ANNEX I

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

COXEVAC suspension for injection for cattle, goats and sheep

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

Active substance:

Inactivated Coxiella burnetii, strain Nine Mile

 \geq 72 QF Units*

*QF (Q fever) Unit: relative potency of phase I antigen measured by ELISA in comparison with a reference item.

Excipient:

Qualitative composition of excipients and other constituents	Quantitative composition if that information is essential for proper administration of the veterinary medicinal product
Thiomersal	$\leq 120 \ \mu g/ml$
Sodium chloride	-
Disodium hydrogen phosphate	-
Potassium dihydrogen phosphate	-
Water for injections	QS 1 ml

Whitish, opalescent, homogeneous suspension.

3. CLINICAL INFORMATION

3.1 Target species

Cattle, goats and sheep.

3.2 Indications for use for each target species

Cattle:

For the active immunisation of cattle to lower the risk for non-infected animals vaccinated when non-pregnant to become shedder (5 times lower probability in comparison with animals receiving a placebo), and to reduce shedding of *Coxiella burnetii* in these animals via milk and vaginal mucus. Onset of immunity: not established.

Duration of immunity: 280 days after completion of the primary vaccination course.

Goats:

For the active immunisation of goats to reduce abortion caused by *Coxiella burnetii* and to reduce shedding of the organism via milk, vaginal mucus, faeces and placenta. Onset of immunity: not established.

Duration of immunity: 1 year after completion of the primary vaccination course.

Sheep:

For the active immunisation of sheep against *Coxiella burnetii*, to reduce shedding of the organism via milk, vaginal mucus and faeces.

Onset of immunity: not established Duration of immunity: 4 months

3.3 Contraindications

Do not use in cases of hypersensitivity to the active substance(s) or to any of the excipient(s).

3.4 Special warnings

Vaccinate healthy animals only.

Vaccination of animals already infected at the time of vaccination will have no adverse reaction.

No efficacy data are available concerning the use of COXEVAC in male animals. However, in safety laboratory trials, the use of COXEVAC in males proved to be safe. In the case that it is decided to vaccinate the whole herd, it is advisable to vaccinate the male animals at the same time.

There are no benefits of the vaccine (as described in the indications for cattle), when used in infected and/or pregnant cows.

The biological significance of the levels of reduction shown in shedding in cattle, goats and sheep is not known.

3.5 Special precautions for use

Special precautions for safe use in the target species:

It is advisable to vaccinate all the animals in the herd at the same time.

Under field conditions, vaccination with COXEVAC has commonly been followed by a decrease in milk production in goats. Since stress could contribute to this adverse reaction, appropriate precautions should be taken to reduce stress as much as possible during the administration of the product.

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.

Other precautions:

None

3.6 Adverse events

Cattle:

Very common (>1 animal / 10 animals treated):	Injection site swelling*
Rare	Lethargy, Hyperthermia, Anorexia
(1 to 10 animals / 10,000 animals treated):	

* Palpable, of 9 to 10 cm diameter maximum, which may last for 17 days, reduces gradually and disappears without need for treatment.

Goats:

Very common (>1 animal / 10 animals treated):	Injection site swelling* Hyperthermia**
Uncommon (1 to 10 animals / 1,000 animals treated):	Lethargy, Malaise, Anorexia
Rare (1 to 10 animals / 10,000 animals treated):	Diarrhoea

* Palpable, of 3 to 4 cm diameter maximum, which may last for 14 days, reduces and disappears without need for treatment.

** For 4 days post-vaccination.

Sheep:

norexia

* Palpable, of 5 cm diameter maximum, which may last for 14 days, reduces and disappears without need for treatment. Reactions are expected to be more severe after the second injection.

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 also section "Contact details" of the package leaflet.

3.7 Use during pregnancy, lactation or lay

Pregnancy and lactation:

Cattle and goats:

The safety of the veterinary medicinal product has not been established during pregnancy. The vaccine can be used during lactation.

Under field conditions, vaccination with COXEVAC has been followed by a decrease in milk production, commonly in goats and rarely in cattle. Since stress could contribute to this adverse reaction, appropriate precautions should be taken to reduce stress as much as possible during the administration of the product.

