

TriNessa® Tablets (norgestimate and ethinyl estradiol)

Patients should be counseled that this product does not protect against HIV infection (AIDS) and other sexually transmitted diseases.



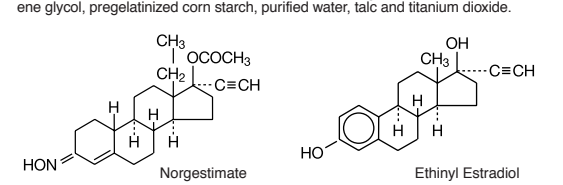
DESCRIPTION

The following product is a combination oral contraceptive containing the progestational compound norgestimate and the estrogenic compound ethinyl estradiol.

TriNessa® Tablets Each white tablet contains 0.180 mg of the progestational compound, norgestimate (18,19-Dihydro-17-pregna-4-en-20-yne-3-one, 17-(acetoxyl)-13-ethyn-, oxime, (17 α)-(+) and 0.035 mg of the estrogenic compound, ethinyl estradiol (19-nor-17 α -pregna, 1,3,5(10)-triene-20-yne-3,17-dione). Inactive ingredients include carmellose, croscarmellose, hydroxypropyl methylcellulose, polyethylene glycol, purified water and titanium dioxide.

Each light blue tablet contains 0.215 mg of the progestational compound norgestimate (18,19-Dihydro-17-pregna-4-en-20-yne-3-one, 17-(acetoxyl)-13-ethyn-, oxime, (17 α)-(+) and 0.035 mg of the estrogenic compound, ethinyl estradiol (19-nor-17 α -pregna, 1,3,5(10)-triene-20-yne-3,17-dione). Inactive ingredients include FD & C Blue No. 2 Aluminum Lake, carmellose, croscarmellose, croscarmellose, lactose, magnesium stearate, microcrystalline cellulose, polyethylene glycol, purified water and titanium dioxide.

Each dark green tablet contains only inert ingredients, as follows: FD & C Blue No. 2 Aluminum Lake, ferrous oxide, hydroxypropyl, lactose, magnesium stearate, polyethylene glycol, pregelatinized corn starch, purified water, talc and titanium dioxide.



CLINICAL PHARMACOLOGY

Combination oral contraceptives act by suppression of gonadotropins. Although the primary mechanism of this action is inhibition of ovulation, other alterations include changes in the cervical mucus (which increase the difficulty of sperm entry into the uterus) and the endometrium (which reduce the likelihood of implantation).

Receptor binding studies, as well as studies in animals and humans, have shown that norgestimate and 17-deacetyl norgestimate, the major serum metabolite, combine high progestational activity with minimal androgenic activity. Norgestimate, in combination with ethinyl estradiol, does not alter the estradiol level in women in sex hormone binding globulin (SHBG), resulting in lower serum testosterone.

Acne is a skin condition with a multifactorial etiology, including androgen stimulation of sebaceous production. While the combination of ethinyl estradiol and norgestimate increases sex hormone binding globulin (SHBG) and decreases free testosterone, the relationship between these changes and a decrease in the severity of facial acne in otherwise healthy women with this skin condition has not been established.

PHARMACOKINETICS

Norgestimate (NGM) and ethinyl estradiol (EE) are rapidly absorbed following oral administration. Norgestimate is rapidly and completely metabolized by first pass (intestinal and/or hepatic) mechanisms to noregestromin (NGNM) and norgestrel (NG), which are the major active metabolites. The dose proportional following NGM (180 mg) and EE (50 mg) are approximately 2-fold for NGNM and EE compared with single dose administration of TriNessa®. Accumulation following multiple dosing of the 250 µg NGM / 35 µg dose is approximately 2-fold for NGNM and EE compared with single dose administration of TriNessa®.

Peak serum concentrations of NGM and EE are generally reached by 2 hours after administration of TriNessa®. Accumulation following multiple dosing of the 250 µg NGM / 35 µg dose is approximately 2-fold for NGM and EE compared with single dose administration of TriNessa®. Accumulation following multiple dosing of the 250 µg NGM / 35 µg dose is approximately 2-fold for NGM and EE compared with single dose administration of TriNessa®.

Table 1. Summary of noregestromin, norgestrel and ethinyl estradiol pharmacokinetic parameters.

Table with 10 columns: Analyte, Cycle, Day, Cmax, Tmax, AUC0-24h, t1/2, and t1/2(h). Rows include NGMN, NG, EE, and EE: Cmax, Tmax, AUC0-24h, t1/2, and t1/2(h).

Cmax = peak serum concentration, tmax = time to reach peak serum concentration, AUC0-24h = area under the curve from 0 to 24 hours, t1/2 = elimination half-life, NC = not calculated.

The effect of food on the pharmacokinetics of TriNessa has not been studied.

Distribution Noregestromin and norgestrel are highly bound (>97%) to serum proteins. Noregestromin is bound to albumin and not to SHBG, while norgestrel is bound primarily to SHBG. Ethinyl estradiol is extensively bound (>97%) to serum albumin and induces an increase in the serum concentrations of SHBG.

Metabolism Norgestimate is extensively metabolized by first-pass mechanisms in the gastrointestinal tract and/or liver. Norgestimate's primary active metabolite is noregestromin. Subsequent hepatic metabolism of noregestromin occurs and metabolites include norgestrel, which is also active and various hydroxylated and conjugated metabolites.

Excretion The metabolites of noregestromin and ethinyl estradiol are eliminated by renal and fecal pathways. Following administration of TriNessa, 77% of radioactivity in urine and feces, respectively. Unchanged norgestimate was not detected in the urine. In addition to 17-deacetyl norgestimate, a number of metabolites of norgestimate have been identified.

INDICATIONS AND USAGE TriNessa is indicated for the prevention of pregnancy in women who elect to use oral contraceptives as a method of contraception.

TriNessa is indicated for the treatment of moderate acne vulgaris in females to least 15 years of age, who have no known contraindications to oral contraceptive therapy, and who have not received oral contraceptives for the treatment of acne only if the patient desires an oral contraceptive for birth control.

Oral contraceptives are highly effective for pregnancy prevention. Table II lists the typical accidental pregnancy rates for users of combination oral contraceptives and other methods of contraception. The efficacy of these contraceptive methods, except sterilization, the IUD, and the Norplant system depends upon the reliability with which they are used. Correct and consistent use of methods can result in lower failure rates.

Table II. Percentage of Women Experiencing an Unintended Pregnancy During the First Year of Typical Use and the First Year of Perfect Use of Contraception and the Percentage Continuing Use at the End of the First Year. United States.

Table with 5 columns: Method, Typical Use(1), Perfect Use(2), % of Women Continuing Use at One Year(3), % of Women Experiencing an Unintended Pregnancy During the First Year of Typical Use(4).

Hatcher et al. 1998, Ref # 1. Emergency Contraceptive Pills: Treatment initiated within 72 hours after unprotected intercourse reduces the risk of pregnancy by at least 75%.

Source: Trussell J. Contraceptive efficacy. In Hatcher RA, Trussell J, Stewart F, Cates W, Stewart K, Kowal D, Guest F, Contraceptive Technology: Seventeenth Revised Edition, New York: W.B. Saunders Company, 1998.

*Among typical couples who initiate use of a method (not necessarily for the first time), the percentage who experience an accidental pregnancy during the first year if they do not stop use for any other reason.

