ANNEX I

SUMMARY OF PRODUCT CHARACTERISTICS
1. NAME OF THE MEDICINAL PRODUCT
Elonva 100 micrograms solution for injection

2. QUALITATIVE AND QUANTITATIVE COMPOSITION
Each pre-filled syringe contains 100 micrograms of corifollitropin alfa* in 0.5 mL solution for injection.

*corifollitropin alfa is a glycoprotein produced in Chinese Hamster Ovary (CHO) cells by recombinant DNA technology.

Excipient(s) with known effect:
This medicinal product contains less than 1 mmol (23 mg) sodium per injection, i.e., essentially ‘sodium-free’.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM
Solution for injection (injection).
Clear and colourless aqueous solution.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications
Elonva is indicated for Controlled Ovarian Stimulation (COS) in combination with a Gonadotropin Releasing Hormone (GnRH) antagonist for the development of multiple follicles in women participating in an Assisted Reproductive Technology (ART) program.

4.2 Posology and method of administration
Treatment with Elonva should be initiated under the supervision of a physician experienced in the treatment of fertility problems.

Posology
In the treatment of women of reproductive age, the dose of Elonva is based on weight and age.

- A single 100-microgram dose is recommended in women who weigh less than or equal to 60 kilograms and who are 36 years of age or younger.

- A single 150-microgram dose is recommended in women:
  - who weigh more than 60 kilograms, regardless of age.
  - who weigh 50 kilograms or more and who are older than 36 years of age.

Women older than 36 years of age who weighed less than 50 kilograms were not studied.
<table>
<thead>
<tr>
<th>Age</th>
<th>Body Weight</th>
<th>36 years or younger</th>
<th>Older than 36 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 50 kg</td>
<td>100 micrograms</td>
<td>Not studied.</td>
</tr>
<tr>
<td></td>
<td>50 – 60 kg</td>
<td>100 micrograms</td>
<td>150 micrograms</td>
</tr>
<tr>
<td></td>
<td>More than 60 kg</td>
<td>150 micrograms</td>
<td>150 micrograms</td>
</tr>
</tbody>
</table>

The recommended doses of Elonva have only been established in a treatment cycle with a GnRH antagonist that was administered from stimulation day 5 or day 6 onwards (see also sections 4.1, 4.4, and 5.1).

Stimulation day 1:
Elonva should be administered as a single subcutaneous injection, preferably in the abdominal wall, during the early follicular phase of the menstrual cycle.

Stimulation day 5 or 6:
Treatment with a GnRH antagonist should be started on stimulation day 5 or day 6 depending on the ovarian response, i.e. the number and size of growing follicles. The concurrent determination of serum oestradiol levels may also be useful. The GnRH antagonist is used to prevent premature Luteinising Hormone (LH) surges.

Stimulation day 8:
Seven days after the injection with Elonva on stimulation day 1, COS treatment may be continued with daily injections of (recombinant) Follicle Stimulating Hormone [(rec)FSH] until the criterion for triggering final oocyte maturation (3 follicles ≥ 17 mm) has been reached. The daily dose of (rec)FSH may depend on the ovarian response. In normal responders a daily dose of 150 IU (rec)FSH is advised. Administration of (rec)FSH on the day of human Chorionic Gonadotropin (hCG) administration can be omitted, depending on the ovarian response. In general, adequate follicular development is achieved on average by the ninth day of treatment (range 6 to 18 days).

As soon as three follicles ≥ 17 mm are observed, a single injection of 5,000 up to 10,000 IU hCG is administered the same day or the day thereafter to induce final oocyte maturation. In case of an excessive ovarian response, see the recommendations given in section 4.4 in order to reduce the risk for developing ovarian hyperstimulation syndrome (OHSS).

Special populations

Renal impairment
No clinical studies have been performed in patients with renal insufficiency. Since the rate of elimination of corifollitropin alfa may be reduced in patients with renal insufficiency, the use of Elonva in these women is not recommended (see sections 4.4 and 5.2).

Hepatic impairment
Although data in hepatically impaired patients are not available, hepatic impairment is unlikely to affect the elimination of corifollitropin alfa (see section 5.2).

Paediatric population

There is no relevant use of Elonva within the approved indication in the paediatric population.

Method of administration

Subcutaneous injection of Elonva may be carried out by the woman herself or her partner, provided that proper instructions are given by the physician. Self administration of Elonva should only be performed by women who are well-motivated, adequately trained and with access to expert advice.
4.3 Contraindications

- Hypersensitivity to the active substance or to any of the excipients listed in section 6.1.
- Tumours of the ovary, breast, uterus, pituitary or hypothalamus.
- Abnormal (not menstrual) vaginal bleeding without a known/diagnosed cause.
- Primary ovarian failure.
- Ovarian cysts or enlarged ovaries.
- A history of Ovarian Hyperstimulation Syndrome (OHSS).
- A previous COS cycle that resulted in more than 30 follicles \( \geq 11 \text{ mm} \) measured by ultrasound examination.
- A basal antral follicle count > 20.
- Fibroid tumours of the uterus incompatible with pregnancy.
- Malformations of the reproductive organs incompatible with pregnancy.
- Polycystic ovarian syndrome (PCOS).

4.4 Special warnings and precautions for use

Infertility evaluation before starting treatment

Before starting treatment, the couple’s infertility should be assessed as appropriate. In particular, women should be evaluated for hypothyroidism, adrenocortical insufficiency, hyperprolactinemia and pituitary or hypothalamic tumours, and appropriate specific treatment given. Medical conditions that contraindicate pregnancy should also be evaluated before starting treatment with Elonva.

Dosing during the stimulation cycle

Elonva is intended for single subcutaneous injection only. Additional injections of Elonva should not be given within the same treatment cycle. (See also section 4.2.)

After administration of Elonva, no additional FSH-containing product should be administered prior to stimulation day 8 (see also section 4.2).

Renal insufficiency

In patients with mild, moderate or severe renal insufficiency the rate of elimination of corifollitropin alfa may be reduced (see sections 4.2 and 5.2). Therefore, the use of Elonva in these women is not recommended.

Not recommended with a GnRH agonist protocol

There are limited data on the use of Elonva in combination with a GnRH agonist. Results of a small uncontrolled study suggest a higher ovarian response than in combination with a GnRH antagonist. Therefore, the use of Elonva is not recommended in combination with a GnRH agonist (see also section 4.2).

Ovarian hyperstimulation syndrome (OHSS)

OHSS is a medical event distinct from uncomplicated ovarian enlargement. Clinical signs and symptoms of mild and moderate OHSS are abdominal pain, nausea, diarrhoea, mild to moderate enlargement of ovaries and ovarian cysts. Severe OHSS may be life-threatening. Clinical signs and symptoms of severe OHSS are large ovarian cysts, acute abdominal pain, ascites, pleural effusion, hydrothorax, dyspnoea, oliguria, haematological abnormalities and weight gain. In rare instances, venous or arterial thromboembolism may occur in association with OHSS. Transient liver function test abnormalities suggestive of hepatic dysfunction with or without morphologic changes on liver biopsy have also been reported in association with OHSS.
OHSS may be caused by administration of hCG and by pregnancy (endogenous hCG). Early OHSS usually occurs within 10 days after hCG administration and may be associated with an excessive ovarian response to gonadotropin stimulation. Late OHSS occurs more than 10 days after hCG administration, as a consequence of the hormonal changes with pregnancy. Because of the risk of developing OHSS, patients should be monitored for at least two weeks after hCG administration.

Women with known risk factors for a high ovarian response may be especially prone to the development of OHSS following treatment with Elonva. For women having their first cycle of ovarian stimulation, for whom risk factors are only partially known, close observation for early signs and symptoms of OHSS is recommended.

To reduce the risk of OHSS, ultrasonographic assessments of follicular development should be performed prior to treatment and at regular intervals during treatment. The concurrent determination of serum oestradiol levels may also be useful. In ART there is an increased risk of OHSS with 18 or more follicles of 11 mm or more in diameter. When there are 30 or more follicles in total it is advised to withhold hCG administration.

Depending on the ovarian response, the following measures can be considered to reduce the risk of OHSS:
- withhold further stimulation with a gonadotropin for a maximum of 3 days (coasting);
- withhold hCG and cancel the treatment cycle;
- administer a dose lower than 10,000 IU of hCG for triggering final oocyte maturation, e.g. 5,000 IU hCG or 250 micrograms rec-hCG (which is equivalent to approximately 6,500 IU);
- cancel the fresh embryo transfer and cryopreserve embryos;
- avoid administration of hCG for luteal phase support.

Adherence to the recommended Elonva dose and treatment cycle and careful monitoring of ovarian response is important to reduce the risk of OHSS. If OHSS develops, standard and appropriate management of OHSS should be implemented and followed.

**Ovarian torsion**

Ovarian torsion has been reported after treatment with gonadotropins, including Elonva. Ovarian torsion may be related to other conditions, such as OHSS, pregnancy, previous abdominal surgery, past history of ovarian torsion, and previous or current ovarian cysts. Damage to the ovary due to reduced blood supply can be limited by early diagnosis and immediate detorsion.

**Multiple pregnancy**

Multiple pregnancies and births have been reported for all gonadotropin treatments, including Elonva. The woman and her partner should be advised of the potential risks for the mother (pregnancy and delivery complications) and the neonate (low birth weight) before starting treatment. In women undergoing ART procedures the risk of multiple pregnancy is mainly related to the number of embryos transferred.

**Ectopic pregnancy**

Infertile women undergoing ART have an increased incidence of ectopic pregnancies. It is important to have early ultrasound confirmation that a pregnancy is intrauterine, and to exclude the possibility of extraterine pregnancy.
**Congenital malformations**

The incidence of congenital malformations after ART may be slightly higher than after spontaneous conceptions. This is thought to be due to differences in parental characteristics (e.g., maternal age, sperm characteristics) and the higher incidence of multiple pregnancies.

**Ovarian and other reproductive system neoplasms**

There have been reports of ovarian and other reproductive system neoplasms, both benign and malignant, in women who have undergone multiple treatment regimens for infertility treatment. It is not established whether or not treatment with gonadotropins increases the risk of these tumours in infertile women.

**Vascular complications**

Thromboembolic events, both in association with and separate from OHSS, have been reported following treatment with gonadotropins, including Elonva. Intravascular thrombosis, which may originate in venous or arterial vessels, can result in reduced blood flow to vital organs or the extremities. In women with generally recognized risk factors for thromboembolic events, such as a personal or family history, severe obesity or thrombophilia, treatment with gonadotropins may further increase this risk. In these women the benefits of gonadotropin administration need to be weighed against the risks. It should be noted, however, that pregnancy itself also carries an increased risk of thrombosis.

4.5 **Interaction with other medicinal products and other forms of interaction**

No interaction studies with Elonva and other medicines have been performed. Since corifollitropin alfa is not a substrate of cytochrome P450 enzymes, no metabolic interactions with other medicinal products are anticipated.

4.6 **Fertility, pregnancy and lactation**

**Pregnancy**

In case of inadvertent exposure to Elonva during pregnancy, clinical data are not sufficient to exclude an adverse outcome of pregnancy. In animal studies reproductive toxicity has been observed (see preclinical safety data in section 5.3). The use of Elonva during pregnancy is not indicated.

**Breast-feeding**

The use of Elonva during breast-feeding is not indicated.

**Fertility**

Elonva is indicated for use in infertility (see section 4.1).

4.7 **Effects on ability to drive and use machines**

No studies on the ability to drive and use machines have been performed. Elonva may cause dizziness. Women should be advised that if they feel dizzy, they should not drive or use machines.
4.8 Undesirable effects

Summary of the safety profile

The most frequently reported adverse reactions during treatment with Elonva in clinical trials (N=2,397) are pelvic discomfort (6.0%), OHSS (4.3%, see also section 4.4), headache (4.0%), pelvic pain (2.9%), nausea (2.3%), fatigue (1.5%), and breast tenderness (1.3%).

Tabulated list of adverse reactions

The table below displays the main adverse reactions in women treated with Elonva in clinical trials according to system organ class and frequency; very common (≥ 1/10), common (≥ 1/100 to < 1/10), uncommon (≥ 1/1,000 to < 1/100), rare (≥ 1/10,000 to < 1/1,000), and very rare (< 1/10,000). Within each frequency grouping, adverse reactions are presented in order of decreasing seriousness.

