



# Colorectal cancer

## Coding issues

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# Introduction

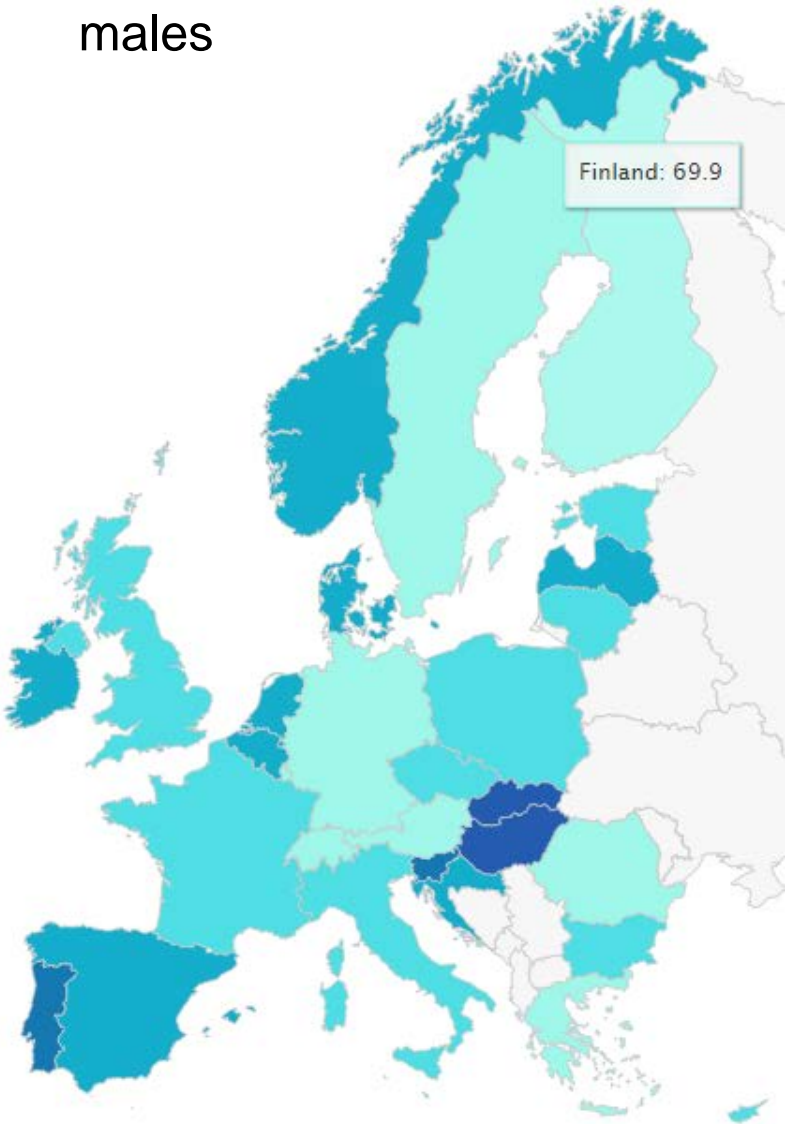
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- Epidemiological information
  - Incidence & mortality trend in Europe, survival
  - Distribution according to age and sex
- Risk factors
- (Diagnostics & staging procedures)
- Topography & morphology
- Stage
- Treatment
- Quality issues

# Incidence of colorectal cancer in Europe in 2018

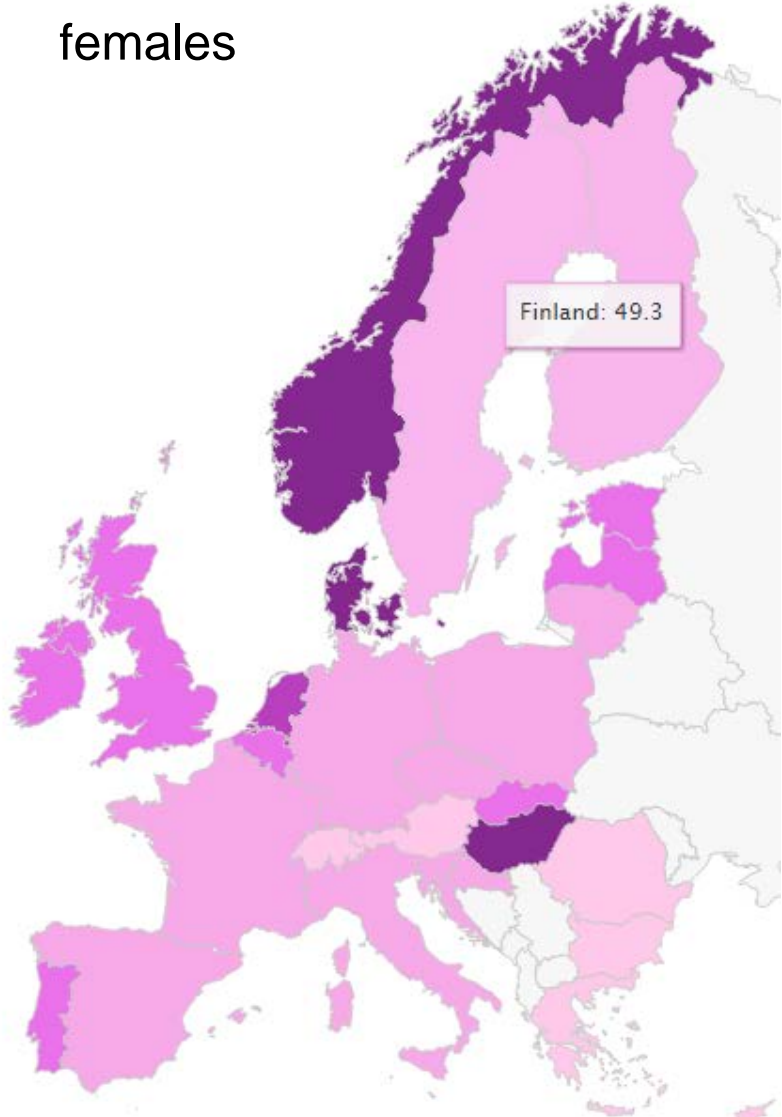
- 63.6 – 82.5
- 82.5 – 101.4
- 101.4 – 120.4
- 120.4 – 139.3
- 139.3 – 158.2

