

TRISEQUENS® NOVO NORDISK A/S

Trisequens® contains:

12 blue tablets marked "NOVO 280": Estradiol 2 mg (as estradiol hemihydrate).

10 white tablets marked "NOVO 281": Estradiol 2 mg (as estradiol hemihydrate) and norethisterone acetate 1 mg.

6 red tablets marked "NOVO 282": Estradiol 1 mg (as estradiol hemihydrate).

The tablet cores of the blue, white and red tablets contains:

Lactose monohydrate, maize starch, gelatine, talc, magnesium stearate.

Film-coating:

Blue tablets: Hypromellose, talc, titanium dioxide (E171), indigo carmine (E132) and macrogol 400.

White tablets: Hypromellose, triacetin and talc.

Red tablets: Hypromellose, talc, titanium dioxide (E171), red iron oxide (E172) and propylene glycol.

Each Trisequens calendar dial pack contains 28 film-coated tablets.

Pharmaco-therapeutic group

Oestrogen/progestagen preparation (sex hormones).

Manufacturer

Novo Nordisk A/S
2880 Bagsvaerd, Denmark

Indications

Hormone Replacement Therapy (HRT) for oestrogen deficiency symptoms.

Prevention of osteoporosis in postmenopausal women at high risk of future fractures, who are intolerant of, or contraindicated for, other medicinal products approved for the prevention of osteoporosis.

The experience of treating women older than 65 years is limited.

Contraindications

- Known, past or suspected breast cancer
- Known or suspected oestrogen-dependent malignant tumours (e.g. endometrial cancer)

- Undiagnosed genital bleeding
- Untreated endometrial hyperplasia
- Previous idiopathic or current venous thromboembolism (deep venous thrombosis, pulmonary embolism)
- Active or recent arterial thromboembolic diseases (e.g. angina, myocardial infarction)
- Acute liver disease, or a history of liver disease as long as liver function tests have failed to return to normal
- Known hypersensitivity to the active substances or to any of the excipients
- Porphyria.

Special warnings and special precautions for use

For the treatment of postmenopausal symptoms, HRT should only be initiated for symptoms that adversely affect quality of life. In all cases, a careful appraisal of the risks and benefits should be undertaken at least annually and HRT should only be continued as long as the benefit outweighs the risk.

Medical examination/follow-up

Before initiating or reinstating HRT, a complete personal and family medical history should be taken.

Physical (including pelvic and breast) examination should be guided by this and by the contraindications and warnings for use. During treatment periodic check-ups are recommended of a frequency and nature adapted to the individual woman. Women should be advised which changes in their breasts should be reported to their doctor or nurse. Investigations, including mammography, should be carried out in accordance with currently accepted screening practices, modified to the clinical needs of the individual.

Conditions which need supervision

If any of the following conditions are present, have occurred previously, and/or have been aggravated during pregnancy or previous hormone treatment, the patient should be closely supervised.

It should be taken into account that these conditions may recur or be aggravated during treatment with Trisequens, in particular:

- Leiomyoma (uterine fibroids) or endometriosis
- A history of, or risk factors for, thromboembolic disorders (see below)
- Risk factors for oestrogen dependent tumours, e.g. 1st degree heredity for breast cancer
- Hypertension
- Liver disorders (e.g. liver adenoma)
- Diabetes mellitus with or without vascular involvement
- Cholelithiasis
- Migraine or (severe) headache
- Systemic lupus erythematosus
- A history of endometrial hyperplasia (see below)
- Epilepsy
- Asthma
- Otosclerosis

Reasons for immediate withdrawal of therapy

Therapy should be discontinued in case a contraindication is discovered and in the following situations:

- Jaundice or deterioration in liver function
- Significant increase in blood pressure
- New onset of migraine-type headache
- Pregnancy

Endometrial hyperplasia

The risk of endometrial hyperplasia and carcinoma is increased when oestrogens are administered alone for prolonged periods (see "Side effects"). The addition of a progestagen, for at least 10 days per cycle in non-hysterectomised women greatly reduces this risk.

Breakthrough bleeding and spotting may occur during the first months of treatment.

