

# MONO-LINYAH - norgestimate and ethinyl estradiol

## A-S Medication Solutions

### HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use Mono-Linyah safely and effectively. See full prescribing information for Mono-Linyah. Mono-Linyah (norgestimate/ethinyl estradiol tablets) for oral use. Initial U.S. Approval: 1989

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

*See full prescribing information for complete boxed warning.*

- Mono-Linyah is 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

Contraindications (4) 08/2017  
Warnings and Precautions (5.3) 08/2017

#### INDICATIONS AND USAGE

Mono-Linyah is an estrogen/progestin COC, indicated for use by women to prevent pregnancy. (1.1)

#### DOSAGE AND ADMINISTRATION

- Take one tablet 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

Mono-Linyah consists of 28 tablets in the following order (3):

- 21 blue tablets each containing 0.250 mg norgestimate and 0.035 mg ethinyl estradiol
- 7 white tablets (inert)

#### CONTRAINDICATIONS

- 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

- Thromboembolic Disorders and Other Vascular Problems: Stop Mono-Linyah 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 Mono-Linyah if jaundice occurs. (5.2)
- High blood pressure: If used in women with well-controlled hypertension, monitor blood pressure and stop Mono-Linyah if blood pressure rises significantly. (5.4)
- Carbohydrate and lipid metabolic effects: Monitor prediabetic and diabetic women taking Mono-Linyah. Consider an alternate contraceptive method for women with uncontrolled dyslipidemia. (5.6)
- Headache: Evaluate significant change in headaches and discontinue Mono-Linyah if indicated. (5.7)
- Bleeding Irregularities and Amenorrhea: Evaluate irregular bleeding or amenorrhea. (5.8)

#### ADVERSE REACTIONS

The most common adverse reactions (≥ 2%) were: 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 Northstar Rx LLC. Toll-Free at 1-800-206-7821 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 and FDA-approved patient labeling.**

**Revised: 12/2017**

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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**

Mono-Linyah 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 Mono-Linyah**

Mono-Linyah is dispensed in 28-tablet blister [see How Supplied/Storage and Handling (16)]. Mono-Linyah may be started using either a Day 1 start or a Sunday start (see Table 1). The plastic compact is pre-set for a Sunday start. Day 1 Start day-label stickers are available. 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 Mono-Linyah**



### **Starting Mono-Linyah after Abortion or Miscarriage**

### ***First-trimester***

- After a first-trimester abortion or miscarriage, Mono-Linyah may be started immediately. An additional method of contraception is not needed if Mono-Linyah is started immediately.
- If Mono-Linyah 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 pack of Mono-Linyah.

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

- Do not start until 4 weeks after a second-trimester abortion or miscarriage, due to the increased risk of thromboembolic disease. Start Mono-Linyah, 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 pack of Mono-Linyah.[see *Contraindications (4)*, *Warnings and Precautions (5.1)*, and *FDA-Approved Patient Labeling*.]

### **Starting Mono-Linyah after Childbirth**

- Do not start until 4 weeks after delivery, due to the increased risk of thromboembolic disease. Start contraceptive therapy with Mono-Linyah following the instructions in Table 1 for women not currently using hormonal contraception.
- Mono-Linyah 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 Mono-Linyah.[See *Contraindications (4)*, *Warnings and Precautions (5.1)*, *Use in Specific Populations (8.1 and 8.3)*, and *FDA-Approved Patient Labeling*.]

### **Compact Blister Dispenser**

If the patient starts pill-taking on Sunday, the first active pill should be taken on the first Sunday after the patient's menstrual period begins. Remove the first active pill at the top of the dispenser (Sunday) by pressing the pill through the blister foil.

If the patient will start pill-taking on "Day 1", place a day-label sticker on the compact which starts with the day of the week the patient will take the first pill. Remove the first active pill at the top of the dispenser (Day 1) by pressing the pill through the blister foil.

