Myths and Facts About Menopausal Hormone Therapy

Bioidentical Hormones: Are Yours FDA Approved?

Why FDA Approval Is Important for Hormone Therapy

Warning: Compounded Hormone Therapy Is Not What You Think

Bioidenticals: Available by Prescription at Your Local Drugstore

Transdermal Hormones: Your Best Solution, FDA Approved

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Find out the facts on Bioidentical hormones and ask questions during the live broadcast!
Clear up common misunderstandings about menopausal hormone therapy.

Featuring:
• Karen Giblin, President and Founder of the Red Hot Mamas®, a menopause education organization for women. More information can be seen at www.redhotmamas.org.
• Elizabeth Lee Vliet, MD, women’s health physician, hormone therapy expert, author, and radio show host. Educational materials and information about her practice can be seen at www.HerPlace.com.

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For additional copies of this magazine, e-mail thebuzz@qhc.com.

The information and advice provided in this magazine is general in nature and is not intended to be medical advice specific to any one person. Each individual should consult with her own health care professional before making any medical decisions, including, but not limited to, prescription changes and courses of treatment (ie, menopausal hormone therapy). Quadrant Healthcom Inc; Elizabeth Lee Vliet, MD; and the Red Hot Mamas North America, Inc are not responsible for any losses, damages, or claims that may result from a reader’s medical decisions; all readers are strongly encouraged to do their own research before making any medical decisions or lifestyle changes.

This magazine is an educational service developed by The Female Patient®, the Red Hot Mamas®, and Elizabeth Lee Vliet, MD. Supported by an educational grant from Ascend Therapeutics, Inc.
Are you a red hot mama?
If so, you are probably starting the transition to menopause! If you are having hot flashes, or if you just want to know what to do when you start having them, you have come to the right place. You may be wondering if you should take menopausal hormone therapy to reduce your menopausal symptoms. And you may be a little confused about terms like “bioidentical” hormones that are being discussed on television and the Web.

Many women who want to take menopausal hormone therapy are skeptical of traditional FDA-approved hormone products because they have heard that the Women’s Health Initiative (WHI) studies “proved” they should not take this medication. But the WHI did not study 17-beta-estradiol, the primary active estrogen before menopause.

Many Web sites, television shows, and celebrities are telling women that because of the WHI results they should only take hormones made at compounding pharmacies. They are saying that bioidentical hormones are only available from these types of pharmacies. This magazine will explain why that is not true.

**MYTHS About Bioidenticals**

**MYTH #1:** You can only get bioidentical hormones from compounding pharmacies.

**MYTH #2:** Menopausal hormone therapy prescribed by traditional physicians is not bioidentical.

**MYTH #3:** Bioidentical hormone therapy obtained from a compounding pharmacy is natural.

**MYTH #4:** Bioidentical hormone therapy obtained from a compounding pharmacy is safer than FDA-approved hormone therapy products.

**MYTH #5:** Saliva testing is the best way to find out what type of menopausal hormone therapy a woman should take.

**MYTH #6:** Transdermal menopausal hormone therapy prescribed by traditional physicians is not bioidentical.

All of these statements are FALSE! Read the rest of this magazine to find out the facts!

**What you should know about the WHI**

- The only hormones used in the WHI were oral pills (Premarin and PremPro brands). Premarin is a mixture of estrogens from pregnant mare (horse) urine. PremPro contains the same mixture of estrogens plus medroxyprogesterone acetate, a synthetic progestin. These hormone pills are not bioidentical because they do not contain estradiol, the hormone that women’s bodies produce.

- The WHI linked oral estrogen therapy with a small but significant increase in risk of heart attack and stroke. Combined estrogen-progestin therapy with PremPro slightly increased the risk of breast cancer.

- The WHI studied only hormone therapy taken by pill. Hormone pills are not the only options for menopausal hormone therapy, and they have different risks from hormones delivered through the skin (transdermal).
• Menopausal hormone therapy can be taken by pill; vaginal preparation; injection; or transdermal patch, gel, or lotion. Transdermal hormone therapy has different effects on the body than pills. Many transdermal products, and one oral (pill) product, are bioidentical.


What is the difference between transdermal hormone therapy (bioidentical) and oral hormone therapy (nonbioidentical) used in the WHI studies?

