Gastric Cancer

This practice algorithm has been specifically developed for MD Anderson using a multidisciplinary approach and taking into consideration circumstances particular to MD Anderson, including the following: MD Anderson’s specific patient population; MD Anderson’s services and structure; and MD Anderson’s clinical information. Moreover, this algorithm is not intended to replace the independent medical or professional judgment of physicians or other health care providers. This algorithm should not be used to treat pregnant women.

Note: Consider Clinical Trials as treatment options for eligible patients. Consider referral to a Comprehensive Cancer Center.

INITIAL EVALUATION

- Multidisciplinary evaluation
- History and Physical
- CBC & chemistry profile
- Abdominal CT with contrast
- CT/Ultrasound pelvis (females)
- Chest Imaging
- Esophagogastroduodenoscopy (EGD)
- PET/CT or PET scan (optional)
- Endoscopic Ultrasound (optional)
- H. pylori test, treat if positive
- HER2-neu evaluation by Immunohistochemistry (IHC) in patients with advanced, metastatic cancer (not localized cancer)

CLINICAL STAGE

- cTis or cT1a
- M0

ADDITIONAL EVALUATION

- Medically fit?
- Medically fit, potentially resectable (consider laparoscopy staging)
- Medically unfit
- Stage IV (M1)

POST LAPAROSCOPY STAGING

- cTis or cT1a
- Medically fit, potentially resectable (consider laparoscopy staging)
- Medically unfit
- Karnofsky performance score greater than or equal to 60% or ECOG performance score less than or equal to 2?

PRIMARY TREATMENT

- Endoscopic mucosal resection (EMR) or Surgery
- Endoscopic mucosal resection (EMR)
- Surgery or Preoperative chemotherapy or Chemoradiation
- Radiotherapy, 45-50.4 Gy plus concurrent 5-FU based radiosensitization or Chemotherapy
- Radiotherapy, 45-50.4 Gy plus concurrent 5-FU based radiosensitization or Palliative Therapy
- Chemotherapy or Clinical trial or Best supportive care
- Best supportive care

See Page 2

1 Consider HER2-neu evaluation initially by IHC and later with FISH if clinically indicated.


3 M0 Unresectable refers to an unresectable T4 primary

4 Medically fit patients with positive cytology in the peritoneal fluid (but no macroscopic cancer may be re-assessed for surgery after prolonged systemic therapy and chemoradiation).
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Gastric Cancer

STAGE AFTER PRIMARY TREATMENT

<table>
<thead>
<tr>
<th>No cancer at resected margins</th>
</tr>
</thead>
<tbody>
<tr>
<td>cTis or cT1, N0</td>
</tr>
<tr>
<td>Observe as clinically indicated</td>
</tr>
<tr>
<td>• Observe or chemoradiation (Flouropyrimidone-based) for selected patients</td>
</tr>
<tr>
<td>• or ECF if received preoperatively</td>
</tr>
</tbody>
</table>

| cT2, N0                      |
| Observe or chemoradiation (Flouropyrimidone-based) for selected patients |
| or ECF if received preoperatively |

| cT3, cT4 or Any T, N+        |
| Radiotherapy, 45-50.4 Gy plus concurrent 5-FU-based radiosensitization (preferred) with 5-FU with or without leucovorin |
| or ECF if received preoperatively |

| RT, 45-50.4 Gy + concurrent 5-FU-based radiosensitization (preferred) plus 5-FU with or without leucovorin |
| Residual, unresectable locoregional and/or distant metastasis? |
| Karnofsky performance score greater than or equal to 60% or ECOG performance score less than or equal to 2? |
| Chemotherapy or Clinical trial or Best supportive care |
| Yes |
| Best supportive care |
| No |

ADJUVANT TREATMENT

| Microscopic residual cancer |
| RT, 45-50.4 Gy with concurrent 5-FU-based radiosensitization or chemotherapy |
| • or best supportive care (poor performance) |

| Macroscopic residual cancer or M1B |
| RT, 45-50.4 Gy with concurrent 5-FU-based radiosensitization or chemotherapy |
| • or best supportive care (poor performance) |

SURVEILLANCE

| H&P every 4-6 months for 3 years, then annually |
| CBC and chemistry profile as indicated |
| Radiologic imaging or endoscopy, as clinically indicated |
| Monitor for vitamin B12 deficiency in surgically resected patients and treat as indicated |
| Or surgery if appropriate |
| Vitamin D level check |

| Karnofsky performance score greater than or equal to 60% or ECOG performance score less than or equal to 2? |
| Residual, unresectable locoregional and/or distant metastasis? |
| Karnofsky performance score greater than or equal to 60% or ECOG performance score less than or equal to 2? |
| Chemotherapy or Clinical trial or Best supportive care |
| Yes |
| Best supportive care |
| No |
**Gastric Cancer**

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**SUGGESTED READINGS**

**PRINCIPLES OF MULTIDISCIPLINARY TEAM APPROACH FOR GASTROESOPHAGEAL CANCERS**


**PRINCIPLES OF GASTRIC CANCER SURGERY**


**PRINCIPLES OF SYSTEMIC THERAPY FOR GASTRIC OR GASTROESOPHAGEAL JUNCTION ADENOCARCINOMA**


CONTINUED ON NEXT PAGE
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**SUGGESTED READINGS - CONTINUED**

**PRINCIPLES OF SYSTEMIC THERAPY FOR GASTRIC OR GASTROESOPHAGEAL JUNCTION ADENOCARCINOMA - CONTINUED**


**OTHER SUPPORTIVE READINGS**

Gastric Cancer

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DEVELOPMENT CREDITS

This practice algorithm is based on majority expert opinion of the Gastrointestinal Center Faculty at the University of Texas, MD Anderson Cancer Center. A multidisciplinary approach was used and included input from the following medical oncologists, radiation oncologists, surgical oncologists, and pathologists:

- Jaffer, Ajani, MD
- Brian Badgwell, MD
- Manoop Bhutani, MBBS
- Mariela Blum, MD
- Prajnan Das, MD, MPH
- Jeannelyn Santiano Estrella, MD
- Keith Fournier, MD
- Linus Ho, MD
- Jeffrey H. Lee, MD
- Steven Lin, MD, PHD
- Paul Mansfield, MD
- Dipen Maru, MD
- William A. Ross, MD
- Heath Skinner, MD, PHD
- James Welsh, MD

† Core Development Team