

Serum Tumor Markers in the Management of Malignancies



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This Medical Policy document describes the status of medical technology at the time the document was developed. Since that time, new technology may have emerged, or new medical literature may have been published. This Medical Policy will be reviewed regularly and be updated as scientific and medical literature becomes available; therefore, policies are subject to change without notice.

DESCRIPTION

Tumor markers are substances normally produced by cancer or by other cells in the body in response to cancer, or certain benign (noncancerous) conditions. Most tumor markers are made by normal cells but are produced at a much higher level in the presence of cancer. Tumor markers may be found in the blood, plasma, other bodily fluids (e.g., urine, saliva, cerebrospinal fluid) and/or tissue. Although an abnormal tumor marker level may suggest cancer, their presence alone does not confirm a diagnosis. Tumor markers are typically combined with other diagnostic studies (e.g., laboratory tests, biopsy, radiological imaging) to confirm the diagnosis. These markers may not be elevated in the presence of some diseases or cancers, especially in early stages of the disease, they may not be specific to a particular type of disease or cancer, and/or they may be elevated by more than one type of disease or cancer.

In some types of cancers, tumor marker levels may reflect the extent or stage of the disease and can be useful in determining the most effective treatment and how the disease will respond to the treatment. Typically, the primary use of tumor markers is to monitor a cancer's response to treatment with periodic measurements following therapy. Following therapy, a decrease in the marker level may indicate a response to therapy as opposed to consistently elevated or rising marker levels which may be indicative of lack of response to treatment or recurrence of the disease. The evidence in the published peer reviewed literature and professional societies support tumor markers for the diagnosis and management of some cancers, while other tumor markers are still evolving, and their clinical utility has not been proven.

Summary

Recommendations and guidelines by professional societies and organizations and evidence in the published peer reviewed scientific literature support the use of defined tumor markers for the diagnosis, treatment planning, treatment monitoring and/or follow up of specific cancers. The evidence is sufficient to determine that the technology results in a meaningful improvement in net health outcomes.

However, improvements in meaningful health outcomes for numerous other tumor markers have not been proven and they are still under investigation to determine their clinical utility in the management of individuals with various types of cancers. Overall, clinical trials have primarily been in the form of retrospective validation studies with small heterogeneous patient populations and short- term follow ups. Studies comparing the tumor markers to established treatment options are lacking and management of patients based on the results of these markers have not been published. The evidence is insufficient to determine the effects of the technology on net health outcomes.

Practice Guidelines and Position Statements

The American College of Obstetricians and Gynecologists (ACOG)

In 2011 (reaffirmed in 2019), the American College of Obstetricians and Gynecologists (ACOG), issued a committee opinion Number 716 (replaces Committee Opinion Number 477), role of the obstetrician-gynecologist in the early detection of epithelial ovarian cancer which included the following recommendations:

- Currently, there is no strategy for early detection of ovarian cancer that reduces ovarian cancer mortality.
- The use of transvaginal ultrasonography and tumor markers (such as CA 125), alone or in combination, for the early detection of ovarian cancer in average-risk women have not been proved to reduce mortality, and harms exist from invasive diagnostic testing (e.g., surgery) resulting from false-positive test results.
- Epithelial ovarian cancer is most commonly detected in an advanced stage (65% of cases are stage III or stage IV) when the *cure rate* is only 18%.
- Early stage (localized) ovarian cancer is associated with improved survival.

- Taking a detailed personal and family history for breast, gynecologic, and colon cancer facilitates categorizing women based on their risk (average risk or high risk) of developing epithelial ovarian cancer.
- The patient and her obstetrician–gynecologist should maintain an appropriate level of suspicion when potentially relevant signs and symptoms of ovarian cancer are present.

American Society of Clinical Oncology (ASCO)

In 2012, the American Society of Clinical Oncology (ASCO) issued a clinical practice update on breast cancer follow-up and management after primary treatment which included the following recommendation:

Recommendations for Breast Cancer Follow-Up and Management in Adjuvant Setting: Not Recommended:

- The use of CA 15-3 or CA 27.29 is not recommended for routine surveillance of patients with breast cancer after primary therapy.
- CEA testing is not recommended for routine surveillance of patients with breast cancer after primary therapy.

