



➔ **OVARIAN CANCER** FACTSHEET

What is ovarian cancer?



ENGAGe is releasing a series of factsheets to raise awareness of gynaecological cancers and to support its network to work at grassroots level.

- Ovarian cancer causes more deaths than any other cancer of the female reproductive system.<sup>1</sup> Five year survival rates decrease significantly with the later stages of diagnosis.<sup>2</sup>
- The risk of developing ovarian cancer is increased in women with specific inherited genetic abnormalities. Up to **40%** of women with a BRCA mutation, a genetic abnormality will develop ovarian cancer, while **1.4% of women** in the general population are at risk.<sup>3</sup>

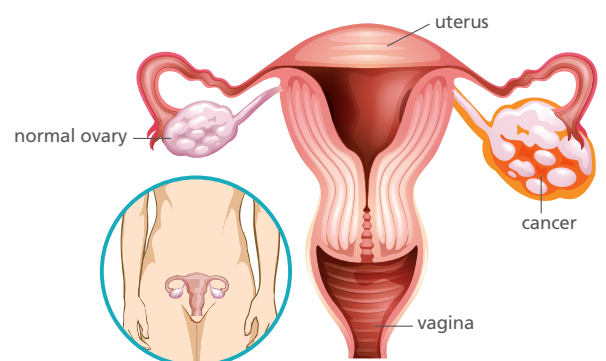
*“Ovarian cancer causes more deaths than any other cancer of the female reproductive system. Each year, there are 42,700 deaths in Europe due to ovarian cancer.<sup>4</sup> No screening programmes have so far proven to be effective in ovarian cancer.”*

*“The symptoms of ovarian cancer are non-specific and can be attributed to other less serious conditions.<sup>5</sup> For this reason, cases are often diagnosed in the late stages, where survival rates are much lower.<sup>2</sup> However, the definitions of the recommended modalities of treatment (as regards surgery and chemotherapy) and how to combine them have led to a prolongation of 5-year survival in the last 35 years.<sup>6</sup>”*

ENGAGe (the European Network of Gynaecological Cancer Advocacy Groups) is a network for all advocacy groups representing gynaecological cancers, especially ovarian, endometrial, cervical, vulvar and rare cancers. ENGAGe was established in 2012 by ESGO, the European Society of Gynaecological Cancer.

## What is ovarian cancer?

Ovarian cancer is a serious, life-threatening disease and is the 7th most commonly diagnosed cancer in women worldwide.<sup>1</sup> In Europe, Ovarian cancer is the sixth most common cancer among women with over 65,000 cases in 2012.<sup>2</sup> The high mortality associated with ovarian cancer is due to the fact that it is often diagnosed at an advanced stage, by which time the patient has a poor prognosis.

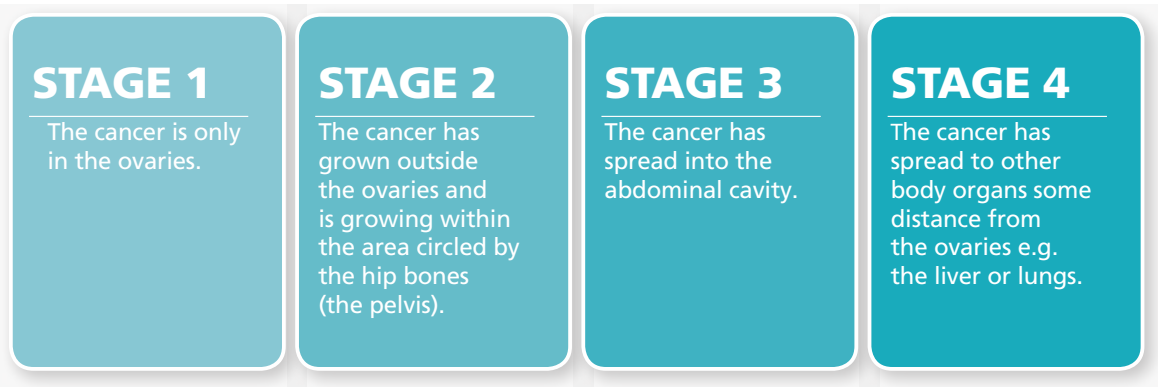


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2. Cancer Research UK. Ovarian cancer survival statistics. <http://www.cancerresearchuk.org/cancer-info/cancerstats/types/ovary/survival/ovarian-cancer-survival-statistics>. Last Accessed 21 August 2014
3. National Cancer Institute. BRCA1 and BRCA2: cancer risk and genetic testing. <http://www.cancer.gov/cancertopics/factsheet/Risk/BRCA>. Last accessed: 6 August 2014
4. Cancer Research UK. Ovarian cancer mortality statistics. <http://www.cancerresearchuk.org/cancer-info/cancerstats/types/ovary/mortality/>. Last Accessed 4 September 2014
5. Cancer Research UK. Ovarian cancer symptoms. <http://www.cancerresearchuk.org/cancer-info/cancerstats/types/ovary/mortality/>. Last Accessed 4 September 2014
6. NIH Cancer Stat Facts: ovarian cancer, 2014

## What are the stages of ovarian cancer?

The stage of a cancer tells the doctor how far it has grown and if it has spread. A one to four staging system for ovarian cancer has been developed.<sup>3</sup>



