



## ➔ UTERINE CANCER FACTSHEET

What is uterine cancer?



The uterus or womb is the hollow, muscular organ in which the baby develops during pregnancy. Uterine cancer is the fourth most common female cancer in Europe, and was diagnosed in nearly 100,000 women in 2012<sup>1</sup>.

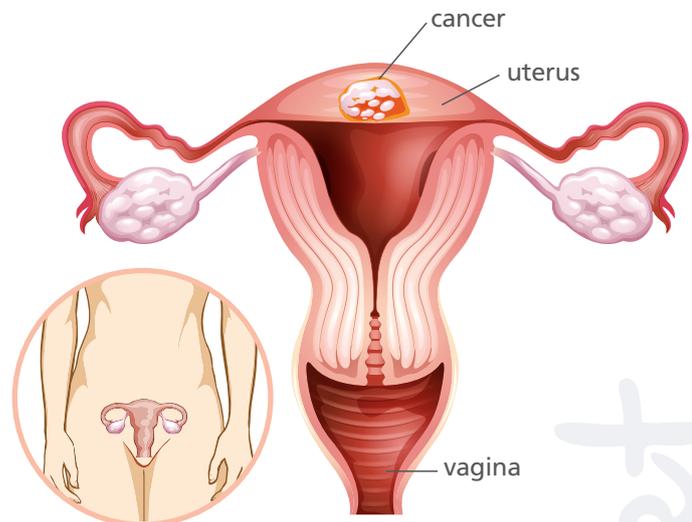
The most common type of uterine cancer is endometrial cancer, which develops from the lining of the womb (the endometrium). There are two types of endometrial cancer, which look different under the microscope and are likely to need different forms of treatment<sup>2</sup>:

#### TYPE 1

cancers amount for more than **80%** of endometrial cancers. They are linked to excess oestrogen in the body, and are usually slow growing and less likely to spread beyond the womb.

#### TYPE 2

cancers are not related to oestrogen, grow more quickly and are more likely spread to other parts of the body.



## ➔ How is uterine cancer diagnosed?

**The first symptom of uterine cancer is usually abnormal vaginal bleeding:**

- After the menopause, bleeding at any time
- Before the menopause, bleeding between periods or after sex.

**Other symptoms include:**

- Vaginal discharge
- Pain during or after sex
- Pain in the lower abdomen.

Abnormal vaginal bleeding can be a symptom of many other non-cancerous conditions that affect the womb (eg fibroids), so tests are needed to confirm a diagnosis of uterine cancer.

**These tests include:**

- An internal pelvic examination to check the womb, vagina, ovaries and bladder
- A swab to examine cells from the cervix
- An ultrasound scan, often via the vagina
- Hysteroscopy: the doctor looks at the inside of the womb using a hysteroscope, a narrow tube with a telescope at the end
- Endometrial biopsy or curettage: the doctor removes tissue from the inside of the womb for examination under a microscope.

## ➔ How can uterine cancer be prevented?

**The causes of uterine cancer are unclear, but factors that increase a woman's risk include<sup>2,3</sup>:**

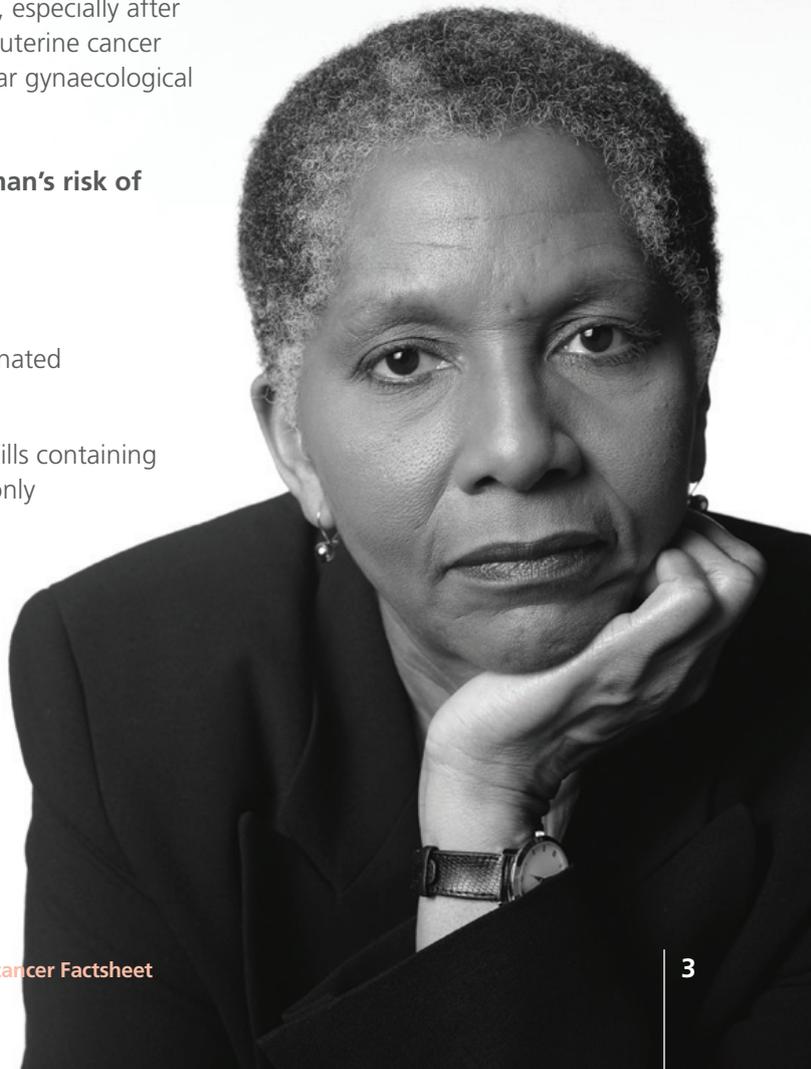
- Advancing age: most cases are diagnosed after the menopause
- More exposure to the female hormone oestrogen, eg through early onset of periods or late menopause
- Obesity, probably because obesity raises oestrogen levels
- Diabetes, possibly because it involves resistance to the effects of insulin, which can stimulate the growth of cancer cells, and it is often associated with obesity
- A mother or sister with endometrial cancer
- Lynch syndrome, also known as hereditary non-polyposis colon cancer (HNPCC), an inherited condition that increases the risk of uterine cancer and colon cancer at a younger age
- Long-term treatment with tamoxifen, a drug given to prevent breast cancer recurrence in postmenopausal women
- Not bearing children.

