

190.34 - Fecal Occult Blood Test

Description

The Fecal Occult Blood Test (FOBT) detects the presence of trace amounts of blood in stool. The procedure is performed by testing one or several small samples of one, two or three different stool specimens.

This test may be performed with or without evidence of iron deficiency anemia, which may be related to gastrointestinal blood loss. The range of causes for blood loss include inflammatory causes, including acid-peptic disease, non-steroidal anti-inflammatory drug use, hiatal hernia, Crohn's disease, ulcerative colitis, gastroenteritis, and colon ulcers. It is also seen with infectious causes, including hookworm, strongyloides, ascariasis, tuberculosis, and enteroamebiasis. Vascular causes include angiodysplasia, hemangiomas, varices, blue rubber bleb nevus syndrome, and watermelon stomach. Tumors and neoplastic causes include lymphoma, leiomyosarcoma, lipomas, adenocarcinoma and primary and secondary metastases to the GI tract. Drugs such as nonsteroidal anti-inflammatory drugs also cause bleeding. There are extra gastrointestinal causes such as hemoptysis, epistaxis, and oropharyngeal bleeding. Artifactual causes include hematuria, and menstrual bleeding. In addition, there may be other causes such as coagulopathies, gastrostomy tubes or other appliances, factitial causes, and long distance running.

Three basic types of fecal hemoglobin assays exist, each directed at a different component of the hemoglobin molecule.

1. Immunoassays recognize antigenic sites on the globin portion and are least affected by diet or proximal gut bleeding, but the antigen may be destroyed by fecal flora.
2. The heme-porphyrin assay measures heme-derived porphyrin and is least influenced by enterocolic metabolism or fecal storage. This assay does not discriminate dietary from endogenous heme. The capacity to detect proximal gut bleeding reduces its specificity for colorectal cancer screening but makes it more useful for evaluating overall GI bleeding in case finding for iron deficiency anemia.
3. The guaiac-based test is the most widely used. It requires the peroxidase activity of an intact heme moiety to be reactive. Positivity rates fall with storage. Fecal hydration such as adding a drop of water increases the test reactivity but also increases false positivity.

Of these three tests, the guaiac-based test is the most sensitive for detecting lower bowel bleeding. Because of this sensitivity, it is advisable, when it is used for screening, to defer the guaiac-based test if other studies of the colon are performed prior to the test. Similarly, this test's sensitivity may result in a false positive if the patient has recently ingested meat. Both of these cautions are appropriate when the test is used for screening, but when appropriate indications are present, the test should be done despite its limitations.



**Medicare National Coverage Determinations (NCD)
Coding Policy Manual and Change Report (ICD-10-CM)**

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
82272	Blood, occult, by peroxidase activity (e.g., guaiac), qualitative, feces, 1-3 simultaneous determinations, performed for other than colorectal neoplasm screening

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
A02.0	Salmonella enteritis
A02.1	Salmonella sepsis
A03.0	Shigellosis due to Shigella dysenteriae
A03.1	Shigellosis due to Shigella flexneri
A03.2	Shigellosis due to Shigella boydii
A03.3	Shigellosis due to Shigella sonnei
A03.8	Other shigellosis
A03.9	Shigellosis, unspecified
A04.5	Campylobacter enteritis
A04.6	Enteritis due to Yersinia enterocolitica
A04.71	Enterocolitis due to Clostridium difficile, recurrent
A04.72	Enterocolitis due to Clostridium difficile, not specified as recurrent
A04.8	Other specified bacterial intestinal infections
A05.0	Foodborne staphylococcal intoxication
A05.1	Botulism food poisoning
A05.2	Foodborne Clostridium perfringens [Clostridium welchii] intoxication
A05.3	Foodborne Vibrio parahaemolyticus intoxication
A05.4	Foodborne Bacillus cereus intoxication
A05.5	Foodborne Vibrio vulnificus intoxication
A05.8	Other specified bacterial foodborne intoxications
A05.9	Bacterial foodborne intoxication, unspecified
A06.0	Acute amebic dysentery
A06.1	Chronic intestinal amebiasis
A06.2	Amebic nondysenteric colitis

Code	Description
A06.3	Ameboma of intestine
A06.4	Amebic liver abscess
A06.5	Amebic lung abscess
A06.6	Amebic brain abscess
A06.7	Cutaneous amebiasis
A06.81	Amebic cystitis
A06.82	Other amebic genitourinary infections
A06.89	Other amebic infections
A06.9	Amebiasis, unspecified
A07.0	Balantidiasis
A07.1	Giardiasis [lambliasis]
A07.2	Cryptosporidiosis
A07.3	Isosporiasis
A07.4	Cyclosporiasis
A07.8	Other specified protozoal intestinal diseases
A07.9	Protozoal intestinal disease, unspecified
A09	Infectious gastroenteritis and colitis, unspecified
A18.31	Tuberculous peritonitis
A18.32	Tuberculous enteritis
A18.39	Retroperitoneal tuberculosis
A18.83	Tuberculosis of digestive tract organs, not elsewhere classified
A52.74	Syphilis of liver and other viscera
A54.00	Gonococcal infection of lower genitourinary tract, unspecified
A54.02	Gonococcal vulvovaginitis, unspecified
A54.09	Other gonococcal infection of lower genitourinary tract
A54.1	Gonococcal infection of lower genitourinary tract with periurethral and accessory gland abscess
A54.6	Gonococcal infection of anus and rectum
A54.83	Gonococcal heart infection
B25.2	Cytomegaloviral pancreatitis
B68.0	Taenia solium taeniasis
B68.1	Taenia saginata taeniasis
B68.9	Taeniasis, unspecified
B69.0	Cysticercosis of central nervous system

Code	Description
B69.1	Cysticercosis of eye
B69.81	Myositis in cysticercosis
B69.89	Cysticercosis of other sites
B69.9	Cysticercosis, unspecified
B70.0	Diphyllobothriasis
B70.1	Sparganosis
B71.0	Hymenolepiasis
B71.1	Dipylidiasis
B71.8	Other specified cestode infections
B71.9	Cestode infection, unspecified
B75	Trichinellosis
B77.0	Ascariasis with intestinal complications
B77.81	Ascariasis pneumonia
B77.89	Ascariasis with other complications
B77.9	Ascariasis, unspecified
B78.0	Intestinal strongyloidiasis
B78.7	Disseminated strongyloidiasis
B78.9	Strongyloidiasis, unspecified
B79	Trichuriasis
B80	Enterobiasis
B81.0	Anisakiasis
B81.1	Intestinal capillariasis
B81.2	Trichostrongyliasis
B81.3	Intestinal angiostrongyliasis
B81.4	Mixed intestinal helminthiasis
B81.8	Other specified intestinal helminthiasis
B82.0	Intestinal helminthiasis, unspecified
B92	Sequelae of leprosy
B94.2	Sequelae of viral hepatitis
B94.8	Sequelae of other specified infectious and parasitic diseases
B94.9	Sequelae of unspecified infectious and parasitic disease
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



**Medicare National Coverage Determinations (NCD)
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
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
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
C22.0	Liver cell carcinoma

NCD 190.34

***January 2025 Changes
ICD-10-CM Version – Red**

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January 2025

Code	Description
C22.1	Intrahepatic bile duct carcinoma
C22.2	Hepatoblastoma
C22.3	Angiosarcoma of liver
C22.4	Other sarcomas of liver
C22.7	Other specified carcinomas of liver
C22.8	Malignant neoplasm of liver, primary, unspecified as to type
C22.9	Malignant neoplasm of liver, not specified as primary or secondary
C23	Malignant neoplasm of gallbladder
C24.0	Malignant neoplasm of extrahepatic bile duct
C24.1	Malignant neoplasm of ampulla of Vater
C24.8	Malignant neoplasm of overlapping sites of biliary tract
C24.9	Malignant neoplasm of biliary tract, unspecified
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
C26.1	Malignant neoplasm of spleen
C26.9	Malignant neoplasm of ill-defined sites within the digestive system
C46.4	Kaposi's sarcoma of gastrointestinal sites
C78.4	Secondary malignant neoplasm of small intestine
C78.5	Secondary malignant neoplasm of large intestine and rectum
C78.7	Secondary malignant neoplasm of liver and intrahepatic bile duct
C78.80	Secondary malignant neoplasm of unspecified digestive organ
C78.89	Secondary malignant neoplasm of other digestive organs
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

