North of Scotland Clinical Management Guideline (CMG): Colorectal Cancer

The North of Scotland Clinical Management Guideline for Colorectal Cancer is currently under review and may not be fully reflective of all current practices.

North of Scotland Clinical Management Guideline (CMG): Colorectal Cancer Approved 26th April 2021

For symptoms of suspected Colorectal Cancer, please refer to the Scottish Referral Guidelines for Suspected Cancer

Document Control

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General Principles

In order to ensure accurate data capture and opportunity for peer review:

- All patients (including those who decline, or are considered clinically not suitable for active treatment) should be registered with the appropriate local colorectal cancer MDT.
- In advance of any patient being discussed at the specialist weekly Colorectal Cancer MDT, it is important to have taken steps at the earliest to establish a cancer diagnosis as well as an indication of clinical staging (see page 7 and 8)

In addition to any other specialist referrals that may be clinically indicated depending on individual patients circumstances, all patients should be formally referred to the relevant Clinical Nurse Specialist at the earlier opportunity. This allows for assessment and ongoing specialist advice, education, support and co-ordination of care for the patient throughout the treatment pathway.

At all stages through the pathway:

- Any treatment plans during their presentation be discussed with the patient
- Patients should be provided with written information and treatment summaries should be provided
- Primary care should be notified of patients pathway progress
- Where available, clinical trials should always be considered the preferred option for eligible patients

SACT regimens will be numbered throughout this document and descriptions of these will be found on page 6 (please see refer to SACT regimen spreadsheet in the interim).

Contents

Confirm Diagnosis

The specific diagnostic tests can be found on each pathway page

Pathology

For biopsy:

- Site
- Type
- Differentiation

For resection (in addition to above):

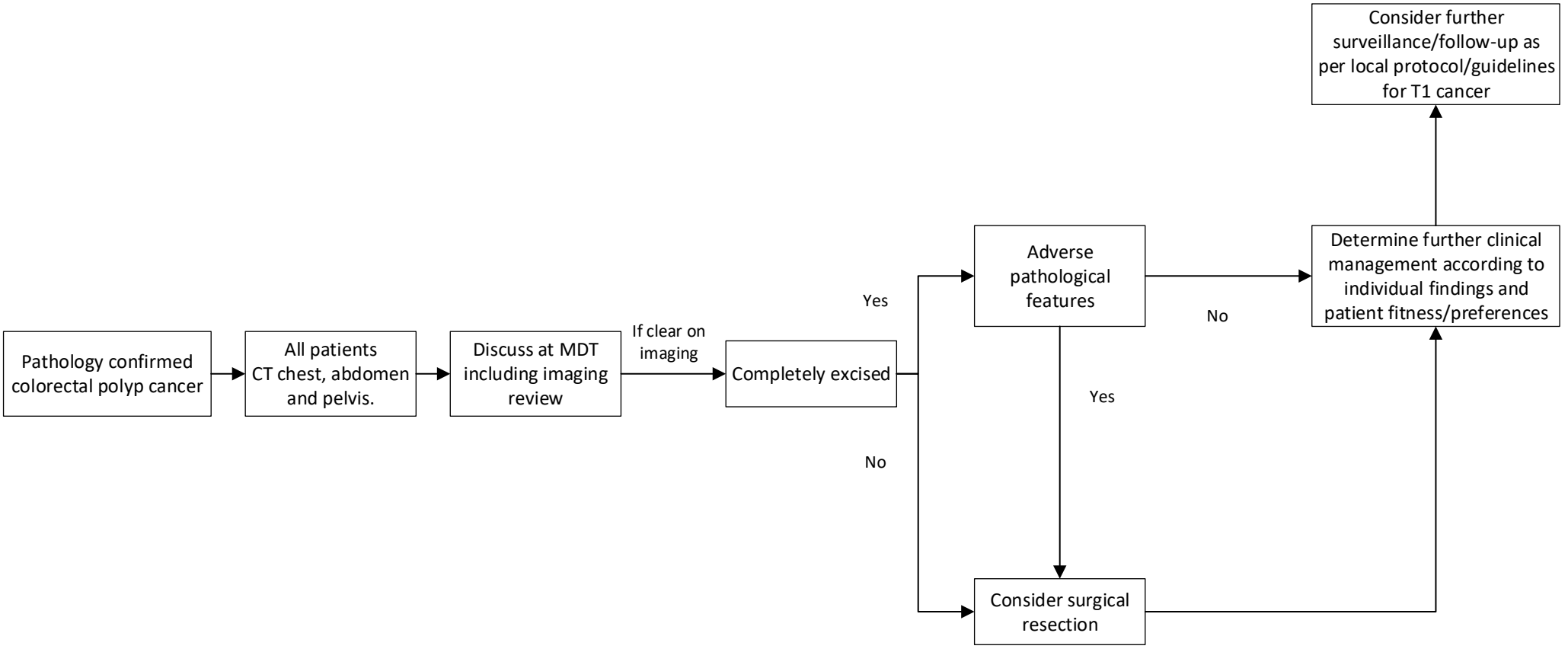
- Margin status
- Nodal involvement
- Local invasion
- Background abnormalities
- Extramural venous invasion
- Assess for genetic markers

