

#### PROFESSIONAL INFORMATION

##### SCHEDULING STATUS

Schedule 4

##### PROPRIETARY NAME AND DOSAGE FORM

EVOREL® SEQUI patch

##### COMPOSITION

EVOREL SEQUI is a combination of an oestradiol matrix type transdermal patch and an oestradiol/norethisterone acetate matrix type transdermal patch (sequential regimen).

**EVOREL SEQUI** is a transdermal therapy comprising:  
 (a) **EVOREL 50** each containing 3.1 mg oestradiol, formulated as 3.2 mg of oestradiol hemihydrate. Each **EVOREL 50** patch delivers 50 µg of oestradiol per 24 hours.  
 (b) **EVOREL CONTI** each containing 3.1 mg oestradiol formulated as 3.2 mg of oestradiol hemihydrate and 9.82 mg norethisterone acetate, formulated as 1.2 mg of norethisterone acetate. Each **EVOREL CONTI** delivers 50 µg of oestradiol and 170 µg of norethisterone acetate per 24 hours.

The following are the inactive ingredients of **EVOREL SEQUI**, **EVOREL 50** and **EVOREL CONTI**:

- Adhesive: acrylate-vinylacetate copolymer
- Guar gum
- Backing film: polyethylene terephthalate foil
- Release liner: siliconised polyethylene terephthalate foil is removed before application

**EVOREL SEQUI** contains no sugar.

##### PHARMACOLOGICAL CLASSIFICATION

A 2.1.2 Oestrogen; **EVOREL 50**  
 A 21.8.2 Progestogens with oestrogen (**EVOREL CONTI**)

##### PHARMACOLOGICAL ACTION

Oestradiol  
 Oestradiol (E<sub>2</sub>)

The active hormone of **EVOREL SEQUI** is 17 $\beta$ -oestradiol a biologically oestrogen produced by the ovary.

##### Norethisterone acetate (NTA)

Norethisterone acetate used in the **EVOREL CONTI** of **EVOREL SEQUI** is norethisterone acetate, which is a progestogen derivative of the 13-methyl gonane group with potent progestational activity. Transdermal norethisterone acetate administration prevents oestrogen-related endometrial proliferation.

##### Pharmacokinetic Properties

Oestradiol distributes widely in the body tissues and is bound to albumin (about 60 - 65 %) and sex-hormone-binding globulin (about 35 - 45 %) in serum. Serum protein-binding fractions remain unaltered following transdermal delivery of oestradiol.

Oestradiol is promptly eliminated from the systemic circulation. Oestradiol is metabolised principally into the less pharmacologically active oestrene and its corresponding sulphate. Oestradiol, oestrene and oestrene sulphate are interconverted to each other and are excreted in urine as glucuronides and sulphates. The skin metabolises oestradiol to a small extent.

##### Norethisterone

Norethisterone acetate is hydroxylated to the active progestagen, norethisterone. Norethisterone acetate produces a sustained and effective level of norethisterone in the systemic circulation.

Norethisterone distributes widely in the body tissues and is bound to albumin (about 61 %) and sex-hormone-binding globulin (about 36 %) in serum. Norethisterone is primarily metabolised by reduction of the  $\alpha$ ,  $\beta$ -unsaturated ketone structure in ring A of the molecule.

Among the four possible stereoisomeric tetrahydrosteroids, the 5 $\alpha$ , 3 $\alpha$ -hydroxy-derivative appears to be the predominant metabolite. These compounds are primarily excreted in urine and faeces as sulphates and glucuronides conjugates.

##### E<sub>2</sub>/NTA combination

Oestradiol and norethisterone acetate and multiple application study in postmenopausal women, serum oestradiol concentrations increased rapidly from pre-treatment levels (about 5 pg/ml) after application of **EVOREL CONTI**.

At four hours after application, the mean serum oestradiol concentration was about 19 pg/ml.