Code	Description
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
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
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
C80.0	Disseminated malignant neoplasm, unspecified
C91.00	Acute lymphoblastic leukemia not having achieved remission
C91.01	Acute lymphoblastic leukemia, in remission
C91.02	Acute lymphoblastic leukemia, in relapse
C91.10	Chronic lymphocytic leukemia of B-cell type not having achieved remission
C91.11	Chronic lymphocytic leukemia of B-cell type in remission
C91.12	Chronic lymphocytic leukemia of B-cell type in relapse
C91.30	Prolymphocytic leukemia of B-cell type not having achieved remission
C91.31	Prolymphocytic leukemia of B-cell type, in remission
C91.32	Prolymphocytic leukemia of B-cell type, in relapse
C91.50	Adult T-cell lymphoma/leukemia (HTLV-1-associated) not having achieved remission
C91.51	Adult T-cell lymphoma/leukemia (HTLV-1-associated), in remission
C91.52	Adult T-cell lymphoma/leukemia (HTLV-1-associated), in relapse
C91.60	Prolymphocytic leukemia of T-cell type not having achieved remission
C91.61	Prolymphocytic leukemia of T-cell type, in remission
C91.62	Prolymphocytic leukemia of T-cell type, in relapse
C91.90	Lymphoid leukemia, unspecified not having achieved remission
C91.91	Lymphoid leukemia, unspecified, in remission
C91.92	Lymphoid leukemia, unspecified, in relapse

NCD 190.34

***January 2025 Changes
ICD-10-CM Version – Red**

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January 2025



**Medicare National Coverage Determinations (NCD)
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Code	Description
C91.A0	Mature B-cell leukemia Burkitt-type not having achieved remission
C91.A1	Mature B-cell leukemia Burkitt-type, in remission
C91.A2	Mature B-cell leukemia Burkitt-type, in relapse
C91.Z0	Other lymphoid leukemia not having achieved remission
C91.Z1	Other lymphoid leukemia, in remission
C91.Z2	Other lymphoid leukemia, in relapse
C92.00	Acute myeloblastic leukemia, not having achieved remission
C92.01	Acute myeloblastic leukemia, in remission
C92.02	Acute myeloblastic leukemia, in relapse
C92.10	Chronic myeloid leukemia, BCR/ABL-positive, not having achieved remission
C92.11	Chronic myeloid leukemia, BCR/ABL-positive, in remission
C92.12	Chronic myeloid leukemia, BCR/ABL-positive, in relapse
C92.20	Atypical chronic myeloid leukemia, BCR/ABL-negative, not having achieved remission
C92.21	Atypical chronic myeloid leukemia, BCR/ABL-negative, in remission
C92.22	Atypical chronic myeloid leukemia, BCR/ABL-negative, in relapse
C92.30	Myeloid sarcoma, not having achieved remission
C92.31	Myeloid sarcoma, in remission
C92.32	Myeloid sarcoma, in relapse
C92.40	Acute promyelocytic leukemia, not having achieved remission
C92.41	Acute promyelocytic leukemia, in remission
C92.42	Acute promyelocytic leukemia, in relapse
C92.50	Acute myelomonocytic leukemia, not having achieved remission
C92.51	Acute myelomonocytic leukemia, in remission
C92.52	Acute myelomonocytic leukemia, in relapse
C92.60	Acute myeloid leukemia with 11q23-abnormality not having achieved remission
C92.61	Acute myeloid leukemia with 11q23-abnormality in remission
C92.62	Acute myeloid leukemia with 11q23-abnormality in relapse
C92.90	Myeloid leukemia, unspecified, not having achieved remission
C92.91	Myeloid leukemia, unspecified in remission
C92.92	Myeloid leukemia, unspecified in relapse
C92.A0	Acute myeloid leukemia with multilineage dysplasia, not having achieved remission
C92.A1	Acute myeloid leukemia with multilineage dysplasia, in remission
C92.A2	Acute myeloid leukemia with multilineage dysplasia, in relapse
C92.Z0	Other myeloid leukemia not having achieved remission

NCD 190.34

***January 2025 Changes
ICD-10-CM Version – Red**

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January 2025



**Medicare National Coverage Determinations (NCD)
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
C92.Z1	Other myeloid leukemia, in remission
C92.Z2	Other myeloid leukemia, in relapse
C93.00	Acute monoblastic/monocytic leukemia, not having achieved remission
C93.01	Acute monoblastic/monocytic leukemia, in remission
C93.02	Acute monoblastic/monocytic leukemia, in relapse
C93.10	Chronic myelomonocytic leukemia not having achieved remission
C93.11	Chronic myelomonocytic leukemia, in remission
C93.12	Chronic myelomonocytic leukemia, in relapse
C93.30	Juvenile myelomonocytic leukemia, not having achieved remission
C93.31	Juvenile myelomonocytic leukemia, in remission
C93.32	Juvenile myelomonocytic leukemia, in relapse
C93.90	Monocytic leukemia, unspecified, not having achieved remission
C93.91	Monocytic leukemia, unspecified in remission
C93.92	Monocytic leukemia, unspecified in relapse
C93.Z0	Other monocytic leukemia, not having achieved remission
C93.Z1	Other monocytic leukemia, in remission
C93.Z2	Other monocytic leukemia, in relapse
C94.00	Acute erythroid leukemia, not having achieved remission
C94.01	Acute erythroid leukemia, in remission
C94.02	Acute erythroid leukemia, in relapse
C94.20	Acute megakaryoblastic leukemia not having achieved remission
C94.21	Acute megakaryoblastic leukemia, in remission
C94.22	Acute megakaryoblastic leukemia, in relapse
C94.30	Mast cell leukemia not having achieved remission
C94.31	Mast cell leukemia, in remission
C94.32	Mast cell leukemia, in relapse
C94.80	Other specified leukemias not having achieved remission
C94.81	Other specified leukemias, in remission
C94.82	Other specified leukemias, in relapse
C95.00	Acute leukemia of unspecified cell type not having achieved remission
C95.01	Acute leukemia of unspecified cell type, in remission
C95.02	Acute leukemia of unspecified cell type, in relapse
C95.10	Chronic leukemia of unspecified cell type not having achieved remission
C95.11	Chronic leukemia of unspecified cell type, in remission

NCD 190.34

***January 2025 Changes
ICD-10-CM Version – Red**

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January 2025

Code	Description
C95.12	Chronic leukemia of unspecified cell type, in relapse
C95.90	Leukemia, unspecified not having achieved remission
C95.91	Leukemia, unspecified, in remission
C95.92	Leukemia, unspecified, in relapse
D00.2	Carcinoma in situ of stomach
D01.0	Carcinoma in situ of colon
D01.1	Carcinoma in situ of rectosigmoid junction
D01.2	Carcinoma in situ of rectum
D01.3	Carcinoma in situ of anus and anal canal
D01.40	Carcinoma in situ of unspecified part of intestine
D01.49	Carcinoma in situ of other parts of intestine
D01.5	Carcinoma in situ of liver, gallbladder and bile ducts
D01.7	Carcinoma in situ of other specified digestive organs
D01.9	Carcinoma in situ of digestive organ, unspecified
D12.0	Benign neoplasm of cecum
D12.1	Benign neoplasm of appendix
D12.2	Benign neoplasm of ascending colon
D12.3	Benign neoplasm of transverse colon
D12.4	Benign neoplasm of descending colon
D12.5	Benign neoplasm of sigmoid colon
D12.6	Benign neoplasm of colon, unspecified
D12.7	Benign neoplasm of rectosigmoid junction
D12.8	Benign neoplasm of rectum
D12.9	Benign neoplasm of anus and anal canal
D13.0	Benign neoplasm of esophagus
D13.1	Benign neoplasm of stomach
D13.2	Benign neoplasm of duodenum
D13.30	Benign neoplasm of unspecified part of small intestine
D13.39	Benign neoplasm of other parts of small intestine
D13.4	Benign neoplasm of liver
D13.5	Benign neoplasm of extrahepatic bile ducts
D13.6	Benign neoplasm of pancreas
D13.7	Benign neoplasm of endocrine pancreas
D13.91	Familial adenomatous polyposis

Code	Description
D13.99	Benign neoplasm of ill-defined sites within the digestive system
D18.03	Hemangioma of intra-abdominal structures
D19.1	Benign neoplasm of mesothelial tissue of peritoneum
D20.0	Benign neoplasm of soft tissue of retroperitoneum
D20.1	Benign neoplasm of soft tissue of peritoneum
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
D37.8	Neoplasm of uncertain behavior of other specified digestive organs
D37.9	Neoplasm of uncertain behavior of digestive organ, unspecified
D3A.010	Benign carcinoid tumor of the duodenum
D3A.011	Benign carcinoid tumor of the jejunum
D3A.012	Benign carcinoid tumor of the ileum
D3A.019	Benign carcinoid tumor of the small intestine, unspecified portion
D3A.020	Benign carcinoid tumor of the appendix
D3A.021	Benign carcinoid tumor of the cecum
D3A.022	Benign carcinoid tumor of the ascending colon
D3A.023	Benign carcinoid tumor of the transverse colon
D3A.024	Benign carcinoid tumor of the descending colon
D3A.025	Benign carcinoid tumor of the sigmoid colon
D3A.026	Benign carcinoid tumor of the rectum
D3A.029	Benign carcinoid tumor of the large intestine, unspecified portion
D45	Polycythemia vera
D49.0	Neoplasm of unspecified behavior of digestive system
D50.0	Iron deficiency anemia secondary to blood loss (chronic)
D50.1	Sideropenic dysphagia
D50.8	Other iron deficiency anemias
D50.9	Iron deficiency anemia, unspecified
D61.82	Myelophthisis
D62	Acute posthemorrhagic anemia
D63.0	Anemia in neoplastic disease
D63.1	Anemia in chronic kidney disease