In 2015, the American Society of Clinical Oncology (ASCO) a clinical practice guideline, use of biomarkers to guide decisions on systemic therapy for women with metastatic breast cancer, to include the following recommendation:

- CEA, CA 15-3 and CA 27.29 may be used as adjuvant assessments to contribute to decisions regarding therapy for metastatic breast cancer. Data are insufficient to recommend use of CEA, CA 15-3, and CA 27-29 alone for monitoring response to treatment. The recommendation for use is based on clinical experience and Panel informal consensus in the absence of studies designed to evaluate the clinical utility of markers. As such, it is also reasonable for clinicians to not use these markers as adjunctive assessments. (Type: informal consensus. Evidence quality: insufficient. Strength of recommendation: moderate)

National Comprehensive Cancer Network (NCCN)

Anal Carcinoma Version 2.2022
Per the current NCCN guideline no tumor markers are indicated at this time for the diagnosis and/or management of anal carcinoma.

Breast Cancer Version 4.2022
Principles of Monitoring Metastatic Disease
Findings Concerning for Progression of Disease Include: Increasing Tumor Markers
(CEA, CA 15-3, CA 27.29)

Baseline Prior to New Therapy	Chemotherapy	Endocrine Therapy	Restaging if Concern for Progression of Disease
As clinically indicated	As clinically indicated	As clinically indicated	As clinically indicated
<p>Rising tumor markers (e.g. CEA, CA 15-3, C 27.29) are concerning for tumor progression, but may also be seen in setting of responding disease. An isolated increase in tumor markers should rarely be used to declare progression of disease. Changes in bone lesion are often difficult to assess on plain or cross – sectional radiology or bone scan. For these reasons, patient symptoms and serum tumor markers may be more helpful in patients with bone-dominant metastatic disease.</p> <p>Monitoring the treatment of metastatic breast cancer involves a wide array of assessments and the need for clinician to integrate several different forms of information to make a determination of the effectiveness of treatment and the acceptability of toxicity. The information includes those from direct observations of the patient, including patient reported symptoms, performance status, change in weight, and physical examination; laboratory tests such as alkaline phosphatase, liver function, blood counts, and calcium; radiographic imaging; functional imaging; and where appropriate, tumor biomarkers.</p>			

Genetic/Familial High- Risk Assessment: Breast, Ovarian and Pancreatic Cancer Version 2.2022 BRCA-Related Breast and/or Ovarian Cancer Syndrome Serum Tumor Marker (CA-125)	
Clinical Presentation	Work-up
<p>BRCA Pathogenic/Likely Pathogenic Variant-Positive Management</p> <p>Ovarian Cancer</p> <ul style="list-style-type: none"> Recommend risk reduction salpingo-oophorectomy (RRSO) typically between 35 and 40 years, and upon completion of child-bearing. Because ovarian cancer onset in patients with BRCA2 pathogenic/likely pathogenic variants is an average of 8-10 years later than in patients with BRCA1 pathogenic/likely pathogenic variants, it is reasonable to delay RRSO until age 40-45 years in 	<p>For those patients who have not elected risk reduction salpingo-oophorectomy (RRSO), transvaginal ultrasound combined with serum CA-125 for ovarian cancer screening, although of uncertain benefit, may be considered at the clinician’s discretion at age 30-35 years</p>

patients with BRCA2 pathogenic/likely pathogenic variants unless age at diagnosis in the family warrants earlier age consideration of prophylactic surgery.	
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Colon Cancer Version 1.2022	
Serum Tumor Marker (CEA)	
Clinical Presentation	Work-up
Pedunculated or sessile polyp (adenoma) with invasive cancer	Work-up shows the following findings: Fragmented specimen or margin cannot be assessed or unfavorable histologic features Consider CBC, chemistry profile, CEA
Colon cancer appropriate for resection (non-metastatic)	CEA as part of the work-up
Suspected or proven metastatic synchronous adenocarcinoma (any T, any N, M1)	CEA as part of the work-up

Surveillance

Pathologic Stage	Surveillance
Stage II, III	CEA every 3-6 months for 2 years, then every 6 months for a total of 5 years
Stage IV	CEA every 3-6 months x2 years, then every 6 months for a total of 5 years

Routine CEA monitoring and routine CT scanning are not recommended beyond 5 years.

