# WHO-PQ recommended clinical and preclinical information for the health care provider

This information focuses on uses of the medicine covered by WHO's Prequalification Team - Medicines. The recommendations for use are based on WHO guidelines and on information from stringent regulatory authorities.<sup>\*</sup>

The medicine may be authorised for additional or different uses by national medicines regulatory authorities.

 $<sup>^*</sup> https://extranet.who.int/prequal/sites/default/files/document_files/75\% 20 SRA\% 20 clarification_Feb 2017_new templ.pdf$ 

# 1. NAME OF THE MEDICINAL PRODUCT

Medroxyprogesterone acetate 150 mg/mL suspension for injection<sup>+</sup>

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each mL of suspension contains 150 mg of medroxyprogesterone acetate. For the full list of excipients, see section 6.1.

# 3. PHARMACEUTICAL FORM

Suspension for injection.

[Visual appearance of the suspension]

# 4. CLINICAL PARTICULARS

# 4.1 Therapeutic indications

Medroxyprogesterone acetate 150 mg/mL suspension for injection is used for contraception in women. Each injection provides contraception for at least 12 weeks.

It can also be used for short-term contraception to cover specific periods when:

- the woman's male partner is awaiting vasectomy to become effective;
- the woman is awaiting sterilisation;
- the woman at risk of rubella is awaiting immunisation against rubella.

#### 4.2 **Posology and method of administration**

Medroxyprogesterone acetate 150 mg/mL suspension for injection is given intramuscularly every 12 weeks.

#### Starting Medroxyprogesterone acetate 150 mg/mL suspension for injection

The first dose of Medroxyprogesterone acetate 150 mg/mL suspension for injection can be given:

- within 7 days of the start of the woman's monthly bleeding
- immediately if switching from an intra-uterine device (IUD)
- immediately if switching from a correctly used hormonal method
- immediately if switching when a repeat injection of another injectable method is due

If more than 7 days have passed since the start of her monthly bleeding, or the woman does not have monthly bleeding, or the woman has not been using another contraception method consistently, she can receive the injection at any time if it is reasonably certain she is not pregnant. In such a case she should use an additional (backup) method of contraception for the first 7 days.

#### After birth

#### Fully or nearly fully breast-feeding

The first dose of Medroxyprogesterone acetate 150 mg/mL suspension for injection can be given:

• any time between 6 weeks and 6 months of birth if the woman's monthly bleeding has not returned

<sup>&</sup>lt;sup>†</sup> Trade names are not prequalified by WHO. This is the national medicines regulatory agency's responsibility.

- any time after more than 6 months of birth if the woman's monthly bleeding has not returned and it is reasonably certain she is not pregnant; an additional (backup) method of contraception should be used for the first 7 days
- if the woman's monthly bleeding has returned, within 7 days of the start of monthly bleeding

# Partially breast-feeding

The first dose of Medroxyprogesterone acetate 150 mg/mL suspension for injection can be given:

- 6 weeks after birth
- any time after more than 6 weeks of birth if the woman's monthly bleeding has not returned and it is reasonably certain she is not pregnant; an additional (backup) method of contraception should be used for the first 7 days
- if the woman's monthly bleeding has returned, within 7 days of the start of monthly bleeding

# Not breast-feeding

The first dose of Medroxyprogesterone acetate 150 mg/mL suspension for injection can be given:

- any time within 4 weeks of birth
- any time after 4 weeks of birth the woman's monthly bleeding has not returned and it is reasonably certain she is not pregnant; an additional (backup) method of contraception should be used for the first 7 days
- if the woman's monthly bleeding has returned, within 7 days of the start of monthly bleeding

# After miscarriage or abortion

The first dose of Medroxyprogesterone acetate 150 mg/mL suspension for injection can be given:

- within 7 days of first- or second-trimester miscarriage or abortion
- any time after 7 days of first- or second-trimester miscarriage or abortion if it is reasonably certain the woman is not pregnant; an additional (backup) method of contraception should be used for the first 7 days

# After progesterone-containing emergency contraceptive pill

Medroxyprogesterone acetate 150 mg/mL suspension for injection can be started or restarted:

- on the same days as taking the progesterone emergency contraceptive pill; an additional (backup) method of contraception should be used for the first 7 days
- any time after taking the emergency contraceptive pill if it is reasonably certain the woman is not pregnant

# After ulipristal acetate emergency contraceptive pill

Medroxyprogesterone acetate 150 mg/mL suspension for injection can be started or restarted:

- 6 days after taking the ulipristal acetate emergency contraceptive pill (contraceptive effectiveness may be reduced if medroxyprogesterone is given earlier than 6 days after using ulipristal acetate); an additional (backup) method of contraception should be used for the first 7 days after the injection
- any time if more than 6 days have passed after taking the emergency contraceptive pill and it is reasonably certain the woman is not pregnant

# Managing late injections

If this medicine is given within 4 weeks of the due dose, the woman can receive her next injection. There is no need for tests, evaluation or a backup method.

If the dose of medroxyprogesterone is more than 4 weeks late the woman can receive her next injection if:

- she has not had sex since 2 weeks after the scheduled date of her injection, or
- she has used a backup method or has taken emergency contraceptive pills after any unprotected sex since 2 weeks after the scheduled date of her injection, or
- she is fully or nearly fully breast-feeding and gave birth less than 6 months ago.

If medroxyprogesterone is given more than 4 weeks late, the woman will need to abstain from sex or use a backup method for the first 7 days after receiving medroxyprogesterone.

# Method of administration

This medicine is given by intramuscular injection into the ventro-gluteal muscle, or into the deltoid muscle, or into the upper outer aspect of the gluteal muscle. The site is chosen according to the woman's preference.

# 4.3 Contraindications

Medroxyprogesterone acetate 150 mg/mL suspension for injection must not be used if the woman:

- has hypersensitivity to medroxyprogesterone acetate or to any of the excipients listed in section 6.1
- has hormone-dependent malignancy of breast or genital organs
- has undiagnosed abnormal uterine bleeding
- has a history of severe hepatic disease and liver function tests have not returned to normal
- has significant hypertension (systolic pressure of 160 mmHg or higher, diastolic pressure of 100 mmHg or higher)
- has had diabetes for longer than 20 years or has complications of the disease (circulatory, renal, nervous or ophthalmic)
- has a combination of risk factors (e.g. hypertension, diabetes) for cerebrovascular disease
- has or has had ischemic heart disease (e.g. myocardial infarction) or stroke
- has or has had arterial thrombosis
- has acute deep vein thrombosis or pulmonary embolism
- has systemic lupus erythematosus with positive test for antiphospholipid antibodies or severe thrombocytopenia

has meningioma or history of meningioma.

# 4.4 Special warnings and precautions for use

Personal and family medical history should be assessed before starting hormonal contraceptives (and at regular intervals afterwards). The frequency and nature of the assessment should be adapted to the individual woman. It should include measurement of blood pressure and, if appropriate, breast, abdominal and pelvic examination including cervical cytology.

# Loss of bone mineral density

Use of medroxyprogesterone acetate reduces serum oestrogen levels and is associated with significant loss of bone mineral density (BMD) due to the known effect of oestrogen deficiency on the bone remodelling system. Bone loss is greater with long-term use of medroxyprogesterone acetate; however, BMD appears to increase after medroxyprogesterone acetate is discontinued and ovarian oestrogen production increases.

This loss of BMD is of particular concern during adolescence and early adulthood, a critical period of bone growth. It is unknown if use of medroxyprogesterone acetate by younger women will reduce peak bone mass and increase the risk for fracture in later life.

WHO has concluded that the decrease in bone mineral density does not place age or time limits on use of medroxyprogesterone acetate.