Code	Description
D63.8	Anemia in other chronic diseases classified elsewhere
D64.0	Hereditary sideroblastic anemia
D64.1	Secondary sideroblastic anemia due to disease
D64.2	Secondary sideroblastic anemia due to drugs and toxins
D64.3	Other sideroblastic anemias
D64.4	Congenital dyserythropoietic anemia
D64.81	Anemia due to antineoplastic chemotherapy
D64.89	Other specified anemias
D64.9	Anemia, unspecified
D65	Disseminated intravascular coagulation [defibrination syndrome]
D66	Hereditary factor VIII deficiency
D67	Hereditary factor IX deficiency
D68.00	Von Willebrand disease, unspecified
D68.01	Von Willebrand disease, type 1
D68.020	Von Willebrand disease, type 2A
D68.021	Von Willebrand disease, type 2B
D68.022	Von Willebrand disease, type 2M
D68.023	Von Willebrand disease, type 2N
D68.029	Von Willebrand disease, type 2, unspecified
D68.03	Von Willebrand disease, type 3
D68.04	Acquired von Willebrand disease
D68.09	Other von Willebrand disease
D68.1	Hereditary factor XI deficiency
D68.2	Hereditary deficiency of other clotting factors
D68.311	Acquired hemophilia
D68.312	Antiphospholipid antibody with hemorrhagic disorder
D68.318	Other hemorrhagic disorder due to intrinsic circulating anticoagulants, antibodies, or inhibitors
D68.32	Hemorrhagic disorder due to extrinsic circulating anticoagulants
D68.4	Acquired coagulation factor deficiency
D68.8	Other specified coagulation defects
D68.9	Coagulation defect, unspecified
D69.0	Allergic purpura
D69.1	Qualitative platelet defects

Code	Description
D69.2	Other nonthrombocytopenic purpura
D69.3	Immune thrombocytopenic purpura
D69.41	Evans syndrome
D69.42	Congenital and hereditary thrombocytopenia purpura
D69.49	Other primary thrombocytopenia
D69.51	Posttransfusion purpura
D69.59	Other secondary thrombocytopenia
D69.6	Thrombocytopenia, unspecified
D69.8	Other specified hemorrhagic conditions
D69.9	Hemorrhagic condition, unspecified
D75.838	Other thrombocytosis
D75.839	Thrombocytosis, unspecified
D75.84	Other platelet-activating anti-PF4 disorders
D89.831	Cytokine release syndrome, grade 1
D89.832	Cytokine release syndrome, grade 2
D89.833	Cytokine release syndrome, grade 3
D89.834	Cytokine release syndrome, grade 4
D89.835	Cytokine release syndrome, grade 5
G89.3	Neoplasm related pain (acute) (chronic)
G93.31	Postviral fatigue syndrome
G93.32	Myalgic encephalomyelitis/chronic fatigue syndrome
G93.39	Other post infection and related fatigue syndromes
I78.0	Hereditary hemorrhagic telangiectasia
I85.00	Esophageal varices without bleeding
I85.01	Esophageal varices with bleeding
I85.10	Secondary esophageal varices without bleeding
I85.11	Secondary esophageal varices with bleeding
J86.0	Pyothorax with fistula
K20.0	Eosinophilic esophagitis
K20.80	Other esophagitis without bleeding
K20.81	Other esophagitis with bleeding
K20.90	Esophagitis, unspecified without bleeding
K20.91	Esophagitis, unspecified with bleeding
K21.00	Gastro-esophageal reflux disease with esophagitis, without bleeding

Code	Description
K21.01	Gastro-esophageal reflux disease with esophagitis, with bleeding
K21.9	Gastro-esophageal reflux disease without esophagitis
K22.10	Ulcer of esophagus without bleeding
K22.11	Ulcer of esophagus with bleeding
K22.2	Esophageal obstruction
K22.3	Perforation of esophagus
K22.4	Dyskinesia of esophagus
K22.5	Diverticulum of esophagus, acquired
K22.6	Gastro-esophageal laceration-hemorrhage syndrome
K22.70	Barrett's esophagus without dysplasia
K22.710	Barrett's esophagus with low grade dysplasia
K22.711	Barrett's esophagus with high grade dysplasia
K22.719	Barrett's esophagus with dysplasia, unspecified
K22.81	Esophageal polyp
K22.82	Esophagogastric junction polyp
K22.89	Other specified disease of esophagus
K22.9	Disease of esophagus, unspecified
K23	Disorders of esophagus in diseases classified elsewhere
K25.0	Acute gastric ulcer with hemorrhage
K25.1	Acute gastric ulcer with perforation
K25.2	Acute gastric ulcer with both hemorrhage and perforation
K25.3	Acute gastric ulcer without hemorrhage or perforation
K25.4	Chronic or unspecified gastric ulcer with hemorrhage
K25.5	Chronic or unspecified gastric ulcer with perforation
K25.6	Chronic or unspecified gastric ulcer with both hemorrhage and perforation
K25.7	Chronic gastric ulcer without hemorrhage or perforation
K25.9	Gastric ulcer, unspecified as acute or chronic, without hemorrhage or perforation
K26.0	Acute duodenal ulcer with hemorrhage
K26.1	Acute duodenal ulcer with perforation
K26.2	Acute duodenal ulcer with both hemorrhage and perforation
K26.3	Acute duodenal ulcer without hemorrhage or perforation
K26.4	Chronic or unspecified duodenal ulcer with hemorrhage
K26.5	Chronic or unspecified duodenal ulcer with perforation
K26.6	Chronic or unspecified duodenal ulcer with both hemorrhage and perforation

Code	Description
K26.7	Chronic duodenal ulcer without hemorrhage or perforation
K26.9	Duodenal ulcer, unspecified as acute or chronic, without hemorrhage or perforation
K27.0	Acute peptic ulcer, site unspecified, with hemorrhage
K27.1	Acute peptic ulcer, site unspecified, with perforation
K27.2	Acute peptic ulcer, site unspecified, with both hemorrhage and perforation
K27.3	Acute peptic ulcer, site unspecified, without hemorrhage or perforation
K27.4	Chronic or unspecified peptic ulcer, site unspecified, with hemorrhage
K27.5	Chronic or unspecified peptic ulcer, site unspecified, with perforation
K27.6	Chronic or unspecified peptic ulcer, site unspecified, with both hemorrhage and perforation
K27.7	Chronic peptic ulcer, site unspecified, without hemorrhage or perforation
K27.9	Peptic ulcer, site unspecified, unspecified as acute or chronic, without hemorrhage or perforation
K28.0	Acute gastrojejunal ulcer with hemorrhage
K28.1	Acute gastrojejunal ulcer with perforation
K28.2	Acute gastrojejunal ulcer with both hemorrhage and perforation
K28.3	Acute gastrojejunal ulcer without hemorrhage or perforation
K28.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage
K28.5	Chronic or unspecified gastrojejunal ulcer with perforation
K28.6	Chronic or unspecified gastrojejunal ulcer with both hemorrhage and perforation
K28.7	Chronic gastrojejunal ulcer without hemorrhage or perforation
K28.9	Gastrojejunal ulcer, unspecified as acute or chronic, without hemorrhage or perforation
K29.00	Acute gastritis without bleeding
K29.01	Acute gastritis with bleeding
K29.20	Alcoholic gastritis without bleeding
K29.21	Alcoholic gastritis with bleeding
K29.30	Chronic superficial gastritis without bleeding
K29.31	Chronic superficial gastritis with bleeding
K29.40	Chronic atrophic gastritis without bleeding
K29.41	Chronic atrophic gastritis with bleeding
K29.50	Unspecified chronic gastritis without bleeding
K29.51	Unspecified chronic gastritis with bleeding
K29.60	Other gastritis without bleeding
K29.61	Other gastritis with bleeding
K29.70	Gastritis, unspecified, without bleeding