A mean pre-treatment oestradiol concentration of about 41 pg/ml above the pre-treatment level was observed at about 22 hours following application. Serum oestradiol concentrations remained elevated for the 3.5-day application period.

Concentrations returned rapidly to pre-treatment levels within 24 hours following removal of the patch. A serum half-life of about 6.6 hours was determined with an increased risk of ischaemic stroke.

##### Dementia

HRT use does not improve cognitive function. There is evidence of increased risk of dementia in women using continuous combined HRT such as **EVOREL SEQUI** or oestrogen-only HRT.

##### Depressed mood and depression and the risk of suicidality

There are cases and depression are side effects reported with the use of hormonal containing products including **EVOREL SEQUI**. There is some evidence that use of oestrogen and/or progestogen/progestogen containing medicines may be associated with severe depression and a higher risk of suicidal thoughts/behavior (e.g. talking about suicide, withdrawing from social contact, having mood swings, being preoccupied with death or violence, feeling hopeless about a situation, increasing use of alcohol/drugs, doing self-destructive things, personality changes) and/or suicide. Prescribers should inform their patients to contact their doctor for advice if they experience mood changes and depression whilst on treatment with **EVOREL SEQUI**.

##### Other conditions

Concomitant administration of lamotrigine with medicines containing both ethynodiol diacetate and a progestagen, such as **EVOREL SEQUI**, increases the risk of seizures in epileptic patients. (See **INTERACTIONS**).

##### EVOREL SEQUI is not to be used as contraception.

**EVOREL SEQUI** should be kept away from children.

##### INTERACTIONS

Medicines, which induce microsomal liver enzyme activity, may alter oestrogen and progestogen metabolism and change the effect of **EVOREL SEQUI**. Examples of these medicines are barbiturates, hydantoins, carbamazepine, phenobarbital, phenytoin, rifampicin, rifabutin, bosentan and certain non-nucleoside reverse transcriptase inhibitors (e.g. nevirapine and efavirenz) used in the treatment of HIV/AIDS infections.

Ritonavir and neflunaril, although known as strong inhibitors of the cytochrome P450 isoenzymes, by contrast exhibit inducing properties when used concomitantly with **EVOREL SEQUI**. The effect of these drugs on the metabolism of **EVOREL SEQUI** has not been studied.

Metabolism may be affected by St. John's wort preparations (*Hypericum perforatum*), which induce certain cytochrome P450 isoenzymes in the liver (e.g. CYP 3A4) as well as P-glycoprotein.

The induction of the P450 isoenzymes may reduce plasma concentrations of the oestrogen component of **EVOREL SEQUI** possibly resulting in a decrease in the therapeutic effect and increased vaginal bleeding.

The induction of these same isoenzymes may also reduce circulating concentrations of the progestin component of **EVOREL SEQUI** which could result in a diminished effect against oestrogen-induced endometrial hyperplasia.

Concomitant administration of lamotrigine has been shown to significantly decrease plasma concentrations of lamotrigine when co-administered due to induction of lamotrigine glucuronidation. This may reduce seizure control.

Although the potential interaction between **EVOREL SEQUI** therapy and lamotrigine has not been studied, it is expected that a similar interaction exists, which may lead to a reduction in seizure control among women taking both medicines together.

Therefore, discontinuation of lamotrigine may be necessary (see **WARNINGS and SPECIAL PRECAUTIONS**).

A history of depression with the use of oestrogen and/or progestogen/progestogen containing medicines irrespective of the indication, dosage formulation and route of administration.

##### WARNINGS AND SPECIAL PRECAUTIONS

For the management of menopausal symptoms, it is recommended that the patient be given a thorough physical and gynaecological examination. A complete medical and family history of thromboembolic or thromboembolic disorders should be taken.

Repeated breakthrough bleeding, unexplained vaginal bleeding, and changes in the pattern of bleeding should be monitored.

A careful appraisal of the risk/benefit ratio should be undertaken before the initiation of treatment.

