

Gestromed Tablets

Medroxyprogesterone acetate (MPA)
2.5 mg, 5 mg or 10 mg tablets



WARNING: Cardiovascular disorders, breast cancer and probable dementia for estrogen plus progestin therapy:

Cardiovascular Disorders and Probable Dementia:

Estrogen plus progestin therapy should not be used for the prevention of cardiovascular disease or dementia.

The Women's Health Initiative (WHI) estrogen plus progestin sub study reported an increased risk of deep vein thrombosis (DVT), pulmonary embolism (PE), stroke and myocardial infarction (MI) in postmenopausal women (50 to 79 years of age) during 5.6 years of treatment with daily oral conjugated estrogens (CE) [0.625 mg] combined with medroxyprogesterone acetate (MPA) [2.5 mg], relative to placebo.

The WHI Memory Study (WHIMS) estrogen plus progestin ancillary study reported an increased risk of developing probable dementia in postmenopausal women 65 years of age or older during 4 years of treatment with daily CE (0.625 mg) combined with MPA (2.5 mg), relative to placebo. It is unknown whether this finding applies to younger postmenopausal women.

Breast Cancer:

The WHI estrogen plus progestin sub study demonstrated an increased risk of invasive breast cancer.

In the absence of comparable data, these risks should be assumed to be similar for other doses of CE and MPA, and other combinations and dosage forms of estrogens and progestins.

Progestins with estrogens should be prescribed at the lowest effective doses and for the shortest duration consistent with treatment goals and risks for the individual woman.

Composition and excipients:

Each tablet contains Medroxyprogesterone acetate 2.5 mg, 5 mg or 10 mg.

Excipients: Calcium citrate, corn starch, lactose, mineral oil, sorbic acid, sucrose, talc.

CLINICAL PHARMACOLOGY:

Medroxyprogesterone acetate (MPA) administered orally or parenterally in the recommended doses to women with adequate endogenous estrogen, transforms proliferative into secretory endometrium. Androgenic and anabolic effects have been noted, but the drug is apparently devoid of significant estrogenic activity. While parenterally administered MPA inhibits gonadotropin production, which in turn prevents follicular maturation and ovulation, available data indicate that this does not occur when the usually recommended oral dosage is given as single daily doses.

Pharmacokinetics:

Absorption:

MPA is rapidly absorbed from the gastrointestinal tract, and maximum MPA concentrations are obtained between 2 to 4 hours after oral administration.

Administration of MEDROXYPROGESTERONE ACETATE with food increases the bioavailability of MPA. A 10 mg dose of MEDROXYPROGESTERONE ACETATE, taken immediately before or after a meal, increased MPA C (50 to 70%) and AUC (18 to 33%). The half-life of MPA was not changed with food.

Distribution:

MPA is approximately 90% protein bound, primarily to albumin; no MPA binding occurs with sex hormone binding globulin.

Metabolism:

Following oral dosing, MPA is extensively metabolized in the liver via hydroxylation, with subsequent conjugation and elimination in the urine.

Excretion:

Most MPA metabolites are excreted in the urine as glucuronide conjugates with only minor amounts excreted as sulfates.

INDICATIONS:

Gestromed tablets are indicated for the treatment of secondary amenorrhea and abnormal uterine bleeding due to hormonal imbalance in the absence of organic pathology, such as fibroids or uterine cancer. They are also indicated for use in the prevention of endometrial hyperplasia in non hysterectomized postmenopausal women who are receiving daily oral conjugated estrogens 0.625 mg tablets

CONTRAINDICATIONS:

Gestromed is contraindicated in women with any of the following conditions:

- 1)Undiagnosed abnormal genital bleeding.
- 2)Known, suspected, or history of breast cancer.
- 3)Known or suspected estrogen- or progesterone-dependent neoplasia.
- 4)Active DVT, PE, or a history of these conditions
- 5)Active arterial thromboembolic disease (for example, stroke and MI), or a history of these conditions.
- 6)Known anaphylactic reaction or angioedema to MEDROXYPROGESTERONE ACETATE.
- 7)Known liver impairment or disease.
- 8)Known or suspected pregnancy.

