

# NORGESTIMATE AND ETHINYL ESTRADIOL- norgestimate and ethinyl estradiol

## AvKARE

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### HIGHLIGHTS OF PRESCRIBING INFORMATION

#### Norgestimate and Ethinyl Estradiol Tablets, USP

These highlights do not include all the information needed to use Norgestimate and Ethinyl Estradiol Tablets, USP safely and effectively. See full prescribing information for Norgestimate and Ethinyl Estradiol Tablets, USP.

Initial U.S. Approval: 1989

#### WARNING: CIGARETTE SMOKING AND SERIOUS CARDIOVASCULAR EVENTS

*See full prescribing information for complete boxed warning.*

- Norgestimate and ethinyl estradiol are contraindicated in women over 35 years old who smoke. ( 4)
- Cigarette smoking increases the risk of serious cardiovascular events from combination oral contraceptives (COC) use. ( 4)

#### RECENT MAJOR CHANGES

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Contraindications ( 4) 11/2021

Warnings and Precautions ( 5.3) 11/2021

#### INDICATIONS AND USAGE

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Norgestimate and Ethinyl Estradiol Tablets are an estrogen/progestin COCs, indicated for use by women to prevent pregnancy. ( 1.1)

#### DOSAGE AND ADMINISTRATION

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- Take one tablet daily by mouth at the same time every day. ( 2.2)
- Take tablets in the order directed on the blister pack. ( 2.2)
- Do not skip or delay tablet intake. ( 2.2)

#### DOSAGE FORMS AND STRENGTHS

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Norgestimate and Ethinyl Estradiol Tablets consists of 28 round tablets in the following order ( 3):

- 21 blue tablets each containing 0.25 mg norgestimate and 0.035 mg ethinyl estradiol
- 7 green tablets (inert)

#### CONTRAINDICATIONS

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- A high risk of arterial or venous thrombotic diseases ( 4)
- Liver tumors or liver disease ( 4)
- Undiagnosed abnormal uterine bleeding ( 4)
- Pregnancy ( 4)
- Breast cancer or other estrogen- or progestin-sensitive cancer ( 4)
- Co-administration with Hepatitis C drug combinations containing ombitasvir/paritaprevir/ritonavir, with or without dasabuvir ( 4)

#### WARNINGS AND PRECAUTIONS

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- **Thromboembolic Disorders and Other Vascular Problems:** Stop norgestimate and ethinyl estradiol if a thrombotic event occurs. Stop at least 4 weeks before and through 2 weeks after major surgery. Start no earlier than 4 weeks after delivery, in women who are not breastfeeding. ( 5.1)
- **Liver disease:** Discontinue norgestimate and ethinyl estradiol if jaundice occurs. ( 5.2)
- **High blood pressure:** If used in women with well-controlled hypertension, monitor blood pressure and stop norgestimate and ethinyl estradiol if blood pressure rises significantly. ( 5.4)
- **Carbohydrate and lipid metabolic effects:** Monitor prediabetic and diabetic women taking norgestimate and ethinyl estradiol. Consider an alternate contraceptive method for women with uncontrolled dyslipidemia. ( 5.6)

- **Headache:** Evaluate significant change in headaches and discontinue norgestimate and ethinyl estradiol if indicated. ( 5.7)
- **Bleeding Irregularities and Amenorrhea:** Evaluate irregular bleeding or amenorrhea. ( 5.8)

#### -----ADVERSE REACTIONS-----

The most common adverse reactions reported during clinical trials ( $\geq 2\%$ ) were:

Norgestimate and ethinyl estradiol: headache/migraine, abdominal/gastrointestinal pain, vaginal infection, genital discharge, breast issues (including breast pain, discharge, and enlargement), mood disorders (including depression and mood altered), flatulence, nervousness, rash. ( 6.1)

**To report SUSPECTED ADVERSE REACTIONS, contact AvKARE at 1-855-361-3993; email DRUGSAFETY@AVKARE.COM or FDA at 1-800-FDA-1088 or [www.fda.gov/medwatch](http://www.fda.gov/medwatch).**

#### -----DRUG INTERACTIONS-----

Drugs or herbal products that induce certain enzymes including CYP3A4, may decrease the effectiveness of COCs or increase breakthrough bleeding. Counsel patients to use a back-up or alternative method of contraception when enzyme inducers are used with COCs. ( 7.1)

#### -----USE IN SPECIFIC POPULATIONS-----

**Nursing mothers:** Not recommended; can decrease milk production. ( 8.3)

**See 17 for PATIENT COUNSELING INFORMATION.**

**Revised: 11/2021**

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## **FULL PRESCRIBING INFORMATION**

### **WARNING: CIGARETTE SMOKING AND SERIOUS CARDIOVASCULAR EVENTS**

**Cigarette smoking increases the risk of serious cardiovascular events from combination oral contraceptive (COC) use. This risk increases with age, particularly in women over 35 years of age, and with the number of cigarettes smoked. For this reason, COCs are contraindicated in women who are over 35 years of age and smoke [see CONTRAINDICATIONS (4)].**

## **1 INDICATIONS AND USAGE**

### **1.1 Oral Contraceptive**

Norgestimate and Ethinyl Estradiol Tablets are indicated for use by females of reproductive potential to prevent pregnancy [see **CLINICAL STUDIES (14)**].

## 2 DOSAGE AND ADMINISTRATION

### 2.1 How to Start Norgestimate and Ethinyl Estradiol Tablets

Norgestimate and Ethinyl Estradiol Tablets dispensed in a blister pack [see **HOW SUPPLIED/STORAGE AND HANDLING ( 16)**]. Norgestimate and Ethinyl Estradiol Tablets may be started using either a Day 1 start or a Sunday start (see **Table 1**). For the first cycle of a Sunday Start regimen, an additional method of contraception should be used until after the first 7 consecutive days of administration.

### 2.2 How to Take Norgestimate and Ethinyl Estradiol Tablets

**Table 1: Instructions for Administration of Norgestimate and Ethinyl Estradiol Tablets**

<b>Starting COCs in women not currently using hormonal contraception (Day 1 Start or Sunday Start)</b>	<b>Day 1 Start:</b> <ul style="list-style-type: none"><li>• Take first active tablet without regard to meals on the first day of menses.</li><li>• Take subsequent active tablets once daily at the same time each day for a total of 21 days.</li><li>• Take one <b>green</b> inactive tablet daily for 7 days and at the same time of day that active tablets were taken.</li><li>• Begin each subsequent blister pack on the same day of Norgestimate and Ethinyl Estradiol Tablets the week as the first cycle blister pack (i.e., on the day after taking the last inactive tablet)</li></ul>
<b>Important:</b>  Consider the possibility of ovulation and conception prior to initiation of this product.	<b>Sunday Start:</b> <ul style="list-style-type: none"><li>• Take first active tablet without regard to meals on the first Sunday after the onset of menses. <b>Due to the potential risk of becoming pregnant, use additional non-hormonal contraception (such as condoms and spermicide) for the first seven days of the patient's first cycle blister pack of Norgestimate and</b></li></ul>
<b>Tablet Color:</b> <ul style="list-style-type: none"><li>• Norgestimate and Ethinyl Estradiol Tablets active tablets are blue (Day 1 to Day 21).</li><li>• Norgestimate and Ethinyl Estradiol Tablets has green inactive tablets (Day 22 to Day 28)</li></ul>	

	<p><b>Ethinyl Estradiol Tablets.</b></p> <ul style="list-style-type: none"> <li>• Take subsequent active tablets once daily at the same time each day for a total of 21 days.</li> <li>• Take one <b>green</b> inactive tablet daily for the following 7 days and at the same time of day that active tablets were taken.</li> <li>• Begin each subsequent blister pack on the same day of the week as the first cycle blister pack (i.e., on the Sunday after taking the last inactive tablet) and additional non-hormonal contraceptive is not needed.</li> </ul>
<b>Switching to Norgestimate and Ethinyl Estradiol Tablets from another oral contraceptive</b>	Start on the same day that a new blister pack of the previous oral contraceptive would have started.
<b>Switching from another contraceptive method to Norgestimate and Ethinyl Estradiol Tablets</b>	<b>Start Norgestimate and Ethinyl Estradiol Tablets:</b>
• <b>Transdermal patch</b>	• On the day when next application would have been scheduled
• <b>Vaginal ring</b>	• On the day when next insertion would have been scheduled
• <b>Injection</b>	• On the day when next injection would have been scheduled
• <b>Intrauterine contraceptive</b>	• On the day of removal • If the IUD is not removed on first day of the patient's menstrual cycle, additional non-hormonal contraceptive (such as condoms and spermicide) is needed for the first seven days of the first cycle blister pack.
• <b>Implant</b>	• On the day of removal

**Complete instructions to facilitate patient counseling on proper tablet usage are located in the FDA-Approved Patient Labeling.**

**Starting Norgestimate and Ethinyl Estradiol Tablets after Abortion or Miscarriage**

***First-trimester***

- After a first-trimester abortion or miscarriage, Norgestimate and Ethinyl Estradiol

Tablets may be started immediately. An additional method of contraception is not needed if Norgestimate and Ethinyl Estradiol Tablets is started immediately.

- If Norgestimate and Ethinyl Estradiol Tablets is not started within 5 days after termination of the pregnancy, the patient should use additional non-hormonal contraception (such as condoms and spermicide) for the first seven days of her first cycle blister pack of Norgestimate and Ethinyl Estradiol Tablets.

### ***Second-trimester***

- Do not start until 4 weeks after a second-trimester abortion or miscarriage, due to the increased risk of thromboembolic disease. Start Norgestimate and Ethinyl Estradiol Tablets, following the instructions in Table 1 for Day 1 or Sunday start, as desired. If using Sunday start, use additional non-hormonal contraception (such as condoms and spermicide) for the first seven days of the patient's first cycle blister pack of Norgestimate and Ethinyl Estradiol Tablets [see **CONTRAINDICATIONS (4), WARNINGS AND PRECAUTIONS (5.1), and FDA-APPROVED PATIENT LABELING**].