### **2.3 Missed Tablets**

Table 2: Instructions for Missed Mono-Linyah 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 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 pack is finished.</p> <p><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>
<ul style="list-style-type: none"> <li>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</li> </ul>	<p><u>Day 1 start:</u> Throw out the rest of the pack and start a new pack that same day.</p> <p><u>Sunday start:</u> Continue taking one tablet a day until Sunday, then throw out the rest of the pack and start a new pack that same day.</p> <p><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

Mono-Linyah Tablets are available in blister cards. Each blister card contains 28 tablets in the following order:

- 21 blue, round, biconvex, coated tablet imprinted "C3" on one side of the tablet and contains 0.250 mg norgestimate and 0.035 mg ethinyl estradiol
- 7 white, round, biconvex tablets (non-hormonal placebo) imprinted "P" on one side and "N" on the other side contains inert ingredients

## 4 CONTRAINDICATIONS

Do not prescribe Mono-Linyah to women who are known to have 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 have 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* (5.9)*and Use in Specific Populations* (8.1)]
- Breast cancer or other estrogen- or progestin-sensitive cancer, now or in the past[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 Thrombotic Disorders and Other Vascular Problems

- Stop Mono-Linyah if an arterial thrombotic event or venous thromboembolic (VTE) event occurs.
- Stop Mono-Linyah 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 Mono-Linyah 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 Mono-Linyah 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 Mono-Linyah 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 Mono-Linyah if jaundice develops.

### Liver Tumors

Mono-Linyah 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 per 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 Mono-Linyah prior to starting therapy with the combination drug regimen ombitasvir/paritaprevir/ritonavir, with or without dasabuvir [see *Contraindications (4)*]. Mono-Linyah can be restarted approximately 2 weeks following completion of treatment with the Hepatitis C combination drug regimen.

### **5.4 High Blood Pressure**

Mono-Linyah 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 Mono-Linyah 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 Mono-Linyah. COCs may decrease glucose tolerance.

Consider alternative contraception for women with uncontrolled dyslipidemias. 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 Mono-Linyah develops new headaches that are recurrent, persistent, or severe, evaluate the cause and discontinue Mono-Linyah if indicated.

Consider discontinuation of Mono-Linyah 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 Tablets 0.25mg/0.035mg, 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 Tablets 0.25mg/0.035mg, at least in part, due to bleeding or spotting. Based on data from the clinical trials, 14-34% of women using norgestimate and ethinyl estradiol Tablets 0.25mg/0.035mg 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 Mono-Linyah 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 Mono-Linyah 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 Mono-Linyah if depression recurs to a serious degree.

## 5.11 Carcinoma of the Breast and Cervix

- Mono-Linyah is contraindicated in women who currently have or have had breast cancer because breast cancer may be hormonally sensitive [*see Contraindications (4)*] .

There is substantial evidence that COCs do not increase the incidence of breast cancer. Although some past studies have suggested that COCs might increase the incidence of breast cancer, more recent studies have not confirmed such findings.

- Some studies suggest that COC use has been associated with an increase in the risk of cervical cancer or intraepithelial neoplasia. However, there continues to be controversy about the extent to which such findings may be 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 Mono-Linyah.

## 6 ADVERSE REACTIONS

The following serious adverse reactions with the use of COCs are discussed elsewhere in the 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 0.25mg/0.035mg tablets 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 0.25mg/0.035mg tablets 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 ( ≥ 2% of all 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) (5.0%), 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 ( ≥ 1%) leading to discontinuation were: metrorrhagia (6.9%), nausea/vomiting (5.0%), 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**

The following additional adverse drug reactions have been reported from worldwide postmarketing experience with norgestimate/ethinyl estradiol. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

*Infections and Infestations:* Urinary tract infection;

*Neoplasms Benign, Malignant and Unspecified (Incl. Cysts and Polyps):* Breast cancer, benign breast neoplasm, hepatic adenoma, focal nodular hyperplasia, breast cyst;

