

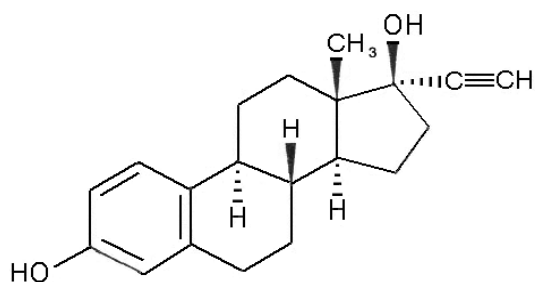
# PRODUCT INFORMATION

## TRIFEME<sup>®</sup> TABLETS

### NAME OF THE MEDICINE

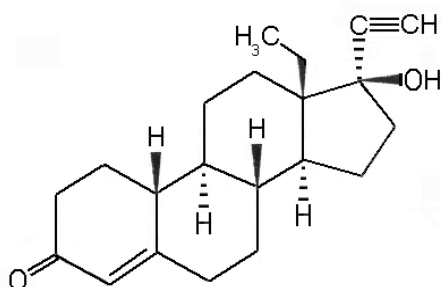
Levonorgestrel and Ethinylloestradiol

Chemically, ethinylloestradiol is 19-nor-17 $\alpha$ -pregna-1,3,5(10)-trien-20-yne-3,17-diol and has the following structure: -



Chemical Formula: C<sub>20</sub>H<sub>24</sub>O<sub>2</sub>  
Molecular Weight: 296.41  
Melting Point: 181-185°C  
CAS No: [57-63-6]

Chemically, levonorgestrel is (-)-13 $\beta$ -Ethyl-17 $\beta$ -hydroxy-18,19-dinor-17 $\alpha$ -pregn-4-en-20-yn-3-one and has the following structure:



Chemical Formula: C<sub>21</sub>H<sub>28</sub>O<sub>2</sub>  
Molecular Weight: 312.45  
Melting Point: 232-239°C  
CAS No: [797-63-7]

### DESCRIPTION

Ethinylloestradiol is a white to creamy white, odourless, crystalline powder. It is insoluble in water and soluble in alcohol, chloroform, ether, vegetable oils, and aqueous solutions of alkali hydroxides.

Levonorgestrel is a white crystalline powder that is very slightly soluble in water, slightly soluble in alcohol and acetone, and soluble in chloroform.

Each TRIFEME package contains 28 tablets; 6 brown tablets each containing 30 microgram ethinylloestradiol and 50 microgram levonorgestrel, followed by 5 white tablets each containing 40 microgram of ethinylloestradiol and 75 microgram levonorgestrel, followed by 10 yellow tablets, each containing 30 microgram ethinylloestradiol and 125 microgram levonorgestrel, followed by 7 red inert tablets.

Each tablet contains the following excipients; calcium carbonate, glycol montanate, macrogol 6000, magnesium stearate, sucrose, maize starch, povidone, purified talc and lactose. The brown tablets contain glycerol, the colourants iron oxide yellow CI 77492, iron oxide red CI 77491 and titanium dioxide. The yellow tablets contain glycerol, the colourants iron oxide yellow CI 77492 and titanium dioxide. The red inactive tablets contain the colourants erythrosine CI45430 and brilliant scarlet 4R CI16255.

## **PHARMACOLOGY**

The hormonal components of TRIFEME inhibit ovulation by suppressing gonadotropin release. Secondary mechanisms, which may contribute to the effectiveness of TRIFEME as a contraceptive, include changes in the cervical mucus (which increase the difficulty of sperm penetration) and changes in the endometrium (which reduce the likelihood of implantation).

### **Pharmacokinetics**

Ethinylloestradiol and levonorgestrel are rapidly and almost completely absorbed from the gastrointestinal tract. Ethinylloestradiol is subject to considerable first-pass metabolism with a mean bioavailability of 40-45%. Levonorgestrel does not undergo first-pass metabolism and is therefore completely bioavailable.

Levonorgestrel is extensively plasma protein bound both to sex hormone binding globulin (SHBG) and albumin. Ethinylloestradiol, however, is bound in plasma only to albumin and enhances the binding capacity of SHBG. Following oral administration, peak plasma levels of each drug occur within 1 to 4 hours.

The elimination half-life for ethinylloestradiol is approximately 25 hours. It is primarily metabolised by aromatic hydroxylation but a wide variety of hydroxylated and methylated metabolites are formed, and these are present both free and as conjugates with glucuronide and sulphate. Conjugated ethinylloestradiol is excreted in bile and subject to enterohepatic recirculation. About 40% of the drug is excreted in the urine and 60% is eliminated in the faeces.

The elimination half-life for levonorgestrel is approximately 24 hours. The drug is primarily metabolised by reduction of the A ring followed by glucuronidation. About 60% of levonorgestrel is excreted in the urine and 40% is eliminated in the faeces.

## **INDICATIONS**

TRIFEME is indicated for the prevention of pregnancy.

## **CONTRAINDICATIONS**

TRIFEME should not be used in the presence of any of the conditions listed below. Should any of the conditions appear for the first time during TRIFEME use, the product should be stopped immediately.