A study to assess the BMD effects of medroxyprogesterone acetate-IM in adolescent females showed a decrease in BMD from baseline. In the small number of women who were followed-up, mean BMD recovered to around baseline values by 1- 3 years after discontinuing treatment. In adolescents, medroxyprogesterone acetate may be used, but only after other methods of contraception have been discussed with the patients and considered to be unsuitable or unacceptable.

In women of all ages, careful re-evaluation of the risks and benefits of treatment should be carried out in those who wish to continue use for more than 2 years.

In particular, in women with significant lifestyle or medical risk factors for osteoporosis, other methods of contraception should be considered prior to use of medroxyprogesterone acetate.

July 2025

Significant risk factors for osteoporosis include:

- Alcohol abuse or tobacco use
- Chronic use of drugs that can reduce bone mass, e.g. anticonvulsants or corticosteroids
- · Low body mass index or eating disorder, e.g. anorexia nervosa or bulimia
- Previous low trauma fracture
- Family history of osteoporosis

A retrospective cohort study reported that women using medroxyprogesterone acetate injections (DMPA), have a higher risk of fracture compared with contraceptive users with no recorded use of DMPA (incident rate ratio 1.41, 95% CI 1.35-1.47 for the five-year follow-up period); it is not known if this is due to DMPA, or to other related lifestyle factors which have a bearing on fracture rate. By contrast, in women using DMPA, the fracture risk before and after starting DMPA was not increased (relative risk 1.08, 95% CI 0.92-1.26). Importantly, this study could not determine whether use of DMPA has an effect on fracture rate later in life.

Adequate intake of calcium and Vitamin D, whether from the diet or from supplements, is important for bone health in women of all ages.

# Menstrual irregularity

Depot medroxyprogesterone acetate usually disrupts the normal menstrual cycle. Bleeding patterns include amenorrhoea (in up to 30% of women during the first 3 months, increasing to 55% by month 12 and 68% by month 24); irregular bleeding and spotting; prolonged (longer than 10 days) episodes of bleeding (up to 33% of women in the first 3 months of use decreasing to 12% by month 12).

Prolonged or heavy bleeding requiring treatment may occur in 0.5–4 occasions per 100 woman-years of use. Persistent or severe abnormal bleeding should be investigated to rule out organic pathology and treatment started if necessary. Excessive or prolonged bleeding can be controlled using oestrogen either as a low-dose (30 micrograms oestrogen) combined oral contraceptive pill or as oestrogen-replacement therapy such as conjugated equine oestrogen (0.625-1.25 mg daily). Oestrogen therapy may need to be repeated for 1–2 cycles. Long-term use of oestrogen is not recommended.

#### Return to fertility

Pregnancies have occurred as early as 14 weeks after an injection of depot medroxyprogesterone acetate. However, on average, women become pregnant 10 months after their last injection. Women should be counselled of possible delay in return to full fertility, regardless of the duration of use but over 80 % of women may be expected to conceive within 15 months of the last injection.

# HIV acquisition risk

Medroxyprogesterone acetate 150 mg/mL suspension for injection does not protect against HIV acquisition. Where HIV is common, health care providers should inform women considering a progestogen-only injection how to protect themselves from HIV, so that each woman can make a fully informed choice.

#### Cancer risk

Depot medroxyprogesterone acetate does not cause cancer. It helps protect against cancer of the lining of the uterus (endometrial cancer). Findings of the few studies on its use and breast cancer are similar to findings with combined oral contraceptives: women using depot medroxyprogesterone acetate were more likely to be diagnosed with breast cancer while using it or within 10 years after stopping. It is unclear whether these findings are explained by earlier detection of existing breast cancers among users of depot medroxyprogesterone acetate or by its biological effect on breast cancer.