**Among couples who initiate use of a method (not necessarily for the first time) and who stop use perfectly (both consistently and correctly), the percentage who experience an accidental pregnancy during the first year if they do not stop use for any other reason.

**Among couples attempting to avoid pregnancy, the percentage who continue to use a method for one year.

†The percentages bearing pregnant in columns (2) and (3) are based on data from populations where contraception is not used and from women who cease using contraception in the first year of use. This estimate is based on data from two randomized trials conducted over one year. This estimate was lowered slightly (to 85%) to represent the percent who would be pregnant within one year among women relying on reversible methods of contraception.

‡Fovams, creams, gels, vaginal suppositories, and vaginal film.

§Oral contraceptives (including the pill) are highly effective. The percentage of women who continue to use oral contraceptives for birth control is 81%.

¶Deaths are birth-related. ††Deaths are method-related.

‡‡Deaths are method-related. Adapted from H.W. Ory, ref. #35.

§§Numerous epidemiologic studies have been performed on the incidence of breast, endometrial, ovarian, and cervical cancer in women using oral contraceptives. The risk of having breast cancer diagnosed may be slightly elevated among women who have used oral contraceptives for long periods of time.

¶¶Recent users of combination oral contraceptives (COCs). However, this excess risk appears to decrease over time after COC discontinuation and by 10 years after discontinuation the increase in risk disappears. Some studies report an increased risk with duration of use while other studies report no consistent relationship. The increased risk for women who use of type or type of study. Most studies show a small increase in risk for women who first use COCs before age 20. Most studies show a similar pattern of risk with COC use regardless of a woman's reproductive history or her family breast cancer history.

Breast cancers diagnosed in current or previous oral contraceptive users tend to be less clinically advanced than nonusers. Women who currently have or have had breast cancer should not use oral contraceptives because breast cancer is usually a hormonally-sensitive tumor.

Some studies suggest that oral contraceptive use has been associated with an increase in the risk of cervical intraepithelial neoplasia in some populations of women. However, there is no evidence from the epidemiologic studies that the increase in risk can be attributed to differences in sexual behavior and other factors. In spite of many studies of the relationship between oral contraceptive use and breast and cervical cancers, a cause-and-effect relationship has not been established.

TriNessa® Tablets (norgestimate and ethinyl estradiol)

Patients should be counseled that this product does not protect against HIV infection (AIDS) and other sexually transmitted diseases.

Table III: Acne Vulgaris Indicators, Combined Results: Two Multicenter, Placebo-Controlled Trials, at Least Two Means: Six Months (LOCF*) and at Baseline, Intent-to-Treat Population.

Table with 6 columns: # of Lesions, TriNessa (N=221), Placebo (N=234), Difference in Counts between TriNessa and Placebo at 6 Months. Rows include INFLAMMATORY LESIONS and NON-INFLAMMATORY LESIONS.

*LOCF: Last Observation Carried Forward. †Data from FM, Layge and B, Beral, ref. #12.

CONTRAINDICATIONS

Oral contraceptives should not be used in women who currently have the following conditions:

- Thrombophlebitis or thromboembolic disorders
•past history of deep vein thrombophlebitis or thromboembolic disorders
•acute or chronic hepatitis or liver disease (current or past history)
•Valvular heart disease with complications
•Severe hypertension
•Diabetes with vascular involvement
•Headaches with focal neurological symptoms
•Major surgery with prolonged immobilization
•Known or suspected carcinoma of the breast or personal history of breast cancer
•Carcinoma of the endometrium or other known or suspected estrogen-dependent neoplasia
•Undiagnosed abnormal genital bleeding
•Cholestatic jaundice of pregnancy or jaundice with prior pill use
•Acute or chronic hepatocellular disease with abnormal liver function
•Hepatic adenomas or carcinomas
•Known or suspected pregnancy
•Hypersensitivity to any component of this product

WARNINGS Cigarette smoking increases the risk of serious cardiovascular side effects with oral contraceptive use. This risk increases with age and with heavy smoking (15 or more cigarettes per day) and is more marked in women over 35 years of age. Women who use oral contraceptives should be strongly advised not to smoke.

The use of oral contraceptives is associated with increased risks of several serious conditions including myocardial infarction, thromboembolism, stroke, hepatic neoplasia, and gallbladder disease. These risks increase with the duration of use. The overall mortality is very small in healthy women without underlying risk factors. The risk of morbidity and mortality increases significantly in the presence of other underlying risk factors such as hypertension, hyperlipidemias, obesity and diabetes.

Progestagens describing oral contraceptives should be familiar with the following information relating to these risks.

The information contained in this package insert is principally based on studies carried out in patients who used oral contraceptives with higher formulations of estrogen and progestagens than those in common use today. The effect of long-term use of the oral contraceptives with lower formulations of both estrogens and progestagens remains to be determined.

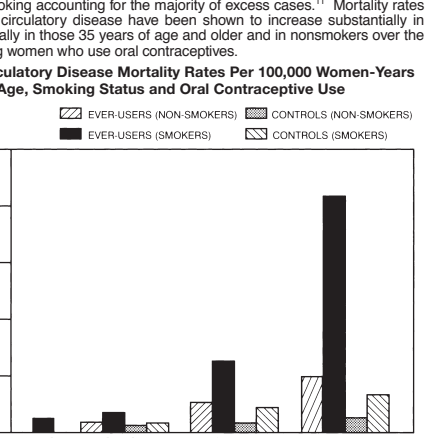
Throughout this labeling, epidemiological studies reported are of two types: retrospective or case control studies; and prospective or cohort studies. Case control studies provide a measure of the relative risk of a disease, namely, a ratio of the incidence of disease among oral contraceptive users to that among nonusers. The relative risk does not provide information on the actual clinical occurrence of a disease. Cohort studies provide a measure of attributable risk, which is the difference in the incidence of disease between oral contraceptive users and nonusers. The attributable risk does provide information about the actual occurrence of a disease in the population (adapted from ref. #2, and #3 with the author's permission). For further information, the reader is referred to a text on epidemiological methods.

1. Thromboembolic Disorders and Other Vascular Problems

a. Myocardial Infarction An increased risk of myocardial infarction has been attributed to oral contraceptive use. This risk is primarily in smokers and in older women (with or without coronary artery disease) with a history of hypertension, hypercholesterolemia, morbid obesity, and diabetes. The relative risk of heart attack for current oral contraceptive users has been estimated to be two to six.

b. Stroke Similar to combination oral contraceptives, oral contraceptives have been reported substantially to the incidence of myocardial infarctions in women in their mid-thirties or older with smoking accounting for the majority of excess cases. Mortality rates associated with circulatory disease have been shown to increase substantially in women over 40 years of age, with or without a history of hypertension and in nonusers over the age of 40 among women who use oral contraceptives.

Figure 1. Circulatory Disease Mortality Rates Per 100,000 Women-Years By Age, Smoking Status and Oral Contraceptive Use.



Oral contraceptives may compound the effects of well-known risk factors, such as hypertension, diabetes, hyperlipidemia, and obesity. In particular, some progestagens are known to decrease HDL cholesterol and cause glucose intolerance, while estrogens may create a state of hyperinsulinism. Oral contraceptives have been reported to increase the risk of thromboembolism and other vascular diseases. Similar effects on risk factors have been associated with an increased risk of heart disease. Oral contraceptives must be used with caution in women with cardiovascular disease risk factors.