- Presence or risk of venous thromboembolism (VTE) (see PRECAUTIONS);
- A history of or current deep-vein thrombosis or thromboembolic disorders;

- Known hereditary or acquired predisposition for venous thromboembolism, such as APC-resistance (including Factor V Leiden), antithrombin-III-deficiency, protein C deficiency, protein S deficiency;
- Major surgery with prolonged immobilisation;
- A high risk of venous thromboembolism due to the presence of multiple risk factors.
- Presence or risk of arterial thromboembolism (ATE) (see PRECAUTIONS);
- Current or history of ATE (e.g. myocardial infarction or stroke) or prodromal condition (e.g. angina pectoris or transient ischaemic attack [TIA]) or thrombotic valvulopathies or thrombotic rhythm disorders;
- Known hereditary or acquired predisposition for arterial thromboembolism, such as hyperhomocysteinaemia and antiphospholipid-antibodies (e.g. anticardiolipin-antibodies and lupus anticoagulant);
- Headaches with focal neurological symptoms, (such as aura), including hemiplegic migraine;
- A high risk of arterial thromboembolism due to multiple risk factors or to the presence of one serious risk factor such as:
  - Diabetes mellitus with vascular involvement;
  - Severe hypertension;
  - Severe dyslipoproteinaemia;
  - Sickle cell anaemia.
- Pancreatitis or a history thereof if associated with severe hypertriglyceridemia;
- Presence or history of active hepatic disease as long as liver function values have not returned to normal;
- Presence or history of liver tumours (benign or malignant);
- Known or suspected sex steroid-influenced malignancies (e.g. of the genital organs or the breasts);
- Undiagnosed vaginal bleeding;
- Known or suspected pregnancy;
- Hypersensitivity to any of the ingredients contained in TRIFEME.

## PRECAUTIONS

In the absence of the above contraindications, if any of the conditions/risk factors mentioned below are present, the benefits of TRIFEME should be weighed against the possible risks for each individual woman and discussed with the woman before she decides to start taking it. In the event of aggravation, exacerbation or first appearance of any of these conditions or risk factors, the woman should contact her doctor. The doctor should then decide whether TRIFEME should be discontinued.

## Circulatory Disorders

Epidemiological studies have suggested an association between the use of combined oral contraceptives (COCs) containing ethinyloestradiol and an increased risk of arterial and venous thrombotic and thromboembolic diseases such as myocardial infarction, stroke, deep venous thrombosis, and pulmonary embolism. These events occur rarely in average-risk women.

For any particular oestrogen/progestogen combination, the dosage regimen prescribed should be one which contains the least amount of oestrogen and progestogen that is compatible with a low failure rate and the needs of the individual patient.

## Venous Thrombosis and Thromboembolism

The physician should be alert to the earliest manifestations of those disorders (e.g. pulmonary embolism, cerebrovascular insufficiency, cerebral haemorrhage, cerebral thrombosis, coronary occlusion, retinal thrombosis, mesenteric thrombosis). Should any of these occur or be suspected; the medicine should be discontinued immediately.

### *Risk of venous thromboembolism (VTE)*

The use of any COCs increases the risk of VTE compared with no use. The women considering using TRIFEME should be advised that her VTE risk is highest in the first ever year of use and that there is some evidence that the risk is increased when a COC is re-started after a break in use of 4 weeks or more.

The risk of VTE with the COC is greatest for products containing over 50 µg of ethinyloestradiol. There is less risk for products such as TRIFEME containing less than 50 µg ethinyloestradiol.

The decision to use any product other than one with the lowest VTE risk should be taken only after a discussion with the woman to ensure she understands the risk of VTE with COCs, and how her current risk factors influence this risk.

### **Risk<sup>1</sup> of developing a blood clot (VTE) in a year**

Women not using a combined hormonal contraceptive and not pregnant	About 2 out of 10,000 women <sup>1</sup>
Women using a COC containing levonorgestrel, norethisterone or norgestimate	About 5-7 out of 10,000 women
Women using a COC containing etonogestrel or norelgestromin	About 6-12 out of 10,000 women
Women using a COC containing drospirenone, gestodene, desogestrel or cyproterone <sup>2</sup>	About 9-12 out of 10,000 women
Women using a COC containing chlormadinone, dienogest or nomegestrol	Not yet known <sup>3</sup>

<sup>1</sup> In any individual woman the risk may be far higher, depending on her underlying risk factors (see below).

<sup>2</sup> While cyproterone is indicated for the treatment of moderate to severe acne related to androgen sensitivity and/or hirsutism, it is known to have efficacy as a contraceptive. The risk of VTE associated with cyproterone use is considered to be 1.5 to 2 times higher than for COCs containing levonorgestrel and may be similar to the risk with contraceptives containing gestodene, desogestrel or drospirenone.

<sup>3</sup> Further studies are ongoing or planned to collect sufficient data to estimate the risk for these products. Where the risk for a particular progestogen is uncertain, the risk of the class should be used in determining the risk for the individual patient.

It is important that women understand that VTE associated with COC use is rare in average-risk women. The risk in pregnancy (5 - 20 per 10,000 women over 9 months) and the risk in the post-partum period (45 - 65 per 10,000 women over 12 weeks) is higher than that associated with COC use.

However VTE is a serious condition and may be fatal in 1-2% of cases. Extremely rarely, thrombosis has been reported to occur in COC users in other blood vessels, e.g. hepatic, cerebral, mesenteric, renal or retinal veins and arteries.

The risk for venous thromboembolic complications in COC users may increase substantially in a woman with additional risk factors, particularly if there are multiple risk factors (see list).

TRIFEME is contraindicated if a woman has multiple risk factors that put her at high risk of venous thrombosis. If a woman has more than one risk factor, it is possible that the increase in risk is greater than the sum of the individual factors – in this case her total risk of VTE should be considered. If the balance of benefits and risks is considered to be negative a COC should not be prescribed.