Drug Interactions:

Medroxyprogesterone acetate (MPA) is metabolized in-vitro primarily by hydroxylation via the CYP3A4. Specific drug-drug interaction studies evaluating the clinical effects with CYP3A4 inducers or inhibitors on MPA have not been conducted. Inducers and/or inhibitors of CYP3A4 may affect the metabolism of MPA.

WARNINGS:

1. Cardiovascular Disorders:

An increased risk of PE, DVT, stroke, and MI has been reported with estrogen plus progestin therapy. Should any of these events occur or be suspected, estrogen plus progestin therapy should be discontinued immediately.

Risk factors for arterial vascular disease (for example, hypertension, diabetes mellitus, tobacco use, hypercholesterolemia, and obesity) and/or venous thromboembolism (VTE) (for example, personal history or family history of VTE, obesity, and systemic lupus erythematosus) should be managed appropriately.

a. Stroke:

a statistically significant increased risk of stroke was reported in women 50 to 79 years of age receiving CE (0.625 mg) plus MPA (2.5 mg) compared to women in the same age group receiving placebo (33 versus 25 per 10,000 women-years). The increase in risk was demonstrated after the first year and persisted. Should a stroke occur or be suspected, estrogen plus progestin therapy should be discontinued immediately.

b. coronary heart disease:

In the WHI estrogen plus progestin sub study, there was a statistically non-significant increased risk of CHD events reported in women receiving daily CE (0.625 mg) plus MPA (2.5 mg) compared to women receiving placebo (41 versus 34 per 10,000 women-years). An increase in relative risk was demonstrated in year 1, and a trend toward decreasing relative risk was reported in years 2 through 5.

In postmenopausal women with documented heart disease (n = 2,763, average 66.7 years of age), in a controlled clinical trial of secondary prevention of cardiovascular disease (Heart and Estrogen/Progestin Replacement Study [HERS]), treatment with daily CE (0.625 mg) plus MPA(2.5mg) demonstrated no cardiovascular benefit. During an average follow-up of 4.1 years, treatment with CE plus MPA did not reduce the overall rate of CHD events in postmenopausal women with established coronary heart disease. There were more CHD events in the CE plus MPA-treated group than in the placebo group in year 1, but not during the subsequent years.

c. Venous Thromboembolism:

In the WHI estrogen plus progestin sub study, a statistically significant 2-fold greater rate of VTE (DVT and PE) was reported in women receiving daily CE (0.625 mg) plus MPA (2.5 mg) compared to women receiving placebo (35 versus 17 per 10,000 women-years). Statistically significant increases in risk for both DVT (26 versus 13 per 10,000 women-years) and PE (18 versus 8 per 10,000 women-years) were also demonstrated. The increase in VTE risk was demonstrated during the first year and persisted.

Should a VTE occur or be suspected, estrogen plus progestin therapy should be discontinued immediately.

If feasible, estrogens plus progestins should be discontinued at least 4 to 6 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization.

2. Malignant Neoplasms:

a. Breast Cancer:

The most important randomized clinical trial providing information about breast cancer in estrogen plus progestin users is the WHI sub study of daily CE (0.625 mg) plus MPA (2.5 mg). After a mean follow-up of 5.6 years, the estrogen plus progestin sub study reported an increased risk of invasive breast cancer in women who took daily CE plus MPA.

Observational studies have also reported an increased risk of breast cancer for estrogen plus progestin therapy, and a smaller risk for estrogen-alone therapy, after several years of use. The risk increased with duration of use, and appeared to return to baseline over about 5 years after stopping treatment (only the observational studies have substantial data on risk after stopping). Observational studies also suggest that the risk of breast cancer was greater, and became apparent earlier, with estrogen plus progestin therapy as compared to estrogen-alone therapy. However, these studies have not found significant variation in the risk of breast cancer among different estrogen plus progestin combinations, or routes of administration.