Norgestimate has minimal androgenic activity (see CLINICAL PHARMACOLOGY), and there is some evidence that the risk of myocardial infarction associated with oral contraceptives is lower when the progestagen has minimal androgenic activity than when the activity is greater.

b. Thromboembolism An increased risk of thromboembolic and thrombotic disease associated with the use of oral contraceptives is well established. Case control studies have found the relative risk of users compared to nonusers to be 3 for the first episode of superficial vein thrombosis, 4 to 11 for deep vein thrombosis or pulmonary embolism, and to 6 for women with predisposing conditions for venous thromboembolic disease.

Cohort studies have shown the relative risk to be somewhat lower, about 3 for new cases and about 4.5 for new cases requiring hospitalization. The risk of thromboembolism and other vascular diseases is not related to length of use and disappears after pill use is stopped.

a two- to four-fold increase in relative risk of post-operative thromboembolic complications has been reported with the use of oral contraceptives. The relative risk of venous thrombosis in women who have predisposing conditions is twice that of women without such medical conditions. If feasible, oral contraceptives should be discontinued at least four weeks prior to and for two weeks after elective surgery of a type normally associated with a higher risk of thromboembolism and for longer periods of immobilization. Since the immediate postpartum period is also associated with an increased risk of thromboembolism, oral contraceptives should be started no earlier than two weeks after delivery in women who elect not to breast feed.

2. Cerebrovascular Diseases

Oral contraceptives 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), hypertensive women who also smoke. Hypertension was more likely to be reported in users of oral contraceptives for both types of strokes, and smoking increased the risk of stroke. 25-34

In a large study, the relative risk of thrombotic strokes has been shown to range from 2 for nonusers versus to 14 for users with severe hypertension. 35-44 The relative risk of hemorrhagic stroke is reported to be 1.2 for nonusers versus 1.4 for users of oral contraceptives, 2.6 for smokers who did not use oral contraceptives, 7.6 for smokers who used oral contraceptives, 1.8 for nonusers versus and 25.7 for users with severe hypertension. The attributable risk is also greater in older women. 45+

3. Estimates of Mortality Risk from Oral Contraceptives and Nonusers. A positive association has been observed between the amount of estrogen and progestogen in oral contraceptives and the risk of vascular disease. 35-44 A decline in serum high density lipoproteins (HDL) has been reported with many progestational agents. A decline in HDL has also been reported with several oral contraceptives. An increased incidence of ischemic heart disease. Because estrogens increase HDL cholesterol, the net effect of an oral contraceptive depends on a balance achieved between doses of estrogen and progestogen and the activity of the progestogen used. The balance between these two is important because of both hormones should be considered in the choice of an oral contraceptive.

Minimizing exposure to estrogen and progestogen is in keeping with good principles of therapeutics. For any particular estrogen/progestogen combination, the dosage regimen prescribed should be one which contains the least amount of estrogen and progestogen that is compatible with a low failure rate and the needs of the individual patient. New acceptors of oral contraceptive agents should be started on preparations containing the lowest estrogen content which is judged appropriate for the individual patient.

e. Persistence of Risk of Vascular Disease There are two studies which show persistence of risk of vascular disease for ever-users of oral contraceptives. In a study in the United States, the risk of developing myocardial infarction or stroke among oral contraceptive users was found to be 1.3 for women 40-49 years who had used oral contraceptives for five or more years, but this increased risk was not demonstrated in other age groups. 35-44 In another study, the risk of developing cerebrovascular disease persisted for at least 6 years after discontinuation of oral contraceptives, although excess risk was very small. 45-49 However, both studies were of high oral contraceptive formulations containing 50 micrograms or higher of estrogens.

4. Estimates of Mortality Risk from Oral Contraceptives and Nonusers. One study gathered data from a variety of sources which have estimated the mortality rate associated with different methods of contraception at different ages (Table IV). These estimates include the combined risk of death associated with contraceptive use and the risk attributable to nonuse of contraception. The study concluded that with the exception of oral contraceptive users 35 and older who smoke, and 40 and older who do not smoke, mortality associated with all methods of birth control is low and below that associated with childbirth. The observation of an increase in the risk of mortality with age for oral contraceptive users is based on data gathered in the 1970's. 35-44

Current clinical recommendation involves the use of lower estrogen dose formulations and a careful consideration of risk factors. In 1989, the Fertility and Maternal Health Drugs Advisory Committee was asked to review the use of oral contraceptives in women 40 years of age and over. The Committee concluded that although cardiovascular disease risks may be increased with oral contraceptive use after age 40 in healthy non-smoking women (even with the newer low-dose formulations), there are also potential greater health risks associated with pregnancy in older women and with the alternative surgical and medical procedures which may be necessary if such women do not have access to effective and acceptable means of contraception. The Committee recommended that the benefits of low-dose oral contraceptive use by healthy non-smoking women over 40 may outweigh the possible risks.

Of course, older women, as all women, who take oral contraceptives, should take an oral contraceptive containing the lowest estrogen dose and progestogen that is compatible with a low failure rate and individual patient needs.

TABLE IV. ANNUAL NUMBER OF BIRTH-RELATED OR METHOD-RELATED DEATHS ASSOCIATED WITH CONTROL OF FERTILITY PER 100,000 NON-STERILE WOMEN, BY FERTILITY CONTROL METHOD ACCORDING TO AGE.

Table with 6 columns: Method of Control, 15-19, 20-24, 25-29, 30-34, 35-39, 40-44. Rows include No fertility control methods, Oral contraceptives, Oral contraceptives, smoker*, IUD**, Condom***, Diaphragm†††, Female Sterilization††††.

*Deaths are birth-related. **Deaths are method-related. Adapted from H.W. Ory, ref. #35.

§§Numerous epidemiologic studies have been performed on the incidence of breast, endometrial, ovarian, and cervical cancer in women using oral contraceptives. The risk of having breast cancer diagnosed may be slightly elevated among women who have used oral contraceptives for long periods of time.

¶¶Recent users of combination oral contraceptives (COCs). However, this excess risk appears to decrease over time after COC discontinuation and by 10 years after discontinuation the increase in risk disappears. Some studies report an increased risk with duration of use while other studies report no consistent relationship. The increased risk for women who use of type or type of study. Most studies show a small increase in risk for women who first use COCs before age 20. Most studies show a similar pattern of risk with COC use regardless of a woman's reproductive history or her family breast cancer history.

Breast cancers diagnosed in current or previous oral contraceptive users tend to be less clinically advanced than nonusers. Women who currently have or have had breast cancer should not use oral contraceptives because breast cancer is usually a hormonally-sensitive tumor.

Some studies suggest that oral contraceptive use has been associated with an increase in the risk of cervical intraepithelial neoplasia in some populations of women. However, there is no evidence from the epidemiologic studies that the increase in risk can be attributed to differences in sexual behavior and other factors. In spite of many studies of the relationship between oral contraceptive use and breast and cervical cancers, a cause-and-effect relationship has not been established.

4. Hepatic Neoplasia

Benign hepatic adenomas are associated with oral contraceptive use, although the incidence of benign tumors is rare in the United States. Indirect calculations have estimated the attributable risk to be in the range of 3.3 cases/100,000 for users, a risk that increases after four or more years of use especially with oral contraceptives of higher dose. Rupture of benign, hepatic adenomas may cause death through intra-abdominal hemorrhage.

Studies from Britain have shown an increased risk of developing hepatocellular carcinoma in long-term (>3 years) oral contraceptive users. However, these cancers are extremely rare in the U.S. and the attributable risk (the excess incidence) of liver cancers in oral contraceptive users approaches less than one per million users.

