ANNEX I SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Enteroporc COLI AC lyophilisate and suspension for suspension for injection for pigs

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each dose (2 ml) contains:

Active substances:

Lyophilisate:

Clostridium perfringens type A/C toxoids:

alpha toxoid $\geq 125 \text{ rU/ml*}$ beta1 toxoid $\geq 3354 \text{ rU/ml*}$ beta2 toxoid $\geq 794 \text{ rU/ml*}$

Suspension:

 $\begin{array}{lll} \text{Inactivated fimbrial adhesins of } \textit{Escherichia coli} : \\ \text{F4ab} & \geq 23 \text{ rU/ml*} \\ \text{F4ac} & \geq 19 \text{ rU/ml*} \\ \text{F5} & \geq 13 \text{ rU/ml*} \\ \text{F6} & \geq 37 \text{ rU/ml*} \end{array}$

Adjuvant:

Aluminium (as hydroxide) 2.0 mg/ml

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Lyophilisate and suspension for suspension for injection.

Beige to brown lyophilisate.

Yellowish suspension.

4. CLINICAL PARTICULARS

4.1 Target species

Pigs (pregnant sows and gilts).

4.2 Indications for use, specifying the target species

For the passive immunisation of progeny by active immunisation of pregnant sows and gilts to reduce:

- Clinical signs (severe diarrhoea) and mortality caused by *Escherichia coli* strains expressing the fimbrial adhesins F4ab, F4ac, F5 and F6
- Clinical signs (diarrhoea during the first days of life) associated with *Clostridium perfringens* type A expressing alpha and beta2 toxins

^{*} toxoid and fimbrial adhesins content in relative units per ml, determined by ELISA against an internal standard

- Clinical signs and mortality associated with haemorrhagic and necrotising enteritis caused by *Clostridium perfringens* type C expressing beta1 toxin

Onset of immunity (after uptake of colostrum):

E. coli F4ab, F4ac, F5, F6: within 12 hours after birth

C. perfringens type A and C: First day of life

Duration of immunity (after uptake of colostrum):

E. coli F4ab, F4ac, F5, F6: first days of life C. perfringens type A: 14 days of life C. perfringens types C: 21 days of life

4.3 Contraindications

None.

4.4 Special warnings for each target species

Vaccinate healthy animals only.

4.5 Special precautions for use

Special precautions for use in animals

Not applicable.

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

None.

4.6 Adverse reactions (frequency and seriousness)

A transient increase in body temperature (mean 0.5 °C, in individual pigs up to 2 °C) occurred very commonly on the day of vaccination which returned to normal within 24 hours.

A transient swelling and redness at the injection site (mean 2.8 cm, in individual pigs up to 8 cm) was very commonly observed which disappeared without treatment within 7 days.

A slightly depressed behaviour was commonly observed on the days of vaccination.

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

Can be used during pregnancy.

4.8 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.

4.9 Amounts to be administered and administration route

Intramuscular use.

Inject one dose (2 ml) of vaccine into the neck muscles in the area behind the ear of each pig.

Vaccination scheme:

Primary vaccination:

First vaccination: one dose 5 weeks before the expected date of farrowing. Second vaccination: one dose 2 weeks before the expected date of farrowing.

<u>Revaccination (before each subsequent farrowing)</u>: one dose 2 weeks before the expected date of farrowing.

Preparation of the vaccine:

- 1. To reconstitute the vaccine, use an appropriately sized sterile syringe to withdraw approximately 5 ml of the suspension and transfer it into the vial containing the lyophilisate.
- 2. Shake gently until the lyophilisate is completely dispersed in the suspension.
- 3. Then withdraw all the contents of the lyophilisate vial into the same syringe and transfer them back into the suspension vial.
- 4. Shake well until thoroughly mixed.
- 5. Withdraw approximately 5 ml of the reconstituted vaccine suspension and transfer it into lyophilisate vial. Shake the vial. Then withdraw the contents and transfer them back into the vaccine suspension vial.

