AUSTRALIAN PRODUCT INFORMATION - MENOPUR® (human menopausal gonadotrophin) powder and solvent for injection

1 NAME OF THE MEDICINE

Human menopausal gonadotrophin (hMG).

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

MENOPUR 600 IU (600 IU/mL after reconstitution)
MENOPUR 1200 IU (600 IU/mL after reconstitution)

MENOPUR 600 IU: Each multidose vial with powder contains highly purified human menopausal gonadotrophin (hMG) corresponding to follicle stimulating hormone (FSH) activity 600 IU and luteinising hormone (LH) activity 600 IU.

MENOPUR 1200 IU: Each multidose vial with powder contains highly purified human menopausal gonadotrophin (hMG) corresponding to follicle stimulating hormone (FSH) activity 1200 IU and luteinising hormone (LH) activity 1200 IU.

Excipients with known effect: Not applicable.

For the full list of excipients, see Section 6.1 LIST OF EXCIPIENTS.

3 PHARMACEUTICAL FORM

Powder and solvent for solution for injection.

Appearance of powder: White to off-white lyophilisation cake.

Appearance of solvent: Clear colourless solution.

4 CLINICAL PARTICULARS

4.1 THERAPEUTIC INDICATIONS

MENOPUR is indicated for the treatment of infertility in the following clinical situations:

Anovulatory infertility, including polycystic ovarian disease (PCOD), in women who have been unresponsive to treatment with clomiphene citrate.

Controlled ovarian hyperstimulation to induce the development of multiple follicles for assisted reproductive technologies (ART) (e.g. in vitro fertilisation/embryo transfer (IVF/ET), gamete intra-fallopian transfer (GIFT) and intracytoplasmic sperm injection (ICSI)).

4.2 DOSE AND METHOD OF ADMINISTRATION

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

There are great inter-individual variations in the response of the ovaries to exogenous gonadotrophins. This makes it impossible to set a uniform dosage scheme. Therefore, the dosage should be adjusted individually depending on the ovarian response. MENOPUR can be given alone or in combination with a gonadotrophin-releasing hormone (GnRH) agonist or antagonist. Recommendations about dosage and duration of treatment may change depending on the actual treatment protocol.

Women with anovulatory infertility (including PCOD)

The object of MENOPUR therapy is to develop a single Graafian follicle from which the oocyte will be liberated after the administration of human chorionic gonadotrophin (hCG).

MENOPUR therapy should start within the initial 7 days of the menstrual cycle. The recommended initial dose of MENOPUR is 75–150 IU daily, which should be maintained for at least 7 days. Based on clinical monitoring (including ovarian ultrasound alone or in combination with measurement of oestradiol levels), subsequent dosing should be adjusted according to individual patient response. Adjustments in dose should not be made more frequently than every 7 days. The recommended dose increment is 37.5 IU per adjustment, and should not exceed 75 IU. The maximum daily dose should not be higher than 225 IU. If a patient fails to respond adequately after 4 weeks of treatment, that cycle should be abandoned, and the patient should recommence treatment at a higher starting dose than in the abandoned cycle.

When an optimal response is obtained, a single injection of 5,000–10,000 IU hCG should be given 1 day after the last MENOPUR 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 to MENOPUR is obtained, treatment should be stopped, hCG withheld (see Section 4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE) and the patient should use a barrier method of contraception or refrain from having coitus until the next menstrual bleeding has started.

Women undergoing controlled ovarian hyperstimulation for multiple follicular development for assisted reproductive technologies (ART)

In a protocol using downregulation with a GnRH agonist, MENOPUR therapy should start approximately two weeks after the start of the agonist treatment. In a protocol using downregulation with a GnRH antagonist, MENOPUR therapy should start on Day 2 or 3 of the menstrual cycle.

The recommended initial dose of MENOPUR is 150–225 IU daily for at least the first 5 days of treatment. Based on clinical monitoring (including ovarian ultrasound alone or in combination with measurement of oestradiol levels) subsequent dosing should be adjusted according to individual patient response, and should not exceed more than 150 IU per adjustment. The maximum daily dose given should not be higher than 450 IU daily and, in most cases, dosing beyond 20 days is not recommended.

When a suitable number of follicles have reached an appropriate size, a single injection of up to 10,000 IU hCG should be administered to induce final follicular maturation in preparation for oocyte retrieval. Patients should be followed closely for at least two weeks after hCG administration. If an excessive response to MENOPUR is obtained treatment should be stopped, hCG withheld (see Section 4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE) and the patient should use a barrier method of contraception or refrain from having coitus until the next menstrual bleeding has started.