The risk of cervical cancer may be slightly increased among women using depot medroxyprogesterone acetate for 5 years or more. Cervical cancer cannot develop because of depot medroxyprogesterone acetate alone; it is caused by persistent infection with human papillomavirus.

# Meningioma

Cases of meningioma (single and multiple) have been reported in those receiving medroxyprogesterone acetate over several years. Women receiving medroxyprogesterone acetate should be monitored for signs and symptoms of meningioma.

In some cases, the meningioma shrank after discontinuing depot medroxyprogesterone acetate. If a woman is diagnosed with meningioma, medroxyprogesterone acetate must be stopped, as a precaution.

# Weight gain

Women may gain weight while receiving depot medroxyprogesterone acetate. Studies indicate that over the first 1–2 years of use, the average weight gain was 2–4 kg. Women completing 4–6 years of depot medroxyprogesterone acetate contraception gained on average 6–7.5 kg. The weight gain is accounted by increased fat and is not secondary to an anabolic effect or fluid retention. Some of the increase in weight may be the usual weight that people gain as they age.

# Fluid retention

Women with illnesses including epilepsy, migraine, asthma, heart failure, or renal dysfunction should be closely watched because use of progestogens, such as medroxyprogesterone acetate, may result in some fluid retention.

# Anaphylaxis

Reactions such as anaphylaxis, anaphylactic shock and anaphylactoid reactions have been reported in individuals receiving medroxyprogesterone acetate.

# Lipids

No clear impact of medroxyprogesterone acetate on lipid metabolism has been demonstrated. Both increases and decreases in total cholesterol, triglycerides and low-density lipoprotein (LDL) cholesterol have occurred.

Depot medroxyprogesterone acetate appears to be associated with a 15–20% reduction in serum high-density lipoprotein (HDL) cholesterol levels which may protect women from cardiovascular disease. The clinical consequences of this observation are unknown. The potential for an increased risk of coronary disease should be considered before use.

#### Thromboembolic disorders

If the woman receiving depot medroxyprogesterone acetate develops pulmonary embolism, cerebrovascular disease or retinal thrombosis, it should not be given again. There have been rare cases of thromboembolism with use of depot medroxyprogesterone acetate, but causality has not been established.

#### Psychiatric disorders

Those with a history of endogenous depression should be carefully monitored. Some women may complain of premenstrual-type depression while receiving depot medroxyprogesterone acetate.

Depressed mood and depression are well-known undesirable effects of hormonal contraceptives. Depression can be serious and may lead to suicidal behaviour and suicide. Women should be advised to contact their health care provider about mood changes and depressive symptoms, including those that occur shortly after starting contraception.

#### Abscess formation

As with any intramuscular injection, especially if not administered correctly, there is a risk of abscess formation at the site of injection, which may require medical or surgical intervention.

#### Precautions

History or emergence of the following conditions require careful consideration and appropriate investigation: migraine or unusually severe headaches, acute visual disturbances of any kind, pathological changes in liver function and hormone levels.

Those with thromboembolic or coronary vascular disease should be carefully evaluated before using depot medroxyprogesterone acetate.

Glucose tolerance may decrease in some individuals receiving progestogens. Women with diabetes should therefore be carefully monitored while receiving Medroxyprogesterone acetate 150 mg/mL suspension for injection.

Health care providers should carefully consider the use of depot medroxyprogesterone acetate in those with recent trophoblastic disease before levels of human chorionic gonadotrophin have returned to normal.

Health care providers should inform pathologists of the use of medroxyprogesterone if endometrial or endocervical tissue is submitted for examination.

The results of certain laboratory tests may be affected by the use of medroxyprogesterone. These include gonadotrophin levels (decreased), plasma progesterone levels (decreased), urinary pregnanediol levels (decreased), plasma oestrogen levels (decreased), plasma cortisol levels (decreased), glucose tolerance test, metyrapone test, liver function tests (may increase), thyroid function tests (protein-bound iodine levels may increase and T3 uptake levels may decrease). Coagulation test values for prothrombin (Factor II), and Factors VII, VIII, IX and X may increase.