**Medicare National Coverage Determinations (NCD)
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
K29.71	Gastritis, unspecified, with bleeding
K29.80	Duodenitis without bleeding
K29.81	Duodenitis with bleeding
K29.90	Gastroduodenitis, unspecified, without bleeding
K29.91	Gastroduodenitis, unspecified, with bleeding
K30	Functional dyspepsia
K31.1	Adult hypertrophic pyloric stenosis
K31.4	Gastric diverticulum
K31.5	Obstruction of duodenum
K31.6	Fistula of stomach and duodenum
K31.7	Polyp of stomach and duodenum
K31.811	Angiodysplasia of stomach and duodenum with bleeding
K31.819	Angiodysplasia of stomach and duodenum without bleeding
K31.82	Dieulafoy lesion (hemorrhagic) of stomach and duodenum
K31.89	Other diseases of stomach and duodenum
K31.9	Disease of stomach and duodenum, unspecified
K31.A0	Gastric intestinal metaplasia, unspecified
K31.A11	Gastric intestinal metaplasia without dysplasia, involving the antrum
K31.A12	Gastric intestinal metaplasia without dysplasia, involving the body (corpus)
K31.A13	Gastric intestinal metaplasia without dysplasia, involving the fundus
K31.A14	Gastric intestinal metaplasia without dysplasia, involving the cardia
K31.A15	Gastric intestinal metaplasia without dysplasia, involving multiple sites
K31.A19	Gastric intestinal metaplasia without dysplasia, unspecified site
K31.A21	Gastric intestinal metaplasia with low grade dysplasia
K31.A22	Gastric intestinal metaplasia with high grade dysplasia
K31.A29	Gastric intestinal metaplasia with dysplasia, unspecified
K50.00	Crohn's disease of small intestine without complications
K50.011	Crohn's disease of small intestine with rectal bleeding
K50.012	Crohn's disease of small intestine with intestinal obstruction
K50.013	Crohn's disease of small intestine with fistula
K50.014	Crohn's disease of small intestine with abscess
K50.018	Crohn's disease of small intestine with other complication
K50.019	Crohn's disease of small intestine with unspecified complications
K50.10	Crohn's disease of large intestine without complications

NCD 190.34

***January 2025 Changes
ICD-10-CM Version – Red**

Fu Associates, Ltd.

January 2025



**Medicare National Coverage Determinations (NCD)
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
K50.111	Crohn's disease of large intestine with rectal bleeding
K50.112	Crohn's disease of large intestine with intestinal obstruction
K50.113	Crohn's disease of large intestine with fistula
K50.114	Crohn's disease of large intestine with abscess
K50.118	Crohn's disease of large intestine with other complication
K50.119	Crohn's disease of large intestine with unspecified complications
K50.80	Crohn's disease of both small and large intestine without complications
K50.811	Crohn's disease of both small and large intestine with rectal bleeding
K50.812	Crohn's disease of both small and large intestine with intestinal obstruction
K50.813	Crohn's disease of both small and large intestine with fistula
K50.814	Crohn's disease of both small and large intestine with abscess
K50.818	Crohn's disease of both small and large intestine with other complication
K50.819	Crohn's disease of both small and large intestine with unspecified complications
K50.90	Crohn's disease, unspecified, without complications
K50.911	Crohn's disease, unspecified, with rectal bleeding
K50.912	Crohn's disease, unspecified, with intestinal obstruction
K50.913	Crohn's disease, unspecified, with fistula
K50.914	Crohn's disease, unspecified, with abscess
K50.918	Crohn's disease, unspecified, with other complication
K50.919	Crohn's disease, unspecified, with unspecified complications
K51.00	Ulcerative (chronic) pancolitis without complications
K51.011	Ulcerative (chronic) pancolitis with rectal bleeding
K51.012	Ulcerative (chronic) pancolitis with intestinal obstruction
K51.013	Ulcerative (chronic) pancolitis with fistula
K51.014	Ulcerative (chronic) pancolitis with abscess
K51.018	Ulcerative (chronic) pancolitis with other complication
K51.019	Ulcerative (chronic) pancolitis with unspecified complications
K51.20	Ulcerative (chronic) proctitis without complications
K51.211	Ulcerative (chronic) proctitis with rectal bleeding
K51.212	Ulcerative (chronic) proctitis with intestinal obstruction
K51.213	Ulcerative (chronic) proctitis with fistula
K51.214	Ulcerative (chronic) proctitis with abscess
K51.218	Ulcerative (chronic) proctitis with other complication
K51.219	Ulcerative (chronic) proctitis with unspecified complications

NCD 190.34

***January 2025 Changes
ICD-10-CM Version – Red**

Fu Associates, Ltd.

January 2025



**Medicare National Coverage Determinations (NCD)
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
K51.30	Ulcerative (chronic) rectosigmoiditis without complications
K51.311	Ulcerative (chronic) rectosigmoiditis with rectal bleeding
K51.312	Ulcerative (chronic) rectosigmoiditis with intestinal obstruction
K51.313	Ulcerative (chronic) rectosigmoiditis with fistula
K51.314	Ulcerative (chronic) rectosigmoiditis with abscess
K51.318	Ulcerative (chronic) rectosigmoiditis with other complication
K51.319	Ulcerative (chronic) rectosigmoiditis with unspecified complications
K51.40	Inflammatory polyps of colon without complications
K51.411	Inflammatory polyps of colon with rectal bleeding
K51.412	Inflammatory polyps of colon with intestinal obstruction
K51.413	Inflammatory polyps of colon with fistula
K51.414	Inflammatory polyps of colon with abscess
K51.418	Inflammatory polyps of colon with other complication
K51.419	Inflammatory polyps of colon with unspecified complications
K51.50	Left sided colitis without complications
K51.511	Left sided colitis with rectal bleeding
K51.512	Left sided colitis with intestinal obstruction
K51.513	Left sided colitis with fistula
K51.514	Left sided colitis with abscess
K51.518	Left sided colitis with other complication
K51.519	Left sided colitis with unspecified complications
K51.80	Other ulcerative colitis without complications
K51.811	Other ulcerative colitis with rectal bleeding
K51.812	Other ulcerative colitis with intestinal obstruction
K51.813	Other ulcerative colitis with fistula
K51.814	Other ulcerative colitis with abscess
K51.818	Other ulcerative colitis with other complication
K51.819	Other ulcerative colitis with unspecified complications
K51.90	Ulcerative colitis, unspecified, without complications
K51.911	Ulcerative colitis, unspecified with rectal bleeding
K51.912	Ulcerative colitis, unspecified with intestinal obstruction
K51.913	Ulcerative colitis, unspecified with fistula
K51.914	Ulcerative colitis, unspecified with abscess
K51.918	Ulcerative colitis, unspecified with other complication

NCD 190.34

***January 2025 Changes
ICD-10-CM Version – Red**

Fu Associates, Ltd.

January 2025

Code	Description
K51.919	Ulcerative colitis, unspecified with unspecified complications
K52.0	Gastroenteritis and colitis due to radiation
K52.1	Toxic gastroenteritis and colitis
K52.21	Food protein-induced enterocolitis syndrome
K52.22	Food protein-induced enteropathy
K52.29	Other allergic and dietetic gastroenteritis and colitis
K52.3	Indeterminate colitis
K52.81	Eosinophilic gastritis or gastroenteritis
K52.82	Eosinophilic colitis
K52.831	Collagenous colitis
K52.832	Lymphocytic colitis
K52.838	Other microscopic colitis
K52.839	Microscopic colitis, unspecified
K52.89	Other specified noninfective gastroenteritis and colitis
K52.9	Noninfective gastroenteritis and colitis, unspecified
K55.011	Focal (segmental) acute (reversible) ischemia of small intestine
K55.012	Diffuse acute (reversible) ischemia of small intestine
K55.019	Acute (reversible) ischemia of small intestine, extent unspecified
K55.021	Focal (segmental) acute infarction of small intestine
K55.022	Diffuse acute infarction of small intestine
K55.029	Acute infarction of small intestine, extent unspecified
K55.031	Focal (segmental) acute (reversible) ischemia of large intestine
K55.032	Diffuse acute (reversible) ischemia of large intestine
K55.039	Acute (reversible) ischemia of large intestine, extent unspecified
K55.041	Focal (segmental) acute infarction of large intestine
K55.042	Diffuse acute infarction of large intestine
K55.049	Acute infarction of large intestine, extent unspecified
K55.051	Focal (segmental) acute (reversible) ischemia of intestine, part unspecified
K55.052	Diffuse acute (reversible) ischemia of intestine, part unspecified
K55.059	Acute (reversible) ischemia of intestine, part and extent unspecified
K55.061	Focal (segmental) acute infarction of intestine, part unspecified
K55.062	Diffuse acute infarction of intestine, part unspecified
K55.069	Acute infarction of intestine, part and extent unspecified
K55.1	Chronic vascular disorders of intestine