The use of estrogen plus progestin has been reported to result in an increase in abnormal mammograms requiring further evaluation. All women should receive yearly breast examinations by a healthcare provider and perform monthly breast self-examinations. In addition, mammography examinations should be scheduled based on patient age, risk factors, and prior mammogram results.

b. Endometrial Cancer:

An increased risk of endometrial cancer has been reported with the use of unopposed estrogen therapy in women with a uterus. The reported endometrial cancer risk among unopposed estrogen users is about 2 to 12 times greater than in non-users, and appears dependent on duration of treatment and on estrogen dose. Most studies show no significant increased risk associated with the use of estrogens for less than 1 year. The greatest risk appears associated with prolonged use, with increased risks of 15- to 24-fold for 5 to 10 years or more. This risk has been shown to persist for at least 8 to 15 years after estrogen therapy is discontinued.

Clinical surveillance of all women using estrogen plus progestin therapy is important. Adequate diagnostic measures, including endometrial sampling when indicated, should be undertaken to rule out malignancy in all cases of undiagnosed persistent or recurring abnormal genital bleeding. There is no evidence that the use of natural estrogens results in a different endometrial risk profile than synthetic estrogens of equivalent estrogen dose. Adding a progestin to estrogen therapy has been shown to reduce the risk of endometrial hyperplasia, which may be a precursor to endometrial cancer.

c. Ovarian Cancer

The WHI estrogen plus progestin sub study reported a statistically non-significant increased risk of ovarian cancer. After an average follow-up of 5.6 years, the relative risk for ovarian cancer for CE plus MPA versus placebo was 1.58 (95 percent CI, 0.77-3.24). The absolute risk for CE plus MPA was 4 versus 3 cases per 10,000 women-years. In some epidemiologic studies, the use of estrogen plus progestin and estrogen-only products, in particular for 5 or more years, has been associated with increased risk of ovarian cancer. However, the duration of exposure associated with increased risk is not consistent across all epidemiologic studies and some report no association.

3. Probable Dementia:

After an average follow-up of 4 years, 40 women in the CE plus MPA group and 21 women in the placebo group were diagnosed with probable dementia. The relative risk of probable dementia for CE plus MPA versus placebo was 2.05 (95 percent CI, 1.21-3.48). The absolute risk of probable dementia for CE plus MPA versus placebo was 45 versus 22 cases per 10,000 women-years. It is unknown whether these findings apply to younger postmenopausal women.

4. Visual Abnormalities:

Discontinue estrogen plus progestin therapy pending examination if there is sudden partial or complete loss of vision, or a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, estrogen plus progestin therapy should be permanently discontinued.

PRECAUTIONS:

A. General:

1. Addition of a progestin when a woman has not had a hysterectomy:

Studies of the addition of a progestin for 10 or more days of a cycle of estrogen administration, or daily with estrogen in a continuous regimen, have reported a lower incidence of endometrial hyperplasia than would be induced by estrogen treatment alone. Endometrial hyperplasia may be a precursor to endometrial cancer.

There are, however, possible risks that may be associated with the use of progestins with estrogens compared to estrogen-alone regimens. These include an increased risk of breast cancer.

2. Unexpected abnormal vaginal bleeding:

In cases of unexpected abnormal vaginal bleeding, adequate diagnostic measures are indicated.

3. Elevated blood pressure:

Blood pressure should be monitored at regular intervals with estrogen plus progestin therapy.

4. Hypertriglyceridemia:

In women with pre-existing hypertriglyceridemia, estrogen plus progestin therapy may be associated with elevations of plasma triglycerides leading to pancreatitis. Consider discontinuation of treatment if pancreatitis occurs.

5. Hepatic impairment and/or past history of cholestatic jaundice:

Estrogens plus progestins may be poorly metabolized in women with impaired liver function. For women with a history of cholestatic jaundice associated with past estrogen use or with pregnancy, caution should be exercised, and in the case of recurrence, medication should be discontinued.

6. Fluid Retention:

Progestins may cause some degree of fluid retention. Women who have conditions which might be influenced by this factor, such as cardiac or renal impairment, warrant careful observation when estrogen plus progestin are prescribed.