If breakthrough bleeding or spotting appears after some time on therapy, or continues after treatment has been discontinued, the reason should be investigated, which may include endometrial biopsy to exclude endometrial malignancy.

Breast cancer

A randomised placebo-controlled trial, the Women's Health Initiative study (WHI), and epidemiological studies, including the Million Woman Study (MWS),

have reported an increased risk of breast cancer in women taking oestrogens, oestrogen-progestagen combinations or tibolone for HRT for several years (see "Side effects").

For all HRT, an excess risk becomes apparent within a few years of use and increases with duration of intake but returns to baseline within a few (at most five) years after stopping treatment.

In the MWS, the relative risk of breast cancer with conjugated equine oestrogens (CEE) or estradiol (E2) was greater when a progestagen was added, either sequentially or continuously, and regardless of type of progestagen.

There was no evidence of a difference in risk between the different routes of administration.

In the WHI study, the continuous combined conjugated equine oestrogen and medroxyprogesterone acetate (CEE + MPA) product used was associated with breast cancers that were slightly larger in size and more frequently had local lymph node metastases compared to placebo.

HRT, especially oestrogen-progestagen combined treatment, increases the density of mammographic images which may adversely affect the radiological detection of breast cancer.

Venous thromboembolism HRT is associated with a higher relative risk of developing venous thromboembolism (VTE), i.e. deep vein thrombosis or pulmonary embolism. One randomised controlled trial and epidemiological studies found a two- to three-fold higher risk for users compared with non-users. For non-users it is estimated that the number of cases of VTE that will occur over a 5 year period is about 3 per 1000 women aged 50-59 years and 8 per 1000 women aged between 60-69 years.

It is estimated that in healthy women who use HRT for 5 years, the number of additional cases of VTE over a 5 year period will be between 2 and 6 (best estimate = 4) per 1000 women aged 50-59 years and between 5 and 15 (best estimate = 9) per 1000 women aged 60-69 years. The occurrence of such an event is more likely in the first year of HRT than later.

Generally recognised risk factors for VTE include

a personal history or family history, severe obesity (Body Mass Index $>30 \text{ kg/m}^2$) and systemic lupus erythematosus (SLE).

There is no consensus about the possible role of varicose veins in VTE.

Patients with a history of VTE or known thrombophilic states have an increased risk of VTE. HRT may add to this risk. Personal or strong family history of thromboembolism, or recurrent spontaneous abortion, should be investigated in order to exclude a thrombophilic predisposition. Until a thorough evaluation of thrombophilic factors has been made or anticoagulant treatment initiated, use of HRT in such patients should be viewed as contraindicated. Those women already on anticoagulant treatment require careful consideration of the benefit-risk of use of HRT.

The risk of VTE may be temporarily increased with prolonged immobilisation, major trauma or major surgery. As in all postoperative patients, scrupulous attention should be given to prophylactic measures to prevent VTE following surgery. Where prolonged immobilisation is liable to follow elective surgery, particularly abdominal or orthopaedic surgery to the lower limbs, consideration should be given to temporarily stopping HRT four to six weeks earlier, if possible. Treatment should not be restarted until the woman is completely mobilised.

If VTE develops after initiating therapy, the drug should be discontinued. Patients should be told to contact their doctors immediately when they are aware of a potential thromboembolic symptom (e.g. painful swelling of a leg, sudden pain in the chest, dyspnea).

Coronary artery disease (CAD) There is no evidence from randomised controlled trials of cardiovascular benefit with continuous combined conjugated oestrogens and medroxyprogesterone acetate (MPA). Two large clinical trials (WHI and HERS i.e. Heart and Estrogen/progestin Replacement Study) showed a possible increased risk of cardiovascular morbidity in the first year of use and no overall benefit. For other HRT products there are only limited data from randomised controlled trials examining effects in cardiovascular morbidity and mortality.

Therefore, it is uncertain whether these findings also extend to other HRT products.