Rectal Cancer Version 1.2022	
Serum Tumor Marker (CEA)	
Clinical Presentation	Work-up and Surveillance
Pedunculated polyp or Sessile polyp (adenoma) with invasive cancer: <ul style="list-style-type: none"> Fragmented specimen or margin cannot be assessed or unfavorable histologic features 	CEA as part of work-up

Rectal cancer appropriate for resection	CEA as part of the work-up
Suspected or proven metastatic synchronous adenocarcinoma (T any, N any, M1)	Work-up includes CEA

Surveillance

Pathologic Stage	Surveillance
Stage II-IV	CEA every 3-6 months for 2 years then every 6 months for total of 5 years

Routine CEA monitoring and routine CT scanning are not recommended beyond 5 years.

Ovarian Cancer Version 3.2022	
Epithelial Ovarian Cancer/Fallopian Tube Cancer/Primary Peritoneal Cancer	
Serum Tumor Marker (CA-125 and CEA)	
Clinical Presentation	Work-up, Receiving Primary Chemotherapy, After Primary Treatment and Surveillance
<ul style="list-style-type: none"> Suspicious/palpable pelvic mass detected on abdominal/pelvic exam and or ascites abdominal distention, and/or Symptoms without source of malignancy i.e. bloating, pelvic or abdominal pain, difficulty eating or feeling full quickly, or urinary symptoms (urgency or frequency) 	<p>CA-125 or other tumor makers as clinically indicated</p> <p>Other tumor markers may include inhibin, beta-human chorionic gonadotropin (B-hCG), alpha-fetoprotein, lactate dehydrogenase (LDH), carcinoembryonic antigen (CEA), and CA 19-9</p>
Newly diagnosis ovarian cancer after recent surgical procedure	<p>CA-125 or other tumor makers as clinically indicated</p> <p>Other tumor markers may include inhibin, beta-human chorionic gonadotropin (B-hCG), alpha-fetoprotein, lactate dehydrogenase (LDH), carcinoembryonic antigen (CEA), and CA 19-9</p>
Stage I, II, III and IV after primary treatment	<p>Monitoring and follow-up: CA-125 or other tumor markers if initially elevated</p> <p>Other tumor markers may include inhibin, beta-human chorionic gonadotropin (B-hCG), alpha-</p>

	fetoprotein, lactate dehydrogenase (LDH), carcinoembryonic antigen (CEA), and CA 19-9
Borderline Epithelial Ovarian Tumors (low malignant potential)	Monitoring and Follow-up: CA-125 or other tumor markers every visit if initially elevated Other tumor markers may include inhibin, beta-human chorionic gonadotropin (B-hCG), alpha-fetoprotein, lactate dehydrogenase (LDH), carcinoembryonic antigen (CEA), and CA 19-9
Less Common Ovarian Histopathologies (malignant germ cell neoplasms and malignant sex cord stromal tumors)	See below chart
Mucinous Carcinoma of the Ovary	Additional work-up: CEA, CA 19-9

Ovarian Cancer Version 3.2022
Epithelial Ovarian Cancer/Fallopian Tube Cancer/Primary Peritoneal Cancer

Serum Tumor Marker Surveillance for Malignant Germ Cell and Sex Cord Stromal Tumors