males

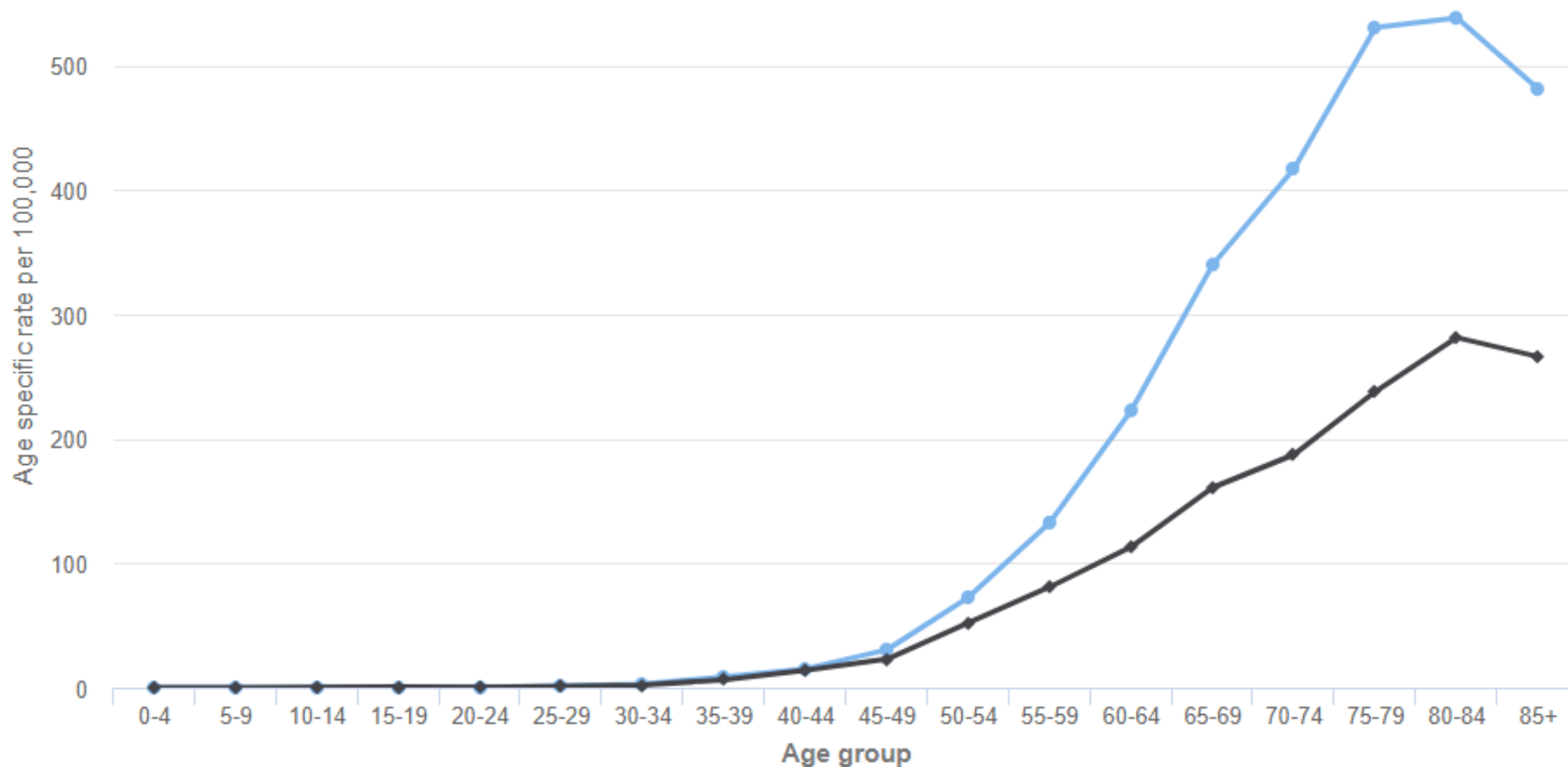




- 36.4 – 47.8
- 47.8 – 59.2
- 59.2 – 70.7
- 70.7 – 82.1
- 82.1 – 93.5

females