Advantages of transdermal hormone therapy, which contains estradiol, over pills which don’t contain estradiol:
• Transdermal hormone delivery avoids the changes in hormones from the first pass through the liver that oral medicines must undergo before getting to the rest of the body. Oral hormones need to contain more estrogen than transdermals because some of the drug is not used when it passes through the liver. This means that lower doses of hormones can be used in transdermal therapy than in oral therapy, which is always beneficial.
• Transdermal drug delivery maintains a more consistent level of medication in the blood compared with pills. Pills cause an up and down level of medication in the body.

Why haven’t you heard about FDA-approved transdermal hormone therapy?

Transdermal hormone therapy is very popular in Europe and has been for many years. It is the most popular form of hormone therapy there. In fact, a recent study (the ESTHER study) was conducted in France and showed that transdermal therapy did not increase the risk of blood clots, while oral estrogen increased the risk 4-fold. Women in the United States have been slow to realize its benefits compared with women in France and Italy. But many FDA-approved transdermal hormone therapy medications are available in the United States. And they are bioidentical. ●

Bioidentical Hormones Definitions

There is much confusion surrounding bioidentical and compounded hormones as communicated by the media.

Here are the facts!

**Menopausal hormone therapy:** Hormones (estrogen, progesterone, or both) used on a short-term basis to reduce menopausal symptoms. Previously called hormone replacement therapy (HRT). And different from hormones taken as contraception to prevent pregnancy. Menopausal hormone therapy can reduce hot flashes and vaginal dryness. It also can prevent osteoporosis. There are 3 main categories of FDA-approved menopausal hormone therapy products: products containing only estrogen, products containing only progesterin, and products containing estrogen and progesterin.

**Bioidentical hormones:** Medications containing estradiol (or progesterone) hormones that are an exact copy of the hormone molecules produced in the human body (in women, mainly in the ovaries), during women’s reproductive years. “Bioidentical” is not a medical term; it is a marketing term. That is why there is a lot of confusion about what it means. If you looked up “bioidentical” in a medical dictionary, the word would not be there! Many compounding pharmacies claim they are the only source for bioidentical hormones. This is not true, and these custom-compounded products are not FDA approved. There are, however, many FDA-approved hormone therapy medications that are “bioidentical.” In particular, transdermal formulations are bioidentical and are sold in many standard doses.

**Transdermal hormone therapy:** FDA-approved menopausal hormone therapy products containing estradiol and progesterone that are bioidentical. Transdermal hormone therapy products contain estrogen; some contain both estrogen and progesterone. They are available as patches, lotion, a clear gel applied to the arm once a day, and a mist that is sprayed on the body. Transdermal products have several advantages over oral products, as discussed above.

**Compounded hormones:** Menopausal hormone preparations compounded for a specific person as an alternative to FDA-approved hormones. Some people think that bioidentical hormones can be obtained only from compounding pharmacies. That is not true. Later on you will see why there may be problems with some compounded hormones.

**Estriol:** A hormone often used by compounding pharmacies. No drug containing estriol has been approved by FDA, and the safety and effectiveness of estriol are unknown. Pharmacies may not compound drugs containing estriol unless they have an FDA-sanctioned investigational new drug application. Yet, many compounding pharmacies continue to violate FDA regulations and add estriol to their products.
The 5 Most Important Facts You Must Know About Bioidentical Hormones

1. You don’t need to go to a compounding pharmacy to obtain bioidentical hormone therapy.

2. Many FDA-approved menopausal hormone therapy products are bioidentical. They are made from plant (or plant-derived) “building blocks” that have been chemically changed to be copies of the molecules developed by the ovaries. They are available at the local pharmacy in various doses.

3. Most FDA-approved bioidentical hormone therapy products are covered under major health plans, can be obtained from your local drugstore, and cost less than compounded hormone therapy.

4. The source of the hormone’s active ingredients in FDA-approved products and those from compounding pharmacies is the same. The exception is that some compounding pharmacies use estriol, a hormone that is not FDA approved.

5. There are a wide range of doses and formulations available to obtain individual therapy from FDA-approved hormone therapy, so there is no need to risk using a compounding pharmacy.