<table>
<thead>
<tr>
<th>System organ class</th>
<th>Frequency</th>
<th>Adverse reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatric disorders</td>
<td>Uncommon</td>
<td>Depression</td>
</tr>
<tr>
<td>Nervous system disorders</td>
<td>Common</td>
<td>Dizziness</td>
</tr>
<tr>
<td></td>
<td>Uncommon</td>
<td>Headache</td>
</tr>
<tr>
<td>Vascular disorders</td>
<td>Uncommon</td>
<td>Nausea</td>
</tr>
<tr>
<td>Gastrointestinal disorders</td>
<td>Common</td>
<td>Abdominal distension, vomiting, diarrhoea, constipation</td>
</tr>
<tr>
<td></td>
<td>Uncommon</td>
<td>Abortion spontaneous</td>
</tr>
<tr>
<td>Musculoskeletal and connective tissue</td>
<td>Uncommon</td>
<td>Back pain</td>
</tr>
<tr>
<td>Pregnancy, puerperium and perinatal</td>
<td>Uncommon</td>
<td>OHSS, pelvic pain, pelvic discomfort, breast tenderness</td>
</tr>
<tr>
<td>conditions</td>
<td></td>
<td>Ovarian torsion, adnexa uteri pain, premature ovulation, breast pain</td>
</tr>
<tr>
<td>Reproductive system and breast disorders</td>
<td>Common</td>
<td>OHSS, pelvic pain, pelvic discomfort, breast tenderness</td>
</tr>
<tr>
<td></td>
<td>Uncommon</td>
<td>Ovarian torsion, adnexa uteri pain, premature ovulation, breast pain</td>
</tr>
<tr>
<td>General disorders and administration site</td>
<td>Common</td>
<td>Fatigue</td>
</tr>
<tr>
<td>conditions</td>
<td>Uncommon</td>
<td>Injection site haematoma, injection site pain, irritability</td>
</tr>
<tr>
<td>Investigations</td>
<td>Uncommon</td>
<td>Alanine aminotransferase increased, aspartate aminotransferase increased</td>
</tr>
<tr>
<td>Injury, poisoning and procedural</td>
<td>Uncommon</td>
<td>Procedural pain</td>
</tr>
<tr>
<td>complications</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Description of selected adverse reactions

In addition, ectopic pregnancy and multiple gestations have been reported. These are considered to be related to ART or subsequent pregnancy.

In rare instances, thromboembolism has been associated with Elonva therapy as with other gonadotropins.
Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system listed in Appendix V.

4.9 Overdose

More than one injection of Elonva within one treatment cycle or too high a dose of Elonva and/or (rec)FSH may increase the risk of OHSS. For measures to reduce the risk of OHSS see section 4.4.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: sex hormones and modulators of the genital system, gonadotropins, ATC code: G03GA09

Mechanism of action

Corifollitropin alfa is designed as a sustained follicle stimulant with the same pharmacodynamic profile as (rec)FSH, but with a markedly prolonged duration of FSH activity. Due to its ability to initiate and sustain multiple follicular growth for an entire week, a single subcutaneous injection of the recommended dose of Elonva may replace the first seven injections of any daily (rec)FSH preparation in a COS treatment cycle. The long duration of FSH activity was achieved by adding the carboxy-terminal peptide of the β-subunit of human chorionic gonadotropin (hCG) to the β-chain of human FSH. Corifollitropin alfa does not display any intrinsic LH/hCG activity.

Clinical efficacy and safety

In three randomized, double-blind, clinical trials, treatment with a single subcutaneous injection of Elonva, 100 micrograms (ENSURE study) or 150 micrograms (ENGAGE and PURSUE study), for the first seven days of COS was compared to treatment with a daily dose of 150, 200, or 300 IU of recFSH, respectively. Pituitary suppression with a GnRH antagonist (ganirelix acetate injection at a daily dose of 0.25 mg) was used in each of the three clinical trials.

In the ENSURE study, 396 healthy normal ovulatory women, aged 18 to 36 years with a body weight less than or equal to 60 kg, were treated for one cycle with 100 micrograms of Elonva and pituitary suppression with a GnRH antagonist as part of an ART program. The primary efficacy endpoint was number of oocytes retrieved. The median total duration of stimulation was 9 days for both groups, indicating that two days of recFSH were required to complete ovarian stimulation from stimulation day 8 onwards (recFSH was given on the day of hCG for this study).

In the ENGAGE Study, 1,506 healthy normal ovulatory women, aged 18 to 36 years with a body weight greater than 60 kg and less than or equal to 90 kg, were treated for one cycle with 150 micrograms of Elonva and pituitary suppression with a GnRH antagonist as part of an ART program. The co-primary efficacy endpoints were ongoing pregnancy rate and number of oocytes retrieved. The median total duration of stimulation was 9 days for both groups, indicating that two days of recFSH were required to complete ovarian stimulation from stimulation day 8 onwards (recFSH was given on the day of hCG for this study).

In the PURSUE study, 1,390 healthy normal ovulatory women, aged 35 to 42 years with a body weight greater than or equal to 50 kg, were treated for one cycle with 150 micrograms of Elonva and pituitary suppression with a GnRH antagonist as part of an ART program. The primary efficacy endpoint was vital pregnancy rate. The number of oocytes retrieved was a key secondary efficacy
endpoint. The median total duration of stimulation was 9 days for both groups, indicating that one day of recFSH was required to complete ovarian stimulation from stimulation day 8 onwards (no recFSH was given on the day of hCG for this study).

Number of oocytes retrieved
In all three studies, treatment with a single injection of Elonva, 100 or 150 micrograms, for the first seven days of COS, resulted in a higher number of oocytes retrieved compared with a daily dose of recFSH. However, the differences were within the predefined equivalence (ENGAGE and ENSURE) or non-inferiority (PURSUE) margins. See Table 1 below.

Table 1: Mean Number of Oocytes Retrieved from ENSURE, ENGAGE, and PURSUE Intent-to-Treat Population (ITT)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>ENSURE (18-36 years of age) (body weight less than or equal to 60 kg)</th>
<th>ENGAGE (18-36 years of age) (body weight greater than 60 kg and less than or equal to 90 kg)</th>
<th>PURSUE (35-42 years of age) (body weight greater than or equal to 50 kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elonva 100 µg recFSH 150 IU</td>
<td>Elonva 150 µg recFSH 200 IU</td>
<td>Elonva 150 µg recFSH 300 IU</td>
</tr>
<tr>
<td></td>
<td>N=268</td>
<td>N=756</td>
<td>N=694</td>
</tr>
<tr>
<td>Mean number of oocytes</td>
<td>13.3</td>
<td>13.8</td>
<td>10.7</td>
</tr>
<tr>
<td>Difference [95% CI]</td>
<td>2.5 [1.2; 3.9]</td>
<td>1.2 [0.5, 1.9]</td>
<td>0.5 [-0.2, 1.2]</td>
</tr>
</tbody>
</table>

Pregnancy from the fresh cycles of ENGAGE and PURSUE

In the ENGAGE study, non-inferiority was demonstrated in ongoing pregnancy rates between Elonva and recFSH, with ongoing pregnancy rate defined as presence of at least one foetus with heart activity assessed at least 10 weeks after embryo transfer.

In the PURSUE study, non-inferiority was demonstrated in vital pregnancy rate between Elonva and recFSH, with vital pregnancy rate defined as the percentage of subjects with at least one foetus with heart activity assessed 5 to 6 weeks after embryo transfer.

The pregnancy results from the fresh cycles of ENGAGE and PURSUE are summarized in Table 2 below.

Table 2: Pregnancy Results from the Fresh Cycles of ENGAGE and PURSUE Intent-to-Treat Population (ITT)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Fresh Cycles of ENGAGE† (18-36 years of age) (body weight greater than 60 kg and less than or equal to 90 kg)</th>
<th>Fresh Cycles of PURSUE‡ (35-42 years of age) (body weight greater than or equal to 50 kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elonva 150 µg recFSH 200 IU Difference [95% CI]</td>
<td>Elonva 150 µg recFSH 300 IU Difference [95% CI]</td>
</tr>
<tr>
<td></td>
<td>N=756</td>
<td>N=694</td>
</tr>
<tr>
<td>Vital pregnancy rate</td>
<td>39.9%</td>
<td>39.1%</td>
</tr>
<tr>
<td></td>
<td>1.1 [-3.8, 5.9]</td>
<td>23.9%</td>
</tr>
<tr>
<td>Ongoing pregnancy rate</td>
<td>39.0%</td>
<td>38.1%</td>
</tr>
</tbody>
</table>
In these clinical trials, the safety profile of a single injection with Elonva was comparable to daily injections with recFSH.

**Pregnancy from the Frozen-Thawed Embryo Transfer (FTET) cycles of ENGAGE and PURSUE**

The follow-up FTET trial for ENGAGE included women who had at least one embryo thawed for use up to at least one year after cryopreservation. The mean number of embryos transferred in the FTET cycles of ENGAGE was 1.7 in both treatment groups.

The follow-up FTET trial for PURSUE included women who had at least one embryo thawed for use within two years of the date of the last cryopreservation for this trial. The mean number of embryos transferred in the FTET cycles of PURSUE was 2.4 in both treatment groups. This trial also provided safety data on the infants born from cryopreserved embryos.

The maximum number of FTET cycles was 5 and 4 for the follow-up FTET trial for ENGAGE and PURSUE, respectively. The pregnancy results from the first two FTET cycles of ENGAGE and PURSUE are summarized in Table 3 below.

**Table 3: Pregnancy Results from the FTET cycles of ENGAGE and PURSUE Intent-to-Treat Population (ITT)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Fresh Cycles of ENGAGE† (18-36 years of age)</th>
<th>Fresh Cycles of PURSUE‡ (35-42 years of age)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(body weight greater than 60 kg and less than or equal to 90 kg)</td>
<td>(body weight greater than or equal to 50 kg)</td>
</tr>
<tr>
<td></td>
<td>Elonva 150 µg</td>
<td>recFSH 200 IU</td>
</tr>
<tr>
<td>Live birth rate*</td>
<td>N=756</td>
<td>35.6%</td>
</tr>
</tbody>
</table>

†The primary efficacy endpoint in the ENGAGE study was ongoing pregnancy (assessed at least 10 weeks after embryo transfer).
‡The primary efficacy endpoint in the PURSUE study was vital pregnancy rate defined as the percentage of subjects with at least one foetus with heart activity assessed 5 to 6 weeks after embryo transfer.
*Live birth rate was a secondary efficacy endpoint in ENGAGE and PURSUE.
Congenital malformations reported in infants born after a frozen-thawed embryo transfer (FTET) cycle

Following use of Elonva, 61 infants were born after an FTET cycle, and 630 infants were born after fresh ART cycles. The rates for congenital malformations (major and minor combined) reported for infants born after an FTET cycle (16.4%) were similar to those reported for infants born after fresh ART cycles (19.5%).

Immunogenicity

Of the 2,511 women treated with Elonva who were evaluated for the formation of post-treatment antibodies, four (0.16%) had evidence of antibody formation, including three who had been exposed once to Elonva and one who had been exposed twice to Elonva. In each case, these antibodies were non-neutralizing and did not interfere with the response to stimulation or the normal physiologic responses of the Hypothalamic-Pituitary-Ovarian (HPO) axis. Two of these four women became pregnant during the same treatment cycle in which antibodies were detected, suggesting that the presence of non-neutralizing antibodies after stimulation with Elonva is not clinically relevant.

Paediatric population

The European Medicines Agency has deferred the obligation to submit the results of studies with Elonva in one or more subsets of the paediatric population in hypogonadotrophic hypogonadism (see section 4.2 for information on paediatric use).

5.2 Pharmacokinetic properties

Pharmacokinetic parameters of corifollitropin alfa were evaluated after subcutaneous administration in women undergoing a COS treatment cycle.

Due to the long elimination half-life, after administration of the recommended dose, serum concentrations of corifollitropin alfa are sufficient to sustain multiple follicular growth for an entire week. This justifies replacement of the first seven injections of daily (rec)FSH with a single subcutaneous injection of Elonva in COS for the development of multiple follicles and pregnancy in an ART program (see section 4.2).

