CA125 stands for ‘cancer antigen 125’. It is called a ‘tumour marker’. Women with ovarian cancer often have their CA125 measured throughout the different stages of their diagnosis, treatment and after treatment.

This fact sheet helps women understand what CA125 is and the role of the CA125 test in diagnosing and monitoring ovarian cancer. It discusses:

- What is CA125?
- What is the CA125 test?
- Can the CA125 test be used for screening?
- CA125 and diagnosis
- CA125 during treatment
- CA125 after treatment
- More information

If you would like more detailed information about ovarian cancer and its diagnosis and treatment, including where to access support, download or order yourself a copy of our Resilience Kit (www.ovariancancer.net.au).

WHAT IS THE CA125 TEST?

The CA125 test is used to measure the CA125 protein in the blood.

The level of CA125 increases in about 50% of women with early stage ovarian cancer and 90% of women with an advanced stage of ovarian, fallopian tube or primary peritoneal cancer.

Women with symptoms associated with ovarian cancer should see their GP, who may suggest having a CA125 blood test. "If women are experiencing symptoms associated with ovarian cancer, they should have both the CA125 test and a transvaginal ultrasound. These tests indicate if ovarian cancer is a possibility."

Ovarian Cancer Australia

CAN THE CA125 TEST BE USED FOR SCREENING?

Screening means testing a population of healthy people to find a disease in its early stages (in the case of cervical cancer it can also pick up cell changes before cancer actually develops). People being screened usually have no signs or symptoms of the disease.

For cancer screening to be effective, there must be an accurate test that can detect early stage cancer, when treatment is more likely to cure the cancer. It is also important that the screening test does not give a positive result in people who do not have cancer (‘false positive’) or a negative result in people who do have cancer (‘false negative').
The CA125 test cannot be used for early detection of ovarian cancer as it is not a reliable screening test. This is because the CA125 level is not always raised during the early stages of ovarian cancer, and many other non-cancerous conditions can also cause it to rise, including:

- menstruation
- pregnancy
- irritable bowel syndrome and diverticulitis
- ovarian cysts
- fibroids
- endometriosis
- liver cirrhosis.

As a screening test, CA125 would result in too many cancers being missed and too many women being wrongly diagnosed and having unnecessary (and often invasive) procedures.

Neither CA125 nor transvaginal ultrasound have been shown to be reliable as population screening tests for ovarian cancer.

Research continues to try and develop better screening tests to detect ovarian cancer at earlier stages and improve outcomes for women.

**CA125 AND DIAGNOSIS**

Although the CA125 test cannot be used to screen for ovarian cancer, it is still a useful test to help with diagnosis.

If a woman is having common symptoms associated with ovarian cancer, the CA125 test can be used as well as other tests to help diagnose the cause of the symptoms. The main symptoms of ovarian cancer include:

- increased abdominal size or persistent abdominal bloating
- abdominal or pelvic (lower tummy) pain
- feeling full after eating a small amount
- needing to urinate often or urgently.

The level of CA125 increases in about 50% of women with early stage ovarian cancer and over 90% of women with an advanced stage of ovarian cancer.

**CA125 DURING TREATMENT**

For some women with ovarian cancer, the CA125 test can indicate whether their treatment is working or not. A rising CA125 during treatment may suggest the treatment is not working very well and a falling CA125 can mean the treatment is working. However, this is not the case for all women because the CA125 level doesn’t always rise and fall with the growth and reduction of all types of ovarian cancer.

For women whose CA125 level does indicate what is happening, doctors tend to use the first CA125 level taken at the time of their diagnosis as a baseline comparison for what is happening with their cancer during treatment.

“Don’t feel afraid to ask as many questions of your healthcare team as you want to ask – and ask the questions twice if you don’t understand their answers!”

**Meghan**

**CA125 AFTER TREATMENT**

Doctors do not use the CA125 test as a routine test for all women after their treatment finishes. The test is often optional for women during their regular follow-ups. This is because the CA125 level can’t tell:

- if you need to start treatment again
- if it returns, how severe the cancer is
- how a cancer recurrence will respond to treatment.

If the CA125 level is rising, it may suggest the cancer is coming back. But for most women it is not until they actually develop symptoms that their doctor will advise them to start further treatment. The reason for this is that waiting a longer time between treatments may increase the chance of the treatment’s effectiveness.

Starting treatment based solely on the CA125 level hasn’t shown to improve outcomes for women.
If your CA125 level has risen after your treatment is over, but you have no symptoms, you may want to ask your specialist doctor the following questions:

- Will second-line treatment be more effective if I wait until I develop symptoms?
- What is the benefit of waiting if my CA125 is rising?
- What is the benefit of having immediate treatment if my CA125 is rising?
- Can you provide me with evidence from studies to help guide me with making my decision?
- Are there any clinical trials available for me?

“If I have a recurrence, I will deal with it then. I’m not going to worry and live with less quality of life because of ‘what ifs’ or fear.”

Marie

If you would like more information about the CA125 test or would like to talk to someone about the information you have read in this fact sheet, we encourage you to speak to your doctors and nurses or call Ovarian Cancer Australia Helpline on 1300 660 334. For more information about ovarian cancer and its treatment and support, the following may be helpful:

- Ovarian Cancer Australia’s Resilience Kit
- Ovarian Cancer Australia’s fact sheet Fear of cancer recurrence (coming soon)
- The Department of Health’s ovarian cancer optimal care pathway, which explains consistent, safe and evidence-based practices to all women undergoing treatment. You can refer to this pathway to learn about the optimum standards of care at each stage of ovarian cancer diagnosis, treatment and follow-up.
- Cancer Australia’s website.