Code	Description
K55.20	Angiodysplasia of colon without hemorrhage
K55.21	Angiodysplasia of colon with hemorrhage
K55.30	Necrotizing enterocolitis, unspecified
K55.31	Stage 1 necrotizing enterocolitis
K55.32	Stage 2 necrotizing enterocolitis
K55.33	Stage 3 necrotizing enterocolitis
K55.8	Other vascular disorders of intestine
K55.9	Vascular disorder of intestine, unspecified
K56.0	Paralytic ileus
K56.1	Intussusception
K56.2	Volvulus
K56.3	Gallstone ileus
K56.41	Fecal impaction
K56.49	Other impaction of intestine
K56.699	Other intestinal obstruction unspecified as to partial versus complete obstruction
K56.7	Ileus, unspecified
K57.20	Diverticulitis of large intestine with perforation and abscess without bleeding
K57.21	Diverticulitis of large intestine with perforation and abscess with bleeding
K57.30	Diverticulosis of large intestine without perforation or abscess without bleeding
K57.31	Diverticulosis of large intestine without perforation or abscess with bleeding
K57.32	Diverticulitis of large intestine without perforation or abscess without bleeding
K57.33	Diverticulitis of large intestine without perforation or abscess with bleeding
K57.40	Diverticulitis of both small and large intestine with perforation and abscess without bleeding
K57.41	Diverticulitis of both small and large intestine with perforation and abscess with bleeding
K57.50	Diverticulosis of both small and large intestine without perforation or abscess without bleeding
K57.51	Diverticulosis of both small and large intestine without perforation or abscess with bleeding
K57.52	Diverticulitis of both small and large intestine without perforation or abscess without bleeding
K57.53	Diverticulitis of both small and large intestine without perforation or abscess with bleeding
K57.80	Diverticulitis of intestine, part unspecified, with perforation and abscess without bleeding
K57.81	Diverticulitis of intestine, part unspecified, with perforation and abscess with bleeding
K57.90	Diverticulosis of intestine, part unspecified, without perforation or abscess without bleeding
K57.91	Diverticulosis of intestine, part unspecified, without perforation or abscess with bleeding

Code	Description
K57.92	Diverticulitis of intestine, part unspecified, without perforation or abscess without bleeding
K57.93	Diverticulitis of intestine, part unspecified, without perforation or abscess with bleeding
K58.0	Irritable bowel syndrome with diarrhea
K58.1	Irritable bowel syndrome with constipation
K58.2	Mixed irritable bowel syndrome
K58.8	Other irritable bowel syndrome
K58.9	*Irritable bowel syndrome, unspecified
K59.00	Constipation, unspecified
K59.01	Slow transit constipation
K59.02	Outlet dysfunction constipation
K59.04	Chronic idiopathic constipation
K59.09	Other constipation
K59.1	Functional diarrhea
K59.2	Neurogenic bowel, not elsewhere classified
K59.31	Toxic megacolon
K59.39	Other megacolon
K59.4	Anal spasm
K59.81	Ogilvie syndrome
K59.89	Other specified functional intestinal disorders
K59.9	Functional intestinal disorder, unspecified
K60.0	Acute anal fissure
K60.1	Chronic anal fissure
K60.2	Anal fissure, unspecified
K60.30	Anal fistula, unspecified
K60.311	Anal fistula, simple, initial
K60.312	Anal fistula, simple, persistent
K60.313	Anal fistula, simple, recurrent
K60.319	Anal fistula, simple, unspecified
K60.321	Anal fistula, complex, initial
K60.322	Anal fistula, complex, persistent
K60.323	Anal fistula, complex, recurrent
K60.329	Anal fistula, complex, unspecified
K60.40	Rectal fistula, unspecified
K60.411	Rectal fistula, simple, initial

Code	Description
K60.412	Rectal fistula, simple, persistent
K60.413	Rectal fistula, simple, recurrent
K60.419	Rectal fistula, simple, unspecified
K60.421	Rectal fistula, complex, initial
K60.422	Rectal fistula, complex, persistent
K60.423	Rectal fistula, complex, recurrent
K60.429	Rectal fistula, complex, unspecified
K60.50	Anorectal fistula, unspecified
K60.511	Anorectal fistula, simple, initial
K60.512	Anorectal fistula, simple, persistent
K60.513	Anorectal fistula, simple, recurrent
K60.519	Anorectal fistula, simple, unspecified
K60.521	Anorectal fistula, complex, initial
K60.522	Anorectal fistula, complex, persistent
K60.523	Anorectal fistula, complex, recurrent
K60.529	Anorectal fistula, complex, unspecified
K62.0	Anal polyp
K62.1	Rectal polyp
K62.2	Anal prolapse
K62.3	Rectal prolapse
K62.5	Hemorrhage of anus and rectum
K62.6	Ulcer of anus and rectum
K62.7	Radiation proctitis
K62.81	Anal sphincter tear (healed) (nontraumatic) (old)
K62.82	Dysplasia of anus
K62.89	Other specified diseases of anus and rectum
K62.9	Disease of anus and rectum, unspecified
K63.1	Perforation of intestine (nontraumatic)
K63.3	Ulcer of intestine
K63.5	Polyp of colon
K63.81	Dieulafoy lesion of intestine
K63.8211	Small intestinal bacterial overgrowth, hydrogen-subtype
K63.8212	Small intestinal bacterial overgrowth, hydrogen sulfide-subtype
K63.8219	Small intestinal bacterial overgrowth, unspecified

Code	Description
K63.822	Small intestinal fungal overgrowth
K63.829	Intestinal methanogen overgrowth, unspecified
K64.0	First degree hemorrhoids
K64.1	Second degree hemorrhoids
K64.2	Third degree hemorrhoids
K64.3	Fourth degree hemorrhoids
K64.4	Residual hemorrhoidal skin tags
K64.5	Perianal venous thrombosis
K64.8	Other hemorrhoids
K64.9	Unspecified hemorrhoids
K70.0	Alcoholic fatty liver
K70.10	Alcoholic hepatitis without ascites
K70.11	Alcoholic hepatitis with ascites
K70.2	Alcoholic fibrosis and sclerosis of liver
K70.30	Alcoholic cirrhosis of liver without ascites
K70.31	Alcoholic cirrhosis of liver with ascites
K70.40	Alcoholic hepatic failure without coma
K70.41	Alcoholic hepatic failure with coma
K70.9	Alcoholic liver disease, unspecified
K73.0	Chronic persistent hepatitis, not elsewhere classified
K73.1	Chronic lobular hepatitis, not elsewhere classified
K73.2	Chronic active hepatitis, not elsewhere classified
K73.8	Other chronic hepatitis, not elsewhere classified
K73.9	Chronic hepatitis, unspecified
K74.00	Hepatic fibrosis, unspecified
K74.01	Hepatic fibrosis, early fibrosis
K74.02	Hepatic fibrosis, advanced fibrosis
K74.1	Hepatic sclerosis
K74.2	Hepatic fibrosis with hepatic sclerosis
K74.3	Primary biliary cirrhosis
K74.4	Secondary biliary cirrhosis
K74.5	Biliary cirrhosis, unspecified
K74.60	Unspecified cirrhosis of liver
K74.69	Other cirrhosis of liver



**Medicare National Coverage Determinations (NCD)
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
K75.4	Autoimmune hepatitis
K75.81	Nonalcoholic steatohepatitis (NASH)
K76.0	Fatty (change of) liver, not elsewhere classified
K76.89	Other specified diseases of liver
K76.9	Liver disease, unspecified
K85.00	Idiopathic acute pancreatitis without necrosis or infection
K85.01	Idiopathic acute pancreatitis with uninfected necrosis
K85.02	Idiopathic acute pancreatitis with infected necrosis
K85.10	Biliary acute pancreatitis without necrosis or infection
K85.11	Biliary acute pancreatitis with uninfected necrosis
K85.12	Biliary acute pancreatitis with infected necrosis
K85.20	Alcohol induced acute pancreatitis without necrosis or infection
K85.21	Alcohol induced acute pancreatitis with uninfected necrosis
K85.22	Alcohol induced acute pancreatitis with infected necrosis
K85.30	Drug induced acute pancreatitis without necrosis or infection
K85.31	Drug induced acute pancreatitis with uninfected necrosis
K85.32	Drug induced acute pancreatitis with infected necrosis
K85.80	Other acute pancreatitis without necrosis or infection
K85.81	Other acute pancreatitis with uninfected necrosis
K85.82	Other acute pancreatitis with infected necrosis
K85.90	Acute pancreatitis without necrosis or infection, unspecified
K85.91	Acute pancreatitis with uninfected necrosis, unspecified
K85.92	Acute pancreatitis with infected necrosis, unspecified
K86.0	Alcohol-induced chronic pancreatitis
K86.1	Other chronic pancreatitis
K86.2	Cyst of pancreas
K86.3	Pseudocyst of pancreas
K86.81	Exocrine pancreatic insufficiency
K86.89	Other specified diseases of pancreas
K86.9	Disease of pancreas, unspecified
K87	Disorders of gallbladder, biliary tract and pancreas in diseases classified elsewhere
K90.0	Celiac disease
K90.41	Non-celiac gluten sensitivity
K90.49	Malabsorption due to intolerance, not elsewhere classified

NCD 190.34

***January 2025 Changes
ICD-10-CM Version – Red**

Fu Associates, Ltd.

