# YASMIN - drospirenone and ethinyl estradiol Physicians Total Care, Inc.

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#### HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use YASMIN safely and effectively. See full prescribing information for YASMIN.

YASMIN (drospirenone/ethinyl estradiol) tablets, for oral use

Initial U.S. Approval: 2001

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

See full prescribing information for complete boxed warning.

- Women over 35 years old who smoke should not use Yasmin. (4)
- Cigarette smoking increases the risk of serious cardiovascular events from combination oral contraceptive (COC) use. (4)

RECENT MAJOR CHANGES ·
Warnings and Precautions, Thromboembolic Disorders (5.1)2/2012
INDICATIONS AND USAGE
Yasmin is an estrogen/progestin COC indicated for use by women to prevent pregnancy. (1)
DOSAGE AND ADMINISTRATION
• Take one tablet daily by mouth at the same time every day. (2.1)
• Tablets must be taken in the order directed on the blister pack. (2.1)
DOSAGE FORMS AND STRENGTHS
Yasmin consists of 28 film-coated, biconvex tablets in the following order (3):
• 21 yellow tablets, each containing 3 mg drospirenone (DRSP) and 0.03 mg ethinyl estradiol (EE),
• 21 yellow tablets, each containing 5 mg drosphenone (DRSF) and 0.05 mg ethinyl estilation (EE),

• 7 inert white tablets

#### ------CONTRAINDICATIONS -----

- Renal impairment (4)
- Adrenal insufficiency (4)
- A high risk of arterial or venous thrombotic diseases (4)
- Undiagnosed abnormal uterine bleeding (4)
- Breast cancer or other estrogen- or progestin-sensitive cancer (4)
- Liver tumors or liver disease (4)
- Pregnancy (4)

#### ------ WARNINGS AND PRECAUTIONS -----

- <u>Vascular risks</u>: Stop Yasmin 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)
- <u>Hyperkalemia</u>: DRSP has antimineralocorticoid activity. Do not use in patients predisposed to hyperkalemia. Check serum potassium concentration during the first treatment cycle in women on long-term treatment with medications that may increase serum potassium concentration. (5.2, 7.3)
- <u>Liver disease</u>: Discontinue Yasmin if jaundice occurs. (5.4)
- <u>High blood pressure</u>: Do not prescribe Yasmin for women with uncontrolled hypertension or hypertension with vascular disease. (5.5)
- <u>Carbohydrate and lipid metabolic effects</u>: Monitor prediabetic and diabetic women taking Yasmin. Consider an alternate contraceptive method for women with uncontrolled dyslipidemia. (5.7)
- Headache: Evaluate significant change in headaches and discontinue Yasmin if indicated. (5.8)
- Uterine bleeding: Evaluate irregular bleeding or amenorrhea. (5.9)

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

The most frequent adverse reactions ( $\geq 2\%$ ) are premenstrual syndrome (13.2%), headache /migraine (10.7%), breast pain/tenderness/discomfort (8.3%), nausea/vomiting (4.5%), abdominal pain/tenderness/discomfort (2.3%), mood changes (2.3%). (6.1)

To report SUSPECTED ADVERSE REACTIONS, contact Bayer or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch

DRUG INTERACTIONS
Drugs or herbal products that induce certain enzymes (for example, 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
Number of mothers Not accommonded and describe model and describe (0.2)
Nursing mothers: Not recommended; can decrease milk production. (8.3)
See 17 for PATIENT COUNSELING INFORMATION.

**Revised: 3/2012** 

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

Cigarette smoking increases the risk of serious cardiovascular events from combination oral contraceptives (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 should not be used by women who are over 35 years of age and smoke [see Contraindications (4)].

#### 1 INDICATIONS AND USAGE

Yasmin is indicated for use by women to prevent pregnancy.

#### 2 DOSAGE AND ADMINISTRATION

#### 2.1 How to Take Yasmin

Take one tablet by mouth at the same time every day. The failure rate may increase when pills are missed or taken incorrectly.

To achieve maximum contraceptive effectiveness, Yasmin must be taken as directed, in the order directed on the blister pack. Single missed pills should be taken as soon as remembered.

#### 2.2 How to Start Yasmin

Instruct the patient to begin taking Yasmin either on the first day of her menstrual period (Day 1 Start) or on the first Sunday after the onset of her menstrual period (Sunday Start).

#### Day 1 Start

During the first cycle of Yasmin use, instruct the patient to take one yellow Yasmin daily, beginning on Day 1 of her menstrual cycle. (The first day of menstruation is Day 1.) She should take one yellow Yasmin daily for 21 consecutive days, followed by one white tablet daily on Days 22 through 28. Yasmin should be taken in the order directed on the package at the same time each day, preferably after the evening meal or at bedtime with some liquid, as needed. Yasmin can be taken without regard to meals. If Yasmin is first taken later than the first day of the menstrual cycle, Yasmin should not be considered effective as a contraceptive until after the first 7 consecutive days of product administration. Instruct the patient to use a non-hormonal contraceptive as back-up during the first 7 days. The possibility of ovulation and conception prior to initiation of medication should be considered.

#### Sunday Start

During the first cycle of Yasmin use, instruct the patient to take one yellow Yasmin daily, beginning on the first Sunday after the onset of her menstrual period. She should take one yellow Yasmin daily for 21 consecutive days, followed by one white tablet daily on Days 22 through 28. Yasmin should be taken in the order directed on the package at the same time each day, preferably after the evening meal or at bedtime with some liquid, as needed. Yasmin can be taken without regard to meals. Yasmin should not be considered effective as a contraceptive until after the first 7 consecutive days of product administration. Instruct the patient to use a non-hormonal contraceptive as back-up during the first 7 days. The possibility of ovulation and conception prior to initiation of medication should be considered.