*Immune System Disorders:* Hypersensitivity;

*Metabolism and Nutrition Disorders:* Dyslipidemia;

*Psychiatric Disorders:* Anxiety, insomnia;

*Nervous System Disorders:* Syncope, convulsion, paresthesia, dizziness;

*Eye Disorders:* Visual impairment, dry eye, contact lens intolerance;

*Ear and Labyrinth Disorders:* Vertigo;

*Cardiac Disorders:* Tachycardia, palpitations;

*Vascular Events:* Deep vein thrombosis, pulmonary embolism, retinal vascular thrombosis, hot flush;

*Arterial Events:* Arterial thromboembolism, myocardial infarction, cerebrovascular accident;

*Respiratory, Thoracic and Mediastinal Disorders:* Dyspnea;

*Gastrointestinal Disorders:* Pancreatitis, abdominal distension, diarrhea, constipation;

*Hepatobiliary Disorders:* Hepatitis;

*Skin and Subcutaneous Tissue Disorders:* Angioedema, erythema nodosum, hirsutism, night sweats, hyperhidrosis, photosensitivity reaction, urticaria, pruritus, acne;

*Musculoskeletal, Connective Tissue, and Bone Disorders:* Muscle spasms, pain in extremity, myalgia, back pain;

*Reproductive System and Breast Disorders:* Ovarian cyst, suppressed lactation, vulvovaginal dryness;

*General Disorders and Administration Site Conditions:* Chest pain, asthenic conditions.

## **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 Mono-Linyah.

### **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, rifinamide, 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 20-25%. 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**

7.2.1 COCs containing EE may inhibit the metabolism of other compounds (e.g., cyclosporine, prednisolone, theophylline, tizanidine, and voriconazole) and increase their plasma concentrations.

7.2.2 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 Interactions 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 Elevatio**

Do not co-administer Mono-Linyah 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 Mono-Linyah 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**

Mono-Linyah has not been studied in postmenopausal women and are not indicated in this population.

### **8.6 Hepatic Impairment**

The pharmacokinetics of Mono-Linyah 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 Mono-Linyah has not been studied in women with renal impairment.

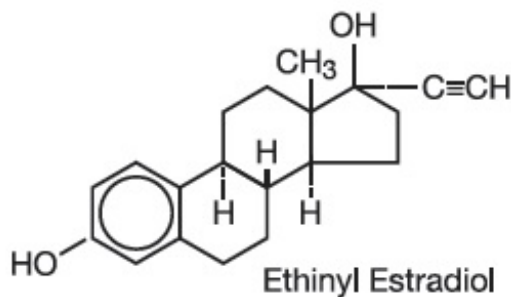
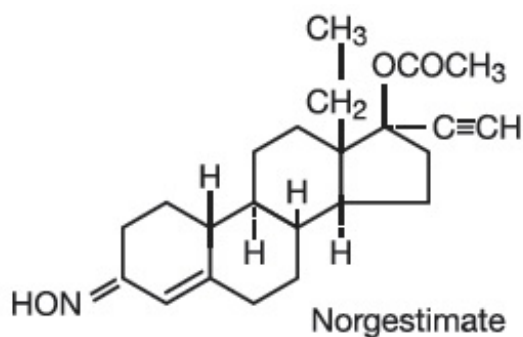
## **10 OVERDOSAGE**

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**

Mono-Linyah 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 )(+)-) and ethinyl estradiol is designated as (19-nor-17 -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 ethinyl estradiol. Inactive ingredients include: FD&C Blue No. 2 Aluminium Lake, FD&C Blue No. 1 Aluminum lake, FD&C Red No. 40 Aluminum Lake, FD&C Yellow No. 10 Aluminum Lake, titanium dioxide, polyvinyl alcohol, talc, macrogol/PEG 3350 NF, lecithin, lactose monohydrate, magnesium stearate and pregelatinized corn starch.
- Each white placebo tablet containing only inert ingredients, as follows: titanium dioxide, polydextrose, hypromellose, triacetin, macrogol/polyethylene glycol, lactose monohydrate, magnesium stearate and pregelatinized corn starch.



