**Colorectal cancer**

**## Clinical description (if available already):**

Primary malignant neoplasm of colon, primary malignant neoplasm of rectum. Including all subtypes melanoma’s, lymphoma, carcinoids but excluding benign, insitu and secondary malignancies.

**### Overview**

Colorectal cancers include malignant tumours of the colon and rectum. Colorectal cancer is the second cause of cancer death globally. Symptoms of colorectal cancer include changes in bowel habits, rectal bleeding or blood in stools, abdominal discomfort, fatigue/weakness, anaemia, and unexplained weight loss. Incidence and mortality rates have decreased significantly in individuals 50 years of age or older due to enhanced screening practices resulting in early detection as well as improved treatments. Incidence and mortality rates in under 50’s with no genetic risk factors or family history is increasing each year. Presence of symptoms in this age group often are initially attributed to other causes, resulting in a more advanced disease stage at the time of diagnosis. Other than age, risk factors include having inflammatory bowel diseases, family history, having high-risk genes, and lifestyle factors such as smoking, poor diet, physical inactivity, and obesity. Treatments include surgery, chemotherapy and/or radiotherapy but depend on tumour location, tumour type, tumour stage and location of any metastasis.

**### Presentation**

Symptoms can vary with the anatomic location of the tumour. Common symptoms include change in bowel habits such as diarrhoea or constipation, abdominal cramping, rectal bleeding and/or blood in stools, tiredness, and fatigue.

**### Assessment**

Physical examination, colonoscopy, blood tests to assess liver function, plasma CEA levels, CT scan of chest, abdomen, and pelvis.

**### Plan**

Total resection of tumour is the optimal treatment when a malignant lesion is detected in the large bowel. Systemic therapy (chemotherapy) for patients with colorectal cancer includes 5-fluorouracil combined with other drugs such as irinotecan, oxaliplatin. Type and duration of chemotherapy will depend can depend on tumour staging and genetic mutations in the cancer. In rectal cancer, the delivery of preoperative or postoperative combined-modality therapy (5-FU or capecitabine plus radiation therapy to the pelvis) can be given. Monoclonal antibodies such as cetuximab, panitumumab and bevacizumab are also effective in patients with advanced colorectal cancer.

**### Prognosis**

Prognosis is related to the depth of tumour penetration into the bowel wall and the presence of both regional lymph node involvement and distant metastases. Higher tumour penetration, lymph node involvement and distant metastases have a poorer prognosis and lower survival. Most recurrences after a surgical resection of a large-bowel cancer occur within the first 4 years, making 5-year survival a fairly reliable indicator of cure.

**### MedDRA PTs**

NA

**### Disqualifiers**

Benign tumours/polyps, secondary disease, unknown primary, in situ

**### Strengtheners**

Colonoscopy procedure, chemotherapy (5-fluorouracil combined with other drugs such as irinotecan, oxaliplatin)

**### Suggested Logic Description**

Malignant neoplasm of colon or rectum and descendants using Codelist generator

<<Table of concepts from description above with inclusion/exclusion stated>>

**### References**

Loscalzo, Fauci, Kasper, Hauser, Longo, Jameson: “Harrison’s Principles of Internal Medicine” 21st Edition McGrawHill

Johnson, C. M., Wei, C., Ensor, J. E., Smolenski, D. J., Amos, C. I., Levin, B., & Berry, D. A. (2013). Meta-analyses of Colorectal Cancer Risk Factors. *Cancer Causes & Control : CCC*, *24*(6), 1207. <https://doi.org/10.1007/S10552-013-0201-5>

Xi, Y., & Xu, P. (2021). Global colorectal cancer burden in 2020 and projections to 2040. Translational Oncology, 14(10), 101174. https://doi.org/10.1016/J.TRANON.2021.101174

**Breast cancer**

**## Clinical description (if available already):**

Primary malignant neoplasm of breast. Including melanoma’s, sarcoma’s, lymphoma related to breast. Excluding benign, insitu and secondary malignancies.

**### Overview**

Breast cancer is a malignant proliferation of epithelial cells lining the ducts or lobules of the breast. Seventy-five percent of all breast cancers occur in women aged >50 years. The main risk factors are sex, age, and hormonal exposure however other risk features such as family history, obesity, metabolic syndromes, depression, and moderate alcohol consumption all potentially increase occurrence and reoccurrence. Earlier detection and improved treatments such as surgery, radiotherapy and chemotherapy have reduced mortality from breast cancer by more than one-third over the past three decades in high- and middle-income countries. All breast cancer is diagnosed by biopsy of an abnormality detected either on a mammogram or by palpation.