### ***Risk factors for VTE***

- Obesity (body mass index over 30 kg/m<sup>2</sup>). Risk increases substantially as BMI rises;
- Prolonged immobilisation, major surgery, any surgery to the legs or pelvis, neurosurgery, or major trauma;
- Temporary immobilisation including air travel > 4 hours can also be a risk factor for VTE, particularly in women with other risk factors;
- Positive family history (venous thromboembolism ever in a sibling or parent especially at a relatively early age e.g. before 50);
- Biochemical factors Activated Protein C (APC) resistance (including Factor V Leiden), antithrombin-III deficiency, protein C deficiency, protein S deficiency;
- Other medical conditions associated with VTE;
  - Cancer;
  - Systemic lupus erythematosus;
  - Haemolytic uraemic syndrome;
  - Chronic inflammatory bowel disease (e.g. Crohn's disease or ulcerative colitis);
  - Sickle cell disease.
- Increasing age, particularly above 35 years;
- Smoking;
- Recent delivery or second trimester abortion.

In women at risk of prolonged immobilisation (including major surgery, any surgery to the legs or pelvis, neurosurgery, or major trauma), it is advisable to discontinue use of TRIFEME (in the case of elective surgery at least four weeks in advance) and not resume until two weeks after complete remobilisation. Another method of contraception should be used to avoid unintentional pregnancy. Antithrombotic treatment should be considered if TRIFEME has not been discontinued in advance.

If a hereditary predisposition to VTE is suspected, the woman should be referred to a specialist for advice before deciding about any COC use.

The increased risk of VTE during the postpartum period should be considered if re-starting TRIFEME. Since the immediate post-partum period is associated with an increased risk of thromboembolism, combined oral contraceptives should be started no earlier than day 28 after delivery or second-trimester abortion.

There is no consensus about the possible role of varicose veins and superficial thrombophlebitis in venous thromboembolism.

### ***Symptoms of VTE (deep vein thrombosis and pulmonary embolism)***

Women should be informed of the symptoms of VTE and be advised to seek urgent medical attention if VTE symptoms develop and to inform the healthcare professional that she is taking a COC.

Symptoms of deep vein thrombosis (DVT) can include:

- Unilateral swelling of the leg and/or foot or along a vein in the leg;
- Pain or tenderness in the leg which may be felt only when standing or walking;
- Increased warmth in the affected leg; red or discoloured skin on the leg.

Symptoms of pulmonary embolism (PE) can include:

- Sudden onset of unexplained shortness of breath or rapid breathing;
- Sudden coughing which may be associated with haemoptysis;
- Sharp chest pain;
- Severe light headedness or dizziness;
- Rapid or irregular heartbeat.

Some of these symptoms (e.g. “shortness of breath”, “coughing”) are non-specific and might be misinterpreted as more common or less severe events (e.g. respiratory tract infections).

Other signs of vascular occlusion can include: sudden pain, swelling and slight blue discoloration of an extremity.

If the occlusion occurs in the eye symptoms can range from painless blurring of vision which can progress to loss of vision. Sometimes loss of vision can occur almost immediately.

## **Arterial Thrombosis and Thromboembolism**

### ***Risk of arterial thromboembolism (ATE)***

Epidemiological studies have associated the use of COCs with an increased risk for arterial thromboembolism (e.g. myocardial infarction, angina pectoris, stroke or TIA). Arterial thromboembolic events may be fatal.

The risk of arterial thromboembolic complications in COC users increases in women with risk factors. TRIFEME is contraindicated if a woman has one serious or multiple risk factors for ATE that puts her at high risk of arterial thrombosis. If a woman has more than one risk

factor, it is possible that the increase in risk is greater than the sum of the individual factors - in this case her total risk should be considered. If the balance of benefits and risks is considered to be negative a COC should not be prescribed.

### ***Risk factors for ATE***

- Increasing age, particularly above 35 years;
- Smoking;
- Hypertension;
- Obesity;
- Positive family history (arterial thromboembolism ever in a sibling or parent especially at relatively early age e.g. below 50);
- Biochemical factors: hyperhomocysteinaemia and antiphospholipid antibodies (e.g. anticardiolipin antibodies, and lupus anticoagulant);
- Migraine;
- Other medical conditions associated with adverse vascular events:
  - Diabetes mellitus;
  - Hyperhomocysteinaemia;
  - Valvular heart disease;
  - Atrial fibrillation;
  - Dyslipoproteinaemia;
  - Systemic lupus erythematosus;
  - History of pre-eclamptic toxæmia.

Women should be advised not to smoke if they wish to use a COC. Women over 35 years of age who continue to smoke should be strongly advised to use a different method of contraception.

If a hereditary predisposition is suspected, the woman should be referred to a specialist for advice before deciding about any COC use.

An increase in frequency or severity of migraine during COC use (which may be prodromal of a cerebrovascular event) may be a reason for immediate discontinuation.

### ***Symptoms of ATE***

Women should be informed of the symptoms of ATE and be advised to seek urgent medical attention if ATE symptoms develop and to inform the healthcare professional that she is taking a COC.

Symptoms of a stroke can include:

- Sudden numbness or weakness of the face, arm or leg, especially on one side of the body;
- Sudden trouble walking, dizziness, loss of balance or coordination;

- Sudden confusion, trouble speaking or understanding;
- Sudden trouble seeing in one or both eyes;
- Sudden, severe or prolonged headache with no known cause;
- Loss of consciousness or fainting with or without seizure.

Temporary symptoms suggest the event is a transient ischaemic attack (TIA).

The onset or exacerbation of migraine or development of headache of a new pattern that is recurrent, persistent, or severe, requires discontinuation of the medicine and evaluation of the cause.

Women with migraine (particularly migraine with aura) who take combined oral contraceptives may be at increased risk of stroke.

