

## Medical Coverage Policy | Serum Tumor Markers for Breast and Gastrointestinal Malignancies



**EFFECTIVE DATE:** 09|26|2003

**POLICY LAST UPDATED:** 10|16|2018

### OVERVIEW

This policy addresses the coverage for tumor markers only when utilized for the management of cancerous conditions. Tumor markers are substances produced in low quantities by tumor cells or other cells of the body in response to the presence of cancer or certain benign conditions.

### MEDICAL CRITERIA

Not applicable

### PRIOR AUTHORIZATION

Not applicable

### POLICY STATEMENT

#### BlueCHiP for Medicare and Commercial Products

The noted immunoassay tests for tumor antigens CA 15-3 (CA 27.29) or CA 19-9 are covered when filed with a covered diagnosis.

#### BlueCHiP for Medicare

Immunoassay test for tumor antigen, other antigen (e.g., CA 50, 72-4, 549) is not covered as the evidence is insufficient to determine the effects of the technology on health outcomes.

#### Commercial Products

Immunoassay test for tumor antigen, other antigen (e.g., CA 50, 72-4, 549) is considered not medically necessary as the evidence is insufficient to determine the effects of the technology on health outcomes.

### COVERAGE

Benefits may vary between groups and contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage or Subscriber Agreement for applicable not medically necessary/not covered benefits/coverage.

### BACKGROUND

Serum tumor markers are molecules or substances shed by a tumor into the circulation where they can be detected and quantitated. Noncirculating tumor markers include those that can be detected histochemically or cytogenetically on a tissue sample. Examples of the latter include the HER2 oncoprotein, detected by immunohistochemistry on a subset of breast cancers, and the Philadelphia chromosome, which is a cytogenetic marker for chronic myelogenous leukemia.

Serum tumor markers have been investigated in many malignancies, including most prominently myeloma (i.e.,  $\beta$ 2-microglobulin), germ cell tumors (i.e., alpha fetoprotein, human chorionic gonadotropin), and prostate cancer (i.e., PSA). The HER2 oncoprotein extracellular domain has been studied as a serum tumor marker in breast and other malignancies. Carcinoembryonic antigen (CEA) has also been widely investigated in gastrointestinal malignancies. This policy focuses on specific tumor markers for breast and gastrointestinal malignancies.

For breast cancer, the most extensively investigated serum tumor markers besides HER2 are those associated with the MUC-1 gene. For gastrointestinal cancer, including gastric, pancreatic, and colorectal cancer, the

most extensively studied tumor markers, other than CEA, are those related to mucinous glycoproteins. The MUC-1 gene encodes a cell-associated mucin-like antigen, and different antibodies may be used to detect different epitopes. CA 15-3 and CA 27.29 are two related monoclonal antibodies that detect epitopes encoded by the MUC-1 gene. While much of the literature has focused on the use of CA 15-3, it has been largely replaced by CA 27.29, which is reportedly more sensitive. The mucinous glycoproteins of the gastrointestinal tract include CA 19-9, and CA 72-4, depending on which antibody is used.

Since serum tumor markers can also be detected in normal or benign lesions, significantly elevated circulating levels may occur with malignancy by one or more of the following mechanisms: (1) overexpression of the antigen by malignant cells; (2) a large tumor burden; and/or (3) slower clearance of the marker. For example, since most tumor markers are cleared by the liver, liver abnormalities (whether benign, malignant, or inflammatory) may elevate tumor marker concentrations due to impaired clearance. Because most tumor markers are not unique to malignancy, cut-off points must be established for normal versus abnormal marker levels. In contrast, serial monitoring of serum tumor markers in a setting of established malignancy may not require such cutoff points. Various clinical applications of serum tumor markers can be broadly divided into 2 categories, those involving a single measurement and those involving serial measurements.

Measurement of serum tumor marker CA 72-4 is considered not medically necessary as a technique to diagnose, determine prognosis, select therapy, assess response to therapy, or monitor for recurrence of either breast or gastrointestinal malignancies. Gastrointestinal malignancies include gastric, pancreatic, and colorectal cancer. Therefore, this test is not covered for BlueCHiP for Medicare and not medically necessary for Commercial products.

## **CODING**

### **BlueCHiP for Medicare and Commercial Products**

The following immunoassay tests are covered with one of the diagnosis codes below:

**86300** Immunoassay for tumor antigen, quantitative; CA 15-3 (CA 27.29)

Diagnosis codes covered for CPT code 86300: C50.011-C50.929; C79.2, C79.81, G89.3, R97.8, Z85.3

**86301** Immunoassay for tumor antigen, quantitative; CA 19-9

Diagnosis codes covered for CPT code 86301: C22.1, C23, C24.0-C25.9, C78.7-C78.89, D37.6-D37.9, G89.3, M33.03, M33.13, M33.93, R97.8, Z85.068, Z85.07-Z85.09

The following immunoassay test is not covered for BlueCHiP for Medicare and not medically necessary for Commercial Products:

**86316** Immunoassay for tumor antigen, other antigen, quantitative (eg, CA 50, 72-4, 549), each

## **RELATED POLICIES**

BlueCHiP for Medicare National and Local Coverage Determinations Policy

## **PUBLISHED**

Provider Update, January 2019

Provider Update, November 2017

Provider Update, February 2017

Provider Update, May 2016

Provider Update, December 2014

Provider Update, July 2013

## **REFERENCES**

1. Centers for Medicare and Medicaid Services. NCD for Tumor Antigen by Immunoassay - CA 15-3/CA 27.29 (190.29). <https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=134&ncdver=1&DocID=190.29&bc=gAAAABAAAAAAAAAA%3d%3d&>

2. Centers for Medicare and Medicaid Services. NCD for Tumor Antigen by IMMUNOASSAY - CA 19-9 (190.30). <https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=142&ncdver=1&DocID=190.30&bc=gAAAAABAAAAAAAAA%3d%3d&>

**CLICK THE ENVELOPE ICON BELOW TO SUBMIT COMMENTS**

This medical policy is made available to you for informational purposes only. It is not a guarantee of payment or a substitute for your medical judgment in the treatment of your patients. Benefits and eligibility are determined by the member's subscriber agreement or member certificate and/or the employer agreement, and those documents will supersede the provisions of this medical policy. For information on member-specific benefits, call the provider call center. If you provide services to a member which are determined to not be medically necessary (or in some cases medically necessary services which are non-covered benefits), you may not charge the member for the services unless you have informed the member and they have agreed in writing in advance to continue with the treatment at their own expense. Please refer to your participation agreement(s) for the applicable provisions. This policy is current at the time of publication; however, medical practices, technology, and knowledge are constantly changing. BCBSRI reserves the right to review and revise this policy for any reason and at any time, with or without notice. Blue Cross & Blue Shield of Rhode Island is an independent licensee of the Blue Cross and Blue Shield Association.