Body weight is a determinant of exposure to corifollitropin alfa. Corifollitropin alfa exposure after a single subcutaneous injection is 665 hours*ng/mL (AUC, 426-1,037 hours*ng/mL) and is similar after administration of 100 micrograms corifollitropin alfa to women with a body weight less than or equal to 60 kilograms and of 150 micrograms corifollitropin alfa to women with a body weight greater than 60 kilograms.

Absorption

After a single subcutaneous injection of Elonva, the maximum serum concentration of corifollitropin alfa is 4.24 ng/mL (2.49-7.21 ng/mL) and is reached 44 hours (35-57 hours) postdose. The absolute bioavailability is 58% (48-70%).

Distribution

Distribution, metabolism and elimination of corifollitropin alfa are very similar to other gonadotropins, such as FSH, hCG and LH. After absorption into the blood, corifollitropin alfa is distributed mainly to the ovaries and the kidneys. The steady state volume of distribution is 9.2 L (6.5-13.1 L). Exposure to corifollitropin alfa increases proportionally with dose within the range of 60 micrograms to 240 micrograms.

1 Predicted range for 90% of subjects.
Elimination

Corifollitropin alfa has an elimination half-life of 70 hours (59-82 hours\(^1\)) and a clearance of 0.13 L/h (0.10-0.18 L/h\(^1\)). Elimination of corifollitropin alfa predominantly occurs via the kidneys, and the rate of elimination may be reduced in patients with renal insufficiency (see sections 4.2 and 4.4). Hepatic metabolism contributes to a minor extent to the elimination of corifollitropin alfa.

Other special populations

Hepatic impairment

Although data in hepatically impaired patients are not available, hepatic impairment is unlikely to affect the pharmacokinetic profile of corifollitropin alfa.

5.3 Preclinical safety data

Preclinical data revealed no special hazard for humans based on conventional studies of single and repeated dose toxicity and safety pharmacology.

Reproduction toxicology studies in rats and rabbits indicated that corifollitropin alfa does not adversely affect fertility. Administration of corifollitropin alfa to rats and rabbits, prior to and directly after mating, and during early pregnancy, resulted in embryotoxicity. In rabbits, when administered prior to mating, teratogenicity has been observed. Both embryotoxicity and teratogenicity are considered a consequence of the superovulatory state of the animal not able to support a number of embryos above a physiological ceiling. The relevance of these findings for the clinical use of Elonva is limited.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sodium citrate
Sucrose
Polysorbate 20
Methionine
Sodium hydroxide (for pH adjustment)
Hydrochloric acid (for pH adjustment)
Water for injections

6.2 Incompatibilities

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

6.3 Shelf life

3 years

6.4 Special precautions for storage

Store in a refrigerator (2°C-8°C).
Do not freeze.
For convenience, the patient is allowed to store the product at or below 25°C for a period of not more than 1 month.

Keep the syringe in the outer carton in order to protect from light.
6.5 Nature and contents of container

Elonva is supplied in pre-filled luerlock syringes of 1 mL (type I hydrolytic glass), closed with a bromobutyl elastomer plunger and a tip cap. The syringe is equipped with an automatic safety system to prevent needle stick injuries after use and is packed together with a sterile injection needle. Each pre-filled syringe contains 0.5 mL solution for injection.

Elonva is available in pack sizes of 1 pre-filled syringe.

6.6 Special precautions for disposal and other handling

Do not use Elonva if the solution is not clear.

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

Merck Sharp & Dohme Limited
Hertford Road
Hoddesdon
Hertfordshire EN11 9BU
United Kingdom

8. MARKETING AUTHORISATION NUMBER(S)

EU/1/09/609/001

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 25 January 2010
Date of latest renewal: 22 August 2014

10. DATE OF REVISION OF THE TEXT

DD month YYYY

Detailed information on this medicinal product is available on the website of the European Medicines Agency http://www.ema.europa.eu.
1. **NAME OF THE MEDICINAL PRODUCT**

Elonva 150 micrograms solution for injection

2. **QUALITATIVE AND QUANTITATIVE COMPOSITION**

Each pre-filled syringe contains 150 micrograms of corifollitropin alfa* in 0.5 mL solution for injection.

*corifollitropin alfa is a glycoprotein produced in Chinese Hamster Ovary (CHO) cells by recombinant DNA technology.

Excipient(s) with known effect:
This medicinal product contains less than 1 mmol (23 mg) sodium per injection, i.e., essentially ‘sodium-free’.

For the full list of excipients, see section 6.1.

3. **PHARMACEUTICAL FORM**

Solution for injection (injection).

Clear and colourless aqueous solution.

4. **CLINICAL PARTICULARS**

4.1 **Therapeutic indications**

Elonva is indicated for Controlled Ovarian Stimulation (COS) in combination with a Gonadotropin Releasing Hormone (GnRH) antagonist for the development of multiple follicles in women participating in an Assisted Reproductive Technology (ART) program.

4.2 **Posology and method of administration**

Treatment with Elonva should be initiated under the supervision of a physician experienced in the treatment of fertility problems.

**Posology**

In the treatment of women of reproductive age, the dose of Elonva is based on weight and age.

- A single 100-microgram dose is recommended in women who weigh less than or equal to 60 kilograms and who are 36 years of age or younger.

- A single 150-microgram dose is recommended in women:
  - who weigh more than 60 kilograms, regardless of age.
  - who weigh 50 kilograms or more and who are older than 36 years of age.

Women older than 36 years of age who weighed less than 50 kilograms were not studied.
<table>
<thead>
<tr>
<th>Age</th>
<th>Body Weight Less than 50 kg</th>
<th>Body Weight 50 – 60 kg</th>
<th>Body Weight More than 60 kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 years or younger</td>
<td>100 micrograms</td>
<td>100 micrograms</td>
<td>150 micrograms</td>
</tr>
<tr>
<td>Older than 36 years</td>
<td>Not studied.</td>
<td>150 micrograms</td>
<td>150 micrograms</td>
</tr>
</tbody>
</table>

The recommended doses of Elonva have only been established in a treatment cycle with a GnRH antagonist that was administered from stimulation day 5 or day 6 onwards (see also sections 4.1, 4.4, and 5.1).

Stimulation day 1:
Elonva should be administered as a single subcutaneous injection, preferably in the abdominal wall, during the early follicular phase of the menstrual cycle.

Stimulation day 5 or 6:
Treatment with a GnRH antagonist should be started on stimulation day 5 or day 6 depending on the ovarian response, i.e. the number and size of growing follicles. The concurrent determination of serum oestradiol levels may also be useful. The GnRH antagonist is used to prevent premature Luteinising Hormone (LH) surges.

Stimulation day 8:
Seven days after the injection with Elonva on stimulation day 1, COS treatment may be continued with daily injections of (recombinant) Follicle Stimulating Hormone [(rec)FSH] until the criterion for triggering final oocyte maturation (3 follicles ≥ 17 mm) has been reached. The daily dose of (rec)FSH may depend on the ovarian response. In normal responders a daily dose of 150 IU (rec)FSH is advised. Administration of (rec)FSH on the day of human Chorionic Gonadotropin (hCG) administration can be omitted, depending on the ovarian response. In general, adequate follicular development is achieved on average by the ninth day of treatment (range 6 to 18 days).

As soon as three follicles ≥ 17 mm are observed, a single injection of 5,000 up to 10,000 IU hCG is administered the same day or the day thereafter to induce final oocyte maturation. In case of an excessive ovarian response, see the recommendations given in section 4.4 in order to reduce the risk for developing ovarian hyperstimulation syndrome (OHSS).

Special populations

Renal impairment
No clinical studies have been performed in patients with renal insufficiency. Since the rate of elimination of corifollitropin alfa may be reduced in patients with renal insufficiency, the use of Elonva in these women is not recommended (see sections 4.4 and 5.2).

Hepatic impairment
Although data in hepatically impaired patients are not available, hepatic impairment is unlikely to affect the elimination of corifollitropin alfa (see section 5.2).

Paediatric population

There is no relevant use of Elonva within the approved indication in the paediatric population.

Method of administration

Subcutaneous injection of Elonva may be carried out by the woman herself or her partner, provided that proper instructions are given by the physician. Self administration of Elonva should only be performed by women who are well-motivated, adequately trained and with access to expert advice.
4.3 Contraindications

- Hypersensitivity to the active substance or to any of the excipients listed in section 6.1.
- Tumours of the ovary, breast, uterus, pituitary or hypothalamus.
- Abnormal (not menstrual) vaginal bleeding without a known/diagnosed cause.
- Primary ovarian failure.
- Ovarian cysts or enlarged ovaries.
- A history of Ovarian Hyperstimulation Syndrome (OHSS).
- A previous COS cycle that resulted in more than 30 follicles ≥ 11 mm measured by ultrasound examination.
- A basal antral follicle count > 20.
- Fibroid tumours of the uterus incompatible with pregnancy.
- Malformations of the reproductive organs incompatible with pregnancy.
- Polycystic ovarian syndrome (PCOS).

4.4 Special warnings and precautions for use

Infertility evaluation before starting treatment

Before starting treatment, the couple’s infertility should be assessed as appropriate. In particular, women should be evaluated for hypothyroidism, adrenocortical insufficiency, hyperprolactinemia and pituitary or hypothalamic tumours, and appropriate specific treatment given. Medical conditions that contraindicate pregnancy should also be evaluated before starting treatment with Elonva.

Dosing during the stimulation cycle

Elonva is intended for single subcutaneous injection only. Additional injections of Elonva should not be given within the same treatment cycle. (See also section 4.2.)

After administration of Elonva, no additional FSH-containing product should be administered prior to stimulation day 8 (see also section 4.2).

Renal insufficiency

In patients with mild, moderate or severe renal insufficiency the rate of elimination of corifollitropin alfa may be reduced (see sections 4.2 and 5.2). Therefore, the use of Elonva in these women is not recommended.

Not recommended with a GnRH agonist protocol

There are limited data on the use of Elonva in combination with a GnRH agonist. Results of a small uncontrolled study suggest a higher ovarian response than in combination with a GnRH antagonist. Therefore, the use of Elonva is not recommended in combination with a GnRH agonist (see also section 4.2).

Ovarian hyperstimulation syndrome (OHSS)

OHSS is a medical event distinct from uncomplicated ovarian enlargement. Clinical signs and symptoms of mild and moderate OHSS are abdominal pain, nausea, diarrhoea, mild to moderate enlargement of ovaries and ovarian cysts. Severe OHSS may be life-threatening. Clinical signs and symptoms of severe OHSS are large ovarian cysts, acute abdominal pain, ascites, pleural effusion, hydrothorax, dyspnoea, oliguria, haematological abnormalities and weight gain. In rare instances, venous or arterial thromboembolism may occur in association with OHSS. Transient liver function test abnormalities suggestive of hepatic dysfunction with or without morphologic changes on liver biopsy have also been reported in association with OHSS.
OHSS may be caused by administration of hCG and by pregnancy (endogenous hCG). Early OHSS usually occurs within 10 days after hCG administration and may be associated with an excessive ovarian response to gonadotropin stimulation. Late OHSS occurs more than 10 days after hCG administration, as a consequence of the hormonal changes with pregnancy. Because of the risk of developing OHSS, patients should be monitored for at least two weeks after hCG administration.

Women with known risk factors for a high ovarian response may be especially prone to the development of OHSS following treatment with Elonva. For women having their first cycle of ovarian stimulation, for whom risk factors are only partially known, close observation for early signs and symptoms of OHSS is recommended.

To reduce the risk of OHSS, ultrasonographic assessments of follicular development should be performed prior to treatment and at regular intervals during treatment. The concurrent determination of serum oestradiol levels may also be useful. In ART there is an increased risk of OHSS with 18 or more follicles of 11 mm or more in diameter. When there are 30 or more follicles in total it is advised to withhold hCG administration.

Depending on the ovarian response, the following measures can be considered to reduce the risk of OHSS:
- withhold further stimulation with a gonadotropin for a maximum of 3 days (coasting);
- withhold hCG and cancel the treatment cycle;
- administer a dose lower than 10,000 IU of hCG for triggering final oocyte maturation, e.g. 5,000 IU hCG or 250 micrograms rec-hCG (which is equivalent to approximately 6,500 IU);
- cancel the fresh embryo transfer and cryopreserve embryos;
- avoid administration of hCG for luteal phase support.