Stroke

One large randomised clinical trial (WHI-trial) found, as a secondary outcome, an increased risk of ischaemic stroke in healthy women during treatment with continuous combined conjugated oestrogens and MPA. For women who do not use HRT, it is estimated that the number of cases of stroke that will occur over a 5 year period is about 3 per 1000 women aged 50 - 59 years and 11 per 1000 women aged 60 - 69 years. It is estimated that for women who use conjugated oestrogens and MPA for 5 years, the number of additional cases will be between 0 and 3 (best estimate = 1) per 1000 users aged 50 - 59 years and between 1 and 9 (best estimate = 4) per 1000 users aged 60 - 69 years. It is unknown whether the increased risk also extends to other HRT products.

Ovarian cancer

Long-term (at least 5 - 10 years) use of oestrogen-only HRT products in hysterectomised women has been associated with an increased risk of ovarian cancer in some epidemiological studies. It is uncertain whether long-term use of combined HRT confers to a different risk than oestrogen-only products.

Other conditions

Oestrogens may cause fluid retention, and therefore patients with cardiac or renal dysfunction should be carefully observed. Patients with terminal renal insufficiency should be closely observed, since it is expected that the level of circulating active ingredients in Trisequens will increase.

Women with pre-existing hypertriglyceridemia should be followed closely during oestrogen replacement or hormone replacement therapy, since rare cases of large increases of plasma triglycerides leading to pancreatitis have been reported with oestrogen therapy in this condition.

Oestrogens increase thyroid binding globulin (TBG), leading to increased circulating total thyroid hormone, as measured by protein-bound iodine (PBI), T4 levels (by column or by radio-immunoassay) or T3 levels (by radio-immunoassay).

T3 resin uptake is decreased, reflecting the elevated TBG.

Free T4 and free T3 concentrations are unaltered. Other binding proteins may be elevated in serum, i.e. corticoid binding globulin (CBG), sex-hormonebinding globulin (SHBG) leading to increased circulating corticosteroids and sex steroids, respectively. Free or biological active hormone concentrations are unchanged.

Other plasma proteins may be increased (angiotensinogen/renin substrate, alpha-I-antitrypsin, ceruloplasmin).

There is no conclusive evidence for improvement of cognitive function.

There is some evidence from the WHI trial of increased risk of probable dementia in women who start using continuous combined CEE and MPA after the age of 65.

It is unknown whether the findings apply to younger post-menopausal women or other HRT products.

Contraceptive

Trisequens has no contraceptive effect.

Interactions

The metabolism of oestrogens and progestagens may be increased by concomitant use of substances known to induce drug-metabolising enzymes, specifically cytochrome P450 enzymes such as anti-convulsants (e.g. phenobarbital, phenytoin, carbamazepin) and anti-infectives (e.g. rifampicin, rifabutin, nevirapine, efavirenz).

Ritonavir and nelfinavir, although known as strong inhibitors, by contrast exhibit inducing properties when used concomitantly with steroid hormones. Herbal preparations containing St. John's Wort (*Hypericum perforatum*) may induce the metabolism of oestrogens and progestagens.

Clinically, an increased metabolism of oestrogens and progestagens may lead to decreased effect and changes in the uterine bleeding profile.

Drugs that inhibit the activity of hepatic microsomal drug metabolising enzymes e.g. ketoconazole, may increase circulating levels of the active substances in Trisequens.

Pregnancy and lactation

Trisequens is not indicated during pregnancy.

If pregnancy occurs during medication with Trisequens, treatment should be withdrawn immediately.

Data on a limited number of exposed pregnancies indicate adverse effects of norethisterone on the foetus. At doses higher than normally used in OC and HRT formulations masculinisation of female foetuses was observed.

The results of most epidemiological studies to date relevant to inadvertent foetal exposure to combinations of oestrogens and progestagens indicate no teratogenic or foetotoxic effect.

Trisequens is not indicated during lactation.

Effects on ability to drive and use machines

No effects known.

Dosage and administration

Trisequens is a continuous sequential preparation for hormone replacement therapy. The oestrogen is dosed continuously.

The progestagen is added for 10 days of every 28 day cycle, in a sequential manner.

One tablet should be taken orally once a day without interruption, preferably at the same time of the day starting with oestrogen therapy (blue film-coated tablet) over 12 days, followed by 10 days of oestrogen/progestagen therapy (white film-coated tablet) and 6 days of oestrogen therapy (red film-coated tablet). A regular shedding of the endometrium is usually induced during the red tablet phase.