Method of administration

MENOPUR is intended for subcutaneous (SC) injection after reconstitution with the solvent provided.

The powder should be reconstituted prior to use. The reconstituted solution is for multiple injections and can be used for up to 28 days. Each reconstituted MENOPUR 600 IU or 1200 IU vial should be for individual patient use only.

<u>General</u>

Shaking should be avoided. The solution should not be used if it contains particles or if it is not clear.

Instructions for use and handling

The powder should only be reconstituted with the solvent provided in the package.

Attach the reconstitution needle to the prefilled syringe. Inject the total contents of solvent into the vial containing the powder. MENOPUR 600 IU must be reconstituted with one pre-filled syringe with solvent before use. MENOPUR 1200 IU must be reconstituted with two pre-filled syringes with solvent before use. The powder should dissolve quickly to a clear solution. If not, roll the vial gently between the hands until the solution is clear. Shaking should be avoided.

The single use administration syringes with pre-fixed needle are graduated in FSH/LH units from 37.5 - 600 IU and are supplied separately. Draw up the reconstituted solution from the vial into the administration syringe for injection according to the prescribed dose. Each mL of reconstituted solution contains 600 IU FSH and LH activity.

Draw up the exact dose of reconstituted solution from the vial into the syringe for injection and administer the dose immediately.

General

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

4.3 CONTRAINDICATIONS

Pregnancy and lactation.

Hypersensitivity to the active substance or any of the excipients used in the formulation.

MENOPUR is contraindicated in women who have:

- Tumours of the pituitary gland or hypothalamus
- Ovarian, uterine or mammary carcinoma
- Gynaecological haemorrhage of unknown aetiology
- Ovarian cysts or enlarged ovaries not due to polycystic ovarian disease

In the following situations treatment outcome is unlikely to be favourable, and therefore MENOPUR should not be administered:

- Primary ovarian failure
- Malformation of sexual organs incompatible with pregnancy
- Fibroid tumours of the uterus incompatible with pregnancy

4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE

The active ingredient in this preparation is extracted from human urine. Therefore, the risk of transmission of a pathogen (known or unknown) cannot be completely excluded.

The luteinising hormone activity of MENOPUR is almost totally contributed by hCG, which has a longer plasma half-life than luteinising hormone. As a consequence, the duration of luteinising hormone activity of MENOPUR may differ from that of recombinant products.

MENOPUR 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.

Gonadotrophin therapy requires a certain time commitment by physicians and supportive health professionals, and calls for monitoring of ovarian response with ultrasound, alone or in combination with measurement of serum oestradiol levels, on a regular basis. There is considerable inter-patient variability in response to human menopausal gonadotrophin

administration, with a poor response to hMG in some patients. The lowest effective dose in relation to the treatment objective should be used.

The first injection of MENOPUR should be performed under direct medical supervision.

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, hyperprolactinaemia and pituitary or hypothalamic tumours, and appropriate specific treatment given.

Patients undergoing stimulation of follicular growth, whether in the frame of a treatment for anovulatory infertility or ART procedures, may experience ovarian enlargement or develop hyperstimulation. Adherence to recommended MENOPUR dosage and administration regimen, and careful monitoring of therapy will minimise the incidence of such events. Acute interpretation of the indices of follicle development and maturation requires a physician who is experienced in the interpretation of the relevant tests.

Ovarian Hyperstimulation Syndrome (OHSS)

OHSS is a medical event distinct from uncomplicated ovarian enlargement. OHSS is a syndrome 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 symptoms may be observed in severe cases of OHSS: abdominal pain, abdominal distension, severe ovarian enlargement, weight gain, dyspnoea, oliguria and gastrointestinal symptoms including nausea, vomiting and diarrhoea. Clinical evaluation may reveal hypovolaemia, haemoconcentration, electrolyte imbalances, ascites, haemoperitoneum, pleural effusions, hydrothorax, acute pulmonary distress, and thromboembolic events.

Excessive ovarian response to gonadotrophin treatment seldom gives rise to OHSS unless hCG is administered to trigger ovulation. Therefore, in cases of ovarian hyperstimulation it is prudent to withhold hCG and advise the patient to refrain from coitus or to use barrier methods for at least 4 days. OHSS may progress rapidly (within 24 hours to several days) to become a serious medical event, therefore patients should be followed for at least two weeks after the hCG administration.