7. Hypocalcemia

Estrogen plus progestin therapy should be used with caution in women with hypoparathyroidism as estrogen-induced hypocalcemia may occur.

8. Exacerbation of other conditions:

Estrogen plus progestin therapy may cause an exacerbation of asthma, diabetes mellitus, epilepsy, migraine, porphyria, systemic lupus erythematosus, and hepatic hemangiomas and should be used with caution in women with these conditions.

B. Drug-Laboratory Test Interactions:

The following laboratory results may be altered by the use of estrogen plus progestin therapy:

Accelerated prothrombin time, partial thromboplastin time, and platelet aggregation time; increased platelet count; increased factors II, VI antigen, VIII antigen, VIII coagulant activity, IX, X, XII, VII-X complex, II-VII-X complex, and beta-thromboglobulin; decreased levels of anti-factor Xa and antithrombin III; decreased antithrombin III activity; increased levels of fibrinogen and fibrinogen activity; increased plasminogen antigen and activity.

Increased thyroid-binding globulin (TBG) levels leading to increased circulating total thyroid hormone levels as measured by protein-bound iodine (PBI), T4 levels (by column or by radioimmunoassay) or T3 levels by radioimmunoassay, T3 resin uptake is decreased, reflecting the elevated TBG. Free T4 and free T3 concentrations are unaltered. Women on thyroid replacement therapy may require higher doses of thyroid hormone.

Other binding proteins may be elevated in serum, for example, corticosteroid binding globulin (CBG), sex hormone binding globulin (SHBG) leading to increased circulating corticosteroid and sex steroids, respectively. Free hormone concentrations, such as testosterone and estradiol, may be decreased. Other plasma proteins may be increased (angiotensinogen/reinin substrate, alpha-1-antitrypsin, ceruloplasmin).

Increased plasma high-density lipoprotein (HDL) and HDL2 cholesterol subfraction concentrations, reduced low-density lipoprotein (LDL) cholesterol concentration, increased triglycerides levels.

Impaired glucose tolerance.

Carcinogenesis, Mutagenesis, Impairment of Fertility:

Carcinogenicity:

Long-term intramuscular administration of medroxyprogesterone acetate has been shown to produce mammary tumors in beagle dogs. There was no evidence of a carcinogenic effect associated with the oral administration of medroxyprogesterone acetate to rats and mice.

Long-term continuous administration of estrogen plus progestin therapy has shown an increased risk of breast cancer and ovarian cancer.

Genotoxicity:

Medroxyprogesterone acetate was not mutagenic in vitro or in vivo genetic toxicity assays.

Fertility:

Medroxyprogesterone acetate at high doses is an antifertility drug and high doses would be expected to impair fertility until the cessation of treatment.

Pregnancy:

Gestromed should not be used during pregnancy.

There may be increased risk for hypospadias, clitoral enlargement and labial fusion in children whose mothers are exposed to Gestromed during the first trimester of pregnancy. However, a clear association between these conditions with use of Gestromed has not been established.

Nursing Mothers:

Gestromed should not be used during lactation. Detectable amounts of progestin have been identified in the breast milk of nursing mothers receiving progestins.

Pediatric Use:

Gestromed tablets are not indicated in children. Clinical studies have not been conducted in the pediatric population.

Geriatric Use:

There have not been sufficient numbers of geriatric women involved in clinical studies utilizing Gestromed alone to determine whether those over 65 years of age differ from younger subjects in their response to Gestromed alone.

ADVERSE REACTIONS:

The following adverse reactions have been reported in women taking Gestromed tablets, without concomitant estrogens treatment:

1. Genitourinary system

Abnormal uterine bleeding (irregular, increase, decrease), change in menstrual flow, breakthrough bleeding, spotting, amenorrhea, changes in cervical erosion and cervical secretions.

2. Breasts

Breast tenderness, mastodynia or galactorrhea has been reported.

3. Cardiovascular

Thromboembolic disorders including thrombophlebitis and pulmonary embolism have been reported.

4. Gastrointestinal

Nausea, cholestatic jaundice.