Malignant Germ Cell Tumors

	Year 1	Year 2	Year 3	Years 4-5	Year 5
Dysgerminoma	Physical exam and serum tumor markers (CA-125; as clinically indicated CEA and CA 19-9) every 2-3 months	Physical exam and serum tumor markers (CA-125; as clinically indicated CEA and CA 19-9) every 3-4 months	Physical exam and serum tumor markers (CA-125; as clinically indicated CEA and CA 19-9) every 6 months	Physical exam and serum tumor markers (CA-125; as clinically indicated CEA and CA 19-9) every 6 months	Physical exam and serum tumor markers (CA-125; as clinically indicated CEA and CA 19-9) annually
Non-dysgerminoma	Physical exam and serum tumor markers (CA-125;	Physical exam and serum tumor markers (CA-125;	Physical exam and serum tumor markers (CA-125;	Physical exam and serum tumor markers (CA-125;	Physical exam and serum tumor markers (CA-125;

	as clinically indicated CEA and CA 19-9) every 2 months	as clinically indicated CEA and CA 19-9) every 2 months	as clinically indicated CEA and CA 19-9) every 4-6 months	as clinically indicated CEA and CA 19-9) every 6 months	as clinically indicated CEA and CA 19-9) annually
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Malignant Sex-Cord Stromal Tumors

	0-2 Years	After 2 Years
Serum Tumor Markers	<p>Serum tumor markers as clinically indicated, if applicable (CA-125, CEA and CA 19-9)</p> <p>If done frequency based on stage (i.e. 6-12 months if early stage, low risk disease; 4-6 months if high risk disease)</p>	<p>Serum tumor markers as clinically indicated, if applicable (CA-125, CEA and CA 19-9)</p> <p>If done frequency based on stage (i.e. 6-12 months if early stage, low risk disease; 4-6 months if high risk disease)</p>

Uterine Neoplasms Version 1.2022 Endometrial Carcinoma (Serum Tumor Marker CA-125)	
Clinical Presentation	Work-up and Surveillance
Suspected extrauterine disease (endometrioid histology)	<p>Work-Up</p> <ul style="list-style-type: none"> • Consider CA-125 <p>Surveillance CA-125 if initially elevated</p>
<p>Biopsy Findings:</p> <ul style="list-style-type: none"> • Serous carcinoma; or • Clear cell carcinoma; or • Undifferentiated/dedifferentiated carcinoma; or • Carcinosarcoma 	<p>Additional Work-Up</p> <ul style="list-style-type: none"> • Consider CA-125

Pancreatic Adenocarcinoma Version 1.2022 Serum Tumor Marker (CA 19-9)	
Clinical Presentation	Work-up, Monitoring and Surveillance
Clinical suspicion of pancreatic cancer or evidence of dilated pancreatic and/or bile duct (stricture) - No metastatic disease on physical exam and imaging	Baseline CA 19-9 after adequate biliary drainage

Resectable disease	Post treatment CA 19-9
Borderline resectable disease no metastases	Work-up <ul style="list-style-type: none"> Baseline CA 19-9 Biopsy Positive <ul style="list-style-type: none"> Post Treatment CA 19.9
Post-operative adjuvant treatment	Baseline postoperative CA 19-9 if not previously done Surveillance <ul style="list-style-type: none"> Every 3-6 -months for 2- years, then every 6- 12-months as clinically indicated CA 19-9 (category 2B)

Hepatobiliary Cancers Version 2.2022 Serum Tumor Markers (CEA and CA 19-9)	
Clinical Presentation	Workup
Hepatocellular Carcinoma	Indicators for consideration of biopsy which may include: Initial biopsy <ul style="list-style-type: none"> Lesion meets imaging criteria for HCC: Patient has elevated CA 19-9 or carcinoembryonic antigen (CEA) with suspicion of intrahepatic cholangiocarcinoma or cHCC-CCA
Biliary Tract Cancers: Intrahepatic Cholangiocarcinoma – isolated intrahepatic mass (imaging characteristics consistent with malignancy but not consistent with hepatocellular carcinoma)	Work-up: Consider CEA and CA 19-9 Footnote: CEA and CA 19-9 are baseline tests and should not be done to confirm diagnosis.
Biliary Tract Cancers: Extrahepatic Cholangiocarcinoma – presentation includes any of the following: pain, jaundice, abnormal LFT’s, obstruction or abnormality on imaging	Work-up: Consider CEA and CA 19-9 Footnote: CEA and CA 19-9 are baseline tests and should not be done to confirm diagnosis.
Biliary Tract Caners: Gallbladder Cancer Presentation	