Adherence to the recommended Elonva dose and treatment cycle and careful monitoring of ovarian response is important to reduce the risk of OHSS. If OHSS develops, standard and appropriate management of OHSS should be implemented and followed.

Ovarian torsion

Ovarian torsion has been reported after treatment with gonadotropins, including Elonva. Ovarian torsion may be related to other conditions, such as OHSS, pregnancy, previous abdominal surgery, past history of ovarian torsion, and previous or current ovarian cysts. Damage to the ovary due to reduced blood supply can be limited by early diagnosis and immediate detorsion.

Multiple pregnancy

Multiple pregnancies and births have been reported for all gonadotropin treatments, including Elonva. The woman and her partner should be advised of the potential risks for the mother (pregnancy and delivery complications) and the neonate (low birth weight) before starting treatment. In women undergoing ART procedures the risk of multiple pregnancy is mainly related to the number of embryos transferred.

Ectopic pregnancy

Infertile women undergoing ART have an increased incidence of ectopic pregnancies. It is important to have early ultrasound confirmation that a pregnancy is intrauterine, and to exclude the possibility of extraterine pregnancy.
Congenital malformations

The incidence of congenital malformations after ART may be slightly higher than after spontaneous conceptions. This is thought to be due to differences in parental characteristics (e.g., maternal age, sperm characteristics) and the higher incidence of multiple pregnancies.

Ovarian and other reproductive system neoplasms

There have been reports of ovarian and other reproductive system neoplasms, both benign and malignant, in women who have undergone multiple treatment regimens for infertility treatment. It is not established whether or not treatment with gonadotropins increases the risk of these tumours in infertile women.

Vascular complications

Thromboembolic events, both in association with and separate from OHSS, have been reported following treatment with gonadotropins, including Elonva. Intravascular thrombosis, which may originate in venous or arterial vessels, can result in reduced blood flow to vital organs or the extremities. In women with generally recognized risk factors for thromboembolic events, such as a personal or family history, severe obesity or thrombophilia, treatment with gonadotropins may further increase this risk. In these women the benefits of gonadotropin administration need to be weighed against the risks. It should be noted, however, that pregnancy itself also carries an increased risk of thrombosis.

4.5 Interaction with other medicinal products and other forms of interaction

No interaction studies with Elonva and other medicines have been performed. Since corifollitropin alfa is not a substrate of cytochrome P450 enzymes, no metabolic interactions with other medicinal products are anticipated.

4.6 Fertility, pregnancy and lactation

Pregnancy

In case of inadvertent exposure to Elonva during pregnancy, clinical data are not sufficient to exclude an adverse outcome of pregnancy. In animal studies reproductive toxicity has been observed (see preclinical safety data in section 5.3). The use of Elonva during pregnancy is not indicated.

Breast-feeding

The use of Elonva during breast-feeding is not indicated.

Fertility

Elonva is indicated for use in infertility (see section 4.1).

4.7 Effects on ability to drive and use machines

No studies on the ability to drive and use machines have been performed. Elonva may cause dizziness. Women should be advised that if they feel dizzy, they should not drive or use machines.
4.8 Undesirable effects

Summary of the safety profile

The most frequently reported adverse reactions during treatment with Elonva in clinical trials (N=2,397) are pelvic discomfort (6.0%), OHSS (4.3%, see also section 4.4), headache (4.0%), pelvic pain (2.9%), nausea (2.3%), fatigue (1.5%), and breast tenderness (1.3%).

Tabulated list of adverse reactions

The table below displays the main adverse reactions in women treated with Elonva in clinical trials according to system organ class and frequency; very common (≥ 1/10), common (≥ 1/100 to < 1/10), uncommon (≥ 1/1,000 to < 1/100), rare (≥ 1/10,000 to < 1/1,000), and very rare (< 1/10,000). Within each frequency grouping, adverse reactions are presented in order of decreasing seriousness.

<table>
<thead>
<tr>
<th>System organ class</th>
<th>Frequency</th>
<th>Adverse reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatric disorders</td>
<td>Uncommon</td>
<td>Mood swings</td>
</tr>
<tr>
<td>Nervous system disorders</td>
<td>Common, Uncommon</td>
<td>Headache, Dizziness</td>
</tr>
<tr>
<td>Vascular disorders</td>
<td>Uncommon</td>
<td>Hot flush</td>
</tr>
<tr>
<td>Gastrointestinal disorders</td>
<td>Common, Uncommon</td>
<td>Nausea, Abdominal distension, vomiting, diarrhoea, constipation</td>
</tr>
<tr>
<td>Musculoskeletal and connective tissue disorders</td>
<td>Uncommon</td>
<td>Back pain</td>
</tr>
<tr>
<td>Pregnancy, puerperium and perinatal conditions</td>
<td>Uncommon</td>
<td>Abortion spontaneous</td>
</tr>
<tr>
<td>Reproductive system and breast disorders</td>
<td>Common, Uncommon</td>
<td>OHSS, pelvic pain, pelvic discomfort, breast tenderness, Ovarian torsion, adnexa uteri pain, premature ovulation, breast pain</td>
</tr>
<tr>
<td>General disorders and administration site conditions</td>
<td>Common, Uncommon</td>
<td>Fatigue, Injection site haematoma, injection site pain, irritability</td>
</tr>
<tr>
<td>Investigations</td>
<td>Uncommon</td>
<td>Alanine aminotransferase increased, aspartate aminotransferase increased</td>
</tr>
<tr>
<td>Injury, poisoning and procedural complications</td>
<td>Uncommon</td>
<td>Procedural pain</td>
</tr>
</tbody>
</table>

Description of selected adverse reactions

In addition, ectopic pregnancy and multiple gestations have been reported. These are considered to be related to ART or subsequent pregnancy.

In rare instances, thromboembolism has been associated with Elonva therapy as with other gonadotropins.
Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system listed in Appendix V.

4.9 Overdose

More than one injection of Elonva within one treatment cycle or too high a dose of Elonva and/or (rec)FSH may increase the risk of OHSS. For measures to reduce the risk of OHSS see section 4.4.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: sex hormones and modulators of the genital system, gonadotropins, ATC code: G03GA09

Mechanism of action

Corifollitropin alfa is designed as a sustained follicle stimulant with the same pharmacodynamic profile as (rec)FSH, but with a markedly prolonged duration of FSH activity. Due to its ability to initiate and sustain multiple follicular growth for an entire week, a single subcutaneous injection of the recommended dose of Elonva may replace the first seven injections of any daily (rec)FSH preparation in a COS treatment cycle. The long duration of FSH activity was achieved by adding the carboxy-terminal peptide of the β-subunit of human chorionic gonadotropin (hCG) to the β-chain of human FSH. Corifollitropin alfa does not display any intrinsic LH/hCG activity.

Clinical efficacy and safety

In three randomized, double-blind, clinical trials, treatment with a single subcutaneous injection of Elonva, 100 micrograms (ENSURE study) or 150 micrograms (ENGAGE and PURSUE study), for the first seven days of COS was compared to treatment with a daily dose of 150, 200, or 300 IU of recFSH, respectively. Pituitary suppression with a GnRH antagonist (ganirelix acetate injection at a daily dose of 0.25 mg) was used in each of the three clinical trials.

In the ENSURE study, 396 healthy normal ovulatory women, aged 18 to 36 years with a body weight less than or equal to 60 kg, were treated for one cycle with 100 micrograms of Elonva and pituitary suppression with a GnRH antagonist as part of an ART program. The primary efficacy endpoint was number of oocytes retrieved. The median total duration of stimulation was 9 days for both groups, indicating that two days of recFSH were required to complete ovarian stimulation from stimulation day 8 onwards (recFSH was given on the day of hCG for this study).

In the ENGAGE Study, 1,506 healthy normal ovulatory women, aged 18 to 36 years with a body weight greater than or equal to 60 kg and less than or equal to 90 kg, were treated for one cycle with 150 micrograms of Elonva and pituitary suppression with a GnRH antagonist as part of an ART program. The co-primary efficacy endpoints were ongoing pregnancy rate and number of oocytes retrieved. The median total duration of stimulation was 9 days for both groups, indicating that two days of recFSH were required to complete ovarian stimulation from stimulation day 8 onwards (recFSH was given on the day of hCG for this study).

In the PURSUE study, 1,390 healthy normal ovulatory women, aged 35 to 42 years with a body weight greater than or equal to 50 kg, were treated for one cycle with 150 micrograms of Elonva and pituitary suppression with a GnRH antagonist as part of an ART program. The primary efficacy endpoint was vital pregnancy rate. The number of oocytes retrieved was a key secondary efficacy
endpoint. The median total duration of stimulation was 9 days for both groups, indicating that one day of recFSH was required to complete ovarian stimulation from stimulation day 8 onwards (no recFSH was given on the day of hCG for this study).

Number of oocytes retrieved
In all three studies, treatment with a single injection of Elonva, 100 or 150 micrograms, for the first seven days of COS, resulted in a higher number of oocytes retrieved compared with a daily dose of recFSH. However, the differences were within the predefined equivalence (ENGAGE and ENSURE) or non-inferiority (PURSUE) margins. See Table 1 below.

Table 1: Mean Number of Oocytes Retrieved from ENSURE, ENGAGE, and PURSUE Intent-to-Treat Population (ITT)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>ENSURE (18-36 years of age) (body weight less than or equal to 60 kg)</th>
<th>ENGAGE (18-36 years of age) (body weight greater than 60 kg and less than or equal to 90 kg)</th>
<th>PURSUE (35-42 years of age) (body weight greater than or equal to 50 kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elonva 100 µg</td>
<td>recFSH 150 IU</td>
<td>Elonva 150 µg</td>
</tr>
<tr>
<td>Mean number of oocytes</td>
<td>13.3</td>
<td>10.6</td>
<td>13.8</td>
</tr>
<tr>
<td>Difference [95% CI]</td>
<td>2.5 [1.2; 3.9]</td>
<td>1.2 [0.5, 1.9]</td>
<td>0.5 [-0.2, 1.2]</td>
</tr>
</tbody>
</table>

Pregnancy from the fresh cycles of ENGAGE and PURSUE
In the ENGAGE study, non-inferiority was demonstrated in ongoing pregnancy rates between Elonva and recFSH, with ongoing pregnancy rate defined as presence of at least one foetus with heart activity assessed at least 10 weeks after embryo transfer.

In the PURSUE study, non-inferiority was demonstrated in vital pregnancy rate between Elonva and recFSH, with vital pregnancy rate defined as the percentage of subjects with at least one foetus with heart activity assessed 5 to 6 weeks after embryo transfer.

The pregnancy results from the fresh cycles of ENGAGE and PURSUE are summarized in Table 2 below.

Table 2: Pregnancy Results from the Fresh Cycles of ENGAGE and PURSUE Intent-to-Treat Population (ITT)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Fresh Cycles of ENGAGE† (18-36 years of age) (body weight greater than 60 kg and less than or equal to 90 kg)</th>
<th>Fresh Cycles of PURSUE‡ (35-42 years of age) (body weight greater than or equal to 50 kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elonva 150 µg</td>
<td>recFSH 200 IU</td>
</tr>
<tr>
<td>Vital pregnancy rate</td>
<td>39.9%</td>
<td>39.1%</td>
</tr>
<tr>
<td>Ongoing pregnancy rate</td>
<td>39.0%</td>
<td>38.1%</td>
</tr>
</tbody>
</table>
Parameter | Fresh Cycles of ENGAGE†  
|---|---|---|---|---|---|
| | (18-36 years of age) | (body weight greater than 60 kg and less than or equal to 90 kg) | Fresh Cycles of PURSUE‡  
| | | | (35-42 years of age) | (body weight greater than or equal to 50 kg) |
| Elonva 150 µg | recFSH 200 IU | Difference [95% CI] | Elonva 150 µg | recFSH 300 IU | Difference [95% CI] |
| N=756 | N=750 | 1.3 [-3.5, 6.1] | N=694 | N=696 | -2.3 [-6.5, 1.9] |
| Live birth rate* | 35.6% | 34.4% | 1.3 [-3.5, 6.1] | 21.3% | 23.4% | -2.3 [-6.5, 1.9] |

†The primary efficacy endpoint in the ENGAGE study was ongoing pregnancy (assessed at least 10 weeks after embryo transfer).
‡The primary efficacy endpoint in the PURSUE study was vital pregnancy rate defined as the percentage of subjects with at least one foetus with heart activity assessed 5 to 6 weeks after embryo transfer.
*Live birth rate was a secondary efficacy endpoint in ENGAGE and PURSUE.