January 2025

Code	Description
K90.81	Whipple's disease
K90.821	Short bowel syndrome with colon in continuity
K90.822	Short bowel syndrome without colon in continuity
K90.829	Short bowel syndrome, unspecified
K90.83	Intestinal failure
K90.89	Other intestinal malabsorption
K91.0	Vomiting following gastrointestinal surgery
K91.1	Postgastric surgery syndromes
K91.89	Other postprocedural complications and disorders of digestive system
K92.0	Hematemesis
K92.1	Melena
K92.2	Gastrointestinal hemorrhage, unspecified
K94.30	Esophagostomy complications, unspecified
K94.31	Esophagostomy hemorrhage
K94.32	Esophagostomy infection
K94.33	Esophagostomy malfunction
K94.39	Other complications of esophagostomy
M33.03	Juvenile dermatomyositis without myopathy
M33.13	Other dermatomyositis without myopathy
M33.93	Dermatopolymyositis, unspecified without myopathy
N32.1	Vesicointestinal fistula
N80.50	Endometriosis of intestine, unspecified
N80.511	Superficial endometriosis of the rectum
N80.512	Deep endometriosis of the rectum
N80.519	Endometriosis of the rectum, unspecified depth
N80.521	Superficial endometriosis of the sigmoid colon
N80.522	Deep endometriosis of the sigmoid colon
N80.529	Endometriosis of the sigmoid colon, unspecified depth
N80.531	Superficial endometriosis of the cecum
N80.532	Deep endometriosis of the cecum
N80.539	Endometriosis of the cecum, unspecified depth
N80.541	Superficial endometriosis of the appendix
N80.542	Deep endometriosis of the appendix
N80.549	Endometriosis of the appendix, unspecified depth



**Medicare National Coverage Determinations (NCD)
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
N80.551	Superficial endometriosis of other parts of the colon
N80.552	Deep endometriosis of other parts of the colon
N80.559	Endometriosis of other parts of the colon, unspecified depth
N80.561	Superficial endometriosis of the small intestine
N80.562	Deep endometriosis of the small intestine
N80.569	Endometriosis of the small intestine, unspecified depth
R10.0	Acute abdomen
R10.10	Upper abdominal pain, unspecified
R10.11	Right upper quadrant pain
R10.12	Left upper quadrant pain
R10.13	Epigastric pain
R10.2	Pelvic and perineal pain
R10.30	Lower abdominal pain, unspecified
R10.31	Right lower quadrant pain
R10.32	Left lower quadrant pain
R10.33	Periumbilical pain
R10.811	Right upper quadrant abdominal tenderness
R10.812	Left upper quadrant abdominal tenderness
R10.813	Right lower quadrant abdominal tenderness
R10.814	Left lower quadrant abdominal tenderness
R10.815	Periumbilic abdominal tenderness
R10.816	Epigastric abdominal tenderness
R10.817	Generalized abdominal tenderness
R10.819	Abdominal tenderness, unspecified site
R10.821	Right upper quadrant rebound abdominal tenderness
R10.822	Left upper quadrant rebound abdominal tenderness
R10.823	Right lower quadrant rebound abdominal tenderness
R10.824	Left lower quadrant rebound abdominal tenderness
R10.825	Periumbilic rebound abdominal tenderness
R10.826	Epigastric rebound abdominal tenderness
R10.827	Generalized rebound abdominal tenderness
R10.829	Rebound abdominal tenderness, unspecified site
R10.83	Colic
R10.84	Generalized abdominal pain

NCD 190.34

***January 2025 Changes
ICD-10-CM Version – Red**

Fu Associates, Ltd.

January 2025



**Medicare National Coverage Determinations (NCD)
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
R10.9	Unspecified abdominal pain
R11.0	Nausea
R11.10	Vomiting, unspecified
R11.11	Vomiting without nausea
R11.12	Projectile vomiting
R11.13	Vomiting of fecal matter
R11.14	Bilious vomiting
R11.15	Cyclical vomiting syndrome unrelated to migraine
R11.2	Nausea with vomiting, unspecified
R12	Heartburn
R13.0	Aphagia
R13.10	Dysphagia, unspecified
R13.11	Dysphagia, oral phase
R13.12	Dysphagia, oropharyngeal phase
R13.13	Dysphagia, pharyngeal phase
R13.14	Dysphagia, pharyngoesophageal phase
R13.19	Other dysphagia
R18.0	Malignant ascites
R18.8	Other ascites
R19.00	Intra-abdominal and pelvic swelling, mass and lump, unspecified site
R19.01	Right upper quadrant abdominal swelling, mass and lump
R19.02	Left upper quadrant abdominal swelling, mass and lump
R19.03	Right lower quadrant abdominal swelling, mass and lump
R19.04	Left lower quadrant abdominal swelling, mass and lump
R19.05	Periumbilic swelling, mass or lump
R19.06	Epigastric swelling, mass or lump
R19.07	Generalized intra-abdominal and pelvic swelling, mass and lump
R19.09	Other intra-abdominal and pelvic swelling, mass and lump
R19.30	Abdominal rigidity, unspecified site
R19.31	Right upper quadrant abdominal rigidity
R19.32	Left upper quadrant abdominal rigidity
R19.33	Right lower quadrant abdominal rigidity
R19.34	Left lower quadrant abdominal rigidity
R19.35	Periumbilic abdominal rigidity

NCD 190.34

***January 2025 Changes
ICD-10-CM Version – Red**

Fu Associates, Ltd.

January 2025

Code	Description
R19.36	Epigastric abdominal rigidity
R19.37	Generalized abdominal rigidity
R19.4	Change in bowel habit
R19.5	Other fecal abnormalities
R19.7	Diarrhea, unspecified
R19.8	Other specified symptoms and signs involving the digestive system and abdomen
R53.0	Neoplastic (malignant) related fatigue
R53.1	Weakness
R53.2	Functional quadriplegia
R53.81	Other malaise
R53.82	Chronic fatigue, unspecified
R53.83	Other fatigue
R63.0	Anorexia
R63.4	Abnormal weight loss
R79.1	Abnormal coagulation profile
R93.5	Abnormal findings on diagnostic imaging of other abdominal regions, including retroperitoneum
R94.5	Abnormal results of liver function studies
S28.0XXA	Crushed chest, initial encounter
S31.001A	Unspecified open wound of lower back and pelvis with penetration into retroperitoneum, initial encounter
S31.609A	Unspecified open wound of abdominal wall, unspecified quadrant with penetration into peritoneal cavity, initial encounter
S35.00XA	Unspecified injury of abdominal aorta, initial encounter
S35.01XA	Minor laceration of abdominal aorta, initial encounter
S35.02XA	Major laceration of abdominal aorta, initial encounter
S35.09XA	Other injury of abdominal aorta, initial encounter
S35.10XA	Unspecified injury of inferior vena cava, initial encounter
S35.11XA	Minor laceration of inferior vena cava, initial encounter
S35.12XA	Major laceration of inferior vena cava, initial encounter
S35.19XA	Other injury of inferior vena cava, initial encounter
S35.211A	Minor laceration of celiac artery, initial encounter
S35.212A	Major laceration of celiac artery, initial encounter
S35.218A	Other injury of celiac artery, initial encounter
S35.219A	Unspecified injury of celiac artery, initial encounter



**Medicare National Coverage Determinations (NCD)
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
S35.221A	Minor laceration of superior mesenteric artery, initial encounter
S35.222A	Major laceration of superior mesenteric artery, initial encounter
S35.228A	Other injury of superior mesenteric artery, initial encounter
S35.229A	Unspecified injury of superior mesenteric artery, initial encounter
S35.231A	Minor laceration of inferior mesenteric artery, initial encounter
S35.232A	Major laceration of inferior mesenteric artery, initial encounter
S35.238A	Other injury of inferior mesenteric artery, initial encounter
S35.239A	Unspecified injury of inferior mesenteric artery, initial encounter
S35.291A	Minor laceration of branches of celiac and mesenteric artery, initial encounter
S35.292A	Major laceration of branches of celiac and mesenteric artery, initial encounter
S35.298A	Other injury of branches of celiac and mesenteric artery, initial encounter
S35.299A	Unspecified injury of branches of celiac and mesenteric artery, initial encounter
S35.311A	Laceration of portal vein, initial encounter
S35.318A	Other specified injury of portal vein, initial encounter
S35.319A	Unspecified injury of portal vein, initial encounter
S35.321A	Laceration of splenic vein, initial encounter
S35.328A	Other specified injury of splenic vein, initial encounter
S35.329A	Unspecified injury of splenic vein, initial encounter
S35.331A	Laceration of superior mesenteric vein, initial encounter
S35.338A	Other specified injury of superior mesenteric vein, initial encounter
S35.339A	Unspecified injury of superior mesenteric vein, initial encounter
S35.341A	Laceration of inferior mesenteric vein, initial encounter
S35.348A	Other specified injury of inferior mesenteric vein, initial encounter
S35.349A	Unspecified injury of inferior mesenteric vein, initial encounter
S35.401A	Unspecified injury of right renal artery, initial encounter
S35.402A	Unspecified injury of left renal artery, initial encounter
S35.403A	Unspecified injury of unspecified renal artery, initial encounter
S35.404A	Unspecified injury of right renal vein, initial encounter
S35.405A	Unspecified injury of left renal vein, initial encounter
S35.406A	Unspecified injury of unspecified renal vein, initial encounter
S35.411A	Laceration of right renal artery, initial encounter
S35.412A	Laceration of left renal artery, initial encounter
S35.413A	Laceration of unspecified renal artery, initial encounter
S35.414A	Laceration of right renal vein, initial encounter

NCD 190.34

***January 2025 Changes
ICD-10-CM Version – Red**

Fu Associates, Ltd.