<ul style="list-style-type: none"> • Mass on imaging • Jaundice 	<p>Work-up consider CEA and CA 19-9</p> <p>Footnote: CEA and CA 19-9 are baseline tests and should not be done to confirm diagnosis</p>
Post resection status	Surveillance consider CEA and CA 19-9 as clinically indicated

Occult Primary Version 1.2023	
Localized Adenocarcinoma or Carcinoma not Otherwise Specified Serum Tumor Markers (CA-125 and CA 19-9)	
Clinical Presentation	Workup
Localized adenocarcinoma or carcinoma not otherwise specified, chest (multiple nodules) or pleural effusion	Additional workup for women – CA-125
Localized adenocarcinoma or carcinoma not otherwise specified, peritoneal/ascites	Additional workup for women – CA-125
Localized adenocarcinoma or carcinoma not otherwise specified, retroperitoneal mass	Additional workup for women – CA-125
Localized adenocarcinoma or carcinoma not otherwise specified, inguinal nodes	Additional workup for women – CA-125

Thyroid Carcinoma Version 2.2022	
Medullary Carcinoma Serum Tumor Marker (CEA)	
Clinical Presentation	Work-up and Surveillance
Clinical Presentation: Medullary thyroid carcinoma on FNA	Diagnostic procedures include CEA
Clinical Presentation: Medullary thyroid carcinoma diagnosed after initial thyroid surgery	Additional work-up includes CEA
Clinical Presentation: Germline mutation of RET proto-oncogene – MEN 2B (RET mutations)	Additional work- up includes CEA
Clinical Presentation: Germline mutation of RET proto-oncogene – MEN	Additional work- up includes CEA

2A/Familial medullary thyroid carcinoma (FMTC) (RET mutations)	
Management 2-3 months postoperative: Disease Monitoring	<ul style="list-style-type: none"> • Detectable basal calcitonin or elevated CEA: if imaging is negative and asymptomatic <ul style="list-style-type: none"> ▪ Serum calcitonin, CEA every 6-12 months • Basal calcitonin undetectable and CEA within reference range; active surveillance <ul style="list-style-type: none"> ▪ Annual serum calcitonin and CEA

Neuroendocrine and Adrenal Tumors Version 1.2022	
Serum Tumor Markers (Chromogranin A (CgA) and 24- Hour Urine or plasma 5-HIAA)	
Clinical Presentation	Work-up and Surveillance
<p>Neuroendocrine tumor of the gastrointestinal tract (jejunal/ileal/colon; duodenal; appendix; rectal; gastric), lungs (bronchopulmonary) and thymus (carcinoid tumors)</p> <p>Clinical symptoms</p> <ul style="list-style-type: none"> • Primary tumors in the GI tract usually are not associated with symptoms of hormone secretion unless extensive metastasis • Symptoms of hormone secretion may include flushing, diarrhea, cardiac valvular fibrosis and bronchoconstriction • Bronchial/thymic tumors may be associated with classic carcinoid syndrome as well as Cushing’s syndrome 	<ul style="list-style-type: none"> • Initial evaluation includes chromogranin A (CgA) and 24-hour urine or plasma 5-HIAA • Surveillance: Chromogranin A (CgA) and 24- hour urine or plasma 5-HIAA <ul style="list-style-type: none"> ▪ 12 weeks-12 months post-resection – as clinically indicated ▪ >1 year post-resection to a maximum of 10 -years, every 12-24 months consider as clinically indicated
Pancreatic neuroendocrine tumor (PanNET)	Chromogranin A (CgA)
Carcinoid Syndrome	Biochemical evaluation with 24- hour urine or plasma 5-HIAA

Non-Small Cell Lung Cancer Version 3.2022	
Serum Tumor Marker (CEA)	
Clinical Presentation	Work-up
The distinction between pulmonary adenocarcinoma and malignant mesothelioma (epithelial type) can be made by correlation of the histology with the clinical impression, imaging studies, and a limited panel of immunomarkers if needed	Immunostains sensitive and specific for pulmonary adenocarcinoma include pCEA

Small Bowel Adenocarcinoma Version 1.2022	
Serum Tumor Marker (CA 19-9 and CEA)	
Clinical Presentation	Work-up and Surveillance
Duodenum	Work-up: CA 19-9 and CEA Surveillance: CEA and/or CA 19-9 every 3-6 months for 2 years then every 6 months for a total of 5 years
Jejunum/Ileum	Work-up: CA 19-9 and CEA Surveillance: CEA and /or CA 19-9 every 3-6 months for 2 years then every 6 months for a total of 5 years
Metastatic adenocarcinoma	Work-up: CA 19-9 and CEA

PRIOR APPROVAL

Not applicable.

