Algorithm for Oesophageal and Gastric Carcinoma  
(excluding Early Oesophageal and Gastric Cancer/ High Grade Dysplasia)

Document Purpose

An agreed Network wide pathway for the treatment of patients with a diagnosis of gastric carcinoma.

EGC Early Gastric Cancer  
EOC Early Oesophageal Cancer  
OGJ Oesophago-Gastric Junction  
ECF Epirubicin, Cisplatin, 5 Fluorouracil  
ECX Epirubicin, Cisplatin, Capecitabine  
EUS Endoscopic Ultrasound  
EMR Endoscopic Mucosal Resection  
NEJM New England Journal of Medicine  
APC Argon Plasma Coagulation  
SCC Mid Oesophageal Squamous Cell Carcinoma  
PS Performance Status  
MIC Mitomycin, Ifofamide, Cisplatin  
HGD High Grade Dysplasia

Agreed by the Upper GI NSSG and published March 2012
1. **ALGORITHM for GASTRIC CARCINOMA (excluding EGC/ HGD – see separate guideline)**

   ![Flowchart Diagram](link-to-diagram)

   **ENDOSCOPY & BIOPSY**

   **GASTRIC ADENOCARCINOMA (Including Siewert Type III)**

   Adequate cognitive ability and patient wishes to proceed with staging

   **Staging CT**
   (Gastric protocol)

   **Local MDT**

   **Potentially operable**
   Stage I, II, III
   Reasonable fitness

   **Central MDT**

   **Staging laparoscopy**
   Cytology +/- biopsy

   **Fitness assessment**
   Anaesthetic
   Cardio-respiratory

   **Potentially operable**
   Stage I, II, Illa, (IIIb)
   Reasonable fitness

   **Central MDT**

   **Neo-adjuvant CHEMOTHERAPY**

   **GASTRECTOMY**

   **Adjuvant Chemotherapy**

   **Inoperable**
   Stage IV/ locally advanced
   Unfit for surgery

   **Local MDT**

   **Palliative chemotherapy**
   Good performance status

   **Palliative care**
   Poor performance status

   **Borderline operable**
   Restage

   **Downsizing CHEMOTHERAPY**
2. STOMACH CANCER

2.1 POTENTIALLY OPERABLE (CURATIVE)

2.1.1 Peri-operative chemotherapy

MRC ST02 (MAGIC) trial Lancet 2007 - survival benefit from peri-operative chemotherapy

Gastric and Type 3 OGJ
ECF (trial) / ECX (regarded as equivalent)
3 cycles pre-op and consider 3 post-op

2.1.2 Direct to Gastrectomy
T1 or HGD not amenable to endoscopic therapy.
Patient informed choice
(Semi) emergency setting – bleeding, perforation, gastric outlet obstruction

2.1.3 Downsizing chemotherapy

If uncertain operability consider downsizing chemotherapy
Max 6 cycles with repeat CT scan after 3 - 4 to reassess
ECX / ECF
Repeat CT (+/- laparoscopy) at completion with central MDT review

2.1.4 Post-op chemoradiation

McDonald et al NEJM 2001
45Gy/25# + concurrent 5FU
Still not accepted as standard but consider in selected patients

2.2 PALLIATION

2.2.1 Palliative chemotherapy

ECX (ECF) symptomatic and survival benefit (Cochrane review; 2004)
Approx. 45% response rate
Max 8 cycles

No standard second line regime
Reported activity for docetaxel / irinotecan (consider phase II trial)
Cannot be recommended routinely

Consider:
Best supportive care
Palliative bypass / stent (obstruction)
APC / radiotherapy (haemorrhage)
Enteral feeding
3. ALGORITHM for OESOPHAGEAL CARCINOMA (excluding EOC/HGD – see separate guideline)

ENDOSCOPY & BIOPSY

OESOPHAGEAL CARCINOMA (Squamous + Adeno (Siewert Type I/II))

Adequate cognitive ability and patient wishes to proceed with staging

Staging CT

Local MDT

Potentially operable
- Stage I, II, III
- Reasonable fitness

Central MDT

Staging laparoscopy
- Type I/II OGJ
- EUS

Fitness assessment
- Anaesthetic
- Cardio-respiratory

Potentially operable
- Stage I, II, III
- Reasonable fitness

Inoperable

Locally advanced
- Unfit/Preference

Local MDT

Stage IV

Palliative Care
- Chemotherapy
- Radiotherapy
- Stent
- Endotherapy (e.g. APC, laser)
- Brachytherapy