The patient should begin her next and all subsequent 28-day regimens of Yasmin on the same day of the week that she began her first regimen, following the same schedule. She should begin taking her yellow tablets on the next day after ingestion of the last white tablet, regardless of whether or not a menstrual

period has occurred or is still in progress. Anytime a subsequent cycle of Yasmin is started later than the day following administration of the last white tablet, the patient should use another method of contraception until she has taken a yellow Yasmin daily for seven consecutive days.

When switching from a different birth control pill

When switching from another birth control pill, Yasmin should be started on the same day that a new pack of the previous oral contraceptive would have been started.

When switching from a method other than a birth control pill

When switching from a transdermal patch or vaginal ring, Yasmin should be started when the next application would have been due. When switching from an injection, Yasmin should be started when the next dose would have been due. When switching from an intrauterine contraceptive or an implant, Yasmin should be started on the day of removal.

Withdrawal bleeding usually occurs within 3 days following the last yellow tablet. If spotting or breakthrough bleeding occurs while taking Yasmin, instruct the patient to continue taking Yasmin by the regimen described above. Counsel her that this type of bleeding is usually transient and without significance; however, advise her that if the bleeding is persistent or prolonged, she should consult her healthcare provider.

Although the occurrence of pregnancy is low if Yasmin is taken according to directions, if 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. Discontinue Yasmin if pregnancy is confirmed.

The risk of pregnancy increases with each active yellow tablet missed. For additional patient instructions regarding missed pills, see the "WHAT TO DO IF YOU MISS PILLS" section in the FDA-Approved Patient Labeling. If breakthrough bleeding occurs following missed tablets, it will usually be transient and of no consequence. If the patient misses one or more white tablets, she should still be protected against pregnancy provided she begins taking a new cycle of yellow tablets on the proper day.

For postpartum women who do not breastfeed or after a second trimester abortion, start Yasmin no earlier than 4 weeks postpartum due to the increased risk of thromboembolism. If the patient starts Yasmin postpartum and has not yet had a period, evaluate for possible pregnancy, and instruct her to use an additional method of contraception until she has taken Yasmin for 7 consecutive days.

#### 2.3 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 occurs within 3-4 hours after tablet-taking, this can be regarded as a missed tablet.

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

Yasmin (drospirenone/ethinyl estradiol) tablets are available in blister packs.

Each blister pack contains 28 film-coated, round, bi-convex tablets in the following order:

- 21 yellow tablets each containing 3 mg drospirenone (DRSP) and 0.03 mg ethinyl estradiol (EE) embossed with a "DO" in a regular hexagon on one side
- 7 inert white tablets embossed with a "DP" in a regular hexagon on one side

#### 4 CONTRAINDICATIONS

Do not prescribe Yasmin to women who are known to have the following:

- Renal impairment
- Adrenal insufficiency
- 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 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 inherited or acquired hypercoagulopathies [see Warnings and Precautions (5.1)]
- Have uncontrolled hypertension [see Warnings and Precautions (5.5)]
- Have diabetes mellitus with vascular disease [see Warnings and Precautions (5.7)]
- Have headaches with focal neurological symptoms or have migraine headaches with or without aura if over age 35 [see Warnings and Precautions (5.8)]
- Undiagnosed abnormal uterine bleeding [see Warnings and Precautions (5.9)]
- Breast cancer or other estrogen- or progestin-sensitive cancer, now or in the past [see Warnings and Precautions (5.3)]
- Liver tumor (benign or malignant) or liver disease [see Warnings and Precautions (5.4) and Use in Specific Populations (8.7)]
- Pregnancy, because there is no reason to use COCs during pregnancy [see Warnings and Precautions (5.10) and Use in Specific Populations (8.1)]

#### **5 WARNINGS AND PRECAUTIONS**

#### 5.1 Thromboembolic Disorders and Other Vascular Problems

Stop Yasmin if an arterial or venous thrombotic (VTE) event occurs.

The use of COCs increases the risk of venous thromboembolism. However, pregnancy increases the risk of venous thromboembolism as much or more than the use of COCs. The risk of VTE in women using COCs has been estimated to be 3 to 9 per 10,000 woman-years. The risk of VTE is highest during the first year of use. Data from a large, prospective cohort safety study of various COCs suggest that this increased risk, as compared to that in non-COC users, is greatest during the first 6 months of COC use. Data from this safety study indicate that the greatest risk of VTE is present after initially starting a COC or restarting (following a 4 week or greater pill-free interval) the same or a different COC.

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.

The risk of thromboembolic disease due to oral contraceptives gradually disappears after COC use is discontinued.

If feasible, stop Yasmin at least 4 weeks before and through 2 weeks after major surgery or other surgeries known to have an elevated risk of thromboembolism.

Start Yasmin no earlier than 4 weeks after delivery, in women who are not breastfeeding. The risk of postpartum thromboembolism decreases after the third postpartum week, whereas the risk of ovulation

increases after the third postpartum week.

COCs have been shown to increase both the relative and attributable risks of cerebrovascular events (thrombotic and hemorrhagic strokes), although, in general, the risk is greatest among older (35 years of age), hypertensive women who also smoke. COCs also increase the risk for stroke in women with other underlying risk factors.

Oral contraceptives must be used with caution in women with cardiovascular disease risk factors.

Stop Yasmin if there is unexplained loss of vision, proptosis, diplopia, papilledema, or retinal vascular lesions. Evaluate for retinal vein thrombosis immediately.

#### Epidemiologic studies including a DRSP-containing COC

Several studies have investigated the relative risks of thromboembolism in women using Yasmin compared to those in women using COCs containing other progestins. Two prospective cohort studies, both evaluating the risk of venous and arterial thromboembolism and death, were initiated at the time of Yasmin approval. The first (EURAS) showed the risk of thromboembolism (particularly venous thromboembolism) and death in Yasmin users to be comparable to that of other oral contraceptive preparations, including those containing levonorgestrel (a so-called second generation COC). The second prospective cohort study (Ingenix) also showed a comparable risk of thromboembolism in Yasmin users compared to users of other COCs, including those containing levonorgestrel. In the second study, COC comparator groups were selected based on their having similar characteristics to those being prescribed Yasmin.