## 12 CLINICAL PHARMACOLOGY

### 12.1 Mechanism of Action

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 Mono-Linyah.

### 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 Mono-Linyah. 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 norgestromin, norgestrel and ethinyl estradiol pharmacokinetic parameters

Mean (SD) Pharmacokinetic Parameters of Norgestimate and Ethinyl Estradiol 0.25mg/0.035mg Tablets During a Three Cycle Study						
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 (14.0)
	3	21	2.65 (1.11)	1.67 (1.32)	48.2 (20.5)	45.0 (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)	15.0 (2.36)
<p>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</p>						

### *Food Effect*

The effect of food on the pharmacokinetics of Mono-Linyah 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<sub>i</sub>). 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 14C-norgestimate, 47% (45-49%) and 37% (16-49%) 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 )-( - ); 18, 19-Dinor-5 -17-pregnan-20-yn, 3 , 17 -dihydroxy-13-ethyl, (17 ), 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 0.25mg/0.035mg, 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 73-86% Caucasian, 8-13% African-American, 6-14% Hispanic with the remainder Asian or Other ( 1%). There were no exclusions on the basis of weight; the weight range for women treated was 82-303 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**

Mono-Linyah Tablets are available in a compact blister card (NDC 16714-360-01) containing 28 tablets in the following order: 21 blue, biconvex, round, coated tablets with "C3" debossed on one side containing 0.25 mg norgestimate and 0.035 mg ethinyl estradiol, and 7 white, biconvex, round, coated tablets with "P" debossed on one side and the "N" debossed on the other side containing inert ingredients.

Mono-Linyah Tablets are available in the following configurations:

Carton of 1 blister card NDC 16714-360-02

Carton of 3 blister cards NDC 16714-360-03

Carton of 6 blister cards NDC 16714-360-04

Keep out of reach of children.

### **16.2 Storage Conditions**

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

## **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)] .
- Mono-Linyah do not protect against HIV infection (AIDS) and other sexually transmitted infections.
- Mono-Linyah is not to be used during pregnancy; if pregnancy occurs during use of Mono-Linyah 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 Mono-Linyah[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: Northstar Rx LLC  
Memphis TN 38141  
Toll Free 1-800-206-7821  
Manufactured by: Novast Laboratories Ltd.  
Nantong, China 226009

Revised Dec 2017

## **Patient Information**

### **Mono-Linyah[Mon-oh-lin-YAH]**

### **(norgestimate and ethinyl estradiol) Tablets**

#### **What is the most important information I should know about MONO-LINYAH?**

**Do not use MONO-LINYAH 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 MONO-LINYAH?**

MONO-LINYAH is a birth control pill (oral contraceptive) used by women to prevent pregnancy.