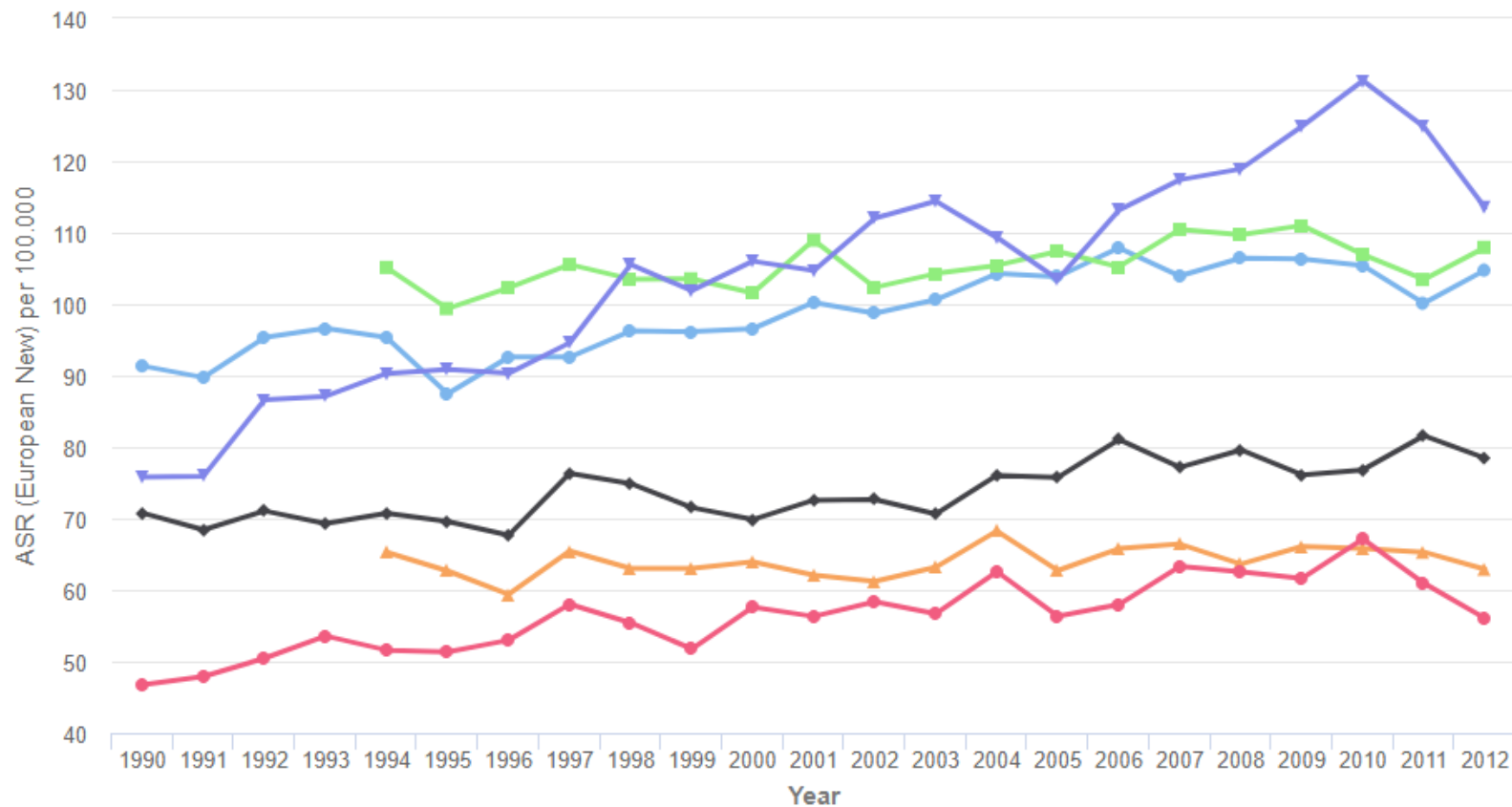


# Age specific incidence of colorectal cancer by sex



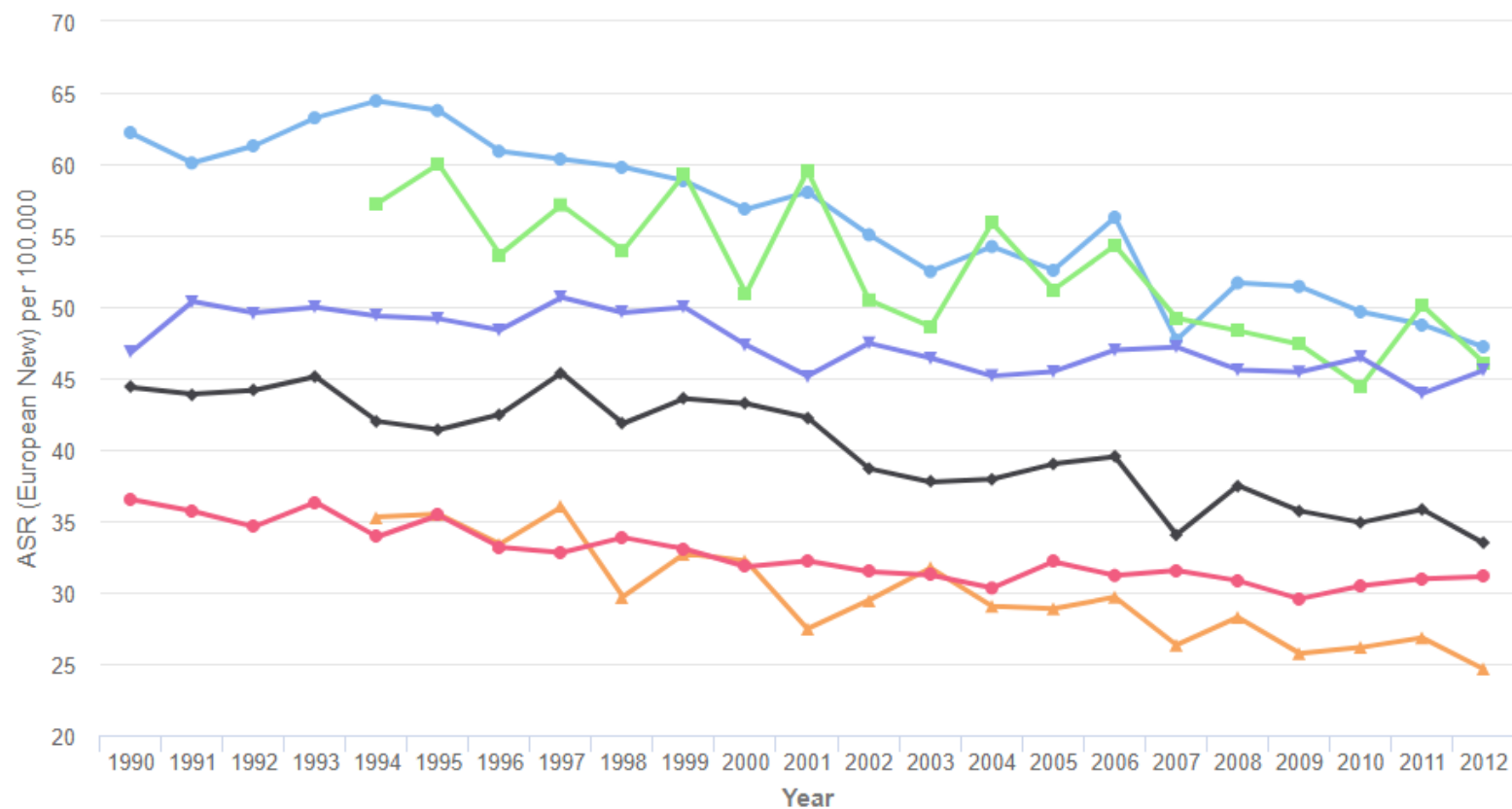
Indicator	Registry	Sex	Cancer	Year	
Incidence	SI Slovenia	Male	Colon, rectum, and anus	2003-2012	
Incidence	SI Slovenia	Female	Colon, rectum, and anus	2003-2012	

