# GONAL-f® 450 IU

## 1. NAME OF THE MEDICINAL PRODUCT

GONAL-f® 450 IU/0.72 mL (33 mcg/0.72 mL) solution for injection in prefilled pen.

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each prefilled multidose pen contains 450 IU (equivalent to 33 mcg) of follitropin alfa* in 0.72 mL solution.
*Recombinant human follicle stimulating hormone (r-hFSH) produced in Chinese Hamster Ovary (CHO) cells by recombinant DNA technology.
For a full list of excipients, see section 6.1.

## 3. PHARMACEUTICAL FORM

Solution for injection in prefilled pen
Clear colorless solution
The pH of the solution is 6.7-7.3

## 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 fertilization (IVF), gamete intra-fallopian transfer and zygote intra-fallopian transfer.
- GONAL-f® in association with luteinizing hormone (LH) preparation is recommended for the stimulation of follicular development in women with severe LH and FSH deficiency.

### 4.2 Posology and method of administration

Treatment with GONAL-f® 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 GONAL-f® are those in use for urinary FSH. Clinical assessment of GONAL-f® 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 GONAL-f® compared with urinary FSH. Therefore, it is considered appropriate to give a lower total dose of GONAL-f® than generally used for urinary FSH, not only in order to optimize follicular development but also to minimize the risk of unwanted ovarian hyperstimulation. See section 5.1.
Bioequivalence has been demonstrated between equivalent doses of the monodose presentation and the multidose presentation of GONAL-f®.

*Women with anovulation (including polycystic ovarian syndrome)*

GONAL-f® 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 75-150 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 mcg recombinant human choriogonadotropin alfa (r-hCG) or 5,000 IU, up to 10,000 IU hCG should be administered 24-48 hours after the last GONAL-f® injection. The patient is recommended to have coitus on the day of, and the day following, hCG administration. Alternatively intrauterine insemination (IUI) 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.

*Women undergoing ovarian stimulation for multiple follicular development prior to in vitro fertilization or other assisted reproductive technologies.*

A commonly used regimen for superovulation involves the administration of 150-225 IU of GONAL-f® 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 mcg r-hCG or 5,000 IU up to 10,000 IU hCG is administered 24-48 hours after the last GONAL-f® 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, GONAL-f® 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, 150-225 IU GONAL-f® 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 anovulation resulting from severe LH and FSH deficiency:*
In LH and FSH deficient women (hypogonadotrophic hypogonadism), the objective of GONAL-f® therapy in association with lutropin alfa is to develop a single mature Graafian follicle from which the oocyte will be liberated after the administration of human Chorionic Gonadotropin (hCG).
GONAL-f® should be given as course daily injections simultaneously with lutropin alfa. Since these patients are amenorrheic and have low endogenous estrogen secretion, treatment can commence at any time.

A recommended regimen commences at 75 IU of lutropin alfa daily with 75-150 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 7-14 day intervals and preferably by 37.5 IU- 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 microgram choriogonadotropin (r-hCG) or 5,000 IU to 10,000 IU hCG should be administered 24-48 hours after the last GONAL-f® 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 may be performed.

Luteal phase support may be considered since lack of hormones 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 (r-)hCG withheld. Treatment should recommence in the next cycle at a dose of FSH lower than that of the previous cycle.

Special population

*Elderly population*
There is no relevant use of GONAL-f® in the elderly population. Safety and effectiveness of GONAL-f® in elderly patients have not been established.

*Renal or hepatic impairment*
Safety, efficacy and pharmacokinetics of GONAL-f® in patients with renal or hepatic impairment have not been established.

Pediatric population
There is no relevant use of GONAL-f® in the pediatric population.

Method of administration

GONAL-f® is intended for subcutaneous administration. The first injection of GONAL--f should be performed under direct medical supervision. Self-administration of GONAL-f® should only be performed by patients who are well motivated, adequately trained and have access to expert advice.

As GONAL-f® prefilled pen with multidose cartridge is intended for several injections, clear instructions should be provided to the patients to avoid misuse of the multidose presentation.

For instructions on the administration with the prefilled pen, see “Instructions for Use”.

**4.3 Contraindications**

- hypersensitivity to the active substance follitropin alfa, FSH or to any of the excipients
- tumors of the hypothalamus or pituitary gland
- ovarian enlargement or ovarian cyst not due to polycystic ovarian syndrome
- gynecological hemorrhages of unknown etiology
- ovarian, uterine or mammary carcinoma

GONAL-f® must not be used when an effective response cannot be obtained, such as:

- primary ovarian failure
- malformations of sexual organs incompatible with pregnancy
- fibroid tumors of the uterus incompatible with pregnancy

**4.4 Special warnings and precautions for use**

GONAL-f® 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 professionals, as well as the availability of appropriate monitoring facilities. In women, safe and effective use of GONAL-f® calls for monitoring of 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 interpatient 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.