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Why You Should Avoid Compounded Hormone Therapy

Compounding pharmacies are places where a pharmacist mixes drugs to create a unique medication. All drugs used to be compounded before mass production came on the scene. The most common reasons drugs are compounded are:

- Change the form of a drug, such as from a pill to a liquid
- Avoid ingestion of an ingredient to which a patient is allergic
- Change (increase or decrease) the dosage for patients who need a dose different from the commercially available ones.

These are useful reasons why certain drugs need to be compounded. But some compounding pharmacies are creating the false impression that all menopausal hormone therapy should be obtained from them, and that is not true. There are also other controversies about compounding pharmacies.

Since compounding pharmacies are creating many menopausal hormone products, for example, experts believe these hormones should be subject to the same regulation as FDA-approved drugs. Since the FDA does not regulate compounding pharmacies, it is concerned that patients may be in danger. The FDA will not approve any compounded products, because those products are not standardized. Compounded products don’t go through the FDA approval process. They are not required to issue the same safety warnings we see on FDA-approved hormone therapy.

The FDA does not regulate compounding pharmacies—states do. Compounding pharmacies are licensed and regulated in the 50 states and the District of Columbia by their respective state boards of pharmacy. This may sound reassuring, but each state has different laws and different methods of oversight. This can result in problems.

Problems with compounded hormones

Each compounding pharmacy makes hormones with various different ingredients and doses, yet the hormones have the same name at each pharmacy! This makes it difficult for your health care professional to know exactly what you are taking. In addition, batches can vary in potency (strength). This will impact side effects as well as symptom control.

It is a misconception that compounded hormones are natural and that FDA-approved hormones are not. Even hormones used in compounding are synthetic and made by chemical processes.

Some compounding pharmacies use misleading advertising

Here are some examples of claims you may have heard made by compounding pharmacies. They may say their “bioidentical” hormones...

- Are a natural, safer alternative to dangerous prescription drugs
- Can help you lose weight by reducing hormonal imbalances
- May prevent breast cancer and Alzheimer’s disease
- Improve maintenance of muscle mass and strength.

These claims are all unsubstantiated and, in most cases, completely false. Some compounding pharmacies have been issued warnings from the FDA for false and misleading claims about safety and other benefits. In addition, many compounding pharmacies advertise saliva testing as a way to individualize their hormone therapy products, but many studies show such testing is not a reliable measure of hormone levels in the body.

Compounding pharmacies may also advertise misleading information about progesterone. Progesterone has not been proved safer than other hormones, and it has not been proved to prevent bone loss, prevent breast cancer, or help with weight loss.

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What Do Respected Medical Societies Say About Bioidenticals?

Why should you care what the American College of Obstetricians and Gynecologists (ACOG) and the North American Menopause Society (NAMS) say about bioidentical menopausal hormones? Because these organizations are our country’s best experts in all things hormonal.

ACOG has more than 52,000 members—mostly ObGyns—and is the nation’s leading group of professionals providing health care for women. It is a private, voluntary, nonprofit membership organization. NAMS is also a nonprofit organization, and it is dedicated to promoting the health and quality of life of women through an understanding of menopause. Its 2,000 members are leaders in medicine, nursing, sociology, psychology, nutrition, anthropology, epidemiology, pharmacy, and education.

NAMS is uniquely qualified to provide information that is both accurate and unbiased, not for or against any point of view.

You can see more information about these organizations at www.acog.org and www.menopause.org.

Consider that ACOG and NAMS are nonprofit medical organizations, while compounding pharmacies and the people who promote them are for-profit businesses.

The American College of Obstetricians (ACOG) says:

“Compounded hormone products have the same safety issues as those associated with hormone therapy agents that are approved by the US Food and Drug Administration and may have additional risks intrinsic to compounding.”

“Most compounded products have not undergone rigorous clinical testing for safety or efficacy, and issues regarding purity, potency, and quality are a concern.”

“There is no scientific evidence to support claims of increased efficacy or safety for individualized estrogen or progesterone regimens.”

“Although many advocates and compounders of bioidentical hormones recommend the use of salivary hormone level testing as a means of offering individualized therapy, hormone therapy does not belong to a class of drugs with an indication for individualized dosing. Individualized dosing is indicated when a narrow therapeutic window exists for a drug or a drug class.”

The North American Menopause Society (NAMS) says:

“NAMS does not recommend custom-compounded products over well-tested, government-approved products for the majority of women—and does not recommend saliva testing to determine hormone levels.”