# Trends in colorectal cancer incidence



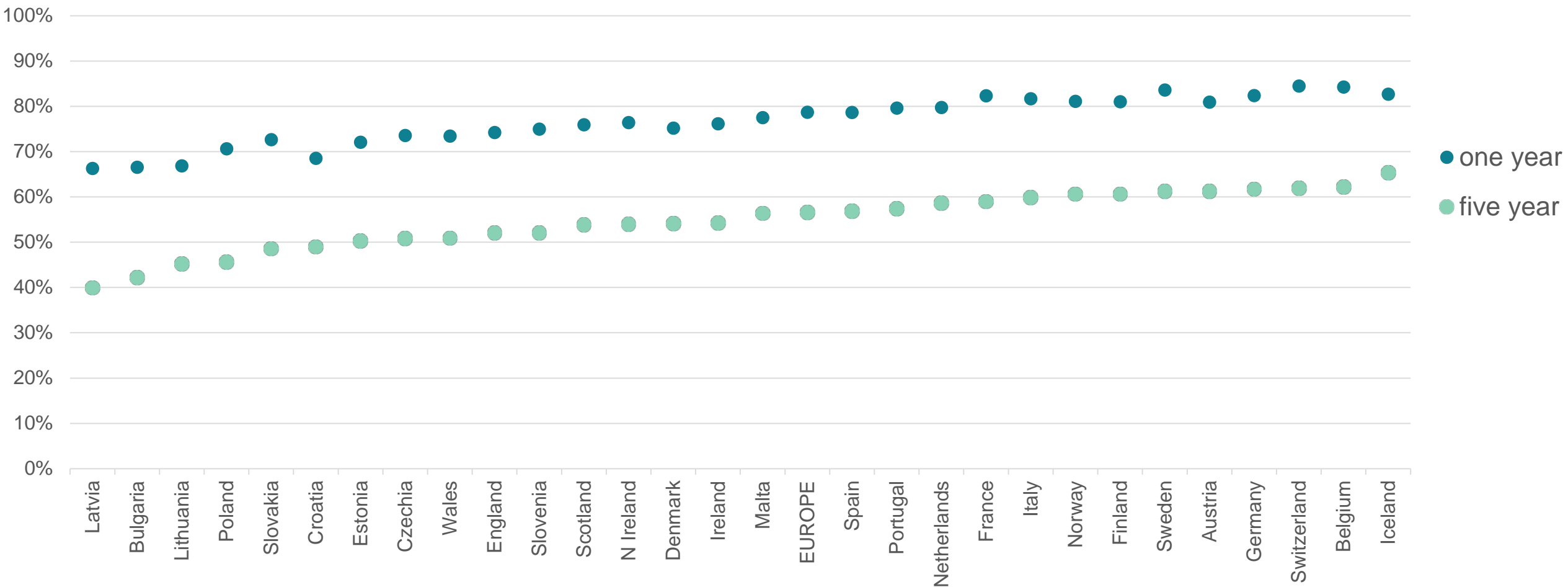
Indicator	Registry	Sex	Cancer	Age Group	▲
Incidence	DK Denmark	Male	Colon, rectum, and anus	0-85+	—
Incidence	DK Denmark	Female	Colon, rectum, and anus	0-85+	—
Incidence	IE Ireland	Male	Colon, rectum, and anus	0-85+	—
Incidence	IE Ireland	Female	Colon, rectum, and anus	0-85+	—
Incidence	SI Slovenia	Male	Colon, rectum, and anus	0-85+	—
Incidence	SI Slovenia	Female	Colon, rectum, and anus	0-85+	—

# Trends in colorectal cancer mortality



Indicator	Registry	Sex	Cancer	Age Group	▲
Mortality	DK Denmark	Male	Colon, rectum, and anus	0-85+	—
Mortality	DK Denmark	Female	Colon, rectum, and anus	0-85+	—
Mortality	IE Ireland	Male	Colon, rectum, and anus	0-85+	—
Mortality	IE Ireland	Female	Colon, rectum, and anus	0-85+	—
Mortality	NL Netherlands	Male	Colon, rectum, and anus	0-85+	—
Mortality	NL Netherlands	Female	Colon, rectum, and anus	0-85+	—

# Relative survival of colorectal cancer (2000-2007)



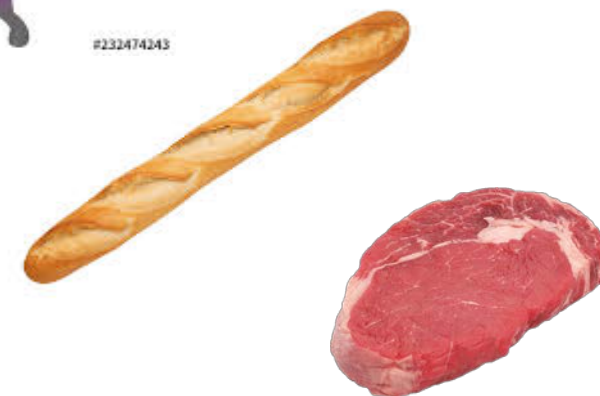


# Risk factors & Symptoms



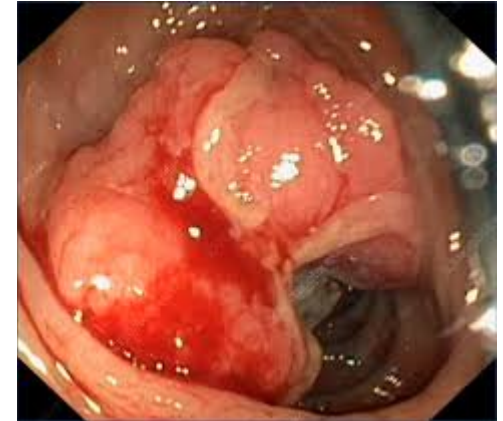
# Risk factors

- Obesity
- Lack of physical exercise
- Diet (low fibre, red meat)
- Smoking
- Genetic factors (Lynch syndrome, FAP)
- Polyps
- Inflammatory bowel disease