Two additional epidemiological studies, one case-control study (van Hylckama Vlieg et al. <sup>3</sup>) and one retrospective cohort study (Lidegaard et al. <sup>4</sup>) suggested that the risk of venous thromboembolism occurring in Yasmin users was higher than that for users of levonorgestrel-containing COCs and lower than that for users of desogestrel/gestodene-containing COCs (so-called third generation COCs). In the case-control study, however, the number of Yasmin cases was very small (1.2% of all cases) making the risk estimates unreliable. The relative risk for Yasmin users in the retrospective cohort study was greater than that for users of other COC products when considering women who used the products for less than one year. However, these one-year estimates may not be reliable because the analysis may include women of varying risk levels. Among women who used the product for 1 to 4 years, the relative risk was similar for users of Yasmin to that for users of other COC products.

# 5.2 Hyperkalemia

Yasmin contains 3 mg of the progestin DRSP, which has antimineral corticoid activity, including the potential for hyperkalemia in high-risk patients, comparable to a 25 mg dose of spironolactone. Yasmin should not be used in patients with conditions that predispose to hyperkalemia (that is, renal impairment, hepatic impairment, and adrenal insufficiency). Women receiving daily, long-term treatment for chronic conditions or diseases with medications that may increase serum potassium concentration should have their serum potassium concentration checked during the first treatment cycle. Medications that may increase serum potassium concentration include ACE inhibitors, angiotensin—II receptor antagonists, potassium-sparing diuretics, potassium supplementation, heparin, aldosterone antagonists, and NSAIDs.

#### 5.3 Carcinoma of the Breasts and Reproductive Organs

Women who currently have or have had breast cancer should not use Yasmin because breast cancer is a hormonally-sensitive tumor.

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 COCs are associated with an increase in the risk of cervical cancer or intraepithelial neoplasia. However, there is controversy about the extent to which these findings may be due to differences in sexual behavior and other factors.

#### 5.4 Liver Disease

Discontinue Yasmin if jaundice develops. Steroid hormones may be poorly metabolized in patients with impaired liver function. 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.

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 attributable risk of liver cancers in COC users is less than one case per million users.

Oral contraceptive-related cholestasis may occur in women with a history of pregnancy-related cholestasis. Women with a history of COC-related cholestasis may have the condition recur with subsequent COC use.

#### 5.5 High Blood Pressure

For women with well-controlled hypertension, monitor blood pressure and stop Yasmin if blood pressure rises significantly. Women with uncontrolled hypertension or hypertension with vascular disease should not use COCs.

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

#### 5.6 Gallbladder Disease

Studies suggest a small increased relative risk of developing gallbladder disease among COC users.

#### 5.7 Carbohydrate and Lipid Metabolic Effects

Carefully monitor prediabetic and diabetic women who are taking Yasmin. COCs may decrease glucose tolerance in a dose-related fashion.

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.

#### 5.8 Headache

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

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

# 5.9 Bleeding Irregularities

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 COC.

Data from ten contraceptive efficacy clinical trials (N=2,467) show that the percent of women who took Yasmin and experienced unscheduled bleeding decreased over time from 12% at cycle 2 to 6% (cycle 13). A total of 24 subjects out of 2,837 in the Yasmin trials (<1%) discontinued due to bleeding complaints. These are described as metrorrhagia, vaginal hemorrhage, menorrhagia, abnormal withdrawal bleeding, and menometrorrhagia.

The average duration of scheduled bleeding episodes in the majority of subjects (86%-88%) was 4-7 days. Women who use Yasmin may experience absence of withdrawal bleeding, even if they are not pregnant. Based on subject diaries from contraceptive efficacy trials, during cycles 2–13, 1-11% of women per cycle experienced no withdrawal bleeding. Some women may encounter post-pill amenorrhea or oligomenorrhea, especially when such a condition was pre-existent.

If 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.

#### 5.10 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 when COCs are taken inadvertently during early pregnancy, particularly in so far as cardiac anomalies and limb-reduction defects are concerned.

The administration of oral contraceptives to induce withdrawal bleeding should not be used as a test for pregnancy [see Use in Specific Populations (8.1)].

#### 5.11 Depression

Women with a history of depression should be carefully observed and Yasmin discontinued if depression recurs to a serious degree.

#### **5.12 Interference with Laboratory Tests**

- 1. The use of COCs may change the results of some laboratory tests, such as coagulation factors, lipids, glucose tolerance, and binding proteins. Women on thyroid hormone replacement therapy may need increased doses of thyroid hormone because serum concentrations of thyroid-binding globulin increase with use of COCs [see Drug Interactions (7.2)].
- 2. DRSP causes an increase in plasma renin activity and plasma aldosterone induced by its mild antimineralocorticoid activity.

#### 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 Other Conditions

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

#### **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 (5.4)]

Adverse reactions commonly reported by COC users are:

- Irregular uterine bleeding
- Nausea
- Breast tenderness
- Headache

#### **6.1 Clinical Trials Experience**

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

The data provided reflect the experience with the use of Yasmin (3 mg DRSP/0.03 mg EE) in the adequate and well-controlled studies for contraception (N=2,837). The US pivotal clinical study (N=326) was a multicenter, open-label trial in healthy women aged 18 -35 who were treated for up to 13 cycles. The second pivotal study (N=442)was a multicenter, randomized, open-label comparative European study of Yasmin vs. 0.150 mg desogestrel/0.03 mg EE conducted in healthy women aged 17-40 who were treated for up to 26 cycles.