“Custom-compounded hormones...do not have government approval because individually mixed recipes have not been tested to prove that they are absorbed appropriately or provide predictable levels in blood and tissue. And there is no scientific evidence about the effects of these hormones on the body, both good and bad. Preparation methods vary from one pharmacist to another, and from one pharmacy to another, which means that patients may not receive consistent amounts of medication. In addition, inactive ingredients may vary and there can be batch-to-batch differences. Reliable sterility and freedom from undesired contaminants are also concerns. Expense is also an issue, as many custom-compounded preparations are viewed as experimental drugs and are not covered by insurance plans.”
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• Elizabeth Lee Vliet, MD, women’s health physician,
  hormone therapy expert, author, and radio show host.
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Now that you have learned about the problems with compounded menopausal hormones, it is important to know about the benefits of FDA-approved menopausal hormone products.

There are 2 main reasons why FDA-approved hormone therapy products are better than compounded drugs.

- FDA-approved products have safety and efficacy data. This means they have been tested in many clinical trials, on real women. The results of those tests have been published in medical journals and scrutinized closely by many medical experts. Compounded hormone therapy products, however, do not undergo clinical trials.
- FDA-approved products are held to manufacturing standards. This means that the FDA oversees the production of the drugs to make sure they are manufactured correctly. The FDA has no oversight of compounding pharmacies, however.

**FDA survey on quality control of compounded drugs**
The FDA conducted a test to compare the quality of approved drugs with nonapproved, compounded drugs. They analyzed 29 compounded products from 12 compounding pharmacies for characteristics such as sterility, potency, and uniformity.
Here is what they found:
• 10 of the 29 products (34%) of the compounded drugs failed at least 1 of these quality tests.
• 25% failed the potency test, meaning that the products analyzed contained less of the active ingredient than should have been in the drug.

The FDA also tested more than 3,000 FDA-approved drugs. Less than 2% failed the tests.

This survey is available online at www.fda.gov.

There are many bioidentical FDA-approved menopausal hormone therapy products available by prescription from your health care professional that can be purchased at your local pharmacy.

Diana’s Story
When I decided to take menopausal hormone therapy, my ObGyn suggested that I use a transdermal. She said transdermals are easy to use and have advantages over pills. She described all the different types available—patches, lotion, gels, and spray. I decided to use a gel. I spread it on my arm each morning right after I use my facial moisturizer. It has become part of my morning routine. And my hot flashes are much better. I feel great!

There are so many FDA-approved menopausal hormone therapy products currently available that there are too many to list here. A list of all available FDA-approved hormone therapy products and their dosages can be seen at www.menopause.org/htcharts.pdf.

If you decide to use hormone therapy drugs for menopausal symptoms, use the lowest dose that helps your symptoms and use it for the shortest time needed. Check with your health care professional every 3 to 6 months to see whether you still need hormone therapy.
The menopausal transition begins when the ovaries naturally start making less estrogen and progesterone. This eventually causes the body to stop menstruating. It does not happen overnight but is a process that takes several years. Your periods will usually stop around age 50 or 51, but you may have hot flashes for several years prior.

If you are experiencing menopausal symptoms such as hot flashes, your symptoms can be reduced with FDA-approved menopausal hormone therapy products. These medications can also treat vaginal dryness and slow bone loss that can cause osteoporosis.

It is important to know, however, that all hormone therapy, bioidentical or not, compounded or not, has risks along with its benefits. The use of FDA-approved hormone therapy AND compounded hormone therapy includes, for some women, an increased risk of blood clots, heart attacks, breast cancer, stroke, and gall bladder disease.

Most of these risks can be decreased by taking nonoral (transdermal) hormones like gels and patches instead of oral hormones. If your uterus has not been removed, hormone therapy with estrogen alone can also increase the risk of endometrial cancer. In this case, if you take hormone therapy that contains both an estrogen and a progestin, the risk is lowered.

Who should not take menopausal hormone therapy? Women who:
- May be pregnant
- Have vaginal bleeding
- Have or have had certain kinds of cancer
- Have had a stroke or heart attack
- Have had blood clots
- Have liver disease.

Note: Transdermal delivery of hormones has been found to have lower risks than oral hormones and may still be an option for women who should not take oral hormones.