Europe has some of the highest rates of uterine cancer in the world; more than one in 20 female cancers affects the endometrium, and the number of cases is increasing<sup>4</sup>. This is partly because of the ageing of the European population, but rising rates of obesity are known to be an important contributory factor<sup>5</sup>.

There are currently no screening tests, but uterine cancer can be treated successfully if it is diagnosed at an early stage. Although most women with abnormal vaginal bleeding do not have uterine cancer, it is vital for every woman to consult her doctor as soon as possible if she experiences this symptom, especially after the menopause. Women who are at high risk of uterine cancer because of their family history should have regular gynaecological examinations.

**Several factors are thought to reduce a woman's risk of developing uterine cancer<sup>3,6,7</sup>:**

- Maintaining a healthy weight to avoid obesity
- Being physically active
- Coffee drinking, both caffeinated and decaffeinated
- Bearing children
- Most modern birth control pills (combination pills containing oestrogen and progesterone or progesterone-only 'mini-pills') if taken long term
- Continuous combined hormone replacement therapy (HRT), which combines daily oestrogen and progestogen, lowers the risk, but it is essential to bear in mind that combined oestrogen-progestogen HRT at the same time increases the risk of developing breast cancer.



## ➔ How is uterine cancer treated?

The outlook is relatively good for women diagnosed with uterine cancer in Europe. On average, nearly **80%** are alive five years after their diagnosis<sup>8</sup>.

Standard treatment of uterine cancer is surgery. In some cases, it is necessary to add radiotherapy, chemotherapy and/or hormone therapy. Conservative therapy with hormones can be considered in young women with early uterine cancer who wish to preserve their fertility.

**Surgery** is recommended for all women with uterine cancer who are fit enough for the operation. The type of surgery depends on the woman's cancer, but most women are recommended to have their womb, fallopian tubes and ovaries removed. Lymph glands are sometimes removed at the same time to check if further treatment is needed.

**Radiotherapy** is given as the main treatment for less fit women, or when surgery cannot remove all the cancer. It is also given post-operatively to reduce the risk that the cancer will recur. Radiotherapy can be given in two ways: either externally to the whole pelvis or internally via a narrow central tube of tissue (brachytherapy). These forms of radiotherapy can also be given one after the other, if indicated. Since radiotherapy can cause long-term side effects, research is under way to investigate the best time to give this treatment and to identify women who are most likely to benefit.

**Hormone therapy** with progesterone is used to shrink cancers that have spread to the rest of the body, or have regrown after surgery or radiotherapy. This treatment can be given only to women with less aggressive disease, or if hormone receptors are seen when cancer cells are examined under a microscope.

**Chemotherapy** is increasingly used in women who present with advanced uterine cancer, and platinum-based combinations of drugs can produce dramatic improvements. However, the side effects of chemotherapy may mean that it is less suitable for women with other serious health problems.

## ➔ How is uterine cancer treated?

- European Cancer Observatory: <http://eu-cancer.iarc.fr>
- EURO CARE: <http://www.euocare.it>
- ENGAGE: <http://engage.esgo.org/en>
- Women's silent cancers: the state of gynaecological cancers in Europe. <http://tinyurl.com/ndtwaca>
- ENGAGE network members: <http://www1.esgo.org/esgomaps/>
- ESGO: <http://esgo.org>
- European Society of Medical Oncology (ESMO). Endometrial cancer: a guide for patients: <http://www.esmo.org/Patients/Patient-Guides>
- Cancer Research UK. Womb (endometrial and uterine) cancer. <http://www.cancerresearchuk.org/about-cancer/type/womb-cancer/> (last accessed 30 June 2015)
- Womb Cancer Support UK: <http://wombcancersupportuk.weebly.com/>

### References:

- 1 Ferlay J, et al. Eur J Cancer 2013;49:1374-403
- 2 Stewart BW, Wild CP (eds). World Cancer Report 2014. International Agency for Research on Cancer. 2014
- 3 World Cancer Research Fund/American Institute for Cancer Research. Continuous Update Project Report. Food, nutrition, physical activity, and the prevention of endometrial cancer. 2013. Available at <http://www.wcrf.org/sites/default/files/Endometrial-Cancer-2013-Report.pdf> (last accessed 30 June 2015)
- 4 Bray F, et al. Cancer Epidemiol Biomarkers Prev 2005;14:1132
- 5 Arnold M, et al. Lancet Oncol 2015;16:36-46
- 6 Cogliano V, et al. Lancet Oncol 2005;6:552-3
- 7 Million Women Study Collaborators. Lancet 2005;365:1543-51
- 8 ECO, European Cancer Observatory. International Agency for Research on Cancer: <http://eco.iarc.fr/EUCAN> (last accessed 30 June 2015)