Women should be counselled that this medicine does not protect against sexually transmitted infections (STIs) including HIV infection (AIDS). Safer sex practices including correct and consistent use of condoms reduce the transmission of STIs through sexual contact.

The benefits of contraceptive options and their risks must be evaluated individually for each woman.

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

The bioavailability of medroxyprogesterone acetate may be significantly reduced when it is co-administered with aminoglutethimide.

Interactions with medicines (including oral anticoagulants) have been reported rarely, and causality has not been determined. The possibility of interaction should be borne in mind in patients receiving concurrent treatment with other drugs.

Medroxyprogesterone acetate is metabolised in vitro primarily by hydroxylation via CYP3A4. However, the clearance of medroxyprogesterone acetate is about equal to the rate of hepatic blood flow. It is therefore unlikely that inducers of hepatic enzymes will significantly affect the kinetics of medroxyprogesterone acetate 150 mg/mL suspension for injection may be used by women who take the following CYP3A4 inducers: carbamazepine, efavirenz, fosphenytoin, nevirapine, oxcarbazepine, phenobarbital, phenytoin, primidone, rifabutin, rifampicin, and St John's wort (*Hypericum perforatum*).

# 4.6 Fertility, pregnancy and breastfeeding

#### Pregnancy

Depot medroxyprogesterone acetate will not cause birth defects and will not otherwise harm the fetus if a woman becomes pregnant while using progestogen-only injection or accidentally starts injections when she is pregnant.

Children exposed to medroxyprogesterone acetate in utero and followed to adolescence showed no evidence of any adverse effect on their health including their physical, intellectual, sexual or social development.

#### Breast-feeding

Medroxyprogesterone acetate is present in breast milk in small amounts. Depot medroxyprogesterone acetate is not likely to affect either the breast-feeding mother or the baby.

Mdroxyprogesterone can be used during breast-feeding, starting as early as 6 weeks after birth. It does not affect milk production.

# Fertility

Return to fertility (conception) may be delayed following discontinuation of Medroxyprogesterone acetate 150 mg/mL suspension for injection (see section 4.4). The bleeding pattern a woman had before she used

depot medroxyprogesterone acetate generally returns several months after the last injection even if she had no monthly bleeding while using medroxyprogesterone.

# 4.7 Effects on ability to drive and use machines

Medroxyprogesterone acetate 150 mg/mL suspension for injection is unlikely to affect the ability to drive or operate machinery.

However, patients should be advised to consider if their clinical status, including any undesirable effects of the medicine, allows them to perform skilled tasks safely.

# 4.8 Undesirable effects

#### Tabulated list of adverse reactions

Those most frequently (more than 5%) reported adverse drug reactions were weight gain (69%), menstrual irregularities (57% in first 12 months), weight loss (25%), headache (16%), nervousness (11%), abdominal pain or discomfort (11%), dizziness (6%), and decrease in libido (6%).

Adverse reactions to medroxyprogesterone are listed below by body system or organ. Frequencies are defined as follows: very common (at least 1 in 10), common (1 in 100 to 1 in 10) uncommon (1 in 1000 to 1 in 100), rare (1 in 10 000 to 1 in 1000), very rare (less than 1 in 10 000) or frequency not known (frequency cannot be estimated from available data).