POLICY

See related medical policies

- [02.04.59 Gene Expression Profiling for the Management of Breast Cancer](#)
- [02.04.65 Molecular Markers in Fine Needle Aspirates of the Thyroid](#)
- [02.04.45 Multimarker Serum Testing Related to Ovarian Cancer](#)

Measurement of the following tumor markers are considered **medically necessary** for the indications listed below when the measurement of these tumor markers may be used to

influence the management of patients, and these management changes will result in an improvement in patient outcomes:

Tumor Marker	Condition(s)
Carcinoembryonic Antigen (CEA)_ (82378)	<ul style="list-style-type: none"> • Metastatic Breast Cancer • Colon and Rectal Cancer • Biliary Tract Cancers including: <ul style="list-style-type: none"> ▪ Intrahepatic Cholangiocarcinoma ▪ Extrahepatic Cholangiocarcinoma ▪ Gallbladder Cancer • Medullary Thyroid Carcinoma • Pseudomyxoma peritonei/mucinous carcinoma of the ovary • Lung cancer • Mucinous appendiceal carcinoma • Small bowel adenocarcinoma • Ovarian cancer
Cancer Antigen 125 (CA-125) (86304)	<ul style="list-style-type: none"> • Primary Peritoneal Cancer • Ovarian cancer • Ovarian cancer screening in asymptomatic women when there is a family history of hereditary ovarian cancer syndrome (a pattern of clusters of ovarian cancer within two or more generations) where testing is performed concurrently with vaginal ultrasound and prophylactic/risk reducing salpingo-oophorectomy (RRSO) has not been performed, may be considered as an additional screening test at the clinician's discretion starting at age 30 years of age or 10 years before earliest age of first diagnosis of ovarian cancer in family. • Evaluation of pelvic mass • Endometrial cancer • Occult primary: localized adenocarcinoma or carcinoma not

	<p>otherwise specified for any of the following clinical presentations:</p> <ul style="list-style-type: none"> ▪ Chest (multiple nodules or pleural effusion) in women ▪ Peritoneal/Ascites in women ▪ Retroperitoneal mass in women ▪ Inguinal nodes in women
CA 19-9 (86301)	<ul style="list-style-type: none"> • Pancreatic Cancer • Biliary Tract Cancers including: <ul style="list-style-type: none"> ▪ Intrahepatic Cholangiocarcinoma ▪ Extrahepatic Cholangiocarcinoma ▪ Gallbladder Cancer • To aid in the detection of cholangiocarcinoma in patients with primary sclerosing cholangitis • Gastric cancer • Pseudomyxoma peritonei/mucinous carcinoma of ovary • Ovarian Cancer • Small bowel adenocarcinoma
CA 15-3 and CA 27.29 (86300)	<ul style="list-style-type: none"> • Metastatic Breast Cancer
5-HIAA (5 Hydroxyindoleacetic Acid) (24-hour urine) (83497)	<ul style="list-style-type: none"> • Neuroendocrine Tumors • Carcinoid syndrome
Chromogranin A (CgA) (86316)	<ul style="list-style-type: none"> • Neuroendocrine Tumors

Tumor markers not meeting the above medical necessity criteria will be considered **not medically necessary** as they have not been proven to be effective.

