

# Steps for Self-Injection of GONAL-f® RFF\* Redi-ject®

An Easy to Use Injectable Pen<sup>†</sup>



## **How to use GONAL-f RFF\* Redi-ject**

Do not inject GONAL-f RFF\* Redi-ject at home until your healthcare provider has taught you the right way to inject it. GONAL-f RFF\* Redi-ject is for injection into the skin of the abdominal area. Choose a different injection site each day to minimize redness, irritation, or other skin problems.

Please read the following instructions carefully.

## PREP:

## Before you get started



Remove your medicine from the refrigerator approximately 30 minutes before you inject to let it warm to room temperature.



Wash your hands with soap and water to keep the things you use as clean as possible.



Gather everything you need on a clean, flat surface:

- one GONAL-f RFF\* Redi-ject prefilled pen
- · one disposable needle
- · one alcohol pad
- · one sharps container

†A study of 60 participants evaluated the study injector after receiving training. Of the participants, 23 were patients (women with infertility) and rated the injector pen for ease of use (1 = difficult and 7 =easy). Approximately, 5% of patients rated a 5, 70% rated a 6, and 25% rated a 7.

#### INDICATIONS

Gonal-f® RFF\* Redi-ject® (follitropin alfa injection) is a prescription medicine containing follicle-stimulating hormone (FSH) used in infertile women to:

- help ovulation and pregnancy in women who are infertile due to a cause other than primary ovarian failure
- cause your ovaries to make multiple (more than 1) eggs as part of an Assisted Reproductive Technology (ART) program

## IMPORTANT RISK INFORMATION Do not use Gonal-f® RFF\* Redi-ject® if you:

- are allergic to recombinant human FSH or any of the ingredients listed on the product carton or package insert
- have levels of FSH indicating primary gonadal failure
- are pregnant or think you may be

pregnant due to the potential hazard to a fetus

- have uncontrolled thyroid, adrenal or pituitary problems
- have a tumor in your female organs, including your ovaries, breast, or uterus
- have a tumor in your brain, such as a tumor in your pituitary or hypothalamus
- have abnormal bleeding from your uterus or vagina
- have ovarian cysts or large ovaries with unknown cause, not due to polycystic ovary syndrome (PCOS)

Before using Gonal-f® RFF\* Rediject®, tell your healthcare provider about your medical history including any prescription or over-the-counter medicines, vitamins and herbal supplements used, whether you have or have had asthma, abdominal surgery, ovarian cysts, polycystic ovarian disease, blood clots (thrombosis) or family history of blood clots, or are breastfeeding or plan to breastfeed.

## Gonal-f® RFF\* Redi-ject® may cause serious side effects, including:

- Severe or fatal allergic reactions. Stop using Gonal-f® RFF\* Redi-ject® and go to the hospital right away if you have symptoms of an allergic reaction which can include shortness of breath, swelling of your face, itchy, red bumps or rash on your skin (hives).
- Stomach bloating or pain caused by enlargement of your ovaries, or fluid build-up in your stomach, chest and heart caused by ovarian hyperstimulation syndrome (OHSS). OHSS can require hospitalization and in rare cases has caused death. Call your healthcare provider right away if

you have symptoms of OHSS, including trouble breathing, severe lower stomach (pelvic) area pain, decreased urine output, nausea, vomiting, weight gain, and diarrhea.

- Gonal-f® RFF\* can also cause or worsen lung problems (including severe shortness of breath and asthma), blood and blood vessel problems (including clots and stroke) which in rare cases have caused death.
- Twisting of your ovary, which requires medical attention.
- Chances of having a baby with birth defects may increase in a baby born after an ART cycle and can be impacted by maternal age, paternal sperm problems, and genetic background associated with the egg and sperm.
- Use of Gonal-f® RFF\* Redi-ject® can result in pregnancy with more than 1 baby and the birth of multiple babies.
- Ectopic pregnancy (pregnancy outside

your womb).

An increased risk of miscarriage.

- If you have used fertility medicines like Gonal-f® RFF\* Redi-ject® before to get pregnant, you may have an increased chance of having tumors in your ovary(ies) (including cancer).
- Ultrasound and lab tests should be used to monitor treatment.

## The most common side effects of Gonal-f® RFF\* Redi-ject® include:

 In Ovulation Induction headache, abdominal pain, and ovarian hyperstimulation

Please see Important Risk Information continued on page 2 and accompanying full <u>Prescribing</u> <u>Information</u> and <u>Patient Information</u>.

\*RFF = revised formulation female.

## **Preparing the pen**



Pull off the pen cap and peel off the needle seal.

Call your healthcare provider if the pen is cracked, the liquid is discolored or cloudy, or the needle seal is broken.



Push the needle on the clear, plastic end of the pen, and twist the needle until you cannot twist it anymore.

Do not attach the needle too tightly, as it could be difficult to remove after the injection.

Pull off the outer needle cap and save it for later.



Keeping the needle pointing up, carefully pull off the green inner needle shield and throw it away.



If you're using a new pen, check for a droplet of liquid at the tip of the needle. If you don't see a droplet, follow the steps below.

When re-using a pen, you do not need to check for a droplet. Proceed to Setting the dose. Please make sure to use a new needle provided for every injection within the package.



## Creating a droplet of liquid



Turn the dose knob until the dose information display on the pen reads 25.



With the needle pointing up, gently tap the reservoir so that any air bubbles rise to the top.



Keeping the needle pointing up, slowly press the dose knob in all the way until one or more tiny drops of liquid appear at the tip of the needle.



Release the dose knob and make sure the dose information display reads 0.

## Setting the dose and preparing the injection site



Turn the dose knob until your intended dose shows in the dose information display.

You can turn the dose knob backward if you turn it past your intended dose. Call your healthcare provider if you are unsure of your dosage.



Select your injection site and wipe the skin with an alcohol pad to clean the site.

## **Injecting your dose**



Pinch the previously cleaned skin around the injection site with one hand.



GONAL-f RFF\* Redi-ject is given by injection under your skin. Hold the pen at a 90° angle to the injection site and push the needle into your skin.



Use your thumb to press the dose knob straight down as far as it will go for 5 seconds. After a slow count of 5, remove the needle from your skin and **then** release the dose knob.



You must remove the needle from the pen and throw it away after each injection to avoid risk of infection. If the pen is empty after your injection, throw it away in an FDA-cleared sharps disposal container. Do not reuse or share syringes or needles.

See FAQs for safe disposal of your pen.

## Completing an incomplete dose

If you've finished your injection and the dose information display on your pen does not read 0, your injection was incomplete. A second GONAL-f RFF\* Redi-ject pen will be needed to finish your dose. On the new pen, dial the number that appears in the dose information display on the empty pen, then repeat the "Injecting Your Dose" step above.



#### **MORE SUPPORT**

Scan the QR code to watch an injection video for GONAL-f RFF\* Redi-ject (follitropin alfa for injection).

For more support materials, visit **EMDSeronoFertility.com.** 

#### **FAQs**

#### How do I properly dispose of medicine products?

All used needles, syringes, and vials should be discarded in an FDA-cleared sharps disposal container immediately after use.

If you do not have a sharps container, do not throw away loose needles, syringes, and vials in your household trashcan. Instead, use a container that is:

- made of heavy-duty plastic
- able to be closed with a tight-fitting, puncture-resistant lid
- upright and stable during use
- leak resistant
- properly labeled to warn of hazardous waste inside the container

For more information, visit www.fda.gov/safesharpsdisposal.

#### How do I know the pen is totally empty?

When your combined injected doses equal the number of IUs available in your pen and the dosing window reads 0, your device is empty. Ask your healthcare provider about keeping a treatment diary to help you keep better track of your injections.