The vaccine is ready to use.

The reconstituted vaccine is a yellowish brown to reddish brown suspension.

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

Not applicable.

4.11 Withdrawal period(s)

Zero days.

5. IMMUNOLOGICAL PROPERTIES

Pharmacotherapeutic group: Immunologicals for Suidae, inactivated bacterial vaccines. ATC vet code: OI09AB08.

The active immunisation of pregnant sows and gilts induces the formation of antibodies against the alpha, beta1 and beta2 toxins of *C. perfringens* types A and C and against *E. coli* fimbrial adhesins F4ab, F4ac, F5 and F6. The piglets are then passively immunised by the uptake of colostrum that contains those specific antibodies.

Efficacy of the vaccine has been demonstrated upon intraperitoneal challenge with a combination of alpha and beta2 toxins from *C. perfringens* type A. This toxin pattern is representative for the majority of *C. perfringens* type A isolates in the field associated with neonatal enteritis. Both toxins have been proposed to play a role in the pathogenesis.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Lyophilisate:

Sucrose

Suspension:

Aluminium hydroxide Sodium chloride Disodium hydrogen phosphate dihydrate Potassium dihydrogen phosphate

Water for injection

6.2 Major incompatibilities

Do not mix with any other veterinary medicinal product, except the suspension supplied for use with the veterinary medicinal product.

6.3 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 21 months.

Shelf life after reconstitution according to directions: 8 hours.

Until use the reconstituted vaccine should be stored at 2-8 °C.

After removal of the reconstituted vaccine from storage at 2-8 °C, the vaccine should be used immediately.

6.4. Special precautions for storage

Store and transport refrigerated (2 °C - 8 °C).

Protect from light.

Do not freeze.

6.5 Nature and composition of immediate packaging

Lyophilisate:

10 ml glass (type I) vials containing 10 or 25 doses

Suspension:

25 ml PET or glass (type I) vials containing 10 doses (20 ml)

50 ml PET or glass (type II) vials containing 25 doses (50 ml)

The vials are closed with bromobutyl rubber stoppers and sealed with aluminium crimp caps.

Pack sizes:

10 doses: Cardboard box containing 1 glass vial of lyophilisate and 1 glass vial (20 ml) of suspension

10 doses: Cardboard box containing 1 glass vial of lyophilisate and 1 PET vial (20 ml) of suspension

25 doses: Cardboard box containing 1 glass vial of lyophilisate and 1 glass vial (50 ml) of suspension.

25 doses: Cardboard box containing 1 glass vial of lyophilisate and 1 PET vial (50 ml) of suspension

Not all pack sizes 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 product should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

Ceva Santé Animale 10 av. de La Ballastière 33500 Libourne France

8. MARKETING AUTHORISATION NUMBER(S)

EU/2/20/262/001 EU/2/20/262/002 EU/2/20/262/003 EU/2/20/262/004

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 09.12.2020

10. DATE OF REVISION OF THE TEXT

{MM/YYYY}

Detailed information on this veterinary medicinal product is available on the website of the European Medicines Agency (http://www.ema.europa.eu/).

PROHIBITION OF SALE, SUPPLY AND/OR USE

Not applicable.

ANNEX II

- A. MANUFACTURERS OF THE BIOLOGICAL ACTIVE SUBSTANCE AND MANUFACTURER RESPONSIBLE FOR BATCH RELEASE
- B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE
- C. STATEMENT OF THE MRLs

A. MANUFACTURERS OF THE BIOLOGICAL ACTIVE SUBSTANCE AND MANUFACTURER RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturers of the biological active substance

IDT Biologika GmbH Am Pharmapark 06861 Dessau-Rosslau Germany

CZ Vaccines S.A.U. La Relva - Torneiros s/n Porriño 36410 Pontevedra Spain

Name and address of the manufacturer responsible for batch release

IDT Biologika GmbH Am Pharmapark 06861 Dessau-Rosslau Germany

Ceva-Phylaxia Veterinary Biologicals Co. Ltd. Szállás u. 5. 1107 Budapest Hungary

The printed package leaflet of the medicinal product must state the name and address of the manufacturer responsible for the release of the concerned batch.