Adherence to recommended MENOPUR dosage, regimen of administration and careful monitoring of therapy will minimise the incidence of ovarian hyperstimulation and multiple pregnancy. In ART, aspiration of all follicles prior to ovulation may reduce the occurrence of hyperstimulation.

OHSS may be more severe and more protracted if pregnancy occurs. Most often, OHSS occurs after hormonal treatment has been discontinued and reaches its maximum severity at about seven to ten days following treatment. Usually, OHSS resolves spontaneously with the onset of menses.

If severe OHSS occurs, gonadotrophin treatment should be stopped if still ongoing, the patient hospitalised and specific therapy for OHSS started.

Women with polycystic ovarian syndrome (PCOS) are at higher risk of developing OHSS. Other reported risk factors that increase the risk of developing OHSS include previous episodes of OHSS, many follicles and high level of oestradiol.

Systemic diseases

MENOPUR is anticipated to be used in patients who, apart from infertility, are otherwise healthy. The safety of MENOPUR in individuals with systemic disease, including renal or hepatic disease, has not been studied and the safety profile in these individuals is unknown. Caution should be used when prescribing MENOPUR to individuals with clinically relevant systemic disease.

Multiple pregnancy

Multiple pregnancy, especially high order, carries an increased risk of adverse maternal and perinatal outcomes.

In patients undergoing ovulation induction with gonadotrophins, the incidence of multiple pregnancies is increased compared with natural conception. The majority of multiple conceptions are twins. 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 age of the patient.

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

Pregnancy wastage

The incidence of pregnancy wastage by miscarriage or abortion is higher in patients undergoing stimulation of follicular growth for ART procedures than in the normal population.

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 treatment. The prevalence of ectopic pregnancy after IVF has been reported to be 2–5%, as compared to 1–1.5% 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 drug regimens for infertility treatment. It is not yet established if treatment with gonadotrophins increases the baseline risk of these tumours in infertile women.

Congenital malformation

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

Thromboembolic events

Women with generally recognised risk factors for thromboembolic events, such as personal or family history, severe obesity (Body Mass Index > 30 kg/m^2) or thrombophilia may have an increased risk of venous or arterial thromboembolic events, during or following treatment with gonadotrophins. In these women, the benefits of gonadotrophin administration need to be weighed against the risks. It should be noted however, that pregnancy itself also carries an increased risk of thromboembolic events.

Use in the elderly

MENOPUR should not be used in the elderly.

Paediatric use

MENOPUR should not be used in children.

Effects on laboratory tests

No data available.

4.5 INTERACTIONS WITH OTHER MEDICINES AND OTHER FORMS OF INTERACTIONS

No interaction studies have been conducted with MENOPUR in humans.

Although there is no controlled clinical experience, it is expected that the concomitant use of MENOPUR and clomiphene citrate may enhance the follicular response. When using GnRH agonists for pituitary desensitisation, a higher dose of MENOPUR may be necessary to achieve adequate follicular response.

4.6 FERTILITY, PREGNANCY AND LACTATION

Effects on fertility

MENOPUR is indicated for use in infertility (see Section 4.1 THERAPEUTIC INDICATIONS).

Use in pregnancy

(Category C)

MENOPUR is contraindicated in women who are pregnant (see Section 4.3 CONTRAINDICATIONS). Although no adequate animal studies have been conducted with MENOPUR, based on its pharmacology and reproductive studies conducted with similar products, an increase in embryonic resorptions and post-implantation loss may be expected at clinically relevant doses.

Use in lactation

MENOPUR should not be used during lactation (see Section 4.3 CONTRAINDICATIONS).

4.7 EFFECTS ON ABILITY TO DRIVE AND USE MACHINES

No studies on the effects on the ability to drive and use machines have been performed. However, MENOPUR is unlikely to have influence on the patient's ability to drive and use machines.

4.8 ADVERSE EFFECTS (UNDESIRABLE EFFECTS)

Clinical trials

The most frequently reported adverse drug reactions (ADRs) reported during treatment with MENOPUR in clinical trials are OHSS, headache, pelvic pain, pelvic discomfort, abdominal pain, abdominal distension, nausea and injection site reactions, with incidence rates up to 5%.

Table 1 displays the main ADRs in women treated with MENOPUR in clinical trials distributed by system organ classes (SOCs) and frequency.