## Can I still use my medication if I left it outside in a car during hot or cold weather?

GONAL-f RFF\* Redi-ject must be stored with the cap attached and away from light. New pens should be kept in the refrigerator between 36 °F and 46 °F until the expiration date, or at room temperature between 68 °F and 77 °F for up to 3 months or until the expiration date, whichever comes first.

If medicine is left in the pen after injecting, it may be stored in the refrigerator or at room temperature for up to 28 days before safely discarding.

For more information about storing your medication, call Fertility LifeLines™ support at 1-866-538-7879 or contact your healthcare provider.

#### **IMPORTANT RISK INFORMATION (continued)**

• <u>In ART</u> - abdominal pain, nausea, abdominal enlargement, headache and injection site bruising

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088. Or contact EMD Serono at 1-800-283-8088.

Use Gonal-f® RFF\* Redi-ject® as directed and do not change your dose unless directed. Do not share your Gonal-f® RFF\* Redi-ject® and needles with another person; you may give another person an infection or get an infection from them.

Carefully review the Gonal-f® RFF\* Redi-ject® Instructions for Use that comes with the Pen for information about the correct use of Gonal-f® RFF\* Redi-ject® and follow all training and instruction provided by your healthcare provider.

Please see full <u>Prescribing Information</u> and <u>Patient Information</u> for GONAL-f RFF\* Redi-ject provided with this tear pad and in your product carton, or visit online. Please also see Instructions for Use (IFU) in your product carton.

\*RFF = revised formulation female.



HIGHLIGHTS OF PRESCRIBING INFORMATION These highlights do not include all the information needed to use GONAL-f® RFF Redi-ject® safely and effectively. See full prescribing information for GONAL-f® RFF Redi-ject®

GONAL-f® RFF Redi-ject® (follitropin alfa) injection for subcutaneous use

## Initial U.S. Approval: 1997

### — INDICATIONS AND USAGE—

GONAL-f® RFF Redi-ject® is a prefilled gonadotropincontaining auto-injection device indicated for:

- Induction of ovulation and pregnancy in oligoanovulatory women in whom the cause of infertility is functional and not due to primary ovarian failure (1.1)
- Development of multiple follicles in ovulatory women as part of an Assisted Reproductive Technology (ART) cycle (1.2)

## -DOSAGE AND ADMINISTRATION —

### Ovulation Induction (2.2)

- Initial starting dose of the first cycle 75 International Units of GONAL-f<sup>®</sup> RFF Redi-ject<sup>®</sup> per day for 14 days, administered subcutaneously
- Individualization doses after 14 days
- Doses larger than 300 International Units of FSH per day are not recommended

## Assisted Reproductive Technology (2.3)

- Initial starting dose of the first cycle 150 International Units per day, administered subcutaneously
- Dosage adjustments after 3-5 days and by 75-150 International Units at each adjustment
- Do not administer doses greater than 450 International Units per day

## DOSAGE FORMS AND STRENGTHS-

- Injection: GONAL-f® RFF Redi-ject® 300 International Units per 0.48 mL in prefilled, single-patient-use pen (3)
- Injection: GONAL-f® RFF Redi-ject® 450 International Units per 0.72 mL in prefilled, single-patient-use pen (3)
- Injection: GONAL-f<sup>®</sup> RFF Redi-ject<sup>®</sup> 900 International Units per 1.44 mL in prefilled single-patient-use pen (3)

### - CONTRAINDICATIONS -

GONAL-f® RFF Redi-ject® is contraindicated in women who exhibit (4):

- Hypersensitivity to recombinant FSH preparations or one of their excipients
- High levels of FSH indicating primary gonadal failure
- Uncontrolled non-gonadal endocrinopathies
- Sex hormone dependent tumors of the reproductive tract and accessory organ.
- Tumors of pituitary gland or hypothalamus
- Abnormal uterine bleeding of undetermined origin
- Ovarian cyst or enlargement of undetermined origin, not due to polycystic ovary syndrome

## WARNINGS AND PRECAUTIONS -

- Hypersensitivity Reactions and Anaphylaxis (5.1)
- Abnormal Ovarian Enlargement (5.2)
- Ovarian Hyperstimulation Syndrome (5.3)
- Pulmonary and Vascular Complications (5.4)
- Ovarian Torsion (5.5)
- Multi-fetal Gestation and Births (5.6)
- Congenital Malformation (5.7)
- Ectopic Pregnancy (5.8)
- Spontaneous Abortion (5.9)
- Ovarian Neoplasms (5.10)

## ADVERSE REACTIONS —

- The most common adverse reactions (≥5%) in ovulation induction include: headache, abdominal pain, ovarian hyperstimulation (6.1)
- The most common adverse reactions (≥5%) in ART include: abdominal pain, nausea, abdominal enlargement, headache, injection site bruising (6.1)

To report SUSPECTED ADVERSE REACTIONS, contact EMD Serono at 1-800-283-8088, Ext 5563 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

## -USE IN SPECIFIC POPULATIONS-

- Do not use GONAL-f® RFF Redi-ject® in pregnant women (4, 8.1),
- Nursing Mothers: It is not known whether this drug is excreted in human milk. (8.3)
- Pediatric Use: Safety and efficacy not established. (8.4)
- Renal and Hepatic Insufficiency: Safety, efficacy, and pharmacokinetics of GONAL-f<sup>®</sup> RFF Redi-ject<sup>®</sup> in women with renal or hepatic insufficiency have not been established. (8.6)

See 17 for PATIENT COUNSELING INFORMATION and FDA-approved patient labeling

Revised: 03/2025

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<sup>\*</sup>Sections or subsections omitted from the Full Prescribing Information are not listed

## **FULL PRESCRIBING INFORMATION**

### 1 INDICATIONS AND USAGE

## 1.1 Induction of Ovulation and Pregnancy in Oligo-Anovulatory Women in whom the Cause of Infertility is Functional and Not Due to Primary Ovarian Failure.

Prior to initiation of treatment with GONAL-f® RFF Redi-ject®:

- Perform a complete gynecologic and endocrinologic evaluation
- Exclude primary ovarian failure
- Exclude the possibility of pregnancy
- Demonstrate tubal patency
- Evaluate the fertility status of the male partner

## 1.2 Development of Multiple Follicles in Ovulatory Women as Part of an Assisted Reproductive Technology (ART) Cycle.

Prior to initiation of treatment with GONAL-f® RFF Redi-ject®:

- Perform a complete gynecologic and endocrinologic evaluation, and diagnose the cause of infertility
- Exclude the possibility of pregnancy
- Evaluate the fertility status of the male partner

### 2 DOSAGE AND ADMINISTRATION

## 2.1 General Dosing Information

- Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit.
- GONAL-f® RFF Redi-ject® is a pre-filled disposable auto-injection device intended for multiple dose use.
- GONAL-f® RFF Redi-ject® can be set in 12.5 International Units increments.
- Administer GONAL-f<sup>®</sup> RFF Redi-ject<sup>®</sup> subcutaneously in the abdomen as described in Instructions for Use
- Do not attempt to mix any other medications inside of the device with GONAL-f® RFF Redi-ject®.
- Instruct women to remove the GONAL-f® RFF Redi-ject® from the refrigerator at least 30 minutes prior to use in order to allow GONAL-f® RFF Redi-ject® to warm to room temperature and avoid the discomfort of a cold injection.

### 2.2 Recommended Dosing for Ovulation Induction

The dosing scheme is stepwise and is individualized for each woman [see Clinical Studies (14.1)]. Starting doses less than 37.5 International Units have not been studied in clinical trials and are not recommended.