B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

Veterinary medicinal product subject to prescription.

C. STATEMENT OF THE MRLs

The active substance being a principle of biological origin intended to produce passive immunity is not within the scope of Regulation (EC) No 470/2009.

The excipients (including adjuvants) listed in section 6.1 of the SPC are either allowed substances for which table 1 of the annex to Commission Regulation (EU) No 37/2010 indicates that no MRLs are required or considered as not falling within the scope of Regulation (EC) No 470/2009 when used as in this veterinary medicinal product.

ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGE

Cardboard box (10 doses)

Cardboard box (25 doses)

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Enteroporc COLI AC lyophilisate and suspension for suspension for injection for pigs

2. STATEMENT OF ACTIVE SUBSTANCES

One dose (2 ml) contains:

Clostridium perfringens type A/C toxoids:

alpha toxoid $\geq 125 \text{ rU/ml}$ beta1 toxoid $\geq 3354 \text{ rU/ml}$ beta2 toxoid $\geq 794 \text{ rU/ml}$

Inactivated fimbrial adhesins of *Escherichia coli*:

 $\begin{array}{lll} F4ab & \geq 23 \; rU/ml \\ F4ac & \geq 19 \; rU/ml \\ F5 & \geq 13 \; rU/ml \\ F6 & \geq 37 \; rU/ml \end{array}$

3. PHARMACEUTICAL FORM

Lyophilisate and suspension for suspension for injection

4. PACKAGE SIZE

10 doses

25 doses

5. TARGET SPECIES

Pigs (pregnant sows and gilts)

6. INDICATION(S)

7. METHOD AND ROUTE(S) OF ADMINISTRATION

Intramuscular use.

Read the package leaflet before use.

8. WITHDRAWAL PERIOD(S)

Withdrawal period: Zero days.

9. SPECIAL WARNING(S), IF NECESSARY

Read the package leaflet before use.

10. EXPIRY DATE

EXP {month/year}

Shelf life after reconstitution: 8 hours at 2-8 °C. Once the reconstituted vaccine is removed from storage at 2-8 °C, it should be used immediately.

11. SPECIAL STORAGE CONDITIONS

Store and transport refrigerated.

Protect from light.

Do not freeze.

12. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCTS OR WASTE MATERIALS, IF ANY

Disposal: read package leaflet.

13. THE WORDS "FOR ANIMAL TREATMENT ONLY" AND CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE, IF APPLICABLE

For animal treatment only. To be supplied only on veterinary prescription.

14. THE WORDS "KEEP OUT OF THE SIGHT AND REACH OF CHILDREN"

Keep out of the sight and reach of children.

15. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Ceva Santé Animale 10 av. de La Ballastière 33500 Libourne France

16. MARKETING AUTHORISATION NUMBER(S)

EU/2/20/262/001

EU/2/20/262/002

EU/2/20/262/003

EU/2/20/262/004

17. MANUFACTURER'S BATCH NUMBER

Lot {number}

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS
Vial (10 doses) Lyophilisate
Vial (25 doses) Lyophilisate
1. NAME OF THE VETERINARY MEDICINAL PRODUCT
Enteroporc COLI AC lyophilisate
2. QUANTITY OF THE ACTIVE SUBSTANCE(S)
C. perfringens toxoids
3. CONTENTS BY WEIGHT, BY VOLUME OR BY NUMBER OF DOSES
10 doses 25 doses
4. ROUTE(S) OF ADMINISTRATION
IM
5. WITHDRAWAL PERIOD(S)
Withdrawal period: Zero days.
6. BATCH NUMBER
Lot {number}
7. EXPIRY DATE
EXP {month/year} Shelf life after reconstitution: 8 hours at 2 - 8 °C. Once the reconstituted vaccine is removed from storage at 2-8 °C, it should be used immediately.
8. THE WORDS "FOR ANIMAL TREATMENT ONLY"

For animal treatment only.

