# ANNEX I SUMMARY OF PRODUCT CHARACTERISTICS

#### 1. NAME OF THE MEDICINAL PRODUCT

Bemfola 75 IU/0.125 mL solution for injection in pre-filled pen Bemfola 150 IU/0.25 mL solution for injection in pre-filled pen Bemfola 225 IU/0.375 mL solution for injection in pre-filled pen Bemfola 300 IU/0.50 mL solution for injection in pre-filled pen Bemfola 450 IU/0.75 mL solution for injection in pre-filled pen

#### 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each mL of the solution contains 600 IU (equivalent to 44 micrograms) of follitropin alfa\*.

Bemfola 75 IU/0.125 mL solution for injection in pre-filled pen: Each pre-filled pen delivers 75 IU (equivalent to 5.5 micrograms) in 0.125 mL.

Bemfola 150 IU/0.25 mL solution for injection in pre-filled pen: Each pre-filled pen delivers 150 IU (equivalent to 11 micrograms) in 0.25 mL.

Bemfola 225 IU/0.375 mL solution for injection in pre-filled pen: Each pre-filled pen delivers 225 IU (equivalent to 16.5 micrograms) in 0.375 mL.

Bemfola 300 IU/0.50 mL solution for injection in pre-filled pen: Each pre-filled pen delivers 300 IU (equivalent to 22 micrograms) in 0.5 mL.

Bemfola 450 IU/0.75 mL solution for injection in pre-filled pen: Each pre-filled pen delivers 450 IU (equivalent to 33 micrograms) in 0.75 mL.

For the full list of excipients, see section 6.1.

#### 3. PHARMACEUTICAL FORM

Solution for injection (injection).

Clear colourless solution.

The pH of the solution is 6.7 to 7.3.

#### 4. CLINICAL PARTICULARS

#### 4.1 Therapeutic indications

#### In adult women

- Anovulation (including polycystic ovarian syndrome) in women who have been unresponsive to treatment with clomiphene citrate.
- Stimulation of multifollicular development in women undergoing superovulation for assisted reproductive technologies (ART) such as *in vitro* fertilisation (IVF), gamete intra-fallopian transfer and zygote intra-fallopian transfer.
- Follitropin alfa in association with a luteinising hormone (LH) preparation is indicated for the stimulation of follicular development in women with severe LH and FSH deficiency.

<sup>\*</sup> recombinant human follicle stimulating hormone (r-hFSH) produced in Chinese Hamster Ovary (CHO) cells by recombinant DNA technology.

#### In adult men

• Follitropin alfa is indicated for the stimulation of spermatogenesis in men who have congenital or acquired hypogonadotrophic hypogonadism with concomitant human chorionic gonadotropin (hCG) therapy.

#### 4.2 Posology and method of administration

Treatment with follitropin alfa should be initiated under the supervision of a physician experienced in the treatment of fertility disorders.

Patients must be provided with the correct number of pens for their treatment course and educated to use the proper injection techniques.

#### **Posology**

The dose recommendations given for follitropin alfa are those in use for urinary FSH. Clinical assessment of follitropin alfa indicates that its daily doses, regimens of administration and treatment monitoring procedures should not be different from those currently used for urinary FSH-containing medicinal products. It is advised to adhere to the recommended starting doses indicated below.

Comparative clinical studies have shown that on average patients require a lower cumulative dose and shorter treatment duration with follitropin alfa compared with urinary FSH. Therefore, it is considered appropriate to give a lower total dose of follitropin alfa than generally used for urinary FSH, not only in order to optimise follicular development but also to minimise the risk of unwanted ovarian hyperstimulation (see section 5.1).

#### Women with anovulation (including polycystic ovarian syndrome)

Follitropin alfa may be given as a course of daily injections. In menstruating women treatment should commence within the first 7 days of the menstrual cycle.

A commonly used regimen commences at 75 to 150 IU FSH daily and is increased preferably by 37.5 or 75 IU at 7 or preferably 14-day intervals if necessary, to obtain an adequate, but not excessive, response. Treatment should be tailored to the individual patient's response as assessed by measuring follicle size by ultrasound and/or estrogen secretion. The maximal daily dose is usually not higher than 225 IU FSH. If a patient fails to respond adequately after 4 weeks of treatment, that cycle should be abandoned and the patient should undergo further evaluation after which she may recommence treatment at a higher starting dose than in the abandoned cycle.

When an optimal response is obtained, a single injection of 250 micrograms recombinant human choriogonadotropin alfa (r-hCG) or 5 000 IU up to 10 000 IU hCG should be administered 24 to 48 hours after the last follitropin alfa injection. The patient is recommended to have coitus on the day of, and the day following hCG administration. Alternatively, intrauterine insemination may be performed.

If an excessive response is obtained, treatment should be stopped and hCG withheld (see section 4.4). Treatment should recommence in the next cycle at a dose lower than that of the previous cycle.

### <u>Women undergoing ovarian stimulation for multiple follicular development prior to in vitro</u> <u>fertilisation or other assisted reproductive technologies</u>

A commonly used regimen for superovulation involves the administration of 150 to 225 IU of follitropin alfa daily commencing on days 2 or 3 of the cycle. Treatment is continued until adequate follicular development has been achieved (as assessed by monitoring of serum estrogen concentrations and/or ultrasound examination), with the dose adjusted according to the patient's response, to usually not higher than 450 IU daily. In general adequate follicular development is achieved on average by the tenth day of treatment (range 5 to 20 days).

A single injection of 250 micrograms r-hCG or 5 000 IU up to 10 000 IU hCG is administered 24 to 48 hours after the last follitropin alfa injection to induce final follicular maturation.

Down-regulation with a gonadotropin-releasing hormone (GnRH) agonist or antagonist is now commonly used in order to suppress the endogenous LH surge and to control tonic levels of LH. In a commonly used protocol, follitropin alfa is started approximately 2 weeks after the start of agonist treatment, both being continued until adequate follicular development is achieved. For example, following two weeks of treatment with an agonist, 150 to 225 IU follitropin alfa are administered for the first 7 days. The dose is then adjusted according to the ovarian response.

Overall experience with IVF indicates that in general the treatment success rate remains stable during the first four attempts and gradually declines thereafter.

#### Women with severe LH and FSH deficiency

In LH and FSH deficient women, the objective of follitropin alfa therapy in association with a luteinising hormone (LH) preparation is to promote follicular development followed by final maturation after the administration of human chorionic gonadotropin (hCG). Follitropin alfa should be given as a course of daily injections simultaneously with lutropin alfa. If the patient is amenorrhoeic and has low endogenous estrogen secretion, treatment can commence at any time.

A recommended regimen commences at 75 IU of lutropin alfa daily with 75 to 150 IU FSH. Treatment should be tailored to the individual patient's response as assessed by measuring follicle size by ultrasound and estrogen response.

If an FSH dose increase is deemed appropriate, dose adaptation should preferably be after 7 to 14-day intervals and preferably by 37.5 to 75 IU increments. It may be acceptable to extend the duration of stimulation in any one cycle to up to 5 weeks.

When an optimal response is obtained, a single injection of 250 micrograms r-hCG or 5 000 IU up to 10 000 IU hCG should be administered 24 to 48 hours after the last follitropin alfa and lutropin alfa injections. The patient is recommended to have coitus on the day of, and on the day following hCG administration. Alternatively, intrauterine insemination or another medically assisted reproduction procedure may be performed based on the physician's judgment of the clinical case.

Luteal phase support may be considered since lack of substances with luteotrophic activity (LH/hCG) after ovulation may lead to premature failure of the corpus luteum.

If an excessive response is obtained, treatment should be stopped and hCG withheld. Treatment should recommence in the next cycle at a dose of FSH lower than that of the previous cycle (see section 4.4).

#### *Men with hypogonadotrophic hypogonadism*

Follitropin alfa should be given at a dose of 150 IU three times a week, concomitantly with hCG, for a minimum of 4 months. If after this period, the patient has not responded, the combination treatment may be continued; current clinical experience indicates that treatment for at least 18 months may be necessary to achieve spermatogenesis.