Symptoms of myocardial infarction (MI) can include:

- Pain, discomfort, pressure, heaviness, sensation of squeezing or fullness in the chest, arm, or below the breastbone;
- Discomfort radiating to the back, jaw, throat, arm, stomach;
- Feeling of being full, having indigestion or choking;
- Sweating, nausea, vomiting or dizziness;
- Extreme weakness, anxiety, or shortness of breath;
- Rapid or irregular heartbeats.

### **Medical examination/consultation**

A complete medical history and physical examination should be taken prior to the initiation or reinstatement of COC use, guided by the contraindications and precautions, and should be repeated at least annually during the use of COCs. Pregnancy should be ruled out before the start of therapy. Baseline and periodic blood glucose determinations should be performed in patients predisposed to diabetes mellitus. Periodic medical assessment is also of importance because contraindications (e.g. a transient ischaemic attack, etc.) or risk factors (e.g. a family history of venous or arterial thrombosis) may appear for the first time during the use of a COC. The frequency and nature of these assessments should be adapted to the individual woman but should generally include special reference to blood pressure, breasts, abdomen and pelvic organs, including cervical cytology, and relevant laboratory tests.

The woman should also be instructed to carefully read the user leaflet and to adhere to the advice given.

### **Ocular Lesions**

With use of combined oral contraceptives, there have been reports of retinal vascular thrombosis, which may lead to partial or complete loss of vision. Discontinue oral contraceptive and institute appropriate diagnostic and therapeutic measures if there is unexplained, gradual or sudden, partial or complete loss of vision; proptosis or diplopia; papilloedema; or any evidence of retinal vascular lesions or optic neuritis.



## **Elevated Blood Pressure**

An increase in blood pressure has been reported in patients receiving oral contraceptives.

In women with hypertension, or a history of hypertension or hypertension related diseases; another method of contraception may be preferable. If combined oral contraceptives are used in such cases, close monitoring is recommended and, if a significant increase in blood pressure occurs, the drug should be discontinued. Combined oral contraceptives are contraindicated in women with uncontrolled hypertension.

In some women, hypertension may occur within a few months of beginning use. In the first year of use, the prevalence of women with hypertension is low but the incidence increases with increasing exposure. Age is also strongly correlated with the development of hypertension in oral contraceptive users. Women who previously have had hypertension during pregnancy may be more likely to develop an elevation of blood pressure when given oral contraceptives. If blood pressure rises markedly, the drug should be discontinued. Hypertension that develops as a result of taking oral contraceptives usually returns to normal after discontinuing the drug.

## **Carcinoma of the Reproductive Organs**

### ***Cervical Cancer***

The most important risk factor for cervical cancer is persistent human papillomavirus infection.

Several epidemiological studies suggest that oral contraceptive use has been associated with an increase in the risk of cervical intraepithelial neoplasia or invasive cervical cancer. The studies suggest that there is an “ever used” effect in addition to duration of use. These findings must be balanced against evidence of effects attributable to sexual behaviour, smoking and other factors.

### ***Breast Cancer***

A meta-analysis from 54 epidemiological studies showed that there is a slightly increased relative risk (RR= 1.24) of having breast cancer diagnosed in women who are currently using combined oral contraceptives compared to never-users. The increased risk gradually disappears during the course of the 10 years after cessation of combined oral contraceptive use. Because breast cancer is rare in women under 40 years of age, the excess number of breast cancer diagnoses in current and recent combined oral contraceptive users is small in relation to the lifetime risk of breast cancer. These studies do not provide evidence for causation. The observed pattern of increased risk may be due to an earlier diagnosis of breast cancer in combined oral contraceptive users, (due to more regular clinical monitoring), the biological effects of combined oral contraceptives or a combination of both. Breast cancers diagnosed in ever-users tend to be less advanced clinically than the cancers diagnosed in never-users.

Established risk factors for the development of breast cancer include increasing age, family history, obesity, nulliparity, and late age for first full-term pregnancy.

Long-term continuous administration of either natural or synthetic oestrogen in certain animal species increases the frequency of carcinoma of the breast, cervix, vagina, and liver.

In all cases of undiagnosed, persistent, or recurrent abnormal vaginal bleeding, appropriate diagnostic measures should be taken to eliminate the possibility of malignancy. Women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms should be monitored with particular care.

### **Hepatic Neoplasia/Liver Disease**

In very rare cases hepatic adenomas, and in extremely rare cases, hepatocellular carcinoma may be associated with combined oral contraceptive use. Hepatic adenomas may rupture and cause death through intra-abdominal haemorrhage. The risk appears to increase with duration of combined oral contraceptive use. Such lesions may present as an abdominal mass or with the signs and symptoms of an acute abdomen and should be considered if the patient has abdominal pain and tenderness or evidence of intra-abdominal bleeding.

Cholestatic jaundice has been reported in users of oral contraceptives. If this occurs, the drug should be discontinued. Women with a history of cholestasis during pregnancy or combined oral contraceptive-related cholestasis are more likely to have this condition with combined oral contraceptive use. If these patients receive a combined oral contraceptive they should be carefully monitored and, if the condition recurs, the combined oral contraceptive should be discontinued.

Hepatocellular injury has been reported with combined oral contraceptive use. Early identification of drug-related hepatocellular injury can decrease the severity of hepatotoxicity when the drug is discontinued. If hepatocellular injury is diagnosed, patients should stop their combined oral contraceptive use, use a non-hormonal form of contraception and consult their doctor.

Acute or chronic disturbances of liver function require the discontinuation of combined oral contraceptive use until liver function has returned to normal (see **CONTRAINDICATIONS**).

