# 190.26 - Carcinoembryonic Antigen

#### Other Names/Abbreviations

**CEA** 

## **Description**

Carcinoembryonic antigen (CEA) is a protein polysaccharide found in some carcinomas. It is effective as a biochemical marker for monitoring the response of certain malignancies to therapy.

#### HCPCS Codes (Alphanumeric, CPT® AMA)

| Code  | Description                    |
|-------|--------------------------------|
| 82378 | Carcinoembryonic antigen (CEA) |

### ICD-10-CM Codes Covered by Medicare Program

The ICD-10-CM codes in the table below can be viewed on CMS' website as part of Downloads: Lab Code List, at

http://www.cms.gov/Medicare/Coverage/CoverageGenInfo/LabNCDsICD10.html

| Code  | Description   |
|-------|---|
| C15.3 | Malignant neoplasm of upper third of esophagus                  |
| C15.4 | Malignant neoplasm of middle third of esophagus                 |
| C15.5 | Malignant neoplasm of lower third of esophagus                  |
| C15.8 | Malignant neoplasm of overlapping sites of esophagus            |
| C15.9 | Malignant neoplasm of esophagus, unspecified                    |
| C16.0 | Malignant neoplasm of cardia                                    |
| C16.1 | Malignant neoplasm of fundus of stomach                         |
| C16.2 | Malignant neoplasm of body of stomach                           |
| C16.3 | Malignant neoplasm of pyloric antrum                            |
| C16.4 | Malignant neoplasm of pylorus                                   |
| C16.5 | Malignant neoplasm of lesser curvature of stomach, unspecified  |
| C16.6 | Malignant neoplasm of greater curvature of stomach, unspecified |
| C16.8 | Malignant neoplasm of overlapping sites of stomach              |
| C16.9 | Malignant neoplasm of stomach, unspecified                      |
| C17.0 | Malignant neoplasm of duodenum                                  |
| C17.1 | Malignant neoplasm of jejunum                                   |
| C17.2 | Malignant neoplasm of ileum                                     |
| C17.3 | Meckel's diverticulum, malignant                                |



| Code   | Description  |
|--------|--|
| C17.8  | Malignant neoplasm of overlapping sites of small intestine             |
| C17.9  | Malignant neoplasm of small intestine, unspecified                     |
| C18.0  | Malignant neoplasm of cecum  |
| C18.1  | Malignant neoplasm of appendix   |
| C18.2  | Malignant neoplasm of ascending colon                                  |
| C18.3  | Malignant neoplasm of hepatic flexure                                  |
| C18.4  | Malignant neoplasm of transverse colon                                 |
| C18.5  | Malignant neoplasm of splenic flexure                                  |
| C18.6  | Malignant neoplasm of descending colon                                 |
| C18.7  | Malignant neoplasm of sigmoid colon                                    |
| C18.8  | Malignant neoplasm of overlapping sites of colon                       |
| C18.9  | Malignant neoplasm of colon, unspecified                               |
| C19    | Malignant neoplasm of rectosigmoid junction                            |
| C20    | Malignant neoplasm of rectum   |
| C21.0  | Malignant neoplasm of anus, unspecified                                |
| C21.1  | Malignant neoplasm of anal canal                                       |
| C21.2  | Malignant neoplasm of cloacogenic zone                                 |
| C21.8  | Malignant neoplasm of overlapping sites of rectum, anus and anal canal |
| C25.0  | Malignant neoplasm of head of pancreas                                 |
| C25.1  | Malignant neoplasm of body of pancreas                                 |
| C25.2  | Malignant neoplasm of tail of pancreas                                 |
| C25.3  | Malignant neoplasm of pancreatic duct                                  |
| C25.4  | Malignant neoplasm of endocrine pancreas                               |
| C25.7  | Malignant neoplasm of other parts of pancreas                          |
| C25.8  | Malignant neoplasm of overlapping sites of pancreas                    |
| C25.9  | Malignant neoplasm of pancreas, unspecified                            |
| C26.0  | Malignant neoplasm of intestinal tract, part unspecified               |
| C33    | Malignant neoplasm of trachea  |
| C34.00 | Malignant neoplasm of unspecified main bronchus                        |
| C34.01 | Malignant neoplasm of right main bronchus                              |
| C34.02 | Malignant neoplasm of left main bronchus                               |
| C34.10 | Malignant neoplasm of upper lobe, unspecified bronchus or lung         |
| C34.11 | Malignant neoplasm of upper lobe, right bronchus or lung               |
| C34.12 | Malignant neoplasm of upper lobe, left bronchus or lung                |