### ***Starting Norgestimate and Ethinyl Estradiol Tablets, USP after Childbirth***

- Do not start until 4 weeks after delivery, due to the increased risk of thromboembolic disease. Start contraceptive therapy with Norgestimate and Ethinyl Estradiol Tablets following the instructions in **Table 1** for women not currently using hormonal contraception.
- Norgestimate and Ethinyl Estradiol Tablets is not recommended for use in lactating women [see **USE IN SPECIFIC POPULATIONS (8.3)**].
- If the woman has not yet had a period postpartum, consider the possibility of ovulation and conception occurring prior to use of Norgestimate and Ethinyl Estradiol Tablets. [See **CONTRAINDICATIONS (4), WARNINGS AND PRECAUTIONS (5.1), USE IN SPECIFIC POPULATIONS (8.1 and 8.3), and FDA-Approved Patient Labeling**].

## **BEFORE YOU START TAKING YOUR PILLS**

- ◦ **DECIDE WHAT TIME OF DAY YOU WANT TO TAKE YOUR PILL.**

It is important to take it at about the same time every day.

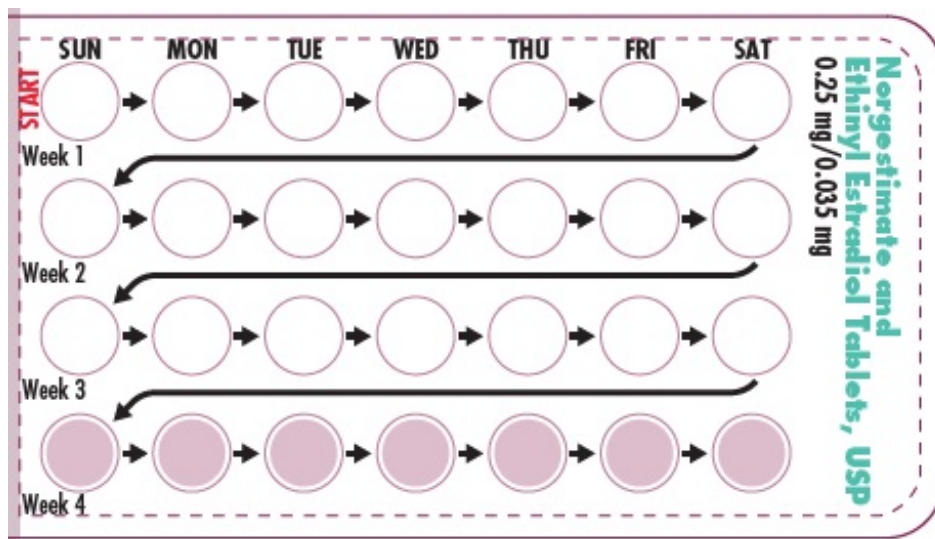
- **LOOK AT YOUR PILL PACK**

The pill blister pack has 21 active pills (with hormones) to take for 3 weeks. This is followed by 1 week of reminder green pills (without hormones).

There are 21 blue active pills, and 7 green reminder pills.

### **3. ALSO FIND:**

- ◦ 1. where on the blister pack to start taking pills,  
2. in what order to take the pills (follow the arrows)  
3. The week numbers as shown in the diagram below.



### 1. BE SURE YOU HAVE READY AT ALL TIMES:

Another kind of birth control (such as a condom or spermicide) to use as a back-up method in case you miss pills.

An extra, full pill blister pack.

### 2.3 Missed Tablets

**Table 2: Instructions for Missed Norgestimate and Ethinyl Estradiol Tablets**

<ul style="list-style-type: none"> <li>If one active tablet is missed in Weeks 1, 2, or 3</li> </ul>	<p>Take the tablet as soon as possible. Continue taking one tablet a day until the blister pack is finished.</p>
<ul style="list-style-type: none"> <li>If two active tablets are missed in Week 1 or Week 2</li> </ul>	<p>Take the two missed tablets as soon as possible and the next two active tablets the next day. Continue taking one tablet a day until the blister pack is finished. <b>Additional non-hormonal contraception (such as condoms and spermicide) should be used as back-up if the patient has sex within 7 days after missing tablets.</b></p>
<p><b>If two active tablets are missed in the third week or three or more active tablets are missed in a row in Weeks 1, 2, or 3</b></p>	<p><b>Day 1 start:</b> Throw out the rest of the blister pack and start a new pack that same day.</p> <p><b>Sunday start:</b> Continue taking one tablet a day until Sunday, then throw out the rest of the blister pack and start a new blister pack that same day. <b>Additional non-hormonal contraception (such as condoms and spermicide) should be used as back-up if the patient has sex within 7 days after missing tablets.</b></p>

### 2.4 Advice in Case of Gastrointestinal Disturbances

In case of severe vomiting or diarrhea, absorption may not be complete and additional contraceptive measures should be taken. If vomiting or diarrhea occurs within 3 to 4 hours after taking an active tablet, handle this as a missed tablet [see **FDA-Approved Patient Labeling**].

### **3 DOSAGE FORMS AND STRENGTHS**

- Norgestimate and Ethinyl Estradiol Tablets is available in blister cards. Each blister pack contains 28 tablets in the following order:
- 21 active tablets are blue, round, debossed with SZ on one side and T4 on the other side.
- 7 inert tablets are green, round, debossed with SZ on one side and J1 on the other side.

### **4 CONTRAINDICATIONS**

Estartylla™ is contraindicated in females who are known to have or develop the following conditions:

- A high risk of arterial or venous thrombotic diseases. Examples include women who are known to:
- Smoke, if over age 35 [see **BOXED WARNING and WARNINGS AND PRECAUTIONS ( 5.1)**]
- Have deep vein thrombosis or pulmonary embolism, now or in the past [see **WARNINGS AND PRECAUTIONS ( 5.1)**]
- Have inherited or acquired hypercoagulopathies [see **WARNINGS AND PRECAUTIONS ( 5.1)**]
- Have cerebrovascular disease [see **WARNINGS AND PRECAUTIONS ( 5.1)**]
- Have coronary artery disease [see **WARNINGS AND PRECAUTIONS ( 5.1)**]
- Have thrombogenic valvular or thrombogenic rhythm diseases of the heart (for example, subacute bacterial endocarditis with valvular disease, or atrial fibrillation) [see **WARNINGS AND PRECAUTIONS (5.1)**]
- Have uncontrolled hypertension [see **WARNINGS AND PRECAUTIONS ( 5.4)**]
- Have diabetes mellitus with vascular disease [see **WARNINGS AND PRECAUTIONS ( 5.6)**]
- Have headaches with focal neurological symptoms or migraine headaches with aura [see **WARNINGS AND PRECAUTIONS ( 5.7)**]
  - Women over age 35 with any migraine headaches [see **WARNINGS AND PRECAUTIONS (5.7)**]
- Liver tumors, benign or malignant, or liver disease [see **WARNINGS AND PRECAUTIONS ( 5.2)**]
- Undiagnosed abnormal uterine bleeding [see **WARNINGS AND PRECAUTIONS ( 5.8)**]
- Pregnancy, because there is no reason to use COCs during pregnancy [see **WARNINGS AND PRECAUTIONS (5.8) and USE IN SPECIFIC POPULATIONS ( 8.1)**]
- Current diagnosis of, or history of, breast cancer, which may be hormone-sensitive [see **WARNINGS AND PRECAUTIONS ( 5.11)**]
- Use of Hepatitis C drug combinations containing ombitasvir/paritaprevir/ritonavir, with



or without dasabuvir, due to the potential for ALT elevations [see **WARNINGS AND PRECAUTIONS ( 5.3) ]**

## **5 WARNINGS AND PRECAUTIONS**

### **5.1 Thromboembolic Disorders and Other Vascular Problems**

- Stop norgestimate and ethinyl estradiol if an arterial thrombotic event or venous thromboembolic (VTE) event occurs.
- Stop norgestimate and ethinyl estradiol if there is unexplained loss of vision, proptosis, diplopia, papilledema, or retinal vascular lesions. Evaluate for retinal vein thrombosis immediately [see ADVERSE REACTIONS (6.2)].
- If feasible, stop norgestimate and ethinyl estradiol at least 4 weeks before and through 2 weeks after major surgery or other surgeries known to have an elevated risk of VTE as well as during and following prolonged immobilization.
- Start norgestimate and ethinyl estradiol no earlier than 4 weeks after delivery, in women who are not breastfeeding. The risk of postpartum VTE decreases after the third postpartum week, whereas the risk of ovulation increases after the third postpartum week.
- The use of COCs increases the risk of VTE. However, pregnancy increases the risk of VTE as much or more than the use of COCs. The risk of VTE in women using COCs is 3 to 9 cases per 10,000 woman-years. The risk of VTE is highest during the first year of use of COCs and when restarting hormonal contraception after a break of 4 weeks or longer. The risk of thromboembolic disease due to COCs gradually disappears after use is discontinued.
- Use of COCs also increases the risk of arterial thromboses such as strokes and myocardial infarctions, especially in women with other risk factors for these events. COCs have been shown to increase both the relative and attributable risks of cerebrovascular events (thrombotic and hemorrhagic strokes). This risk increases with age, particularly in women over 35 years of age who smoke.
- Use COCs with caution in women with cardiovascular disease risk factors.

### **5.2 Liver Disease**

#### ***Impaired Liver Function***

Do not use norgestimate and ethinyl estradiol in women with liver disease, such as acute viral hepatitis or severe (decompensated) cirrhosis of liver [see **CONTRAINDICATIONS (4)**]. Acute or chronic disturbances of liver function may necessitate the discontinuation of COC use until markers of liver function return to normal and COC causation has been excluded. Discontinue norgestimate and ethinyl estradiol if jaundice develops.