#### Special populations

#### Elderly

There is no relevant use of follitropin alfa in the elderly population. Safety and efficacy of follitropin alfa in elderly patients have not been established.

#### Renal or hepatic impairment

Safety, efficacy and pharmacokinetics of follitropin alfa in patients with renal or hepatic impairment have not been established.

#### Paediatric population

There is no relevant use of follitropin alfa in the paediatric population.

#### Method of administration

Bemfola is intended for subcutaneous use. The injection should be given at the same time each day.

The first injection of Bemfola should be performed under direct medical supervision. Self-administration of Bemfola should only be performed by patients who are well motivated, adequately trained and have access to expert advice.

The injection site should be alternated daily.

As the Bemfola pre-filled pen with the single-dose cartridge is intended for only one injection, clear instructions should be provided to the patients to avoid misuse of the single dose presentation.

For instructions on the administration with the pre-filled pen, see section 6.6 and the package leaflet.

#### 4.3 Contraindications

- hypersensitivity to the active substance or to any of the excipients listed in section 6.1;
- tumours of the hypothalamus or pituitary gland;
- ovarian enlargement or ovarian cyst unrelated to polycystic ovarian disease and of unknown origin;
- gynaecological haemorrhages of unknown origin;
- ovarian, uterine or mammary carcinoma.

Follitropin alfa must not be used when an effective response cannot be obtained, such as in cases of:

- primary ovarian failure;
- malformations of sexual organs incompatible with pregnancy;
- fibroid tumours of the uterus incompatible with pregnancy;
- primary testicular insufficiency.

#### 4.4 Special warnings and precautions for use

#### Traceability

In order to improve the traceability of biological medicinal products, the name and the batch number of the administered product should be clearly recorded.

#### General recommendations

Follitropin alfa is a potent gonadotrophic substance capable of causing mild to severe adverse reactions and should only be used by physicians who are thoroughly familiar with infertility problems and their management.

Gonadotropin therapy requires a certain time commitment by physicians and supportive health care professionals, as well as the availability of appropriate monitoring facilities. In women, safe and effective use of follitropin alfa calls for monitoring of the ovarian response with ultrasound, alone or preferably in combination with measurement of serum estradiol levels, on a regular basis. There may be a degree of inter-patient variability in response to FSH administration, with a poor response to FSH in some patients and exaggerated response in others. The lowest effective dose in relation to the treatment objective should be used in both men and women.

#### **Porphyria**

Patients with porphyria or a family history of porphyria should be closely monitored during treatment with follitropin alfa. Deterioration or a first appearance of this condition may require cessation of

treatment.

#### Treatment in women

Before starting treatment, the couple's infertility should be assessed as appropriate and putative contraindications for pregnancy evaluated. In particular, patients should be evaluated for hypothyroidism, adrenocortical deficiency, hyperprolactinemia and appropriate specific treatment given.

Patients undergoing stimulation of follicular growth, whether as treatment for anovulatory infertility or ART procedures, may experience ovarian enlargement or develop hyperstimulation. Adherence to the recommended follitropin alfa dose and regimen of administration, and careful monitoring of therapy will minimise the incidence of such events. For accurate interpretation of the indices of follicle development and maturation, the physician should be experienced in the interpretation of the relevant tests.

In clinical trials, an increase of the ovarian sensitivity to follitropin alfa was shown when administered with lutropin alfa. If an FSH dose increase is deemed appropriate, dose adaptation should preferably be at 7- to 14-day intervals and preferably with 37.5 to 75 IU increments.

No direct comparison of follitropin alfa/LH versus human menopausal gonadotropin (hMG) has been performed. Comparison with historical data suggests that the ovulation rate obtained with follitropin alfa/LH is similar to that obtained with hMG.

#### Ovarian Hyperstimulation Syndrome (OHSS)

A certain degree of ovarian enlargement is an expected effect of controlled ovarian stimulation. It is more commonly seen in women with polycystic ovarian syndrome and usually regresses without treatment.

In distinction to uncomplicated ovarian enlargement, OHSS is a condition that can manifest itself with increasing degrees of severity. It comprises marked ovarian enlargement, high serum sex steroids, and an increase in vascular permeability which can result in an accumulation of fluid in the peritoneal, pleural and, rarely, in the pericardial cavities.

The following symptomatology may be observed in severe cases of OHSS: abdominal pain, abdominal distension, severe ovarian enlargement, weight gain, dyspnoea, oliguria and gastrointestinal symptoms including nausea, vomiting and diarrhoea. Clinical evaluation may reveal hypovolaemia, haemoconcentration, electrolyte imbalances, ascites, haemoperitoneum, pleural effusions, hydrothorax, or acute pulmonary distress. Very rarely, severe OHSS may be complicated by ovarian torsion or thromboembolic events such as pulmonary embolism, ischaemic stroke or myocardial infarction.

Independent risk factors for developing OHSS include young age, lean body mass, polycystic ovarian syndrome, higher doses of exogenous gonadotropins, high absolute or rapidly rising serum estradiol levels and previous episodes of OHSS, large number of developing ovarian follicles and large number of oocytes retrieved in assisted reproductive technology (ART) cycles.

Adherence to recommended follitropin alfa dose and regimen of administration can minimise the risk of ovarian hyperstimulation (see sections 4.2 and 4.8). Monitoring of stimulation cycles by ultrasound scans as well as estradiol measurements are recommended to early identify risk factors.

There is evidence to suggest that hCG plays a key role in triggering OHSS and that the syndrome may be more severe and more protracted if pregnancy occurs. Therefore, if signs of ovarian hyperstimulation occur such as a serum estradiol level > 5 500 pg/mL or > 20 200 pmol/L and/or ≥ 40 follicles in total, it is recommended that hCG be withheld and the patient be advised to refrain from coitus or to use barrier contraceptive methods for at least 4 days. OHSS may progress rapidly (within 24 hours) or over several days to become a serious medical event. It most often occurs after

hormonal treatment has been discontinued and reaches its maximum at about seven to ten days following treatment. Therefore, patients should be followed for at least two weeks after hCG administration.

In ART, aspiration of all follicles prior to ovulation may reduce the occurrence of hyperstimulation.

Mild or moderate OHSS usually resolves spontaneously. If severe OHSS occurs, it is recommended that gonadotropin treatment be stopped if still ongoing, and that the patient be hospitalised, and appropriate therapy be started.

#### Multiple pregnancy

In patients undergoing ovulation induction, the incidence of a multiple pregnancy is increased compared with natural conception. The majority of multiple conceptions are twins. Multiple pregnancy, especially of high order, carries an increased risk of adverse maternal and perinatal outcomes.

To minimise the risk of multiple pregnancy, careful monitoring of ovarian response is recommended.

In patients undergoing ART procedures the risk of a multiple pregnancy is related mainly to the number of embryos replaced, their quality and the patient age.

The patients should be advised of the potential risk of multiple births before starting treatment.

#### Pregnancy loss

The incidence of pregnancy loss by miscarriage or abortion is higher in patients undergoing stimulation of follicular growth for ovulation induction or ART than following natural conception.

#### Ectopic pregnancy

Women with a history of tubal disease are at risk of ectopic pregnancy, whether the pregnancy is obtained by spontaneous conception or with fertility treatments. The prevalence of ectopic pregnancy after ART was reported to be higher than in the general population.

#### *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 yet established whether or not treatment with gonadotropins increases the risk of these tumours in infertile women.

#### Congenital malformation

The prevalence 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 multiple pregnancies.

#### Thromboembolic events

In women with recent or ongoing thromboembolic disease or women with generally recognised risk factors for thromboembolic events, such as personal or family history, treatment with gonadotropins may further increase the risk for aggravation or occurrence of such events. In these women, the benefits of gonadotropin administration need to be weighed against the risks. It should be noted however that pregnancy itself as well as OHSS also carry an increased risk of thromboembolic events.