| Code     | Description   |
|----------|---|
| C34.2    | Malignant neoplasm of middle lobe, bronchus or lung                       |
| C34.30   | Malignant neoplasm of lower lobe, unspecified bronchus or lung            |
| C34.31   | Malignant neoplasm of lower lobe, right bronchus or lung                  |
| C34.32   | Malignant neoplasm of lower lobe, left bronchus or lung                   |
| C34.80   | Malignant neoplasm of overlapping sites of unspecified bronchus and lung  |
| C34.81   | Malignant neoplasm of overlapping sites of right bronchus and lung        |
| C34.82   | Malignant neoplasm of overlapping sites of left bronchus and lung         |
| C34.90   | Malignant neoplasm of unspecified part of unspecified bronchus or lung    |
| C34.91   | Malignant neoplasm of unspecified part of right bronchus or lung          |
| C34.92   | Malignant neoplasm of unspecified part of left bronchus or lung           |
| C44.1321 | Sebaceous cell carcinoma of skin of right upper eyelid, including canthus |
| C44.1322 | Sebaceous cell carcinoma of skin of right lower eyelid, including canthus |
| C44.1391 | Sebaceous cell carcinoma of skin of left upper eyelid, including canthus  |
| C44.1392 | Sebaceous cell carcinoma of skin of left lower eyelid, including canthus  |
| C50.011  | Malignant neoplasm of nipple and areola, right female breast              |
| C50.012  | Malignant neoplasm of nipple and areola, left female breast               |
| C50.019  | Malignant neoplasm of nipple and areola, unspecified female breast        |
| C50.021  | Malignant neoplasm of nipple and areola, right male breast                |
| C50.022  | Malignant neoplasm of nipple and areola, left male breast                 |
| C50.029  | Malignant neoplasm of nipple and areola, unspecified male breast          |
| C50.111  | Malignant neoplasm of central portion of right female breast              |
| C50.112  | Malignant neoplasm of central portion of left female breast               |
| C50.119  | Malignant neoplasm of central portion of unspecified female breast        |
| C50.121  | Malignant neoplasm of central portion of right male breast                |
| C50.122  | Malignant neoplasm of central portion of left male breast                 |
| C50.129  | Malignant neoplasm of central portion of unspecified male breast          |
| C50.211  | Malignant neoplasm of upper-inner quadrant of right female breast         |
| C50.212  | Malignant neoplasm of upper-inner quadrant of left female breast          |
| C50.219  | Malignant neoplasm of upper-inner quadrant of unspecified female breast   |
| C50.221  | Malignant neoplasm of upper-inner quadrant of right male breast           |
| C50.222  | Malignant neoplasm of upper-inner quadrant of left male breast            |
| C50.229  | Malignant neoplasm of upper-inner quadrant of unspecified male breast     |
| C50.311  | Malignant neoplasm of lower-inner quadrant of right female breast         |
| C50.312  | Malignant neoplasm of lower-inner quadrant of left female breast          |



| Code    | Description   |
|---------|---|
| C50.319 | Malignant neoplasm of lower-inner quadrant of unspecified female breast |
| C50.321 | Malignant neoplasm of lower-inner quadrant of right male breast         |
| C50.322 | Malignant neoplasm of lower-inner quadrant of left male breast          |
| C50.329 | Malignant neoplasm of lower-inner quadrant of unspecified male breast   |
| C50.411 | Malignant neoplasm of upper-outer quadrant of right female breast       |
| C50.412 | Malignant neoplasm of upper-outer quadrant of left female breast        |
| C50.419 | Malignant neoplasm of upper-outer quadrant of unspecified female breast |
| C50.421 | Malignant neoplasm of upper-outer quadrant of right male breast         |
| C50.422 | Malignant neoplasm of upper-outer quadrant of left male breast          |
| C50.429 | Malignant neoplasm of upper-outer quadrant of unspecified male breast   |
| C50.511 | Malignant neoplasm of lower-outer quadrant of right female breast       |
| C50.512 | Malignant neoplasm of lower-outer quadrant of left female breast        |
| C50.519 | Malignant neoplasm of lower-outer quadrant of unspecified female breast |
| C50.521 | Malignant neoplasm of lower-outer quadrant of right male breast         |
| C50.522 | Malignant neoplasm of lower-outer quadrant of left male breast          |
| C50.529 | Malignant neoplasm of lower-outer quadrant of unspecified male breast   |
| C50.611 | Malignant neoplasm of axillary tail of right female breast              |
| C50.612 | Malignant neoplasm of axillary tail of left female breast               |
| C50.619 | Malignant neoplasm of axillary tail of unspecified female breast        |
| C50.621 | Malignant neoplasm of axillary tail of right male breast                |
| C50.622 | Malignant neoplasm of axillary tail of left male breast                 |
| C50.629 | Malignant neoplasm of axillary tail of unspecified male breast          |
| C50.811 | Malignant neoplasm of overlapping sites of right female breast          |
| C50.812 | Malignant neoplasm of overlapping sites of left female breast           |
| C50.819 | Malignant neoplasm of overlapping sites of unspecified female breast    |
| C50.821 | Malignant neoplasm of overlapping sites of right male breast            |
| C50.822 | Malignant neoplasm of overlapping sites of left male breast             |
| C50.829 | Malignant neoplasm of overlapping sites of unspecified male breast      |
| C50.911 | Malignant neoplasm of unspecified site of right female breast           |
| C50.912 | Malignant neoplasm of unspecified site of left female breast            |
| C50.919 | Malignant neoplasm of unspecified site of unspecified female breast     |
| C50.921 | Malignant neoplasm of unspecified site of right male breast             |
| C50.922 | Malignant neoplasm of unspecified site of left male breast              |
| C50.929 | Malignant neoplasm of unspecified site of unspecified male breast       |