#### ***Liver Tumors***

Norgestimate and ethinyl estradiol is contraindicated in women with benign and malignant liver tumors [see **CONTRAINDICATIONS (4)**]. Hepatic adenomas are associated with COC use. An estimate of the attributable risk is 3.3 cases/100,000 COC users. Rupture of hepatic adenomas may cause death through intra-abdominal hemorrhage.

Studies have shown an increased risk of developing hepatocellular carcinoma in long-term (>8 years) COC users. However, the risk of liver cancers in COC users is less than

one case per million users.

### **5.3 Risk of Liver Enzyme Elevations with Concomitant Hepatitis C Treatment**

During clinical trials with the Hepatitis C combination drug regimen that contains ombitasvir/paritaprevir/ritonavir, with or without dasabuvir, ALT elevations greater than 5 times the upper limit of normal (ULN), including some cases greater than 20 times the ULN, were significantly more frequent in women using ethinyl estradiol-containing medications, such as COCs. Discontinue norgestimate and ethinyl estradiol prior to starting therapy with the combination drug regimen ombitasvir/paritaprevir/ritonavir, with or without dasabuvir [**see CONTRAINDICATIONS (4)**]. Norgestimate and ethinyl estradiol can be restarted approximately 2 weeks following completion of treatment with the Hepatitis C combination drug regimen.

### **5.4 High Blood Pressure**

Norgestimate and ethinyl estradiol is contraindicated in women with uncontrolled hypertension or hypertension with vascular disease [**see CONTRAINDICATIONS (4)**]. For women with well-controlled hypertension, monitor blood pressure and stop norgestimate and ethinyl estradiol if blood pressure rises significantly.

An increase in blood pressure has been reported in women taking COCs, and this increase is more likely in older women with extended duration of use. The incidence of hypertension increases with increasing concentrations of progestin.

### **5.5 Gallbladder Disease**

Studies suggest a small increased relative risk of developing gallbladder disease among COC users. Use of COCs may worsen existing gallbladder disease. A past history of COC-related cholestasis predicts an increased risk with subsequent COC use. Women with a history of pregnancy-related cholestasis may be at an increased risk for COC related cholestasis.

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

Carefully monitor prediabetic and diabetic women who take norgestimate and ethinyl estradiol. COCs may decrease glucose tolerance.

Consider alternative contraception for women with uncontrolled dyslipidemia. A small proportion of women will have adverse lipid changes while on COCs.

Women with hypertriglyceridemia, or a family history thereof, may be at an increased risk of pancreatitis when using COCs.

### **5.7 Headache**

If a woman taking norgestimate and ethinyl estradiol develops new headaches that are recurrent, persistent, or severe, evaluate the cause and discontinue norgestimate and ethinyl estradiol if indicated.

Consider discontinuation of norgestimate and ethinyl estradiol in the case of increased frequency or severity of migraine during COC use (which may be prodromal of a cerebrovascular event).

## **5.8 Bleeding Irregularities and Amenorrhea**

### ***Unscheduled Bleeding and Spotting***

Unscheduled (breakthrough or intracyclic) bleeding and spotting sometimes occur in patients on COCs, especially during the first three months of use. If bleeding persists or occurs after previously regular cycles, check for causes such as pregnancy or malignancy. If pathology and pregnancy are excluded, bleeding irregularities may resolve over time or with a change to a different contraceptive product.

In clinical trials of norgestimate and ethinyl estradiol, the frequency and duration of breakthrough bleeding and/or spotting was assessed in 1,647 patients (21,275 evaluable cycles) and 4,826 patients (35,546 evaluable cycles), respectively. A total of 100 (7.5%) women discontinued norgestimate and ethinyl estradiol, at least in part, due to bleeding or spotting. Based on data from the clinical trials, 14 to 34% of women using norgestimate and ethinyl estradiol experienced unscheduled bleeding per cycle in the first year. The percent of women who experienced breakthrough/unscheduled bleeding tended to decrease over time.

### ***Amenorrhea and Oligomenorrhea***

Women who use norgestimate and ethinyl estradiol may experience amenorrhea. Some women may experience amenorrhea or oligomenorrhea after discontinuation of COCs, especially when such a condition was pre-existent.

If scheduled (withdrawal) bleeding does not occur, consider the possibility of pregnancy. If the patient has not adhered to the prescribed dosing schedule (missed one or more active tablets or started taking them on a day later than she should have), consider the possibility of pregnancy at the time of the first missed period and take appropriate diagnostic measures. If the patient has adhered to the prescribed regimen and misses two consecutive periods, rule out pregnancy.

## **5.9 COC Use Before or During Early Pregnancy**

Extensive epidemiological studies have revealed no increased risk of birth defects in women who have used oral contraceptives prior to pregnancy. Studies also do not suggest a teratogenic effect, particularly in so far as cardiac anomalies and limb reduction defects are concerned, when oral contraceptives are taken inadvertently during early pregnancy. Discontinue norgestimate and ethinyl estradiol use if pregnancy is confirmed.

Administration of COCs to induce withdrawal bleeding should not be used as a test for pregnancy [see **USE IN SPECIFIC POPULATIONS (8.1)**].

## **5.10 Depression**

Carefully observe women with a history of depression and discontinue norgestimate and ethinyl estradiol if depression recurs to a serious degree.

## **5.11 Malignant Neoplasms**

### **Breast Cancer**

Estarylla™ is contraindicated in females who currently have or have had breast cancer because breast cancer may be hormonally sensitive [see Contraindications (4)].

Epidemiology studies have not found a consistent association between use of combined oral contraceptives (COCs) and breast cancer risk. Studies do not show an association between ever (current or past) use of COCs and risk of breast cancer. However, some studies report a small increase in the risk of breast cancer among current or recent users (<6 months since last use) and current users with longer duration of COC use [see Postmarketing Experience (6.2)].

#### Cervical Cancer

A causal relationship between the use of CHCs and the development of cervical cancer and intraepithelial neoplasia has not been clearly established. In observational studies it suggests that COCs are associated with an increase in the risk of cervical cancer or intraepithelial neoplasia. There is controversy about the extent to which these findings are due to differences in sexual behavior and other factors.

### 5.12 Effect on Binding Globulins

The estrogen component of COCs may raise the serum concentrations of thyroxine-binding globulin, sex hormone-binding globulin, and cortisol-binding globulin. The dose of replacement thyroid hormone or cortisol therapy may need to be increased.

### 5.13 Monitoring

A woman who is taking COCs should have a yearly visit with her healthcare provider for a blood pressure check and for other indicated healthcare.

### 5.14 Hereditary Angioedema

In women with hereditary angioedema, exogenous estrogens may induce or exacerbate symptoms of angioedema.

### 5.15 Chloasma

Chloasma may occasionally occur, especially in women with a history of chloasma gravidarum. Women with a tendency to chloasma should avoid exposure to the sun or ultraviolet radiation while taking norgestimate and ethinyl estradiol.

## 6 ADVERSE REACTIONS

The following serious adverse reactions with the use of COCs are discussed elsewhere in labeling:

- Serious cardiovascular events and stroke [see **BOXED WARNING and WARNINGS AND PRECAUTIONS (5.1)**]
- Vascular events [see **WARNINGS AND PRECAUTIONS (5.1)**]
- Liver disease [see **WARNINGS AND PRECAUTIONS (5.2)**]

Adverse reactions commonly reported by COC users are:

- Irregular uterine bleeding
- Nausea

- Breast tenderness
- Headache

## 6.1 Clinical Trial Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in clinical practice.

The safety of norgestimate and ethinyl estradiol was evaluated in 1,647 healthy women of child-bearing potential who participated in 3 clinical trials and received at least 1 dose of norgestimate and ethinyl estradiol for contraception. Two trials were randomized active-controlled trials and 1 was an uncontrolled open-label trial. In all 3 trials, subjects were followed for up to 24 cycles.

**Common Adverse Reactions ( $\geq 2\%$  of subjects):** The most common adverse reactions reported by at least 2% of the 1,647 women were the following in order of decreasing incidence: headache/migraine (32.9%), abdominal/gastrointestinal pain (7.8%), vaginal infection (8.4%), genital discharge (6.8%), breast issues (including breast pain, discharge, and enlargement) (6.3%), mood disorders (including depression and mood altered) (5%), flatulence (3.2%), nervousness (2.9%), and rash (2.6%).

**Adverse Reactions Leading to Study Discontinuation:** Over the three trials, between 11 to 21% of subjects discontinued the trial due to an adverse reaction. The most common adverse reactions ( $\geq 1\%$ ) leading to discontinuation were: metrorrhagia (6.9%), nausea/vomiting (5%), headache (4.1%), mood disorders (including depression and mood altered) (2.4%), premenstrual syndrome (1.7%), hypertension (1.4%), breast pain (1.4%), nervousness (1.3%), amenorrhea (1.1%), dysmenorrhea (1.1%), weight increased (1.1%), and flatulence (1.1%).

**Serious Adverse Reactions:** breast cancer (1 subject), mood disorders including depression, irritability, and mood swings (1 subject), myocardial infarction (1 subject), and venous thromboembolic events including pulmonary embolism (1 subject) and deep vein thrombosis (DVT) (1 subject).