5. Ocular Effects

There have been clinical case reports of retinal thrombosis associated with the use of oral contraceptives. Oral contraceptives should be discontinued if there is unexplained partial or complete loss of vision; onset of proptosis or diplopia; papilledema; or retinal vascular lesions. Appropriate diagnostic and therapeutic measures should be undertaken immediately.

6. Oral Contraceptive 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. 35-44 The majority of these studies do not indicate a teratogenic effect, particularly in so far as cardiac anomalies and limb reduction defects are concerned. 35-44 When taken inadvertently during early pregnancy.

The administration of oral contraceptives to induce withdrawal bleeding should not be used as a method for pregnancy. Oral contraceptives should not be used during pregnancy or breast-feeding or treated or habitual abortion.

It is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out. If the patient has not adhered to the prescribed daily regimen, the possibility of pregnancy should be considered at the time of the first missed period. Oral contraceptive use should be discontinued if pregnancy is confirmed.

7. Gallbladder Disease

Earlier studies have reported an increased lifetime relative risk of gallbladder surgery in users of oral contraceptives and estrogens. 35-44 More recent studies, however, have shown that the relative risk of developing gallbladder disease among oral contraceptive users may be minimal. 45-49 The recent findings of minimal risk may be related to the oral contraceptive formulations containing lower hormonal doses of estrogens and progestagens.

8. Carbohydrate and Lipid Metabolic Effects

Oral contraceptives have been shown to cause a decrease in glucose tolerance in a significant percentage of users. 35-44 This effect has been shown to be directly related to the progestogen component and is more pronounced in women with glucose intolerance, this effect varying with different progestational agents. 35-44 However, in the non-diabetic woman, oral contraceptives appear to have no effect on fasting blood glucose levels. Because of these demonstrated effects, prediabetic and diabetic women in particular should be carefully monitored while taking oral contraceptives.

A small proportion of women will have persistent hypertriglyceridemia while on the pill. As discussed earlier (see WARNINGS 1a and 1d), changes in serum triglycerides and lipoprotein levels have been reported in oral contraceptive users.

Changes in serum lipoproteins, including changes in lipoprotein ratios, have been reported in women taking oral contraceptives. In a study of 12 women, there were no clinically significant changes in fasting blood glucose levels. Minimal statistically significant changes were noted in glucose levels over 24 cycles of use. Glucose tolerance tests showed no clinically significant changes from baseline to cycles 3, 12, and 24.

9. Elevated Blood Pressure

Women with significant hypertension should not be started on hormonal contraception. 35-44 An increase in blood pressure has been reported in women taking oral contraceptives 35-44 and this increase is more likely in older oral contraceptive users 35-44 and longer duration of use. In some cases, the increase in blood pressure has been reported to be reversible. In undiagnosed and subsequent randomized trials have shown that the incidence of hypertension increased with increasing progestational activity.

Women with a history of hypertension or hypertension-related diseases, or renal disease should be encouraged to use another method of contraception. If women elect to use oral contraceptives, they should be monitored closely and if significant elevation of blood pressure occurs, oral contraceptives should be discontinued. For most women, elevated blood pressure will return to normal after stopping oral contraceptives, and there is no difference in the occurrence of hypertension between former and never users. 35-44

10. Headache

The onset or exacerbation of migraine or development of headache with a new pattern which is severe or persistent requires discontinuation of oral contraceptives and evaluation of the cause.

11. Bleeding Irregularities

Breakthrough bleeding and spotting are sometimes encountered in patients on oral contraceptives, especially during the first three months of use. Non-hormonal causes should be considered and appropriate diagnostic measures taken to rule out malignancy or pregnancy in the event of breakthrough bleeding, as in the case of any abnormal vaginal bleeding. If pathology has been excluded, time or change of another formulation may solve the problem. In the event of amenorrhea, pregnancy should be ruled out.

Some women may encounter post-pill amenorrhea or oligomenorrhea, especially when such a condition was preexistent.

12. Ectopic Pregnancy

Ectopic as well as intrauterine pregnancy may occur in contraceptive failures.

PRECAUTIONS

1. General

Patients should be counseled that this product does not protect against HIV infection (AIDS) and other sexually transmitted diseases.

2. Physical Examination and Follow Up

It is good medical practice for all women to have annual history and physical examinations, including women using oral contraceptives. The physical examination, however, may be deferred until after initiation of oral contraceptives if requested by the woman and judged appropriate by the clinician. The physical examination should include special reference to blood pressure, breasts, abdomen and pelvic organs, including cervical cytology, and relevant laboratory tests. In case of undiagnosed, persistent or recurrent abnormal vaginal bleeding, appropriate measures should be considered to rule out malignancy. Women with a strong family history of breast cancer or who have breast nodules should be monitored with particular care.

3. Lipid Disorders

Women who are being treated for hyperlipidemias should be followed carefully if they elect to use oral contraceptives. Some progestagens may elevate LDL levels and may render the control of hyperlipidemia more difficult.

4. Liver Function

If jaundice develops in any woman receiving such drugs, the medication should be discontinued. Steroid hormones may be poorly metabolized in patients with impaired liver function.

5. Fluid Retention

Oral contraceptives may cause some degree of fluid retention. They should be prescribed with caution, and only with careful monitoring, in patients with conditions which might be aggravated by fluid retention.

6. Emotional Disorders

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

7. Contact Lenses

Contact lens wearers who develop visual changes or changes in lens tolerance should be assessed by an ophthalmologist.

8. Drug Interactions

Changes in contraceptive effectiveness associated with co-administration of other drugs: 1. General

Patients should be counseled that this product does not protect against HIV infection (AIDS) and other sexually transmitted diseases.

It is good medical practice for all women to have annual history and physical examinations, including women using oral contraceptives. The physical examination, however, may be deferred until after initiation of oral contraceptives if requested by the woman and judged appropriate by the clinician. The physical examination should include special reference to blood pressure, breasts, abdomen and pelvic organs, including cervical cytology, and relevant laboratory tests. In case of undiagnosed, persistent or recurrent abnormal vaginal bleeding, appropriate measures should be considered to rule out malignancy. Women with a strong family history of breast cancer or who have breast nodules should be monitored with particular care.

Changes in contraceptive effectiveness associated with co-administration of other drugs: 1. General

Patients should be counseled that this product does not protect against HIV infection (AIDS) and other sexually transmitted diseases.

It is good medical practice for all women to have annual history and physical examinations, including women using oral contraceptives. The physical examination, however, may be deferred until after initiation of oral contraceptives if requested by the woman and judged appropriate by the clinician. The physical examination should include special reference to blood pressure, breasts, abdomen and pelvic organs, including cervical cytology, and relevant laboratory tests. In case of undiagnosed, persistent or recurrent abnormal vaginal bleeding, appropriate measures should be considered to rule out malignancy. Women with a strong family history of breast cancer or who have breast nodules should be monitored with particular care.

Changes in contraceptive effectiveness associated with co-administration of other drugs: 1. General

Patients should be counseled that this product does not protect against HIV infection (AIDS) and other sexually transmitted diseases.

It is good medical practice for all women to have annual history and physical examinations, including women using oral contraceptives. The physical examination, however, may be deferred until after initiation of oral contraceptives if requested by the woman and judged appropriate by the clinician. The physical examination should include special reference to blood pressure, breasts, abdomen and pelvic organs, including cervical cytology, and relevant laboratory tests. In case of undiagnosed, persistent or recurrent abnormal vaginal bleeding, appropriate measures should be considered to rule out malignancy. Women with a strong family history of breast cancer or who have breast nodules should be monitored with particular care.