In these clinical trials, the safety profile of a single injection with Elonva was comparable to daily injections with recFSH.

Pregnancy from the Frozen-Thawed Embryo Transfer (FTET) cycles of ENGAGE and PURSUE

The follow-up FTET trial for ENGAGE included women who had at least one embryo thawed for use up to at least one year after cryopreservation. The mean number of embryos transferred in the FTET cycles of ENGAGE was 1.7 in both treatment groups.

The follow-up FTET trial for PURSUE included women who had at least one embryo thawed for use within two years of the date of the last cryopreservation for this trial. The mean number of embryos transferred in the FTET cycles of PURSUE was 2.4 in both treatment groups. This trial also provided safety data on the infants born from cryopreserved embryos.

The maximum number of FTET cycles was 5 and 4 for the follow-up FTET trial for ENGAGE and PURSUE, respectively. The pregnancy results from the first two FTET cycles of ENGAGE and PURSUE are summarized in Table 3 below.

![Table 3: Pregnancy Results from the FTET cycles of ENGAGE and PURSUE Intent-to-Treat Population (ITT)](image_url)

| FTET Cycles of ENGAGE (18-36 years of age) | FTET Cycles of PURSUE (35-42 years of age) |
|---|---|---|---|---|---|
| (body weight greater than 60 kg and less than or equal to 90 kg) | (body weight greater than or equal to 50 kg) |
| n | N | % | n | N | % | n | N | % | n | N | % |
| Elonva 150 µg | recFSH 200 IU | Elonva 150 µg | recFSH 300 IU |
| FTET Cycle 1* | | | | | | | | | | | |
| Ongoing pregnancy | 55 | 148 | 37.2 | 45 | 147 | 30.6 | 43 | 152 | 28.3 | 42 | 145 | 29.0 |
| Live birth | - | - | - | - | - | - | 43 | 152 | 28.3 | 41 | 145 | 28.3 |
| FTET Cycle 2* | | | | | | | | | | | |
| Ongoing pregnancy | 9 | 38 | 23.7 | 9 | 31 | 29.0 | 8 | 23 | 34.8 | 6 | 14 | 42.9 |
| Live birth | - | - | - | - | - | - | 8 | 23 | 34.8 | 6 | 14 | 42.9 |

n = number of subjects with the event; N = total number of subjects

* Per embryo transfer.
Congenital malformations reported in infants born after a frozen-thawed embryo transfer (FTET) cycle

Following use of Elonva, 61 infants were born after an FTET cycle, and 630 infants were born after fresh ART cycles. The rates for congenital malformations (major and minor combined) reported for infants born after an FTET cycle (16.4%) were similar to those reported for infants born after fresh ART cycles (19.5%).

Immunogenicity

Of the 2,511 women treated with Elonva who were evaluated for the formation of post-treatment antibodies, four (0.16%) had evidence of antibody formation, including three who had been exposed once to Elonva and one who had been exposed twice to Elonva. In each case, these antibodies were non-neutralizing and did not interfere with the response to stimulation or the normal physiologic responses of the Hypothalamic-Pituitary-Ovarian (HPO) axis. Two of these four women became pregnant during the same treatment cycle in which antibodies were detected, suggesting that the presence of non-neutralizing antibodies after stimulation with Elonva is not clinically relevant.

Paediatric population

The European Medicines Agency has deferred the obligation to submit the results of studies with Elonva in one or more subsets of the paediatric population in hypogonadotrophic hypogonadism (see section 4.2 for information on paediatric use).

5.2 Pharmacokinetic properties

Pharmacokinetic parameters of corifollitropin alfa were evaluated after subcutaneous administration in women undergoing a COS treatment cycle.

Due to the long elimination half-life, after administration of the recommended dose, serum concentrations of corifollitropin alfa are sufficient to sustain multiple follicular growth for an entire week. This justifies replacement of the first seven injections of daily (rec)FSH with a single subcutaneous injection of Elonva in COS for the development of multiple follicles and pregnancy in an ART program (see section 4.2).

Body weight is a determinant of exposure to corifollitropin alfa. Corifollitropin alfa exposure after a single subcutaneous injection is 665 hours*ng/mL (AUC, 426-1,037 hours*ng/mL) and is similar after administration of 100 micrograms corifollitropin alfa to women with a body weight less than or equal to 60 kilograms and of 150 micrograms corifollitropin alfa to women with a body weight greater than 60 kilograms.

Absorption

After a single subcutaneous injection of Elonva, the maximum serum concentration of corifollitropin alfa is 4.24 ng/mL (2.49-7.21 ng/mL) and is reached 44 hours (35-57 hours) postdose. The absolute bioavailability is 58% (48-70%).

Distribution

Distribution, metabolism and elimination of corifollitropin alfa are very similar to other gonadotropins, such as FSH, hCG and LH. After absorption into the blood, corifollitropin alfa is distributed mainly to the ovaries and the kidneys. The steady state volume of distribution is 9.2 L (6.5-13.1 L). Exposure to corifollitropin alfa increases proportionally with dose within the range of 60 micrograms to 240 micrograms.

1 Predicted range for 90% of subjects.
Elimination

Corifollitropin alfa has an elimination half-life of 70 hours (59-82 hours) and a clearance of 0.13 L/h (0.10-0.18 L/h). Elimination of corifollitropin alfa predominantly occurs via the kidneys, and the rate of elimination may be reduced in patients with renal insufficiency (see sections 4.2 and 4.4). Hepatic metabolism contributes to a minor extent to the elimination of corifollitropin alfa.

Other special populations

Hepatic impairment
Although data in hepatically impaired patients are not available, hepatic impairment is unlikely to affect the pharmacokinetic profile of corifollitropin alfa.

5.3 Preclinical safety data

Preclinical data revealed no special hazard for humans based on conventional studies of single and repeated dose toxicity and safety pharmacology.

Reproduction toxicology studies in rats and rabbits indicated that corifollitropin alfa does not adversely affect fertility. Administration of corifollitropin alfa to rats and rabbits, prior to and directly after mating, and during early pregnancy, resulted in embryotoxicity. In rabbits, when administered prior to mating, teratogenicity has been observed. Both embryotoxicity and teratogenicity are considered a consequence of the superovulatory state of the animal not able to support a number of embryos above a physiological ceiling. The relevance of these findings for the clinical use of Elonva is limited.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sodium citrate
Sucrose
Polysorbate 20
Methionine
Sodium hydroxide (for pH adjustment)
Hydrochloric acid (for pH adjustment)
Water for injections

6.2 Incompatibilities

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

6.3 Shelf life

3 years

6.4 Special precautions for storage

Store in a refrigerator (2°C-8°C).
Do not freeze.
For convenience, the patient is allowed to store the product at or below 25°C for a period of not more than 1 month.

Keep the syringe in the outer carton in order to protect from light.
6.5 Nature and contents of container

Elonva is supplied in pre-filled luerlock syringes of 1 mL (type I hydrolytic glass), closed with a bromobutyl elastomer plunger and a tip cap. The syringe is equipped with an automatic safety system to prevent needle stick injuries after use and is packed together with a sterile injection needle. Each pre-filled syringe contains 0.5 mL solution for injection.

Elonva is available in pack sizes of 1 pre-filled syringe.

6.6 Special precautions for disposal and other handling

Do not use Elonva if the solution is not clear.

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

Merck Sharp & Dohme Limited
Hertford Road
Hoddesdon
Hertfordshire EN11 9BU
United Kingdom

8. MARKETING AUTHORISATION NUMBER(S)

EU/1/09/609/002

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 25 January 2010
Date of latest renewal: 22 August 2014

10. DATE OF REVISION OF THE TEXT

DD month YYYY

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

A. MANUFACTURER(S) OF THE BIOLOGICAL ACTIVE SUBSTANCE(S) AND MANUFACTURER(S) RESPONSIBLE FOR BATCH RELEASE

B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT
A. MANUFACTURER(S) OF THE BIOLOGICAL ACTIVE SUBSTANCE AND MANUFACTURER(S) RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturer of the biological active substance

N.V. Organon
Kloosterstraat 6
5349 AB Oss
The Netherlands

N.V. Organon
Veersemeer 4,
5347 JN Oss
The Netherlands

Name and address of the manufacturers responsible for batch release

N.V. Organon
Kloosterstraat 6 5349 AB Oss
P.O. Box 20 5340 BH Oss
The Netherlands

Organon (Ireland) Ltd.
Drynam Road, Swords, Co. Dublin
Ireland

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

Medicinal product subject to restricted medical prescription (See Annex I: Summary of Product Characteristics, Section 4.2).

C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

- Periodic Safety Update Reports

The marketing authorisation holder shall submit periodic safety update reports for this product in accordance with the requirements set out in the list of Union reference dates (EURD list) provided for under Article 107c(7) of Directive 2001/83/EC and published on the European medicines web-portal.

D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT

- Risk Management Plan (RMP)

The MAH shall perform the required pharmacovigilance activities and interventions detailed in the agreed RMP presented in Module 1.8.2 of the Marketing Authorisation and any agreed subsequent updates of the RMP.

An updated RMP should be submitted:
- At the request of the European Medicines Agency;
Whenever the risk management system is modified, especially as the result of new information being received that may lead to a significant change to the benefit/risk profile or as the result of an important (pharmacovigilance or risk minimisation) milestone being reached.

If the dates for submission of a PSUR and the update of a RMP coincide, they can be submitted at the same time.
ANNEX III

LABELLING AND PACKAGE LEAFLET
A. LABELLING
<table>
<thead>
<tr>
<th>PARTICULARS TO APPEAR ON THE OUTER PACKAGING</th>
</tr>
</thead>
<tbody>
<tr>
<td>OUTER CARTON</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1. NAME OF THE MEDICINAL PRODUCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elonva 100 micrograms solution for injection</td>
</tr>
<tr>
<td>corifollitropin alfa</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. STATEMENT OF ACTIVE SUBSTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each pre-filled syringe contains 100 micrograms of corifollitropin alfa in 0.5 mL solution for injection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. LIST OF EXCIPIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other ingredients: sodium citrate, sucrose, polysorbate 20, methionine, sodium hydroxide (for pH adjustment), hydrochloric acid (for pH adjustment), water for injections.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. PHARMACEUTICAL FORM AND CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solution for injection</strong></td>
</tr>
<tr>
<td>1 pre-filled syringe with an automatic safety (needle injury prevention) system and a sterile injection needle. 0.5 mL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. METHOD AND ROUTE(S) OF ADMINISTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>For single use only.</td>
</tr>
<tr>
<td>Read the package leaflet before use.</td>
</tr>
<tr>
<td>Subcutaneous use (SC)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keep out of the sight and reach of children.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. OTHER SPECIAL WARNING(S), IF NECESSARY</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>8. EXPIRY DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXP</td>
</tr>
</tbody>
</table>
9. SPECIAL STORAGE CONDITIONS

Storage by the pharmacist
Store in a refrigerator. Do not freeze

Storage by the patient
There are two options:
1. Store in a refrigerator. Do not freeze.
2. Store at or below 25°C for a period of not more than 1 month.

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

10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE

11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Merck Sharp & Dohme Limited
Hertford Road
Hoddesdon
Hertfordshire EN11 9BU
United Kingdom

12. MARKETING AUTHORISATION NUMBERS

EU/1/09/609/001

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

Medicinal product subject to medical prescription.

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

<Justification for not including Braille accepted>
### MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

**PRE-FILLED SYRINGE LABEL**

<table>
<thead>
<tr>
<th>1. NAME OF THE MEDICINAL PRODUCT AND ROUTE OF ADMINISTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elonva 100 micrograms injection</td>
</tr>
<tr>
<td>corifollitropin alfa</td>
</tr>
<tr>
<td>SC</td>
</tr>
</tbody>
</table>

| 2. METHOD OF ADMINISTRATION                                 |

<table>
<thead>
<tr>
<th>3. EXPIRY DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXP</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. BATCH NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lot</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 mL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. OTHER</th>
</tr>
</thead>
</table>
PARTICULARS TO APPEAR ON THE OUTER PACKAGING

OUTER CARTON

1. NAME OF THE MEDICINAL PRODUCT

Elonva 150 micrograms solution for injection
corifollitropin alfa

2. STATEMENT OF ACTIVE SUBSTANCE

Each pre-filled syringe contains 150 micrograms of corifollitropin alfa in 0.5 mL solution for injection.