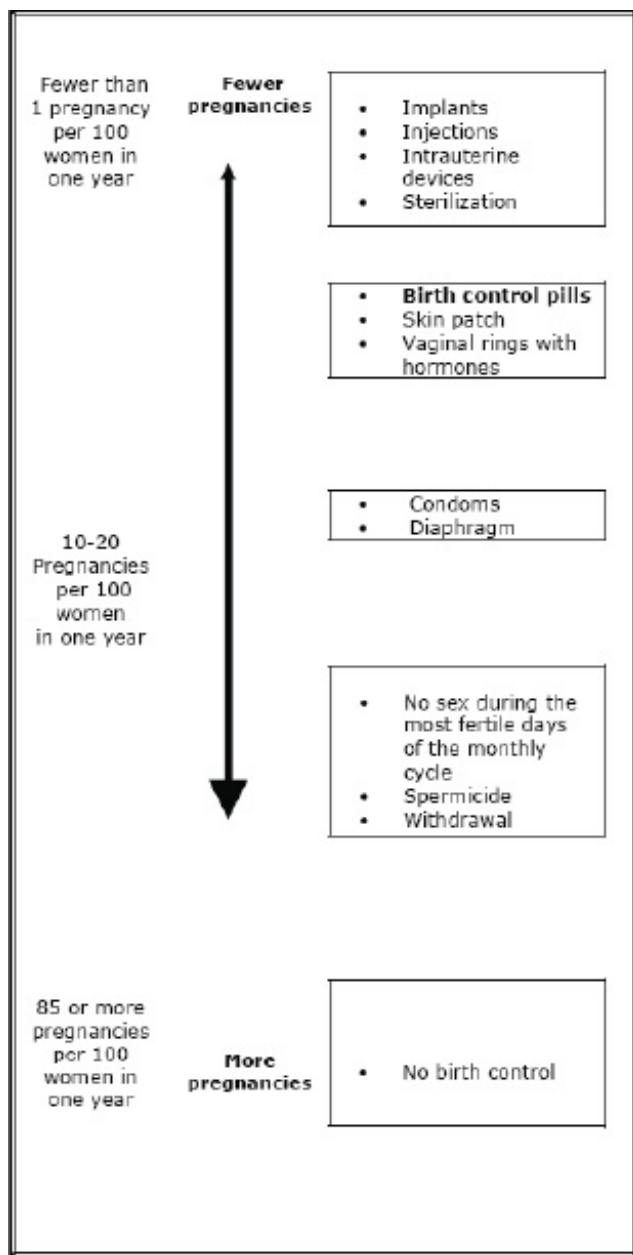
#### **How does MONO-LINYAH work for contraception?**

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 MONO-LINYAH.

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 MONO-LINYAH? Do not take MONO-LINYAH 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 hormones

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

**What should I tell my healthcare provider before taking MONO-LINYAH? 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. **MONO-LINYAH** may decrease the amount of breast milk you make. A small amount of the hormones in **MONO-LINYAH** 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.

MONO-LINYAH may affect the way other medicines work, and other medicines may affect how well MONO-LINYAH 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 MONO-LINYAH?**

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

**What are the possible serious side effects of MONO-LINYAH?**

- **Like pregnancy, MONO-LINYAH 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 usual headaches
- sudden severe shortness of breath
- weakness or numbness in your arm or leg
- sudden change in vision or blindness
- trouble speaking
- chest pain

**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 MONO-LINYAH.**
- **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 Mono-Linyah. Use sunscreen if you have to be in the sunlight.

### **What are the most common side effects of MONO-LINYAH?**

- 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 MONO-LINYAH. For more information, ask your healthcare provider or pharmacist.

You may report side effects to the FDA at 1-800-FDA-1088.

### **What else should I know about taking MONO-LINYAH?**

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

### **How should I store MONO-LINYAH?**

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

### **General information about the safe and effective use of MONO-LINYAH.**

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

This Patient Information summarizes the most important information about MONO-LINYAH. You can ask your pharmacist or healthcare provider for information about MONO-LINYAH that is written for health professionals.

For more information, call 1-800-206-7821.

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

Birth control pills do not seem to cause breast cancer. However, if you have breast cancer now, or have

had it in the past, do not use birth control pills 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.

### **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 Mono-Linyah?**

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 MONO-LINYAH, 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 MONO-LINYAH?**

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

#### **Inactive ingredients:**

Blue pills: FD&C Blue No. 2 Aluminium Lake, FD&C Blue No. 1 Aluminum lake, FD&C Red No. 40 Aluminum Lake, FD&C Yellow No. 10 Aluminum Lake, titanium dioxide, polyvinyl alcohol, talc, macrogol/PEG 3350 NF, lecithin, lactose monohydrate, magnesium stearate and pregelatinized corn starch

White pills: titanium dioxide, polydextrose, hypromellose, triacetin, macrogol/polyethylene glycol, lactose monohydrate, magnesium stearate and pregelatinized corn starch.