Changes in contraceptive effectiveness associated with co-administration of other drugs: 1. General

Patients should be counseled that this product does not protect against HIV infection (AIDS) and other sexually transmitted diseases.

It is good medical practice for all women to have annual history and physical examinations, including women using oral contraceptives. The physical examination, however, may be deferred until after initiation of oral contraceptives if requested by the woman and judged appropriate by the clinician. The physical examination should include special reference to blood pressure, breasts, abdomen and pelvic organs, including cervical cytology, and relevant laboratory tests. In case of undiagnosed, persistent or recurrent abnormal vaginal bleeding, appropriate measures should be considered to rule out malignancy. Women with a strong family history of breast cancer or who have breast nodules should be monitored with particular care.

Changes in contraceptive effectiveness associated with co-administration of other drugs: 1. General

Patients should be counseled that this product does not protect against HIV infection (AIDS) and other sexually transmitted diseases.

It is good medical practice for all women to have annual history and physical examinations, including women using oral contraceptives. The physical examination, however, may be deferred until after initiation

BRIEF SUMMARY PATIENT PACKAGE INSERT

This product (like all oral contraceptives) does not protect against HIV infection (AIDS) and other sexually transmitted diseases.

Oral contraceptives, also known as "birth control pills" or "the pill," are taken to prevent pregnancy. When taken correctly, oral contraceptives have a failure rate of approximately 1% per year (1 pregnancy per 100 women per year of use) when used without missing any pills. The typical failure rate is approximately 5% per year (5 pregnancies per 100 women per year of use) when women who miss pills are included. For most women oral contraceptives are also free of seriously or unpleasant side effects. However, forgetting to take pills considerably increases the chances of pregnancy.

"Trinessa" may also be taken to treat moderate acne in females at least 15 years of age, who have started having menstrual periods, are able to take the pill and want to use the pill for birth control.

For the majority of women, oral contraceptives can be taken safely. But there are some women who are at high risk of developing certain serious diseases that can be fatal or may cause temporary or permanent disability. The risks associated with taking oral contraceptives increase significantly if you:

- smoke
 - have high blood pressure, diabetes, high cholesterol
 - have or have had clotting disorders, heart attack, stroke, angina pectoris, cancer of the breast or sex organs, jaundice or malignant or benign liver tumors.
- Although cardiovascular disease risks may be increased with oral contraceptive use after age 40 in healthy, non-smoking women (even with the newer low-dose formulations), there are also greater potential health risks associated with pregnancy in older women.

You should not take the pill if you suspect you are pregnant or have unexplained vaginal bleeding.

Cigarette smoking increases the risk of serious cardiovascular side effects from oral contraceptive use. This risk increases with age and with heavy smoking (15 or more cigarettes per day) and is quite marked in women over 35 years of age. Women who use oral contraceptives are strongly advised not to smoke.

Most side effects of the pill are not serious. The most common such effects are nausea, vomiting, bleeding between menstrual periods, weight gain, breast tenderness, and difficulty wearing contact lenses. These side effects, especially nausea and vomiting, may subside within the first three months of use.

The serious side effects of the pill occur very infrequently, especially if you are in good health and are young. However, you should know that the following medical conditions have been associated with or made worse by the pill:

1. Blood clots in the legs (thrombophlebitis), lungs (pulmonary embolism), stoppage or rupture of a blood vessel in the brain (stroke), blockage of blood vessels in the heart (heart attack or angina pectoris) or other organs of the body. As mentioned above, smoking increases the risk of heart attacks and strokes and subsequent serious medical consequences.
2. In rare cases, oral contraceptives can cause benign but dangerous liver tumors. These benign liver tumors can rupture and cause fatal internal bleeding. In addition, some studies report an increased risk of developing liver cancer. However, liver cancers are rare.
3. High blood pressure, although blood pressure usually returns to normal when the pill is stopped.

The symptoms associated with these serious side effects are discussed in the detailed leaflet given to you with your supply of pills. Notify your healthcare professional if you notice any unusual physical symptoms while taking the pill. In addition, drugs such as rifampin, as well as some anticonvulsants and some antibiotics may decrease oral contraceptive effectiveness.

Various studies give conflicting reports on the relationship between breast cancer and oral contraceptive use. Oral contraceptive use may slightly increase your chance of having breast cancer diagnosed, particularly after using hormonal contraceptives at a younger age. After you stop using hormonal contraceptives, the chances of having breast cancer diagnosed begin to go back down. You should have regular breast examinations by a healthcare professional and examine your own breasts monthly. Tell your healthcare professional if you have a family history of breast cancer or if you have had breast nodules or an abnormal mammogram. Women who currently have or have had breast cancer should not use oral contraceptives because breast cancer is usually a hormone-sensitive tumor.

Some studies have found an increase in the incidence of cancer of the cervix in women who use oral contraceptives. However, this finding may be related to factors other than the use of oral contraceptives. There is insufficient evidence to rule out the possibility that the pill may cause such cancers.

Taking the combination pill provides some important non-contraceptive benefits. These include less painful menstruation, less menstrual blood loss and anemia, fewer pelvic infections, and fewer cancers of the ovary and the lining of the uterus. Be sure to discuss any medical condition you may have with your healthcare professional. Your healthcare professional will take a medical and family history before prescribing oral contraceptives and will examine you. The physical examination may be delayed to another time if you request it and the healthcare professional believes that it is a good medical practice to postpone it. You should be reexamined at least once a year while taking oral contraceptives. Your pharmacist should have given you the detailed patient information labeling which gives you further information which you should read and discuss with your healthcare professional.

HOW TO TAKE THE PILL

IMPORTANT POINTS TO REMEMBER

BEFORE YOU START TAKING YOUR PILLS:

1. BE SURE TO READ THESE DIRECTIONS: Before you start taking your pills. Anyone you are not sure what to do.
2. THE RIGHT WAY TO TAKE THE PILL IS TO TAKE ONE PILL EVERY DAY AT THE SAME TIME. If you miss pills you could get pregnant. This includes starting the pack late. The more pills you miss, the more likely you are to get pregnant.
3. MANY WOMEN HAVE SPOTTING OR LIGHT BLEEDING, OR MAY FEEL SICK TO THEIR STOMACH DURING THE FIRST 1-3 PACKS OF PILLS. If you feel sick to your stomach or have spotting or light bleeding, do not stop taking the pill. The problem will usually go away. If it doesn't go away, check with your healthcare professional.
4. MISSING PILLS CAN ALSO CAUSE SPOTTING OR LIGHT BLEEDING, even when you make up missed pills. On the days you take 2 pills to make up for missed pills, you could also feel a little sick to your stomach.
5. IF YOU HAVE VOMITING OR DIARRHEA, OR IF YOU TAKE SOME MEDICINES, including some antibiotics, your pills may not work as well. Use a back-up method (such as condoms or spermicide) until you check with your healthcare professional.
6. IF YOU HAVE TROUBLE REMEMBERING TO TAKE THE PILL, talk to your healthcare professional about how to make pill-taking easier or about using another method of birth control.
7. IF YOU HAVE ANY QUESTIONS OR ARE UNSURE ABOUT THE INFORMATION IN THIS LEAFLET, call your healthcare professional.