#### Treatment in men

Elevated endogenous FSH levels are indicative of primary testicular failure. Such patients are unresponsive to follitropin alfa/hCG therapy. Follitropin alfa should not be used when an effective response cannot be obtained.

Semen analysis is recommended 4 to 6 months after the beginning of treatment as part of the

assessment of the response.

#### Sodium content

This medicinal product contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially "sodium-free".

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

Concomitant use of follitropin alfa with other medicinal products used to stimulate ovulation (e.g. hCG, clomiphene citrate) may potentiate the follicular response, whereas concurrent use of a GnRH agonist or antagonist to induce pituitary desensitisation may increase the dose of follitropin alfa needed to elicit an adequate ovarian response. No other clinically significant medicinal product interaction has been reported during follitropin alfa therapy.

#### 4.6 Fertility, pregnancy and lactation

#### **Pregnancy**

There is no indication for use of follitropin alfa during pregnancy. Data on a limited number of exposed pregnancies (less than 300 pregnancy outcomes) indicate no malformative or feto/neonatal toxicity of follitropin alfa.

No teratogenic effect has been observed in animal studies (see section 5.3). In case of exposure during pregnancy, clinical data are not sufficient to exclude a teratogenic effect of follitropin alfa.

#### Breast-feeding

Follitropin alfa is not indicated during breast-feeding.

#### **Fertility**

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

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

Follitropin alfa has no or negligible influence on the ability to drive and use machines.

#### 4.8 Undesirable effects

#### Summary of the safety profile

The most commonly reported adverse reactions are headache, ovarian cysts and local injection site reactions (e.g. pain, erythema, haematoma, swelling and/or irritation at the site of injection).

Mild or moderate ovarian hyperstimulation syndrome (OHSS) has been commonly reported and should be considered as an intrinsic risk of the stimulation procedure. Severe OHSS is uncommon (see section 4.4).

Thromboembolism may occur very rarely (see section 4.4).

#### List of adverse reactions

The following definitions apply to the frequency terminology used hereafter: very common ( $\geq 1/10$ ), common ( $\geq 1/100$  to < 1/100), uncommon ( $\geq 1/1000$ ), rare ( $\geq 1/10000$ ), very rare (< 1/10000).

#### Treatment in women

*Immune system disorders* 

Very rare: Mild to severe hypersensitivity reactions including anaphylactic reactions and

shock

<u>Nervous system disorders</u> Very common: Headache

Vascular disorders

Very rare: Thromboembolism (both in association with and separate from OHSS)

Respiratory, thoracic and mediastinal disorders

Very rare: Exacerbation or aggravation of asthma

**Gastrointestinal disorders** 

Common: Abdominal pain, abdominal distension, abdominal discomfort, nausea, vomiting,

diarrhoea

Reproductive system and breast disorders

Very common: Ovarian cysts

Common: Mild or moderate OHSS (including associated symptomatology)
Uncommon: Severe OHSS (including associated symptomatology) (see section 4.4)

Rare: Complication of severe OHSS

General disorders and administration site conditions

Very common: Injection site reactions (e.g. pain, erythema, haematoma, swelling and/or irritation

at the site of injection)

Treatment in men

Immune system disorders

Very rare: Mild to severe hypersensitivity reactions including anaphylactic reactions and

shock

Respiratory, thoracic and mediastinal disorders

Very rare: Exacerbation or aggravation of asthma

Skin and subcutaneous tissue disorders

Common: Acne

Reproductive system and breast disorders

Common: Gynaecomastia, varicocele

General disorders and administration site conditions

Very common: Injection site reactions (e.g. pain, erythema, haematoma, swelling and/or irritation

at the site of injection)

*Investigations* 

Common: Weight gain

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

The effects of an overdose of follitropin alfa are unknown, nevertheless, there is a possibility that OHSS may occur (see section 4.4).

#### 5. PHARMACOLOGICAL PROPERTIES

#### 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Sex hormones and modulators of the genital systems, gonadotropins, ATC code: G03GA05.

Bemfola is a biosimilar medicinal product. Detailed information is available on the website of the European Medicines Agency <a href="http://www.ema.europa.eu">http://www.ema.europa.eu</a>.

#### Mechanism of action

Follicle stimulating hormone (FSH) and luteinising hormone (LH) are secreted from the anterior pituitary gland in response to GnRH and play a complementary role in follicle development and ovulation. FSH stimulates the development of ovarian follicles, while LH action is involved in follicle development, steroidogenesis and maturation.

#### Pharmacodynamic effects

Inhibin and estradiol (E2) levels are raised after administration of r-hFSH, with subsequent induction of follicular development. Inhibin serum level increase is rapid and can be observed as early as the third day of r-hFSH administration, while E2 levels take more time, and an increase is observed only from the fourth day of treatment. Total follicular volume starts to increase after 4 to 5 days of r-hFSH daily dosing, and, depending on patient response, the maximum effect is reached after about 10 days from the start of r-hFSH administration.

#### Clinical efficacy and safety in women

In clinical trials, patients with severe FSH and LH deficiency were defined by an endogenous serum LH level < 1.2 IU/L as measured in a central laboratory. However, it should be taken into account that there are variations between LH measurements performed in different laboratories.

In clinical studies comparing r-hFSH (follitropin alfa) and urinary FSH in ART (see table below) and in ovulation induction, follitropin alfa was more potent than urinary FSH in terms of a lower total dose and a shorter treatment period needed to trigger follicular maturation.

In ART, follitropin alfa at a lower total dose and shorter treatment period than urinary FSH, resulted in a higher number of oocytes retrieved when compared to urinary FSH.

Table: Results of study GF 8407 (randomised parallel group study comparing efficacy and safety of follitropin alfa with urinary FSH in assisted reproduction technologies)

	follitropin alfa	urinary FSH
	(n = 130)	(n = 116)
Number of oocytes retrieved	$11.0 \pm 5.9$	$8.8 \pm 4.8$
Days of FSH stimulation required	$11.7 \pm 1.9$	$14.5 \pm 3.3$
Total dose of FSH required (number of FSH 75 IU ampoules)	$27.6 \pm 10.2$	$40.7 \pm 13.6$
Need to increase the dose (%)	56.2	85.3

Differences between the 2 groups were statistically significant (p< 0.05) for all criteria listed.

#### Clinical efficacy and safety in men

In men deficient in FSH, follitropin alfa administered concomitantly with hCG for at least 4 months induces spermatogenesis.

#### 5.2 Pharmacokinetic properties

There is no pharmacokinetic interaction between follitropin alfa and lutropin alfa when administered simultaneously.

#### Distribution

Following intravenous administration, follitropin alfa is distributed to the extracellular fluid space with an initial half-life of around 2 hours and eliminated from the body with a terminal half-life of 14 to 17 hours. The steady state volume of distribution is in the range of 9 to 11 L.

Following subcutaneous administration, the absolute bioavailability is 66% and the apparent terminal half-life is in the range of 24 to 59 hours. Dose proportionality after subcutaneous administration was demonstrated up to 900 IU. Following repeated administration, follitropin alfa accumulates 3-fold achieving a steady-state within 3 to 4 days.

#### Elimination

Total clearance is 0.6 L/h and about 12% of the follitropin alfa dose is excreted in the urine.

#### 5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of single and repeated dose toxicity and genotoxicity in addition to those already stated in the other sections of this SmPC.

Impaired fertility has been reported in rats exposed to pharmacological doses of follitropin alfa  $(\ge 40 \text{ IU/kg/day})$  for extended periods, through reduced fecundity.

Given in high doses (≥ 5 IU/kg/day) follitropin alfa caused a decrease in the number of viable foetuses without being teratogenic, and dystocia similar to that observed with urinary menopausal gonadotropin (hMG). However, since follitropin alfa is not indicated in pregnancy, these data are of limited clinical relevance.

#### 6. PHARMACEUTICAL PARTICULARS

#### 6.1 List of excipients

Poloxamer 188
Sucrose
Methionine
Disodium phosphate dihydrate
Sodium dihydrogen phosphate dihydrate
Phosphoric acid
Water for injections

#### 6.2 Incompatibilities

Not applicable.