### **Instructions For Use**

#### **Mono-Linyah [Mon-oh-lin-YAH]**

#### **(norgestimate and ethinyl estradiol) Tablets**

#### **Important Information about taking Mono-Linyah**

- Take **1** pill every day at the same time. Take the pills in the order directed on your pill dispenser.
- 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 Mono-Linyah, talk to your healthcare provider. When you first start taking Mono-Linyah, 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 Mono-Linyah. 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 Mono-Linyah 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 Mono-Linyah 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 Mono-Linyah.
- If you have vomiting or diarrhea within 3-4 hours of taking your pill, take another pill of the same color from your extra pill dispenser. If you do not have an extra pill dispenser, take the next pill in your pill dispenser. Continue taking all your remaining pills in order. Start the first pill of your next pill dispenser the day after finishing your current pill dispenser. 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 Mono-Liyah 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 Mono-Liyah:**

- 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 pill dispenser.
- Have backup contraception (condoms and spermicide) available and if possible, an extra full pack of pills as needed.

**When should I start taking Mono-Liyah?**

**If you start taking Mono-Liyah 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 Mono-Liyah. You do not need back-up contraception if you use the Day 1 Start.

**If you start taking Mono-Liyah and you are switching from another birth control pill:**

- Start your new Mono-Liyah 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 Mono-Liyah and previously used a vaginal ring or transdermal patch:**

- Start using Mono-Liyah on the day you would have reapplied the next ring or patch.

**If you start taking Mono-Liyah and you are switching from a progestin-only method such as an implant or injection:**

- Start taking Mono-Liyah on the day of removal of your implant or on the day when you would have had your next injection.

**If you start taking Mono-Liyah and you are switching from an intrauterine device or system (IUD or IUS):**

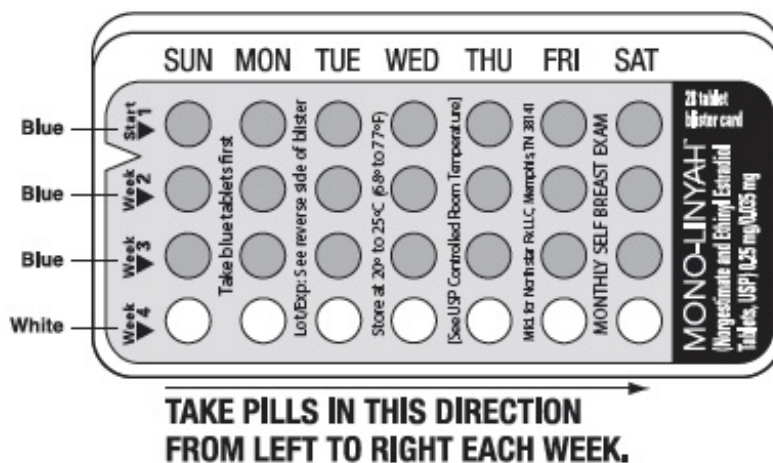
- Start taking Mono-Liyah on the day of removal of your IUD or IUS.
- You do not need back-up contraception if your IUD or IUS is removed on the first day (Day 1) of your period. If your IUD or IUS is removed on any other day, use non-hormonal back-up contraception such as condoms and spermicide for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

**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 Mono-Liyah?**" above.

MONO-LINYAH is available as a blister card placed within a white compact with the days of the week imprinted on the white compact preset for a Sunday start. The MONO-LINYAH blister card has 21 blue "active" pills (with hormones) to take for 3 weeks. This is followed by 1 week of 7 white "reminder" pills (without hormones). The MONO-LINYAH blister card and the imprinted days of the week on the compact is shown in the picture below.

Example only:



On the above blister card find where on the card to start taking pills, in what order to take the pills and the week numbers. Day 1 stickers are also provided.

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 pill dispenser at the same time each day for **28** days.
- After taking the last pill on **Day 28** from the pill dispenser, start taking the first pill from a new pack, on the **same** day of the week as the first pack (Sunday). Take the first pill in the new 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 MONO-LINYAH.

