1. NAME OF THE MEDICINAL PRODUCT

PILL 72^{*}

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each tablet contains 0.75 mg levonorgestrel.

Each tablet also contains 82.25 mg of lactose monohydrate.

For a full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Tablet

White to off-white, circular, flat, bevelled, uncoated tablets plain on both sides.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Emergency contraception within 72 hours of unprotected sexual intercourse or failure of a contraceptive method.

4.2 Posology and method of administration

For oral administration, the treatment course comprises two tablets.

The highest efficacy is achieved if the first tablet is taken as soon as possible (and no later than 72 hours) after unprotected intercourse.

The second tablet should be taken 12 hours (and no later than 16 hours) after the first tablet (for efficacy data, see section 5.1).

If vomiting occurs within two hours of taking a tablet, another tablet should be taken immediately. If repeated vomiting occurs, the tablet may be administered vaginally.

PILL 72 can be used at any time during the menstrual cycle unless menstrual bleeding is overdue.

After using emergency contraception it is recommended to use a local barrier method (condom, cervical cap) until the next menstrual period starts. The use of PILL 72 does not contraindicate the continuation of regular hormonal contraception.

PILL 72 is not recommended for use by young women aged under 16 years without medical supervision.

4.3 Contraindications

- Hypersensitivity to the active substance or to any of the excipients listed in section 6.1.
- Known or suspected pregnancy.

4.4 Special warnings and precautions for use

Emergency contraception is not effective in terminating an existing pregnancy.

Emergency contraception is an occasional method. It should **not** replace a regular contraceptive method.

Emergency contraception does not prevent a pregnancy in every instance.

Efficacy appears to decline with time (see section 5.1).

^{*} Trade names are not prequalified by WHO. This is the national medicines regulatory authority's (NMRA) responsibility. Throughout this WHOPAR the proprietary name is given as an example only.

If there is uncertainty about the timing of the unprotected intercourse or if the woman has had unprotected intercourse more than 72 hours earlier in the same menstrual cycle, conception may have occurred. Treatment with PILL 72 following the second act of intercourse may therefore be ineffective in preventing pregnancy. If menstrual periods are delayed by more than 5 days or abnormal bleeding occurs at the expected date of menstrual periods or pregnancy is suspected for any other reason, pregnancy should be ruled out.

If pregnancy occurs after treatment with PILL 72, the possibility of an ectopic pregnancy should be considered, especially in women in whom severe abdominal pain or fainting occurs, or if there is a history of ectopic pregnancy, Fallopian tube surgery or pelvic inflammatory disease. Ectopic pregnancy may continue despite uterine bleeding. Therefore, PILL 72 is not recommended for women at risk of ectopic pregnancy (history of salpingitis or of ectopic pregnancy).

PILL 72 is not recommended in patients with severe hepatic dysfunction.

Severe malabsorption syndromes, such as Crohn's disease, might impair the efficacy of PILL 72.

The tablets contain lactose monohydrate. Patients with rare hereditary problems of galactose intolerance, the Lapp lactase deficiency or glucose-galactose malabsorption may experience symptoms of intolerance.

After taking PILL 72, menstrual periods are usually normal and occur at the expected date. They can sometimes occur earlier or later than expected by a few days. Women should be advised to see a health care provider to initiate or adopt a method of regular contraception. If no withdrawal bleed occurs in the next pill-free period following the use of PILL 72 after regular hormonal contraception, pregnancy should be ruled out.

Repeated administration within a menstrual cycle is not advisable because of the possibility of disturbing the cycle.

Any regular contraceptive method can be started immediately after the use of PILL 72 emergency contraceptive pills. If the woman starts a hormonal contraceptive:

- she needs to abstain from sexual intercourse or use barrier contraception for 7 days;
- she should be advised to have a pregnancy test if she does not have a withdrawal bleed within 3 weeks.

PILL 72 is not as effective as a conventional regular method of contraception and is suitable only as an emergency measure. Women who present for repeated courses of emergency contraception should be advised to consider long-term methods of contraception.

Use of emergency contraception does not replace the necessary precautions against sexually transmitted diseases.

4.5 Interaction with other medicinal products and other forms of interaction

The metabolism of levonorgestrel is enhanced by concomitant use of liver enzyme inducers.

Drugs suspected of having the capacity to reduce the efficacy of levonorgestrel include barbiturates (including primidone), phenytoin, carbamazepine, herbal medicines containing St. John's wort (*Hypericum perforatum*), rifampicin, ritonavir, rifabutin, bosentan, felbamate, oxcarbazepine and griseofulvin. Women taking such drugs should be referred to the doctor for advice.

Significant changes (increase or decrease) in the plasma levels of the progestogen have been noted in some cases of co-administration with HIV protease inhibitors or with non-nucleoside reverse transcriptase inhibitors. The potential interaction may require close monitoring, alteration of drug dosage or timing of administration.

Medicines containing levonorgestrel may increase the risk of ciclosporin toxicity due to possible inhibition of ciclosporin metabolism.

4.6 Pregnancy and lactation

Pregnancy

PILL 72 should not be given to pregnant women. It will not interrupt the pregnancy.

In case of failure of this emergency contraception and developing pregnancy, epidemiological studies indicate no adverse effects of progestogens on the fetus. There are no clinical data on the potential consequences if doses greater than 1.5 mg levonorgestrel are taken (see section 5.3.).