The most common adverse reactions ( $\geq$  2% of users) were: premenstrual syndrome (13.2%), headache/migraine (10.7%), breast pain/tenderness/discomfort (8.3%), nausea/vomiting (4.5%) abdominal pain/discomfort/tenderness (2.3%) and mood changes (depression, depressed mood, irritability, mood swings, mood altered and affect lability (2.3%).

#### Adverse Reactions (≥ 1%) Leading to Study Discontinuation:

Of 2,837 women, 6.7% discontinued from the clinical trials due to an adverse reaction; the most frequent adverse reaction leading to discontinuation was headache/migraine (1.5%).

#### Serious Adverse Reactions:

Depression, pulmonary embolism, toxic skin eruption, and uterine leiomyoma.

#### 6.2 Postmarketing Experience

The following adverse reactions have been identified during post-approval use of Yasmin. 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.

Adverse reactions, including fatalities, are grouped into System Organ Classes and ordered by frequency.

Vascular disorders: Venous and arterial thromboembolic events (including pulmonary emboli, deep vein thrombosis, intracardiac thrombosis, intracranial venous sinus thrombosis, sagittal sinus thrombosis, retinal vein occlusion, myocardial infarction and stroke), hypertension

Hepatobiliary disorders: Gallbladder disease Immune system disorders: Hypersensitivity

Metabolism and nutrition disorders: Hyperkalemia Skin and subcutaneous tissue disorders: Chloasma

#### 7 DRUG INTERACTIONS

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

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

Substances diminishing the efficacy of COCs: Drugs or herbal products that induce certain enzymes, including cytochrome P450 3A4 (CYP3A4), may decrease 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 and products containing St. John's wort. Interactions between oral 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.

**Substances increasing the plasma concentrations of COCs:** Co-administration of atorvastatin with certain COCs containing EE increase AUC values for EE by approximately 20%. Ascorbic acid and acetaminophen may increase plasma EE concentrations, possibly by inhibition of conjugation. CYP3A4 inhibitors such as itraconazole 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 progestin have been noted in some cases of co-administration with HIV/HCV protease inhibitors or with non-nucleoside reverse transcriptase inhibitors.

**Antibiotics:** There have been reports of pregnancy while taking hormonal contraceptives and antibiotics, but clinical pharmacokinetic studies have not shown consistent effects of antibiotics on plasma concentrations of synthetic steroids.

*Effect on DRSP:* The main metabolites of DRSP in human plasma are generated without involvement of the CYP system. Inhibitors of this enzyme system are therefore unlikely to influence the metabolism of DRSP.

# 7.2 Effects of Combined Oral Contraceptives on Other Drugs

COCs containing EE may inhibit the metabolism of other compounds. COCs have been shown to significantly decrease plasma concentrations of lamotrigine, likely due to induction of lamotrigine glucuronidation. This may reduce seizure control; therefore, dosage adjustments of lamotrigine may be necessary. Consult the labeling of the concurrently-used drug to obtain further information about interactions with COCs or the potential for enzyme alterations.

*In vitro* and clinical studies did not indicate an inhibitory potential of DRSP towards human CYP enzymes at clinically relevant concentrations [see Clinical Pharmacology (12.3)].

Women on thyroid hormone replacement therapy may need increased doses of thyroid hormone because serum concentration of thyroid-binding globulin increases with use of COCs.

**Potential to Increase Serum Potassium Concentration:** There is a potential for an increase in serum potassium concentration in women taking Yasmin with other drugs that may increase serum potassium concentration [see Warnings and Precautions (5.2) and Clinical Pharmacology (12.3)].

#### 7.3 Interference with Laboratory Tests

1. The use of contraceptive steroids may influence the results of certain laboratory tests, such as coagulation factors, lipids, glucose tolerance, and binding proteins. DRSP causes an increase in plasma renin activity and plasma aldosterone induced by its mild antimineralocorticoid activity[see Warnings and Precautions (5.12) and Drug Interactions (7.2)].

#### **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 nongenital birth defects (including cardiac anomalies and limb-reduction defects) following exposure to low dose COCs prior to conception or during early pregnancy.

The administration of COCs to induce withdrawal bleeding should not be used as a test for pregnancy. COCs should not be used during pregnancy to treat threatened or habitual abortion.

Women who do not breastfeed may start COCs no earlier than four weeks postpartum.

#### 8.3 Nursing Mothers

When possible, advise the nursing mother to use other forms of contraception until she has weaned her child. Estrogen-containing 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.

After oral administration of Yasmin, about 0.02% of the DRSP dose was excreted into the breast milk of postpartum women within 24 hours. This results in a maximal daily dose of about 0.003 mg DRSP in an infant.

#### 8.4 Pediatric Use

Safety and efficacy of Yasmin has been established in women of reproductive age. Efficacy is expected to be the same for postpubertal 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

Yasmin has not been studied in postmenopausal women and is not indicated in this population.

#### 8.6 Patients with Renal Impairment

Yasmin is contraindicated in patients with renal impairment [see Contraindications (4) and Warnings and Precautions (5.2)].

In subjects with creatinine clearance (CLcr) of 50-79 mL/min, serum DRSP concentrations were comparable to those in a control group with CLcr  $\geq 80$  mL/min. In subjects with CLcr of 30-49 mL/min, serum DRSP concentrations were on average 37% higher than those in the control group. In addition, there is a potential to develop hyperkalemia in subjects with renal impairment whose serum potassium is in the upper reference range, and who are concomitantly using potassium sparing drugs [see Clinical Pharmacology (12.3)].

# 8.7 Patients with Hepatic Impairment

Yasmin is contraindicated in patients with hepatic disease [see Contraindications (4) and Warnings and Precautions (5.4)]. The mean exposure to DRSP in women with moderate liver impairment is approximately three times higher than the exposure in women with normal liver function. Yasmin has not been studied in women with severe hepatic impairment.