# Symptoms

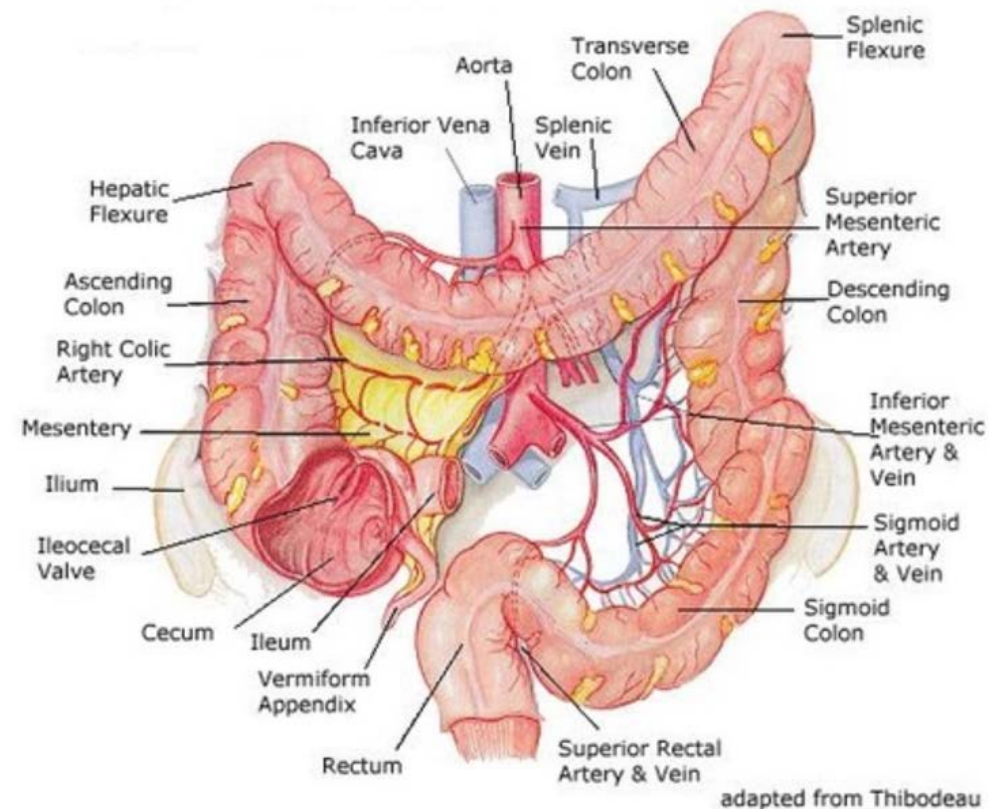
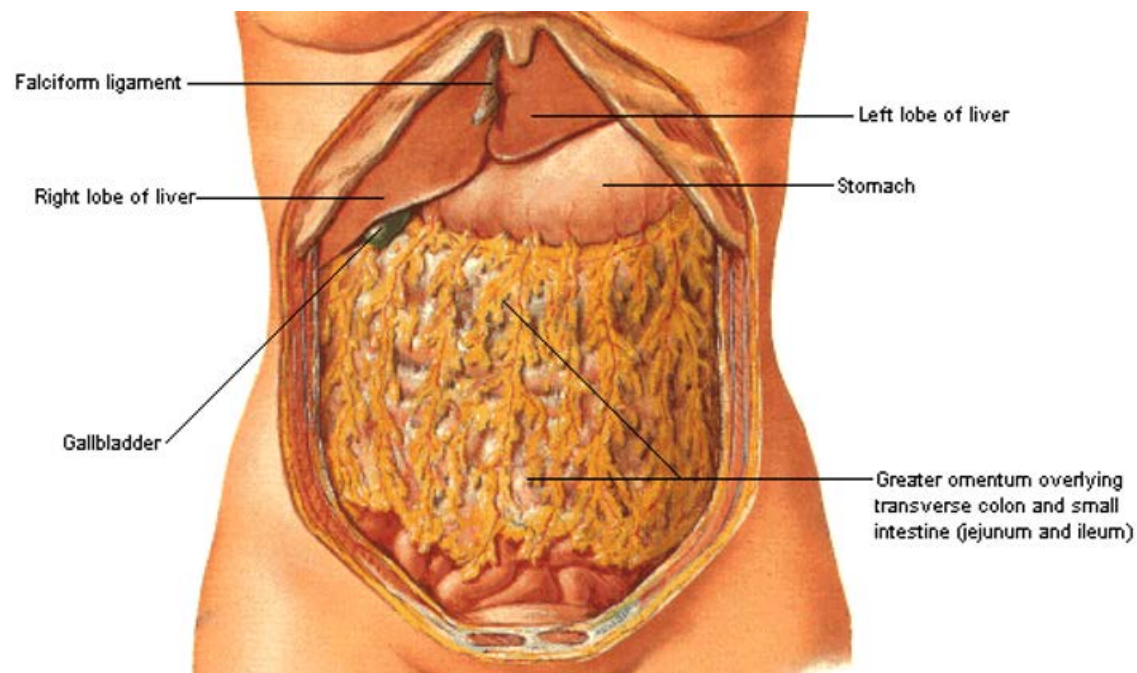
- Blood or mucus in the stool
- Anaemia (due to blood loss)
- Weight loss
- Change in defecation pattern
- Obstipation
- Lack of appetite
- Pain
- Diarrhoea