Sheep:

The safety of the veterinary medicinal product has not been established during pregnancy and lactation.

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.

3.9 Administration routes and dosage

Subcutaneous use. Shake well before use.

Administer the vaccine as follows: Cattle: 4 ml in the neck region. Goats: 2 ml in the neck region. Sheep: 2 ml in the neck region.

Cattle from 3 months of age:

Primary vaccination:

Two doses should be given subcutaneously with an interval of 3 weeks. Under normal conditions the timing of vaccination should be planned so that the primary course is completed by 3 weeks before artificial insemination or mating.

Re-vaccination:

Every 9 months, as described for primary vaccination, based on duration of immunity of 280 days.

Goats from 3 months of age:

Primary vaccination:

Two doses should be given subcutaneously with an interval of 3 weeks. Under normal conditions the timing of vaccination should be planned so that the primary course is completed by 3 weeks before artificial insemination or mating.

Re-vaccination:

One dose should be given yearly.

Sheep from 4 months of age:

Primary vaccination:

Two doses should be given subcutaneously with an interval of 3 weeks. The vaccination should be done as late as possible, but the primary course needs to be completed by 3 weeks before artificial insemination or mating.

Re-vaccination:

Prior to each artificial insemination or mating, two doses, 3 weeks apart; the vaccination course should be done as late as possible but needs to be completed at least 3 weeks before the intended start of the reproduction phase.

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

Cattle:

With double dose, a palpable reaction of maximum diameter of 10 cm was observed at the injection site, lasting for 16 days. The reaction gradually reduced and disappeared without need for treatment.

Goats:

With double dose, a moderate palpable reaction of diameter of 4 to 5 cm was observed at the injection site, lasting for 4 days. The reaction reduced and disappeared without need for treatment.

Sheep:

With double dose, a moderate palpable reaction of diameter of less than 2 cm was observed at the injection site, lasting for 12 days. The reaction reduced and disappeared without need for treatment.

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

Meat and offal: Zero days Milk: Zero days

4. IMMUNOLOGICAL INFORMATION

4.1 ATCvet code:

ATCvet code: QI02AB.

The vaccine contains phase I *Coxiella burnetii* as active substance inducing active immunity against Q fever in cattle, goats and sheep.

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: 10 hours.

5.3 Special precautions for storage

Store and transport refrigerated (2 °C - 8 °C). Do not freeze. Protect from light.

5.4 Nature and composition of immediate packaging

Carton box with 1 plastic (LDPE) bottle, containing 40 ml of suspension. Carton box with 1 plastic (LDPE) bottle, containing 100 ml of suspension. Each container is closed with a 20 mm bromobutyl rubber stopper and a central tear-off aluminiumplastic cap.

Not all pack sizes may be marketed.

5.5 Special precautions for the disposal of unused veterinary medicinal product 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

CEVA Sante Animale

7. MARKETING AUTHORISATION NUMBER(S)

EU/2/10/110/001-002

8. DATE OF FIRST AUTHORISATION

Date of first authorisation: 30/09/2010.

9. DATE OF THE LAST REVISION OF THE SUMMARY OF THE PRODUCT CHARACTERISTICS

{MM/YYYY}

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).

ANNEX II

OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

None

ANNEX III

LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGE

CARTON BOX for 40 ml or 100 ml plastic bottle

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

COXEVAC suspension for injection for cattle, goats and sheep

2. STATEMENT OF ACTIVE SUBSTANCES

Inactivated Coxiella burnetii, strain Nine Mile

 \geq 72 QF Units/ml

3. PACKAGE SIZE

40 ml 100 ml

4. TARGET SPECIES

Cattle, goats and sheep

5. INDICATIONS

6. ROUTES OF ADMINISTRATION

Subcutaneous use.

7. WITHDRAWAL PERIODS

Withdrawal period: zero days.

8. EXPIRY DATE

Exp. {mm/yyyy} Once broached, use within 10 hours.