After intake of the last red tablet, treatment is continued with the first blue tablet of a new pack on the next day.

In women with amenorrhoea and not taking HRT or women with irregular bleeding or women transferring from a continuous combined HRT product, treatment with Trisequens may be started on any convenient day. In women transferring from another sequential HRT regimen, or women still having periods treatment should start on the 5th day of the period.

For initiation and continuation of treatment of post-menopausal symptoms, the lowest effective dose

for the shortest duration (see “Special warnings and precautions for use”) should be used.

A switch to a higher dose combination product could be indicated if the response after three months is insufficient for satisfactory symptom relief.

If the patient has forgotten to take one tablet, the forgotten tablet is to be discarded. Forgetting a dose may increase the likelihood of breakthrough bleeding and spotting.

Overdose

Overdose may be manifested by nausea and vomiting. Treatment should be symptomatic.

Side effects

The most frequently reported adverse events in the clinical trials with Trisequens were vaginal bleeding and breast pain/tenderness, reported in approximately 10% to 20% of patients. Vaginal bleeding usually occurred in the first months of treatment. Breast pain usually disappears after a few months of therapy. All adverse events observed in the randomised clinical trials with a higher frequency in patients treated with Trisequens or similar HRT products as compared to placebo and which on an overall judgement are possible related to treatment are presented below.

Very common (>1/10)

- Reproductive system and breast disorders: Breast pain or breast tenderness, menstruation irregular or menorrhagia.

Common (>1/100; <1/10)

- Infections and infestations: Genital candidiasis or vaginitis
- Metabolism and nutrition disorders: Fluid retention
- Psychiatric disorders: Depression or depression aggravated
- Nervous system disorders: Headache, migraine or migraine aggravated
- Gastrointestinal disorders: Nausea, abdominal pain, abdominal distension or abdominal discomfort
- Musculoskeletal, connective tissue and bone disorders: Leg cramps or back pain
- Reproductive system and breast disorders: Breast oedema or breast enlargement, uterine fibroids or

uterine fibroids aggravated or uterine fibroids recurrence

- General disorders and administration site conditions: Oedema peripheral
- Investigations: Weight increased.

Uncommon (>1/1,000; <1/100)

- Immune system disorders: Hypersensitivity
- Psychiatric disorders: Nervousness
- Vascular disorders: Thrombophlebitis superficial
- Gastrointestinal disorders: Flatulence or bloating
- Skin and subcutaneous tissue disorders: Alopecia, hirsutism or acne, pruritus or urticaria
- Reproductive system and breast disorders: Hyperplasia endometrial, dysmenorrhoea
- General disorders and administration site conditions: Drug ineffective

Rare (>1/10,000; <1/1,000)

- Vascular disorders: Pulmonary embolism, thrombophlebitis deep.

Breast cancer

According to evidence from a large number of epidemiological studies and one randomised placebo-controlled trial, the Women’s Health Initiative (WHI), the overall risk of breast cancer increases with increasing duration of HRT use in current or recent HRT users.

For oestrogen-only HRT, estimates of relative risk (RR) from a reanalysis of original data from 51 epidemiological studies (in which >80% of HRT use was oestrogenonly HRT) and from the epidemiological Million Women Study (MWS) are similar at 1.35 (95%CI 1.21 - 1.49) and 1.30 (95%CI 1.21 - 1.40), respectively.

For oestrogen plus progestagen combined HRT, several epidemiological studies have reported an overall higher risk for breast cancer than with oestrogens alone.

The MWS reported that, compared to never users, the use of various types of oestrogen-progestagen combined HRT was associated with a higher risk of breast cancer (RR = 2.00, 95%CI: 1.88 - 2.12) than use of oestrogens alone (RR = 1.30, 95%CI: 1.21 - 1.40) or use of tibolone (RR=1.45; 95%CI 1.25-1.68).

The WHI trial reported a risk estimate of 1.24 (95%CI 1.01 - 1.54) after 5.6 years of use of oestrogen-progestagen combined HRT (CEE + MPA) in all users compared with placebo.