## What are the symptoms of ovarian cancer?

**The symptoms of ovarian cancer include:**<sup>4</sup>

- Persistent pelvic and abdominal pain
- Increased abdominal size/persistent bloating - not bloating that comes and goes
- Difficulty eating and feeling full quickly
- Increased urinary urgency and/or frequency

As the symptoms of ovarian cancer are non-specific and can be attributed to other conditions, e.g. irritable bowel syndrome (IBS), around 60% of patients are currently diagnosed once the cancer is already at an advanced (Stage III or IV), significantly reducing the chance of successful treatment.<sup>5</sup>

High-grade serous carcinoma is the most common form of ovarian cancer. Approximately 70 percent of ovarian cancer is serous, which is the most aggressive form but also the one more sensitive to treatment.<sup>6</sup> As many as 90 percent of stage III–IV ovarian cancers are high grade serous carcinoma.

## What are the risk factors for ovarian cancer?

The risk of developing ovarian cancer is influenced by several factors, including age, lifestyle, reproductive history and family history. The risk of developing ovarian cancer is highly increased in women with specific inherited genetic abnormalities, such as mutations in the BRCA1 or BRCA2 genes,<sup>8</sup> or other alterations in the genetic profile which increase the risk of developing ovarian cancer but also increase the sensitivity to chemotherapy with platinum compounds and other new agents targeting those alterations. In the general population, 1.4 percent of women will be diagnosed with ovarian cancer,<sup>9</sup> while mutations in these genes account for 20% of ovarian cancer cases.<sup>7</sup>

## How is ovarian cancer diagnosed?

There is currently no reliable screening method to detect ovarian cancer and symptoms often go unnoticed. A number of investigations may be carried out to diagnose ovarian cancer including a blood test for CA125, a protein produced by some ovarian cancers and scans, e.g. ultrasound scan and a CT scan.<sup>8</sup> The final diagnosis is done by taking a tissue biopsy of the suspicious lesions.

## How is ovarian cancer treated?

There is a significant unmet need for new treatment options for ovarian cancer since the tumor tends to re-grow after an initial response to treatment in 70% of cases of stages III- IV. Surgery and chemotherapy are the principal treatment options. In general, cancers of the ovary, fallopian tube and peritoneum are managed in the same way. Guidelines for the most appropriate initial surgical and chemotherapy management have been defined, based on the results achieved over the years in big clinical studies. Their applications can significantly improve the results – Qualified centers use them. New classes of treatment have been investigated, particularly in high-grade serous carcinoma e.g. antiangiogenics like bevacizumab, parp-inhibitors like niraparib, olaparib and rucaparib targeting BRCA mutated ovarian cancer. Genetic testing is important for reducing the risk of ovarian cancer in the family and for the therapeutic management of patients.<sup>9</sup>

## Further Information

- Cancer Research UK. Ovarian Cancer: [www.cancerresearchuk.org/cancer-help/type/ovarian-cancer/](http://www.cancerresearchuk.org/cancer-help/type/ovarian-cancer/)
- Target Ovarian Cancer: [www.targetovariancancer.org.uk](http://www.targetovariancancer.org.uk)
- Ovacome: [www.ovacome.org.uk/](http://www.ovacome.org.uk/)
- European Cancer Observatory: <http://eu-cancer.iarc.fr>
- EUROcare: [www.eurocare.it](http://www.eurocare.it)
- ENGAGe: <http://esgo.org/ENGAGe>
- Women's silent cancers - The state of gynaecological cancers in Europe. Updated September 2013: <http://esgo.org/ENGAGe/Pages/resources.aspx>
- ENGAGe network members: <http://esgo.org/ENGAGe/Pages/NetworkMembers.aspx>
- ESGO: <http://esgo.org>

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1. WHO Globocan 2012. Population Fact Sheet. [http://globocan.iarc.fr/Pages/fact\\_sheets\\_population.aspx](http://globocan.iarc.fr/Pages/fact_sheets_population.aspx). Last accessed: 20 August 2014.
2. Ferlay J, et al. Eur J Cancer 2013;49:1374-403
3. Cancer Research UK. Stages of ovarian cancer. <http://www.cancerresearchuk.org/cancer-help/type/ovarian-cancer/treatment/stages-of-ovarian-cancer>. Last Accessed 20 August 2014.
4. Cancer Research UK. Ovarian cancer symptoms. <http://www.cancerresearchuk.org/cancer-help/type/ovarian-cancer/about/ovarian-cancer-symptoms>. Last Accessed 20 August 2014.
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6. Mc Cluggage WG et al. Data set for reporting of ovary, fallopian tube and primary peritoneal carcinoma: recommendations from the ICCR Modern Pathol 2015; 28:1101-1122.
7. The Cancer Genome Atlas Research Network: Integrated genomic analysis of ovarian carcinoma - Nature 2011; 474:609-615.
8. Cancer Research UK. Ovarian cancer tests. <http://www.cancerresearchuk.org/cancer-help/type/ovarian-cancer/diagnosis/ovarian-cancer-tests>. Last Accessed 20 August 2014.
9. National Cancer Institute. BRCA1 and BRCA2: cancer risk and genetic testing. <http://www.cancer.gov/cancertopics/factsheet/Risk/BRCA>. Last accessed: 6 August 2014

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