What about alternative, herbal treatment for menopause symptoms?
Many women use a variety of herbal therapies for menopausal symptoms, such as black cohosh, soy, flaxseed, red clover, Chinese herbs, valerian, kava, and others. But there are risks to all of these, and they are not more natural or necessarily safer than prescription FDA-approved hormones. In particular, there are case reports associating black cohosh with liver failure requiring transplantation, and even causing death.

Studies have found potentially dangerous drug-herb interactions with other medications women may be taking. Safety has not been confirmed for long-term use in humans, and allergic reactions may occur. And, studies are mixed on the effectiveness of alternative treatments. Most studies have shown they are not effective for hot flashes when compared with placebo.

Facts about hot flashes
- Hot flashes are a natural and normal part of menopause.
- Some women never have them, but most do.
- They usually start during perimenopause, before your periods stop.
- You may have 1 to 10 or more hot flashes each day.
- Many women just live with hot flashes, others seek hormone therapy.
- You may have hot flashes for up to 5 years or longer.

Lifestyle changes can help reduce hot flashes
- Eat a healthy diet.
- Limit caffeine and alcohol.
- Quit smoking.
- Exercise regularly.
- Maintain a healthy weight.
- Manage stress with meditation, exercise, and yoga.
You have learned that:
- You don’t need to go to compounding pharmacies to obtain bioidentical hormone therapy.
- Compounding pharmacies and the media may be communicating information that is not correct.
- There are many bioidentical menopausal hormones available from your local pharmacy that are FDA-approved.
- FDA-approved transdermal hormone therapy products are bioidentical.

So, how should you decide whether to take menopausal hormone therapy?
The decision of whether to take hormone therapy for menopausal symptoms is a very personal choice. Only you can decide. If you choose to use hormone therapy, tell your health care professional that you want an FDA-approved bioidentical product. Transdermal products that are absorbed through the skin have advantages over oral (pill) products. If you are overweight, have high blood pressure, migraines, or high triglycerides, or are at risk for gallstones, ask your health care professional about trying an FDA-approved transdermal gel, patch, or other nonoral form of estrogen.

If you are currently taking a compounded hormone therapy drug, review the doses you are being given and talk to your health care professional to find out if there are FDA-approved options for you.

An important study is being conducted
Even though menopausal hormone therapy has been studied for more than 30 years, a lot is still unknown about how it affects different parts of the body. The Kronos Early Estrogen Prevention Study (KEEPS) trial may provide information on the effect of menopausal hormone therapy on the heart.

- KEEPS is different from the WHI studies in 2 important ways: age of participants and type of hormone used.
- Women in the WHI studies were 50 to 79 years old. The women participating in KEEPS will be younger. They will be 42 to 58 years old, with their last menstrual cycle occurring within 6 months to 3 years. Scientists believe that estrogen may need to be started at a younger age to be effective in protecting against heart disease.

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Why You Should Avoid Compounded Hormone Therapy
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If compounded hormone therapy is not safe, why haven’t there been any reports of women who have had bad side effects?

There are several reasons you may not know about side effects of compounded hormones.

• Compounding pharmacies are not required to report problems with their drugs.

• Many women and their health care professionals may not realize the compounded hormone may be causing the problems.

• Adverse effects may take a long time to become evident.

What You Need to Know About Menopause and Hormone Therapy
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• Get support by talking about your menopausal symptoms with like-minded friends, family, and health care professionals.

Some nondrug ways to minimize hot flashes

• Keep your rooms cool, especially at night.

• Wear lightweight clothes in layers that you can take off as needed.

• Use a personal fan to cool off.

• Wash hands in cold water during or after the flash.

• Keep a glass of ice water handy to drink when you feel a flash coming on.

For More Information

Web Sites for More Information on Bioidentical Hormones, Hormone Therapy, and Menopause

North American Menopause Society
www.menopause.org

American College of Obstetricians and Gynecologists
www.acog.org

US Food and Drug Administration, Brochure on Bioidentical Hormones
www.fda.gov/ForConsumers/ConsumerUpdates/ucm049311.htm

The Female Patient medical journal
www.femalepatient.com

Red Hot Mamas®
www.redhotmamas.org

Elizabeth Lee Vliet, MD
www.HerPlace.com

Sources for information in this magazine


FDA: Compounded Menopausal Hormone Therapy Questions and Answers. Available at: www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/PharmacyCompounding/ucm078647.htm.