#### Neoplasms benign, malignant and unspecified

| Rare                | breast cancer                                 |
|---------------------|---|
| Frequency not known | cervical cancer (see section 4.4), meningioma |

#### Blood and lymphatic system disorders

Rare anaemia, blood disorder

#### Immune system disorders

| Uncommon | drug hypersensitivity                                     |
|----------|---|
| Rare     | anaphylactic reaction, anaphylactoid reaction, angioedema |

#### Metabolism and nutrition disorders

Uncommon increased appetite, decreased appetite

#### Psychiatric disorders

| Very common | nervousness  |
|-------------|--|
| Common      | depression, libido decreased   |
| Uncommon    | insomnia   |
| Rare        | anorgasmia, emotional disturbance, affective disorder, irritability, anxiety |

#### Nervous system disorders

| Very common | headache                          |
|-------------|-----------------------------------|
| Common      | dizziness                         |
| Uncommon    | seizure, somnolence, paraesthesia |
| Rare        | migraine, paralysis, syncope      |

#### Ear and labyrinth disorders

Rare vertigo

#### **Cardiac disorders**

Rare tachycardia

#### Vascular disorders

| Uncommon hot fl | ush |
|-----------------|-----|
|-----------------|-----|

| Domo | embolism and thrombosis, deep vein thrombosis, thrombophlebitis, hypertension, varicose |
|------|---|
| Rare | veins   |

#### Respiratory, thoracic and mediastinal disorders

| Uncommon            | dyspnoea           |
|---------------------|--------------------|
| Rare                | pulmonary embolism |
| Frequency not known | asthma, hoarseness |

#### **Gastrointestinal disorders**

| Very common | abdominal pain, abdominal discomfort |
|-------------|--------------------------------------|
| Common      | nausea, abdominal distension         |
| Rare        | rectal haemorrhage                   |

#### Hepatobiliary disorders

| Uncommon | abnormal hepatic function              |
|----------|--|
| Rare     | jaundice, hepatic enzyme abnormalities |

#### Skin and subcutaneous tissue disorders

| Common   | alopecia, acne, rash  |
|----------|---|
| Uncommon | hirsutism, urticaria, pruritus, chloasma                        |
| Rare     | lipodystrophy, dermatitis, ecchymosis, scleroderma, skin striae |

#### Musculoskeletal and connective tissue disorders

| Common Back pain, pain in extremity | Common | Back pain, pain in extremity |
|-------------------------------------|--------|------------------------------|
|-------------------------------------|--------|------------------------------|

Rare arthralgia, muscle spasms, osteoporosis, osteoporotic fractures

#### Reproductive system and breast disorders

| Common   | vaginal discharge, breast tenderness, dysmenorrhea, genitourinary tract infection   |
|----------|---|
| Uncommon | dysfunctional uterine bleeding (irregular, increased, decreased, spotting), galactorrhoea pelvic pain, dyspareunia, suppressed lactation  |
| Rare     | vaginitis, amenorrhoea, breast pain, metrorrhagia, menometrorrhagia, menorrhagia, vulvovaginal dryness, breast atrophy, ovarian cyst, premenstrual syndrome, endometrial hyperplasia, breast mass, bloody exudate from nipples, vaginal cyst, breast enlargement, lack of return to fertility, sensation of pregnancy |

#### General disorders and administration site conditions

| Common                 | odema/fluid retention, asthenia  |  |
|------------------------|--|--|
| Uncommon               | chest pain   |  |
| Rare                   | pyrexia, fatigue, injection site reaction, persistent atrophy/indentation/dimpling at injection site, injection site nodule/lump, injection site pain/tenderness, thirst, dysphonia, facial nerve paralysis, axillary swelling |  |
| Frequency not<br>known | Chills   |  |

#### Investigations

| Very common | weight increased, weight decreased   |
|-------------|--|
| Rare        | decreased bone density, decreased glucose tolerance, abnormal cervical smear |

# Reporting of suspected adverse reactions

Health care providers are asked to report adverse reactions that may be linked to a medicine, to the marketing authorisation holder, or, if available, to the national reporting system. Reports of suspected adverse reactions to a medicine are important for the monitoring of the medicine's benefits and risks.

#### 4.9 Overdose

Overdose is unlikely with an injection of depot medroxyprogesterone acetate. However, if excessive amount is injected, no immediate action is necessary. Consideration may need to be given to delaying subsequent injection.