3. LIST OF EXCIPIENTS

Other ingredients: sodium citrate, sucrose, polysorbate 20, methionine, sodium hydroxide (for pH adjustment), hydrochloric acid (for pH adjustment), water for injections.

4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection
1 pre-filled syringe with an automatic safety (needle injury prevention) system and a sterile injection needle. 0.5 mL.

5. METHOD AND ROUTE(S) OF ADMINISTRATION

For single use only.
Read the package leaflet before use.
Subcutaneous use (SC)

6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

8. EXPIRY DATE

EXP
9. SPECIAL STORAGE CONDITIONS

Storage by the pharmacist
Store in a refrigerator. Do not freeze.

Storage by the patient
There are two options:
1. Store in a refrigerator. Do not freeze.
2. Store at or below 25°C for a period of not more than 1 month.

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

10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE

11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Merck Sharp & Dohme Limited
Hertford Road
Hoddesdon
Hertfordshire EN11 9BU
United Kingdom

12. MARKETING AUTHORISATION NUMBERS

EU/1/09/609/002

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

Medicinal product subject to medical prescription.

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

<Justification for not including Braille accepted>
<table>
<thead>
<tr>
<th>MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRE-FILLED SYRINGE LABEL</strong></td>
</tr>
</tbody>
</table>

1. **NAME OF THE MEDICINAL PRODUCT AND ROUTE OF ADMINISTRATION**

Elonva 150 micrograms injection
corifollitropin alfa
SC

2. **METHOD OF ADMINISTRATION**

3. **EXPIRY DATE**

EXP

4. **BATCH NUMBER**

Lot

5. **CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT**

0.5 mL

6. **OTHER**
B. PACKAGE LEAFLET
Elonva contains the active ingredient corifollitropin alfa and belongs to the group of medicines called gonadotropic hormones. Gonadotropic hormones play an important role in human fertility and reproduction. One of these gonadotropic hormones is follicle-stimulating hormone (FSH), which is needed in women for the growth and development of follicles (small round sacs in your ovaries that contain the eggs).

Elonva is used to help achieve pregnancy in women having infertility treatment, such as in vitro fertilisation (IVF). IVF involves collecting the eggs from the ovary, fertilising them in the laboratory, and transferring the embryos into the uterus a few days later. Elonva causes the growth and development of several follicles at the same time by a controlled stimulation of the ovaries.

Do not use Elonva if you:
- are allergic (hypersensitive) to corifollitropin alfa or any of the other ingredients of this medicine (listed in section 6)
- have cancer of the ovary, breast, uterus, or brain (pituitary gland or hypothalamus)
- have recently had unexpected vaginal bleeding, other than menstrual, without a diagnosed cause
- have ovaries that do not work because of a condition called primary ovarian failure
- have ovarian cysts or enlarged ovaries
- have polycystic ovarian syndrome (PCOS)
- have had ovarian hyperstimulation syndrome (OHSS). OHSS is a serious medical problem that can happen when the ovaries are overly stimulated. See below for further explanation.
- have previously had a treatment cycle of controlled stimulation of the ovaries that resulted in the growth of more than 30 follicles with a size of 11 mm or larger
- have a basal antral follicle count (the number of small follicles present in your ovaries at the beginning of a menstrual cycle) higher than 20
- have malformations of the sexual organs which make a normal pregnancy impossible
- have fibroid tumours in the uterus which make a normal pregnancy impossible
Warnings and precautions

Talk to your doctor before using Elonva.

Ovarian hyperstimulation syndrome (OHSS)
Treatment with gonadotropic hormones like Elonva may cause ovarian hyperstimulation syndrome (OHSS). This is a serious medical condition where the ovaries are overly stimulated and the growing follicles become larger than normal. In rare cases, severe OHSS may be life-threatening. Therefore, close supervision by your doctor is very important. To check the effects of treatment, your doctor will do ultrasound scans of your ovaries. Your doctor may also check blood hormone levels. (See also section 4.)

OHSS causes fluid to build up suddenly in your stomach and chest areas and can cause blood clots to form. Call your doctor right away if you have:
- severe abdominal swelling and pain in the stomach area (abdomen)
- feeling sick (nausea)
- vomiting
- sudden weight gain due to fluid build up
- diarrhoea
- decreased urine output
- trouble breathing

You may use Elonva only once during the same treatment cycle, otherwise, the chance of having OHSS may increase.

Before starting to use this medicine, tell your doctor if you have ever had ovarian hyperstimulation syndrome (OHSS).

Ovarian torsion
Ovarian torsion is the twisting of an ovary. Twisting of the ovary could cause the blood flow to the ovary to be cut off.

Before starting to use this medicine, tell your doctor if you:
- have ever had ovarian hyperstimulation syndrome OHSS.
- are pregnant or think that you may be pregnant.
- have ever had stomach (abdominal) surgery.
- have ever had a twisting of an ovary.
- have past or current cysts in your ovary or ovaries.

Blood clot (Thrombosis)
Treatment with gonadotropic hormones like Elonva may (just as pregnancy) increase the risk of having a blood clot (thrombosis). Thrombosis is the formation of a blood clot in a blood vessel.

Blood clots can cause serious medical conditions, such as:
- blockage in your lungs (pulmonary embolus)
- stroke
- heart attack
- blood vessel problems (thrombophlebitis)
- a lack of blood flow (deep venous thrombosis) that may result in a loss of your arm or leg.

Please discuss this with your doctor, before starting treatment, especially if:
- you know you already have an increased chance of having a thrombosis
- you, or anyone in your immediate family, have ever had a thrombosis
- you are severely overweight.
Multiple births or birth defects
There is an increased chance of having twins or even more than two babies, even when only one embryo is transferred into the uterus. Multiple pregnancies carry an increased health risk for both the mother and her babies. Multiple pregnancies and specific characteristics of couples with fertility problems (e.g., a woman’s age, certain sperm problems, genetic background of both parents) may also be associated with an increased chance of birth defects.

Pregnancy complications
If treatment with Elonva results in pregnancy, there is a higher chance of pregnancy outside the uterus (an ectopic pregnancy). Therefore, your doctor should perform an early ultrasound examination to exclude the possibility of pregnancy outside the uterus.

Ovarian and other reproductive system tumours
There have been reports of ovarian and other reproductive system tumours in women who have had infertility treatment. It is not known if treatment with fertility medicines increases the risk of these tumours in infertile women.

Other medical conditions
In addition, before starting to use this medicine, tell your doctor if you:
- have kidney disease.
- have uncontrolled pituitary gland or hypothalamic problems.
- have an underactive thyroid gland (hypothyroidism).
- have adrenal glands that are not working properly (adrenocortical insufficiency).
- have high prolactin levels in the blood (hyperprolactinemia).
- have any other medical conditions (for example, diabetes, heart disease, or any other long-term disease).
- have been told by a doctor that pregnancy would be dangerous for you.

Other medicines and Elonva
Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines, including medicines obtained without a prescription.

Pregnancy and breast-feeding
You should not use Elonva if you are already pregnant, or think that you might be pregnant, or if you are breast-feeding.

Ask your doctor or pharmacist for advice before taking this medicine.

Driving and using machines
Elonva may cause dizziness. If you feel dizzy, you should not drive or use machines.

Elonva contains sodium
This medicinal product contains less than 1 mmol sodium (23 mg) per injection, i.e. essentially ‘sodium-free’.

3. How to use Elonva
Always use Elonva exactly as your doctor has told you. Check with your doctor or pharmacist if you are not sure.

Elonva is used in women having infertility treatment like in vitro fertilisation (IVF). During this treatment, Elonva is used in combination with a medicine (so called GnRH-antagonist) to prevent your ovary from releasing an egg too early. Treatment with the GnRH-antagonist usually starts 5 to 6 days after the injection of Elonva.
The use of Elonva in combination with a GnRH agonist (another medicine to prevent your ovary from releasing an egg too early) is not recommended.

**Dose**

In the treatment of women of reproductive age, the dose of Elonva is based on weight and age.

- A single 100-microgram dose is recommended in women who weigh less than or equal to 60 kilograms and who are 36 years of age or younger.

- A single 150-microgram dose is recommended in women:
  - who weigh more than 60 kilograms, regardless of age.
  - who weigh 50 kilograms or more and who are older than 36 years of age.

Women older than 36 years of age who weighed less than 50 kilograms were not studied.

<table>
<thead>
<tr>
<th>Age</th>
<th>Body Weight</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 50 kg</td>
<td>50 – 60 kg</td>
<td>More than 60 kg</td>
<td></td>
</tr>
<tr>
<td>36 years or younger</td>
<td>100 micrograms</td>
<td>100 micrograms</td>
<td>150 micrograms</td>
<td></td>
</tr>
<tr>
<td>Older than 36 years</td>
<td>Not studied.</td>
<td>150 micrograms</td>
<td>150 micrograms</td>
<td></td>
</tr>
</tbody>
</table>

During the first seven days after the injection with Elonva, you should not use (recombinant) Follicle Stimulating Hormone ((rec)FSH). Seven days after the injection of Elonva, your doctor may decide to continue your stimulation cycle with another gonadotropic hormone, like (rec)FSH. This may be continued for a few days until enough follicles of adequate size are present. This can be checked by ultrasound examination. Treatment with (rec)FSH is then stopped and the eggs are matured by giving hCG (human Chorionic Gonadotropin). The eggs are collected from the ovary 34-36 hours later.

**How Elonva is given**

Treatment with Elonva should be supervised by a physician experienced in the treatment of fertility problems. Elonva must be injected under the skin (subcutaneously) into a skin fold (that you pinch between your thumb and index finger), preferably just below the navel. The injection may be given by a healthcare professional (for example a nurse), your partner or yourself, if carefully instructed by your doctor. Always use Elonva exactly as your doctor has told you. You should check with your doctor or pharmacist if you are unsure. A step-by-step “instructions for use” is given at the end of this leaflet.

Do not inject Elonva into a muscle.

Elonva is supplied in pre-filled syringes that have an automatic safety system to help prevent needle stick injuries after use.

**If you use more Elonva or (rec)FSH than you should**

If you think you have used more Elonva or (rec)FSH than you should, contact your doctor immediately.

**If you forget to use Elonva**

If you forgot to inject Elonva on the day you should have, contact your doctor immediately. Do not inject Elonva without talking with your doctor.

If you have any further questions on the use of this medicine, ask your doctor.

**4. Possible side effects**

Like all medicines, this medicine can cause side effects, although not everybody gets them.
Serious side effects

A possible complication of treatment with gonadotropic hormones like Elonva is unwanted overstimulation of the ovaries. The chance of having this complication can be reduced by carefully monitoring the number of maturing follicles. Your doctor will do ultrasound scans of your ovaries to carefully monitor the number of maturing follicles. Your doctor may also check blood hormone levels. The first symptoms of ovarian overstimulation may be noticed as pain in the stomach (abdomen), feeling sick or diarrhoea. Ovarian overstimulation may develop into a medical condition called ovarian hyperstimulation syndrome (OHSS), which can be a serious medical problem. In more severe cases this may lead to enlargement of the ovaries, collection of fluid in the abdomen and/or chest (which may cause sudden weight gain due to fluid buildup) or clots in the blood vessels. Contact your doctor without delay if you have pain in the stomach (abdomen) or any of the other symptoms of ovarian hyperstimulation, even if they occur some days after the injection has been given.

The chance of having a side effect is described by the following categories:

Common (may affect up to 1 in 10 women)
- Ovarian hyperstimulation syndrome (OHSS)
- Pelvic pain
- Feeling sick (nausea)
- Headache
- Pelvic discomfort
- Breast tenderness
- Tiredness (fatigue)

Uncommon (may affect up to 1 in 100 women)
- Twisting of an ovary (ovarian torsion)
- Liver enzyme increases
- Miscarriage
- Pain after oocyte retrieval
- Procedural pain
- Releasing an egg too early (premature ovulation)
- Abdominal distension
- Vomiting
- Diarrhoea
- Constipation
- Back pain
- Breast pain
- Bruising or pain at the injection site
- Irritability
- Mood swings
- Dizziness
- Hot flush

Pregnancy outside the uterus (an ectopic pregnancy) and multiple pregnancies have also been reported. These side effects are not considered to be related to the use of Elonva, but to Assisted Reproductive Technology (ART) or subsequent pregnancy.