• A starting daily dose of 75 International Units of GONAL-f® RFF Redi-ject® is administered subcutaneously daily for 14 days in the first cycle of use.

In subsequent cycles of treatment, the starting dose (and dosage adjustments) of GONAL-f® RFF Redi-ject® should be determined based on the history of the ovarian response to GONAL-f® RFF Redi-ject®.

- The following should be considered when planning the woman's individualized dose:
  - Appropriate GONAL-f<sup>®</sup> RFF Redi-ject<sup>®</sup> dose adjustment(s) should be used to prevent multiple follicular growth and cycle cancellation.
  - The maximum, individualized, daily dose of GONAL-f® RFF Redi-ject® is 300 International Units per day.
  - In general, do not exceed 35 days of treatment.
- If indicated by the ovarian response after the initial 14 days, make an incremental adjustment in dose, up to 37.5 International Units.
- If indicated by the ovarian response, make additional adjustments in dose, up to 37.5 International Units, every 7 days.
- Treatment should continue until follicular growth and/or serum estradiol levels indicate an adequate ovarian response.
- When pre-ovulatory conditions are reached, administer human chorionic gonadotropin (hCG) to induce final oocyte maturation and ovulation.
  - Withhold hCG in cases where the ovarian monitoring suggests an increased risk of ovarian hyperstimulation syndrome (OHSS) on the last day of GONAL-f® RFF Rediject® therapy [see Warnings and Precautions (5.2, 5.3, 5.11)].
- Encourage the woman and her partner to have intercourse daily, beginning on the day prior to the administration of hCG and until ovulation becomes apparent.
  - Discourage intercourse when the risk for OHSS is increased [see Warnings and Precautions (5.2, 5.3)].

## 2.3 Recommended Dosing for Assisted Reproductive Technology

The dosing scheme follows a stepwise approach and is individualized for each woman.

- Beginning on cycle day 2 or 3, a starting dose of 150 International Units of GONAL-f<sup>®</sup>
  RFF Redi-ject<sup>®</sup> is administered subcutaneously daily until sufficient follicular
  development, as determined by ultrasound in combination with measurement of serum
  estradiol levels, is attained. In most cases, therapy should not exceed 10 days.
  - In women under 35 years of age whose endogenous gonadotropin levels are suppressed, initiate GONAL-f® RFF Redi-ject® administration at a dose of 150 International Units per day.
  - In women 35 years of age and older whose endogenous gonadotropin levels are suppressed, initiate GONAL-f® RFF Redi-ject® administration at a dose of 225 International Units per day.
- Adjust the dose after 5 days based on the woman's ovarian response, as determined by ultrasound evaluation of follicular growth and serum estradiol levels.
- Do not make additional dosage adjustments more frequently than every 3-5 days or by more than 75-150 International Units at each adjustment.
- Continue treatment until adequate follicular development is evident, and then administer hCG.

The administration of hCG should be withheld in cases where the ovarian monitoring suggests an increased risk of OHSS on the last day of GONAL-f® RFF Redi-ject® therapy [see Warnings and Precautions (5.2, 5.3, 5.11)].

Doses greater than 450 International Units per day are not recommended.

### 3 DOSAGE FORMS AND STRENGTHS

GONAL-f® RFF Redi-ject is a clear and colorless to slightly yellow solution available as:

 Injection: GONAL-f<sup>®</sup> RFF Redi-ject<sup>®</sup> 300 International Units per 0.48 mL in prefilled, single-patient-use pen

• Injection: GONAL-f® RFF Redi-ject® 450 International Units per 0.72 mL in prefilled,

single-patient-use pen

• Injection: GONAL-f® RFF Redi-ject® 900 International Units per 1.44 mL in prefilled,

single-patient-use pen

## 4 CONTRAINDICATIONS

GONAL-f® RFF Redi-ject® is contraindicated in women who exhibit:

- Prior hypersensitivity to recombinant FSH products
- High levels of FSH indicating primary gonadal failure
- Presence of uncontrolled non-gonadal endocrinopathies (e.g., thyroid, adrenal, or pituitary disorders) [see Indications and Usage (1.1, 1.2)]
- Sex hormone dependent tumors of the reproductive tract and accessory organs
- Tumors of pituitary gland or hypothalamus
- Abnormal uterine bleeding of undetermined origin
- Ovarian cyst or enlargement of undetermined origin, not due to polycystic ovary syndrome

## 5 WARNINGS AND PRECAUTIONS

GONAL-f® RFF Redi-ject® should only be used by physicians who are experienced in infertility treatment. GONAL-f® RFF Redi-ject® contains a gonadotropic substance capable of causing Ovarian Hyperstimulation Syndrome (OHSS) in women with or without pulmonary or vascular complications [see Warnings and Precautions (5.2, 5.3, 5.4, 5.5)] and multiple births [see Warnings and Precautions (5.6)]. Gonadotropin therapy requires the availability of appropriate monitoring facilities [see Warnings and Precautions (5.11)]. The lowest effective dose should be used.

Careful attention should be given to the diagnosis of infertility and the selection of candidates for GONAL-f® RFF Redi-ject® therapy [see Indications and Usage (1.1, 1.2) and Dosage and Administration (2.2, 2.3)].

## 5.1 Hypersensitivity Reactions and Anaphylaxis

Serious systemic hypersensitivity reactions, including anaphylaxis, have been reported in the postmarketing experience with GONAL-f® and GONAL-f® RFF. Symptoms have included dyspnea, facial edema, pruritus, and urticaria. If an anaphylactic or other serious allergic

reaction occurs, initiate appropriate therapy including supportive measures if cardiovascular instability and/or respiratory compromise occur, and discontinue further use.

## **5.2** Abnormal Ovarian Enlargement

In order to minimize the hazards associated with abnormal ovarian enlargement that may occur with GONAL-f® RFF Redi-ject® therapy, treatment should be individualized and the lowest effective dose should be used [see Dosage and Administration (2.2, 2.3)]. Use of ultrasound monitoring of ovarian response and/or measurement of serum estradiol levels is important to minimize the risk of ovarian stimulation [see Warnings and Precautions (5.11)].

If the ovaries are abnormally enlarged on the last day of GONAL-f® RFF Redi-ject® therapy, hCG should not be administered in order to reduce the chance of developing Ovarian Hyperstimulation Syndrome (OHSS) [see Warnings and Precautions (5.3)]. Intercourse should be prohibited in women with significant ovarian enlargement after ovulation because of the danger of hemoperitoneum resulting from rupture of ovarian cysts [see Warnings and Precautions (5.3)].

## 5.3 Ovarian Hyperstimulation Syndrome (OHSS)

OHSS is a medical entity distinct from uncomplicated ovarian enlargement and may progress rapidly to become a serious medical event. OHSS is characterized by a dramatic increase in vascular permeability, which can result in a rapid accumulation of fluid in the peritoneal cavity, thorax, and potentially, the pericardium. The early warning signs of development of OHSS are severe pelvic pain, nausea, vomiting, and weight gain. Abdominal pain, abdominal distension, gastrointestinal symptoms including nausea, vomiting and diarrhea, severe ovarian enlargement, weight gain, dyspnea, and oliguria have been reported with OHSS. Clinical evaluation may reveal hypovolemia, hemoconcentration, electrolyte imbalances, ascites, hemoperitoneum, pleural effusions, hydrothorax, acute pulmonary distress, and thromboembolic reactions [see Warnings and Precautions (5.4)]. Transient liver function test abnormalities suggestive of hepatic dysfunction with or without morphologic changes on liver biopsy, have been reported in association with OHSS.