#### **8.8 Race**

No clinically significant difference was observed between the pharmacokinetics of DRSP or EE in Japanese versus Caucasian women [see Clinical Pharmacology (12.3)].

#### 10 OVERDOSAGE

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

DRSP is a spironolactone analogue which has antimineral ocorticoid properties. Serum concentration of potassium and sodium, and evidence of metabolic acidosis, should be monitored in cases of overdose.

#### 11 DESCRIPTION

Yasmin (drospirenone/ethinyl estradiol) tablets provide an oral contraceptive regimen consisting of 28 film-coated tablets that contain the ingredients specified for each tablet below:

- 21 yellow tablets each containing 3 mg DRSP and 0.03 mg EE
- 7 inert white tablets

The inactive ingredients in the yellow tablets are lactose monohydrate NF, corn starch NF, pregelatinized starch NF, povidone 25000 NF, magnesium stearate NF, hypromellose USP, macrogol 6000 NF, titanium dioxide USP, talc USP, and ferric oxide pigment, yellow NF. The white inert film-coated tablets contain lactose monohydrate NF, corn starch NF, povidone 25000 NF, magnesium stearate NF, hypromellose USP, talc USP, and titanium dioxide USP.

Drospirenone (6R,7R,8R,9S,10R,13S,14S,15S,16S,17S)-1,3',4',6,6a,7,8,9,10,11,12,13, 14,15,15a,16-hexadecahydro-10,13-dimethylspiro-[17H-dicyclopropa-[6,7:15,16] cyclopenta[a]phenanthrene-17,2'(5H)-furan]-3,5'(2H)-dione) is a synthetic progestational compound and has a molecular weight of 366.5 and a molecular formula of  $C_{24}H_{30}O_3$ .

Ethinyl estradiol (19-nor-17 $\alpha$ -pregna 1,3,5(10)-triene-20-yne-3,17-diol) is a synthetic estrogenic compound and has a molecular weight of 296.4 and a molecular formula of  $C_{20}H_{24}O_2$ .

The structural formulas are as follows:

#### 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

Drospirenone is a spironolactone analogue with antimineral ocorticoid activity. The estrogen in Yasmin is ethinyl estradiol (EE).

No specific pharmacodynamic studies were conducted with Yasmin.

#### 12.3 Pharmacokinetics

#### Absorption

The absolute bioavailability of DRSP from a single entity tablet is about 76%. The absolute bioavailability of EE is approximately 40% as a result of presystemic conjugation and first-pass metabolism. The absolute bioavailability of Yasmin, which is a combination tablet of DRSP and EE, has not been evaluated. Serum concentrations of DRSP and EE reached peak levels within 1-2 hours after administration of Yasmin.

The pharmacokinetics of DRSP are dose proportional following single doses ranging from 1-10 mg. Following daily dosing of Yasmin, steady state DRSP concentrations were observed after 8 days. There was about 2 to 3 fold accumulation in serum  $C_{max}$  and AUC (0-24h) values of DRSP following multiple dose administration of Yasmin (see Table 1).

For EE, steady-state conditions are reported during the second half of a treatment cycle. Following daily administration of Yasmin serum  $C_{max}$  and AUC (0-24h) values of EE accumulate by a factor of about 1.5 to 2 (see Table 1).

Table 1 MEAN PHARMACOKINETIC PARAMETERS OF YASMIN

#### (DRSP 3 mg and EE 0.03 mg)

DRSP Mean (%CV) Values				
Cycle / Day No. of Subjects $C_{max}$ $T_{max}$ $AUC(0-24h)$ $t_{1/2}$ $(ng/mL)$ $(h)$ $(ng • h/mL)$				

1/1	12	36.9 (13)	1.7 (47)	288 (25)	NA
1/21	12	87.5 (59)	1.7 (20)	827 (23)	30.9 (44)
6/21	12	84.2 (19)	1.8 (19)	930 (19)	32.5 (38)
9/21	12	81.3 (19)	1.6 (38)	957 (23)	31.4 (39)
13/21	12	78.7 (18)	1.6 (26)	968 (24)	31.1 (36)
EE					

	EE	
Mean	(%CV)	<b>Values</b>

Cycle / Day	No. of Subjects	C <sub>max</sub> (pg/mL)	T <sub>max</sub> (h)	AUC(0-24h) (pg•h/mL)	t <sub>1/2</sub> (h)
1/1	11	53.5 (43)	1.9 (45)	280 (87)	NA
1/21	11	92.1 (35)	1.5 (40)	461 (94)	NA
6/21	11	99.1 (45)	1.5 (47)	346 (74)	NA
9/21	11	87 (43)	1.5 (42)	485 (92)	NA
13/21	10	90.5 (45)	1.6 (38)	469 (83)	NA

#### Food Effect

The rate of absorption of DRSP and EE following single administration of a formulation similar to Yasmin was slower under fed (high fat meal) conditions with the serum Cmax being reduced about 40% for both components. The extent of absorption of DRSP, however, remained unchanged. In contrast, the extent of absorption of EE was reduced by about 20% under fed conditions.

#### Distribution

DRSP and EE serum concentrations decline in two phases. The apparent volume of distribution of DRSP is approximately 4 L/kg and that of EE is reported to be approximately 4–5 L/kg.

DRSP does not bind to sex hormone binding globulin (SHBG) or corticosteroid binding globulin (CBG) but binds about 97% to other serum proteins. Multiple dosing over 3 cycles resulted in no change in the free fraction (as measured at trough concentrations). EE is reported to be highly but non-specifically bound to serum albumin (approximately 98.5 %) and induces an increase in the serum concentrations of both SHBG and CBG. EE induced effects on SHBG and CBG were not affected by variation of the DRSP dosage in the range of 2 to 3 mg.