January 2025

Code	Description
S35.415A	Laceration of left renal vein, initial encounter
S35.416A	Laceration of unspecified renal vein, initial encounter
S35.491A	Other specified injury of right renal artery, initial encounter
S35.492A	Other specified injury of left renal artery, initial encounter
S35.493A	Other specified injury of unspecified renal artery, initial encounter
S35.494A	Other specified injury of right renal vein, initial encounter
S35.495A	Other specified injury of left renal vein, initial encounter
S35.496A	Other specified injury of unspecified renal vein, initial encounter
S35.50XA	Injury of unspecified iliac blood vessel(s), initial encounter
S35.511A	Injury of right iliac artery, initial encounter
S35.512A	Injury of left iliac artery, initial encounter
S35.513A	Injury of unspecified iliac artery, initial encounter
S35.514A	Injury of right iliac vein, initial encounter
S35.515A	Injury of left iliac vein, initial encounter
S35.516A	Injury of unspecified iliac vein, initial encounter
S35.531A	Injury of right uterine artery, initial encounter
S35.532A	Injury of left uterine artery, initial encounter
S35.533A	Injury of unspecified uterine artery, initial encounter
S35.534A	Injury of right uterine vein, initial encounter
S35.535A	Injury of left uterine vein, initial encounter
S35.536A	Injury of unspecified uterine vein, initial encounter
S35.59XA	Injury of other iliac blood vessels, initial encounter
S35.8X1A	Laceration of other blood vessels at abdomen, lower back and pelvis level, initial encounter
S35.8X8A	Other specified injury of other blood vessels at abdomen, lower back and pelvis level, initial encounter
S35.8X9A	Unspecified injury of other blood vessels at abdomen, lower back and pelvis level, initial encounter
S35.90XA	Unspecified injury of unspecified blood vessel at abdomen, lower back and pelvis level, initial encounter
S35.91XA	Laceration of unspecified blood vessel at abdomen, lower back and pelvis level, initial encounter
S35.99XA	Other specified injury of unspecified blood vessel at abdomen, lower back and pelvis level, initial encounter
S36.112A	Contusion of liver, initial encounter
S36.113A	Laceration of liver, unspecified degree, initial encounter
S36.114A	Minor laceration of liver, initial encounter

NCD 190.34

***January 2025 Changes
ICD-10-CM Version – Red**

Fu Associates, Ltd.

January 2025



**Medicare National Coverage Determinations (NCD)
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
S36.115A	Moderate laceration of liver, initial encounter
S36.116A	Major laceration of liver, initial encounter
S36.118A	Other injury of liver, initial encounter
S36.119A	Unspecified injury of liver, initial encounter
S36.200A	Unspecified injury of head of pancreas, initial encounter
S36.201A	Unspecified injury of body of pancreas, initial encounter
S36.202A	Unspecified injury of tail of pancreas, initial encounter
S36.209A	Unspecified injury of unspecified part of pancreas, initial encounter
S36.220A	Contusion of head of pancreas, initial encounter
S36.221A	Contusion of body of pancreas, initial encounter
S36.222A	Contusion of tail of pancreas, initial encounter
S36.229A	Contusion of unspecified part of pancreas, initial encounter
S36.230A	Laceration of head of pancreas, unspecified degree, initial encounter
S36.231A	Laceration of body of pancreas, unspecified degree, initial encounter
S36.232A	Laceration of tail of pancreas, unspecified degree, initial encounter
S36.239A	Laceration of unspecified part of pancreas, unspecified degree, initial encounter
S36.240A	Minor laceration of head of pancreas, initial encounter
S36.241A	Minor laceration of body of pancreas, initial encounter
S36.242A	Minor laceration of tail of pancreas, initial encounter
S36.249A	Minor laceration of unspecified part of pancreas, initial encounter
S36.250A	Moderate laceration of head of pancreas, initial encounter
S36.251A	Moderate laceration of body of pancreas, initial encounter
S36.252A	Moderate laceration of tail of pancreas, initial encounter
S36.259A	Moderate laceration of unspecified part of pancreas, initial encounter
S36.260A	Major laceration of head of pancreas, initial encounter
S36.261A	Major laceration of body of pancreas, initial encounter
S36.262A	Major laceration of tail of pancreas, initial encounter
S36.269A	Major laceration of unspecified part of pancreas, initial encounter
S36.290A	Other injury of head of pancreas, initial encounter
S36.291A	Other injury of body of pancreas, initial encounter
S36.292A	Other injury of tail of pancreas, initial encounter
S36.299A	Other injury of unspecified part of pancreas, initial encounter
S36.30XA	Unspecified injury of stomach, initial encounter
S36.32XA	Contusion of stomach, initial encounter

NCD 190.34

***January 2025 Changes
ICD-10-CM Version – Red**

Fu Associates, Ltd.

January 2025



**Medicare National Coverage Determinations (NCD)
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
S36.33XA	Laceration of stomach, initial encounter
S36.39XA	Other injury of stomach, initial encounter
S36.400A	Unspecified injury of duodenum, initial encounter
S36.408A	Unspecified injury of other part of small intestine, initial encounter
S36.409A	Unspecified injury of unspecified part of small intestine, initial encounter
S36.410A	Primary blast injury of duodenum, initial encounter
S36.418A	Primary blast injury of other part of small intestine, initial encounter
S36.419A	Primary blast injury of unspecified part of small intestine, initial encounter
S36.420A	Contusion of duodenum, initial encounter
S36.428A	Contusion of other part of small intestine, initial encounter
S36.429A	Contusion of unspecified part of small intestine, initial encounter
S36.430A	Laceration of duodenum, initial encounter
S36.438A	Laceration of other part of small intestine, initial encounter
S36.439A	Laceration of unspecified part of small intestine, initial encounter
S36.490A	Other injury of duodenum, initial encounter
S36.498A	Other injury of other part of small intestine, initial encounter
S36.499A	Other injury of unspecified part of small intestine, initial encounter
S36.500A	Unspecified injury of ascending [right] colon, initial encounter
S36.501A	Unspecified injury of transverse colon, initial encounter
S36.502A	Unspecified injury of descending [left] colon, initial encounter
S36.503A	Unspecified injury of sigmoid colon, initial encounter
S36.508A	Unspecified injury of other part of colon, initial encounter
S36.509A	Unspecified injury of unspecified part of colon, initial encounter
S36.510A	Primary blast injury of ascending [right] colon, initial encounter
S36.511A	Primary blast injury of transverse colon, initial encounter
S36.512A	Primary blast injury of descending [left] colon, initial encounter
S36.513A	Primary blast injury of sigmoid colon, initial encounter
S36.518A	Primary blast injury of other part of colon, initial encounter
S36.519A	Primary blast injury of unspecified part of colon, initial encounter
S36.520A	Contusion of ascending [right] colon, initial encounter
S36.521A	Contusion of transverse colon, initial encounter
S36.522A	Contusion of descending [left] colon, initial encounter
S36.523A	Contusion of sigmoid colon, initial encounter
S36.528A	Contusion of other part of colon, initial encounter

NCD 190.34

***January 2025 Changes
ICD-10-CM Version – Red**

Fu Associates, Ltd.