Resection reports should conform to RCPath dataset proforma and use TNM 8

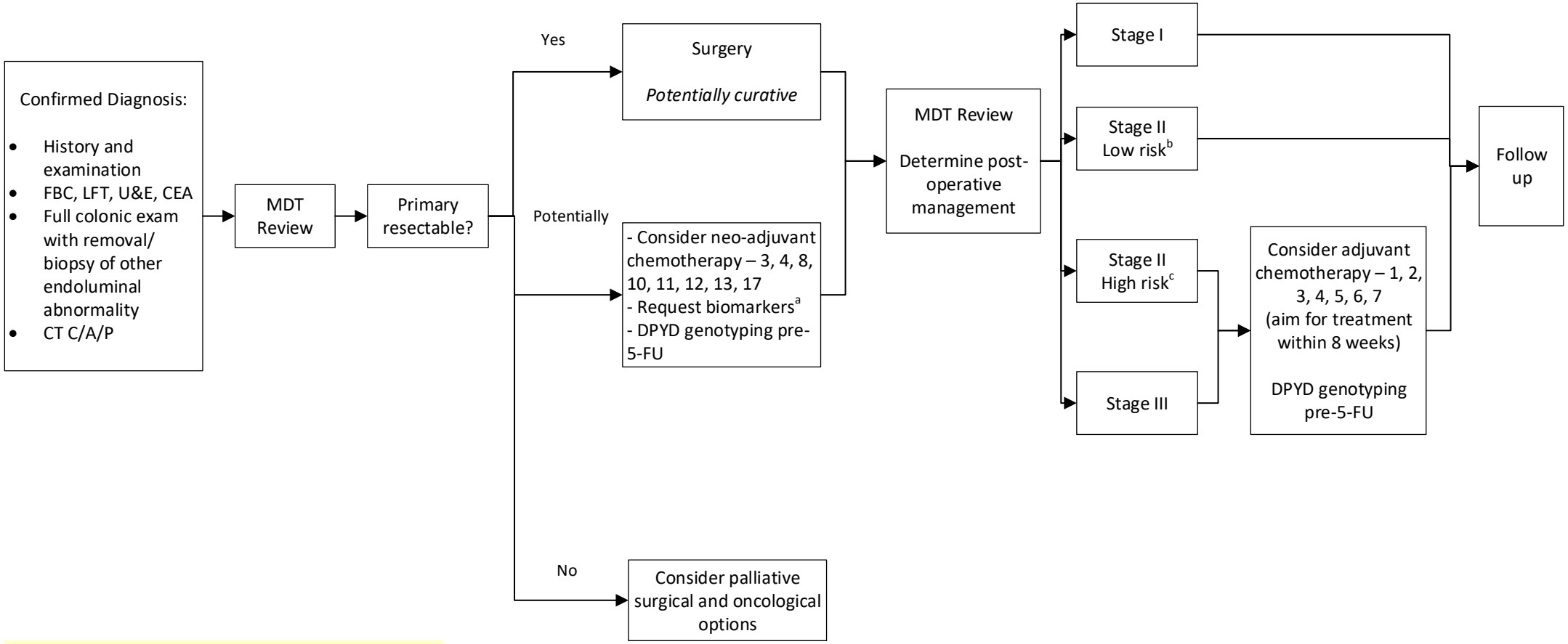
Other Considerations

- Bowel function
- Performance Status (ECOG and/ or ASA)