# 5. PHARMACOLOGICAL PROPERTIES

# 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Progestogens, ATC code: G03AC06

Medroxyprogesterone acetate exerts anti-oestrogenic, anti-androgenic and anti-gonadotrophic effects.

# Mechanism of action

Depot medroxyprogesterone acetate, administered parenterally at the recommended dose to women, inhibits the secretion of gonadotropins, which prevents follicular maturation and ovulation and causes thickening of cervical mucus that inhibits sperm entry into the uterus.

#### Meningioma

Based on a French epidemiological case-control study, there may be an association between medroxyprogesterone acetate and meningioma. This study included 18 061 women who had intracranial surgery for meningioma and 90 305 women without meningioma. Use of medroxyprogesterone acetate 150 mg/3 mL injection was compared between women who had intracranial surgery for meningioma and women without meningioma. An excess risk of meningioma was found with the use of medroxyprogesterone acetate 150 mg/3 mL (9/18 061 [0.05%] vs 11/90 305 [0.01%], OR 5.55 [95% CI 2.27 to 13.56]). This excess risk seems to be driven primarily by prolonged use (3 years or more) of medroxyprogesterone acetate.

# 5.2 Pharmacokinetic properties

Pharmacokinetics of medroxyprogesterone acetate

| General                        |   |
|--------------------------------|---|
|                                | Medroxyprogesterone acetate (as a depot formulation) has a long duration of action as a result of slow absorption from the injection site.  |
| Absorption                     |   |
| Oral bioavailability           | Not applicable  |
| Distribution                   |   |
| Volume of distribution (mean)  | $20 \pm 3 L$  |
| Plasma proteinbinding in vitro | 90-95 %   |
| Tissue distribution            | Medroxyprogesterone acetate binding occurs primarily to serum albumin. It crosses the blood-brain barrier and is present in breast milk.  |
| Metabolism                     |   |
|                                | The principal metabolite is $6\alpha$ -methyl- $6\beta$ , $17\alpha$ , $21$ -trihydroxy-4-pregnene-3, $20$ -<br>dione-17-acetate. At least 11 metabolites have been reported. All are excreted in<br>the urine, some, but not all, conjugated.<br>CYP3A4 is involved in the metabolism. |
| Active metabolite              | None  |
| Elimination                    |   |
| Elimination half-life          | About 6 weeks (following intramuscular injection)   |
| Mean systemic clearance (Cl/F) | 1600-4000 L/day   |
| % of dose excreted in urine    | NA*   |
| % of dose excreted in faeces   | NA*   |
| Metabolizing enzymes           | CYP3A4  |

NA\*-Not available

#### Patients with hepatic impairment

The effect of a hepatic impairment on the pharmacokinetics of medroxyprogesterone acetate is unknown. However, medroxyprogesterone acetate is almost exclusively eliminated by hepatic metabolism and metabolism may be reduced in patients with hepatic impairment.

# Patients with renal impairment.

The effect of renal impairment on the pharmacokinetics of medroxyprogesterone acetate is unknown.

# 5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of safety pharmacology, repeated dose toxicity, genotoxicity and carcinogenic potential.

Medroxyprogestrone acetate has adverse effects on reproduction in animal studies.

# 6. PHARMACEUTICAL PARTICULARS

- 6.1 List of excipients
- 6.2 Incompatibilities
- 6.3 Shelf life
- 6.4 Special precautions for storage
- 6.5 Nature and contents of container
- 6.6 Special precautions for disposal and other handling

# 7. SUPPLIER

# 8. WHO REFERENCE NUMBER (WHO Prequalification Programme)

# 9. DATE OF PREQUALIFICATION

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

July 2025

#### References

Detailed information on this medicine is available on the World Health Organization (WHO) website: <u>https://extranet.who.int/prequal/medicines/prequalified/finished-pharmaceutical-products</u>