The absolute risks calculated from the MWS and the WHI trial are presented below:

The MWS has estimated, from the known average incidence of breast cancer in developed countries, that:

- For women not using HRT, about 32 in every 1000 are expected to have breast cancer diagnosed between the ages of 50 and 64 years.
- For 1000 current or recent users of HRT, the number of additional cases during the corresponding period will be:

For users of oestrogen-only replacement therapy: Between 0 and 3 (best estimate = 1.5) for 5 years' use. Between 3 and 7 (best estimate = 5) for 10 years' use.

For users of oestrogen plus progestagen combined HRT: Between 5 and 7 (best estimate = 6) for 5 years' use. Between 18 and 20 (best estimate = 19) for 10 years' use.

The WHI trial estimated that after 5.6 years of follow-up of women between the ages of 50 and 79 years, an additional 8 cases of invasive breast cancer would be due to oestrogen-progestagen combined HRT (CEE + MPA) per 10,000 women years.

According to calculations from the trial data, it is estimated that:

- For 1000 women in the placebo group, about 16 cases of invasive breast cancer would be diagnosed in 5 years.
- For 1000 women who used oestrogen + progestagen combined HRT (CEE + MPA), the number of additional cases would be between 0 and 9 (best estimate = 4) for 5 years' use.

The number of additional cases of breast cancer in women who use HRT is broadly similar for women who start HRT irrespective of age at start of use (between the ages of 45-65) (see "Special warnings and special precautions for use").

Endometrial cancer

In women with an intact uterus, the risk of endome-

trial hyperplasia and endometrial cancer increases with increasing duration of use of unopposed oestrogens. According to data from epidemiological studies, the best estimate of the risk is that for women not using HRT, about 5 in every 1000 are expected to have endometrial cancer diagnosed between the ages of 50 and 65. Depending on the duration of treatment and oestrogen dose, the reported increase in endometrial cancer risk among unopposed oestrogen users varies from 2-to 12-fold greater compared with non-users. Adding a progestagen to oestrogen-only therapy greatly reduces this increased risk.

In addition to the above mentioned adverse drug reactions, those presented below have been spontaneously reported, and are by an overall judgement considered possibly related to Trisequens treatment.

Very rare (<1/10,000)

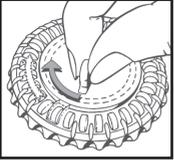
- Neoplasms benign and malignant (incl. cysts and polyps): Endometrial cancer
- Psychiatric disorders: Insomnia, anxiety, libido decreased, libido increased
- Nervous system disorders: Dizziness, stroke
- Eye disorders: Visual disturbances
- Vascular disorders: Hypertension aggravated
- Cardiac disorders: Myocardial infarction
- Gastrointestinal disorders: Dyspepsia, vomiting
- Hepatobiliary disorders: Gallbladder disease, cholelithiasis, cholelithiasis aggravated, cholelithiasis re-occurrence
- Skin and subcutaneous tissue disorder: Seborrhoea, rash, angioneurotic oedema
- Reproductive system and breast disorders: Vulvovaginal pruritus
- Investigations: Weight decreased, blood pressure increased.

The following adverse reactions have been reported to be associated with oestrogen/progestagen treatment:

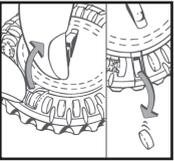
- Skin and subcutaneous disorders: Chloasma, erythema multiforme, erythema nodosum and vascular purpura
- Probable dementia (see "Special warnings and special precautions for use").

Storage conditions

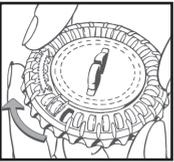
Do not store above 25°C. Do not refrigerate. Keep the container in the outer carton.

Instructions for use**1. Set the day reminder**

Turn the inner disk to set the selected day of the week opposite the little plastic tab.

**2. How to take the first tablet**

Break the plastic tab and tip out the first tablet.

**3. Every day**

Simply move the transparent dial clockwise one space as indicated by the arrow. Tip out the next tablet. The transparent dial can only be turned after the tablet in the

opening has been removed.

Trisequens® is a trademark owned by Novo Nordisk A/S

Please go to www.novonordisk.com for more information.