January 2025



**Medicare National Coverage Determinations (NCD)
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
S36.529A	Contusion of unspecified part of colon, initial encounter
S36.530A	Laceration of ascending [right] colon, initial encounter
S36.531A	Laceration of transverse colon, initial encounter
S36.532A	Laceration of descending [left] colon, initial encounter
S36.533A	Laceration of sigmoid colon, initial encounter
S36.538A	Laceration of other part of colon, initial encounter
S36.539A	Laceration of unspecified part of colon, initial encounter
S36.590A	Other injury of ascending [right] colon, initial encounter
S36.591A	Other injury of transverse colon, initial encounter
S36.592A	Other injury of descending [left] colon, initial encounter
S36.593A	Other injury of sigmoid colon, initial encounter
S36.598A	Other injury of other part of colon, initial encounter
S36.599A	Other injury of unspecified part of colon, initial encounter
S36.60XA	Unspecified injury of rectum, initial encounter
S36.61XA	Primary blast injury of rectum, initial encounter
S36.62XA	Contusion of rectum, initial encounter
S36.63XA	Laceration of rectum, initial encounter
S36.69XA	Other injury of rectum, initial encounter
S36.899A	Unspecified injury of other intra-abdominal organs, initial encounter
S36.90XA	Unspecified injury of unspecified intra-abdominal organ, initial encounter
S37.001A	Unspecified injury of right kidney, initial encounter
S37.002A	Unspecified injury of left kidney, initial encounter
S37.009A	Unspecified injury of unspecified kidney, initial encounter
S37.011A	Minor contusion of right kidney, initial encounter
S37.012A	Minor contusion of left kidney, initial encounter
S37.019A	Minor contusion of unspecified kidney, initial encounter
S37.021A	Major contusion of right kidney, initial encounter
S37.022A	Major contusion of left kidney, initial encounter
S37.029A	Major contusion of unspecified kidney, initial encounter
S37.031A	Laceration of right kidney, unspecified degree, initial encounter
S37.032A	Laceration of left kidney, unspecified degree, initial encounter
S37.039A	Laceration of unspecified kidney, unspecified degree, initial encounter
S37.041A	Minor laceration of right kidney, initial encounter
S37.042A	Minor laceration of left kidney, initial encounter

NCD 190.34

***January 2025 Changes
ICD-10-CM Version – Red**

Fu Associates, Ltd.

January 2025

Code	Description
S37.049A	Minor laceration of unspecified kidney, initial encounter
S37.051A	Moderate laceration of right kidney, initial encounter
S37.052A	Moderate laceration of left kidney, initial encounter
S37.059A	Moderate laceration of unspecified kidney, initial encounter
S37.061A	Major laceration of right kidney, initial encounter
S37.062A	Major laceration of left kidney, initial encounter
S37.069A	Major laceration of unspecified kidney, initial encounter
S37.091A	Other injury of right kidney, initial encounter
S37.092A	Other injury of left kidney, initial encounter
S37.099A	Other injury of unspecified kidney, initial encounter
S38.1XXA	Crushing injury of abdomen, lower back, and pelvis, initial encounter
T43.641A	Poisoning by ecstasy, accidental (unintentional), initial encounter
T43.641D	Poisoning by ecstasy, accidental (unintentional), subsequent encounter
T43.641S	Poisoning by ecstasy, accidental (unintentional), sequela
T43.642A	Poisoning by ecstasy, intentional self-harm, initial encounter
T43.642D	Poisoning by ecstasy, intentional self-harm, subsequent encounter
T43.642S	Poisoning by ecstasy, intentional self-harm, sequela
T43.643A	Poisoning by ecstasy, assault, initial encounter
T43.643D	Poisoning by ecstasy, assault, subsequent encounter
T43.643S	Poisoning by ecstasy, assault, sequela
T43.644A	Poisoning by ecstasy, undetermined, initial encounter
T43.644D	Poisoning by ecstasy, undetermined, subsequent encounter
T43.644S	Poisoning by ecstasy, undetermined, sequela
T45.511A	Poisoning by anticoagulants, accidental (unintentional), initial encounter
T45.512A	Poisoning by anticoagulants, intentional self-harm, initial encounter
T45.513A	Poisoning by anticoagulants, assault, initial encounter
T45.514A	Poisoning by anticoagulants, undetermined, initial encounter
T45.521A	Poisoning by antithrombotic drugs, accidental (unintentional), initial encounter
T45.522A	Poisoning by antithrombotic drugs, intentional self-harm, initial encounter
T45.523A	Poisoning by antithrombotic drugs, assault, initial encounter
T45.524A	Poisoning by antithrombotic drugs, undetermined, initial encounter
*T45.AX1A	*Poisoning by immune checkpoint inhibitors and immunostimulant drugs, accidental (unintentional), initial encounter

Code	Description
*T45.AX2A	*Poisoning by immune checkpoint inhibitors and immunostimulant drugs, intentional self-harm, initial encounter
*T45.AX3A	*Poisoning by immune checkpoint inhibitors and immunostimulant drugs, assault, initial encounter
*T45.AX4A	*Poisoning by immune checkpoint inhibitors and immunostimulant drugs, undetermined, initial encounter
*T45.AX5A	*Adverse effect of immune checkpoint inhibitors and immunostimulant drugs, initial encounter
T50.905A	Adverse effect of unspecified drugs, medicaments and biological substances, initial encounter
T50.915A	Adverse effect of multiple unspecified drugs, medicaments and biological substances, initial encounter
T88.52XA	Failed moderate sedation during procedure, initial encounter
U07.1	COVID-19
U09.9	Post COVID-19 condition, unspecified
Z09	Encounter for follow-up examination after completed treatment for conditions other than malignant neoplasm
Z79.01	Long term (current) use of anticoagulants
Z79.02	Long term (current) use of antithrombotics/antiplatelets
Z79.1	Long term (current) use of non-steroidal anti-inflammatories (NSAID)
Z79.3	Long term (current) use of hormonal contraceptives
Z79.51	Long term (current) use of inhaled steroids
Z79.52	Long term (current) use of systemic steroids
Z79.82	Long term (current) use of aspirin
Z79.84	Long term (current) use of oral hypoglycemic drugs
Z79.891	Long term (current) use of opiate analgesic
Z79.899	Other long term (current) drug therapy
Z85.00	Personal history of malignant neoplasm of unspecified digestive organ
Z85.01	Personal history of malignant neoplasm of esophagus
Z85.028	Personal history of other malignant neoplasm of stomach
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
Z85.05	Personal history of malignant neoplasm of liver
Z85.068	Personal history of other malignant neoplasm of small intestine
Z85.07	Personal history of malignant neoplasm of pancreas
Z85.09	Personal history of malignant neoplasm of other digestive organs

Code	Description
Z85.810	Personal history of malignant neoplasm of tongue
Z85.818	Personal history of malignant neoplasm of other sites of lip, oral cavity, and pharynx
Z85.819	Personal history of malignant neoplasm of unspecified site of lip, oral cavity, and pharynx
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
Z86.0100	Personal history of colon polyps, unspecified
Z86.0101	Personal history of adenomatous and serrated colon polyps
Z86.0102	Personal history of hyperplastic colon polyps
Z86.0109	Personal history of other colon polyps
Z86.16	Personal history of COVID-19
Z86.19	Personal history of other infectious and parasitic diseases
*Z92.26	*Personal history of immune checkpoint inhibitor therapy

Indications

1. To evaluate known or suspected alimentary tract conditions that might cause bleeding into the intestinal tract.
2. To evaluate unexpected anemia.
3. To evaluate abnormal signs, symptoms, or complaints that might be associated with loss of blood.
4. To evaluate patient complaints of black or red-tinged stools.

Limitations

1. The FOBT is reported once for the testing of up to three separate specimens (comprising either one or two tests per specimen).
2. In patients who are taking non-steroidal anti-inflammatory drugs and have a history of gastrointestinal bleeding but no other signs, symptoms, or complaints associated with gastrointestinal blood loss, testing for occult blood may generally be appropriate no more than once every three months.

When testing is done for the purpose of screening for colorectal cancer in the absence of signs, symptoms, conditions, or complaints associated with gastrointestinal blood loss, report the HCPCS code for colorectal cancer screening; fecal-occult blood test, 1-3 simultaneous determinations should be used.

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

Ahlquist, D.A., "Approach to the patient with occult gastrointestinal bleeding," in Tadatake, Y. (ed.), Textbook of Gastroenterology (2nd ed.), 1995, J.B. Lippincott, pp. 699-717.

Tietz, N.W. (ed.), Clinical guide to Laboratory Tests (3rd ed.), 1995, pp.452-454.

Schleisenger, M.H., Wall, S.D., et al., "Part X. Gastrointestinal Diseases" in Wyngaarden, J.B., & Smith, L.H. (eds.), Cecil Textbook of Medicine (18th ed.), 1988, W.B. Saunders, pp. 656-807.

Harrison's Principles of Internal Medicine (14th ed.), 1998, McGraw Hill.

Wallach, J., Interpretation of Diagnostic Tests, 1996, Little Brown and Co.

Illustrated Guide to Diagnostic Tests (2nd ed.), 1997, Springhouse Corporation.

Sleisenger and Fordtrans's Gastrointestinal and Liver Disease (6th ed.), 1997, W.B. Saunders.