Table 1: Adverse Reactions – Clinical Trials

System Organ Class	Common (≥1/100 to <1/10)	Uncommon (≥1/1,000 to <1/100)	Rare (≥1/10,000 to <1/1,000)
Gastrointestinal disorders	Abdominal pain, Abdominal distension, Nausea	Vomiting, Abdominal discomfort, Diarrhoea	
General disorders and administration site conditions	Injection site reactions [a]	Fatigue	
Nervous system disorders	Headache	Dizziness	
Reproductive system disorders	OHSS [b], Pelvic pain [c]	Ovarian cyst, Breast complaints [d]	
Skin and subcutaneous tissue disorders			Acne, Rash
Vascular disorders		Hot flush	

[a] Most frequently reported injection site reaction was injection site pain.

[b] Gastrointestinal symptoms associated with OHSS such as abdominal distension and discomfort, nausea, vomiting, diarrhoea have been reported with MENOPUR in clinical trials. In cases of severe OHSS, ascites and pelvic fluid collection, pleural effusion, dyspnoea, oliguria, thromboembolic events and ovarian torsion have been reported as rare complications (see Table 2).

[c] Pelvic pain includes ovarian pain and adnexa uteri pain.

[d] Breast complaints include breast pain, breast tenderness, breast discomfort, nipple pain and breast swelling.

Post-marketing experience

Table 2 displays ADRs reported in women treated with MENOPUR in the post-marketing period, distributed by system organ classes (SOCs). The ADRs seen during post-marketing experience are mentioned with unknown frequency.

Table 2: Adverse Reactions – Post Marketing

System Organ Class	Unknown
Eye disorders	Visual impairment
General disorders and administration site conditions	Pyrexia, Malaise
Immune system disorders	Hypersensitivity reactions [a]
Investigations	Weight increased
Musculoskeletal and connective tissue disorders	Musculoskeletal pain [b]
Reproductive system disorders	Ovarian torsion [c]
Skin and subcutaneous tissue disorders	Pruritus, Urticaria
Vascular disorders	Thromboembolism [c]

[a] Cases of localised or generalised allergic reactions, including anaphylactic reaction, along with associated symptomatology have been reported rarely.

[b] Musculoskeletal pain includes arthralgia, back pain, neck pain and pain in extremities.

[c] In cases of severe OHSS, ascites and pelvic fluid collection, pleural effusion, dyspnoea, oliguria, thromboembolic events and ovarian torsion have been reported as rare complications.

Reporting suspected adverse effects

Reporting suspected adverse reactions after registration of the medicinal product is important. It allows continued monitoring of the benefit-risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions at www.tga.gov.au/reporting-problems.

4.9 OVERDOSE

The effects of an overdose are unknown, nevertheless one could expect ovarian hyperstimulation syndrome to occur (see Section 4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE).

For information on the management of overdose, contact the Poison Information Centre on 13 11 26 (Australia).

5 PHARMACOLOGICAL PROPERTIES

5.1 PHARMACODYNAMIC PROPERTIES

Mechanism of action

Pharmacotherapeutic group: Gonadotrophins
ATC code: G03G A02

Human Chorionic Gonadotrophin (hCG), a naturally occurring hormone in postmenopausal urine, is present in MENOPUR and is the main contributor of the LH activity.

MENOPUR, which contains both FSH and LH activity, induces ovarian follicular growth and development as well as gonadal steroid production in women who do not have primary ovarian failure. FSH is the primary driver of follicular recruitment and growth in early folliculogenesis, while LH is important for ovarian steroidogenesis and is involved in the physiological events leading to the development of a competent pre-ovulatory follicle. Follicular growth can be stimulated by FSH in the total absence of LH, but the resulting follicles develop abnormally and are associated with low oestradiol levels and inability to luteinise to a normal ovulatory stimulus.

In line with the action of LH activity in enhancing steroidogenesis, oestradiol levels associated with treatment with MENOPUR are higher than with recombinant FSH preparations in downregulated IVF/ICSI cycles. This issue should be considered when monitoring patients' response based on oestradiol levels. The difference in oestradiol levels is not found when using low-dose ovulation induction protocols in anovulatory patients.

Clinical trials

Anovulatory infertility

CS002 was a prospective randomised clinical trial in 184 women with WHO Group II anovulatory infertility failing to ovulate or conceive on clomiphene citrate. Ovarian stimulation was achieved using a low-dose step-up protocol. The study was designed to document the non-inferiority of MENOPUR SC versus a recombinant FSH preparation (GONAL-F) SC with respect to ovulation rate after one cycle of gonadotrophin treatment.

