What is ROMA?

The risk of ovarian cancer is assessed by simultaneously testing for tumor markers **CA125 and HE4 using a small amount of blood**.

CA125 **+** **HE4**

Risk of Ovarian Cancer

✳ **Helps with early diagnosis of epithelial ovarian cancer (EOC)!**

Simultaneous testing of CA125, a tumor marker for ovarian cancer, and HE4, an early diagnostic marker for EOC, along with ultrasound examination, can significantly improve the diagnostic rate of ovarian cancer.

✳ **Differentiate between a benign tumor and ovarian cancer!**

The ROMA test allows for a more accurate assessment of the risk of ovarian cancer in cases of a pelvic mass, helping avoid unnecessary surgeries and enabling appropriate treatment decisions.

✳ **Promptly predict the recurrence of ovarian cancer!**

Early diagnosis and appropriate treatment are crucial for ovarian cancer, which has a high recurrence rate. The ROMA test enables effective treatment of ovarian cancer by providing a faster prediction of recurrence.

Test information

Code No.	Test Name	Specimen	Method
21638	**ROMA** (Risk of ovarian malignancy algorithm)	Serum 1.0 mL	Calculation (calculus)

Early,
diagnosis is crucial for ovarian cancer!

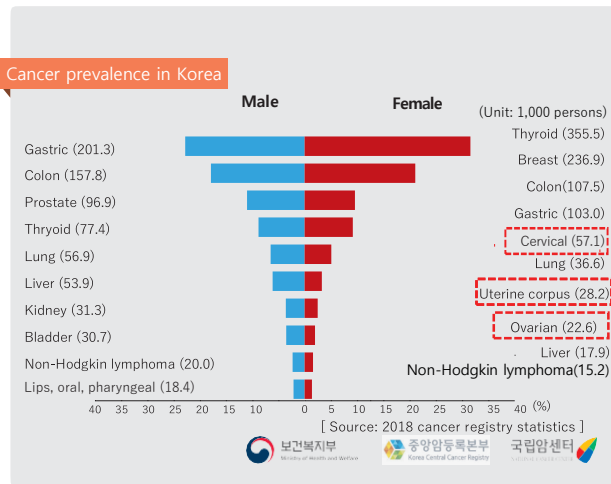Consult your specialist for details about the test.

Seegene Medical Foundation

Ovarian cancer risk screening

Early diagnosis is crucial for ovarian cancer.

[**R**isk of **O**varian **M**alignancy **A**lgorithm]

What is ovarian cancer

Ovarian cancer can be classified into: epithelial cell carcinoma, germ cell tumors, and sex cord-stromal tumors. Among these, **EOC**, which originates from surface epithelial cells of the ovaries **accounts for more than 85% of all ovarian cancers.** In South Korea, ovarian cancer ranks 8th (2.0%) in terms of 5-year prevalence among major cancer types, and its incidence rate is rising by 1.5% every year.

Cancer prevalence in Korea

Male   **Female**

(Unit: 1,000 persons)

Male	Female
Gastric (201.3)	Thyroid (355.5)
Colon (157.8)	Breast (236.9)
Prostate (96.9)	Colon(107.5)
Thryoid (77.4)	Gastric (103.0)
Lung (56.9)	Cervical (57.1)
Liver (53.9)	Lung (36.6)
Kidney (31.3)	Uterine corpus (28.2)
Bladder (30.7)	Ovarian (22.6)
Non-Hodgkin lymphoma (20.0)	Liver (17.9)
Lips, oral, pharyngeal (18.4)	Non-Hodgkin lymphoma(15.2)

40 35 30 25 20 15 10 0 5 10 15 20 25 30 40 (%)

[Source: 2018 cancer registry statistics]

보건복지부 Ministry of Health and Welfare   중앙암등록본부 Korea Central Cancer Registry   국립암센터

At-risk groups for ovarian cancer

☑ **Have a family member with ovarian cancer**

☑ **Age ≥ 40 years (Especially, ≥ 60 years)**

☑ **Infertile or have never delivered a baby**

☑ **Obesity**

☑ **Patients with breast cancer, endometrial cancer, or rectal cancer**

Symptoms of ovarian cancer

Main symptoms

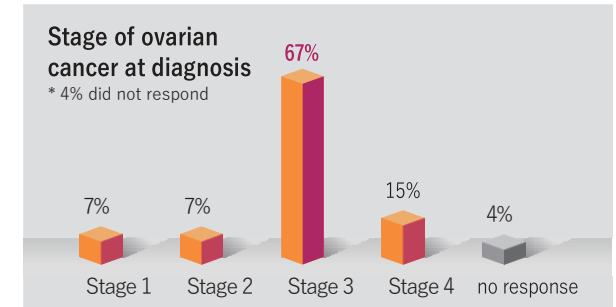Pain (57%), abdominal distention (51%), vaginal bleeding (25%)

Other symptoms

Gastrointestinal disorders, abdominal discomfort, digestive disorders, gastrointestinal discomfort, mild appetite loss, premenstrual tension, severe breast swelling, lower back pain, and urological symptoms such as frequent urination and difficulty urinating

Abdominal discomfort

digestive disorder

loss of appetite

urological symptoms

Early diagnosis is crucial for ovarian cancer!.

Due to the location of the ovaries within the abdominal cavity, most cases of early ovarian cancer progress without noticeable symptoms. As a result, around 70% of ovarian cancers are not detected until they have reached stage 3 or higher.

Stage of ovarian cancer at diagnosis
* 4% did not respond

Stage 1	Stage 2	Stage 3	Stage 4	no response
7%	7%	67%	15%	4%

Data: Korean Gynecologic Oncology Group

Ovarian cancer detected at an early stage has a favorable prognosis, with a 5-year survival rate of over 90% without the need for adjuvant chemotherapy. However, for women diagnosed with stage 3 or 4 ovarian cancer, the 5-year survival rate is only around 30%

5-year survival rate of EOC (%)

100 —
80 —
60 —
40 —
20 —
0 —

Stage 1   Stage 2   Stage 3   Stage 4