Steroid hormones may be poorly metabolised in patients with impaired liver function and should be administered with caution to such patients.

### **Gallbladder Disease**

Studies report an increased risk of surgically confirmed gallbladder disease in users of oestrogens and oral contraceptives. Combined oral contraceptives may worsen existing gallbladder disease and may accelerate the development of this disease in previously asymptomatic women.

### **Angioedema**

Exogenous oestrogens may induce or exacerbate symptoms of angioedema, particularly in women with hereditary angioedema.

### **Carbohydrate and Lipid Metabolic Effects**

Glucose intolerance has been reported in combined oral contraceptive users. Women with impaired glucose tolerance or diabetes mellitus who use combined oral contraceptives should be carefully monitored while receiving the drug.

A small proportion of women will have adverse lipid changes while taking oral contraceptives. Non-hormonal contraception should be considered in women with uncontrolled dyslipidaemias.

Persistent hypertriglyceridaemia may occur in a small proportion of combined oral contraceptive users. Elevations of plasma triglycerides in combined oral contraceptive users may lead to pancreatitis and other complications.

Women who are being treated for hyperlipidaemias should be followed closely if they elect to use combined oral contraceptives.

### **Genital Bleeding**

In some women withdrawal bleeding may not occur during the inactive-tablet interval. If TRIFEME has not been taken according to directions prior to the first missed withdrawal bleed, or if two consecutive withdrawal bleeds are missed, tablet taking should be discontinued and a non-hormonal back-up method of contraception should be used until the possibility of pregnancy is excluded.

Breakthrough bleeding, spotting and amenorrhoea are frequent reasons for patients discontinuing oral contraceptives. Breakthrough bleeding/spotting may occur in women taking TRIFEME, especially during the first three months of use. If this bleeding persists or recurs, as in all cases of irregular bleeding from the vagina, non-functional causes should be borne in mind. In undiagnosed persistent or recurrent abnormal bleeding from the vagina, appropriate diagnostic measures are indicated to rule out pregnancy, infection, malignancy or other conditions. If pathology has been excluded, continuation of TRIFEME or a change to another formulation may solve the problem. Changing to a regimen with a higher oestrogen content, while potentially useful in minimising menstrual irregularity should be done only if necessary, since this may increase the risk of thromboembolic disease.

Women with a history of oligomenorrhoea or secondary amenorrhoea or young women without regular cycles may have a tendency to remain anovulatory or to become amenorrhoeic after discontinuation of oral contraceptives. Women with these pre-existing problems should be advised of this possibility and encouraged to use other methods of contraception. Post-use anovulation, possibly prolonged, may also occur in women without previous irregularities.

### **Depression**

Oral contraceptives may cause depression. Patients with a history of depression should be carefully observed and the drug discontinued if depression recurs to a serious degree. Patients becoming significantly depressed while taking oral contraceptives should stop the medication and use an alternative method of contraception in an attempt to determine whether the symptom is drug-related.

### **Vomiting and/or Diarrhoea**

Diarrhoea and/or vomiting may reduce hormone absorption resulting in decreased serum concentrations (see **DOSAGE AND ADMINISTRATION**).

## **Other**

Under the influence of oestrogen-containing oral contraceptives, pre-existing uterine leiomyomata may increase in size.

These agents may cause some degree of fluid retention. Women with cardiac or renal dysfunction, convulsive disorders, migraine, or asthma require careful observation since these conditions may be exacerbated by the fluid retention which may occur in users of oral contraceptives.

Users of oral contraceptives may have disturbances in normal tryptophan metabolism, which may result in a relative pyridoxine deficiency. The clinical significance of this is yet to be determined.

Serum folate levels may be depressed by oral contraceptive use. Women who became pregnant shortly after discontinuing these drugs may have a greater chance of developing folate deficiency and its complications.

Patients should be counselled that this product does not protect against HIV infection (AIDS) or other sexually transmitted diseases.

## **Use During or Immediately Preceding Pregnancy**

### ***Category B3***

Pregnancy must be excluded before starting TRIFEME. If pregnancy occurs during use of TRIFEME, the preparation must be withdrawn immediately.

Oral contraceptives have not been shown to have any deleterious effects on the fetus or to increase the incidence of miscarriage in women who discontinue their use prior to conception. However, in women who discontinue oral contraceptives with the intent of becoming pregnant, a non-hormonal method of contraception is recommended for three months before attempting to conceive.

Animal studies have shown that high doses of progestogens can cause masculinisation of the female fetus. The results of these experiments in animals do not seem to be relevant to humans because of the low doses used in oral contraceptives.

Studies do not suggest a teratogenic effect when oral contraceptives are taken inadvertently during early pregnancy.

Female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that oestrogens are ineffective for these indications, and there is no evidence from well-controlled studies that progestogens are effective for these uses.

The administration of progestogen-only or oestrogen-progestogen combinations to induce withdrawal bleeding should not be used as a test for pregnancy.

Ectopic as well as intrauterine pregnancy may occur in contraceptive failures.

The increased risk of VTE during the postpartum period (recent delivery or second trimester abortion) should be considered when re-starting TRIFEME.

### **Use in Lactation**

Oestrogen-containing oral contraceptives given in the postpartum period may interfere with lactation. There may be a decrease in the quantity and a change in the composition of the breast milk. Furthermore, small amounts of contraceptive steroids and/or metabolites have been identified in the milk of mothers receiving them. A few adverse effects on the child have been reported, including jaundice and breast enlargement. The use of oestrogen-containing oral contraceptives should be deferred until the infant has been completely weaned.