5. Skin

Sensitivity reactions consisting of urticaria, pruritus, edema and generalized rash have occurred. Acne, alopecia and hirsutism have been reported.

6. Eyes

Neuro-ocular lesions, for example, retinal thrombosis, and optic neuritis.

7. Central nervous system

Mental depression, insomnia, somnolence, dizziness, headache, nervousness.

8. Miscellaneous

Hypersensitivity reactions (for example, anaphylaxis and anaphylactoid reactions, angioedema), rash (allergic) with and without pruritus, change in weight (increase or decrease), pyrexia, edema/fluid retention, fatigue, decreased glucose tolerance.

DOSEAGE AND ADMINISTRATION:

Secondary Amenorrhea:

Gestromed tablets may be given in dosages of 5 or 10 mg daily for 5 to 10 days. A dose for inducing an optimum secretory transformation of an endometrium that has been adequately primed with either endogenous or exogenous estrogen is 10 mg of Gestromed daily for 10 days. In cases of secondary amenorrhea, therapy may be started at any time. Progestin withdrawal bleeding usually occurs within three to seven days after discontinuing Gestromed therapy.

Abnormal Uterine Bleeding Due to Hormonal Imbalance in the Absence of Organic Pathology:

Beginning on the calculated 16th or 21st day of the menstrual cycle, 5 or 10 mg of Gestromed may be given daily for 5 to 10 days. To produce an optimum secretory transformation of an endometrium that has been adequately primed with either endogenous or exogenous estrogen, 10 mg of Gestromed daily for 10 days beginning on the 16th day of the cycle is suggested. Progestin withdrawal bleeding usually occurs within three to seven days after discontinuing therapy with Gestromed. Patients with a past history of recurrent episodes of abnormal uterine bleeding may benefit from planned menstrual cycling with Gestromed.

Reduction of Endometrial Hyperplasia in Postmenopausal Women Receiving Daily 0.625 mg Conjugated Estrogens:

When estrogen is prescribed for a postmenopausal woman with a uterus, a progestin should also be initiated to reduce the risk of endometrial cancer. A woman without a uterus does not need progestin. Use of estrogen, alone or in combination with a progestin, should be with the lowest effective dose and for the shortest duration consistent with treatment goals and risks for the individual woman. Patients should be re-evaluated periodically as clinically appropriate (for example, 3-to-6-month intervals) to determine if treatment is still necessary. Forewomen who have a uterus, adequate diagnostic measures, such as endometrial sampling, when indicated, should be undertaken to rule out malignancy in cases of undiagnosed persistent or recurring abnormal vaginal bleeding.

Gestromed tablets may be given in dosages of 5 or 10 mg daily for 12 to 14 consecutive days per month, in postmenopausal women receiving daily 0.625 mg conjugated estrogens, either beginning on the 1st day of the cycle or the 16th day of the cycle. Patients should be started at the lowest dose.

The lowest effective dose of Gestromed has not been determined.

OVERDOSAGE:

Overdose of estrogen plus progestin therapy may cause nausea and vomiting, breast tenderness, dizziness, abdominal pain, drowsiness/fatigue and withdrawal bleeding may occur in women. Treatment of overdose consists of discontinuation of CE plus MPA together with institution of appropriate symptomatic care.

Storage conditions: Store below 25° C.

Packaging: Two PVC-Alu blisters each contain 10 tablets packed in a cardboard box.

THIS IS A MEDICAMENT

- A medicament is a product but unlike any other products
- A medicament is a product which affects your health, and its consumption contrary to instructions is dangerous for you.
- Follow strictly the doctor's prescription, the method of use and the instructions of the pharmacist who sold the medicament. The doctor and the pharmacist are experts in medicine, its benefits and risks.
- Do not by yourself interrupt the period of treatment prescribed for you.
- Do not repeat the same prescription without consulting your doctor.

KEEP MEDICAMENTS OUT OF REACH OF CHILDREN
(Council of Arab Health Ministers) (Arab Pharmacists Association)

Produced by: **IDM** International Drug Manufacturig - Aleppo - Syria