Management of Malignant Colonic Polyps



Stage I-III Colon Cancer – Diagnosis and Treatment

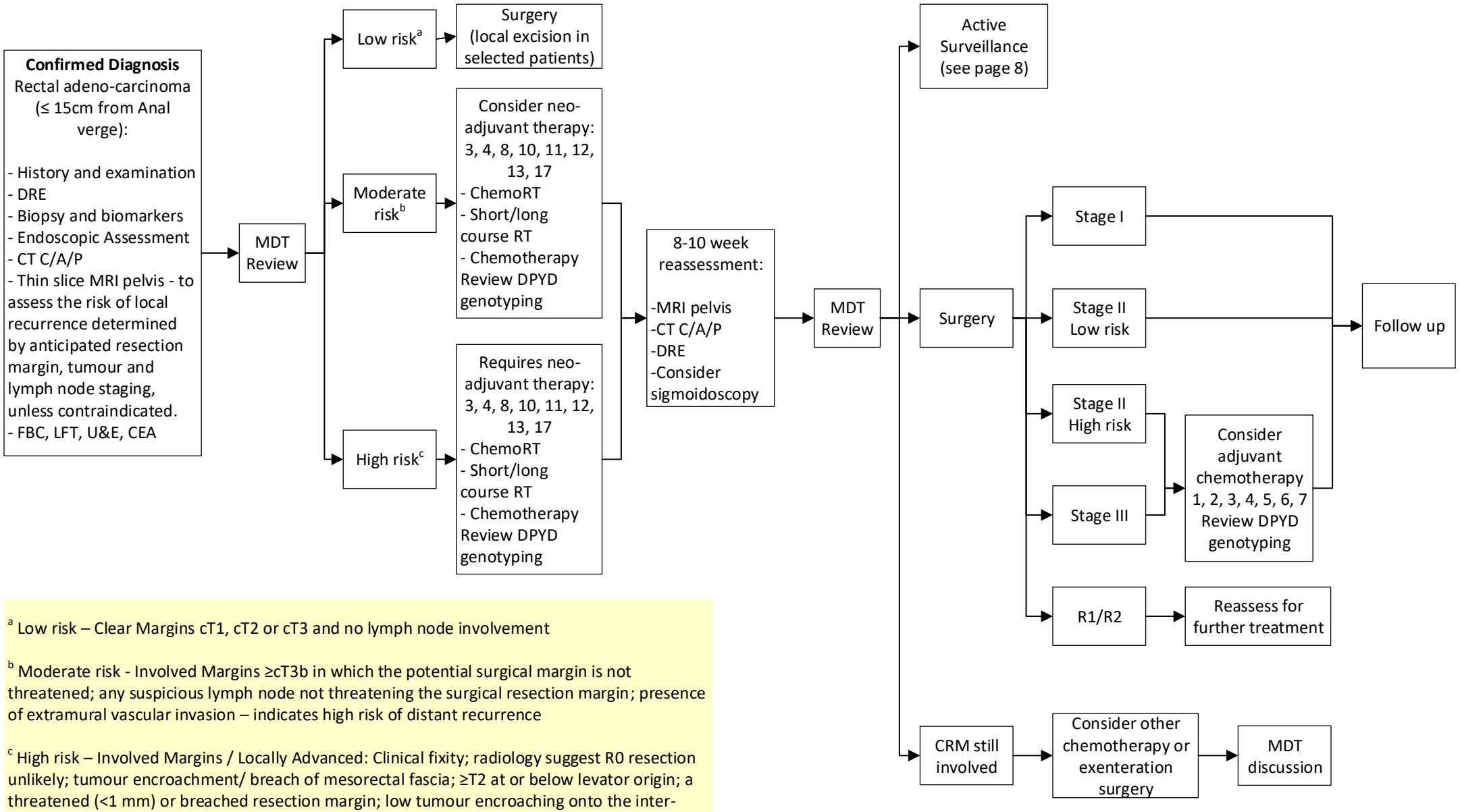


[a] Request biomarkers – RAS, BRAF, MSI

[b] Low risk – absence of high risk factors

[c] High risk – Consider LN number; pT4 disease; tumour perforation; vascular invasion; threatened margin and tumour differentiation (scoring systems may aid decision making)