FDA Consumer Update: The Special Risks of Pharmacy Compounding. Available at: www.fda.gov/ForConsumers/ConsumerUpdates/ucm107836.htm.


Before using the pump for the first time, it must be primed. Wash your hands with soap and water after applying the gel to reduce the chance that the skin will become sensitized.

Wash your hands with soap and water after applying the gel to reduce the chance that the other person will absorb some of the estrogen hormone. This is especially important for men and children.

Who should not use EstroGel?

Do not use EstroGel if:

- You have had cancer of the breast or uterus, unless your healthcare provider tells you otherwise. If you have had breast cancer or if you have ever had breast lumps or an abnormal mammogram, you may need to have breast exams more often. If members of your family have had breast cancer or if you have ever had breast lumps or an abnormal mammogram, you may need to have breast exams more often.

- You have a pelvic exam, breast exam and mammogram (breast x-ray) every year unless your healthcare provider tells you otherwise. If you have had breast cancer or if you have ever had breast lumps or an abnormal mammogram, you may need to have breast exams more often.

- You have had high blood pressure, high cholesterol (fat in the blood), diabetes, are overweight, or if you use tobacco, you may have higher chances of getting heart disease. Ask your healthcare provider for ways to lower your chances of getting heart disease.

General information about the safe and effective use of EstroGel

EstroGel is sometimes prescribed for conditions that are not mentioned in patient information leaflets. Do not use EstroGel for conditions for which it was not prescribed. Do not give EstroGel to other people, even if they have the same symptoms you have. It may harm them.

Keep EstroGel out of the reach of children.

This leaflet provides a summary of the most important information about EstroGel. If you would like more information, talk with your healthcare provider or pharmacist. You can ask for information about EstroGel that is written for health professionals. You can get more information by calling the toll-free number, 1-877-204-1013.

Manufactured for:

ASCEND Therapeutics, Inc.

HOW TO USE ESTROGEL

Before using the pump for the first time, it must be primed. Remove the large pump cover, and fully insert the large pump cover into the pump until you hear a click. Add water to the pump container and fill the pump 1/2 full with gel. Discard the unused gel by thoroughly rinsing down the sink or placing it in the household trash. If you get EstroGel in your eyes, rinse your eyes right away with warm, clean water to flush out any gel. Seek medical attention if needed.

What is the possible side effects of estrogens?

Side effects are grouped by how serious they are and how often they happen when you are treated. Serious but less common side effects include:

- Breast cancer
- Cancer of the uterus
- Stroke
- Heart attack
- Blood clots
- Dementia
- Enlargement of benign tumors of the uterus ("fibroids")

Some of the warning signs of these serious side effects include:

- Breast lumps
- Unusual vaginal bleeding
- Change in speech
- Severe headaches
- Chest pain

Some of the possible adverse events of EstroGel. For more information, ask your healthcare provider or pharmacist.

What should I do if I get EstroGel in my eyes?

If you get EstroGel in your eyes, rinse your eyes right away with warm, clean water to flush out any gel. Seek medical attention if needed.

What should I do if I miss a dose?

If you miss a dose, do not double the dose on the next day to catch up. If your next dose is less than 12 hours away, it is best just to wait and apply your normal dose the next day. If it is more than 12 hours until the next dose, apply the dose you missed, and resume your normal dosing the next day.

What should I avoid while using EstroGel?

It is important that you do not spread the medicine to others, especially men and children. Be sure to wash your hands after applying EstroGel. Do not allow others to make contact with the area of skin where you applied the gel for at least 1 hour after application. Alcohol-based gels are flammable. Avoid fire, flame or smoking until the gel has dried.

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- Cancer of the uterus
- Stroke
- Heart attack
- Blood clots
- Dementia

Some of the warning signs of these serious side effects include:

- Breast lumps
- Unusual vaginal bleeding
- Change in speech
- Severe headaches
- Chest pain

Call your healthcare provider right away if you have any of these warning signs or any other unusual symptoms that concern you.

Less serious but common side effects include:

- Headache
- Breast pain
- Irregular vaginal bleeding or spotting
- Stomach/abdominal cramps, bloating

These are not all of the possible adverse events of EstroGel. For more information, ask your healthcare provider or pharmacist.