**### Presentation**

The first symptom of breast cancer that most notice is a lump or an area of thickened tissue in their breast. However, any changes in how breasts or nipples normally look, and feel and discharge from the nipples can also present as well as lumps or swelling in the armpits.

**### Assessment**

Breast cancer is diagnosed by biopsy of an abnormality detected either on a mammogram and in some cases ultrasound or by palpation. Abnormalities that are first detected by physical exam and/or screening mammography should be evaluated by diagnostic mammography.

**### Plan**

All treatments for breast cancer are based on prognostic and predictive factors. Prognostic factors provide an indication of how likely a cancer will recur either locally or in distant organs in the future if a patient is not treated with the respective treatments. Prognosis factors can include anatomical factors and biologic features, such as histologic tumour grade as well as ER, PgR, and HER2 status. Predictive factors are used to determine if a given treatment is likely to work or not, assuming the patient’s prognosis justifies treatment. Local control of the cancer occurs more often when the tumour is small and can be completely removed by surgery. In the most advanced stages, breast cancer treatment begins with excision of the tumour or destruction of the tumour by radiation therapy. Surgery is frequently accompanied by some type of adjuvant treatment—radiotherapy, chemotherapy, hormonal therapy, immunotherapy, and other therapies

**### Prognosis**

Prognosis is related to the staging of tumour, histology of tumour, and the presence of both regional lymph node involvement and distant metastases. Higher staging, lymph node involvement and distant metastases have a poorer prognosis and lower survival. For example, the 5-year survival rate for stage 2 breast cancer is 77% whereas for stage 3 and 4 breast cancer the 5-year survival rates are 51% and16% respectively.

**### MedDRA PTs**

NA

**### Disqualifiers**

Benign, insitu, secondary

**### Strengtheners**

Procedure of biopsy, mammogram/ultrasound, abnormal finding of mammogram, cancer tumour markers tests

**### Suggested Logic Description**

**<<OUTPUT FROM CODELIST GENERATOR>>**

**### Sources**

Loscalzo, Fauci, Kasper, Hauser, Longo, Jameson: “Harrison’s Principles of Internal Medicine” 21st Edition McGrawHill

<https://training.seer.cancer.gov/breast/> (accessed 21/7/22)

**Prostate cancer**

**## Clinical description (if available already):  
### Overview  
### Presentation  
### Assessment  
### Plan  
### Prognosis  
### MedDRA PTs  
### Disqualifiers**

Female **### Strengtheners**

Male, PCa biopsy

**### Suggested Logic Description**

**Lung cancer**

**## Clinical description (if available already):  
### Overview  
### Presentation  
### Assessment  
### Plan  
### Prognosis  
### MedDRA PTs  
### Disqualifiers  
### Strengtheners  
### Suggested Logic Description**

**Liver cancer**

**## Clinical description (if available already):**

Malignant neoplasm of liver and descendants. Excluding neoplasms related to bile duct. Excluding insitu, secondary, benign tumours.

**### Overview  
### Presentation  
### Assessment  
### Plan  
### Prognosis  
### MedDRA PTs  
### Disqualifiers  
### Strengtheners  
### Suggested Logic Description**

**Stomach cancer**

**## Clinical description (if available already):  
### Overview  
### Presentation  
### Assessment  
### Plan  
### Prognosis  
### MedDRA PTs  
### Disqualifiers  
### Strengtheners  
### Suggested Logic Description**

**Head and neck cancer**

**## Clinical description (if available already):  
### Overview  
### Presentation  
### Assessment  
### Plan  
### Prognosis  
### MedDRA PTs  
### Disqualifiers  
### Strengtheners  
### Suggested Logic Description**

**Dummy**

**## Clinical description (if available already):  
### Overview**

Overview of disease  
**### Presentation**

Symptoms **### Assessment**

Diagnostic procedures **### Plan**

Treatments – surgery, drugs etc  
**### Prognosis  
### MedDRA PTs  
### Disqualifiers**

e.g. if you have T1D you cant have T2D

**### Strengtheners**

Having insulin therapy but no other oral ant diabetes medications

**### Suggested Logic Description**