BEFORE YOU START TAKING YOUR PILLS

1. DECIDE WHAT TIME OF DAY YOU WANT TO TAKE YOUR PILL. It is important to take it at about the same time every day.
2. LOOK AT YOUR PILL PACK The pill pack has 21 "active" pills (with hormones) to take for 3 weeks. This is followed by 7 white "reminder" pills, 7 light blue "active" pills, 7 blue "active" pills, and 7 dark green "reminder" pills.
3. ALSO FIND:
 - 1) where on the pack to start taking pills,
 - 2) in what order to take the pills.
4. BE SURE YOU HAVE READY AT ALL TIMES:

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

AN EXTRA, FULL PILL PACK.

WHEN TO START THE FIRST PACK OF PILLS

You have a choice of which day to start taking your first pack of pills. "Trinessa" is available in a blister card with a tablet dispenser which is preset for a Sunday Start. Day 1 Start is also provided. Decide with your healthcare professional which is the best day for you. Pick a time of day which will be easy to remember.

Sunday Start:

Take the first white "active" pill of your first pack on the Sunday after your period starts, even if you are still bleeding. If your period begins on Sunday, start the pack that same day.

Use another method of birth control such as condoms or spermicide as a back-up method if you have sex anytime from the Sunday you start your first pack until the next Sunday (7 days).

Day 1 Start:

Take the first white "active" pill of the first pack during the first 24 hours of your period. You will not need to use a back-up method of birth control, since you are starting the pill at the beginning of your period.

WHAT TO DO DURING THE MONTH

1. TAKE ONE PILL AT THE SAME TIME EVERY DAY UNTIL THE PACK IS EMPTY. Do not skip pills even if you are spotting or bleeding between monthly periods or feel sick to your stomach (nausea).

2. WHEN YOU FINISH A PACK OR SWITCH YOUR BRAND OF PILLS: Start the next pack on the day after your last "reminder" pill. Do not wait any days between packs.

WHAT TO DO IF YOU MISS PILLS

If you MISS 1 white, light blue or blue "active" pill:

1. 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.
2. You do not need to use a back-up birth control method if you have sex.

If you MISS 2 white or light blue "active" pills in a row in **WEEK 1 OR WEEK 2** of your pack:

1. Take 2 pills on the day you remember and 2 pills the next day.
2. Then take 1 pill a day until you finish the pack.
3. You COULD BECOME PREGNANT if you have sex in the 7 days after you miss pills. You MUST use another birth control method (such as condoms or spermicide) as a back-up method for those 7 days.

If you MISS 2 blue "active" pills in a row in **THE 3RD WEEK:**

1. 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.

2. If you are a Day 1 Starter: THROW OUT the rest of the pill pack and start a new pack that same day.

3. You COULD BECOME PREGNANT if you have sex in the 7 days after you miss pills. You MUST use another birth control method (such as condoms or spermicide) as a back-up method for those 7 days.

If you MISS 3 OR MORE white, light blue or blue "active" pills in a row (during the first 3 weeks):

1. 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.

2. If you are a Day 1 Starter: THROW OUT the rest of the pill pack and start a new pack that same day.

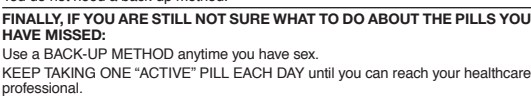
3. You COULD BECOME PREGNANT if you have sex in the 7 days after you miss pills. You MUST use another birth control method (such as condoms or spermicide) as a back-up method for those 7 days.

A REMINDER:

If you forget any of the 7 dark green "reminder" pills in Week 4: THROW AWAY the pills you missed. Keep taking 1 pill each day until the pack is empty. You do not need a back-up method.

FINALLY, IF YOU ARE STILL NOT SURE WHAT TO DO ABOUT THE PILLS YOU HAVE MISSED: Use a BACK-UP METHOD anytime you have sex. KEEP TAKING ONE "ACTIVE" PILL EACH DAY until you can reach your healthcare professional.

INSTRUCTIONS FOR USE

1. Open the compact. Place the blister into the compact, with the tablets facing up, so that the V notch in the blister card matches up with the V shaped post at the top of the compact. Press down firmly on each edge of the blister card and make sure that the edge of the card is firmly seated under each of the ribs inside the compact. (see picture).
 2. There are 7 white "active" pills, 7 light blue "active" pills, 7 blue "active" pills and 7 dark green "reminder" pills.
- 

2. If you are to start pill-taking on Sunday, take your first white pill on the first Sunday after your menstrual period begins. If your period begins on Saturday, take your first pill that day. Remove the first pill at the top of the dispenser (Sunday) by pressing the pill through the hole in the bottom of the dispenser.

3. If you are to start pill-taking on a day other than Sunday, the enclosed calendar which has been provided will be placed over the calendar in the center of the blister card. To put label in place, identify your correct starting day (locate that day printed in blue on the label, and line your blue starting day up with the first white pill which is directly under the V notch at the top of the dispenser. Remove the label from the backing. Press the center of the label down onto the center of the printed calendar. Remove that white pill by pressing the pill through the hole in the bottom of the dispenser.

4. Continue taking one pill daily, clockwise, until no pills remain in the outer ring.

5. The next day take the dark green pill from the inner ring that corresponds with the day of the week it happens to be. Take a dark green pill each day until all seven pills are taken. During this time your period should begin.

6. After you have taken all the dark green pills, begin a new blister card (see Step 1 above in "Instructions for Use") and take the first white "active" pill on the next day, even if your period is not yet over.

DETAILED PATIENT LABELING

PLEASE NOTE: This labeling is revised from time to time as important new medical information becomes available. Therefore, please review this labeling carefully.

This product (like all oral contraceptives) does not protect against HIV infection (AIDS) and other sexually transmitted diseases.

Trinessa® Regimen

Each white tablet contains 0.180 mg norgestimate and 0.035 mg ethinyl estradiol. Each light blue tablet contains 0.215 mg norgestimate and 0.035 mg ethinyl estradiol. Each blue tablet contains 0.250 mg norgestimate and 0.035 mg ethinyl estradiol. Each dark green tablet contains inert ingredients.

INTRODUCTION

Any woman who considers using an oral contraceptive (the birth control pill or the pill) should understand the benefits and risks of using this form of birth control. This patient labeling will give you much of the information you will need to make this decision and will also help you determine if you are at risk of developing any of the serious side effects of the pill. It will tell you how to use the pill properly so that it will be as effective as possible. However, this labeling is not a replacement for a careful discussion between you and your healthcare professional. You should discuss the information provided in this labeling with him or her, both when you first start taking the pill and during your visits. You should also follow your healthcare professional's advice with regard to regular check-ups while you are on the pill.