### **Paediatric Use**

Safety and efficacy of combined oral contraceptives have been established in women of reproductive age. Use of these products before menarche is not indicated.

### **Use in the Elderly**

Combined oral contraceptives are not indicated for use in postmenopausal women.

### **Laboratory Test Interactions**

Oestrogen-containing preparations affect the following blood components and endocrine-and liver-function tests:

1. Increased prothrombin and Factors VII, VIII, IX, and X; decreased antithrombin 3; increased noradrenaline-induced platelet aggregability;
2. Increased thyroid-binding globulin (TBG) leading to increased circulating total-thyroid hormone, as measured by protein-bound iodine (PBI), T4 by column, or T4 by radioimmunoassay. Free T3 resin uptake is decreased, reflecting the elevated TBG; free T4 concentration is unaltered;
3. Decreased pregnanediol excretion;
4. Reduced response to metyrapone test;
5. Increased sulphobromophthalein retention.

The results of these tests should not be regarded as reliable until oral contraceptives use has been discontinued for 1-2 months. Abnormal tests should then be repeated.

Oral contraceptives may produce false positive results when neutrophil alkaline phosphatase activity is evaluated for the early diagnosis of pregnancy.

## **INTERACTIONS WITH OTHER MEDICINES**

Interactions between ethinylloestradiol and other substances may lead to decreased or increased ethinylloestradiol concentrations, respectively.

Decreased ethinylloestradiol serum concentrations may cause an increased incidence of breakthrough bleeding and menstrual irregularities and may possibly reduce efficacy of the oral contraceptive.

Examples of substances that may decrease serum ethinyloestradiol concentrations include any substance that reduces gastrointestinal transit time and, therefore, ethinyloestradiol absorption, and substances that induce hepatic microsomal enzymes, such as rifampicin, phenytoin, primidone, rifabutin, dexamethasone, griseofulvin, topiramate, some protease inhibitors, modafinil, ritonavir and barbiturates.

St. John's wort (*Hypericum perforatum*) may induce hepatic microsomal enzymes, which theoretically may result in reduced efficacy of oral contraceptives. This may also result in breakthrough bleeding.

During concomitant use of TRIFEME and substances that may lead to decreased ethinyloestradiol serum concentrations, it is recommended that a non-hormonal back-up method of contraception (other than the rhythm or temperature methods) be used in addition to the regular intake of TRIFEME. In the case of prolonged use of such substances combined oral contraceptives should not be considered the primary contraceptive.

After discontinuation of substances that may lead to decreased ethinyloestradiol serum concentrations, use of a non-hormonal back-up method of contraception is recommended for at least 7 days.

Longer use of a non-hormonal back-up method, a minimum of 4 weeks, is advisable after discontinuation of substances such as rifampicin that have led to induction of hepatic microsomal enzymes. It may sometimes take several weeks until enzyme induction has completely subsided, depending on dosage, duration of use and rate of elimination of the inducing substance.

Examples of substances that may increase ethinyloestradiol concentrations include atorvastatin, competitive inhibitors for sulphation in the gastrointestinal wall, such as ascorbic acid and paracetamol and substances that inhibit cytochrome P4503A4 isoenzymes such as indinavir and fluconazole.

Increased intermenstrual bleeding and occasional pregnancies have been reported during concomitant administration of oral contraceptives and ampicillin, phenoxymethyl penicillin, and other penicillins, sulphamethoxypyridazine, chloramphenicol, nitrofurantoin, tetracycline and neomycin. The mechanism appears to be reduced enterohepatic circulation of sex steroids due to change in bowel flora. It may be prudent for women to use supplemental forms of contraception during therapy with these antibiotics.

Oral contraceptives have been reported to antagonise the effectiveness of anti-hypertensive agents, anticonvulsants, oral anticoagulants, and hypoglycaemic agents. Patients should be carefully monitored for a decreased response to these drugs.

Ethinyloestradiol may interfere with the metabolism of other drugs by inhibiting hepatic microsomal enzymes, or by inducing hepatic drug conjugation, particularly glucuronidation. Accordingly, plasma and tissue concentrations may either be increased (e.g. cyclosporin, theophylline, corticosteroids) or decreased (e.g. lamotrigine).

Oral contraceptives may alter the effectiveness of other drugs such as phenothiazines, beta-adrenergic antagonists, tricyclic antidepressants, and caffeine, by either potentiating/enhancing their pharmacological effects or by decreasing their clearance.

Oral contraceptives may interfere with the oxidative metabolism of diazepam and chlordiazepoxide, resulting in plasma accumulation of the parent compound. Patients receiving these benzodiazepines on a long-term basis should be monitored for increased sedative effects.

The effects of benzodiazepines on oral contraceptive metabolism have not been determined.

The prescribing information of concomitant medications should be consulted to identify potential interactions.

## ADVERSE EFFECTS

The most serious adverse reactions associated with the use of oral contraceptives are indicated under PRECAUTIONS and CONTRAINDICATIONS.

Adverse reactions are listed in the Table per CIOMS frequency categories:

Very common:	≥10%
Common:	≥1% and <10%
Uncommon:	≥0.1% and <1%
Rare:	≥0.01% and <0.1%
Very rare:	<0.01%.

Use of combined oral contraceptives has been associated with an increased risk of the following:

- \* Arterial and venous thrombotic and thromboembolic events, including myocardial infarction, stroke, transient ischaemic attack, venous thrombosis and pulmonary embolism;
- \* Cervical intraepithelial neoplasia and cervical cancer;
- \* Breast cancer diagnosis;
- \* Benign hepatic tumours (e.g. focal nodular hyperplasia, hepatic adenomas).

