Medical Coverage Policy | Proteomics-Based Testing Related to Ovarian Cancer

EFFECTIVE DATE: | |
POLICY LAST UPDATED: 06|23|2015

OVERVIEW

This policy documents the coverage determination for Proteomics-Based Testing Related to Ovarian Cancer. A variety of gene-based biomarkers have been studied in association with ovarian cancer. Of particular interest have been tests that integrate results from multiple analytes into a risk score to predict the presence of disease. Two tests based on this principle (OVA1™ test, ROMA™ test) have been cleared by the U.S. Food and Drug Administration (FDA) for use in women with adnexal masses as an aid to further assess the likelihood that malignancy is present.

MEDICAL CRITERIA

Not applicable

PRIOR AUTHORIZATION

Not applicable

POLICY STATEMENT

BlueCHiP for Medicare and Commercial products

All uses of the OVA1 and ROMA tests are not medically necessary, including but not limited to the following, because there is insufficient peer-reviewed literature that demonstrates that the service is effective:

- Screening for ovarian cancer, or
- Selecting patients for surgery for an adnexal mass, or
- Evaluation of patients with clinical or radiologic evidence of malignancy, or
- Evaluation of patients with nonspecific signs or symptoms suggesting possible malignancy, or
- Postoperative testing and monitoring to assess surgical outcome and/or to detect recurrent malignant disease following treatment

COVERAGE

Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage or Subscriber Agreement for limitations of benefits/coverage when services are not medically necessary.

BACKGROUND

More than 21,000 women in the United States are diagnosed each year with ovarian cancer and approximately 14,000 die of the disease.1 The mortality rate depends on 3 variables: (1) characteristics of the patient; (2) biology of the tumor (grade, stage, type); and (3) quality of treatment (nature of staging, surgery and chemotherapy used). In particular, comprehensive staging and completeness of tumor resection appear to have a positive impact on patient outcome.

In 1997, the Society of Surgical Oncology recommended ovarian cancer surgery and follow-up treatment be performed by physicians with ovarian cancer disease expertise. To date, dozens of articles have been published on the application of this recommendation looking at long-term outcomes, short-term outcomes, and process measures (eg, types of treatment such as complete staging or tumor debulking). At least 2 meta-analyses have concluded that outcomes are better in patients with ovarian cancer when they are treated by gynecologic oncologists. Data have been most convincing for patients with advanced-stage disease.

Adult women presenting with an adnexal mass have an estimated 68% likelihood of having a benign lesion. About 6% have borderline tumors, 22%, invasive malignant lesions, and 3%, metastatic disease. Clinicians generally agree that women with masses that have a high likelihood of malignancy should undergo surgical staging by gynecologic oncologists. However, women with clearly benign masses do not require referral to a specialist. Criteria and tests that help differentiate benign from malignant pelvic masses are thus desirable.

In 2005, the American College of Obstetricians and Gynecologists and the Society of Gynecologic Oncologists jointly released referral guidelines that address criteria for referring women with pelvic masses that are suspicious for ovarian cancer to gynecologic oncologists. Separate criteria were developed for premenopausal and postmenopausal women. In premenopausal women, referral criteria included at least one of the following: elevated CA125 (>200 U/mL), ascites, evidence of abdominal or distant metastasis, or a positive family history. The referral criteria in postmenopausal women were similar, except that a lower threshold for an elevated CA125 test was used (35 U/mL) and nodular or fixed pelvic mass was an additional criterion.

Two proteomic tests have now been cleared by FDA with the intended use to triage patients with adnexal masses. A suggested use of the test is to identify women with a positive test who have a higher likelihood of malignant disease and may benefit from referral to a gynecologic-oncology specialist. Patients with positive results may be considered candidates for referral to a gynecologic oncologist for treatment.

Regulatory Status

On July 16, 2009, the OVA1TM test (Vermillion Inc., Fremont, CA) was cleared for market by FDA as a 510(k) submission. On September 1, 2011, the Risk of Ovarian Malignancy Algorithm (ROMATM test; Fujirebio Diagnostics Inc., Malvern, PA) was cleared by FDA as a 510(k) submission. Because the OVA1 test had been found to be a class II medical device by virtue of the July 2009 clearance, ROMA was found to be substantially equivalent to that predicate device. Intended use of OVA1 is as an aid to further assess the likelihood that malignancy is present when the physician's independent clinical and radiological evaluation does not indicate malignancy. Intended use of ROMA is as an aid in assessing whether a premenopausal or postmenopausal woman who presents with an ovarian adnexal mass is at high or low likelihood of finding malignancy on surgery. Neither test is FDA-cleared as a screening or stand-alone diagnostic assay.

Black Box Warning
On December 10, 2011, FDA published an amendment to the regulation for classifying ovarian adnexal mass assessment score test systems to restrict these devices so that a prescribed warning statement that addresses off-label risks be highlighted by a black box warning. The warning is intended to mitigate the risk to health associated with off-label use as a screening test, stand-alone diagnostic test, or as a test to determine whether or not to proceed with surgery.

The OVA1 and ROMA tests have both been analytically validated and clinical performance has been reported in prospective multicenter clinical studies. Changes in the observed sensitivity and negative predictive value of testing compared with clinical assessment has been small and of uncertain diagnostic value. Studies on the diagnostic accuracy of these tests compared with other diagnostic tools have had mixed findings, but do not report that ROMA is superior to other risk prediction tools that use standard clinical information or single markers. No studies have been performed that directly evaluated the impact on patient management eg, referral patterns, and no studies have evaluated the impact on health outcomes. Clinical input from academic medical centers and specialty societies did not show consensus that this test improved outcomes when used as a tool to triage patients with adnexal masses. As a result of the evidence and clinical input, these tests are considered not medically necessary because there is insufficient peer-reviewed literature that demonstrates that the service is effective.

CODING

BlueCHiP for Medicare and Commercial products

The following services are considered not medically necessary:
81500 **81503**

RELATED POLICIES

None

PUBLISHED

Provider Update, 2015
Provider Update, December, 2013

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