Porphyria

Patients with porphyria or a family history of porphyria should be closely monitored during treatment with GONAL-f®. 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 recommended GONAL-f® dose and regimen of administration, and careful monitoring of therapy will minimize 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 GONAL-f® was shown when administered with lutropin alfa. If an FSH dose increase is deemed appropriate, dose adaptation should preferably be at 7-14 day intervals and preferably with 37.5-75 IU increments.

No direct comparison of GONAL-f®/LH versus human menopausal gonadotropin (hMG) has been performed. Comparison with historical data suggests that the ovulation rate obtained with GONAL-f®/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, dyspnea, oliguria and gastrointestinal symptoms including nausea, vomiting and diarrhea. Clinical evaluation may reveal hypovolemia, hemoconcentration, electrolyte imbalances, ascites,

hemoperitoneum, pleural effusions, hydrothorax, or acute pulmonary distress. Very rarely, severe OHSS may be complicated by ovarian torsion or thromboembolic events such as pulmonary embolism, ischemic stroke or myocardial infarction.

Independent risk factors for developing OHSS include polycystic ovarian syndrome high absolute or rapidly rising serum estradiol levels (e.g. > 900 pg/mL or > 3,300 pmol/l in anovulation; > 3,000 pg/mL or > 11,000 pmol/l in ART) and large number of developing ovarian follicles (e.g. > 3 follicles of ≥ 14 mm in diameter in anovulation; ≥ 20 follicles of ≥ 12 mm in diameter in ART).

Adherence to recommended GONAL-f® 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 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 hospitalized and appropriate therapy be started.

*Multiple pregnancy*
In patients undergoing ovulation induction, the incidence of 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 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 tumors 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 recognized 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.

Sodium content
GONAL-f® contains less than 1 mmol sodium (23 mg) per dose, i.e. essentially “sodium-free”.

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

Concomitant use of GONAL-f® 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 desensitization may increase the dose of GONAL-f® needed to elicit an adequate ovarian response. No other clinically significant medicinal product interaction has been reported during GONAL-f® therapy.

**4.6 Fertility, pregnancy and lactation**

Pregnancy
There is no indication for use of GONAL-f® 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 GONAL-f®.

Breastfeeding
GONAL-f® is not indicated during breastfeeding.

Fertility
GONAL-f® is indicated for use in infertility (see section 4.1).

**4.7 Effects on ability to drive and use machines**
GONAL-f® is expected to have no or negligible influence on the ability to drive and use machines.

**4.8 Undesirable effects**
The most commonly reported adverse reactions are headache, ovarian cysts and local injection site reactions (e.g. pain, erythema, hematoma, 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, usually associated with severe OHSS (see section 4.4).
The following definitions apply to the frequency terminology used hereafter:
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)
Very rare (< 1/10,000)

**Treatment in women**

*Immune system disorders*
Very rare: Mild to severe hypersensitivity reactions including anaphylactic reactions and shock

*Nervous system disorders*
Very common: Headache

*Vascular disorders*
Rare: Thromboembolism

*Respiratory, thoracic and mediastinal disorders*
Very rare: Exacerbation or aggravation of asthma

*Gastrointestinal disorders*
Common: Abdominal pain, abdominal distension, abdominal discomfort, nausea, vomiting, diarrhea

*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, hematoma, swelling and/or irritation at the site of injection)

At the first sign of any adverse drug reaction, patient must seek medical attention immediately.
Report any suspected adverse drug reaction to ICSR_SEA@merckgroup.com and to the FDA: www.fda.gov.ph.

**4.9 Overdose**

The effects of an overdose of GONAL-f® 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.
In women, the most important effect resulting from parenteral administration of FSH is the development of mature Graafian follicles. In women with anovulation, the object of GONAL-f® therapy is to develop a single mature Graafian follicle from which the ovum will be liberated after the administration of hCG.

*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, GONAL-f® 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, GONAL-f® 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 (randomized parallel group study comparing efficacy and safety of GONAL-f® with urinary FSH in assisted reproduction technologies)

| | **GONAL-f®<br>(n=130)** | **u-FSH<br>(n=116)** |
|---|---|---|
| No. of oocytes retrieved | 11.0 ± 5.9 | 8.8 ± 4.8 |
| Days of FSH stimulation required | 11.7 ± 1.9 | 14.5 ± 3.3 |
| Total dose of FSH required (no. of FSH 75 IU ampoules) | 27.6 ± 10.2 | 40.7 ± 13.6 |
| Need to increase the dosage (%) | 56.2 | 85.3 |

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

### 5.2 Pharmacokinetic properties

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 about one day. The steady state volume of distribution and total clearance are 10 l and 0.6 l/h, respectively. One-eighth of the follitropin alfa dose is excreted in the urine.