SQUAMOUS

Chemoradiotherapy

Consider for SQUAMOUS

Central MDT

Neoadjuvant CHEMOTHERAPY

Borderline operable

Restage

Downsizing CHEMOTHERAPY

OESOPHAGECTOMY

ENDOSCOPY & BIOPSY

OESOPHAGEAL CARCINOMA (Squamous + Adeno (Siewert Type I/II))

Adequate cognitive ability and patient wishes to proceed with staging

Staging CT

Local MDT

Potentially operable
- Stage I, II, III
- Reasonable fitness

Central MDT

Staging laparoscopy
- Type I/II OGJ
- EUS

Fitness assessment
- Anaesthetic
- Cardio-respiratory

Potentially operable
- Stage I, II, III
- Reasonable fitness

Inoperable

Locally advanced
- Unfit/Preference

Local MDT

Stage IV

Palliative Care
- Chemotherapy
- Radiotherapy
- Stent
- Endotherapy (e.g. APC, laser)
- Brachytherapy

SQUAMOUS

Chemoradiotherapy

Consider for SQUAMOUS

Central MDT

Neoadjuvant CHEMOTHERAPY

Borderline operable

Restage

Downsizing CHEMOTHERAPY

OESOPHAGECTOMY
4. **OESOPHAGUS**

OESOPHAGEAL SCC or ADENOCARCINOMA (SIEWERT TYPE I or II)
STAGING: CT chest, abdomen, EUS, PET scan & laparoscopy
MDM: review (biopsy &) radiology

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RESECTABLE

Neoadjuvant chemotherapy
For adenocarcinoma consider MRC OE05 trial

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UNRESECTABLE

Squamous carcinoma
Medically unfit or Patient / MDT choice

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METASTATIC

Good PS
Poor PS

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SURGERY

CHEMORADIOThERAPY
50.4Gy 28F
+ 2 cycles cisplatin/5FU
RADICAL RT
52.5 - 55Gy 20F
or 66Gy 33F

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PALLIATIVE

Chemotherapy
RT (20Gy 5# - 40Gy 15#)
Mechanical (stent, APC)
Brachytherapy
Palliative care
Dependant on symptoms and performance status

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FOLLOW UP

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4.1 **POTENTIALLY OPERABLE (CURATIVE)**

4.1.1 **Neoadjuvant chemotherapy**

Current NCRN trial OE05
2 cisplatinum / 5FU v 4 ECX
Adenocarcinoma oesophagus including type 1, 2 OGJ

Standard treatment 2 cycles cisplatinum/5FU (MRC OE02 trial; Lancet 2002)
Alternatives:
Type 1, 2 adenocarcinoma OGJ – 3 cycles ECF / ECX (STO2 MAGIC trial; Lancet 2007)
Squamous carcinoma – 3 - 4 cycles MIC (J Clin Onc 2003)

4.1.2 **Direct to Oesophagectomy**

Patient informed choice
Emergent setting – bleeding or perforation.
T1 oesophageal cancer or HGD not amenable to endoscopic therapy
4.1.3 **Downsizing chemotherapy**
If uncertain operability consider downsizing chemotherapy
Max 6 cycles with repeat CT scan after 3 - 4 to reassess
Squamous MIC
Adenocarcinoma – ECX/ECF
Restage and MDT review after completion

4.1.4 **Radical chemoradiation**
Alternative to surgery in upper and mid oesophageal sq cell ca
Preferred treatment for post cricoid tumours
50.4Gy + 2 cycles cisplat/5FU (Herskovic NEJM 1992) or consider CX as an alternative

4.1.5 **Radical radiotherapy** alone
52.5-55gGy 20# or 66Gy 33# may be appropriate in pts deemed unfit for chemotherapy

4.1.6 **Adjuvant radiotherapy**
Unproven but consider on individual basis in patients with focally positive margins

4.2 **PALLIATION**

4.2.1 **Palliative chemotherapy**
Adenocarcinoma - ECX (ECF) - as per gastric cancer (Max 8 cycles)
Squamous carcinoma – MIC (Max 6 cycles)

4.2.2 **Palliative radiotherapy**
20Gy 5# - 40Gy 15#
Consider:
- Best supportive care
- Palliative stent (obstruction)
- Palliative endotherapy - laser / APC
- Enteral feeding