

Overview

Useful For

Calculating risk assessment for finding an ovarian malignancy during surgery in premenopausal women who present with an adnexal mass

Method Name

Only orderable as part of a profile. For more information see ROMA / ROMA Score (Ovarian Malignancy Risk Algorithm), Serum.

Calculation

NY State Available

Yes

Specimen

Specimen Type

Serum

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum	Frozen (preferred)	84 days	
	Refrigerated	48 hours	

Clinical & Interpretive

Clinical Information

Women with ovarian cancer symptoms and adnexal masses present primarily to gynecologists, primary care physicians, or general surgeons. Triage guidelines from the American College of Obstetricians and Gynecologists and the Society of Gynecologic Oncologists recommend referral of women with a pelvic mass at high risk for ovarian cancer to gynecologic oncologists. Specialized treatment improves patient outcomes resulting in fewer complications and better survival rates when compared to patients treated by surgeons less familiar with the management of ovarian cancer.

The risk of ovarian malignancy algorithm (ROMA) incorporates cancer antigen 125 (CA125), human epididymal protein 4 (HE4), and menopausal status to assign women that present with an adnexal mass into a high-risk or low-risk group for finding an ovarian malignancy. ROMA is indicated for women who meet the following criteria: older than 18 years, presenting with an adnexal mass for which surgery is planned, and who have not yet been referred to an oncologist. ROMA must be interpreted in conjunction with clinical and radiological assessment.

Reference Values

Only orderable as part of a profile. For more information see ROMA / ROMA Score (Ovarian Malignancy Risk Algorithm), Serum.

Premenopausal:<1.14 (low risk)

Interpretation

In premenopausal women, a risk of ovarian malignancy algorithm (ROMA) value of 1.14 or greater indicates a high risk of finding epithelial ovarian cancer, whereas a ROMA value less than 1.14 indicates a low risk of finding epithelial ovarian cancer at surgery.

The use of these cutpoints provides a 75% specificity and sensitivity of 84% in patients with stage I-IV epithelial ovarian cancer.

Cautions

No significant cautionary statements

Clinical Reference

1. Dochez V, Caillon H, Vaucel E, Dimet J, Winer N, Ducarme G. Biomarkers and algorithms for diagnosis of ovarian cancer: CA125, HE4, RMI and ROMA, a review. *J Ovarian Res.* 2019;12(1):28. doi:10.1186/s13048-019-0503-7
2. Moore RG, Jabre-Raughley M, Brown AK, et al. Comparison of a novel multiple marker assay vs the Risk of Malignancy Index for the prediction of epithelial ovarian cancer in patients with a pelvic mass. *Am J Obstet Gynecol.* 2010;203(3):228.e1-6
3. Karlsen MA, Sandhu N, Hogdall C, et al. Evaluation of HE4, CA125, risk of ovarian malignancy algorithm (ROMA) and risk of malignancy index (RMI) as diagnostic tools of epithelial ovarian cancer in patients with a pelvic mass. *Gynecol Oncol.* 2012;127(2):379-383

Performance**Method Description**

The risk score calculation is performed by the laboratory information system.

PDF Report

No

Day(s) Performed

Monday through Friday

Report Available

1 to 3 days

Performing Laboratory Location

Mayo Clinic Laboratories - Rochester Superior Drive

Fees & Codes**Fees**

- Authorized users can sign in to [Test Prices](#) for detailed fee information.
- Clients without access to Test Prices can contact [Customer Service](#) 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact [Customer Service](#).

Test Classification

Not Applicable

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
ROMA1	Risk Score, if premenopausal	69569-2

Result ID	Test Result Name	Result LOINC® Value
ROMA1	Risk Score, if premenopausal	69569-2