Following subcutaneous administration, the absolute bioavailability is about 70 %. Following repeated administration, follitropin alfa accumulates 3-fold achieving a steady-state within 3-4 days. In women whose endogenous gonadotropin secretion is suppressed, follitropin alfa has nevertheless been shown to effectively stimulate follicular development and steroidogenesis, despite unmeasurable LH levels.

### 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 additional to that already stated in other sections of this package leaflet.

Impaired fertility has been reported in rats exposed to pharmacological doses of follitropin alfa (≥ 40 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 fetuses without being a teratogen, and dystocia similar to that observed with urinary Menopausal Gonadotropin (hMG). However, since GONAL-f® is not indicated in pregnancy, these data are of limited clinical relevance.

## 6. PHARMACEUTICAL PARTICULARS

### 6.1 List of excipients

Poloxamer 188

Sucrose
Methionine
Sodium dihydrogen phosphate monohydrate
Disodium phosphate dihydrate
m-Cresol
Phosphoric acid, concentrated
Sodium hydroxide
Water for injections

**6.2 Incompatibilities**
Not applicable.

**6.3 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 stored outside of the refrigerator at temperatures up to a maximum of 25°C for a single period of up to 3 months . The product must be discarded if it has not been used within these 3 months.
Keep the cap on the pen, in order to protect from light.
For in-use storage conditions:
Once opened, the medicinal product should be stored between 2°C and 25°C for a maximum of 28 days. The patient should write on the GONAL-f® prefilled pen the day of the first use.

**6.4 Nature and contents of container**
0.72 mL of solution for injection in 3 mL cartridge (Type I glass), with a plunger stopper (halobutyl rubber) and an aluminium crimp cap with a black rubber inlay.
Pack of one prefilled pen and 12 needles to be used with the pen for administration

**6.5 Special precautions for disposal and other handling**
See the “Instructions for Use”.
Prior to subcutaneous administration and if the pre-filled pen is kept refrigerated, the prefilled pen should be allowed to sit at room temperature for at least 30 minutes before injecting to allow the medicinal product to reach room temperature.
The pen must not be warmed by using a microwave or other heating element.
The solution should not be administered if it contains particles or is not clear.
Any unused solution must be discarded not later than 28 days after first opening.
GONAL-f® 450 IU/0.72 mL solution for injection in prefilled pen is not designed to allow the cartridge to be removed.
Discard used needles immediately after injection.
Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

**7. HOW TO USE GONAL-f®**
Always use GONAL-f® exactly as your doctor has told you. You should check with your doctor or pharmacist if you are not sure.

**Using this medicine**
GONAL-f® is intended to be given by injection just under the skin (subcutaneously). The prefilled pen can be used for several injections.
The first injection of GONAL-f® should be given under supervision of your doctor.
Your doctor or nurse will show you how to use the GONAL-f® prefilled pen to inject the medicine.
If you administer GONAL-f® to yourself, please carefully read and follow the “Instructions for Use”.

**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.**
- GONAL-f® is usually given every day.
- If you have irregular periods, start using GONAL-f® 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 GONAL-f® is 75 to 150 IU (0.12 to 0.24 mL) each day.
- Your dose of GONAL-f® 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 GONAL-f® is usually not higher than 225 IU (0.36 mL).

- When you get the desired response, you will be given a single injection of 250 mcg 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 GONAL-f® 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 GONAL-f® should be stopped. For the following treatment cycle, your doctor will give you a higher starting dose of GONAL-f® than before.

If your body responds too strongly, your treatment will be stopped and you will not be given any hCG (see section 4.4, OHSS). For the following cycle, your doctor will give you a lower dose of GONAL-f® than before.

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

- The usual starting dose of GONAL-f® is 150 to 225 IU (0.24 to 0.36 mL) each day, from day 2 or 3 of your treatment cycle.
- GONAL-f® dose may be increased, depending on your response. The maximum daily dose is 450 IU (0.72 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 mcg “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 GONAL-f® 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 GONAL-f® is started approximately two weeks after start of agonist treatment. The GONAL-f® 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 GONAL-f® is administered for 7 days. The dose is then adjusted according to your ovarian response. When GnRH antagonist is used, it is administered from the 5th or 6th day of GONAL-f® treatment and continued until ovulation induction.

**CAUTION:** Foods, Drugs, Devices, and Cosmetics Act prohibits dispensing without prescription.

**Date of First Authorization**
07 February 2006

**Registration Number**
BR-829

**Storage Condition**
Store at temperatures between 2°C to 8°C.

**8. MANUFACTURER**
**Merck Serono S.p.A**
Via delle Magnolie 15 (loc. frazione Zona Industriale)
70026 Modugno (BA), Italy

Imported by **Merck, Inc.**
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26th Street corner 9th Avenue
Bonifacio Global City, Taguig

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