#### Metabolism

The two main metabolites of DRSP found in human plasma were identified to be the acid form of DRSP generated by opening of the lactone ring and the 4,5-dihydrodrospirenone-3-sulfate. These metabolites were shown not to be pharmacologically active. In in vitro studies with human liver microsomes, DRSP was metabolized only to a minor extent mainly by CYP3A4.

EE has been reported to be subject to presystemic conjugation in both small bowel mucosa and the liver. Metabolism occurs primarily by aromatic hydroxylation but a wide variety of hydroxylated and methylated metabolites are formed. These are present as free metabolites and as conjugates with glucuronide and sulfate. CYP3A4 in the liver is responsible for the 2-hydroxylation which is the major oxidative reaction. The 2-hydroxy metabolite is further transformed by methylation and glucuronidation prior to urinary and fecal excretion.

#### Excretion

DRSP serum concentrations are characterized by a terminal disposition phase half-life of approximately 30 hours after both single and multiple dose regimens. Excretion of DRSP was nearly complete after

ten days and amounts excreted were slightly higher in feces compared to urine. DRSP was extensively metabolized and only trace amounts of unchanged DRSP were excreted in urine and feces. At least 20 different metabolites were observed in urine and feces. About 38-47% of the metabolites in urine were glucuronide and sulfate conjugates. In feces, about 17-20% of the metabolites were excreted as glucuronides and sulfates.

For EE the terminal disposition phase half-life has been reported to be approximately 24 hours. EE is not excreted unchanged. EE is excreted in the urine and feces as glucuronide and sulfate conjugates and undergoes enterohepatic circulation.

# Use in Specific Populations

Pediatric Use: Safety and efficacy of Yasmin has been established in women of reproductive age. Efficacy is expected to be the same for postpubertal adolescents under the age of 18 and for users 18 years and older. Use of this product before menarche is not indicated.

Geriatric Use: Yasmin has not been studied in postmenopausal women and is not indicated in this population.

Race: No clinically significant difference was observed between the pharmacokinetics of DRSP or EE in Japanese versus Caucasian women (age 25-35) when 3 mg DRSP/0.02 mg EE was administered daily for 21 days. Other ethnic groups have not been specifically studied.

Renal Impairment: Yasmin is contraindicated in patients with renal impairment.

The effect of renal impairment on the pharmacokinetics of DRSP (3 mg daily for 14 days) and the effect of DRSP on serum potassium concentrations were investigated in three separate groups of female subjects (n=28, age 30-65). All subjects were on a low potassium diet. During the study, 7 subjects continued the use of potassium-sparing drugs for the treatment of their underlying illness. On the 14th day (steady-state) of DRSP treatment, the serum DRSP concentrations in the group with CLcr of 50-79 mL/min were comparable to those in a control group with CLcr  $\geq$  80 mL/min. The serum DRSP concentrations were on average 37% higher in the group with CLcr of 30-49 mL/min compared to those in the control group. DRSP treatment did not show any clinically significant effect on serum potassium concentration. Although hyperkalemia was not observed in the study, in five of the seven subjects who continued use of potassium sparing drugs during the study, mean serum potassium concentrations increased by up to 0.33 mEq/L. [SeeContraindications (4) and Warnings and Precautions (5.2).]

Hepatic Impairment: Yasmin is contraindicated in patients with hepatic disease.

The mean exposure to DRSP in women with moderate liver impairment is approximately three times higher than the exposure in women with normal liver function. Yasmin has not been studied in women with severe hepatic impairment [see Contraindications (4) and Warnings and Precautions (5.4)].

#### **Drug Interactions**

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

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

Substances diminishing the efficacy of COCs: Drugs or herbal products that induce certain enzymes, including CYP3A4, may decrease the effectiveness of COCs or increase breakthrough bleeding.

Substances increasing the plasma concentrations of COCs: Co-administration of atorvastatin with certain COCs containing ethinyl estradiol increase AUC values for ethinyl estradiol by approximately 20%.

Ascorbic acid and acetaminophen may increase plasma ethinyl estradiol concentrations, possibly by inhibition of conjugation. CYP3A4 inhibitors such as itraconazole or ketoconazole may increase plasma hormone concentrations.

HIV/HCV protease inhibitors and non-nucleoside reverse transcriptase inhibitors: Significant changes (increase or decrease) in the plasma concentrations of estrogen and progestin have been noted in some cases of co-administration with HIV/HCV protease inhibitors or with non-nucleoside reverse transcriptase inhibitors.

Antibiotics: There have been reports of pregnancy while taking hormonal contraceptives and antibiotics, but clinical pharmacokinetic studies have not shown consistent effects of antibiotics on plasma concentrations of synthetic steroids.

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

COCs containing ethinyl estradiol may inhibit the metabolism of other compounds. COCs have been shown to significantly decrease plasma concentrations of lamotrigine, likely due to induction of lamotrigine glucuronidation. This may reduce seizure control; therefore, dosage adjustments of lamotrigine may be necessary. Consult the labeling of the concurrently-used drug to obtain further information about interactions with COCs or the potential for enzyme alterations.

Metabolism of DRSP and potential effects of DRSP on hepatic CYP enzymes have been investigated in in vitro and in vivo studies. In in vitro studies DRSP did not affect turnover of model substrates of CYP1A2 and CYP2D6, but had an inhibitory influence on the turnover of model substrates of CYP1A1, CYP2C9, CYP2C19 and CYP3A4, with CYP2C19 being the most sensitive enzyme. The potential effect of DRSP on CYP2C19 activity was investigated in a clinical pharmacokinetic study using omeprazole as a marker substrate. In the study with 24 postmenopausal women [including 12 women with homozygous (wild type) CYP2C19 genotype and 12 women with heterozygous CYP2C19 genotype] the daily oral administration of 3 mg DRSP for 14 days did not affect the oral clearance of omeprazole (40 mg, single oral dose) and the CYP2C19 product 5-hydroxy omeprazole. Furthermore, no significant effect of DRSP on the systemic clearance of the CYP3A4 product omeprazole sulfone was found. These results demonstrate that DRSP did not inhibit CYP2C19 and CYP3A4 in vivo.