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS
Vial (10 doses) suspension Vial (25 doses) suspension
4 NAME OF THE VETTERINARY MEDICINAL PROPERTY
1. NAME OF THE VETERINARY MEDICINAL PRODUCT
Enteroporc COLI AC suspension
2. QUANTITY OF THE ACTIVE SUBSTANCE(S)
E. coli fimbrial adhesins
3. CONTENTS BY WEIGHT, BY VOLUME OR BY NUMBER OF DOSES
10 doses 25 doses
4. ROUTE(S) OF ADMINISTRATION
IM
5. WITHDRAWAL PERIOD(S)
Withdrawal period: Zero days.
6. BATCH NUMBER
Lot {number}
7. EXPIRY DATE
EXP {month/year}
8. THE WORDS "FOR ANIMAL TREATMENT ONLY"
For animal treatment only.

B. PACKAGE LEAFLET

PACKAGE LEAFLET:

Enteroporc COLI AC lyophilisate and suspension for suspension for injection 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:

Ceva Santé Animale 10 av. de La Ballastière 33500 Libourne France

Manufacturer responsible for batch release:

IDT Biologika GmbH Am Pharmapark 06861 Dessau-Rosslau Germany

Ceva-Phylaxia Veterinary Biologicals Co. Ltd. Szállás u. 5. 1107 Budapest Hungary

2. NAME OF THE VETERINARY MEDICINAL PRODUCT

Enteroporc COLI AC

lyophilisate and suspension for suspension for injection for pigs

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

One dose (2 ml) contains:

Active substances:

Lyophilisate:

Clostridium perfringens type A/C toxoids:

alpha toxoid $\geq 125 \text{ rU/ml*}$ beta1 toxoid $\geq 3354 \text{ rU/ml*}$ beta2 toxoid $\geq 794 \text{ rU/ml*}$

Suspension:

Inactivated fimbrial adhesins of *Escherichia coli*: F4ab $\geq 23 \text{ rU/ml*}$ F4ac $\geq 19 \text{ rU/ml*}$ F5 $\geq 13 \text{ rU/ml*}$ F6 $\geq 37 \text{ rU/ml*}$

Adjuvant:

Aluminium (as hydroxide) 2.0 mg/ml

 $^{^{*}}$ toxoid content and fimbrial adhesins content in relative units per ml, determined in ELISA against an internal standard

Beige to brown lyophilisate. Yellowish suspension.

4. INDICATIONS

For the passive immunisation of progeny by active immunisation of pregnant sows and gilts to reduce:

- Clinical signs (severe diarrhoea) and mortality caused by *E. coli* strains expressing the adhesins F4ab, F4ac, F5 and F6,
- Clinical signs (diarrhoea) during the first days of life associated with *Clostridium perfringens* type A expressing alpha and beta2 toxins.
- Clinical signs and mortality associated with haemorrhagic and necrotizing enteritis caused by *Clostridium perfringens* type C expressing beta1 toxin

Onset of immunity (after uptake of colostrum):

E. coli F4ab, F4ac, F5, F6: within 12 hours after birth

C. perfringens type A and C: First day of life

Duration of immunity:

E coli F4ab, F4ac, F5, F6: first days of life

C. perfringens type A: 14 days of life C. perfringens type C: 21 days of life

5. CONTRAINDICATIONS

None.

6. ADVERSE REACTIONS

A transient increase in body temperature (mean $0.5\,^{\circ}$ C, in individual pigs up to $2\,^{\circ}$ C) occurred very commonly on the day of vaccination which returned to normal within 24 hours. A transient swelling and redness at the injection site (mean $2.8\,$ cm, in individual pigs up to $8\,$ cm) was very commonly observed which disappeared without treatment within 7 days. A slightly depressed behaviour was commonly observed on the days of vaccination.