EFFECTIVENESS OF ORAL CONTRACEPTIVES FOR CONTRACEPTION

Oral contraceptives or "birth control pills" or "the pill" are used to prevent pregnancy and are more effective than most other non-surgical methods of birth control. When they are taken correctly without missing any pills, the chance of becoming pregnant is approximately 1% (1 pregnancy per 100 women per year of use). Typical failure rates, including women who do not always take the pill correctly, are approximately 5% per year (5 pregnancies per 100 women per year of use). The chance of becoming pregnant increases with each missed pill during a menstrual cycle. In comparison, typical failure rates for other non-surgical methods of birth control during the first year of use are as follows:

Implant: <1%	Male sterilization: <1%
Injection: <1%	Cervical Cap with spermicides: 20 to 40%
IUD: 1 to 2%	Condom alone (male): 14%
Diaphragm with spermicides: 20%	Condom alone (female): 21%
Spermicides alone: 26%	Periodic abstinence: 23%
Vaginal sponge: 20 to 40%	No methods: 85%
Female sterilization: <1%	No methods: 85%

Trinessa® may also be taken to treat moderate acne if all of the following are true:

- You have started having menstrual cycles
- You are at least 15 years old
- Your health care professional says it is safe for you to use the pill
- You want to use the pill for birth control

WHO SHOULD NOT TAKE ORAL CONTRACEPTIVES

Cigarette smoking increases the risk of serious cardiovascular side effects from oral contraceptive use. This risk increases with age and with heavy smoking (15 or more cigarettes per day) and is quite marked in women over 35 years of age. Women who use oral contraceptives are strongly advised not to smoke.

Some women should not use the pill. For example, you should not take the pill if you have any of the following conditions:

- A history of heart attack or stroke
- Blood clots in the legs (thrombophlebitis), lungs (pulmonary embolism), or eyes
- A history of blood clots in the deep veins of your legs
- Chest pain (angina pectoris)
- Known or suspected breast cancer or cancer of the lining of the uterus, cervix or vagina
- Unexplained vaginal bleeding (until a diagnosis is reached by your healthcare professional)
- Yellowing of the whites of the eyes or of the skin (jaundice) during pregnancy or during previous use of the pill
- Liver tumor (benign or cancerous)
- Known or suspected pregnancy
- Valvular heart disease with complications
- Severe hypertension
- Diabetes with vascular involvement
- Headaches with focal neurological symptoms
- Major surgery with prolonged immobilization
- Hypersensitivity to any component of this product

Tell your healthcare professional if you have had any of these conditions. Your healthcare professional will advise you if you should take oral contraceptives.

OTHER CONSIDERATIONS BEFORE TAKING ORAL CONTRACEPTIVES

Tell your healthcare professional if you have or have had:

- Breast nodules, fibrocystic disease of the breast, an abnormal breast x-ray or mammogram
- Diabetes
- Elevated cholesterol or triglycerides
- High blood pressure
- Migraine or other headaches or epilepsy
- Mental depression
- Gallbladder, liver, heart or kidney disease
- History of scanty or irregular menstrual periods

Women with any of these conditions should be checked often by their healthcare professional if they choose to use oral contraceptives.

Also, be sure to inform your healthcare professional if you smoke or are on any medications.

RISKS OF TAKING ORAL CONTRACEPTIVES

1. Risk of Developing Blood Clots

Blood clots and blockage of blood vessels are one of the most serious side effects of taking oral contraceptives and can cause serious medical problems. In particular, a clot in the legs can cause thrombophlebitis and a clot that travels to the lungs can cause a sudden blockage of the vessel carrying blood to the lungs. Rarely, clots occur in the blood vessels of the eye and may cause blindness, double vision, or impaired vision.

If you take oral contraceptives and need elective surgery, need to stay in bed for a prolonged illness or injury or have recently delivered a baby, you may be at risk of developing blood clots. You should consult your healthcare professional about stopping oral contraceptives four weeks before surgery and not taking oral contraceptives for two weeks after surgery or during bed rest. You should also not take oral contraceptives soon after delivery of a baby. It is advisable to wait for at least four weeks after delivery if you are not breastfeeding. If you are breastfeeding, you should wait until you have weaned your child before using the pill. (See also the section on Breast Feeding in General Precautions.)

The risk of circulatory disease in oral contraceptive users may be higher in users of high-dose pills and may be higher with longer duration of oral contraceptive use. In addition, some of these increased risks may continue for a number of years after stopping oral contraceptives. The risk of abnormal blood clotting increases with age in both users and nonusers of oral contraceptives, but the increased risk from the oral contraceptive appears to be present at all ages. For women aged 20 to 44 it is estimated that about 1 in 2,000 using oral contraceptives will be hospitalized each year because of abnormal clotting. Among nonusers in the same age group, about 1 in 20,000 will be hospitalized. For women aged 45 to 64, the risk is estimated to be about 1 in 50,000 per year in the age group 55 to 64, the risk is estimated to be about 1 in 2,500 per year for oral contraceptive users and about 1 in 10,000 per year for nonusers.

2. Heart Attacks and Strokes

Oral contraceptives may increase the tendency to develop strokes (stoppage or rupture of blood vessels in the brain) and heart attacks (blockage of blood vessels in the heart). Any of these conditions can cause death or serious disability.

Smoking greatly increases the possibility of suffering heart attacks and strokes. Further, smoking and the use of oral contraceptives greatly increase the chances of developing and dying of heart disease.

3. Gallbladder Disease

Oral contraceptive users probably have a greater risk than nonusers of having gallbladder disease, although this risk may be related to pills containing high doses of estrogens.

4. Liver Tumors

In rare cases, oral contraceptives can cause benign but dangerous liver tumors. These benign liver tumors can rupture and cause fatal internal bleeding. In addition, some studies report an increased risk of developing liver cancer. However, liver cancers are rare.

5. Cancer of the Reproductive Organs and Breasts

Various studies give conflicting reports on the relationship between breast cancer and oral contraceptive use. Oral contraceptive use may slightly increase your chance of having breast cancer diagnosed, particularly after using hormonal contraceptives at a younger age. After you stop using hormonal contraceptives, the chances of having breast cancer diagnosed begin to go back down. You should have regular breast examinations by a healthcare professional and examine your own breasts monthly. Tell your healthcare professional if you have a family history of breast cancer or if you have had breast nodules or an abnormal mammogram. Women who currently have or have had breast cancer should not use oral contraceptives because breast cancer is usually a hormone-sensitive tumor.

Some studies have found an increase in the incidence of cancer of the cervix in women who use oral contraceptives. However, this finding may be related to factors other than the use of oral contraceptives. There is insufficient evidence to rule out the possibility that the pill may cause such cancers.

ESTIMATED RISK OF DEATH FROM A BIRTH CONTROL METHOD OR PREGNANCY

All methods of birth control and pregnancy are associated with a risk of developing certain diseases which may lead to disability or death. An estimate of the number of deaths associated with different methods of birth control and pregnancy has been calculated and is shown in the following table.

Annual Number of Birth-Related or Method-Related Deaths Associated With Control of Fertility Per 100,000 Nonsterile Women, by Fertility Control Method According to Age	15-19	20-24	25-29	30-34	35-39	40-44
Method of control and outcome						
No fertility control methods*	7.0	7.4	9.1	14.8	25.9	28.2
Oral contraceptives	0.3	0.5	0.9	1.9	13.8	31.6
Non-smoker**						
Oral contraceptives	2.2	3.4	6.6	13.5	51.1	117.2
IUD**	0.8	0.8	1.0	1.0	1.4	1.4
Condom*	1.1	1.6	0.7	0.2	0.3	0.4
Diaphragm/spermicide*	1.9	1.2	1.2	1.3	2.2	2.8
Periodic abstinence*	2.5	1.6	1.6	1.7	2.9	3.6
*Deaths are birth-related						
**Deaths are method-related						

Adapted from H.W. Ory, ref. #35

In the above table, the risk of death from any birth control method is less than the risk of childbirth, except for oral contraceptive users over the age of 35 who smoke and pill users over the age of 40 even if they do not smoke. It can be seen in the table that for women aged 15 to 39, the risk of death was highest with pregnancy (7 to 28 deaths per 100,000 women, depending on age). Among pill users who do not smoke, the risk of death was always lower than that associated with pregnancy for any age group, with the exception of the 40-44 age group where the risk was about the same. For women, compared to 28 associated with pregnancy in that age group. However, for pill users who smoke and are over the age of 35, the estimated number of deaths exceeds those for other methods of birth control. If a woman is over the age of 40 and smokes, her estimated risk of death is four times higher (117/100,000 women) than the estimated risk associated with pregnancy (28/100,000 women) in that age group. The suggestion that women over 40 who do not smoke should not take oral contraceptives is based on information from older, higher-dose pills. An Advisory Committee of the FDA discussed this issue in 1981 and recommended that the benefits of low-dose oral contraceptive use by healthy, non-smoking women over 40 years of age may outweigh the possible risks. Older women, as all women, who take oral contraceptives should take an oral contraceptive which contains the least amount of estrogen and progestogen that is compatible with the individual patient needs.