Stage I-III Rectal Cancer – Diagnosis and Treatment

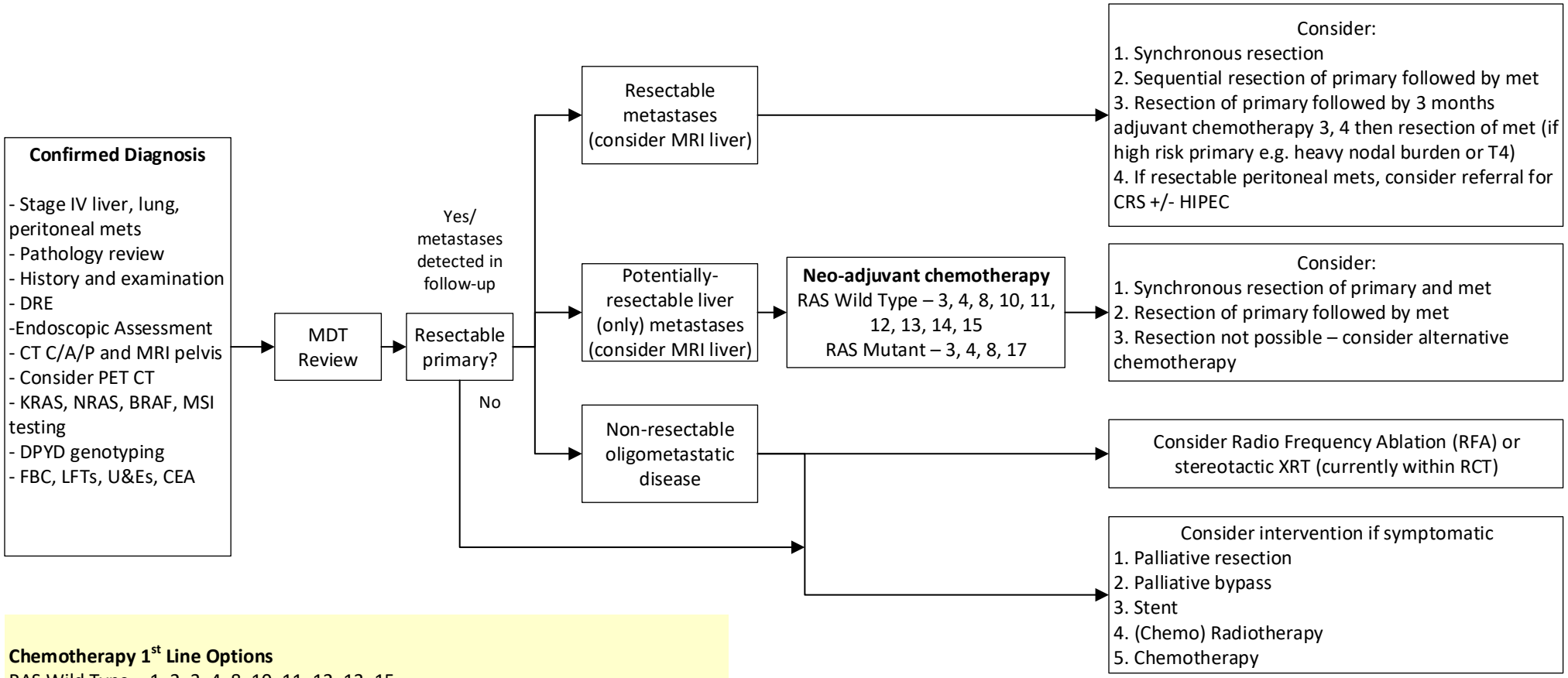


[a] Low risk – Clear Margins cT1, cT2 or cT3 and no lymph node involvement

[b] Moderate risk - Involved Margins ≥cT3b in which the potential surgical margin is not threatened; any suspicious lymph node not threatening the surgical resection margin; presence of extramural vascular invasion – indicates high risk of distant recurrence

[c] High risk – Involved Margins / Locally Advanced: Clinical fixity; radiology suggest R0 resection unlikely; tumour encroachment/ breach of mesorectal fascia; ≥T2 at or below levator origin; a threatened (<1 mm) or breached resection margin; low tumour encroaching onto the inter-sphincteric plane or with levator involvement. Consideration should be given to pelvic exenteration (refer to appropriate MDT).

Metastatic Colorectal Cancer



Chemotherapy 1st Line Options
RAS Wild Type – 1, 2, 3, 4, 8, 10, 11, 12, 13, 15
RAS Mutant – 1, 2, 3, 4, 8, 17
5, 6 and 14 can be considered in particular situations
BRAF mutant – 17

Chemotherapy 2nd Line Options
1, 2, 3, 4, 8, 9, 17
5, 6, 14, 16 can be considered in particular situations

Chemotherapy 3rd Line Options
Consider re-challenge (1,2,3,4, 14) depending on treatment free interval
18
MSI – Consider Pembrolizumab/Nivolumab via PACS2 application - unlicensed