#### 6.3 Shelf life

3 years

Once opened, the medicinal product should be injected immediately.

#### 6.4 Special precautions for storage

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

Before opening and within its shelf life, the medicinal product may be removed from the refrigerator, and without being refrigerated again, may be stored for up to 3 months at or below 25°C. The medicinal product must be discarded if it has not been used after 3 months.

Store in the original package in order to protect from light.

#### 6.5 Nature and contents of container

1.5 mL cartridge (type I glass), with a plunger stopper (halobutyl rubber) and an aluminium crimp cap with a rubber inlay, assembled in a pre-filled pen.

Bemfola 75 IU/0.125 mL:

Each cartridge contains 0.125 mL solution for injection.

Bemfola 150 IU/0.25 mL:

Each cartridge contains 0.25 mL solution for injection.

Bemfola 225 IU/0.375 mL:

Each cartridge contains 0.375 mL solution for injection.

Bemfola 300 IU/0.50 mL:

Each cartridge contains 0.5 mL solution for injection.

Bemfola 450 IU/0.75 mL:

Each cartridge contains 0.75 mL solution for injection.

Pack sizes of 1, 5 and 10 pre-filled pens including one disposable needle and alcohol swab per pen. One needle and one alcohol swab to be used with the pen for administration.

Not all pack sizes may be marketed.

#### 6.6 Special precautions for disposal and other handling

The solution should not be administered if it contains particles or is not clear.

Bemfola pre-filled pen is not designed to allow the cartridge to be removed.

Discard used pen and needle immediately after injection.

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

For instructions on the administration with the pre-filled pen, see the package leaflet.

#### 7. MARKETING AUTHORISATION HOLDER

Gedeon Richter Plc.

Gyömrői út 19-21.

#### 8. MARKETING AUTHORISATION NUMBER(S)

Bemfola 75 IU/0.125 mL:

EU/1/13/909/001

EU/1/13/909/006

EU/1/13/909/007

Bemfola 150 IU/0.25 mL:

EU/1/13/909/002

EU/1/13/909/008

EU/1/13/909/009

Bemfola 225 IU/0.375 mL:

EU/1/13/909/003

EU/1/13/909/010

EU/1/13/909/011

Bemfola 300 IU/0.50 mL:

EU/1/13/909/004

EU/1/13/909/012

EU/1/13/909/013

Bemfola 450 IU/0.75 mL:

EU/1/13/909/005

EU/1/13/909/014

EU/1/13/909/015

#### 9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 27/03/2014

Date of latest renewal:

#### 10. DATE OF REVISION OF THE TEXT

Detailed information on this medicinal product is available on the website of the European Medicines Agency <a href="http://www.ema.europa.eu">http://www.ema.europa.eu</a>

#### **ANNEX II**

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

Name and address of the manufacturer of the biological active substance

Polymun Scientific Immunbiologische Forschung GmbH Donaustraße 99 Klosterneuburg 3400 Austria

Name and address of the manufacturer responsible for batch release

Gedeon Richter Plc. Gyömrői út 19-21. 1103 Budapest Hungary

#### B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

Medicinal products 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 requirements for submission of periodic safety update reports for this medicinal product are set out in the list of Union reference dates (EURD list) provided for under Article 107c(7) of Directive 2001/83/EC and any subsequent updates published on the European medicines webportal.

### 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.

# ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

#### PARTICULARS TO APPEAR ON THE OUTER PACKAGING

#### **BOX OF 1, 5 OR 10 PRE-FILLED PENS**

#### 1. NAME OF THE MEDICINAL PRODUCT

Bemfola 75 IU/0.125 mL solution for injection in pre-filled pen follitropin alfa

#### 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each pre-filled pen delivers 75 IU follitropin alfa, equivalent to 5.5 micrograms per 0.125 mL. Each mL of the solution contains 600 IU equivalent to 44 micrograms.

#### 3. LIST OF EXCIPIENTS

Poloxamer 188, sucrose, methionine, disodium phosphate dihydrate, sodium dihydrogen phosphate dihydrate, phosphoric acid and water for injections.

#### 4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection

1 pre-filled pen

1 injection needle

1 alcohol swab

5 pre-filled pens

5 injection needles

5 alcohol swabs

10 pre-filled pens

10 injection needles

10 alcohol swabs

#### 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

Subcutaneous use.

### 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 Store in a refrigerator. Do not freeze. Store in the original package in order to protect from light. Within its shelf-life, the unopened product may be stored at or below 25°C for up to 3 months without being refrigerated again and must be discarded if it has not been used after 3 months. 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 Gedeon Richter Plc. Gyömrői út 19-21. 1103 Budapest Hungary 12. MARKETING AUTHORISATION NUMBER(S) EU/1/13/909/001 EU/1/13/909/006 EU/1/13/909/007 13. BATCH NUMBER<, DONATION AND PRODUCT CODES> Lot 14. GENERAL CLASSIFICATION FOR SUPPLY Medicinal product subject to medical prescription. 15. INSTRUCTIONS ON USE

Bemfola 75 IU/0.125 mL

INFORMATION IN BRAILLE

**16.** 

2D b	parcode carrying the unique identifier included.
18.	UNIQUE IDENTIFIER - HUMAN READABLE DATA
PC:	
SN:	
NN:	

17.

UNIQUE IDENTIFIER – 2D BARCODE

MIINI	MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS	
PRE-	RE-FILLED PEN LABEL	
1.	NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION	
	iola 75 IU/0.125 mL injection opin alfa	
2.	METHOD OF ADMINISTRATION	
3.	EXPIRY DATE	
EXP		
4.	BATCH NUMBER	
Lot		
5.	CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT	
0.125	mL	
6.	OTHER	

# PARTICULARS TO APPEAR ON THE OUTER PACKAGING BOX OF 1, 5 OR 10 PRE-FILLED PENS

#### 1. NAME OF THE MEDICINAL PRODUCT

Bemfola 150 IU/0.25 mL solution for injection in pre-filled pen follitropin alfa

#### 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each pre-filled pen delivers 150 IU follitropin alfa, equivalent to 11 micrograms per 0.25 mL. Each mL of the solution contains 600 IU equivalent to 44 micrograms.

#### 3. LIST OF EXCIPIENTS

Poloxamer 188, sucrose, methionine, disodium phosphate dihydrate, sodium dihydrogen phosphate dihydrate, phosphoric acid and water for injections.

#### 4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection

1 pre-filled pen

1 injection needle

1 alcohol swab

5 pre-filled pens

5 injection needles

5 alcohol swabs

10 pre-filled pens

10 injection needles

10 alcohol swabs

#### 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

Subcutaneous use.

## 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 Store in a refrigerator. Do not freeze. Store in the original package in order to protect from light. Within its shelf-life, the unopened product may be stored at or below 25°C for up to 3 months without being refrigerated again and must be discarded if it has not been used after 3 months. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF **APPROPRIATE** NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER 11. Gedeon Richter Plc. Gyömrői út 19-21. 1103 Budapest Hungary 12. MARKETING AUTHORISATION NUMBER(S) EU/1/13/909/002 EU/1/13/909/008 EU/1/13/909/009 13. BATCH NUMBER<, DONATION AND PRODUCT CODES> Lot 14. GENERAL CLASSIFICATION FOR SUPPLY Medicinal product subject to medical prescription.

#### 16. INFORMATION IN BRAILLE

INSTRUCTIONS ON USE

Bemfola 150 IU/0.25 mL

15.

2D ba	arcode carrying the unique identifier included.
18.	UNIQUE IDENTIFIER - HUMAN READABLE DATA
PC:	
SN:	
NN:	

17. UNIQUE IDENTIFIER – 2D BARCODE

MIINI	MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS		
PRE-	RE-FILLED PEN LABEL		
1.	NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION		
	iola 150 IU/0.25 mL injection opin alfa		
2.	METHOD OF ADMINISTRATION		
3.	EXPIRY DATE		
EXP			
4.	BATCH NUMBER		
Lot			
5.	CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT		
0.25 r	mL		
6.	OTHER		

# PARTICULARS TO APPEAR ON THE OUTER PACKAGING BOX OF 1, 5 OR 10 PRE-FILLED PENS

#### 1. NAME OF THE MEDICINAL PRODUCT

Bemfola 225 IU/0.375 mL solution for injection in pre-filled pen follitropin alfa

#### 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each pre-filled pen delivers 225 IU follitropin alfa, equivalent to 16.5 micrograms per 0.375 mL. Each mL of the solution contains 600 IU equivalent to 44 micrograms.