9. SPECIAL STORAGE PRECAUTIONS

Store and transport refrigerated. Do not freeze. 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

CEVA Sante Animale

14. MARKETING AUTHORISATION NUMBERS

EU/2/10/110/001 (40 ml) EU/2/10/110/002 (100 ml)

15. BATCH NUMBER

 $Lot\{number\}$

PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE

100 ml plastic bottle

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

COXEVAC suspension for injection for cattle, goats and sheep

2. STATEMENT OF ACTIVE SUBSTANCES

Inactivated Coxiella burnetii, strain Nine Mile

 \geq 72 QF Units/ml

3. TARGET SPECIES

Cattle, goat and sheep

4. ROUTES OF ADMINISTRATION

SC

Read the package leaflet before use.

5. WITHDRAWAL PERIODS

Withdrawal period: zero days.

6. EXPIRY DATE

Exp. {mm/yyyy} Once broached, use within 10 hours.

7. SPECIAL STORAGE CONDITIONS

Store and transport refrigerated. Do not freeze. Protect from light.

8. NAME OF THE MARKETING AUTHORISATION HOLDER

CEVA Sante Animale

9. BATCH NUMBER

Lot {number}

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

40 ml plastic bottle

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

COXEVAC suspension for injection for cattle, goats and sheep

2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES

Inactivated *Coxiella burnetii*, strain Nine Mile \geq 72 QF Units/ml

3. BATCH NUMBER

Lot {number}

4. EXPIRY DATE

Exp. {mm/yyyy}

Once broached, use within 10 hours.

B. PACKAGE LEAFLET

PACKAGE LEAFLET:

1. Name of the veterinary medicinal product

COXEVAC suspension for injection for cattle, goats and sheep

2. Composition

Each ml contains:

Active substance:

Inactivated *Coxiella burnetii*, strain Nine Mile \geq 72 QF Units* *QF (Q fever) Unit: relative potency of phase I antigen measured by ELISA in comparison with a reference item.

Excipient:

Qualitative composition of excipients and other constituents	Quantitative composition if that information is essential for proper administration of the veterinary medicinal product
Thiomersal	$\leq 120 \ \mu g/ml$
Sodium chloride	-
Disodium hydrogen phosphate	-
Potassium dihydrogen phosphate	-
Water for injections	QS 1 ml

Whitish, opalescent, homogeneous suspension.

3. Target species

Cattle, goats and sheep

4. Indications for use

Cattle:

For the active immunisation of cattle to lower the risk for non-infected animals vaccinated when non-pregnant to become shedder (5 times lower probability in comparison with animals receiving a placebo), and to reduce shedding of *Coxiella burnetii* in these animals via milk and vaginal mucus. Onset of immunity: not established.

Duration of immunity: 280 days after completion of the primary vaccination course.

Goats:

For the active immunisation of goats to reduce abortion caused by *Coxiella burnetii* and to reduce shedding of the organism via milk, vaginal mucus, faeces and placenta.

Onset of immunity: not established.

Duration of immunity: one year after completion of the primary vaccination course.

Sheep:

For the active immunisation of sheep against *Coxiella burnetii*, to reduce shedding of the organism via milk, vaginal mucus and faeces.

Onset of immunity: not established Duration of immunity: 4 months

5. Contraindications

Do not use in cases of hypersensitivity to the active substance(s) or to any of the excipient(s).

6. Special warnings

Vaccinate healthy animals only.

Special precautions for safe use in the target species:

Vaccination of animals already infected at the time of vaccination will have no adverse reaction.

No efficacy data are available concerning the use of COXEVAC in male animals. However, in safety laboratory trials, the use of COXEVAC in males proved to be safe. In the case that it is decided to vaccinate the whole herd, it is advisable to vaccinate the male animals at the same time.

There are no benefits of the vaccine (as described in the indications for cattle), when used in infected and/or pregnant cows.

The biological significance of the levels of reduction shown in shedding in cattle, goats and sheep is not known.

It is advisable to vaccinate all the animals in the herd at the same time.

Under field conditions, vaccination with COXEVAC has commonly been followed by a decrease in milk production in goats. Since stress could contribute to this adverse reaction, appropriate precautions should be taken to reduce stress as much as possible during the administration of the product.

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.

Other precautions:

None

Pregnancy and lactation:

Cattle and goats:

The safety of the veterinary medicinal product has not been established during pregnancy.