What can I do to lower my chances of having an adverse event with EstroGel?

- Talk with your healthcare provider regularly about whether you should continue treatment for these problems. If you are using EstroGel only to treat your dryness, itching, and burning in and around your vagina, talk with your healthcare provider about whether a topical vaginal product would be better for you.

Tell your healthcare provider:

- If you are breastfed

- About all the medicines you take

- About all of your medical problems

Your healthcare provider may need to check you more carefully if you have certain conditions, such as asthma (wheezing), epilepsy (seizures), migrane, endometriosis, lupus, or problems with your heart, liver, thyroid, kidneys, or high calcium levels in your blood.

- If you are going to have surgery or will be on bedrest

You may need to stop taking EstroGel. Talk with your healthcare provider about when you can stop taking EstroGel and when you can start again.

How should I store EstroGel?

EstroGel is available in a metered-dose pump that delivers a measured amount of estradiol to the skin each time you use the pump. It is important that you read and follow these directions on how to use the EstroGel pump properly.

1. Before using the pump for the first time, it must be primed. Remove the large pump cover, and fully insert the large pump cover into the pump until you hear a click. Add water to the pump container and fill the pump 1/2 full with gel. Discard the unused gel by thoroughly rinsing down the sink or placing it in the household trash. After priming, the pump is ready to use, and 1 complete pump depression will dispense the same amount of EstroGel each time.

2. Apply EstroGel at the same time each day. You should apply your daily dose of gel to clean, dry, unbroken skin. If you take a bath or shower or use a sauna, apply your EstroGel dose after your bath, shower, or sauna. If you go swimming, try to leave as much time as possible between applying your EstroGel dose and going swimming.

3. Be sure your skin is completely dry before applying EstroGel.

4. To apply the dose, collect the gel into the palm of your hand by pressing the pump firmly and fully on, and, if needed.

5. Apply the gel to the skin of one arm using your hand. Spread the gel as thinly as possible over the entire area on the inside and outside of your arm from wrist to shoulder, as illustrated.

6. Always place the small protective cap back on the tip of the pump and the large pump cover over the top of the pump after each use.
A Modern Solution to Managing Menopause: Gel

Today there's EstroGel for managing your hot flashes; night sweats; and vaginal dryness, itching, and burning with a low dose of estrogen.¹

- Plant based and bio-identical to the estrogen your body makes naturally ¹⁻³
- FDA approved; manufactured under stringent FDA specifications to meet consistent quality standards
- Delivered through the skin directly into the bloodstream, unlike oral therapies ⁴⁻⁵
- Unlike a patch, it has no adhesive
- Easy to use, easy to apply, and fits comfortably into active women's lives

Talk with your doctor today about a prescription for EstroGel, the #1 estrogen-only product in Europe.²

Visit our web site for money-saving coupons. www.estrogel.com

Please see Patient Information and boxed warning on the following page.

WHAT IS THE MOST IMPORTANT INFORMATION I SHOULD KNOW ABOUT EstroGel (AN ESTROGEN HORMONE)?

Estrogens increase the chance of getting cancer of the uterus (womb). Report any unusual vaginal bleeding right away while you are using EstroGel. Vaginal bleeding after menopause may be a warning sign of cancer of the uterus (womb). Your healthcare provider should check any unusual vaginal bleeding to find the cause.

Do not use estrogens with or without progestins to prevent heart disease, heart attacks, strokes, or dementia. Using estrogens with or without progestins may increase your chance of getting heart attacks, strokes, breast cancer, and blood clots.

Using estrogens, with or without progestins, may increase your risk of dementia, based on a study of women age 65 or older.

Do not start using EstroGel if you have unusual vaginal bleeding, currently have or have had certain cancers, had a stroke or heart attack in the past year, currently have or have had blood clots, currently have or have had liver problems, are allergic to EstroGel or any of its ingredients, or think you may be pregnant.

Common side effects of estrogens include headache, breast pain, irregular vaginal bleeding or spotting, stomach/abdominal cramps, bloating, nausea, vomiting, hair loss, fluid retention, and vaginal yeast infection.

You and your healthcare provider should talk regularly about whether you still need treatment with EstroGel.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.