OHSS occurs after gonadotropin treatment has been discontinued and it can develop rapidly, reaching its maximum about seven to ten days following treatment. Usually, OHSS resolves spontaneously with the onset of menses. If there is evidence that OHSS may be developing prior to hCG administration [see Warnings and Precautions (5.2)], the hCG must be withheld. Cases of OHSS are more common, more severe, and more protracted if pregnancy occurs; therefore, women should be assessed for the development of OHSS for at least two weeks after hCG administration.

If serious OHSS occurs, gonadotropins, including hCG, should be stopped and consideration should be given as to whether the woman needs to be hospitalized. Treatment is primarily symptomatic and overall should consist of bed rest, fluid and electrolyte management, and analgesics (if needed). Because the use of diuretics can accentuate the diminished intravascular volume, diuretics should be avoided except in the late phase of resolution as described below. The management of OHSS may be divided into three phases as follows:

## • Acute Phase:

Management should be directed at preventing hemoconcentration due to loss of intravascular volume to the third space and minimizing the risk of thromboembolic phenomena and kidney damage. Fluid intake and output, weight, hematocrit, serum and urinary electrolytes, urine specific gravity, BUN and creatinine, total proteins with

albumin: globulin ratio, coagulation studies, electrocardiogram to monitor for hyperkalemia, and abdominal girth should be thoroughly assessed daily or more often based on the clinical need. Treatment, consisting of limited intravenous fluids, electrolytes, human serum albumin, is intended to normalize electrolytes while maintaining an acceptable but somewhat reduced intravascular volume. Full correction of the intravascular volume deficit may lead to an unacceptable increase in the amount of third space fluid accumulation.

### • Chronic Phase:

After the acute phase is successfully managed as above, excessive fluid accumulation in the third space should be limited by instituting severe potassium, sodium, and fluid restriction.

#### Resolution Phase:

As third space fluid returns to the intravascular compartment, a fall in hematocrit and increasing urinary output are observed in the absence of any increase in intake. Peripheral and/or pulmonary edema may result if the kidneys are unable to excrete third space fluid as rapidly as it is mobilized. Diuretics may be indicated during the resolution phase, if necessary, to combat pulmonary edema.

Ascitic, pleural, and pericardial fluid should not be removed unless there is the necessity to relieve symptoms such as pulmonary distress or cardiac tamponade.

OHSS increases the risk of injury to the ovary. Pelvic examination or intercourse may cause rupture of an ovarian cyst, which may result in hemoperitoneum, and should therefore be avoided.

If bleeding occurs and requires surgical intervention, the clinical objective should be to control the bleeding and retain as much ovarian tissue as possible. A physician experienced in the management of this syndrome, or who is experienced in the management of fluid and electrolyte imbalances should be consulted.

During clinical trials with GONAL-f<sup>®</sup> RFF, OHSS occurred in 7.2% of 83 women and 4.6% of 237 women treated with GONAL-f<sup>®</sup> RFF for ovulation induction and during Assisted Reproductive Technology, respectively.

## 5.4 Pulmonary and Vascular Complications

Serious pulmonary conditions (e.g., atelectasis, acute respiratory distress syndrome and exacerbation of asthma) have been reported in women treated with gonadotropins. In addition, thromboembolic events both in association with, and separate from OHSS have been reported in women treated with gonadotropins including GONAL-f® RFF. Intravascular thrombosis and embolism, which may originate in venous or arterial vessels, can result in reduced blood flow to critical organs or the extremities. Women with generally recognized risk factors for thrombosis, such as personal or family history, severe obesity, or thrombophilia, may have an increased risk of venous or arterial thromboembolic events, during or following treatment with gonadotropins. Sequelae of such reactions have included venous thrombophlebitis, pulmonary embolism, pulmonary infarction, cerebral vascular occlusion (stroke), and arterial occlusion resulting in loss of limb and rarely in myocardial infarctions. In rare cases, pulmonary complications and/or thromboembolic reactions have resulted in death. In women with recognized risk factors, the benefits of ovulation induction and assisted reproductive technology need to be weighed against the risks. It should be noted that pregnancy also carries an increased risk of thrombosis.

### 5.5 Ovarian Torsion

Ovarian torsion has been reported after treatment with gonadotropins. This may be related to OHSS, pregnancy, previous abdominal surgery, past history of ovarian torsion, previous or current ovarian cyst and polycystic ovaries. Damage to the ovary due to reduced blood supply can be limited by early diagnosis and immediate detorsion.

### 5.6 Multi-fetal Gestation and Birth

Multi-fetal gestation and births have been reported with all gonadotropin therapy including therapy with GONAL-f® RFF.

During clinical trials with GONAL-f® RFF, multiple births occurred in 20% of live births in women receiving therapy for ovulation induction and 35.1 % of live births in women undergoing ART.

The woman and her partner should be advised of the potential risk of multi-fetal gestation and birth before beginning therapy with GONAL-f® RFF Redi-ject®.

## 5.7 Congenital Malformations

The incidence of congenital malformations after some ART [specifically in vitro fertilization (IVF) or intracytoplasmic sperm injection (ICSI)] may be slightly higher than after spontaneous conception. This slightly higher incidence is thought to be related to differences in parental characteristics (e.g., maternal age, maternal and paternal genetic background, sperm characteristics) and to the higher incidence of multi-fetal gestations after IVF or ICSI. There are no indications that the use of gonadotropins during IVF or ICSI is associated with an increased risk of congenital malformations.

## 5.8 Ectopic Pregnancy

Since infertile women undergoing ART often have tubal abnormalities, the incidence of ectopic pregnancy may be increased. Early confirmation of intrauterine pregnancy should be determined by  $\beta$ -hCG testing and transvaginal ultrasound.

## 5.9 Spontaneous Abortion

The risk of spontaneous abortion (miscarriage) is increased with gonadotropin products. However, causality has not been established. The increased risk may be a factor of the underlying infertility.

## 5.10 Ovarian Neoplasms

There have been infrequent reports of ovarian neoplasms, both benign and malignant, in women who have had multiple drug therapy for controlled ovarian stimulation, however, a causal relationship has not been established.

## **5.11 Laboratory Tests**

In most instances, treatment of women with GONAL-f® RFF Redi-ject® will result only in follicular growth and maturation. In the absence of an endogenous LH surge, hCG is given when monitoring of the woman indicates that sufficient follicular development has occurred. This may be estimated by ultrasound alone or in combination with measurement of serum estradiol levels. The combination of both ultrasound and serum estradiol measurement are useful for monitoring follicular growth and maturation, timing of the ovulatory trigger, detecting ovarian enlargement and minimizing the risk of the OHSS and multiple gestation.

The clinical confirmation of ovulation is obtained by direct or indirect indices of progesterone production as well as sonographic evidence of ovulation.

Direct or indirect indices of progesterone production:

- Urinary or serum luteinizing hormone (LH) rise
- A rise in basal body temperature
- Increase in serum progesterone
- Menstruation following a shift in basal body temperature

## Sonographic evidence of ovulation:

- Collapsed follicle
- Fluid in the cul-de-sac
- Features consistent with corpus luteum formation
- Secretory endometrium

### 6 ADVERSE REACTIONS

The following serious adverse reactions are discussed elsewhere in the labeling:

- Hypersensitivity Reactions and Anaphylaxis [see Warnings and Precautions (5.1)]
- Abnormal Ovarian Enlargement [see Warnings and Precautions (5.2)]
- Ovarian Hyperstimulation Syndrome [see Warnings and Precautions (5.3)]
- Atelectasis, acute respiratory distress syndrome and exacerbation of asthma [see Warnings and Precautions (5.4)]
- Thromboembolic events [see Warnings and Precautions (5.4)]
- Ovarian Torsion [see Warnings and Precautions (5.5)]
- Multi-fetal Gestation and Birth [see Warnings and Precautions (5.6)]
- Congenital Malformations [see Warnings and Precautions (5.7)]
- Ectopic Pregnancy [see Warnings and Precautions (5.8)]
- Spontaneous Abortion [see Warnings and Precautions (5.9)]
- Ovarian Neoplasms [see Warnings and Precautions (5.10)]

## 6.1 Clinical Study Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trial of another drug and may not reflect the rates observed in practice.