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).

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 (pregnant sows and gilts).

8. DOSAGE FOR EACH SPECIES, ROUTE AND METHOD OF ADMINISTRATION

Intramuscular use.

Inject one dose (2 ml) of vaccine onto neck muscles in the area behind the ear of each pig.

Primary vaccination:

First vaccination: one dose 5 weeks before the expected date of farrowing. Second vaccination: one dose 2 weeks before the expected date of farrowing.

Revaccination (before each subsequent farrowing):

one dose 2 weeks before the expected date of farrowing.

9. ADVICE ON CORRECT ADMINISTRATION

Preparation of the vaccine:

- 1. To reconstitute the vaccine, use an appropriately sized sterile syringe to withdraw approximately 5 ml of the suspension and transfer it into the vial containing the lyophilisate.
- 2. Shake gently until the lyophilisate is completely dispersed in the suspension.
- 3. Then withdraw all the contents of the lyophilisate vial into the same syringe and transfer them back into the suspension vial.
- 4. Shake well until thoroughly mixed.
- 5. Withdraw approximately 5 ml of the reconstituted vaccine suspension and transfer it into the lyophilisate vial. Shake the vial. Then withdraw the contents and transfer them back into the vaccine suspension vial.

The vaccine is ready to use.

The reconstituted vaccine is a yellowish brown to reddish brown suspension.

10. WITHDRAWAL PERIOD

Zero days.

11. SPECIAL STORAGE PRECAUTIONS

Keep out of the sight and reach of children.

Store and transport refrigerated (2 $^{\circ}$ C – 8 $^{\circ}$ C).

Protect from light.

Do not freeze.

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

Shelf life after reconstitution according to directions: 8 hours. Until use the reconstituted vaccine should been stored at 2-8 °C. After removal of the reconstituted vaccine from storage at 2-8 °C, the vaccine should be used immediately.

12. SPECIAL WARNINGS

Special warnings for each target species:

Vaccinate healthy animals only.

Special precautions for use in animals:

Not applicable.

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

None.

Pregnancy and lactation:

Can be used during pregnancy.

<u>Interaction</u> 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 (symptoms, emergency procedures, antidotes):

Not applicable.

Incompatibilities:

Do not mix with any other veterinary medicinal product, except the suspension supplied for use with the veterinary medicinal product.

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

Medicines should not be disposed of via wastewater or household waste.

Ask your veterinary surgeon 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

Detailed information on this veterinary medicinal product is available on the website of the European Medicines Agency (http://www.ema.europa.eu/).

15. OTHER INFORMATION

Pack sizes:

10 doses: Cardboard box containing 1 glass vial of lyophilisate and 1 glass vial (20 ml) of suspension

 $10\ doses$: Cardboard box containing $1\ glass\ vial$ of lyophilisate and $1\ PET\ vial\ (20\ ml)$ of suspension

25 doses: Cardboard box containing 1 glass vial of lyophilisate and 1 glass vial (50 ml) of suspension.

25 doses: Cardboard box containing 1 glass vial of lyophilisate and 1 PET vial (50 ml) of suspension

Not all pack sizes may be marketed.

Immunological properties

The active immunisation of pregnant sows and gilts induces the formation of antibodies against the alpha, beta1 and beta2 toxins of *C. perfringens* types A/C and against the *E. coli* fimbrial adhesins

F4ab, F4ac, F5 and F6. The piglets are then passively immunised by the uptake of colostrum that contains those specific antibodies.

Efficacy of the vaccine has been demonstrated upon intraperitoneal challenge with a combination of alpha and beta2 toxins from *C. perfringens* type A. This toxin pattern is representative for the majority of *C. perfringens* type A isolates in the field associated with neonatal enteritis. Both toxins have been proposed to play a role in the pathogenesis.