| Code    | Description   |
|---------|---|
| C56.1   | Malignant neoplasm of right ovary                                     |
| C56.2   | Malignant neoplasm of left ovary                                      |
| C56.3   | Malignant neoplasm of bilateral ovaries                               |
| C56.9   | Malignant neoplasm of unspecified ovary                               |
| C78.00  | Secondary malignant neoplasm of unspecified lung                      |
| C78.01  | Secondary malignant neoplasm of right lung                            |
| C78.02  | Secondary malignant neoplasm of left lung                             |
| C78.4   | Secondary malignant neoplasm of small intestine                       |
| C78.5   | Secondary malignant neoplasm of large intestine and rectum            |
| C7A.00  | Malignant carcinoid tumor of unspecified site                         |
| C7A.010 | Malignant carcinoid tumor of the duodenum                             |
| C7A.011 | Malignant carcinoid tumor of the jejunum                              |
| C7A.012 | Malignant carcinoid tumor of the ileum                                |
| C7A.019 | Malignant carcinoid tumor of the small intestine, unspecified portion |
| C7A.020 | Malignant carcinoid tumor of the appendix                             |
| C7A.021 | Malignant carcinoid tumor of the cecum                                |
| C7A.022 | Malignant carcinoid tumor of the ascending colon                      |
| C7A.023 | Malignant carcinoid tumor of the transverse colon                     |
| C7A.024 | Malignant carcinoid tumor of the descending colon                     |
| C7A.025 | Malignant carcinoid tumor of the sigmoid colon                        |
| C7A.026 | Malignant carcinoid tumor of the rectum                               |
| C7A.029 | Malignant carcinoid tumor of the large intestine, unspecified portion |
| C7A.090 | Malignant carcinoid tumor of the bronchus and lung                    |
| C7A.091 | Malignant carcinoid tumor of the thymus                               |
| C7A.092 | Malignant carcinoid tumor of the stomach                              |
| C7A.093 | Malignant carcinoid tumor of the kidney                               |
| C7A.094 | Malignant carcinoid tumor of the foregut, unspecified                 |
| C7A.095 | Malignant carcinoid tumor of the midgut, unspecified                  |
| C7A.096 | Malignant carcinoid tumor of the hindgut, unspecified                 |
| C7A.098 | Malignant carcinoid tumors of other sites                             |
| C7B.00  | Secondary carcinoid tumors, unspecified site                          |
| C7B.01  | Secondary carcinoid tumors of distant lymph nodes                     |
| C7B.02  | Secondary carcinoid tumors of liver                                   |
| C7B.03  | Secondary carcinoid tumors of bone                                    |