In rare instances, blood clots (thromboses) that formed inside a blood vessel, broke off, and traveled inside the bloodstream to block another blood vessel (thromboembolism) have been associated with Elonva therapy as with other gonadotropins.

Reporting of side effects
If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via the national reporting system.
5. **How to store Elonva**

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the label and outer carton after “EXP” (expiry date). The expiry date refers to the last day of that month.

**Storage by the pharmacist**

Store in a refrigerator (2°C-8°C). Do not freeze.

**Storage by the patient**

There are two options:
1. Store in a refrigerator (2°C-8°C). Do not freeze.
2. Store at or below 25°C for a period of not more than one month. Make a note of when you start storing the product out of the refrigerator, and use it within one month of that date.

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

**Do not use Elonva**

- if it has been stored out of the refrigerator for more than one month.
- if it has been stored out of the refrigerator at a temperature of more than 25°C.
- if you notice that the solution is not clear.
- if you notice that the syringe or the needle is damaged.

Do not throw away an empty or unused syringe via household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help to protect the environment.

6. **Contents of the pack and other information**

**What Elonva contains**

- The active substance is corifollitropin alfa. Each pre-filled syringe contains 100 micrograms in 0.5 millilitre (mL) solution for injection.
- The other ingredients are: sodium citrate, sucrose, polysorbate 20, methionine and water for injections. The pH may have been adjusted with sodium hydroxide and/or hydrochloric acid.

**What Elonva looks like and contents of the pack**

Elonva is a clear and colourless aqueous solution for injection (injection) in a pre-filled syringe with an automatic safety system, which prevents needle stick injuries after use. The syringe is packed together with a sterile injection needle. Each syringe contains 0.5 mL solution.

One pre-filled syringe is available in a single pack.

Elonva is available in two strengths: 100 micrograms and 150 micrograms solution for injection.

**Marketing Authorisation Holder**

Merck Sharp & Dohme Limited, Hertford Road, Hoddesdon, Hertfordshire EN11 9BU, United Kingdom.

**Manufacturers**

- N.V. Organon, Kloosterstraat 6, 5349 AB Oss, The Netherlands.
- Organon (Ireland) Ltd., Drynam Road, Swords, Co. Dublin, Ireland.
For any information about this medicine, please contact the local representative of the Marketing Authorisation Holder:

**Belgïë/Belgique/Belgien**

MSD Belgium BVBA/SPRL
Tel/Tél: 0800 38 693 (+32(0)27766211)
dpoc_belux@merck.com

**Lietuva**

UAB Merck Sharp & Dohme
Tel: + 370 5 2780247
msd_lietuva@merck.com

**България**

Мерк Шарп и Доум България ЕООД
Тел.: + 359 2 819 37 37
info-ms dbg@merck.com

**Luxembourg/Luxemburg**

MSD Belgium BVBA/SPRL
Tel/Tél: +32(0)27766211
dpoc_belux@merck.com

**Česká republika**

Merck Sharp & Dohme s.r.o.
Tel.: +420 233 010 111
dpoc_czechslovak@merck.com

**Magyarország**

MSD Pharma Hungary Kft.
Tel.: + 36 1 888-5300
hungary_msd@merck.com

**Danmark**

MSD Danmark ApS
Tlf: +45 4482 4000
dkmail@merck.com

**Malta**

Merck Sharp & Dohme Cyprus Limited
Tel: 8007 4433 (+356 99917558)
malta_info@merck.com

**Deutschland**

MSD SHARP & DOHME GMBH
Tel: 0800 673 673 673 (+49 (0) 89 4561 2612)
e-mail@msd.de

**Nederland**

Merck Sharp & Dohme BV
Tel: 0800 99 99 000 (+ 31 23 5153153)
medicalinfo.nl@merck.com

**Eesti**

Merck Sharp & Dohme OÜ
Tel: + 372 6144 200
msdeesti@merck.com

**Norge**

MSD (Norge) AS
Tlf: + 47 32 20 73 00
msdnorge@msd.no

**Ελλάδα**

MSD Α.Φ.Β.Ε.
Τηλ.: + 30 210 98 97 300
dpoc_greece@merck.com

**Österreich**

Merck Sharp & Dohme Ges.m.b.H.
Tel: +43 (0) 1 26 044
msdnorge@msd.no

**España**

Merck Sharp & Dohme de España, S.A.
Tel: +34 91 321 06 00
msd_info@merck.com

**Polska**

MSD Polska Sp.z o.o.
Tel.: +48 22 549 51 00
msdpolska@merck.com

**France**

MSD France
Tél. + 33 (0) 1 80 46 40 40

**Portugal**

Merck Sharp & Dohme, Lda
Tel: + 351 214465700
clic@merck.com

**Hrvatska**

Merck Sharp & Dohme d.o.o.
Tel: + 385 1 6611 333
croatia_info@merck.com

**România**

Merck Sharp & Dohme Romania S.R.L.
Tel: + 40 21 529 29 00
msdromania@merck.com
Instructions for use

Components of the Elonva syringe with needle
Preparing the injection

1. - Wash your hands with soap and water and dry them before you use Elonva.
   - Swab the injection site (the area just below your belly button) with a disinfectant (for example, alcohol) to remove any surface bacteria.
   - Clean about 5 cm around the point where the needle will go in and let the disinfectant dry for at least one minute before proceeding.

2. - While waiting for the disinfectant to dry, break the label perforation and pull off the needle-cap
   - Leave the needle shield on the needle
   - Place the needle shield (containing the needle) on a clean dry surface, while preparing the syringe.

3. - Hold the syringe with the grey cap pointing upwards
   - Tap the syringe gently with your finger to help air bubbles rise to the top.

4. - Keep the syringe pointing upwards
   - Unscrew the syringe cap counter-clockwise.

5. - Keep the syringe pointing upwards
   - Screw the needle shield (containing the needle) clockwise onto the syringe.
6. Keep the syringe pointing upwards
   - Remove the needle shield straight up and discard it
   - **BE CAREFUL** with the needle.

**Injecting**

7. Now take the syringe between index and middle finger in the upward position
   - Place your thumb on the plunger
   - Carefully push the plunger upwards until a tiny droplet appears at the tip of the needle.

8. Pinch a fold of the skin between thumb and index finger
   - Insert the entire needle at an angle of 90 degrees into the fold of the skin
   - CAREFULLY press the plunger until it cannot go further and hold the plunger down
   - COUNT TO FIVE to ensure that all of the solution is injected.

9. Release your thumb from the plunger
   - The needle will withdraw automatically into the syringe where it will be locked permanently.
Elonva 150 micrograms solution for injection
corifollitropin alfa

What is in this leaflet
1. What Elonva is and what it is used for
2. What you need to know before you use Elonva
3. How to use Elonva
4. Possible side effects
5. How to store Elonva
6. Contents of the pack and other information

1. What Elonva is and what it is used for

Elonva contains the active ingredient corifollitropin alfa and belongs to the group of medicines called gonadotropic hormones. Gonadotropic hormones play an important role in human fertility and reproduction. One of these gonadotropic hormones is follicle-stimulating hormone (FSH), which is needed in women for the growth and development of follicles (small round sacs in your ovaries that contain the eggs).

Elonva is used to help achieve pregnancy in women having infertility treatment, such as in vitro fertilisation (IVF). IVF involves collecting the eggs from the ovary, fertilising them in the laboratory, and transferring the embryos into the uterus a few days later. Elonva causes the growth and development of several follicles at the same time by a controlled stimulation of the ovaries.

2. What you need to know before you use Elonva

Do not use Elonva if you:
- are allergic (hypersensitive) to corifollitropin alfa or any of the other ingredients of this medicine (listed in section 6)
- have cancer of the ovary, breast, uterus, or brain (pituitary gland or hypothalamus)
- have recently had unexpected vaginal bleeding, other than menstrual, without a diagnosed cause
- have ovaries that do not work because of a condition called primary ovarian failure
- have ovarian cysts or enlarged ovaries
- have polycystic ovarian syndrome (PCOS)
- have had ovarian hyperstimulation syndrome (OHSS). OHSS is a serious medical problem that can happen when the ovaries are overly stimulated. See below for further explanation.
- have previously had a treatment cycle of controlled stimulation of the ovaries that resulted in the growth of more than 30 follicles with a size of 11 mm or larger
- have a basal antral follicle count (the number of small follicles present in your ovaries at the beginning of a menstrual cycle) higher than 20
- have malformations of the sexual organs which make a normal pregnancy impossible
- have fibroid tumours in the uterus which make a normal pregnancy impossible
Warnings and precautions

Talk to your doctor before using Elonva.

Ovarian hyperstimulation syndrome (OHSS)
Treatment with gonadotropic hormones like Elonva may cause ovarian hyperstimulation syndrome (OHSS). This is a serious medical condition where the ovaries are overly stimulated and the growing follicles become larger than normal. In rare cases, severe OHSS may be life-threatening. Therefore, close supervision by your doctor is very important. To check the effects of treatment, your doctor will do ultrasound scans of your ovaries. Your doctor may also check blood hormone levels. (See also section 4.)

OHSS causes fluid to build up suddenly in your stomach and chest areas and can cause blood clots to form. Call your doctor right away if you have:
- severe abdominal swelling and pain in the stomach area (abdomen)
- feeling sick (nausea)
- vomiting
- sudden weight gain due to fluid build up
- diarrhoea
- decreased urine output
- trouble breathing

You may use Elonva only once during the same treatment cycle, otherwise, the chance of having OHSS may increase.

Before starting to use this medicine, tell your doctor if you have ever had ovarian hyperstimulation syndrome (OHSS).

Ovarian torsion
Ovarian torsion is the twisting of an ovary. Twisting of the ovary could cause the blood flow to the ovary to be cut off.

Before starting to use this medicine, tell your doctor if you:
- have ever had ovarian hyperstimulation syndrome OHSS.
- are pregnant or think that you may be pregnant.
- have ever had stomach (abdominal) surgery.
- have ever had a twisting of an ovary.
- have past or current cysts in your ovary or ovaries.

Blood clot (Thrombosis)
Treatment with gonadotropic hormones like Elonva may (just as pregnancy) increase the risk of having a blood clot (thrombosis). Thrombosis is the formation of a blood clot in a blood vessel.

Blood clots can cause serious medical conditions, such as:
- blockage in your lungs (pulmonary embolus)
- stroke
- heart attack
- blood vessel problems (thrombophlebitis)
- a lack of blood flow (deep venous thrombosis) that may result in a loss of your arm or leg.

Please discuss this with your doctor, before starting treatment, especially if:
- you know you already have an increased chance of having a thrombosis
- you, or anyone in your immediate family, have ever had a thrombosis
- you are severely overweight.
Multiple births or birth defects
There is an increased chance of having twins or even more than two babies, even when only one embryo is transferred into the uterus. Multiple pregnancies carry an increased health risk for both the mother and her babies. Multiple pregnancies and specific characteristics of couples with fertility problems (e.g., a woman’s age, certain sperm problems, genetic background of both parents) may also be associated with an increased chance of birth defects.

Pregnancy complications
If treatment with Elonva results in pregnancy, there is a higher chance of pregnancy outside the uterus (an ectopic pregnancy). Therefore, your doctor should perform an early ultrasound examination to exclude the possibility of pregnancy outside the uterus.

Ovarian and other reproductive system tumours
There have been reports of ovarian and other reproductive system tumours in women who have had infertility treatment. It is not known if treatment with fertility medicines increases the risk of these tumours in infertile women.

Other medical conditions
In addition, before starting to use this medicine, tell your doctor if you:
- have kidney disease.
- have uncontrolled pituitary gland or hypothalamic problems.
- have an underactive thyroid gland (hypothyroidism).
- have adrenal glands that are not working properly (adrenocortical insufficiency).
- have high prolactin levels in the blood (hyperprolactinemia).
- have any other medical conditions (for example, diabetes, heart disease, or any other long-term disease).
- have been told by a doctor that pregnancy would be dangerous for you.

Other medicines and Elonva
Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines, including medicines obtained without a prescription.