#### 3. LIST OF EXCIPIENTS

Poloxamer 188, sucrose, methionine, disodium phosphate dihydrate, sodium dihydrogen phosphate dihydrate, phosphoric acid and water for injections.

#### 4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection

1 pre-filled pen

1 injection needle

1 alcohol swab

5 pre-filled pens

5 injection needles

5 alcohol swabs

10 pre-filled pens

10 injection needles

10 alcohol swabs

#### 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

Subcutaneous use.

## 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 Store in a refrigerator. Do not freeze. Store in the original package in order to protect from light. Within its shelf-life, the unopened product may be stored at or below 25°C for up to 3 months without being refrigerated again and must be discarded if it has not been used after 3 months. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF **APPROPRIATE** NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER 11. Gedeon Richter Plc. Gyömrői út 19-21. 1103 Budapest Hungary 12. MARKETING AUTHORISATION NUMBER(S) EU/1/13/909/003 EU/1/13/909/010 EU/1/13/909/011 13. BATCH NUMBER<, DONATION AND PRODUCT CODES> Lot 14. GENERAL CLASSIFICATION FOR SUPPLY Medicinal product subject to medical prescription. 15. INSTRUCTIONS ON USE

#### 16. INFORMATION IN BRAILLE

Bemfola 225 IU/0.375 mL

2D barcode carrying the unique identifier included.		
18.	UNIQUE IDENTIFIER - HUMAN READABLE DATA	
PC:		
SN:		
NN:		

17. UNIQUE IDENTIFIER – 2D BARCODE

MIN	IMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS
PRE	-FILLED PEN LABEL
1.	NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION
	fola 225 IU/0.375 mL injection cropin alfa
2.	METHOD OF ADMINISTRATION
3.	EXPIRY DATE
EXP	
4.	BATCH NUMBER
Lot	
5.	CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT
0.373	5 mL
6.	OTHER

# PARTICULARS TO APPEAR ON THE OUTER PACKAGING BOX OF 1, 5 OR 10 PRE-FILLED PENS

#### 1. NAME OF THE MEDICINAL PRODUCT

Bemfola 300 IU/0.5 mL solution for injection in pre-filled pen follitropin alfa

#### 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each pre-filled pen delivers 300 IU follitropin alfa, equivalent to 22 micrograms per 0.5 mL. Each mL of the solution contains 600 IU equivalent to 44 micrograms.

#### 3. LIST OF EXCIPIENTS

Poloxamer 188, sucrose, methionine, disodium phosphate dihydrate, sodium dihydrogen phosphate dihydrate, phosphoric acid and water for injections.

#### 4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection

1 pre-filled pen

1 injection needle

1 alcohol swab

5 pre-filled pens

5 injection needles

5 alcohol swabs

10 pre-filled pens

10 injection needles

10 alcohol swabs

#### 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

Subcutaneous use.

## 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 Store in a refrigerator. Do not freeze. Store in the original package in order to protect from light. Within its shelf-life, the unopened product may be stored at or below 25°C for up to 3 months without being refrigerated again and must be discarded if it has not been used after 3 months. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF **APPROPRIATE** NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER 11. Gedeon Richter Plc. Gyömrői út 19-21. 1103 Budapest Hungary 12. MARKETING AUTHORISATION NUMBER(S) EU/1/13/909/004 EU/1/13/909/012 EU/1/13/909/013 13. BATCH NUMBER<, DONATION AND PRODUCT CODES> Lot 14. GENERAL CLASSIFICATION FOR SUPPLY Medicinal product subject to medical prescription. 15. INSTRUCTIONS ON USE

#### 16. INFORMATION IN BRAILLE

Bemfola 300 IU/0.5 mL

2D b	arcode carrying the unique identifier included.	
18.	UNIQUE IDENTIFIER - HUMAN READABLE DATA	
PC:		
SN:		
NN:		

17. UNIQUE IDENTIFIER – 2D BARCODE

MIN	IMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS
PRE-	-FILLED PEN LABEL
1.	NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION
	fola 300 IU/0.5 mL injection ropin alfa
2.	METHOD OF ADMINISTRATION
3.	EXPIRY DATE
EXP	
4.	BATCH NUMBER
Lot	
5.	CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT
0.5 m	nL
6	OTHER

# PARTICULARS TO APPEAR ON THE OUTER PACKAGING BOX OF 1, 5 OR 10 PRE-FILLED PENS

#### 1. NAME OF THE MEDICINAL PRODUCT

Bemfola 450 IU/0.75 mL solution for injection in pre-filled pen follitropin alfa

#### 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each pre-filled pen delivers 450 IU follitropin alfa, equivalent to 33 micrograms per 0.75 mL. Each mL of the solution contains 600 IU equivalent to 44 micrograms.

#### 3. LIST OF EXCIPIENTS

Poloxamer 188, sucrose, methionine, disodium phosphate dihydrate, sodium dihydrogen phosphate dihydrate, phosphoric acid and water for injections.

#### 4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection

1 pre-filled pen

1 injection needle

1 alcohol swab

5 pre-filled pens

5 injection needles

5 alcohol swabs

10 pre-filled pens

10 injection needles

10 alcohol swabs

#### 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

Subcutaneous use.

## 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 Store in a refrigerator. Do not freeze. Store in the original package in order to protect from light. Within its shelf-life, the unopened product may be stored at or below 25°C for up to 3 months without being refrigerated again and must be discarded if it has not been used after 3 months. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF **APPROPRIATE** NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER 11. Gedeon Richter Plc. Gyömrői út 19-21. 1103 Budapest Hungary 12. MARKETING AUTHORISATION NUMBER(S) EU/1/13/909/005 EU/1/13/909/014 EU/1/13/909/015 13. BATCH NUMBER<, DONATION AND PRODUCT CODES> Lot 14. GENERAL CLASSIFICATION FOR SUPPLY Medicinal product subject to medical prescription. 15.

#### **16.** INFORMATION IN BRAILLE

INSTRUCTIONS ON USE

Bemfola 450 IU/0.75 mL

2D barcode carrying the unique identifier included.		
18.	UNIQUE IDENTIFIER - HUMAN READABLE DATA	
PC:		
SN:		
NN:		

17. UNIQUE IDENTIFIER – 2D BARCODE

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS	
PRE-FILLED PEN LABEL	
1.	NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION
	fola 450 IU/0.75 mL injection ropin alfa
2.	METHOD OF ADMINISTRATION
3.	EXPIRY DATE
EXP	
4.	BATCH NUMBER
Lot	
5.	CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT
0.75 mL	
6.	OTHER

**B. PACKAGE LEAFLET** 

#### Package leaflet: Information for the user

Bemfola 75 IU/0.125 mL solution for injection in pre-filled pen Bemfola 150 IU/0.25 mL solution for injection in pre-filled pen Bemfola 225 IU/0.375 mL solution for injection in pre-filled pen Bemfola 300 IU/0.50 mL solution for injection in pre-filled pen Bemfola 450 IU/0.75 mL solution for injection in pre-filled pen

## follitropin alfa

# Read all of this leaflet carefully before you start using this medicine because it contains important information for you.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor or pharmacist.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. See section 4.

#### What is in this leaflet

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

## 1. What Bemfola is and what it is used for

#### What Bemfola is

This medicine contains the active substance follitropin alfa, which is almost identical to a natural hormone produced by your body called "follicle-stimulating hormone" (FSH). FSH is a gonadotropin, a type of hormone that plays an important role in human fertility and reproduction. In women, FSH is needed for the growth and development of the sacs (follicles) in the ovaries that contain the egg cells. In men, FSH is needed for the production of sperm.

