

Pharmaceutical Hormones

Pharmaceutical hormones that imitate, or are natural forms of, our body's sex hormones (estrogen, testosterone, progesterone) have been found in certain cases to increase breast cancer risk.

Science Summary

Hormone replacement therapy (HRT) is often used by women in their 50s-70s to alleviate the negative effects of menopause. There are various forms of HRT, including estrogen-only, and combined estrogen and progestin (the synthetic form of progesterone). HRT can be administered orally through pills or through dermal contact, which includes creams/gels, patches, vaginal inserts, or pellets placed under the skin. Different forms of HRT have different benefits and risks.

The Women's Health Initiative (WHI) was one of the large trials that found a combination of HRT (estrogen and progestin) increased the risk of breast cancer. Additionally, a major 2019 study on over 100,000 women using HRT found that all forms of HRT, except vaginal estrogen-only therapy, led to an increased risk of breast cancer. Stopping the use of the combination HRT leads to decreased risk.

Oral contraceptives (OCs), or birth control pills, contain hormones that can prevent pregnancy. Combination OCs contain both estrogen and progestin and other OCs contain only progestin. The relationship between the use of OCs and breast cancer risk is more nuanced regarding duration and timing of use. Most studies indicate there is no relationship between OCs and breast cancer risk. However, there is limited evidence of increased risk if OCs are used for more than five years.

It's also important to acknowledge the lack of HRT research studies on different ethnic and racial backgrounds, as well as transgender people, and whether hormone treatments for gender transitions impact breast cancer risk.

What can I do for my own body and health? What is in my immediate control?

While HRT can be helpful in managing postmenopausal symptoms, avoid combined HRT, or use it for the shortest duration possible. Discuss other forms of HRT options, or even non-hormonal options, with your healthcare provider.

While it's important to consider the relationship between OCs and breast cancer, it's also crucial to support women's reproductive rights and autonomy around their reproductive health.

How can I navigate and get support with any systemic barriers to my health?

Talk with your healthcare provider about the link between combined HRT and breast cancer. Discuss alternative methods to managing menopausal symptoms, or create a management plan for HRT, which includes lower dosages or duration to minimize breast cancer risk.

And be sure to share information about the link between combined HRT and breast cancer with friends and family.

How can I help advocate for and support systemic change to remove barriers to health?

There are important systemic actions we can take to raise awareness and shift practice around HRT and breast cancer risk. Here are a few ways to get involved:



Support research that investigates HRT, OCs, or other birth control methods and breast cancer risk for all racial/ethnic groups, as well as transgender populations.



Advocate for education to the general public about the natural process of menopause and ways to manage symptoms without hormone therapy.



Add breast cancer risk to the existing risk and benefit information for oral contraceptives and other hormone-based birth control methods.



Work with professional medical organizations to develop guidance for healthcare professionals on the risks and benefits of hormone replacement therapy use to control the symptoms of menopause.



Learn more and get involved.

Breast Cancer Prevention Partners (BCPP) is the leading science-based advocacy organization working to prevent breast cancer by eliminating our exposure to toxic chemicals and other environmental exposures linked to the disease.



ETHER, WE'CA