The safety of GONAL-f® RFF was examined in two clinical studies (one ovulation induction study and one ART study).

## Ovulation Induction

In a multiple cycle (3), assessor-blind, multinational, multicenter, active comparator study vs. a recombinant FSH comparator, a total of 83 oligo-anovulatory infertile women were randomized and underwent ovulation induction with GONAL-f® RFF. Adverse reactions occurring in at least 2.0% of women receiving GONAL-f® RFF are listed in Table 1.

Table 1: Common Adverse Reactions Reported at a Frequency of ≥ 2% in an Ovulation Induction Study

System Organ Class/Adverse Reactions	GONAL-f® RFF N=83 <sup>a</sup> (176 treatment cycles <sup>b</sup> ) n <sup>c</sup> (%)	
Central and Peripheral Nervous System		
Headache	22 (26.5%)	
Gastrointestinal System		
Abdominal Pain	10 (12.0%)	
Nausea	3 (3.6%)	
Flatulence	3 (3.6%)	
Diarrhea	3 (3.6%)	
Neoplasm		
Ovarian Cyst	3 (3.6%)	
Reproductive, Female		
Ovarian Hyperstimulation	6 (7.2%)	
Application Site		
Injection Site Pain	4 (4.8%)	
Injection Site Inflammation	2 (2.4%)	

<sup>&</sup>lt;sup>a</sup> total number of women treated with GONAL-f® RFF bup to 3 treatment cycles per woman

<sup>&</sup>lt;sup>c</sup> number of women with the adverse reaction

## Assisted Reproductive Technology

In a single cycle, assessor-blind, multinational, multicenter, active comparator study vs. a recombinant FSH comparator, a total of 237 normal ovulatory infertile women were randomized and received GONAL-f® RFF as part of an ART [in vitro fertilization (IVF) or intracytoplasmic sperm injection cycle (ICSI)] cycle. All women received pituitary down-regulation with gonadotropin releasing hormone (GnRH) agonist before stimulation. Adverse Reactions occurring in at least 2.0% of women are listed in Table 2.

Table 2: Common Adverse Reactions Reported at a Frequency of ≥ 2% in an Assisted Reproductive Technologies Study

System Organ Class/Adverse Reactions	GONAL-f <sup>®</sup> RFF N=237 <sup>a</sup> n <sup>b</sup> (%)			
Gastrointestinal System				
Abdominal Pain	55 (23.2%)			
Nausea	19 (8.0%)			
Body as a Whole- General				
Abdomen Enlarged	33 (13.9%)			
Central and Peripheral Nervous System				
Headache	44 (18.6%)			
Application Site Disorders				
Injection Site Bruising	23 (9.7%)			
Injection Site Pain	13 (5.5%)			
Injection Site Inflammation	10 (4.2%)			
Injection Site Reaction	10 (4.2%)			

Application Site Edema	6 (2.5%)	
Reproductive, Female		
Ovarian Hyperstimulation	11 (4.6%)	

a total number of women treated with GONAL-f® RFF

## 6.2 Postmarketing Experience

The following adverse reactions have been reported during postmarketing use of GONAL-f<sup>®</sup> RFF. Because these reactions were reported voluntarily from a population of uncertain size, the frequency or a causal relationship to GONAL-f<sup>®</sup> RFF cannot be reliably determined.

**Body as a Whole - General:** hypersensitivity reactions including anaphylactoid reactions [see *Warnings and Precautions (5.1)*]

Respiratory System: asthma

Vascular disorders: thromboembolism [see Warnings and Precautions (5.4)]

## 7 DRUG INTERACTIONS

No drug-drug interaction studies have been performed.

### 8 USE IN SPECIFIC POPULATIONS

## 8.1 Pregnancy

## Risk Summary

GONAL-f® RFF Redi-ject® is not indicated in pregnant women.

The incidence of congenital malformations after some Assisted Reproductive Technology (ART), procedures, specifically in vitro fertilization (IVF) or intracytoplasmic sperm injection (ICSI)], may be slightly higher than after spontaneous conception. This slightly higher incidence is thought to be related to differences in parental characteristics (e.g., maternal age, maternal and paternal genetic background, sperm characteristics) and to a higher incidence of multi-fetal gestations after IVF or ICSI. There is no human data that the use of gonadotropins (including GONAL-f® RFF Redi-ject®), alone or as part of IVF or ICSI cycles, increases the risk of congenital malformations.

The risk of spontaneous abortion (miscarriage) is increased in women who have used gonadotropins products (including GONAL-f® RFF Redi-ject®) to achieve pregnancy.

In animal studies, the continuous administration of recombinant human FSH during pregnancy resulted in a decrease in the number of viable fetuses and difficult and prolonged delivery. No teratogenic effect has been observed.

b number of women with the adverse reaction

In the US general population, the estimated background risk of major birth defects and miscarriage after spontaneous clinically recognized pregnancies, is 2% to 4% and 15% to 20%, respectively.

## <u>Data</u>

#### Human Data

Data on a limited number of exposed pregnancies indicate no adverse reactions of gonadotropins on pregnancy, embryonal or fetal development, parturition or postnatal development following controlled ovarian stimulation.

#### Animal Data

Embryofetal development studies with recombinant human FSH in rats, where dosing occurred during organogenesis, showed a dose dependent increase in difficult and prolonged parturition in dams, and dose dependent increases in resorptions, pre- and post-implantation losses, and stillborn pups at doses representing 5 and 41 times the lowest clinical dose of 75 IU based on body surface area. Pre-/post-natal development studies with recombinant human FSH in rats, where dosing occurred from mid-gestation through lactation, showed difficult and prolonged parturition in all dams dosed at 41 times the lowest clinical dose of 75 IU based on body surface area, along with maternal death and stillborn pups associated with the difficult and prolonged parturition. This toxicity was not observed in dams and offspring dosed at a level 5 times the lowest clinical dose of 75 IU based on body surface area.

### 8.2 Lactation

There are no data on the presence of GONAL-F RFF in human milk, the effects on the breastfed infant, or the effects on milk production. Because the secretion of prolactin during lactation can result in inadequate response to ovarian stimulation, advise women not to breast feed during treatment with GONAL-f® RFF Redi-ject®.

## 8.3 Females and Males of Reproductive Potential

Since GONAL-f<sup>®</sup> RFF Redi-ject<sup>®</sup> is not indicated in pregnant women, verify a negative pregnancy test before administering GONAL-f<sup>®</sup> RFF Redi-ject<sup>®</sup> to a woman [see Dosage and Administration (2.2, 2.3)].

### 8.4 Pediatric Use

Safety and effectiveness in pediatric patients have not been established.

## 8.6 Renal and Hepatic Insufficiency

Safety, efficacy, and pharmacokinetics of GONAL-f® RFF Redi-ject® in women with renal or hepatic insufficiency have not been established.

### 10 OVERDOSAGE

Aside from possible OHSS [see Warnings and Precautions (5.3)] and multiple gestations [see Warnings and Precautions (5.6)], there is no additional information on the consequences of acute overdosage with GONAL-f® RFF Redi-ject®.