#### What Bemfola is used for

#### In adult women, Bemfola is used:

- to help release an egg from the ovary (ovulation) in women that cannot ovulate and that did not respond to treatment with a medicine called "clomiphene citrate".
- together with another medicine called "lutropin alfa" ("luteinising hormone" or LH) to help release an egg from the ovary (ovulation) in women whose body is producing very little gonadotropins (FSH and LH).
- to help develop several follicles (each containing an egg) in women undergoing assisted reproductive technology procedures (procedures that may help you to become pregnant) such as "in vitro fertilisation", "gamete intra-fallopian transfer" or "zygote intra-fallopian transfer".

#### In adult men, Bemfola is used:

• together with another medicine called "human chorionic gonadotropin" (hCG) to help produce sperm in men that are infertile due to a low level of certain hormones.

## 2. What you need to know before you use Bemfola

You and your partner's fertility should be evaluated before the treatment is started by a doctor experienced in treating fertility disorders.

#### Do not use Bemfola

- if you are allergic to follicle stimulating hormone or any of the other ingredients of this medicine (listed in section 6).
- if you have a tumour in your hypothalamus or pituitary gland (both are parts of the brain).
- if you are a woman:
  - with large ovaries or sacs of fluids within the ovaries (ovarian cysts) of unknown origin.
  - with unexplained vaginal bleeding.
  - with cancer in your ovaries, womb or breasts.
  - with a condition that usually makes normal pregnancy impossible, such as ovarian failure (early menopause), or malformed reproductive organs.
- if you are a man:
  - with damaged testicles that cannot be healed.

Do not use Bemfola if any of the above applies to you. If you are not sure, talk to your doctor before using this medicine.

## Warnings and precautions

Talk to your doctor or pharmacist before using Bemfola.

## **Porphyria**

Tell your doctor before you start treatment, if you or any member of your family have porphyria (an inability to break down porphyrins that may be passed on from parents to children).

- Tell your doctor straight away if:
- your skin becomes fragile and easily blistered, especially skin that has been frequently in the sun, and/or
- you have stomach, arm or leg pain.

In case of the above events your doctor may recommend that you stop treatment.

## Ovarian hyper-stimulation syndrome (OHSS)

If you are a woman, this medicine increases your risk of developing OHSS. This is when your follicles develop too much and become large cysts. If you get lower abdominal pain, gain any weight rapidly, feel sick or are vomiting or if you have difficulty in breathing, talk to your doctor straight away who might ask you to stop using this medicine (see section 4).

In case you are not ovulating, and if the recommended dose and schedule of administration are adhered to, the occurrence of OHSS is less likely. Bemfola treatment seldom causes severe OHSS unless the medicine that is used for final follicular maturation (containing human chorionic gonadotropin, hCG) is administered. If you are developing OHSS your doctor may not give you any hCG in this treatment cycle and you may be told not to have sex or to use a barrier contraceptive method for at least four days.

#### Multiple pregnancy

When using Bemfola, you have a higher risk of being pregnant with more than one child at the same time ("multiple pregnancy", mostly twins), than if you conceived naturally. Multiple pregnancy may lead to medical complications for you and your babies. You can reduce the risk of multiple pregnancy by using the right dose of Bemfola at the right times. When undergoing assisted reproductive technology, the risk of having a multiple pregnancy is related to your age, the quality and the number of fertilised eggs or embryos placed inside you.

## **Miscarriage**

When undergoing assisted reproductive technology or stimulation of your ovaries to produce eggs, you are more likely to have a miscarriage than the average woman.

Blood clotting problems (thromboembolic events)

If you had in the past or recently blood clots in the leg or in the lung, or a heart attack or stroke, or if those happened in your family, then you might have a higher risk that these problems occur or become worse with Bemfola treatment.

# Men with too much FSH in their blood

If you are a man, having too much FSH in your blood can be a sign of damaged testicles. Bemfola usually does not work if you have this problem. If your doctor decides to try Bemfola treatment, to monitor the treatment, they may ask you to provide semen for analysis 4 to 6 months after starting treatment.

#### Children and adolescents

Bemfola is not indicated for use in children and adolescents below 18 years old.

#### Other medicines and Bemfola

Tell your doctor if you are taking, have recently taken or might take any other medicines.

- If you use Bemfola with other medicines which help ovulation (such as hCG or clomiphene citrate), this may increase the response of your follicles.
- If you use Bemfola at the same time as a "gonadotropin-releasing hormone" (GnRH) agonist or antagonist (these medicines reduce your sex hormone levels and stop you ovulating) you may need a higher dose of Bemfola to produce follicles.

## Pregnancy and breast-feeding

Do not use Bemfola if you are pregnant or breast-feeding.

## **Driving and using machines**

It is not expected that this medicine will affect your ability to drive and use machines.

#### Bemfola contains sodium

This medicine contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially "sodium-free".

## 3. How to use Bemfola

Always use this medicine exactly as your doctor has told you. Check with your doctor or pharmacist if you are not sure.

## Using this medicine

- Bemfola is intended to be given by injection just under the skin (subcutaneously). Use each prefilled pen only once then they should be disposed of in a safe manner. Do not administered the solution if it contains particles or is not clear.
- The first injection of Bemfola should be given under supervision of your doctor.
- Your doctor or nurse will show you how to use the Bemfola pre-filled pen to inject the medicine yourself.
- If you administer Bemfola to yourself, please carefully read and follow the "Instructions for Use". These instructions can be found at the end of the package leaflet.

#### How much to use

Your doctor will decide how much medicine you will take and how often. The doses described below are stated in International Units (IU) and millilitres (mL).

## Women

# If you are not ovulating and have irregular or no periods

- Bemfola is usually given every day.
- If you have irregular periods, start using Bemfola within the first 7 days of your menstrual cycle. If you do not have periods you can start using the medicine on any convenient day.

- The usual starting dose of Bernfola is 75 to 150 IU (0.12 to 0.25 mL) each day.
- Your dose of Bemfola may be increased every 7 or every 14 days by 37.5 to 75 IU, until you get the desired response.
- The maximum daily dose of Bemfola is usually not higher than 225 IU (0.375 mL).
- When you get the desired response, you will be given a single injection of 250 micrograms of "recombinant hCG" (r-hCG, an hCG made in a laboratory by a special DNA technique), or 5 000 to 10 000 IU of hCG, 24 to 48 hours after your last Bemfola injection. The best time to have sex is on the day of the hCG injection and the day after.

If your doctor cannot see a desired response after 4 weeks, that treatment cycle with Bemfola should be stopped. For the following treatment cycle, your doctor will give you a higher starting dose of Bemfola than before.

If your body responds too strongly, your treatment will be stopped and you will not be given any hCG (see section 2, "Ovarian hyper-stimulation syndrome (OHSS)"). For the following cycle, your doctor will give you a lower dose of Bemfola than before.

## If you have been diagnosed with very low levels of FSH and LH hormones

- The usual starting dose of Bemfola is 75 to 150 IU (0.12 to 0.25 mL) together with 75 IU (0.12 mL) of lutropin alfa.
- You will use these two medicines each day for up to five weeks.
- Your dose of Bemfola may be increased every 7 or every 14 days by 37.5 to 75 IU, until you get the desired response.
- When you get the desired response, you will be given a single injection of 250 micrograms of "recombinant hCG" (r-hCG, an hCG made in a laboratory by a special DNA technique), or 5 000 to 10 000 IU of hCG, 24 to 48 hours after your last injections of Bemfola and lutropin alfa. The best time to have sex is on the day of the hCG injection and the day after. Alternatively, intrauterine insemination or another medically assisted reproduction procedure may be performed based on your doctor's judgment.

If your doctor cannot see a response after 5 weeks, that treatment cycle with Bemfola should be stopped. For the following cycle, your doctor will give you a higher starting dose of Bemfola than before.