Two additional clinical drug-drug interaction studies using simvastatin and midazolam as marker substrates for CYP3A4 were each performed in 24 healthy postmenopausal women. The results of these studies demonstrated that pharmacokinetics of the CYP3A4 substrates were not influenced by steady state DRSP concentrations achieved after administration of 3 mg DRSP/day.

Women on thyroid hormone replacement therapy may need increased doses of thyroid hormone because serum concentration of thyroid-binding globulin increases with use of COCs.

Interactions With Drugs That Have the Potential to Increase Serum Potassium Concentration: There is a potential for an increase in serum potassium concentration in women taking Yasmin with other drugs that may increase serum potassium concentration [see Warnings and Precautions (5.2)].

A drug-drug interaction study of DRSP 3 mg/estradiol (E2) 1 mg versus placebo was performed in 24 mildly hypertensive postmenopausal women taking enalapril maleate 10 mg twice daily. Potassium concentrations were obtained every other day for a total of 2 weeks in all subjects. Mean serum potassium concentrations in the DRSP/E2 treatment group relative to baseline were 0.22 mEq/L higher than those in the placebo group. Serum potassium concentrations also were measured at multiple time points over 24 hours at baseline and on Day 14. On Day 14, the ratios for serum potassium Cmax and AUC in the DRSP/E2 group to those in the placebo group were 0.955 (90% CI: 0.914, 0.999) and 1.010 (90% CI: 0.944, 1.08), respectively. No patient in either treatment group developed hyperkalemia (serum potassium concentrations 5.5 mEq/L).

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

In a 24 month oral carcinogenicity study in mice dosed with 10 mg/kg/day DRSP alone or 1 + 0.01, 3 + 0.03 and 10 + 0.1 mg/kg/day of DRSP and EE, 0.1 to 2 times the exposure (AUC of DRSP) of women taking a contraceptive dose, there was an increase in carcinomas of the harderian gland in the group that received the high dose of DRSP alone. In a similar study in rats given 10 mg/kg/day DRSP alone or 0.3 + 0.003, 3 + 0.03 and 10 + 0.1 mg/kg/day DRSP and EE, 0.8 to

10 times the exposure of women taking a contraceptive dose, there was an increased incidence of benign and total (benign and malignant) adrenal gland pheochromocytomas in the group receiving the high dose of DRSP. Mutagenesis studies for DRSP were conducted *in vivo* and *in vitro* and no evidence of mutagenic activity was observed.

#### 14 CLINICAL STUDIES

In the clinical efficacy studies of up to 2 years duration, 2,629 subjects completed 33,160 cycles of use without any other contraception. The mean age of the subjects was  $25.5 \pm 4.7$  years. The age range was 16 to 37 years. The racial demographic was: 83% Caucasian, 1% Hispanic, 1% Black, <1% Asian, <1% other, <1% missing data, 14% not inquired and <1% unspecified. Pregnancy rates in the clinical trials were less than one per 100 woman-years of use.

#### 15 REFERENCES

- 1. Dinger JC, Heinemann LAJ, et al: The safety of a drospirenone-containing oral contraceptive: final results from the European active surveillance study on oral contraceptives based on 142,475 women-years of observation. *Contraception* 2007;75:344-354.
- 2. Seeger JD, Loughlin J, Eng PM, et al: Risk of thromboembolism in women taking ethinyl estradiol/drospirenone and other oral contraceptives. *Obstetrics & Gynecology* 2007;110(3):587-593.
- 3. van Hylckama Vlieg A, Helmerhorst FM, Vandenbroucke JP, et al: The venous thrombotic risk of oral contraceptives, effects of oestrogen dose and progestogen type: results of the MEGA case-control study. *BMJ* 2009;339:b2921.
- 4. Lidegaard O, Lokkegaard E, Svendsen AL, et al: Hormonal contraception and risk of venous thromboembolism: national follow-up study. *BMJ* 2009; 339:b2890.

#### 16 HOW SUPPLIED/STORAGE AND HANDLING

#### 16.1 How Supplied

Yasmin (drospirenone/ethinyl estradiol) tablets are available in blister packs (54868-4590-0).

The film-coated tablets are rounded with biconvex faces, one side is embossed with a regular hexagon shape with DO or DP.

Each blister pack contains 28 film-coated tablets in the following order:

21 round, biconvex, yellow, film-coated tablets with embossed "DO" in a regular hexagon on one side each containing 3 mg drospirenone and 0.03 mg ethinyl estradiol

7 round, biconvex, white, film-coated tablets with embossed "DP" in a regular hexagon on one side

Store at 25°C (77°F); excursions permitted to 15-30°C (59-86°F) [see USP Controlled Room Temperature].

#### 17 PATIENT COUNSELING INFORMATION

See "FDA-approved patient labeling (Patient Information)."

