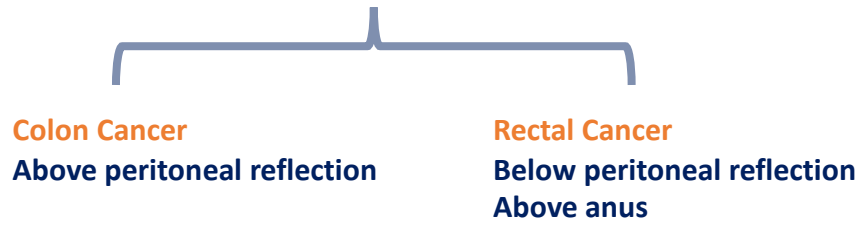


# Colorectal Cancer Reference Handout

# Colorectal Cancer



## Staging

**T1**  
 T0 = carcinoma in situ  
 T1 = submucosa  
 T2 = muscularis propria  
 T3 = peri-colorectal  
 T4 = visceral peritoneum, adjacent organs

**N**  
 N1 = 1-3 LN (includes "tumor deposits")  
 N2 = 4+ LN

**M**  
 M1 = distant mets, includes peritoneum

**Stage**  
 Stage I = T1-2, N0  
 Stage II = T3-4, N0  
 Stage III = T1-4, N1-2  
 Stage IV = M+

# Colon Cancer Tx Early Stage

**Stage I CRC (T1-2, N0)**

Surgery + Observation

**Stage II CRC (T3-4, N0)**

Surgery +/- Chemotherapy

**T3N0**

**+/- Chemo**

MSI-H = NO benefit to chemo

MSI-L = YES benefit with chemo

**T4N0**

**+ Chemo**

5FU/Leucovorin

Capecitabine

**Stage III CRC (N+)**

Surgery + Chemotherapy

**Low Risk**

T1-3, N1 (<3 LN)

**3 Months Chemo**

**CAPOX**

**High Risk**

T4, N2 (>3 LN)

**6 Months Chemo**

**FOLFOX or CAPOX**

\* Stage III > 70 yo: no benefit to oxaliplatin

# Colorectal Cancer Tx Metastatic

## Front-Line

**FOLFOX**  
5FU + Oxaliplatin

**CAPOX**  
Capecitabine + Oxaliplatin

**FOLFIRI**  
5FU + Irinotecan

**FOLFOXIRI**  
5FU + Oxaliplatin + Irinotecan

## Notable Side Effects

**5FU/Capecitabine** → Hand-foot Syndrome (PPE), stomatitis, diarrhea, angina, mild alopecia, NASH  
**Oxaliplatin** → Neuropathy, nephropathy, ototoxicity, cold hypersensitivity  
**Irinotecan** → Watery secretory diarrhea, mild alopecia, NASH  
**Bevacizumab** → HTN, stroke, MI, poor wound healing  
**Cetuximab** → Diarrhea/electrolyte abnormalities, acne

## Targeted Therapy for Special Populations

**Left-Sided Colon Cancer**  
Add cetuximab (EGFR Inhibitor)

**Right-Sided Colon Cancer**  
Add bevacizumab (VEGF Inhibitor)

**KRAS/NRAS Mutated**  
No EGFR biologic therapy

**dMMR/MSI-High**  
Pembrolizumab  
Nivolumab/Ipilimumab  
\* CPI monotherapy front line if dMMR

## Principles of Front-Line Regimen Selection

1. Avoid Neuropathy if possible
2. Balance Toxicity with OS benefit
3. Order is less important
4. Add biologic agent (EGFR or VEGF inhibitor)
4. Utilize maintenance therapy

## Second-Line

**Targeted Therapy** →  
if indicated

**Trifluridine/Tipiracil (Lonsurf)**

**Regorafenib**  
More side effects than lonsurf

## Targeted Therapy for Special Populations

**dMMR/MSI-High**  
Pembrolizumab (1<sup>st</sup> line/2<sup>nd</sup> line)  
Nivolumab/ipilimumab (1<sup>st</sup> line/2<sup>nd</sup> line)

**BRAFV600E Mutated**  
Encorafenib + cetuximab (2<sup>nd</sup> line)  
Dabrafenib + trametinib (2<sup>nd</sup> line)

**HER2 Mutated**  
Trastuzumab  
Lapatinib

# Rectal Cancer

## Pathology

Mostly adenocarcinoma  
Squamous rectal tx as anal

**Colon Cancer**  
Above peritoneal reflection

**Rectal Cancer**  
Below peritoneal reflection  
Above anus

### Stage I

#### Surgery

T1-T2N0

Small (T1, <3 cm) = Local Excision alone

Distal = Abdominoperineal Resection (APR)

Proximal = Low Anterior Resection (LAR)

### Stage II-III

**Neoadjuvant ChemoRT + Surgery + Adjuvant Chemo**  
Trimodal

1. Neoadjuvant ChemoRT (5FU/RT)
2. Surgery
3. Adjuvant Chemotherapy (FOLFOX or CAPOX)

\* Order of trimodal therapy can change

### Stage IV

FOLFOX + Bevacizumab

\* oligometastatic disease is curable

# Anal Cancer

## Risk

Associated with HPV

## Pathology

Mostly squamous, rarely adenocarcinoma

### Stage I

**No sphincter involvement and Well Differentiated**  
Surgery = Abdominoperineal Resection (APR)

**Yes sphincter involvement or Poorly Differentiated**  
ChemoRT

### Stage II-III

#### ChemoRT

5FU/mitomycin + RT

\* Cisplatin can replace mitomycin if contraindication

### Stage IV

**Chemotherapy or Immunotherapy:** No standard treatment  
Carboplatin/paclitaxel  
Pembrolizumab, Nivolumab