European Code Against Cancer, 5th Edition

14 ways you can help prevent cancer

Fact Sheet

Recommendation 13 for Individuals on Hormone replacement therapy

If you decide to use hormone replacement therapy (for menopausal symptoms) after a thorough discussion with your health-care professional, limit its use to the shortest duration possible

Key summary

- Menopausal hormone replacement therapy (HRT) is associated with an increased risk of breast cancer; however, the level of risk varies by the formulation of the medication, the duration of its use, and the method of delivery. Several HRT formulations with lower risks are now available.
- Sometimes HRT may be the most effective option for several menopausal symptoms. Therefore, the potential harms of HRT use need to be weighed against benefits in improving quality of life and mental health.
- Deciding to use HRT requires a thorough discussion with your health-care professional, because the risk of breast cancer varies among individuals. HRT use should be evaluated periodically, and HRT should be used for the shortest duration possible.

Hormone replacement therapy and cancer

Menopausal HRT is a medicine to treat the symptoms of menopause. HRT uses hormones produced outside the body to replicate the hormones that women produce before menopause. The hormone used is estrogen, which is given on its own or in combination with another hormone called progesterone.

Menopausal women experience several symptoms that adversely affect their quality of life and mental health. Some consequences of menopause, for example osteoporosis, can be treated with specific medications. However, a significant proportion of menopausal symptoms merit the use of HRT as the most effective form of treatment.

What is the composition and presentation of HRT?

HRT is available as two main groups of medications: estrogen-only HRT and combined HRT (estrogen plus progesterone). The estrogen component in HRT can be administered as a slow-release patch (with or without progesterone), gel, or cream, or as an oral pill, in which it is combined with progesterone. The progesterone component can be administered as an oral pill (with or without estrogen) or as a slow-release patch with estrogen. Progesterone alone can also be administered as an intra-uterine hormonal device.

The risk of breast cancer is increased if combined HRT (estrogen plus progesterone) is used even for a short duration. The increase in the risk of breast cancer is smaller with estrogen-only HRT than with combined HRT. HRT use may also be associated with an increased risk of ovarian and endometrial cancers.

Since 2015, the rate of prescriptions of HRT appears to have increased, with a much greater increase in prescriptions for patches, gels, or creams than in prescriptions for oral HRT, probably because they are easier to administer and are perceived to lead to a smaller increase in risk.

Actions to reduce your cancer risk

Have a personalized risk assessment and a thorough discussion with your health-care professional. Deciding to use of HRT requires careful consideration of its benefits and harms. This includes:

(1) having an individualized risk assessment, including a baseline mammography and breast tissue density assessment and an assessment of family history and other risk factors (to evaluate the possible risk associated with using HRT);

(2) making an informed decision after a thorough discussion with a health-care professional about the balance of benefits and harms, including a discussion about the most suitable HRT formulation;

(3) having periodic reassessments, to minimize HRT use as much as possible.

Check which HRT formulation is right for you. Different HRT formulations are associated with different levels of breast cancer risk. Estrogen-only HRT is associated with a smaller increase in risk; however, only women who have had their uterus removed can use estrogen-only HRT. For these women, vaginally administered estrogen is the preferred formulation, because it may not increase the risk of breast cancer.

International Agency for Research on Cancer

World Health Organization

Check out the **Overweight and obesity** and **Organized cancer screening Programmes (Annex 2: Breast cancer screening) Fact Sheets** to learn more.

Limit the use of HRT to the shortest duration possible. The longer the duration of HRT use, the larger the risk of breast cancer. A periodic reassessment of symptoms is recommended to adjust the dose or modify the formulation if needed, and to determine whether continuing HRT use is necessary.

HRT should not be used as a preventive measure. It was thought that HRT would have positive impacts on cardiovascular and neurocognitive health. However, the evidence does not support this. HRT use should only be considered in women with menopausal symptoms.

Co-benefits for prevention of non-communicable diseases (NCDs) with similar risk factors and opportunities for health promotion

HRT does not protect the heart or brain. On the contrary, HRT appears to increase the risk of dementia. Therefore, it is important for those considering starting the use of HRT, and for those currently using HRT medications to speak to their healthcare professional about the benefits and harms.

Learn about policies that support the safe usage of HRT

Effective policies that support the use of HRT while making provisions to ensure the best possible outcomes for those using these medications. Some of these policies include:

- Easy access to healthcare professionals to discuss menopausal symptoms and the benefits and harms of using HRT and non-hormonal alternatives
- Assessment of baseline breast cancer risk before starting the use of HRT, and periodic re-evaluation of symptoms and HRT use.
- Availability of various HRT formulations, on a prescription-only basis, to personalize HRT use and minimize its risks.
- Ongoing continuing medical education and professional development for healthcare professionals.

Understanding your risk

- Increasing age is associated with an increase in the risk of breast cancer. The increase in the risk of breast cancer in women using HRT, compared with those not using HRT, will be greater for older women.
- Postmenopausal women with overweight or obesity have a higher risk of breast cancer, because of an excess of internal oestrogen synthesized in body fat. However, the increase in their risk of breast cancer due to HRT use is smaller than that for women who are not overweight or obese.
- Family history of breast cancer and higher breast tissue density (which is identified using mammography) are non-modifiable factors that increase the risk of breast cancer, compared with women without a family history of breast cancer and with normal or low breast tissue density.
    - HRT use increases breast density, and this reduces the sensitivity of mammography used for diagnosis and screening; thus, using HRT increases the chance that mammography may not detect early breast cancer in some cases.

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