Under field conditions, vaccination with COXEVAC has been followed by a decrease in milk production, commonly in goats and rarely in cattle. Since stress could contribute to this adverse reaction, appropriate precautions should be taken to reduce stress as much as possible during the administration of the product.

The vaccine can be used during lactation.

Sheep:

The safety of the veterinary medicinal product has not been established during pregnancy and lactation.

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.

Overdose:

Cattle:

With double dose, a palpable reaction of maximum diameter of 10 cm was observed at the injection site, lasting for 16 days. The reaction gradually reduced and disappeared without need for treatment. *Goats:*

With double dose, a moderate palpable reaction of diameter of 4 to 5 cm was observed at the injection site, lasting for 4 days. The reaction reduced and disappeared without need for treatment. *Sheep:*

With double dose, a moderate palpable reaction of diameter of less than 2 cm was observed at the injection site, lasting for 12 days. The reaction reduced and disappeared without need for treatment.

Major incompatibilities:

Do not mix with any other veterinary medicinal product.

7. Adverse events

Cattle:

Very common (>1 animal / 10 animals treated):	Injection site swelling*
Rare	Lethargy, Hyperthermia, Anorexia
(1 to 10 animals / 10,000 animals treated):	

* Palpable, of 9 to 10 cm diameter maximum, which may last for 17 days, reduces gradually and disappears without need for treatment.

Goats:

Very common	Injection site swelling*
(>1 animal / 10 animals treated):	Hyperthermia**
Uncommon	Lethargy, Malaise, Anorexia

(1 to 10 animals / 1,000 animals treated):	
Rare	Diarrhoea
(1 to 10 animals / 10,000 animals treated):	

* Palpable, of 3 to 4 cm diameter maximum, which may last for 14 days, reduces and disappears without need for treatment.

** For 4 days post-vaccination.

Sheep:

Very common (>1 animal / 10 animals treated):	Injection site inflammation, application site thickening*
Rare	Lethargy, Hyperthermia, Anorexia
(1 to 10 animals / 10,000 animals	
treated)	

* Palpable, of 5 cm diameter maximum, which may last for 14 days, reduces and disappears without need for treatment. Reactions are expected to be more severe after the second injection.

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.

Administer the vaccine as follows: Cattle: 4 ml in the neck region. Goats: 2 ml in the neck region. Sheep: 2ml in the neck region.

Cattle from 3 months of age:

Primary vaccination:

Two doses should be given subcutaneously with an interval of 3 weeks. Under normal conditions the timing of vaccination should be planned so that the primary course is completed by 3 weeks before artificial insemination or mating.

Re-vaccination:

Every 9 months, as described for primary vaccination, based on a duration of immunity of 280 days.

Goats from 3 months of age:

Primary vaccination:

Two doses should be given subcutaneously with an interval of 3 weeks. Under normal conditions the timing of vaccination should be planned so that the primary course is completed by 3 weeks before artificial insemination or mating.

Re-vaccination: One dose should be given yearly.

Sheep from 4 months of age:

Primary vaccination:

Two doses should be given subcutaneously with an interval of 3 weeks. The vaccination should be done as late as possible, but the primary course needs to be completed by 3 weeks before artificial insemination or mating.

Re-vaccination:

Prior to each artificial insemination or mating, two doses, 3 weeks apart; the vaccination course should be done as late as possible but needs to be completed at least 3 weeks before the intended start of the reproduction phase.

9. Advice on correct administration

Shake well before use. Respect normal aseptic conditions.

10. Withdrawal periods

Meat, milk and offal: Zero days.

11. Special storage precautions

Keep out of the sight and reach of children.

Store and transport refrigerated (2°C– 8°C). Do not freeze. 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 bottle: 10 hours.

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

EU/2/10/110/001-002

Pack sizes: 40 ml or 100 ml in a plastic LDPE bottle. Not all pack sizes may be marketed.

15. Date on which the package leaflet was last revised

 $\{MM/YYYY\}$

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: CEVA Sante Animale 10 avenue de la Ballastiere 33500 Libourne FRANCE Phone number: 00 800 35 22 11 51

Manufacturer responsible for batch release: CEVA-Phylaxia Veterinary Biologicals Co. Ltd. Szállás u. 5 1107 Budapest HUNGARY