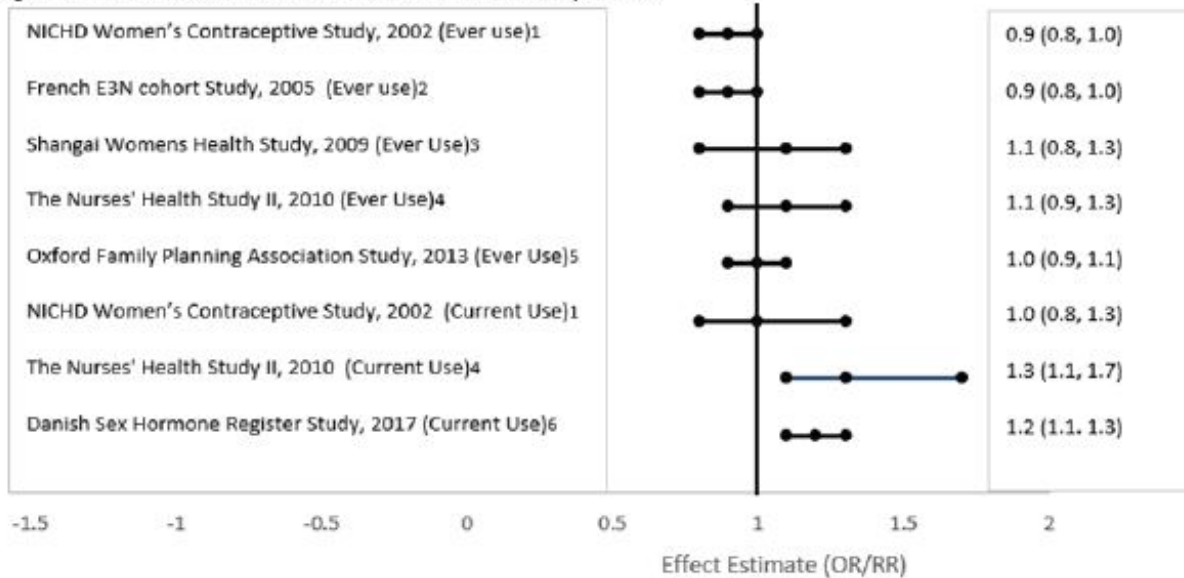
## 6.2 Postmarketing Experience

Five studies that compared breast cancer risk between ever-users (current or past use) of COCs and never-users of COCs reported no association between ever use of COCs and breast cancer risk, with effect estimates ranging from 0.90 - 1.12 (Figure 2).

Three studies compared breast cancer risk between current or recent COC users (<6 months since last use) and never users of

COCs (Figure 2). One of these studies reported no association between breast cancer risk and COC use. The other two studies found an increased relative risk of 1.19 - 1.33 with current or recent use. Both of these studies found an increased risk of breast cancer with current use of longer duration, with relative risks ranging from 1.03 with less than one year of COC use to approximately 1.4 with more than 8-10 years of COC use.

Figure 2: Risk of Breast Cancer with Combined Oral Contraceptive Use



RR = relative risk; OR = odds ratio; HR = hazard ratio. "ever COC" are females with current or past COC use; "never COC use" are females that never used COCs.

For your reference, below are the studies reviewed by FDA to inform the breast cancer risk:

References:

1. Marchbanks PA, McDonald JA, Wilson HG, et al. Oral contraceptives and the risk of breast cancer. *N Engl J Med*. 2002;346(26):2025-2032.
2. Dumeaux V, Fournier A, Lund E, Clavel-Chapelon F. Previous oral contraceptive use and breast cancer risk according to hormone replacement therapy use among postmenopausal women. *Cancer Causes Control*. 2005;16(5):537-544.
3. Dorjgochoo T, Shu XO, Li HL, et al. Use of oral contraceptives, intrauterine devices and tubal sterilization and cancer risk in a large prospective study, from 1996 to 2006. *Int J Cancer*. 2009;124(10):2442- 2449.
4. Hunter DJ, Colditz GA, Hankinson SE, et al. Oral contraceptive use and breast cancer: a prospective study of young women. *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research*, cosponsored by the American Society of Preventive Oncology. 2010;19(10):2496-2502.
5. Vessey M, Yeates D. Oral contraceptive use and cancer. Final report from the Oxford-Family Planning Association contraceptive study. *Contraception*. 2013; 88(6): 678-683.
6. Morch LS, Skovlund CW, Hannaford PC, Iversen L, Fielding S, Lidegaard O. Contemporary Hormonal Contraception and the Risk of Breast Cancer. *N Engl J Med*. 2017;377(23):2228-2239.

## 7 DRUG INTERACTIONS

Consult the labeling of concurrently used drugs to obtain further information about interactions with hormonal contraceptives or the potential for enzyme alterations.

No drug-drug interaction studies were conducted with norgestimate and ethinyl

estradiol.

## **7.1 Effects of Other Drugs on Combined Oral Contraceptives**

### ***Substances decreasing the plasma concentrations of COCs***

Drugs or herbal products that induce certain enzymes, including cytochrome P450 3A4 (CYP3A4), may decrease the plasma concentrations of COCs and potentially diminish the effectiveness of COCs or increase breakthrough bleeding. Some drugs or herbal products that may decrease the effectiveness of hormonal contraceptives include phenytoin, barbiturates, carbamazepine, bosentan, felbamate, griseofulvin, oxcarbazepine, rifampicin, topiramate, rifabutin, rufinamide, aprepitant, and products containing St. John's wort. Interactions between hormonal contraceptives and other drugs may lead to breakthrough bleeding and/or contraceptive failure. Counsel women to use an alternative method of contraception or a back-up method when enzyme inducers are used with COCs, and to continue back-up contraception for 28 days after discontinuing the enzyme inducer to ensure contraceptive reliability.

***Colesevelam:*** Colesevelam, a bile acid sequestrant, given together with a COC, has been shown to significantly decrease the AUC of EE. The drug interaction between the contraceptive and colesevelam was decreased when the two drug products were given 4 hours apart.

### ***Substances increasing the plasma concentrations of COCs***

Co-administration of atorvastatin or rosuvastatin and certain COCs containing ethinyl estradiol (EE) increase AUC values for EE by approximately 20 to 25%. Ascorbic acid and acetaminophen may increase plasma EE concentrations, possibly by inhibition of conjugation. CYP3A4 inhibitors such as itraconazole, voriconazole, fluconazole, grapefruit juice, or ketoconazole may increase plasma hormone concentrations.

### ***Human immunodeficiency virus (HIV)/Hepatitis C virus (HCV) protease inhibitors and non-nucleoside reverse transcriptase inhibitors***

Significant changes (increase or decrease) in the plasma concentrations of estrogen and/or progestin have been noted in some cases of co-administration with HIV protease inhibitors (decrease [e.g., nelfinavir, ritonavir, darunavir/ritonavir, (fos)amprenavir/ritonavir, lopinavir/ritonavir, and tipranavir/ritonavir] or increase [e.g., indinavir and atazanavir/ritonavir])/HCV protease inhibitors (decrease [e.g., boceprevir and telaprevir]) or with non-nucleoside reverse transcriptase inhibitors (decrease [e.g., nevirapine] or increase [e.g., etravirine]).

## **7.2 Effects of Combined Oral Contraceptives on Other Drugs**

- COCs containing EE may inhibit the metabolism of other compounds (e.g., cyclosporine, prednisolone, theophylline, tizanidine, and voriconazole) and increase their plasma concentrations.
- COCs have been shown to decrease plasma concentrations of acetaminophen, clofibric acid, morphine, salicylic acid, temazepam and lamotrigine. Significant decrease in plasma concentration of lamotrigine has been shown, likely due to induction of lamotrigine glucuronidation. This may reduce seizure control; therefore, dosage adjustments of lamotrigine may be necessary.

Women on thyroid hormone replacement therapy may need increased doses of thyroid

hormone because the serum concentration of thyroid-binding globulin increases with use of COCs.

### **7.3 Interference with Laboratory Tests**

The use of contraceptive steroids may influence the results of certain laboratory tests, such as coagulation factors, lipids, glucose tolerance, and binding proteins.

### **7.4 Concomitant Use with HCV Combination Therapy - Liver Enzyme Elevation**

Do not co-administer norgestimate and ethinyl estradiol with HCV drug combinations containing ombitasvir/paritaprevir/ritonavir, with or without dasabuvir, due to potential for ALT elevations [**see WARNINGS AND PRECAUTIONS (5.3)**].

## **8 USE IN SPECIFIC POPULATIONS**

### **8.1 Pregnancy**

There is little or no increased risk of birth defects in women who inadvertently use COCs during early pregnancy. Epidemiologic studies and meta-analyses have not found an increased risk of genital or non-genital birth defects (including cardiac anomalies and limb reduction defects) following exposure to low dose COCs prior to conception or during early pregnancy.

Do not administer COCs to induce withdrawal bleeding as a test for pregnancy. Do not use COCs during pregnancy to treat threatened or habitual abortion.

### **8.3 Nursing Mothers**

Advise the nursing mother to use other forms of contraception, when possible, until she has weaned her child. COCs can reduce milk production in breastfeeding mothers. This is less likely to occur once breastfeeding is well-established; however, it can occur at any time in some women. Small amounts of oral contraceptive steroids and/or metabolites are present in breast milk.

### **8.4 Pediatric Use**

Safety and efficacy of norgestimate and ethinyl estradiol tablets have been established in women of reproductive age. Efficacy is expected to be the same for post-pubertal adolescents under the age of 18 and for users 18 years and older. Use of this product before menarche is not indicated.

### **8.5 Geriatric Use**

Norgestimate and ethinyl estradiol have not been studied in postmenopausal women and are not indicated in this population.

### **8.6 Hepatic Impairment**

The pharmacokinetics of norgestimate and ethinyl estradiol has not been studied in subjects with hepatic impairment. However, steroid hormones may be poorly metabolized in patients with hepatic impairment. Acute or chronic disturbances of liver function may necessitate the discontinuation of COC use until markers of liver function



return to normal and COC causation has been excluded. [See **CONTRAINDICATIONS ( 4) and WARNINGS AND PRECAUTIONS ( 5.2).**]

## 8.7 Renal Impairment

The pharmacokinetics of norgestimate and ethinyl estradiol has not been studied in women with renal impairment.