WARNING SIGNALS

If any of these adverse effects occur while you are taking oral contraceptives, call your healthcare professional immediately:

- Sharp chest pain, coughing of blood, or sudden shortness of breath (indicating a possible clot in the lung)
- Pain in the calf (indicating a possible clot in the leg)
- Crushing chest pain or heaviness in the chest (indicating a possible heart attack)
- Sudden severe headache or vomiting, dizziness or fainting, disturbances of vision or speech, weakness, or numbness in an arm or leg (indicating a possible stroke)
- Sudden partial or complete loss of vision (indicating a possible clot in the eye)
- Breast lumps (indicating possible breast cancer or fibrocystic disease of the breast; ask your healthcare professional to show you how to examine your breasts)
- Severe pain or tenderness in the stomach area (indicating a possibly ruptured liver tumor)
- Difficulty in sleeping, weakness, lack of energy, fatigue, or change in mood (possibly indicating severe depression)
- Jaundice or a yellowing of the skin or eyeballs, accompanied frequently by fever, fatigue, loss of appetite, dark colored urine, or light colored bowel movements (indicating possible liver problems)

SIDE EFFECTS OF ORAL CONTRACEPTIVES

In addition to the risks and more serious side effects discussed above, the following may also occur:

1. Irregular Vaginal Bleeding

Irregular vaginal bleeding or spotting may occur while you are taking the pills. Irregular bleeding may vary from slight staining between menstrual periods to breakthrough bleeding which is a flow much like a regular period. Irregular bleeding occurs most often during the first few months of oral contraceptive use, but may also occur after you have been taking the pill for some time. Such bleeding may be temporary and usually does not indicate any serious problems. It is important to continue taking your pills on schedule. If the bleeding occurs in more than one cycle or lasts for more than a few days, talk to your healthcare professional.

2. Contact Lenses

If you wear contact lenses and notice a change in vision or an inability to wear your lenses, contact your healthcare professional.

3. Fluid Retention

Oral contraceptives may cause edema (fluid retention) with swelling of the fingers or ankles and may raise your blood pressure. If you experience fluid retention, contact your healthcare professional.

4. Melasma

A spotty darkening of the skin is possible, particularly of the face, which may persist.

5. Other Side Effects

Other side effects may include nausea and vomiting, change in appetite, headache, nervousness, depression, dizziness, loss of scalp hair, rash, vaginal infections, and allergic reactions.

If any of these side effects bother you, call your healthcare professional.

GENERAL PRECAUTIONS

1. Missed Periods and Use of Oral Contraceptives Before or During Early Pregnancy

There may be times when you may not menstruate regularly after you have completed taking a cycle of pills. If you have taken your pills regularly and miss one menstrual period, continue taking your pills for the next cycle but be sure to inform your healthcare professional. If you have two or more missed menstrual periods, you may be pregnant. Check with your healthcare professional immediately to determine whether you are pregnant. Stop taking your pills if you are pregnant.

There is no conclusive evidence that oral contraceptive use is associated with an increase in birth defects, when taken inadvertently during early pregnancy. Previously, a few studies had reported that oral contraceptives might be associated with birth defects, but these findings have not been seen in more recent studies. Nevertheless, oral contraceptives should not be used during pregnancy. You should check with your healthcare professional about risks to your unborn child of any medication taken during pregnancy.

2. While Breast Feeding

If you are breast feeding, consult your healthcare professional before starting oral contraceptives. Some of the drug will be passed on to the child in the milk. A few adverse effects on the child have been reported, including yellowing of the skin (jaundice) and breast enlargement. In addition, combination oral contraceptives may decrease the amount and quality of your milk. If you are breast feeding, combination oral contraceptives while breast feeding. You should use another method of contraception since breast feeding provides only partial protection from becoming pregnant and this partial protection decreases significantly as you breast feed for longer periods of time. You should consider starting combination oral contraceptives only after you have weaned your child completely.

3. Laboratory Tests

If you are scheduled for any laboratory tests, tell your healthcare professional you are taking birth control pills. Certain blood tests may be affected by birth control pills.

4. Drug Interactions

Certain drugs may interact with birth control pills to make them less effective in preventing pregnancy or cause an increase in breakthrough bleeding. Such drugs include rifampin, drugs used for epilepsy such as barbiturates (for example, phenobarbital), carbamazepine (Tegretol®), cimetidine (Tagamet®), erythromycin (Erythrocin®) or phenytoin (Dilantin® is one brand of this drug), phenylbutazone (Butazolidin® is one brand), certain drugs used in the treatment of HIV or AIDS, and possibly certain antibiotics. Medicines for pulmonary hypertension, such as bosentan (Tracleer®). Pregnancies and breakthrough bleeding have been reported by women who also used some form of the herbal supplement St. John's Wort while using combined hormonal contraceptives. You may want to use additional contraception when you take drugs which can make oral contraceptives less effective. Be sure to tell your healthcare professional if you are taking or start taking any medications while taking birth control pills.

5. Sexually Transmitted Infections

Trinessa® (like all oral contraceptives) is intended to prevent pregnancy. Oral contraceptives do not protect against transmission of HIV (AIDS) and other sexually transmitted diseases such as chlamydia, genital herpes, genital warts, gonorrhea, hepatitis B, and syphilis.

HOW TO TAKE THE PILL

IMPORTANT POINTS TO REMEMBER

BEFORE YOU START TAKING YOUR PILLS:

1. BE SURE TO READ THESE DIRECTIONS: Before you start taking your pills. Anyone you are not sure what to do.
2. THE RIGHT WAY TO TAKE THE PILL IS TO TAKE ONE PILL EVERY DAY AT THE SAME TIME. If you miss pills you could get pregnant. This includes starting the pack late. The more pills you miss, the more likely you are to get pregnant.
3. MANY WOMEN HAVE SPOTTING OR LIGHT BLEEDING, OR MAY FEEL SICK TO THEIR STOMACH DURING THE FIRST 1-3 PACKS OF PILLS. If you feel sick to your stomach or have spotting or light bleeding, do not stop taking the pill. The problem will usually go away. If it doesn't go away, check with your healthcare professional.
4. MISSING PILLS CAN ALSO CAUSE SPOTTING OR LIGHT BLEEDING, even when you make up these missed pills. On the days you take 2 pills to make up for missed pills, you could also feel a little sick to your stomach.
5. IF YOU HAVE VOMITING OR DIARRHEA, OR IF YOU TAKE SOME MEDICINES, including some antibiotics, your pills may not work as well. Use a back-up method (such as condoms or spermicide) until