Pregnancy and breast-feeding
You should not use Elonva if you are already pregnant, or think that you might be pregnant, or if you are breast-feeding.

Ask your doctor or pharmacist for advice before taking this medicine.

Driving and using machines
Elonva may cause dizziness. If you feel dizzy, you should not drive or use machines.

Elonva contains sodium
This medicinal product contains less than 1 mmol sodium (23 mg) per injection, i.e. essentially ‘sodium-free’.

3. How to use Elonva
Always use Elonva exactly as your doctor has told you. Check with your doctor or pharmacist if you are not sure.

Elonva is used in women having infertility treatment like in vitro fertilisation (IVF). During this treatment, Elonva is used in combination with a medicine (so called GnRH-antagonist) to prevent your ovary from releasing an egg too early. Treatment with the GnRH-antagonist usually starts 5 to 6 days after the injection of Elonva.
The use of Elonva in combination with a GnRH agonist (another medicine to prevent your ovary from releasing an egg too early) is not recommended.

**Dose**
In the treatment of women of reproductive age, the dose of Elonva is based on weight and age.

- A single 100-microgram dose is recommended in women who weigh less than or equal to 60 kilograms and who are 36 years of age or younger.

- A single 150-microgram dose is recommended in women:
  - who weigh more than 60 kilograms, regardless of age.
  - who weigh 50 kilograms or more and who are older than 36 years of age.

Women older than 36 years of age who weighed less than 50 kilograms were not studied.

<table>
<thead>
<tr>
<th>Body Weight</th>
<th>Less than 50 kg</th>
<th>50 – 60 kg</th>
<th>More than 60 kg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36 years or younger</td>
<td>100 micrograms</td>
<td>100 micrograms</td>
<td>150 micrograms</td>
</tr>
<tr>
<td>Older than 36 years</td>
<td>Not studied.</td>
<td>150 micrograms</td>
<td>150 micrograms</td>
</tr>
</tbody>
</table>

During the first seven days after the injection with Elonva, you should not use (recombinant) Follicle Stimulating Hormone ((rec)FSH). Seven days after the injection of Elonva, your doctor may decide to continue your stimulation cycle with another gonadotropic hormone, like (rec)FSH. This may be continued for a few days until enough follicles of adequate size are present. This can be checked by ultrasound examination. Treatment with (rec)FSH is then stopped and the eggs are matured by giving hCG (human Chorionic Gonadotropin). The eggs are collected from the ovary 34-36 hours later.

**How Elonva is given**
Treatment with Elonva should be supervised by a physician experienced in the treatment of fertility problems. Elonva must be injected under the skin (subcutaneously) into a skin fold (that you pinch between your thumb and index finger), preferably just below the navel. The injection may be given by a healthcare professional (for example a nurse), your partner or yourself, if carefully instructed by your doctor. Always use Elonva exactly as your doctor has told you. You should check with your doctor or pharmacist if you are unsure. A step-by-step “instructions for use” is given at the end of this leaflet.

Do not inject Elonva into a muscle.

Elonva is supplied in pre-filled syringes that have an automatic safety system to help prevent needle stick injuries after use.

**If you use more Elonva or (rec)FSH than you should**
If you think you have used more Elonva or (rec)FSH than you should, contact your doctor immediately.

**If you forget to use Elonva**
If you forgot to inject Elonva on the day you should have, contact your doctor immediately. Do not inject Elonva without talking with your doctor.

If you have any further questions on the use of this medicine, ask your doctor.

**4. Possible side effects**
Like all medicines, this medicine can cause side effects, although not everybody gets them.
Serious side effects

A possible complication of treatment with gonadotropic hormones like Elonva is unwanted overstimulation of the ovaries. The chance of having this complication can be reduced by carefully monitoring the number of maturing follicles. Your doctor will do ultrasound scans of your ovaries to carefully monitor the number of maturing follicles. Your doctor may also check blood hormone levels. The first symptoms of ovarian overstimulation may be noticed as pain in the stomach (abdomen), feeling sick or diarrhoea. Ovarian overstimulation may develop into a medical condition called ovarian hyperstimulation syndrome (OHSS), which can be a serious medical problem. In more severe cases this may lead to enlargement of the ovaries, collection of fluid in the abdomen and/or chest (which may cause sudden weight gain due to fluid buildup) or clots in the blood vessels.

Contact your doctor without delay if you have pain in the stomach (abdomen) or any of the other symptoms of ovarian hyperstimulation, even if they occur some days after the injection has been given.

The chance of having a side effect is described by the following categories:

**Common (may affect up to 1 in 10 women)**
- Ovarian hyperstimulation syndrome (OHSS)
- Pelvic pain
- Feeling sick (nausea)
- Headache
- Pelvic discomfort
- Breast tenderness
- Tiredness (fatigue)

**Uncommon (may affect up to 1 in 100 women)**
- Twisting of an ovary (ovarian torsion)
- Liver enzyme increases
- Miscarriage
- Pain after oocyte retrieval
- Procedural pain
- Releasing an egg too early (premature ovulation)
- Abdominal distension
- Vomiting
- Diarrhoea
- Constipation
- Back pain
- Breast pain
- Bruising or pain at the injection site
- Irritability
- Mood swings
- Dizziness
- Hot flush

Pregnancy outside the uterus (an ectopic pregnancy) and multiple pregnancies have also been reported. These side effects are not considered to be related to the use of Elonva, but to Assisted Reproductive Technology (ART) or subsequent pregnancy.

In rare instances, blood clots (thromboses) that formed inside a blood vessel, broke off, and traveled inside the bloodstream to block another blood vessel (thromboembolism) have been associated with Elonva therapy as with other gonadotropins.

**Reporting of side effects**

If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via the national reporting system.
By reporting side effects, you can help provide more information on the safety of this medicine.

5. How to store Elonva

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the label and outer carton after “EXP” (expiry date). The expiry date refers to the last day of that month.

Storage by the pharmacist
Store in a refrigerator (2°C-8°C). Do not freeze.

Storage by the patient
There are two options:
1. Store in a refrigerator (2°C-8°C). Do not freeze.
2. Store at or below 25°C for a period of not more than one month. Make a note of when you start storing the product out of the refrigerator, and use it within one month of that date.

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

Do not use Elonva
- if it has been stored out of the refrigerator for more than one month.
- if it has been stored out of the refrigerator at a temperature of more than 25°C.
- if you notice that the solution is not clear.
- if you notice that the syringe or the needle is damaged.

Do not throw away an empty or unused syringe via household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help to protect the environment.

6. Contents of the pack and other information

What Elonva contains
- The active substance is corifollitropin alfa. Each pre-filled syringe contains 150 micrograms in 0.5 millilitre (mL) solution for injection.
- The other ingredients are: sodium citrate, sucrose, polysorbate 20, methionine and water for injections. The pH may have been adjusted with sodium hydroxide and/or hydrochloric acid.

What Elonva looks like and contents of the pack
Elonva is a clear and colourless aqueous solution for injection (injection) in a pre-filled syringe with an automatic safety system, which prevents needle stick injuries after use. The syringe is packed together with a sterile injection needle. Each syringe contains 0.5 mL solution.
One pre-filled syringe is available in a single pack.
Elonva is available in two strengths: 100 micrograms and 150 micrograms solution for injection.

Marketing Authorisation Holder
Merck Sharp & Dohme Limited, Hertford Road, Hoddesdon, Hertfordshire EN11 9BU, United Kingdom.

Manufacturers
N.V. Organon, Kloosterstraat 6, 5349 AB Oss, The Netherlands.
Organon (Ireland) Ltd., Drynam Road, Swords, Co. Dublin, Ireland.
For any information about this medicine, please contact the local representative of the Marketing Authorisation Holder:

**België/Belgique/Belgien**
MSD Belgium BVBA/SPRL
Tel/Tél: 0800 38 693 (+32(0)27766211)
dpoc_belux@merck.com

**България**
Мерк Шарп и Доум България ЕООД
Тел.: + 359 2 819 37 37
info-msdbg@merck.com

**Česká republika**
Merck Sharp & Dohme s.r.o.
Tel.: +420 233 010 111
dpoc_czechslovak@merck.com

**Danmark**
MSD Danmark ApS
Tlf: +45 4482 4000
dkmail@merck.com

**Deutschland**
MSD SHARP & DOHME GMBH
Tel: 0800 673 673 673 (+49 (0) 89 4561 2612)
e-mail@msd.de

**Ελλάδα**
MSD A.Φ.Β.Ε.
Τηλ.: + 30 210 98 97 300
dpoc_greece@merck.com

**España**
Merck Sharp & Dohme de España, S.A.
Tel: +34 91 321 06 00
msd_info@merck.com

**France**
MSD France
Tél. + 33 (0) 1 80 46 40 40

dpoc_belux@merck.com

**Hrvatska**
Merck Sharp & Dohme d.o.o.
Tel: + 385 1 6611 333
croatia_info@merck.com

**Ierland**
MSD Belgium BVBA/SPRL
Tel/Tél: +32(0)27766211
dpoc_belux@merck.com

**İspanya**
Merck Sharp & Dohme de España, S.A.
Tel: +34 91 321 06 00
msd_info@merck.com

**Italia**
MSD Italia S.r.l.
Tel: +39 (0) 2 818 68 00
dpoc_italia@merck.com

**Lietuva**
UAB Merck Sharp & Dohme
Tel: + 370 5 2780247
msd_lietuva@merck.com

**Luxembourg/Luxemburg**
MSD Belgium BVBA/SPRL
Tel/Tél: +32(0)27766211
dpoc_belux@merck.com

**Magyarország**
MSD Pharma Hungary Kft.
Tel.: + 36 1 888-5300
hungary_msd@merck.com

**Malta**
Merck Sharp & Dohme Cyprus Limited
Tel: 8007 4433 (+356 99917558)
malta_info@merck.com

**Nederland**
Merck Sharp & Dohme BV
Tel: 0800 99 99 000 (+ 31 23 5153153)
medicalinfo.nl@merck.com

**Norge**
MSD (Norge) AS
Tlf: + 47 32 20 73 00
msdnorge@msd.no

**Österreich**
Merck Sharp & Dohme Ges.m.b.H.
Tel: +43 (0) 1 26 044
msdnorge@msd.no

**Polska**
MSD Polska Sp.z o.o.
Tel.: +48 22 549 51 00
msdpolska@merck.com

**Portugal**
Merck Sharp & Dohme, Lda
Tel: + 351 214465700
clic@merck.com

**România**
Merck Sharp & Dohme Romania S.R.L.
Tel: + 40 21 529 29 00
msdromania@merck.com
This leaflet was last revised in Month YYYY.

Other sources of information
Detailed information on this medicine is available on the European Medicines Agency web site: http://www.ema.europa.eu.

Instructions for use

Components of the Elonva syringe with needle
Preparing the injection

1. - Wash your hands with soap and water and dry them before you use Elonva.
   - Swab the injection site (the area just below your belly button) with a disinfectant (for example, alcohol) to remove any surface bacteria.
   - Clean about 5 cm around the point where the needle will go in and let the disinfectant dry for at least one minute before proceeding.

2. - While waiting for the disinfectant to dry, break the label perforation and pull off the needle-cap
   - Leave the needle shield on the needle
   - Place the needle shield (containing the needle) on a clean dry surface, while preparing the syringe.

3. - Hold the syringe with the grey cap pointing upwards
   - Tap the syringe gently with your finger to help air bubbles rise to the top.

4. - Keep the syringe pointing upwards
   - Unscrew the syringe cap counter-clockwise.

5. - Keep the syringe pointing upwards
   - Screw the needle shield (containing the needle) clockwise onto the syringe.
6. Keep the syringe pointing upwards
   - Remove the needle shield straight up and discard it
   - **BE CAREFUL** with the needle.

**Injecting**

7. Now take the syringe between index and middle finger in the upward position
   - Place your thumb on the plunger
   - Carefully push the plunger upwards until a tiny droplet appears at the tip of the needle.

8. Pinch a fold of the skin between thumb and index finger
   - Insert the entire needle at an angle of 90 degrees into the fold of the skin
   - CAREFULLY press the plunger until it cannot go further and hold the plunger down
   - COUNT TO FIVE to ensure that all of the solution is injected.

9. Release your thumb from the plunger
   - The needle will withdraw automatically into the syringe where it will be locked permanently.