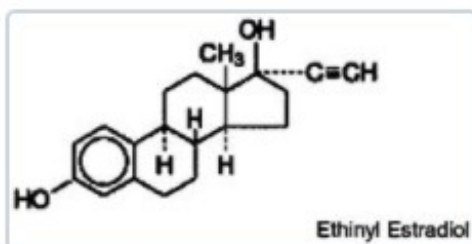
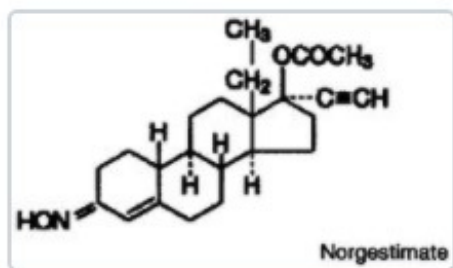
## 10 OVERDOSAGE

There have been no reports of serious ill effects from overdosage of oral contraceptives, including ingestion by children. Overdosage may cause withdrawal bleeding in females and nausea.

## 11 DESCRIPTION

Each of the following products is a combination oral contraceptive containing the progestational compound norgestimate and the estrogenic compound ethinyl estradiol. Norgestimate is designated as (18,19-Dinor-17-pregn-4-en-20-yn-3-one,17-(acetyloxy)-13-ethyl-, oxime,(17 $\alpha$ )-(+) -) and ethinyl estradiol is designated as (19-nor-17 $\alpha$ -pregna,1,3,5(10)-trien-20-yne-3,17-diol).

- Each active blue tablet contains 0.25 mg of norgestimate and 0.035 mg of the ethinyl estradiol. Inactive ingredients include crospovidone, FD & C Blue No.2 Aluminum Lake, lactose anhydrous, magnesium stearate, and pregelatinized starch.
- Each green placebo tablet containing only inert ingredients, as follows: crospovidone, D & C Yellow No.10 Aluminum Lake, FD & C Blue No.2 Aluminum Lake, lactose anhydrous, magnesium stearate, and pregelatinized starch.



## 12 CLINICAL PHARMACOLOGY

### 12.1 Mechanism of Action

- Oral Contraception  
COCs lower the risk of becoming pregnant primarily by suppressing ovulation. Other

possible mechanisms may include cervical mucus changes that inhibit sperm penetration and endometrial changes that reduce the likelihood of implantation.

## 12.2 Pharmacodynamics

No specific pharmacodynamic studies were conducted with norgestimate and ethinyl estradiol.

## 12.3 Pharmacokinetics

### **Absorption**

Norgestimate (NGM) and EE are rapidly absorbed following oral administration. NGM is rapidly and completely metabolized by first pass (intestinal and/or hepatic) mechanisms to norelgestromin (NGMN) and norgestrel (NG), which are the major active metabolites of norgestimate.

Peak serum concentrations of NGMN and EE are generally reached by 2 hours after administration of norgestimate and ethinyl estradiol. Accumulation following multiple dosing of the 250 mcg NGM / 35 mcg EE dose is approximately 2-fold for NGMN and EE compared with single dose administration. The pharmacokinetics of NGMN is dose-proportional following NGM doses of 180 mcg to 250 mcg. Steady-state concentration of EE is achieved by Day 7 of each dosing cycle. Steady-state concentrations of NGMN and NG are achieved by Day 21. Non-linear accumulation (approximately 8 fold) of NG is observed as a result of high-affinity binding to SHBG, which limits its biological activity (**Table 3**).

**Table 3: Summary of NGMN, NG and EE pharmacokinetic parameters.**

<b>Mean (SD) Pharmacokinetic Parameters of Norgestimate and Ethinyl Estradiol During a Three Cycle Study</b>						
Analyte	Cycle	Day	C <sub>max</sub>	t <sub>max</sub> (h)	AUC <sub>0-24h</sub>	t <sub>1/2</sub> (h)
NGMN	1	1	1.78 (0.397)	1.19 (0.250)	9.90 (3.25)	18.4 (5.91)
	3	21	2.19 (0.655)	1.43 (0.680)	18.1 (5.53)	24.9 (9.04)
NG	1	1	0.649 (0.49)	1.42 (0.69)	6.22 (2.46)	37.8 (14)
	3	21	2.65 (1.11)	1.67 (1.32)	48.2 (20.5)	45 (20.4)
EE	1	1	92.2 (24.5)	1.2 (0.26)	629 (138)	10.1 (1.90)
	3	21	147 (41.5)	1.13 (0.23)	1210 (294)	15 (2.36)

C<sub>max</sub> = peak serum concentration, t<sub>max</sub> = time to reach peak serum concentration, AUC<sub>0-24h</sub> = area under serum concentration vs time curve from 0 to 24 hours, t<sub>1/2</sub> = elimination half-life, NC = not calculated.

NGMN and NG: C<sub>max</sub> = ng/mL, AUC<sub>0-24h</sub> = h•ng/mL

EE: C<sub>max</sub> = pg/mL, AUC<sub>0-24h</sub> = h•pg/mL

### **Food Effect**

The effect of food on the pharmacokinetics of norgestimate and ethinyl estradiol has not been studied.

### **Distribution**

NGMN and NG are highly bound (>97%) to serum proteins. NGMN is bound to albumin

and not to SHBG, while NG is bound primarily to SHBG. EE is extensively bound (>97%) to serum albumin and induces an increase in the serum concentrations of SHBG.

### **Metabolism**

NGM is extensively metabolized by first-pass mechanisms in the gastrointestinal tract and/or liver. NGM's primary active metabolite is NGMN. Subsequent hepatic metabolism of NGMN occurs and metabolites include NG, which is also active, and various hydroxylated and conjugated metabolites. Although NGMN and its metabolites inhibit a variety of P450 enzymes in human liver microsomes, under the recommended dosing regimen, the *in vivo* concentrations of NGMN and its metabolites, even at the peak serum levels, are relatively low compared to the inhibitory constant ( $K_i$ ). EE is also metabolized to various hydroxylated products and their glucuronide and sulfate conjugates.

### **Excretion**

The metabolites of NGMN and EE are eliminated by renal and fecal pathways. Following administration of  $^{14}\text{C}$ -norgestimate, 47% (45 to 49%) and 37% (16 to 49%) of the administered radioactivity was eliminated in the urine and feces, respectively. Unchanged NGM was not detected in the urine. In addition to 17-deacetyl norgestimate, a number of metabolites of NGM have been identified in human urine following administration of radiolabeled NGM. These include 18, 19-Dinor-17-pregn-4-en-20-yn-3-one, 17-hydroxy-13-ethyl, (17 $\alpha$ )-(-); 18, 19-Dinor-5 $\beta$ -17-pregnan-20-yn, 3 $\alpha$ , 17 $\beta$ -dihydroxy-13-ethyl, (17 $\alpha$ ), various hydroxylated metabolites and conjugates of these metabolites.

## **13 NONCLINICAL TOXICOLOGY**

### **13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility**

[See **WARNINGS AND PRECAUTIONS** (5.2, 5.11) and **USE IN SPECIFIC POPULATIONS** (8.1).]

## **14 CLINICAL STUDIES**

### **14.1 Contraception**

In three US clinical trials with norgestimate and ethinyl estradiol, 1,651 women aged 18 to 38 years were studied for up to 24 cycles, proving a total of 24,272 cycles of exposure. The racial demographic was about 73 to 86% Caucasian, 8 to 13% African-American, 6 to 14% Hispanic with the remainder Asian or Other ( $\leq 1\%$ ). There were no exclusions on the basis of weight; the weight range for women treated was 82 to 303 lbs, with a mean weight of about 135 lbs. The pregnancy rate was approximately 1 pregnancy per 100 women-years.

## **16 HOW SUPPLIED/STORAGE AND HANDLING**

### **16.1 How Supplied**

Norgestimate and Ethinyl Estradiol Tablets are available in blisters containing 28 tablets as follows:

Each blister card contains 21 active tablets and 7 inactive tablets. The 21 active tablets are blue, round, debossed with SZ on one side and T4 on the other side. The 7 inert tablets are green, round, debossed with SZ on one side and J1 on the other side.

- NDC 42291-553-28, one box containing 1 individual unit carton
- NDC 42291-553-84, one box containing 3 individual unit cartons

## 16.2 Storage Conditions

- Store at 20° to 25°C (68° to 77°F) [see USP Controlled Room Temperature].
- Protect from light.

Keep out of reach of children

## 17 PATIENT COUNSELING INFORMATION

**See FDA-approved patient labeling ( Patient Information and Instructions for Use).**

Counsel patients about the following information:

- Cigarette smoking increases the risk of serious cardiovascular events from COC use, and that women who are over 35 years old and smoke should not use COCs [see **Boxed Warning**].
- Increased risk of VTE compared to non-users of COCs is greatest after initially starting a COC or restarting (following a 4-week or greater pill-free interval) the same or a different COC [see **WARNINGS AND PRECAUTIONS (5.1)**].
- Norgestimate and Ethinyl Estradiol Tablets does not protect against HIV infection (AIDS) and other sexually transmitted infections.
- Norgestimate and Ethinyl Estradiol Tablets is not to be used during pregnancy; if pregnancy occurs during use of Norgestimate and Ethinyl Estradiol Tablets instruct the patient to stop further use [see **WARNINGS AND PRECAUTIONS (5.9)**].
- Take one tablet daily by mouth at the same time every day. Instruct patients what to do in the event tablets are missed [see **DOSAGE AND ADMINISTRATION (2.2)**].
- Use a back-up or alternative method of contraception when enzyme inducers are used with Norgestimate and Ethinyl Estradiol Tablets [see **DRUG INTERACTIONS (7.1)**].
- COCs may reduce breast milk production; this is less likely to occur if breastfeeding is well established [see **USE IN SPECIFIC POPULATIONS (8.3)**].
- Women who start COCs postpartum, and who have not yet had a period, should use an additional method of contraception until they have taken an active tablet for 7 consecutive days [see **DOSAGE AND ADMINISTRATION (2.2)**].
- Amenorrhea may occur. Consider pregnancy in the event of amenorrhea at the time of the first missed period. Rule out pregnancy in the event of amenorrhea in two or more consecutive cycles [see **WARNINGS AND PRECAUTIONS (5.8)**].

