 dose) of lyophilisate and 50 vials (1 ml) of suspension.

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/2/14/164/001 EU/2/14/164/002

8. DATE OF FIRST AUTHORISATION

Date of first authorisation: 07/05/2014.

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 (https://medicines.health.europa.eu/veterinary).