Lactation

Levonorgestrel is secreted into breast milk. Potential exposure of an infant to levonorgestrel can be reduced if the breast-feeding woman takes the tablets immediately after feeding and avoids nursing following each PILL 72 administration.

Fertility

Clinical experience reveal no effect on fertility after use of levonorgestrel. Non-clinical studies show no evidence of adverse effects in animals (see section 5.3)

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.

4.8 Undesirable effects

The most common adverse events (>10%) in the clinical trial for women receiving levonorgestrel 0.75 mg included nausea (23%), abdominal pain (18%), fatigue (17%), headache (17%), dizziness (11%), breast tenderness (11%) and menstrual changes (26%).

The table below shows those adverse events that occurred in \geq 5% of levonorgestrel 0.75 mg users.

Table 3 Adverse events in \geq 5% of women, by frequency				
Adverse events	Levonorgestrel 0.75 mg (n = 977)			
Nausea	23.1%			
Abdominal pain	17.6%			
Fatigue	16.9%			
Headache	16.8%			
Heavier menstrual bleeding	13.8%			
Lighter menstrual bleeding	12.5%			
Dizziness	11.2%			
Breast tenderness	10.7%			
Vomiting	5.6%			
Diarrhea	5.0%			

Bleeding patterns may be temporarily disturbed, but most women will have their next menstrual period within 7 days of the expected time.

If the next menstrual period is more than 5 days overdue pregnancy should be ruled out.

4.9 Overdose

Serious undesirable effects have not been reported following acute ingestion of large doses of oral contraceptives. Overdose may cause nausea and vomiting; withdrawal bleeding may occur. There are no specific antidotes and treatment should be symptomatic.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Progestogens, ATC code: G03AD01

The precise mode of action of PILL 72 is not known.

At the recommended regimen, levonorgestrel is thought to work mainly by preventing ovulation and fertilisation if the intercourse has taken place in the preovulatory phase, when the likelihood of fertilisation is the highest. It is not effective once implantation has begun.

Efficacy: It has been estimated that levonorgestrel emergency contraceptive pills prevent 85% of expected pregnancies. Efficacy appears to decline with time after intercourse (95% within 24 hours, 85% if used between 24 and 48 hours, 58% if used between 48 and 72 hours).

It is therefore, recommended that the course of PILL 72 tablets is started as soon as possible (and no later than 72 hours) after unprotected intercourse.

At the recommended regimen, levonorgestrel is not expected to significantly modify blood clotting factors, or lipid and carbohydrate metabolism.

Safety: 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 trials of another drug and may not reflect the rates observed in clinical practice.

A double-blind, controlled clinical trial in 1,955 evaluable women compared the efficacy and safety of Levonorgestrel (one 0.75 mg tablet of levonorgestrel taken within 72 hours of unprotected intercourse, and one tablet taken 12 hours later) to the Yuzpe regimen (two tablets each containing 0.25 mg levonorgestrel and 0.05 mg ethinyl estradiol, taken within 72 hours of intercourse, and two tablets taken 12 hours later).

The most common adverse events (>10%) in the clinical trial for women receiving levonorgestrel 0.75 mg included nausea (23%), abdominal pain (18%), fatigue (17%), headache (17%), dizziness (11%), breast tenderness (11%) and menstrual changes (26%).

5.2 Pharmacokinetic properties

Pharmacokinetic parameters of PILL 72 (levonorgestrel test formulation) and the reference product are shown in the table below.

Pharmacokinetic Test formulation Parameter (T) arithmetic mean ± SD (*)		Reference	log-transformed parameters	
	(R) arithmetic mean ± SD (*)	Ratio T/R (%)	Conventional 90% CI (ANOVAlog)	
t _{max} (hour)	1.46 ± 0.67	1.76 ± 0.96	_	—
C _{max} (ng/ml)	$13.17 \pm 5.69 \\ (12.03)$	$11.53 \pm 5.30 \\ (10.55)$	114.0	104.1–124.9
AUC _{0-t} (ng·hour/ml)	149 ± 104 (128)	139 ± 86 (122)	105.0	96.1–114.6
AUC _{0-inf} (ng·hour/ml)	160 ± 107 (139)	152 ± 87 (135)	103.1	95.1–111.8

* geometric mean

Levonorgestrel is not excreted as metabolites. Levonorgestrel metabolites are excreted in about equal proportions in urine and faeces. The biotransformation follows the known pathways of

steroid metabolism, the levonorgestrel is hydroxylated in the liver and the metabolites are excreted as glucuronide conjugates.

No pharmacologically active metabolites are known.

Levonorgestrel is bound to serum albumin and sex hormone binding globulin (SHBG). Only about 1.5% of the total serum levels are present as free steroid, but 65% are specifically bound to SHBG. The absolute bioavailability of levonorgestrel was determined to be almost 100% of the dose administered.

About 0.1% of the maternal dose can be transferred via milk to the nursed infant.

5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans, beyond the information included in other sections of the SmPC. Animal experiments with levonorgestrel have shown virilisation of female fetuses at high doses

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Lactose monohydrate Maize starch Povidone Colloidal anhydrous silica Magnesium stearate

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

2 years.

6.4 Special precautions for storage

Do not store above 30°C. Store tablets in blister in the provided carton.

6.5 Nature and contents of container

Clear PVC/PE/PVDC-Alu blister card containing 2 tablets. One blister card per carton.

6.6 Special precautions for disposal and other handling

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

7. SUPPLIER

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References

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