MENOPUR was demonstrated to be non-inferior to rFSH with respect to ovulation rate (Table 3). In addition to the PP and ITT analyses yielding identical conclusions, the result of the sensitivity analysis adjusting for age and BMI was consistent, supporting the robustness of the conclusion drawn from the primary analysis. Significantly fewer intermediate-sized follicles were observed in the MENOPUR group ($P<0.05$). The singleton live birth rate was comparable

between the two groups. The frequency of ovarian hyperstimulation syndrome and/or cancellation due to excessive response was 2.2% with MENOPUR and 9.8% with rFSH (P=0.058).

Table 3: Efficacy outcomes of anovulation in study CS002 (one cycle of treatment)

Parameter	PP		ITT	
	MENOPUR SC	rFSH SC	MENOPUR SC	rFSH SC
Ovulation rate (%)	85.7	85.5	83.5	84.9
Lower limit of 95% CI*	-11%		-12%	

*Pre-specified non-inferiority limit was -20%

Controlled ovarian hyperstimulation

Study 0399E (European and Israeli Study Group trial, EISG), was a Phase 3, randomised study in 727 infertile females undergoing ovarian stimulation to produce multiple follicles for IVF and embryo transfer (IVF/ET) after pituitary suppression with a GnRH agonist. The study was designed to demonstrate non-inferiority of MENOPUR with respect to a recombinant FSH preparation (GONAL-F). The pre-specified non-inferiority limit was -10%. Randomisation was stratified by insemination technique (conventional IVF vs ICSI). Efficacy was assessed based on the primary efficacy parameter of ongoing pregnancy. The initial daily dose of gonadotrophin was 225 IU SC for 5 days. Thereafter the dose was individualised according to each patient's response, up to a maximum of 450 IU/day for a total maximum duration of stimulation of 20 days. Treatment outcomes are summarised in Table 4. The result confirmed that MENOPUR is non-inferior to rFSH with respect to ongoing pregnancy rates. Rates of clinical and biochemical pregnancies were also comparable, as were overall safety results.

Table 4: Efficacy Outcomes for IVF study 0399E (one cycle of treatment)

Parameter	MENOPUR SC (n = 373)	rFSH SC (n = 354)
Ongoing pregnancy	87 (23.3%)	73 (20.6%)
Clinical pregnancy	98 (26.3%)	78 (22.0%)

CS003 (MENOPUR versus recombinant FSH (GONAL-F) in vitro fertilisation trial, MERIT), was a Phase 3, randomised study in 731 women undergoing IVF following downregulation with a GnRH agonist. The study was designed as a superiority study (convertible to non-inferiority with a pre-specified non-inferiority limit of an odds ratio of 0.65) with respect to the primary outcome measure, ongoing pregnancy rate. Randomisation was stratified by age. The starting dose of gonadotrophin was 225 IU SC for the first 5 days. Thereafter the dose could be adjusted individually, according to the subject's follicular response. Treatment outcomes are summarised in Table 5. The odds ratio of ongoing pregnancy was 1.25 in favour of MENOPUR (95% CI 0.89-1.75). Non-inferiority of MENOPUR with respect to rFSH was demonstrated (Table 5).

Table 5: Efficacy Outcomes for IVF study CS003

Parameter	MENOPUR SC (n = 363)	rFSH SC (n = 368)
Ongoing pregnancy	97 (26.7%)	82 (22.3%)
Clinical pregnancy	100 (27.5%)	87 (23.6%)

A retrospective integrated analysis, comprising 986 IVF patients and 472 ICSI patients in these two trials, has been performed. In patients undergoing IVF, the live birth rate per cycle initiated was 26.5% (130/491) with MENOPUR and 20.8% (103/495) with rFSH (P=0.041). The odds

ratio in favour of MENOPUR was 1.36 (95% CI: 1.01-1.83). Results for patients undergoing ICSI showed no statistically significant difference in live birth rate between MENOPUR and rFSH.

5.2 PHARMACOKINETIC PROPERTIES

The pharmacokinetic profile of the FSH in MENOPUR has been documented. After 7 days of repeated dosing with 150 IU MENOPUR in downregulated healthy female volunteers, maximum plasma FSH concentration (baseline-corrected) (mean ± SD) was 8.9 ± 3.5 IU/L for the SC administration. Maximum FSH concentrations were reached within 7 hours. After repeated administration, FSH was eliminated with a half-life (mean ± SD) of 30 ± 11 hours for the SC administration. Although the individual LH concentration versus time curves show an increase in the LH concentration after dosing with MENOPUR, the data available were too sparse to be subjected to a pharmacokinetic analysis. In a bioequivalence study (CS05) utilising a single dose of 450 IU of MENOPUR in downregulated healthy female volunteers, serum hCG was below the assay limit of detection at baseline in all subjects, consistent with their non-pregnant pre-menopausal state, and rose following administration of MENOPUR in a time profile similar to that of FSH.