### **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**). Refer to Day 1 Start instructions below.

1. Pick the day label strip that starts with the first day of your period.
2. Place this day label strip over the area on the plastic compact which already has the days of the week (starting with Sunday) imprinted and press firmly. See the picture below as an example.

- Take **1** pill every day in the order of the pill dispenser dial pack, at the same time each day, for **28** days.
- After taking the last pill on **Day 28** from the pill dispenser, 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.

### **What should I do if I miss any MONO-LINYAH 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.**



Manufactured for: Northstar Rx LLC

Memphis TN 38141

Toll Free 1-800-206-7821

Manufactured by: Novast Laboratories Ltd.

Nantong, China 226009

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

Revised 12/2017

## Norgestimate and Ethinyl Estradiol



### MONO-LINYAH

norgestimate and ethinyl estradiol kit

#### Product Information

Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:50090-4881(NDC:16714-360)
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#### Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:50090-4881-0	1 in 1 KIT; Type 0: Not a Combination Product	02/11/2020	

#### Quantity of Parts

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

### Part 1 of 2

### MONO-LINYAH

norgestimate and ethinyl estradiol tablet

#### Product Information

Route of Administration	ORAL
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Active Ingredient/Active Moiety

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

Inactive Ingredients

Ingredient Name	Strength
FD&C BLUE NO. 2 (UNII: L06K8R7DQK)	
FD&C BLUE NO. 1 (UNII: H3R47K3TBD)	
FD&C RED NO. 40 (UNII: WZB9127XOA)	
D&C YELLOW NO. 10 (UNII: 35SW5USQ3G)	
TITANIUM DIOXIDE (UNII: 15FIX9V2JP)	
POLYVINYL ALCOHOL, UNSPECIFIED (UNII: 532B59J990)	
TALC (UNII: 7SEV7J4R1U)	
POLYETHYLENE GLYCOL 3350 (UNII: G2M7P15E5P)	
LECITHIN, SOYBEAN (UNII: 1DI56QDM62)	
LACTOSE MONOHYDRATE (UNII: EWQ57Q8I5X)	
MAGNESIUM STEARATE (UNII: 70097M6I30)	
STARCH, CORN (UNII: O8232NY3SJ)	

Product Characteristics

Color	BLUE	Score	no score
Shape	ROUND (biconvex)	Size	5mm
Flavor		Imprint Code	C3
Contains			

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA090523	05/23/2012	

Part 2 of 2

INERT

placebo tablet

Product Information

Route of Administration	ORAL
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Inactive Ingredients

Ingredient Name	Strength
POLYDEXTROSE (UNII: VH2XOU12IE)	

HYPROMELLOSE, UNSPECIFIED (UNII: 3NXW29V3WO)				
TRIACETIN (UNII: XHX3C3X673)				
POLYETHYLENE GLYCOL 8000 (UNII: Q662QK8M3B)				
<b>Product Characteristics</b>				
<b>Color</b>	WHITE	<b>Score</b>	no score	
<b>Shape</b>	ROUND (biconvex)	<b>Size</b>	5mm	
<b>Flavor</b>		<b>Imprint Code</b>	P;N	
<b>Contains</b>				
<b>Marketing Information</b>				
<b>Marketing Category</b>	<b>Application Number or Monograph Citation</b>	<b>Marketing Start Date</b>	<b>Marketing End Date</b>	
ANDA	ANDA090523	05/23/2012		
<b>Marketing Information</b>				
<b>Marketing Category</b>	<b>Application Number or Monograph Citation</b>	<b>Marketing Start Date</b>	<b>Marketing End Date</b>	
ANDA	ANDA090523	05/23/2012		

**Labeler** - A-S Medication Solutions (830016429)

Establishment			
Name	Address	ID/FEI	Business Operations
A-S Medication Solutions		830016429	RELABEL(50090-4881)