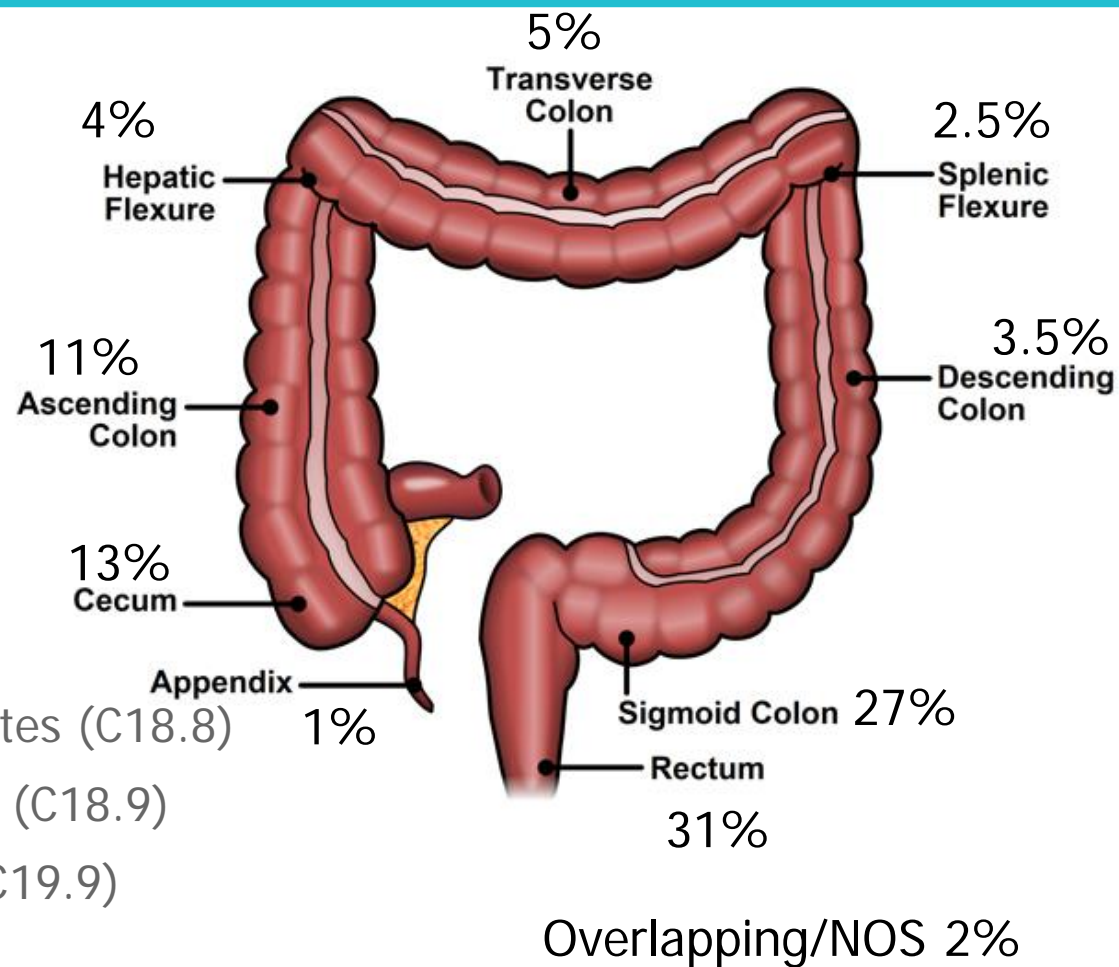
# Topography

# Anatomy



# Topography codes of the colon & rectum

- Cecum (C18.0)
- Appendix (C18.1)
- Ascending colon (C18.2)
- Hepatic flexure of colon (C18.3)
- Transverse colon (C18.4)
- Splenic flexure of colon (C18.5)
- Descending colon (C18.6)
- Sigmoid colon (C18.7)
- Overlapping or multiple in anatomically contiguous subsites (C18.8)
- NOS or multiple in anatomically non-contiguous subsites (C18.9)
- Rectosigmoid junction or multiple in colon and rectum (C19.9)
- Rectum (C20.9)





# Multiple tumours

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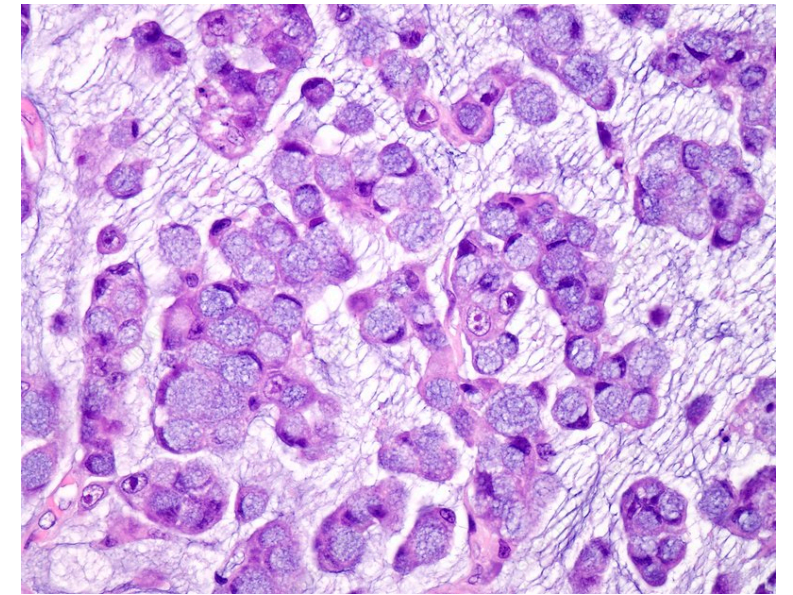
- IACR: 1 tumour for C18; 1 tumour for C19/C20
- Registries are free to register multiple tumours of the colon, but only 1 should be included in the incidence