No	SACT Protocol/Regimen Name
1	Capecitabine
2	5-Fluorouracil (Modified de Gramont)
3	mFolfox 6 (where m = modified)
4	Capox
5	Raltitrexed + oxaliplatin
6	Raltitrexed
7	5-Fluorouracil (continuous infusion)
8	Folfiri
9	Folfiri + Aflibercept
10	Folfiri + Cetuximab
11	Folfox + Cetuximab
12	Folfox + Panitumumab
13	Folfiri + Panitumumab
14	Irinotecan
15	Irinotecan + Cetuximab
16	Irinotecan + Aflibercept
17	Folfoxiri
18	Lonsurf (trifluridine with tipiracil)
19	Capecitabine with radiotherapy

TNM Staging for Colorectal Cancer (8th Edition; 2017)		
Primary Tumour (T)		
TX	Primary tumour cannot be assessed	
To	No evidence of primary tumour	
Tis	Carcinoma in situ: invasion of lamina propria a	
T1	Tumour invades submucosa	
T2	Tumour invades muscularis propria	
T3	Tumour invades subserosa or into non-peritonealised pericolic or perirectal tissues	
pT4	**pT4**	Tumour directly invades other organs or structures b,c,d and/or perforates visceral peritoneum
	pT4a	Tumour perforates visceral peritoneum
	pT4b	Tumour directly invades other organs or structures
Notes	a Tis includes cancer cells confined within the mucosal lamina propria (intramucosal) with no extension through the muscularis mucosae into the submucosa b Invades through to visceral peritoneum to involve the surface c Direct invasion in T4b includes invasion of other organs or segments of the colorectum by way of the serosa, as confirmed on microscopic examination, or for tumours in a retroperitoneal or subperitoneal location, direct invasion of other organs or structures by virtue of extension beyond the muscularis propria. d Tumour that is adherent to other organs or structures, macroscopically, is classified cT4b. However, if no tumour is present in the adhesion, microscopically, the classification should be pT1-3, depending on the anatomical depth of wall invasion.	

Regional Lymph Nodes (N)		
NX	Regional lymph nodes cannot be assessed	
N0	No regional lymph node metastasis	
N1	**N1**	Metastasis in 1 to 3 regional lymph nodes
	N1a	Metastasis in 1 regional lymph node
	N1b	Metastasis in 2 to 3 regional lymph nodes
	N1c	Tumour deposit(s), i.e. satellites,* in the subserosa, or in non peritonealized pericolic or perirectal soft tissue without regional lymph node metastasis
N2	**N2**	Metastasis in 4 or more regional lymph nodes
	N2a	Metastasis in 4–6 regional lymph nodes
	N2b	Metastasis in 7 or more regional lymph nodes
Notes	* Tumour deposits (satellites) are discrete macroscopic or microscopic nodules of cancer in the pericolorectal adipose tissue's lymph drainage area of a primary carcinoma that are discontinuous from the primary and without histological evidence of residual lymph node or identifiable vascular or neural structures. If a vessel wall is identifiable on H&E, elastic or other stains, it should be classified as venous invasion (V1/2) or lymphatic invasion (L1). Similarly, if neural structures are identifiable, the lesion should be classified as perineural invasion (Pn1). The presence of tumour deposits does not change the primary tumour T category, but changes the node status (N) to pN1c if all regional lymph nodes are negative on pathological examination.	
Distant Metastasis (M)		
M0	No distant metastasis	
M1	**M1**	No distant metastasis
	M1a	Metastasis confined to one organ (liver, lung, ovary, non-regional lymph node(s)) without peritoneal metastases
	M1b	Metastasis in more than one organ
	M1c	Metastasis to the peritoneum with or without other organ involvement

Definitions

ASA	American Surgeons Association
CAP	Chest, abdomen and pelvis
CEA	Carcino-embryonic antigen
CRM	Circumferential Resection Margin
CRS	Cyto-Reductive Surgery
CT	Computed Tomography
DPYD	Dihydropyrimidine Dehydrogenase Deficiency
DRE	Digital Rectal Examination
ECOG	East Coast Oncology Group
ERUS	Endoscopic Rectal Ultrasound
FBC	Full blood count
KRAS	Kirsten Rat Sarcoma
LFT	Liver Function Tests
LN	Lymph Nodes
MDT	Multi-Disciplinary Team
MRI	Magnetic Resonance Imaging
PACS2	Peer Approved Clinical System
PET	Positive Emission Tomography
RFA	Radio Frequency Ablation
R0	Resection for cure or complete remission
R1	Microscopic residual tumour
R2	Macroscopic residual tumour
SACT	Systemic Anti-Cancer Therapy
TEMS	Trans-anal Endoscopic Microsurgery
TNT	Total Neo-adjuvant Therapy
U&Es	Urea & Electrolytes

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