| Code    | Description  |
|---------|--|
| C7B.04  | Secondary carcinoid tumors of peritoneum   |
| C7B.09  | Secondary carcinoid tumors of other sites  |
| C7B.1   | Secondary Merkel cell carcinoma  |
| C7B.8   | Other secondary neuroendocrine tumors  |
| D01.0   | Carcinoma in situ of colon   |
| D01.1   | Carcinoma in situ of rectosigmoid junction   |
| D01.2   | Carcinoma in situ of rectum  |
| D01.40  | Carcinoma in situ of unspecified part of intestine   |
| D01.49  | Carcinoma in situ of other parts of intestine  |
| D01.7   | Carcinoma in situ of other specified digestive organs  |
| D01.9   | Carcinoma in situ of digestive organ, unspecified  |
| D37.1   | Neoplasm of uncertain behavior of stomach  |
| D37.2   | Neoplasm of uncertain behavior of small intestine  |
| D37.3   | Neoplasm of uncertain behavior of appendix   |
| D37.4   | Neoplasm of uncertain behavior of colon  |
| D37.5   | Neoplasm of uncertain behavior of rectum   |
| G89.3   | Neoplasm related pain (acute) (chronic)  |
| R70.1   | Abnormal plasma viscosity  |
| R77.0   | Abnormality of albumin   |
| R77.1   | Abnormality of globulin  |
| R77.2   | Abnormality of alphafetoprotein  |
| R77.8   | Other specified abnormalities of plasma proteins   |
| R77.9   | Abnormality of plasma protein, unspecified   |
| R78.89  | Finding of other specified substances, not normally found in blood   |
| R78.9   | Finding of unspecified substance, not normally found in blood  |
| R79.89  | Other specified abnormal findings of blood chemistry   |
| R97.0   | Elevated carcinoembryonic antigen [CEA]  |
| R97.8   | Other abnormal tumor markers   |
| Z08     | Encounter for follow-up examination after completed treatment for malignant neoplasm                       |
| Z09     | Encounter for follow-up examination after completed treatment for conditions other than malignant neoplasm |
| Z85.00  | Personal history of malignant neoplasm of unspecified digestive organ                                      |
| Z85.038 | Personal history of other malignant neoplasm of large intestine  |
| Z85.048 | Personal history of other malignant neoplasm of rectum, rectosigmoid junction, and anus                    |



| Code    | Description  |
|---------|--|
| Z85.118 | Personal history of other malignant neoplasm of bronchus and lung              |
| Z85.3   | Personal history of malignant neoplasm of breast                               |
| Z85.43  | Personal history of malignant neoplasm of ovary                                |
| Z86.002 | Personal history of in-situ neoplasm of other and unspecified genital organs   |
| Z86.003 | Personal history of in-situ neoplasm of oral cavity, esophagus and stomach     |
| Z86.004 | Personal history of in-situ neoplasm of other and unspecified digestive organs |

#### **Indications**

CEA may be medically necessary for follow-up of patients with colorectal carcinoma. It would however only be medically necessary at treatment decision-making points. In some clinical situations (e.g. adenocarcinoma of the lung, small cell carcinoma of the lung, and some gastrointestinal carcinomas) when a more specific marker is not expressed by the tumor, CEA may be a medically necessary alternative marker for monitoring. Preoperative CEA may also be helpful in determining the post-operative adequacy of surgical resection and subsequent medical management. In general, a single tumor marker will suffice in following patients with colorectal carcinoma or other malignancies that express such tumor markers.

In following patients who have had treatment for colorectal carcinoma, ASCO guideline suggests that if resection of liver metastasis would be indicated, it is recommended that post-operative CEA testing be performed every two to three months in patients with initial stage II or stage III disease for at least two years after diagnosis.

For patients with metastatic solid tumors which express CEA, CEA may be measured at the start of the treatment and with subsequent treatment cycles to assess the tumor's response to therapy.

#### Limitations

Serum CEA determinations are generally not indicated more frequently than once per chemotherapy treatment cycle for patients with metastatic solid tumors which express CEA or every two months post-surgical treatment for patients who have had colorectal carcinoma. However, it may be proper to order the test more frequently in certain situations, for example, when there has been a significant change from prior CEA level or a significant change in patient status which could reflect disease progression or recurrence.

Testing with a diagnosis of an in situ carcinoma is not reasonably done more frequently than once, unless the result is abnormal, in which case the test may be repeated once.

#### ICD-10-CM Codes That Do Not Support Medical Necessity

Any ICD-10-CM code not listed in either of the ICD-10-CM covered or non-covered sections.

#### Sources of Information

Journal Clinical Oncol: 14(10:2843-2877), 1996

NCD 190.26

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Kim YH. Ajani JA. Ota DM. Lynch P. Roth JA. Value of serial carcinoembryonic antigen levels in patients with respectable adenocarcinoma of the esophagus and stomach Cancer. 75(2):451©6, 1995 Jan 15.