Measurement of the serum tumor markers including but not limited to the following are considered **investigational**:

- Ova-1 (CA-125, apolipoprotein A1, beta 2 microglobulin transferin and pre-albumin) and ROMA (CA-125 and HE4)
- Human epididymis protein (HE4)
- A2-PAG (pregnancy associated alpha2 glycoprotein)
- BCM (breast cancer mucin)

- CAM 17-1 (antimucin monoclonal antibody)
- CAM-26 (carcinoma associated mucin antigen)
- CAM-29 (carcinoma associated mucin antigen)
- MCA (mucinous carcinoma associated antigen)
- TPA (tissue polypeptide antigen)
- TPS (tissue polypeptide specific antigen)
- CA 72-4 (cancer antigen 72-4)
- CA-50 (cancer antigen 50)
- CA-242 (cancer antigen 242)
- CA-195 (cancer antigen 195)
- CA-549 (cancer antigen 549)
- CA-SCC (squamous cell carcinoma antigen)
- CAR-3 (antigenic determinant recognized by monoclonal antibody AR-3)
- DMSA (pentavalent technetium-99m dimercaptosuccinic acid)
- NSE (neuron specific enolase)
- Du-PAN-2 (sialylated carbohydrate antigen)
- EPCA-2 (early prostate cancer antigen)
- TAG-12 (tumor associated glycoprotein 12)
- TAG 72 (tumor associated glycoprotein 72)
- TAG-72-3 (tumor associated glycoprotein 72-3)
- TNF-alpha (TNF-a) (tumor necrosis factor alpha)
- TATI (tumor associated trypsin inhibitor)
- P-LAP (placental alkaline phosphatase)
- PNA-ELLA (peanut lectin bonding assay)
- P53 (monoclonal antibody)
- SLEX (sialylated Lewis-X antigen)
- SLX (sialylated SSEA-1 antigen)
- SPAN-1 (sialylated carbonated antigen SPAN-1)

Recommendations and guidelines by professional societies and organizations and evidence in the published peer reviewed scientific literature support the use of defined tumor markers for the diagnosis, treatment planning, treatment monitoring and/or follow up of specific cancers. However, based on the peer reviewed medical literature, improvements in meaningful health outcomes have not been proven for the above tumor markers and are still under investigation to determine their clinical utility in the management of individuals with various types of cancers. Studies comparing the tumor markers to established treatment options are lacking and management of patients based on the results of these markers have not been published and does not support that these markers having sufficient sensitivity or specificity to define their clinical role. The evidence is insufficient to determine the effects of this testing on net health outcomes.

PROCEDURE CODES AND BILLING GUIDELINES

To report provider services, use appropriate CPT* codes, Alpha Numeric (HCPCS level 2) codes, Revenue codes, and/or ICD diagnosis codes.

- 82378 Carcinoembryonic antigen (CEA)
- 83497 Hydroxyindolacetic acid 5-HIAA
- 86300 Immunoassay for tumor antigen, quantitative; CA 15-3 (27.29)
- 86301 Immunoassay for tumor antigen, quantitative; CA 19-9
- 86304 Immunoassay for tumor antigen, quantitative; CA 125
- 86316 Immunoassay for tumor antigen; other antigen, quantitative (eg, CA 50, 72-4, 549), each (this code is used for CgA)
- 86305: Human epididymis protein (HE4)
- 81479 Unlisted molecular pathology procedure
- 81599 Unlisted multi-analyte assay with algorithmic analysis
- 84999 Unlisted chemistry procedure

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POLICY HISTORY

Date	Reason	Action
August 2022	Annual Review	Policy Renewed
August 2021	Annual Review	Policy Revised
August 2020	Annual Review	Policy Revised
August 2019	Annual Review	Policy Revised
August 2018	Annual Review	Policy Revised
August 2017	Annual Review	Policy Revised
January 2017	Interim Review	Policy Revised
October 2016	Interim Review	Policy Revised
August 2016	Annual Review	Policy Revised
December 2015	Interim Review	Policy Revised

September 2015	Annual Review	Policy Revised
July 2015	Interim Review	Policy Revised
October 2014	Annual Review	Policy Revised
March 2014	Interim Review	Policy Revised
November 2013	Interim Review	Policy Revised
October 2013	Annual Review	Policy Revised
December 2012	Annual Review	Policy Renewed
December 2011	Annual Review	Policy Renewed
December 2010	Annual Review	Policy Revised

New information or technology that would be relevant for Wellmark to consider when this policy is next reviewed may be submitted to:

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