## 11 DESCRIPTION

Follitropin alfa, a gonadotropin [human follicle stimulating hormone (hFSH)], is a glycoprotein hormone produced by recombinant DNA technology in a Chinese Hamster Ovary (CHO) cell line. It has a dimeric structure consisting of two glycoprotein subunits (alpha and beta). The alpha and beta subunits have 92 and 111 amino acids, respectively, and their primary and tertiary structures are indistinguishable from those of human follicle stimulating hormone. The molecular weight is approximately 31 kDa (14 kDa for alpha subunit and 17 kDa for beta subunit).

GONAL-f® RFF Redi-ject® (follitropin alfa) injection is a sterile, clear and colorless to slightly yellow solution in disposable, prefilled single-patient-use pen intended for the subcutaneous use.

Each GONAL-f® RFF Redi-ject® pen delivers 300 International Units (22 mcg) follitropin alfa in 0.48 mL and the inactive ingredients: dibasic sodium phosphate (0.43 mg), m-cresol (1.47 mg), methionine (0.05 mg), monobasic sodium phosphate (0.19 mg), poloxamer (0.05 mg), sucrose (29.47 mg) and Water for Injection USP. Phosphoric acid and/or sodium hydroxide may be used to adjust the pH to 7.

Each GONAL-f® RFF Redi-ject® pen delivers 450 International Units (33 mcg) follitropin alfa in 0.72 mL and the inactive ingredients: dibasic sodium phosphate (0.65 mg), m-cresol (2.21 mg), methionine (0.07 mg), monobasic sodium phosphate (0.29 mg), poloxamer (0.07 mg), sucrose (44.20 mg) and Water for Injection USP. Phosphoric acid and/or sodium hydroxide may be used to adjust the pH to 7.

Each GONAL-f® RFF Redi-ject® pen delivers 900 International Units (66 mcg) follitropin alfa in 1.44 mL and the inactive ingredients: dibasic sodium phosphate (1.3 mg), m-cresol (4.42 mg), methionine (0.15 mg), monobasic sodium phosphate (0.58 mg), poloxamer (0.15 mg), sucrose (88.41 mg) and Water for Injection USP. Phosphoric acid and/or sodium hydroxide may be used to adjust the pH to 7.

Under current storage conditions, GONAL-f® RFF Redi-ject® may contain up to 10% of oxidized follitropin alfa.

## 12 CLINICAL PHARMACOLOGY

## 12.1 Mechanism of Action

Follicle stimulating hormone (FSH), the active component in GONAL-f® RFF Redi-ject®, is required for normal follicular growth, follicular maturation, and gonadal steroid production. The level of FSH is critical for the onset and duration of follicular development, and consequently for the timing and number of follicles reaching maturity.

GONAL-f® RFF Redi-ject® stimulates ovarian follicular growth in women who do not have primary ovarian failure. In order to effect the final phase of follicle maturation, resumption of meiosis, and rupture of the follicle in the absence of an endogenous LH surge, human chorionic gonadotropin (hCG) must be given following treatment with GONAL-f® RFF Redi-ject® when monitoring of the woman indicates that appropriate follicular development parameters have been achieved. There is inter-woman variability in response to FSH administration.

## 12.3 Pharmacokinetics

Single-dose pharmacokinetics of follitropin alfa were determined following subcutaneous administration of 300 International Units of GONAL-f® RFF Redi-ject® to 21 pre-menopausal healthy female volunteers who were pituitary down-regulated with a GnRH agonist.

The descriptive statistics for the pharmacokinetic parameters are presented in Table 3.

Table 3: Pharmacokinetic parameters of FSH following administration of GONAL-f<sup>®</sup> RFF Redi-ject<sup>®</sup> (300 International Units subcutaneously in a single dose)

Parameter	Healthy Volunteers (N=21)	
	Mean	% CV
AUC <sub>last</sub> (IU hr/L)	884	20%
C <sub>max</sub> (IU/L)	9.83	23%
t <sub>max</sub> (hr)	15.5	43%
t <sub>1/2</sub> (hr)	53	52%

Abbreviations are: C<sub>max</sub>: peak concentration (above baseline)

 $t_{max}$ : time of  $C_{max}$  $t_{1/2}$ : elimination half life

## **Absorption**

The absorption rate of GONAL-f® RFF Redi-ject® following subcutaneous administration is slower than the elimination rate. Hence, the pharmacokinetics of GONAL-f® RFF Redi-ject® are absorption rate-limited.

## Distribution

Human tissue or organ distribution of FSH has not been determined for GONAL-f® RFF Rediject®.

#### Metabolism/Excretion

FSH metabolism and excretion following administration of GONAL-f® RFF Redi-ject® have not been studied in humans.

### 13 NONCLINICAL TOXICOLOGY

### 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

Long-term studies in animals have not been performed to evaluate the carcinogenic potential of GONAL-f® RFF Redi-ject®. However, follitropin alfa showed no mutagenic activity in a series of tests performed to evaluate its potential genetic toxicity including, bacterial and mammalian cell mutation tests, a chromosomal aberration test and a micronucleus test.

Impaired fertility has been reported in rats, exposed to pharmacological doses of follitropin alfa (greater than or equal to 40 International Units per kg per day, greater than or equal to 5 times the lowest clinical dose of 75 International Units) for extended periods, through reduced fecundity.

## 14 CLINICAL STUDIES

The safety and efficacy of GONAL-f® RFF were examined in two clinical studies (one ovulation induction study and one ART study).

## 14.1 Ovulation Induction (OI)

Ovulation induction was evaluated in a randomized, assessor-blind, multinational, multicenter, active-controlled, study in oligo-anovulatory infertile women. Women were randomized to either GONAL-f® RFF (n=83), administered subcutaneously, or a comparator recombinant human FSH. The use of insulin-sensitizing agents was allowed during the study. The study was designed to evaluate and compare mean ovulation rates in the first cycle of treatment. Results for GONAL-f® RFF are presented in Table 4. Also presented in this table are secondary outcome results from cycle 1 through cycle 3. The study was not powered to demonstrate differences in any of the secondary outcomes.

Table 4: Cumulative Ovulation and Clinical Pregnancy Rates in Ovulation Induction

Cycle -	GONAL-f® RFF (n=83)	
	Cumulative <sup>a</sup> Percent Ovulation	Cumulative <sup>a</sup> Clinical Pregnancy <sup>d</sup> Rate
Cycle 1	72% <sup>b</sup>	28% <sup>c</sup>
Cycle 2	89% <sup>c</sup>	41% <sup>c</sup>
Cycle 3	92% <sup>c</sup>	45%°

<sup>&</sup>lt;sup>a</sup> Cumulative rates were determined per woman over cycles 1, 2, and 3.

## 14.2 Assisted Reproductive Technology (ART)

The efficacy of GONAL-f® RFF was evaluated in a randomized, assessor-blind, multinational, multicenter, active controlled study in healthy normal ovulatory, infertile women treated for one cycle with controlled ovarian stimulation, as part of an ART [in vitro fertilization (IVF), or intracytoplasmic sperm injection (ICSI)] cycle. Women were randomized to either GONAL-f® RFF (n=237), administered subcutaneously, or a comparator recombinant human FSH. Randomization was stratified by insemination technique, (IVF vs. ICSI). All women received pituitary down-regulation with a GnRH agonist before stimulation with recombinant FSH. Efficacy was assessed using the mean number of fertilized oocytes the day after insemination. The initial doses of GONAL-f® RFF were 150 International Units per day for women less than 35 years of age and 225 International Units per day for women 35 years of age and older. The maximum dose given for both age groups was 450 International Units per day. Treatment outcomes for GONAL-f® RFF are summarized in Table 5.