- Counsel patients that 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.
- Counsel patients that the 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.
- Counsel patients that Yasmin does not protect against HIV infection (AIDS) and other sexually transmitted diseases.
- Counsel patients on Warnings and Precautions associated with COCs.
- Counsel patients that Yasmin contains DRSP. Drospirenone may increase potassium. Patients should be advised to inform their healthcare provider if they have kidney, liver or adrenal disease because the use of Yasmin in the presence of these conditions could cause serious heart and health problems. They should also inform their healthcare provider if they are currently on daily, long-term treatment (NSAIDs, potassium-sparing diuretics, potassium supplementation, ACE inhibitors, angiotensin-II receptor antagonists, heparin or aldosterone antagonists) for a chronic condition.
- Inform patients that Yasmin is not indicated during pregnancy. If pregnancy occurs during treatment with Yasmin, instruct the patient to stop further intake.
- Counsel patients to take one tablet daily by mouth at the same time every day. Instruct patients what to do in the event pills are missed. *See* "What to Do if You Miss Pills" section in FDA-Approved Patient Labeling.
- Counsel patients to use a back-up or alternative method of contraception when enzyme inducers are used with COCs.
- Counsel patients who are breastfeeding or who desire to breastfeed that COCs may reduce breast milk production. This is less likely to occur if breastfeeding is well established.
- Counsel any patient who starts COCs postpartum, and who has not yet had a period, to use an additional method of contraception until she has taken a yellow tablet for 7 consecutive days.
- Counsel patients that amenorrhea may occur. Rule out pregnancy in the event of amenorrhea in two or more consecutive cycles.

Manufactured for Bayer HealthCare Pharmaceuticals Inc.

Wayne, NJ 07470

Manufactured in Germany

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Bayer HealthCare Pharmaceuticals Inc.

#### Additional barcode labeling by:

Physicians Total Care, Inc. Tulsa, Oklahoma 74146

PACKAGE/LABEL PRINCIPAL DISPLAY PANEL

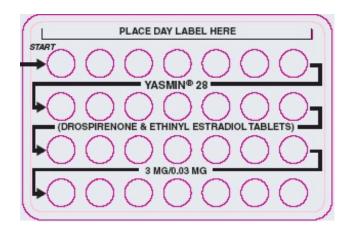
PLACE DAY LABEL HERE

START

YASMIN® 28

#### 3 MG/0.03 MG

#### (DROSPIRENONE & ETHINYL ESTRADIOL TABLETS)



#### Package/Label Principal Display Panel

NDC 54868-4590-0

1 Unit

**YASMIN** 

(drospirenone and ethinyl estradiol tablets) 3 mg/0.03 mg This product (like all oral contraceptives) is intended to prevent pregnancy. It does not protect against HIV infection (AIDS) and other sexually transmitted diseases.

Store at 25°C with excursions permitted between 15–30°C. [See USP Controlled Room Temperature].

To the Dispenser: This unit contains two pieces of information intended for the patient, which are combined in a single booklet. This informational piece is to be provided to the patient with each prescription.

Rx only



# **YASMIN**

drospirenone and ethinyl estradiol kit

# **Product Information**

Product Type HUMAN PRESCRIPTION DRUG Item Code (Source) NDC:54868-4590(NDC:50419-402)

Packaging				
# Item Code	Package Description	Marketing Start Date	Marketing End Date	
NDC:54868-4590-0	1 in 1 PACKAGE			
1	1 in 1 BLISTER PACK			

Quanti	Quantity of Parts			
Part #	Package Quantity	Total Product Quantity		
Part 1		21		
Part 2		7		

# Part 1 of 2

# **YASMIN**

drospirenone and ethinyl estradiol tablet, film coated

# **Product Information**

Route of Administration ORAL

Active Ingredient/Active Moiety			
Ingredient Name	Basis of Strength	Strength	
DRO SPIRENO NE (UNII: N295J34A25) (DROSPIRENO NE - UNII:N295J34A25)	DROSPIRENONE	3 mg	
ETHINYL ESTRADIOL (UNII: 423D2T571U) (ETHINYL ESTRADIOL - UNII:423D2T571U)	ETHINYL ESTRADIOL	0.03 mg	

Inactive Ingredients			
Ingredient Name	Strength		
STARCH, CORN (UNII: O8232NY3SJ)			
FERRIC OXIDE YELLOW (UNII: EX438O2MRT)			
HYPROMELLOSES (UNII: 3NXW29V3WO)			
LACTOSE MONO HYDRATE (UNII: EWQ57Q8I5X)			
POLYETHYLENE GLYCOL 6000 (UNII: 30 IQX730 WE)			
MAGNESIUM STEARATE (UNII: 70097M6I30)			
PO VIDO NE K25 (UNII: K0 KQ V10 C35)			
TALC (UNII: 7SEV7J4R1U)			
TITANIUM DIO XIDE (UNII: 15FIX9 V2JP)	TITANIUM DIO XIDE (UNII: 15FIX9 V2JP)		

Product Characteristics					
Color	yellow (YELLOW)	Score	no score		
Shape	ROUND (ROUND)	Size	6 mm		
Flavor		Imprint Code			
Contains					

	Marketing Information				
ı	Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date	
ı	NDA	NDA021098	01/15/2002		

# Part 2 of 2

# **INERT**

inert tablet, film coated

# **Product Information**

Route of Administration ORAL

Inactive Ingredients		
Ingredient Name	Strength	
STARCH, CORN (UNII: O8232NY3SJ)		
HYPROMELLOSES (UNII: 3NXW29 V3WO)		
LACTOSE MONOHYDRATE (UNII: EWQ57Q8I5X)		
MAGNESIUM STEARATE (UNII: 70097M6I30)		
PO VIDO NE K25 (UNII: K0 KQ V10 C35)		
TALC (UNII: 7SEV7J4R1U)		
TITANIUM DIO XIDE (UNII: 15FIX9 V2JP)		

Product Characteristics			
Color	white (WHITE)	Score	no score
Shape	ROUND (ROUND)	Size	6 mm
Flavor		Imprint Code	
Contains			

Marketing Information			
Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA	NDA021098	01/15/2002	

Marketing Information			
Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA	NDA021098	01/15/2002	

# Labeler - Physicians Total Care, Inc. (194123980)

Establishment				
Name	Address	ID/FEI	Business Operations	
Physicians Total Care, Inc.		194123980	relabel	

Revised: 3/2012 Physicians Total Care, Inc.