Manufactured For:

AvKARE

Pulaski, TN 38478

Rev. 04/2020

## **Patient Information**

### **Norgestimate and Ethinyl Estradiol Tablets**

**(nor-JES-ti-mate, ETH-i-nil es-tra-DYE-ol)**

#### **What is the most important information I should know about Norgestimate and Ethinyl Estradiol Tablets?**

**Do not use Norgestimate and Ethinyl Estradiol Tablets if you smoke cigarettes and are over 35 years old.** Smoking increases your risk of serious cardiovascular side effects from hormonal birth control pills, including death from heart attack, blood clots or stroke. This risk increases with age and the number of cigarettes you smoke.

#### **What is Norgestimate and Ethinyl Estradiol Tablets?**

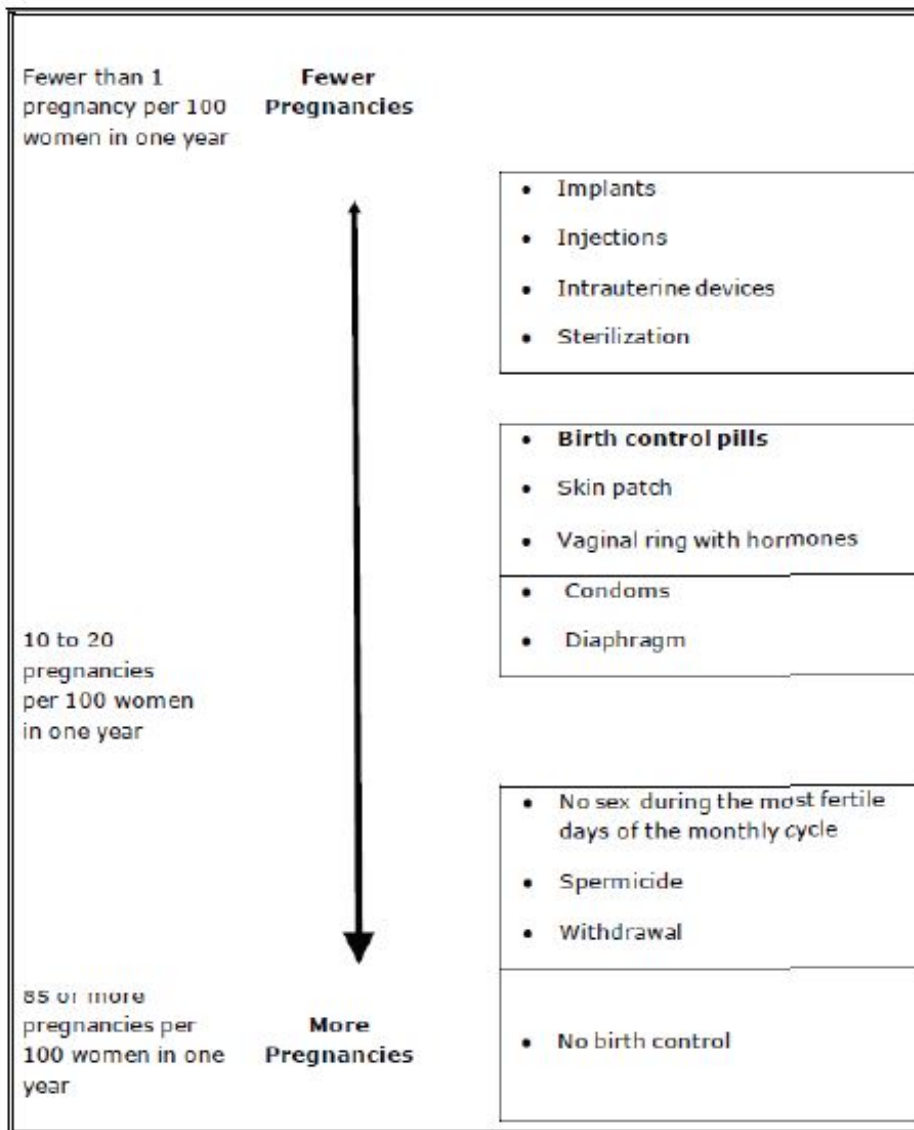
**Norgestimate and Ethinyl Estradiol Tablets** is a birth control pill (oral contraceptive) used by women to prevent pregnancy.

#### **How does Norgestimate and Ethinyl Estradiol Tablets work for contraception?**

Your chance of getting pregnant depends on how well you follow the directions for taking your birth control pills. The better you follow the directions, the less chance you have of getting pregnant.

Based on the results of clinical studies, about 1 out of 100 women may get pregnant during the first year they use Norgestimate and Ethinyl Estradiol Tablets.

The following chart shows the chance of getting pregnant for women who use different methods of birth control. Each box on the chart contains a list of birth control methods that are similar in effectiveness. The most effective methods are at the top of the chart. The box on the bottom of the chart shows the chance of getting pregnant for women who do not use birth control and are trying to get pregnant.



## Who should not take Norgestimate and Ethinyl Estradiol Tablets?

### Do not take Norgestimate and Ethinyl Estradiol Tablets if you:

- smoke and are over 35 years of age
- had blood clots in your arms, legs, lungs, or eyes
- had a problem with your blood that makes it clot more than normal
- have certain heart valve problems or irregular heart beat that increases your risk of having blood clots
- had a stroke
- had a heart attack
- have high blood pressure that cannot be controlled by medicine
- have diabetes with kidney, eye, nerve, or blood vessel damage
- have certain kinds of severe migraine headaches with aura, numbness, weakness or changes in vision, or any migraine headaches if you are over 35 years of age
- have liver problems, including liver tumors
- take any Hepatitis C drug combination containing ombitasvir/paritaprevir/ritonavir, with or without dasabuvir. This may increase levels of the liver enzyme "alanine aminotransferase" (ALT) in the blood.
- have any unexplained vaginal bleeding

- are pregnant
- had breast cancer or any cancer that is sensitive to female hormone

**If any of these conditions happen while you are taking Norgestimate and Ethinyl Estradiol Tablets, stop taking Norgestimate and Ethinyl Estradiol Tablets right away and talk to your healthcare provider. Use non-hormonal contraception when you stop taking Norgestimate and Ethinyl Estradiol Tablets.**

**What should I tell my healthcare provider before taking Norgestimate and Ethinyl Estradiol Tablets?**

**Tell your healthcare provider if you:**

- are pregnant or think you may be pregnant
- are depressed now or have been depressed in the past had yellowing of your skin or eyes (jaundice) caused by pregnancy (Cholestasis of pregnancy)
- are breastfeeding or plan to breastfeed. Norgestimate and Ethinyl Estradiol Tablets may decrease the amount of breast milk you make. A small amount of the hormones in Norgestimate and Ethinyl Estradiol Tablets may pass into your breast milk. Talk to your healthcare provider about the best birth control method for you while breastfeeding.

**Tell your healthcare provider about all the medicines you take,** including prescription and over-the-counter medicines, vitamins and herbal supplements.

Norgestimate and Ethinyl Estradiol Tablets may affect the way other medicines work, and other medicines may affect how well Norgestimate and Ethinyl Estradiol Tablets works.

Know the medicines you take. Keep a list of them to show your healthcare provider and pharmacist when you get a new medicine.

**How should I take Norgestimate and Ethinyl Estradiol Tablets?**

**Read the Instructions for Use** at the end of this Patient Information .

**What are the possible serious side effects of Norgestimate and Ethinyl Estradiol Tablets?**

- Like pregnancy, Norgestimate and Ethinyl Estradiol Tablets may cause serious side effects, including blood clots in your lungs, heart attack, or a stroke that may lead to death. Some other examples of serious blood clots include blood clots in the legs or eyes.

Serious blood clots can happen especially if you smoke, are obese, or are older than 35 years of age. Serious blood clots are more likely to happen when you:

- first start taking birth control pills
- restart the same or different birth control pills after not using them for a month or more

**Call your healthcare provider or go to a hospital emergency room right away if you have:**

- 
- leg pain that will not go away
  - a sudden, severe headache unlike your

- sudden severe shortness of breath
  - sudden change in vision or blindness
  - chest pain
  - usual headaches
  - weakness or numbness in your arm or leg
  - trouble speaking
- 

### **Other serious side effects include:**

- **liver problems, including:**
  - rare liver tumors
  - jaundice (cholestasis), especially if you previously had cholestasis of pregnancy. Call your healthcare provider if you have yellowing of your skin or eyes.
- **high blood pressure.** You should see your healthcare provider for a yearly check of your blood pressure.
- **gallbladder problems**
- **changes in the sugar and fat (cholesterol and triglycerides) levels in your blood**
- **new or worsening headaches including migraine headaches**
- **irregular or unusual vaginal bleeding and spotting between your menstrual periods, especially during the first 3 months of taking Norgestimate and Ethinyl Estradiol Tablets.**
- **depression**
- **possible cancer in your breast and cervix**
- **swelling of your skin especially around your mouth, eyes, and in your throat (angioedema).** Call your healthcare provider if you have a swollen face, lips, mouth tongue or throat, which may lead to difficulty swallowing or breathing. Your chance of having angioedema is higher if you have a history of angioedema.
- **dark patches of skin around your forehead, nose, cheeks and around your mouth, especially during pregnancy (chloasma).** Women who tend to get chloasma should avoid spending a long time in sunlight, tanning booths, and under sun lamps while taking Norgestimate and Ethinyl Estradiol Tablets. Use sunscreen if you have to be in the sunlight.