**Table 5: Treatment Outcomes in ART** 

Study Outcome	value (n)
Mean number of 2PN oocytes per woman	6.3 (237) <sup>a</sup>

<sup>&</sup>lt;sup>b</sup> Non-inferior to comparator recombinant human FSH based on a two-sided 95% confidence interval, intent-to-treat analysis.

<sup>&</sup>lt;sup>c</sup> Secondary efficacy outcomes. The study was not powered to demonstrate differences in these outcomes.

<sup>&</sup>lt;sup>d</sup> Clinical pregnancy was defined as a pregnancy for which a fetal sac (with or without heart activity) was visualized by ultrasound on day 34-36 after hCG administration.

Mean number of 2PN oocytes per subject receiving IVF	6.1 (88) <sup>b</sup>
Mean number of 2PN oocytes per subject receiving ICSI	6.5 (132) <sup>b</sup>
Clinical pregnancy <sup>c</sup> rate per attempt	33.5% (218) <sup>d</sup>
Clinical pregnancy <sup>c</sup> rate per embryo transfer	35.8% (204) <sup>d</sup>
Mean treatment duration in days (range)	9.7 [3-21] (230) <sup>d</sup>

<sup>&</sup>lt;sup>a</sup> Non-inferior to comparator recombinant human FSH based on a two-sided 95% confidence interval, intent-to-treat analysis.

#### 16 HOW SUPPLIED/STORAGE AND HANDLING

## 16.1 How Supplied

GONAL-f® RFF Redi-ject® (follitropin alfa) injection is a disposable, prefilled single-patient-use pen containing a clear and colorless to slightly yellow solution. Each Redi-ject® is supplied in a carton containing 31G x 5/16 inch disposable needles to be used for administration.

## The following package presentations are available:

NDC 44087-1115-1 - One GONAL-f® RFF Redi-ject® delivers 300 International Units per 0.48 mL and 5 single-use disposable 31G x 5/16" needles

NDC 44087-1116-1 - One GONAL-f® RFF Redi-ject® delivers 450 International Units per 0.72 mL and 7 single-use disposable 31G x 5/16" needles

NDC 44087-1117-1 - One GONAL-f® RFF Redi-ject® delivers 900 International Units per 1.44 mL and 14 single-use disposable 31G x 5/16" needles

## 16.2 Storage and Handling

Pharmacy Storage: Refrigerate at 2°C to 8°C (36°F to 46°F) until dispensed.

Patient Storage: Refrigerate at 2°C to 8°C (36°F to 46°F) until the expiration date, or store at room temperature at 20° to 25°C (68°F to 77°F) for up to three months or until the expiration date, whichever occurs first. Store pen in the original carton to protect from light. After the first injection, store refrigerated at 2°C to 8°C (36°F to 46°F) or at room temperature at 20°C to 25°C (68°F to 77°F) for up to 28 days. Keep the cap on the pen to protect from light. Do not freeze. Discard unused material after 28 days.

## 17 PATIENT COUNSELING INFORMATION

See FDA-approved patient labeling (Patient Information and Instructions for Use)

## 17.1 Dosing and Use of GONAL-f® RFF Redi-ject®

Instruct women on the correct usage and dosing of GONAL-f® RFF Redi-ject® [see Dosage and Administration (2.2, 2.3)]. Instruct women to view the dose display in bright light and to adjust the position of the GONAL-f® RFF Redi-ject® to minimize dose window glare. Caution women not to change the dosage or the schedule of administration unless she is told to do so by her healthcare provider. Instruct women to remove the GONAL-f® RFF Redi-ject® from the

<sup>&</sup>lt;sup>b</sup> Subgroup analyses. The study was not powered to demonstrate differences in subgroups.

<sup>&</sup>lt;sup>c</sup> A clinical pregnancy was defined as a pregnancy during which a fetal sac (with or without heart activity) was visualized by ultrasound on day 35-42 after hCG administration.

<sup>&</sup>lt;sup>d</sup> Secondary efficacy outcomes. The study was not powered to demonstrate differences in these outcomes.

refrigerator at least 30 minutes prior to use in order to allow GONAL-f® RFF Redi-ject® to warm to room temperature and avoid the discomfort of a cold injection.

## 17.2 Duration and Necessary Monitoring in Women Undergoing Therapy with GONAL-f<sup>®</sup> RFF Redi-ject<sup>®</sup>

Prior to beginning therapy with GONAL-f® RFF Redi-ject®, inform women about the time commitment and monitoring procedures necessary for treatment [see Dosage and Administration (2.2, 2.3) and Warnings and Precautions (5.11)].

## 17.3 Instructions Regarding a Missed Dose

Inform the woman that if she misses or forgets to take a dose of GONAL-f® RFF Redi-ject®, the next dose should not be doubled and she should call her healthcare provider for further dosing instructions.

## 17.4 Ovarian Hyperstimulation Syndrome

Inform women regarding the risks of OHSS [see Warnings and Precautions (5.3)] and OHSS-associated symptoms including lung and blood vessel problems [see Warnings and Precautions (5.4)] and ovarian torsion [see Warnings and Precautions (5.5)] with the use of GONAL-f® RFF Redi-ject®.

## 17.5 Multi-fetal Gestation and Birth

Inform women regarding the risk of multi-fetal gestation and birth with the use of GONAL-f<sup>®</sup> RFF Redi-ject<sup>®</sup> [see Warnings and Precautions (5.6)]

Manufactured by: EMD Serono, Inc., Boston, MA 02210 U.S.A.

U.S. License number: 1773

### PATIENT INFORMATION

## $\begin{array}{l} \text{GONAL-f}^{\circledR} \text{ RFF Redi-ject}^{\circledR} \text{ (gon-AL-eff } \text{ ar-eff-eff REH dee-jekt)} \\ \text{ (follitropin alfa)} \end{array}$

injection, for subcutaneous use

## GONAL-f RFF\* Redi-ject (follitropin alfa) injection for subcutaneous use

Read this Patient Information before you start using GONAL-f RFF Redi-ject and each time you get a prescription refill. There may be new information. This information does not take the place of talking to your healthcare provider about your medical condition or your treatment.

## What is GONAL-f RFF Redi-ject?

GONAL-f RFF Redi-ject is an injection Pen that delivers a prescription medicine containing follicle-stimulating hormone (FSH) used in infertile women to:

- help healthy ovaries develop (mature) and release an egg
- cause your ovaries to make multiple (more than 1) eggs as part of an Assisted Reproductive Technology (ART) program

## Who should not use GONAL-f RFF Redi-ject? Do not use the GONAL-f RFF Redi-ject if you:

- are allergic to recombinant human FSH or any of the ingredients in GONAL-f RFF Redi-ject. See the end of this leaflet for a complete list of ingredients in GONAL-f RFF Redi-ject.
- have a high level of FSH in your blood that shows your ovaries no longer make eggs (primary ovarian failure)
- have uncontrolled thyroid, adrenal, or pituitary problems
- have a tumor in your female organs, including your ovaries, breast, or uterus that may get worse with high levels of estrogen
- have a tumor in your brain, such as a tumor in your pituitary or hypothalamus
- have abnormal bleeding from your uterus or vagina from an unknown cause
- have ovarian cysts or large ovaries from an unknown cause

## What should I tell my healthcare provider before using GONAL-f RFF Redi-ject? Before you use GONAL-f RFF Redi-ject, tell your healthcare provider if you:

- have or have had asthma
- have been told by a healthcare provider that you have an increased risk for blood clots (thrombosis)
- have ever had a blood clot (thrombosis), or anyone in your family has ever had a blood clot (thrombosis)
- have had stomach (abdominal) surgery
- have had twisting of your ovary (ovarian torsion)
- had or have a cyst on your ovary
- have polycystic ovarian disease
- have any other medical conditions
- are pregnant or think you may be pregnant. GONAL-f RFF Redi-ject is not for pregnant women. Your healthcare provider will give you a pregnancy test before starting GONAL-f RFF Redi-ject.
- are breastfeeding. It is not known if GONAL-f RFF Redi-ject passes into your breast milk. You and your healthcare provider should decide if you will take GONAL-f RFF Redi-ject or breastfeed. You should not do both.
- are not an adult. GONAL-f RFF Redi-ject is not for children. It is not known if GONAL-f RFF Redi-ject is safe or works for children.