The following have been reported and are believed to be drug related:

### **System Organ Class**

### **Adverse Reaction**

#### **Infections and Infestations**

Common

Vaginitis, including candidiasis

#### **Neoplasms benign, malignant, and unspecified**

Very Rare

Hepatic adenomas; hepatocellular carcinomas

#### **Immune System Disorders**

Rare

Anaphylactic/anaphylactoid reactions, including very rare cases of urticaria, angioedema and severe reactions with respiratory and circulatory symptoms

**System Organ Class****Adverse Reaction**

Very Rare

Exacerbation of systemic lupus erythematosus

**Metabolism and Nutrition Disorders**

Uncommon

Changes in appetite (increase or decrease)

Rare

Glucose intolerance

Very Rare

Exacerbation of porphyria

**Psychiatric Disorders**

Common

Mood changes, including depression;  
changes in libido**Nervous System Disorders**

Very Common

Headache, including migraines

Common

Nervousness; dizziness

Very Rare

Exacerbation of chorea

**Eye Disorders**

Rare

Intolerance to contact lenses

Very Rare

Optic neuritis\*; retinal vascular thrombosis

**Vascular Disorders**

Very Rare

Aggravation of varicose veins

**Gastrointestinal Disorders**

Common

Nausea; vomiting; abdominal pain

Uncommon

Abdominal cramps; bloating

Very Rare

Pancreatitis; ischaemic colitis

Unknown

Inflammatory bowel disease (Crohn's disease,  
ulcerative colitis)**Hepato-biliary Disorders**

Rare

Cholestatic jaundice

Very Rare

Gallbladder disease, including gallstones\*\*

Unknown

Hepatocellular injury (e.g. hepatitis, hepatic function  
abnormal)**Skin and Subcutaneous Tissue Disorders**

Common

Acne

Uncommon

Rash (allergic); chloasma (melasma), which may  
persist; hirsutism; alopecia

Rare

Erythema nodosum

Very Rare

Erythema multiforme

**Renal and Urinary Disorders**



## **System Organ Class**

## **Adverse Reaction**

Very Rare

Haemolytic uraemic syndrome

### **Reproductive System and Breast Disorders**

Very Common

Metrorrhagia (Breakthrough bleeding/spotting)

Common

Breast pain, tenderness, enlargement, secretion; dysmenorrhoea; change in menstrual flow; change in cervical ectropion and secretion; amenorrhoea

### **General Disorders and Administration Site Conditions**

Common

Fluid retention/oedema

### **Investigations**

Common

Changes in weight (increase or decrease)

Uncommon

Increase in blood pressure; changes in serum lipid levels, including hypertriglyceridaemia

Rare

Decrease in serum folate levels.\*\*\*

\* Optic neuritis may lead to partial or complete loss of vision.

\*\* Combined oral contraceptives may worsen existing gallbladder disease and may accelerate the development of this disease in previously asymptomatic women.

\*\*\* Serum folate levels may be depressed by combined oral contraceptive therapy. This may be of clinical significance if the woman becomes pregnant shortly after discontinuing combined oral contraceptives.

The following adverse reactions have been reported in users of oral contraceptives, but the association has been neither confirmed nor refuted:

Change in corneal curvature (steepening), premenstrual-like syndrome, cataracts, cystitis-like syndrome, haemorrhagic eruption, Budd-Chiari Syndrome, megaloblastic anaemia.

## **DOSAGE AND ADMINISTRATION**

### **How to Take TRIFEME**

Each package of TRIFEME contains 6 brown active tablets, 5 white active tablets, 10 yellow active tablets and 7 red inactive tablets. To achieve maximum contraceptive effectiveness, TRIFEME must be taken as directed and at intervals not exceeding 24 hours. Women should be instructed to take the tablets at the same time every day, preferably after the evening meal or at bedtime.

### **How to Start TRIFEME**

#### ***No Preceding Hormonal Contraceptive Use (in the Past Month)***

On the first day of the menstrual cycle, i.e. the first day of bleeding, the woman will take the tablet corresponding to that day of the week from the shaded section of the TRIFEME package. The first active tablet taken will be brown. Thereafter, one tablet is taken daily, following the arrows marked on the package, until all 28 tablets have been taken. Withdrawal bleeding should usually occur within 3 days after the last active tablet is taken and may not have finished before the next pack is started.

During this first cycle, a non-hormonal back up method of contraception (other than the rhythm or temperature methods) should be used until one active tablet has been taken daily for 7 consecutive days. If the active tablets are started after Day 5, it must be considered that ovulation and conception may have occurred before the tablets were started.

The next and all subsequent courses of TRIFEME will begin on the day after the last package was completed, even if withdrawal bleeding has not occurred or is still in progress. Each course of TRIFEME is thus begun on the same day of the week as the first course, with a tablet from the shaded section of the package. If withdrawal bleeding does not occur and TRIFEME has been taken according to directions, it is unlikely that the woman has conceived. She should be instructed to begin a second course of TRIFEME on the usual day. If bleeding does not occur at the end of this second cycle, TRIFEME should not be taken until diagnostic procedures to exclude the possibility of pregnancy have been performed.

If the woman has not adhered to the prescribed regimen (missed one or more active tablets or started taking them on a day later than recommended), the probability of pregnancy should be considered at the time of the first missed period before TRIFEME is resumed

### ***Changing from another Combined Oral Contraceptive***

Women changing from another combined oral contraceptive product should start TRIFEME on the day after the last active tablet of her previous combined oral contraceptive by taking the first tablet corresponding to that day of the week from the shaded section of the package. This will shorten the last cycle of the previous combined oral contraceptive, and may prevent or reduce withdrawal bleeding at the end of that cycle. The first cycle with TRIFEME may also be shorter.