### **What are the most common side effects of Norgestimate and Ethinyl Estradiol Tablets?**

- headache (migraine)
- breast pain or tenderness, enlargement or discharge
- stomach pain, discomfort, and gas
- vaginal infections and discharge
- mood changes, including depression
- nervousness
- changes in weight
- skin rash

These are not all the possible side effects of Norgestimate and Ethinyl Estradiol Tablets. For more information, ask your healthcare provider or pharmacist.

You may report side effects to AvKARE at 1-855-361-3993 or email [drugsafety@avkare.com](mailto:drugsafety@avkare.com) or FDA at 1-800-FDA-1088 or [www.FDA.GOV/Medwatch](http://www.FDA.GOV/Medwatch).

### **What else should I know about taking Norgestimate and Ethinyl Estradiol**



## **Tablets?**

- If you are scheduled for any lab tests, tell your healthcare provider you are taking Norgestimate and Ethinyl Estradiol Tablets. Certain blood tests may be affected by Norgestimate and Ethinyl Estradiol Tablets.
- Norgestimate and Ethinyl Estradiol Tablets does not protect against HIV infection (AIDS) and other sexually transmitted infections.

## **How should I store Norgestimate and Ethinyl Estradiol Tablets?**

- Store Norgestimate and Ethinyl Estradiol Tablets at room temperature between 68°F to 77°F (20°C to 25°C).
- Keep Norgestimate and Ethinyl Estradiol Tablets and all medicines out of the reach of children.
- Store away from light.

## **General information about the safe and effective use of Norgestimate and Ethinyl Estradiol Tablets.**

Medicines are sometimes prescribed for purposes other than those listed in a Patient Information leaflet. Do not use Norgestimate and Ethinyl Estradiol Tablets for a condition for which it was not prescribed. Do not give Norgestimate and Ethinyl Estradiol Tablets to other people, even if they have the same symptoms that you have.

This Patient Information summarizes the most important information about Norgestimate and Ethinyl Estradiol Tablets. You can ask your pharmacist or healthcare provider for information about Norgestimate and Ethinyl Estradiol Tablets that is written for health professionals .

For more information, call AvKARE at 1-855-361-3993.

## **Do hormonal birth control pills cause cancer?**

It is not known if hormonal birth control pills causes breast cancer. Some studies, but not all, suggest that there could be a slight increase in the risk of breast cancer among current users with longer duration of use.

If you have breast cancer now, or have had it in the past, do not use hormonal birth control because some breast cancers are sensitive to hormones. Women who use birth control pills may have a slightly higher chance of getting cervical cancer. However, this

may be due to other reasons such as having more sexual partners.

Women who use birth control pills may have a slightly higher chance of gettin cervical cancer. However, this may be due to other reasons such as having more sexual partners.

## **What if I want to become pregnant?**

You may stop taking the pill whenever you wish. Consider a visit with your healthcare provider for a pre-pregnancy checkup before you stop taking the pill.

## **What should I know about my period when taking Norgestimate and Ethinyl Estradiol Tablets?**

Your periods may be lighter and shorter than usual. Some women may miss a period.

Irregular vaginal bleeding or spotting may happen while you are taking Norgestimate and Ethinyl Estradiol Tablets, especially during the first few months of use. This usually is not a serious problem. It is important to continue taking your pills on a regular schedule to prevent a pregnancy.

## **What are the ingredients in Norgestimate and Ethinyl Estradiol Tablets?**

**Active ingredients:** Each blue pill contains norgestimate and ethinyl estradiol.

### **Inactive ingredients:**

**Blue pills:** crospovidone, FD & C Blue No.2 Aluminum Lake, lactose anhydrous, magnesium stearate, and pregelatinized starch.

**Green pills:** crospovidone, D & C Yellow No.10 Aluminum Lake, FD & C Blue No.2 Aluminum Lake, lactose anhydrous, magnesium stearate, and pregelatinized starch.

## **Instructions For Use**

### **Norgestimate and Ethinyl Estradiol Tablets**

#### **Important Information about taking Norgestimate and Ethinyl Estradiol Tablets**

- Take 1 pill every day at the same time. Take the pills in the order directed on your blister pack.
- Do not skip your pills, even if you do not have sex often. If you miss pills (including starting the pack late) **you could get pregnant**. The more pills you miss, the more likely you are to get pregnant.
- If you have trouble remembering to take Norgestimate and Ethinyl Estradiol Tablets, talk to your healthcare provider. When you first start taking Norgestimate and Ethinyl Estradiol Tablets, spotting or light bleeding in between your periods may occur. Contact your healthcare provider if this does not go away after a few months.
- You may feel sick to your stomach (nauseous), especially during the first few months of taking Norgestimate and Ethinyl Estradiol Tablets. If you feel sick to your stomach, do not stop taking the pill. The problem will usually go away. If your nausea does not go away, call your healthcare provider.
- Missing pills can also cause spotting or light bleeding, even when you take the missed pills later. On the days you take 2 pills to make up for missed pills (see **What should I do if I miss any Norgestimate and Ethinyl Estradiol Tablets pills?** below), you could also feel a little sick to your stomach.
- It is not uncommon to miss a period. However, if you miss a period and have not taken Norgestimate and Ethinyl Estradiol Tablets according to directions, or miss 2 periods in a row, or feel like you may be pregnant, call your healthcare provider. If you have a positive pregnancy test, you should stop taking Norgestimate and Ethinyl Estradiol Tablets.
- If you have vomiting or diarrhea within 3 to 4 hours of taking your pill, take another pill of the same color from your extra pill blister pack. If you do not have an extra pill blister pack, take the next pill in your pill blister pack. Continue taking all your remaining pills in order. Start the first pill of your next pill blister pack the day after finishing your current pill blister pack. This will be 1 day earlier than originally scheduled. Continue on your new schedule.
- If you have vomiting or diarrhea for more than 1 day, your birth control pills may not

work as well. Use an additional birth control method, like condoms and a spermicide, until you check with your healthcare provider.

- Stop taking Norgestimate and Ethinyl Estradiol Tablets at least 4 weeks before you have major surgery and do not restart after the surgery without asking your healthcare provider. Be sure to use other forms of contraception (like condoms and spermicide) during this time period.

**Before you start taking Norgestimate and Ethinyl Estradiol Tablets:**

- Decide what time of day you want to take your pill. It is important to take it at the same time every day and in the order as directed on your blister pack.
- Have backup contraception (condoms and spermicide) available and if possible, an extra full blister pack of pills as needed.

**When should I start taking Norgestimate and Ethinyl Estradiol Tablets?**

**If you start taking Norgestimate and Ethinyl Estradiol Tablets and you have not used a hormonal birth control method before:**

- There are 2 ways to start taking your birth control pills. You can either start on a Sunday (Sunday Start) or on the first day (Day 1) of your natural menstrual period (Day 1 Start). Your healthcare provider should tell you when to start taking your birth control pill.
- If you use the Sunday Start, use non-hormonal back-up contraception such as condoms and spermicide for the first 7 days that you take Norgestimate and Ethinyl Estradiol Tablets. You do not need back-up contraception if you use the Day 1 Start.

**If you start taking Norgestimate and Ethinyl Estradiol Tablets and you are switching from another birth control pill:**

- Start your new Norgestimate and Ethinyl Estradiol Tablets pack on the same day that you would start the next pack of your previous birth control method.
- Do not continue taking the pills from your previous birth control pack.

**If you start taking Norgestimate and Ethinyl Estradiol Tablets and previously used a vaginal ring or transdermal patch:**

- Start using Norgestimate and Ethinyl Estradiol Tablets on the day you would have reapplied the next ring or patch.

**If you start taking Norgestimate and Ethinyl Estradiol Tablets and you are switching from a progestin-only method such as an implant or injection:**

- Start taking Norgestimate and Ethinyl Estradiol Tablets on the day of removal of your implant or on the day when you would have had your next injection.

**If you start taking Norgestimate and Ethinyl Estradiol Tablets and you are switching from an intrauterine device or system (IUD or IUS):**

- Start taking Norgestimate and Ethinyl Estradiol Tablets on the day of removal of your IUD or IUS.
- You do not need back-up contraception if your IUD or IUS is removed on the first day (Day 1) of your period. If your IUD or IUS is removed on any other day, use non-hormonal back-up contraception such as condoms and spermicide for the first 7 days that you take Norgestimate and Ethinyl Estradiol Tablets.

**Keep a calendar to track your period:**

**If this is the first time** you are taking birth control pills, read, "**When should I start taking Norgestimate and Ethinyl Estradiol Tablets?**" above. Follow these instructions for either a Sunday **Start** or a **Day 1 Start**.

### **Sunday Start:**

You will use a Sunday Start if your healthcare provider told you to take your first pill on a Sunday.

- Take pill **1** on the Sunday **after your period starts**.
- If your period starts on a Sunday, take pill "1" that day and refer to Day **1** Start instructions below.
- Take **1** pill every day in the order on the blister pack at the same time each day for **28** days.
- After taking the last pill on **Day 28** from the blister pack, start taking the first pill from a new blister pack, on the same day of the week as the first blister pack (Sunday). Take the first pill in the new blister pack whether or not you are having your period.
- Use non-hormonal back-up contraception such as condoms and spermicide for the first 7 days of the first cycle that you take Norgestimate and Ethinyl Estradiol Tablets.

### **Day 1 Start:**

You will use a **Day 1** Start if your doctor told you to take your first pill (Day 1) on the **first day of your period**.

- Take **1** pill every day in the order of the blister pack, at the same time each day, for **28** days.
- After taking the last pill on **Day 28** from the blister pack, start taking the first pill from a new pack, on the same day of the week as the first pack. Take the first pill in the new pack whether or not you are having your period.

**Norgestimate and Ethinyl Estradiol Tablets comes in a blister pack. Read the instructions below for using your blister pack.**

### **BEFORE YOU START TAKING YOUR PILLS:**

#### **1. BE SURE TO READ THESE DIRECTIONS:**

Before you start taking your pills.