**Tell your healthcare provider about all the medicines you take**, including prescription and over-the-counter medicines, vitamins, and herbal supplements.

Know the medicines you take. Keep a list of them to show your healthcare provider and pharmacist when you get a new medicine.

### How should I use GONAL-f RFF Redi-ject?

- Read the "Instructions for Use" that comes with GONAL-f RFF Redi-ject for information about the right way to use GONAL-f RFF Redi-ject.
- GONAL-f RFF Redi-ject is given by injection under your skin. Do not inject GONAL-f RFF Redi-ject until
  your healthcare provider has taught you the correct way to use it.
- Change your injection site as your healthcare provider showed you.
- Use GONAL-f RFF Redi-ject exactly as your healthcare provider tells you to use it.
- Do not change your dose of GONAL-f RFF Redi-ject unless your healthcare provider tells you to.
- Call your healthcare provider if you have any questions about your dose or how to use GONAL-f RFF Redi-ject

## What are the possible side effects of GONAL-f RFF Redi-ject

GONAL-f RFF Redi-ject may cause serious side effects, including:

- severe allergic reactions. Women who have used GONAL-f, GONAL-f RFF, or GONAL-f RFF Redi-ject in the past may have a severe allergic reaction right away when they use GONAL-f RFF Redi-ject again. This severe allergic reaction may lead to death. If you have any of the following symptoms of a severe allergic reaction, stop using GONAL-f RFF Redi-ject and go to the hospital right away:
  - o shortness of breath
  - swelling of your face
  - o itchy, red bumps or rash on your skin (hives)
- **ovaries that are too large.** GONAL-f RFF Redi-ject may cause your ovaries to be abnormally large. Symptoms of large ovaries include bloating or pain in your lower stomach (pelvic) area.
- ovarian hyperstimulation syndrome (OHSS). Using GONAL-f RFF Redi- ject may cause OHSS. OHSS is a
  serious medical condition that can happen when your ovaries produce too many eggs (overstimulated). OHSS
  can cause fluid to suddenly build up in the area of your stomach, chest, and heart, and can cause blood clots to
  form. In rare cases OHSS has caused death. OHSS may also happen after you stop using GONAL-f RFF Rediject. Stop using GONAL-f RFF Redi-ject and call your healthcare provider right away if you have symptoms of
  OHSS, including:
  - trouble breathing
  - o severe lower stomach (pelvic) area pain
  - o decreased urine output
  - o nausea
  - vomiting
  - o weight gain
  - diarrhea
- **lung problems.** GONAL-f RFF Redi-ject may cause serious lung problems including fluid in your lungs (atelectasis), trouble breathing (acute respiratory distress syndrome), and worsening of asthma.
- blood clots. GONAL-f RFF Redi-ject may increase your chance of having blood clots in your blood vessels. Blood clots can cause:
  - o blood vessel problems (thrombophlebitis)
  - stroke
  - loss of your arm or leg
  - blood clot in your lung (pulmonary embolus)
- twisting (torsion) of your ovary. GONAL-f RFF Redi-ject may increase the chance of your ovary twisting if you
  already have certain conditions such as OHSS, pregnancy and previous abdominal surgery. Twisting of your ovary
  may lead to blood flow being cut off to your ovary.
- pregnancy with and birth of multiple babies. GONAL-f RFF Redi-ject may increase your chance of having a pregnancy with more than 1 baby. Having a pregnancy and giving birth to more than 1 baby at a time increases the health risk for you and your babies. Your healthcare provider should tell you about your chances of multiple births.
- **birth defects.** A baby born after an ART cycle may have an increased chance of having birth defects. Your chances of having a baby with birth defects may increase depending on:
  - o your age
  - o certain sperm problems
  - your genetic background and that of your partner
  - o a pregnancy with more than 1 baby at a time
- ectopic pregnancy (pregnancy outside your womb). GONAL-f RFF Redi-ject may increase your chance of having a pregnancy that is abnormally outside of your womb. Your chance of having a pregnancy outside of your womb is increased if you also have fallopian tube problems. Call your healthcare provider right away if you have symptoms of an ectopic pregnancy including:
  - stomach or pelvic pain especially on one side
  - o shoulder pain
  - o neck pain
  - rectal pain
  - nausea and vomiting
- miscarriage. Your chance of loss of an early pregnancy may be increased if you had difficulty becoming pregnant.
- tumors of the ovary. If you have used medicines like GONAL-f RFF Redi-ject more than 1 time to get pregnant, you may have an increased chance of having tumors in your ovary(ies) (including cancer).

The most common side effects of GONAL-f RFF Redi-ject include:

- ovarian cvst
- headache

- OHSS
- stomach pain
- stomach bloating
- gas
- · bruising at the injection site
- nausea
- diarrhea

These are not all the possible side effects of GONAL-f RFF Redi-ject. For more information, call your healthcare provider or pharmacist.

Tell your healthcare provider if you have any side effect that bothers you or that does not go away.

Call your healthcare provider for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-

## How should I store GONAL-f RFF Redi-ject?

- Before you use GONAL-f RFF Redi-ject for the first time, store your Pen in the original carton to protect from light:
  - o in the refrigerator between 36°F to 46°F (2°C to 8°C) until the expiration date, or
  - o store your Pen at room temperature between 68°F to 77°F (20°C to 25°C) for up to 3 months or until the expiration date, whichever comes first
- After you use GONAL-f RFF Redi-ject and there is still medicine left, store your Pen in the refrigerator between 36°F to 46°F (2°C to 8°C) or at room temperature between 68°F to 77°F (20°C to 25°C) up to 28 days. Throw away any unused GONAL-f RFF Redi-ject after 28 days.
- Store your GONAL-f RFF Redi-ject with the Pen cap on in a safe place.
- Store GONAL-f RFF Redi-ject away from light.
- Do not freeze GONAL-f RFF Redi-iect.

## Keep GONAL-f RFF Redi-ject and all medicines out of the reach of children.

### General Information about the safe and effective use of GONAL-f RFF Redi-ject.

Medicines are sometimes prescribed for purposes other than those listed in a Patient Information leaflet. Do not use GONAL-f RFF Redi-ject for a condition for which it was not prescribed. Do not give GONAL-f RFF Redi-ject to other people, even if they have the same condition that you have. It may harm them.

This Patient Information leaflet summarizes the most important patient information about GONAL-f RFF Redi-ject. If you would like more information, talk with your healthcare provider. You can ask your pharmacist or healthcare provider for information about GONAL-f RFF Redi-ject that is written for health professionals.

## What are the ingredients in GONAL-f RFF Redi-ject?

Active ingredient: follitropin alfa

Inactive ingredients: dibasic sodium phosphate, m-cresol, methionine, monobasic sodium phosphate, poloxamer, sucrose and Water for Injection. Phosphoric acid and/or sodium hydroxide may be used for pH adjustment.

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For more information, go to www.fertilitylifelines.com, or call 1-866-538-7879.

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