During the first TRIFEME cycle, a non-hormonal back up, method of contraception (other than the rhythm or temperature methods) should be used until one active tablet has been taken daily for 7 consecutive days.

If transient spotting or breakthrough bleeding occurs, the woman is instructed to continue the regimen since such bleeding is usually without significance. If the bleeding is persistent or prolonged, the woman is advised to consult her physician.

### ***Changing from a Progestogen Only Method (Progestogen-Only Tablet, Injection, Implant)***

Women may switch any day from the progestogen-only tablet and should begin TRIFEME the next day. She should start TRIFEME on the day of an implant removal or, if using an injection, the day the next injection would be due. In all these situations, women should be advised to use a non-hormonal back-up method of contraception (other than the rhythm or temperature methods) until one active tablet has been taken daily for 7 consecutive days.

### ***Following First-Trimester Abortion***

Women may start TRIFEME immediately. Additional contraceptive measures are not needed.

### ***Following Delivery or Second-Trimester Abortion***

Since the immediate post-partum period is associated with an increased risk of thromboembolism, combined oral contraceptives should be started no earlier than day 28 after delivery in the non-lactating mother or after second trimester abortion. The woman

should be advised to use a non-hormonal back-up method of contraception (other than the rhythm or temperature methods) until one active tablet has been taken daily for 7 consecutive days. However, if intercourse has already occurred, pregnancy should be excluded before the actual start of combined oral contraceptive use or the woman must wait for her first menstrual period.

### **Management of Missed Tablets**

Contraceptive efficacy may be reduced if active tablets are missed and particularly if the missed tablets extend the inactive tablet interval.

If one active tablet is missed, but less than 12 hours late, it should be taken as soon as it is remembered. Subsequent tablets should be taken at the usual time.

If one active tablet is missed, and is more than 12 hours late, or if two active tablets are missed, contraceptive protection may be reduced. The last missed tablet should be taken as soon as it is remembered, even if this means taking two tablets in one day. Subsequent tablets should be taken at the usual time. In addition, a non-hormonal back-up method of contraception (other than the rhythm or temperature methods) should be used until one active tablet has been taken daily for 7 consecutive days.

If the 7 days where back up is required run beyond the last active tablet in the current pack, the next pack must be started on the day following the intake of the last active tablet in the current pack; all inactive (red) tablets should be discarded. This prevents an extended break in tablet taking of active tablets that may increase the risk of escape ovulation. The user is unlikely to have a withdrawal bleed until the inactive-tablet interval of the second pack, but she may experience spotting or breakthrough bleeding on days when active tablets are taken. If the user does not have a withdrawal bleed at the end of the second pack, the possibility of pregnancy must be ruled out before resuming tablet taking.

If the woman misses one or more inactive (red) tablets, she is still protected against pregnancy, provided she begins the active brown tablets on the proper day.

If three consecutive active tablets are missed, TRIFEME should be discontinued and the remainder of the package discarded. A new package should be started on the eighth day after the last tablet was taken. A non-hormonal back-up method of contraception (other than the rhythm or temperature methods) should be used until one active tablet has been taken daily for 7 consecutive days.

If withdrawal bleeding does not occur and TRIFEME has been taken according to directions, it is unlikely that the woman has conceived. She should be instructed to begin a second course of TRIFEME on the usual day. If bleeding does not occur at the end of this second cycle, TRIFEME should not be taken until diagnostic procedures to exclude the possibility of pregnancy have been performed.

If the woman has not adhered to the prescribed regimen (missed one or more active tablets or started taking them on a day later than recommended), the probability of pregnancy should be considered at the time of the first missed period before TRIFEME is resumed.

## **Vomiting and Diarrhoea**

If vomiting occurs within 4 hours after tablet taking, absorption may not be complete. In such an event, the advice concerning **Management of Missed Tablets** is applicable. The woman must take the extra active tablet(s) needed from a backup pack. Diarrhoea may increase gastrointestinal motility and reduce hormone absorption.

## **OVERDOSAGE**

Symptoms of oral contraceptive overdose in adults and children may include nausea, vomiting, breast tenderness, dizziness, abdominal pain, drowsiness/fatigue; withdrawal bleeding may occur in females. There is no specific antidote and further treatment of overdose, if necessary, is directed to the symptoms.

## **PRESENTATION AND STORAGE CONDITIONS**

TRIFEME tablets are presented in PVC/aluminium blister. The blistered product is placed in an aluminium pouch with a silica gel desiccant.

Four month pack containing 4 blisters.

Each blister contains:

6 brown tablets each containing ethinylloestradiol 30 microgram and levonorgestrel 50 microgram, followed by

5 white tablets each containing ethinylloestradiol 40 microgram and levonorgestrel 75 microgram, followed by

10 yellow tablets each containing ethinylloestradiol 30 microgram and levonorgestrel 125 microgram, followed by 7 red inert tablets.

### **Storage Conditions**

Store below 25°C.

## **NAME AND ADDRESS OF THE SPONSOR**

Pfizer Australia Pty Ltd  
ABN 50 008 422 348  
38-42 Wharf Road  
WEST RYDE NSW 2114  
Australia.

## **POISON SCHEDULE OF THE MEDICINE**

S4 (Prescription Only Medicine).

**DATE OF FIRST INCLUSION IN THE AUSTRALIAN REGISTER OF THERAPEUTIC GOODS**

5 June 1992.

**DATE OF MOST RECENT AMENDMENT**

Date of most recent amendment: 22 December 2016.

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