##### 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 carefully monitored:

- Leiomyoma (uterine fibroids) or endometriosis.
- Risk factors for thromboembolic disorders (see below).
- Risk factors for oestrogen dependent tumours, e.g. first degree relative with breast cancer.
- Hypertension.
- Liver disorders.
- Diabetes mellitus.
- Obesity.
- Migraine or severe headache.
- Systemic lupus erythematosus.
- A history of endometrial hyperplasia (see below).
- Deep vein thrombosis.
- Mastopathy.

##### Conditions which require monitoring while on **EVOREL SEQUI** therapy:

- Oestrogens such as in **EVOREL SEQUI** may cause fluid retention.
- Cardiac or renal dysfunction should be carefully observed.
- Disturbances of liver function.
- High blood cholesterol.
- Pre-existing hypertension.
- Cases of large increases of plasma triglycerides leading to pancreatitis have been reported in this condition.

#### 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.
- Increased blood pressure.
- New onset of migraine-type headache.
- Pregnancy.

##### Breast cancer

**EVOREL SEQUI** contains oestrogen only which, on prolonged use, may increase the risk of developing breast cancer. A meta-analysis of prospective epidemiological studies found a 2-fold increase in the risk of developing breast cancer in 55,573 women 40 - 59 years of age who used menopausal hormone therapy (MHT).

The risk increased steadily with duration of use and was slightly greater for continuous therapy than oestrogen only preparations, and the risk persisted for more than 10 years after stopping the treatment.

The relative risk (RR) to develop breast cancer for oestrogen-progestogen compared to oestrogen only preparations was 1.7 at 1 - 4 years and 1.33 at 5 - 14 years. There was no risk to develop breast cancer in women who started MHT at 60 years of age.

Women on **EVOREL SEQUI** should receive yearly breast examinations by a healthcare provider and perform monthly breast self-examinations. Mammography evaluations should be done on patient age, risk factors and prior mammogram results.

##### Combined oestrogen-progestogen therapy:

The randomised placebo-controlled trial in the Women's Health Initiative study (WHI), and the WHI study of combined oestrogen-progestogen and oestrogen only, are consistent in finding an increased risk of breast cancer in women taking combined oestrogen-progestogen for HRT that becomes apparent after about 3 years.

##### Oestrogen-only therapy:

The WHI trial found no increase in the risk of breast cancer in hysterectomised women using oestrogen-only HRT.

The excess risks apparent within a few years of use returns to baseline within a few (at most five) years after stopping treatment. HRT, especially oestrogen-progestogen combined treatment, increases the density of mammographic images which may adversely affect the radiological detection of breast cancer.

##### Ovarian Cancer

Long-term (at least 5 years) use of oestrogen-only HRT products in hysterectomised women have been associated with an increased risk of ovarian cancer in some epidemiological studies.

Some studies including the WHI trial suggest that the long-term use of combined HRTs such as **EVOREL SEQUI** may also confer an increased risk.

##### Venous thromboembolism

Hormone replacement therapy (HRT) is associated with a higher relative risk of deep vein thrombosis (DVT), such as deep vein thrombosis or pulmonary embolism. One randomised controlled trial and epidemiological studies found a two- to threefold higher risk for users compared with non-users.

Persons with a strong family history of recurrent thromboembolism or recurrent spontaneous abortions should be investigated in order to exclude a thrombophilic predisposition.

Until a thorough evaluation of thrombophilic factors has been made or anticoagulant treatment initiated, the use of **EVOREL SEQUI** in such patients should be viewed as contraindicated.

Those women already on anticoagulant treatment require careful consideration of the benefit-risk of using **EVOREL SEQUI**. Patients should be told to contact their doctor immediately if they become aware of a potential thromboembolic symptom (e.g., painful swelling of a leg, sudden pain in the chest, dyspnoea).

##### Coronary artery disease (CAD)

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

##### Stroke

There is an increased risk of stroke in healthy women during treatment with HRT. Combined oestrogen-progestogen and oestrogen-only therapy are associated with an increased risk of ischaemic stroke.

##### Dementia

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