Anytime you are not sure what to do.

#### **2. THE RIGHT WAY TO TAKE THE PILL IS TO TAKE ONE PILL EVERY DAY AT THE SAME TIME.** If you miss pills you could get pregnant. This includes starting the pack late.

The more pills you miss, the more likely you are to get pregnant.

**3. MANY WOMEN HAVE SPOTTING OR LIGHT BLEEDING, OR MAY FEEL SICK TO THEIR STOMACH DURING THE FIRST 1 to 3 PACKS OF PILLS.** If you feel sick to your stomach or have spotting or light bleeding, do not stop taking the pill. The problem will usually go away. If it doesn't go away, check with your healthcare professional.

**4. MISSING PILLS CAN ALSO CAUSE SPOTTING OR LIGHT BLEEDING,** even when you make up these missed pills.

On the days you take 2 pills to make up for missed pills, you could also feel a little sick to

your stomach.

5. IF YOU HAVE VOMITING OR DIARRHEA, OR IF YOU TAKE SOME MEDICINES, your pills may not work as well.

Use a back-up method (such as a condom or spermicide) until you check with your healthcare professional.

6. IF YOU HAVE TROUBLE REMEMBERING TO TAKE THE PILL, talk to your healthcare professional about how to make pill-taking easier or about using another method of birth control.

7. IF YOU HAVE ANY QUESTIONS OR ARE UNSURE ABOUT THE INFORMATION IN THIS LEAFLET, call your healthcare professional.

## **BEFORE YOU START TAKING YOUR PILLS**

### **1. DECIDE WHAT TIME OF DAY YOU WANT TO TAKE YOUR PILL.**

It is important to take it at about the same time every day.

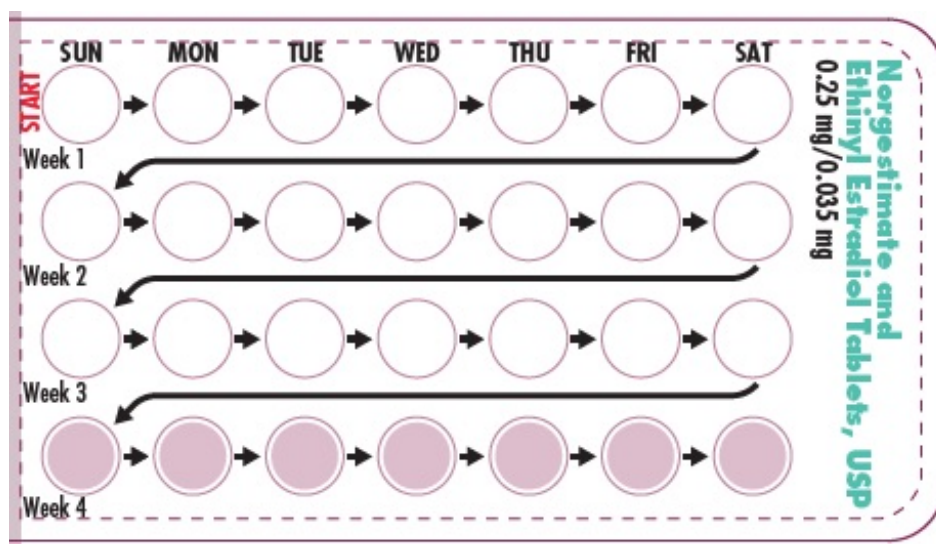
### **2. LOOK AT YOUR PILL PACK**

The pill pack has 21 active pills (with hormones) to take for 3 weeks. This is followed by 1 week of reminder green pills (without hormones).

There are 21 blue active pills, and 7 green reminder pills.

### **3. ALSO FIND:**

- 1) where on the pack to start taking pills,
- 2) in what order to take the pills (follow the arrows)
- 3) the week numbers as shown in the diagram below.



### **4. BE SURE YOU HAVE READY AT ALL TIMES:**

ANOTHER KIND OF BIRTH CONTROL (such as a condom or spermicide) to use as a back-up method in case you miss pills.

AN EXTRA, FULL PILL PACK.

**What should I do if I miss any Norgestimate and Ethinyl Estradiol Tablets**

## **pills?**

### **If you miss 1 pill in Weeks 1, 2, or 3, follow these steps:**

- Take it as soon as you remember. Take the next pill at your regular time. This means you may take 2 pills in 1 day.
- Then continue taking 1 pill every day until you finish the pack.
- You do not need to use a back-up birth control method if you have sex.

### **If you miss 2 pills in Week 1 or Week 2 of your pack, follow these steps:**

- Take the 2 missed pills as soon as possible and the next 2 pills the next day.
- Then continue to take 1 pill every day until you finish the pack.
- Use a non-hormonal birth control method (such as a condom and spermicide) as a back-up if you have sex during the first 7 days after missing your pills.

### **If you miss 2 pills in a row in Week 3, or you miss 3 or more pills in a row during Weeks 1, 2, or 3 of the pack, follow these steps:**

- ***If you are a Day 1 Starter:***
  - Throw out the rest of the pill pack and start a new pack that same day.
  - You may not have your period this month but this is expected. However, if you miss your period 2 months in a row, call your healthcare provider because you might be pregnant.
  - You could become pregnant if you have sex during the first 7 days after you restart your pills. You **MUST** use a non-hormonal birth control method (such as a condom and spermicide) as a back-up if you have sex during the first 7 days after you restart your pills.
- ***If you are a Sunday Starter:***
  - Keep taking 1 pill every day until Sunday. On Sunday, throw out the rest of the pack and start a new pack of pills that same day.
  - Use a non-hormonal birth control method (such as a condom and spermicide) as a back-up if you have sex during the first 7 days after you restart your pills.

### **If you have any questions or are unsure about the information in this leaflet, call your healthcare provider.**

This Patient Information and Instructions for Use has been approved by the U.S. Food and Drug Administration.

Manufactured for:

AvKARE

Pulaski, TN 38478

Rev. 11/2021

**Principal Display Panel**

PLEASE, REMOVE YOUR LABELS WITH THIS RETURN



NDC 42291-55328  
**Rx only**

**Norgestimate and Ethinyl Estradiol Tablets, USP**  
0.25 mg/0.035 mg

Store at 20° to 25°C (68° to 77°F)  
[see USP Controlled Room Temperature].  
Protect from light.

Manufactured for: AvKARE Pulaski, TN 38478.  
Product of Spain      Rev: 04/2020 553-28-00

Exp.:  
Lot.:

# NORGESTIMATE AND ETHINYL ESTRADIOL

norgestimate and ethinyl estradiol kit

## Product Information

<b>Product Type</b>	HUMAN PRESCRIPTION DRUG	<b>Item Code (Source)</b>	NDC:42291-553
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## Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:42291-553-84	3 in 1 CARTON	04/20/2020	
1	NDC:42291-553-28	1 in 1 CARTON		
1		1 in 1 BLISTER PACK; Type 0: Not a Combination Product		

## Quantity of Parts

Part #	Package Quantity	Total Product Quantity
Part 1		21
Part 2		7

## Part 1 of 2

### ESTARYLLA

norgestimate and ethinyl estradiol tablet

## Product Information

<b>Route of Administration</b>	ORAL
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## Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
<b>NORGESTIMATE</b> (UNII: C291HFX4DY) (NORGESTIMATE - UNII:C291HFX4DY)	NORGESTIMATE	0.25 mg
<b>ETHINYL ESTRADIOL</b> (UNII: 423D2T571U) (ETHINYL ESTRADIOL - UNII:423D2T571U)	ETHINYL ESTRADIOL	0.035 mg

## Inactive Ingredients

Ingredient Name	Strength
<b>CROSPVIDONE</b> (UNII: 68401960MK)	
<b>FD&amp;C BLUE NO. 2</b> (UNII: L06K8R7DQK)	
<b>ANHYDROUS LACTOSE</b> (UNII: 3SY5LH9PMK)	
<b>MAGNESIUM STEARATE</b> (UNII: 70097M6I30)	



**STARCH, CORN** (UNII: O8232NY3SJ)

### Product Characteristics

<b>Color</b>	blue	<b>Score</b>	no score
<b>Shape</b>	ROUND	<b>Size</b>	6mm
<b>Flavor</b>		<b>Imprint Code</b>	SZ;T4
<b>Contains</b>			

### Marketing Information

<b>Marketing Category</b>	<b>Application Number or Monograph Citation</b>	<b>Marketing Start Date</b>	<b>Marketing End Date</b>
ANDA	ANDA090794	01/01/2018	

## Part 2 of 2

### ESTARYLLA

inert tablet

### Product Information

<b>Route of Administration</b>	ORAL
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### Inactive Ingredients

<b>Ingredient Name</b>	<b>Strength</b>
<b>CROSPVIDONE</b> (UNII: 68401960MK)	
<b>D&amp;C YELLOW NO. 10</b> (UNII: 35SW5USQ3G)	
<b>FD&amp;C BLUE NO. 2</b> (UNII: L06K8R7DQK)	
<b>ANHYDROUS LACTOSE</b> (UNII: 3SY5LH9PMK)	
<b>MAGNESIUM STEARATE</b> (UNII: 70097M6I30)	
<b>STARCH, CORN</b> (UNII: O8232NY3SJ)	

### Product Characteristics

<b>Color</b>	green	<b>Score</b>	no score
<b>Shape</b>	ROUND	<b>Size</b>	6mm
<b>Flavor</b>		<b>Imprint Code</b>	SZ;J1
<b>Contains</b>			

### Marketing Information

<b>Marketing Category</b>	<b>Application Number or Monograph Citation</b>	<b>Marketing Start Date</b>	<b>Marketing End Date</b>
ANDA	ANDA090794	01/01/2018	

## Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA090794	04/20/2020	

**Labeler** - AvKARE (796560394)

Revised: 1/2022

AvKARE