If your body responds too strongly, your treatment with Bemfola will be stopped and you will not be given any hCG (see section 2, "Ovarian hyper-stimulation syndrome (OHSS)"). For the following cycle, your doctor will give you a lower dose of Bemfola than before.

#### If you need to develop several eggs for collection prior to any assisted reproductive technology

- The usual starting dose of Bemfola is 150 to 225 IU (0.25 to 0.37 mL) each day, from day 2 or 3 of your treatment cycle.
- Bemfola dose may be increased, depending on your response. The maximum daily dose is 450 IU (0.75 mL).
- Treatment is continued until your eggs have developed to a desired point. This usually takes about 10 days but can take any time between 5 and 20 days. Your doctor will use blood tests and/or an ultrasound machine to check when this is.
- When your eggs are ready, you will be given a single injection of 250 micrograms "recombinant hCG" (r-hCG, an hCG made in a laboratory by a special recombinant DNA technique), or 5 000 IU to 10 000 IU of hCG, 24 to 48 hours after the last Bemfola injection. This gets your eggs ready for collection.

In other cases, your doctor may first stop you from ovulating by using a gonadotropin-releasing hormone (GnRH) agonist or antagonist. Then Bemfola is started approximately two weeks after start of agonist treatment. The Bemfola and GnRH agonist are then both given until your follicles develop as desired. For example, after two weeks of GnRH agonist treatment, 150 to 225 IU Bemfola is administered for 7 days. The dose is then adjusted according to your ovarian response.

#### Men

- The usual dose of Bemfola is 150 IU (0.25 mL) together with hCG.
- You will use these two medicines three times a week for at least 4 months.
- If you have not responded to treatment after 4 months, your doctor may suggest that you continue using these two medicines for at least 18 months.

## If you use more Bemfola than you should

The effects of taking too much Bemfola are unknown. Nevertheless, one could expect ovarian hyperstimulation syndrome (OHSS) to occur, which is described in section 4. However, the OHSS will only occur if hCG is also administered (see section 2, "Ovarian hyper-stimulation syndrome (OHSS)").

## If you forget to use Bemfola

If you forget to use Bemfola, do not take a double dose to make up for a forgotten dose. Please talk to your doctor as soon as you notice that you forgot a dose.

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

#### 4. Possible side effects

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

#### Serious side effects in women

- Lower abdominal pain together with nausea or vomiting may be the symptoms of ovarian hyper-stimulation syndrome (OHSS). This may indicate that the ovaries over-reacted to the treatment and that large ovarian cysts developed (see also section 2 "Ovarian hyper-stimulation syndrome (OHSS)"). This side effect is common (may affect up to 1 in 10 people).
- The OHSS may become severe with clearly enlarged ovaries, decreased urine production, weight gain, difficulty in breathing and/or possible fluid accumulation in your stomach or chest. This side effect is uncommon (may affect up to 1 in 100 people).
- Complications of OHSS such as twisting of ovaries or blood clotting may occur rarely (may affect up to 1 in 1 000 people).
- Serious blood clotting complications (thromboembolic events) sometimes independent of OHSS may be found very rarely (may affect up to 1 in 10 000 people). This could cause chest pain, breathlessness, stroke or heart attack (see also section 2, "Blood clotting problems(thromboembolic events)").

#### Serious side effects in men and women

• Allergic reactions such as rash, red skin, hives, swelling of your face with difficulty breathing can sometimes be serious. This side effect is very rare (may affect up to 1 in 10 000 people).

If you notice any of the above-listed side effects, you should immediately contact your doctor, who might ask you to stop using Bemfola.

#### Other side effects in women

### Very common (may affect more than 1 in 10 people):

- Sacs of fluid within the ovaries (ovarian cysts)
- Headache
- Local reactions at the injection site, such as pain, redness, bruising, swelling and/or irritation

#### Common (may affect up to 1 in 10 people):

- Abdominal pain
- Feeling sick, vomiting, diarrhoea, abdominal cramps and bloating

## Very rare (may affect up to 1 in 10,000 people):

- Allergic reactions such as rash, red skin, hives, swelling of your face with difficulty breathing may occur. These reactions can sometimes be serious.
- Your asthma may get worse.

#### Other side effects in men

## Very common (may affect more than 1 in 10 people):

• Local reactions at the injection site, such as pain, redness, bruising, swelling and/or irritation

## Common (may affect up to 1 in 10 people):

- Swelling of the veins above and behind the testicles (varicocele)
- Breast development, acne or weight gain

## Very rare (may affect up to 1 in 10,000 people):

- Allergic reactions such as rash, red skin, hives, swelling of your face with difficulty in breathing may occur. These reactions can sometimes be serious.
- Your asthma may get worse.

## 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 listed in <a href="Appendix V">Appendix V</a>. By reporting side effects you can help provide more information on the safety of this medicine.

#### 5. How to store Bemfola

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 pen label and carton after EXP. The expiry date refers to the last day of that month.

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

Store in the original package in order to protect from light.

Within its shelf life, the unopened pen may be stored at or below 25°C for up to 3 months without being refrigerated again and must be discarded if it has not been used after 3 months.

Do not use this medicine if you notice any visible signs of deterioration, if the liquid contains particles or is not clear.

Once opened, the medicine should be injected immediately.

Do not throw any medicines away via wastewater or household waste. Ask your pharmacist how to dispose of medicines you no longer use. These measures will help protect the environment.

# 6. Contents of the pack and other information

#### What Bemfola contains

- The active substance is follitropin alfa.
- Bemfola 75 IU/0.125 mL: Each cartridge contains 75 IU (equivalent to 5.5 micrograms) follitropin alfa in 0.125 mL solution.
- Bemfola 150 IU/0.25 mL: Each cartridge contains 150 IU (equivalent to 11 micrograms)

- follitropin alfa in 0.25 mL solution.
- Bemfola 225 IU/0.375 mL: Each cartridge contains 225 IU (equivalent to 16.5 micrograms) follitropin alfa in 0.375 mL solution.
- Bemfola 300 IU/0.50 mL: Each cartridge contains 300 IU (equivalent to 22 micrograms) follitropin alfa in 0.50 mL solution.
- Bemfola 450 IU/0.75 mL: Each cartridge contains 450 IU (equivalent to 33 micrograms) follitropin alfa in 0.75 mL solution.
- Each mL of the solution contains 600 IU (equivalent to 44 micrograms) follitropin alfa.
- The other ingredients are poloxamer 188, sucrose, methionine, disodium phosphate dihydrate, sodium dihydrogen phosphate dihydrate, phosphoric acid and water for injections.

## What Bemfola looks like and contents of the pack

- Bemfola is presented as a clear, colourless liquid for injection in a pre-filled pen (injection).
- Bemfola is supplied in packs with 1, 5 or 10 pre-filled pens, 1, 5 or 10 disposable needles and 1, 5 or 10 alcohol swabs. Not all pack sizes may be marketed.

## Marketing Authorisation Holder and Manufacturer

Gedeon Richter Plc. Gyömrői út 19-21. 1103 Budapest Hungary

#### This leaflet was last revised in

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

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Bemfola 75 IU/0.125 mL pre-filled pen Bemfola 150 IU/0.25 mL pre-filled pen Bemfola 225 IU/0.375 mL pre-filled pen Bemfola 300 IU/0.50 mL pre-filled pen Bemfola 450 IU/0.75 mL pre-filled pen

#### **Instructions for Use**

#### **CONTENTS**

- 1. How to use the Bemfola pre-filled pen
- 2. Before you start using your pre-filled pen
- 3. Getting your pre-filled pen ready for injection
- 4. Setting the dose prescribed by your doctor
- 5. Injecting the dose
- 6. After the injection

**Warning**: Please read and follow this Instructions for use of Bemfola pre-filled pen. Do not follow instructions from other sources than those provided in this Instructions for use or by your health care professional as it may compromise the proper use of the pre-filled pen and your treatment.