Human menopausal gonadotrophin is excreted primarily via the kidneys.

The pharmacokinetics of MENOPUR in patients with renal or hepatic impairment has not been investigated.

5.3 PRECLINICAL SAFETY DATA

Genotoxicity

The genotoxic potential of MENOPUR has not been investigated. Gonadotrophins are naturally occurring proteins and unlikely to pose a genotoxic risk.

Carcinogenicity

No carcinogenicity studies have been performed in animals.

6 PHARMACEUTICAL PARTICULARS

6.1 LIST OF EXCIPIENTS

Powder: Lactose monohydrate, polysorbate 20, dibasic sodium phosphate heptahydrate, phosphoric acid.

Solvent: Metacresol, water for injections.

6.2 INCOMPATIBILITIES

MENOPUR should not be administered in the same injection with other products.

6.3 SHELF LIFE

In Australia, information on the shelf life can be found on the public summary of the Australian Register of Therapeutic Goods (ARTG). The expiry date can be found on the packaging.

6.4 SPECIAL PRECAUTIONS FOR STORAGE

Store in a refrigerator (2–8°C). Do not freeze. Store in the original container. To reduce microbiological hazard, the reconstituted solution should be stored in a refrigerator and must be discarded after 28 days. Chemical and in-use stability have been demonstrated for reconstituted product stored for up to 28 days at not more than 25°C.

6.5 NATURE AND CONTENTS OF CONTAINER

MENOPUR is available in the following containers and pack sizes:

MENOPUR 600 IU

Powder: 2 mL colourless glass (Type I glass) vial with rubber stopper sealed with a cap.

Solvent: 1 mL pre-filled syringe (Type I glass) with rubber tip cap, plunger, and rubber stopper.

The product is supplied as a pack containing one vial of powder, one pre-filled syringe with solvent for reconstitution and one needle for reconstitution. Disposable administration syringes (graduated in FSH/LH units with pre-fixed needles) are supplied separately.

MENOPUR 1200 IU

Powder: 2 mL colourless glass (Type I glass) vial with rubber stopper sealed with a cap.

Solvent: Two 1 mL pre-filled syringes (Type I glass) with rubber tip cap, plunger, and rubber stopper.

The product is supplied as a pack containing one vial of powder, two pre-filled syringes with solvent for reconstitution and one needle for reconstitution. Disposable administration syringes (graduated in FSH/LH units with pre-fixed needles) are supplied separately.

6.6 SPECIAL PRECAUTIONS FOR DISPOSAL

In Australia, any unused medicine or waste material should be disposed of in accordance with local requirements.

6.7 PHYSICOCHEMICAL PROPERTIES

Chemical structure

Human menopausal gonadotrophin (hMG) is described in both the British Pharmacopoeia (BP) and the United States Pharmacopeia (USP) as Menotrophin. Highly purified hMG drug substance is obtained from the urine of menopausal/postmenopausal women. Highly purified hMG is an almost white or slightly yellow powder containing not less than 2000 IU of FSH and LH activity per mg of substance. It is soluble in water. The three gonadotrophins luteinising hormone (LH), human chorionic gonadotrophin (hCG) and follicle stimulating hormone (FSH) have been identified in the drug substance.

Human chorionic gonadotrophin (hCG), a naturally occurring hormone in postmenopausal urine, is present in MENOPUR and is the main contributor of the LH activity.

CAS number

9002-68-0

7 MEDICINE SCHEDULE (POISONS STANDARD)

(S4) Prescription Only Medicine

8 SPONSOR

Ferring Pharmaceuticals Pty Ltd
Suite 2, Level 1, Building 1
20 Bridge Street
Pymble NSW 2073
Australia

Toll free: 1800 337 746

9 DATE OF FIRST APPROVAL

13 September 2011

10 DATE OF REVISION

03 September 2024

For the most current approved PI, please refer to https://www.ebs.tga.gov.au/ or http://www.ferring.com.au/

Summary table of changes

Section changed	Summary of new information
6.5	Deletion of alcohol pads due to their discontinuation.
All	Minor editorial changes.