# Morphology

# Morphology

- Adenocarcinoma (intestinal): 8140/3 (8144/3)
  - Mucinous: 8480/3 (mucin-producing: 8481/3) → extracellular mucin
  - In a tubulovillous adenoma: 8263/3
  - In an adenomatous polyp: 8210/3
  - Signet cell: 8490/3 → intracellular mucin
  - Tubular: 8211/3
  - Medullary: 8510/3
  - Serrated: 8213/3
- Undifferentiated carcinoma (8020/34)
- Neuroendocrine tumour/neuroendocrine carcinoma





# Non-epithelial cancers of the colorectum

- Gastrointestinal stromal tumour (GIST; mostly in the rectum) → 8936/3
- Leiomyosarcoma → 8890/3
- Melanoma (mostly in the rectum) → 8720/3
- Diffuse large B-cell lymphoma → 9680/3
- MALT lymphoma → 9699/3
- Mantle cell lymphoma → 9673/3

# Tumours of the appendix

- Neuro-endocrine tumours (NET grade 1 = carcinoid = 8240/3)
- Mucinous adenocarcinoma (8480/3), signet cell adenocarcinoma (8490/3), adenocarcinoma, NOS (8140/3)
- Mixed adenoneuroendocrine carcinoma: MANEC (8244/3)
- Goblet cell adenocarcinoma/carcinoid (8243/3)

Not to be included in a cancer registry:

- Low grade appendiceal mucinous neoplasm (LAMN = 8480/1)



# Treatment

# Loco-regional disease

## Surgery

- Rectum: pre-operative (chemo)radiotherapy
- Colon: post-operative chemotherapy
  - stage III (=positive lymph nodes)
  - high risk stage II (T4, vascular invasion, poorly differentiated or undifferentiated cancers)

*Pre-operative=neo-adjuvant*

*Post-operative=adjuvant*

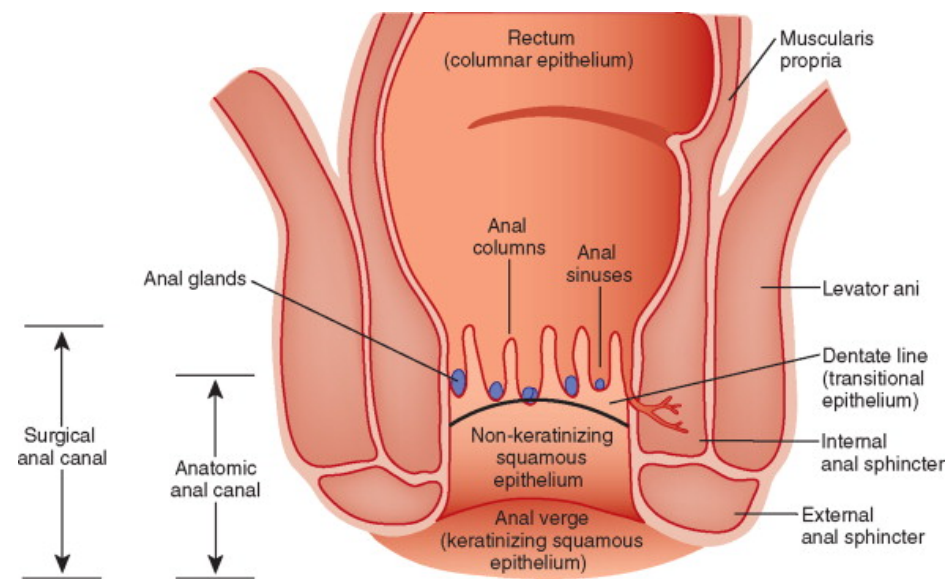
# Metastatic disease

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- Systemic treatment (chemotherapy or targeted therapy)
- Liver surgery

# Cancer of the anal canal

- Anal canal (= terminal part of the large intestine, beginning at the upper surface of the anorectal sphincter and ending at the anus)
  - Upper part: colorectal type mucosa
  - Middle part: anal transition zone ('cloacogenic zone')
  - Lower part: squamous epithelium
- Incidence <1 per 100,000
- Related to HPV-infection
- Mostly squamous cell carcinoma (~90%)
- Rarely adenocarcinoma (~10%)
- Treatment: surgery and/or radiotherapy
- Tumours at the anorectal junction:
  - C21 in case of squamous cell carcinoma (mostly C20 in case of adenocarcinoma)





# EXERCISES



[www.enchr.eu](http://www.enchr.eu)



European Network  
of Cancer Registries



European  
Commission