## 1. How to use the Bemfola pre-filled pen

- Before starting to use your pre-filled pens, please read the full Instructions for use and the package leaflet carefully.
- Each pre-filled pen is only for your **single use** do not let anyone else use it.
- The numbers on the dose display of the pre-filled pens are measured in International Units or IU. Your doctor will have told you how many IU to inject each day.
- Your doctor/pharmacist will tell you how many pre-filled Bemfola pens for single use you need to use for your complete treatment course.
- Give yourself the injection around the same time each day.

# 2. Before you start using your pre-filled pen

#### 2.1. Take the pen out of the fridge

- Take one of your pens out of the fridge 5 to 10 minutes before using it.
- If the medicine is frozen, then please **do not** use it.

#### 2.2. Wash your hands

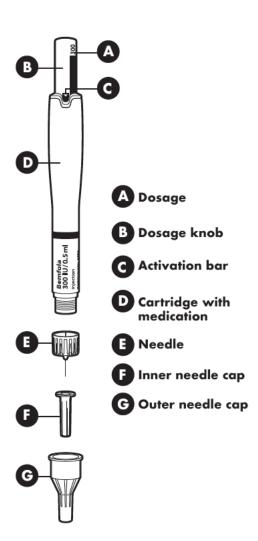
- Wash your hands with soap and warm water, and dry them.
- It is important that your hands and the things you use to get your pen ready are as clean as possible.

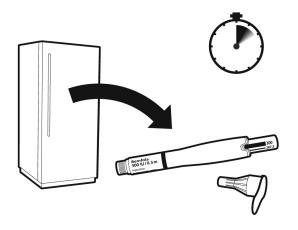
## 2.3. Find a clean area

• A good place is a clean table or surface.

## 3. Getting your pre-filled pen ready for injection

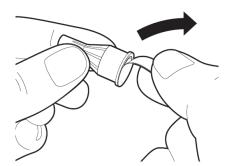
## The different parts of your pre-filled pen





Perform the injection every day around the same time. Take the pen out of the fridge 5 to 10 minutes before using it.

*Note:* Please check that the medicine is not frozen.

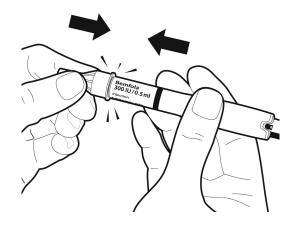


# Prepare your needle for injection

Get a new needle - only use the single-use needles supplied in the package. Hold the outer needle cap firmly.

Check in all cases that the peel-off seal on the outer needle cap is not damaged or loose. Remove the peel-off seal from the injection needle.

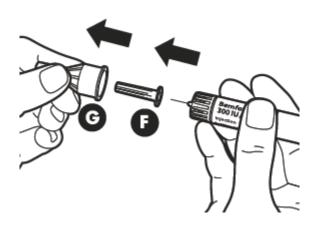
Caution: If the peel-off seal is damaged or loose, do not use the needle. Throw it away in a sharps disposal container. Get a new needle.



Attach the needle.

Hold the pen by its sides and keep the needle in line with it while attaching the needle and firmly snap the needle on to the tip of the pen. Make sure that the needle is properly secured on the pen in a straight position.

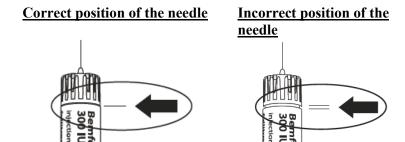
Caution: Despite the fact that there is a thread at the end of the pen, never try to twist the needle to the pen, as this may lead to the incorrect positioning of the needle. Do not push the dosage knob in while attaching the needle.



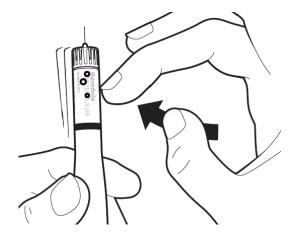
Remove the outer needle cap (G). **Keep it** for later. You will need it after the injection to discard the pen.

Remove the inner needle cap (F).

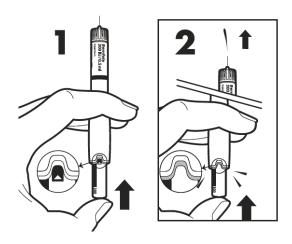
Make sure that the needle is in the correct position.



## 4. Setting the dose prescribed by your doctor

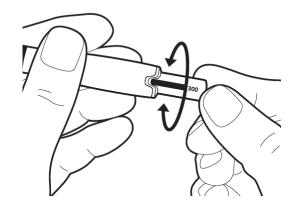


First, hold the pen so that the needle is pointing upwards. To remove the air bubbles from the system, gently tap the side of the pen to make the existing air bubbles rise to the top.



Still holding the pen upright, push the **dosage knob** in until the **activation bar** with the small arrow disappears. You should also hear a click, and some liquid will splash out (this is normal). The pen is now ready to set the dose.

Caution: If no liquid splashes out, or liquid leakage is detected at the junction of the needle and the pen, the pen should not be used. Tell your doctor or pharmacist if you notice any problems.



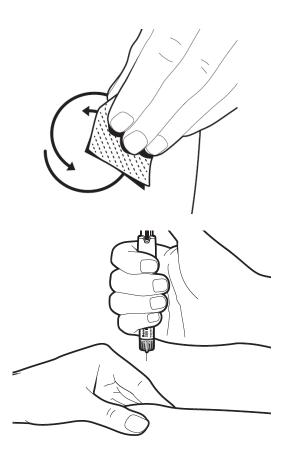
Gently turn the dosage knob until the bar of your prescribed dose is in line with the middle of the indent on the pen.

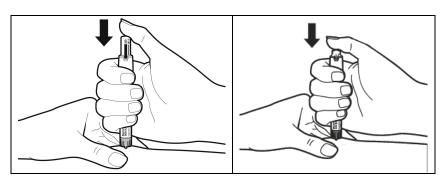
**Note:** For the Bemfola 75 IU/0.125 mL pre-filled pen, the dosage knob cannot go around completely, but it can still be rotated backwards. The pen is now ready for injection.

**Caution:** Do not push the dosage knob in any further, at this point.

## 5. Injecting the dose

Now you are ready to immediately give yourself the injection: Your doctor or nurse will have already advised you where to inject (e.g. tummy, front of thigh). To minimise skin irritation, select a different injection site each day.





Clean the injection site with the alcohol swab available in the package, using a circular motion. Wait for a few seconds until the alcohol has evaporated from the skin and it is dry before injecting.

Check again that the correct dose is displayed on the pen. Lightly pinch the skin of the injection area. Hold the pen at approximately a right angle (90° angle) and insert the needle completely in one steady movement into your skin.

Caution: Do not push the dosage knob, while inserting the needle and do not change the direction of the needle as it goes in.

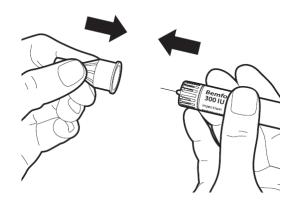
Once the needle is fully inserted in the injection site, push in the dosage knob slowly and continuously until it stops, and the bar of the set dose has disappeared.

Do not remove the needle

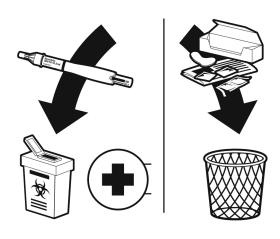
immediately, wait at least for **5 seconds**, before pulling it out to ensure you have injected the full dose. After the withdrawal of the needle: clean the skin with an alcohol swab using a circular motion at the injection site.

Caution: If liquid leakage is detected at the junction of the needle and the pen during injecting, tell your doctor or pharmacist.

## 6. After the injection



Replace the outer needle cap onto the needle carefully.



You can use the pre-filled injection pen only once and must discard the pen even if any liquid remains in the pen after injection.

Throw away the packaging box, inner needle cap, peel tab, alcohol swab and the Instructions for use in the normal household waste. Do not throw away any medicines via your sink, toilet or in your household waste. The used pen needs to be discarded in a sharps container and returned to the pharmacy for a correct disposal. Ask your pharmacist how to dispose of medicines you no longer use.