

<b>*Evolut</b>	
<b>Clinical guidelines:</b> <b>GASTRIC CANCER</b>	<b>Original Date: June 2013</b>
<b>Radiation Oncology</b>	<b>Last Revised Date: May 2023</b>
<b>Guideline Number: Evolut_CG_130</b>	<b>Implementation Date: January 2024</b>

## GENERAL INFORMATION

- *It is an expectation that all patients receive care/services from a licensed clinician. All appropriate supporting documentation, including recent pertinent office visit notes, laboratory data, and results of any special testing must be provided. If applicable: All prior relevant imaging results and the reason that alternative imaging cannot be performed must be included in the documentation submitted.*
- *Where a specific clinical indication is not directly addressed in this guideline, medical necessity determination will be made based on widely accepted standard of care criteria. These criteria are supported by evidence-based or peer-reviewed sources such as medical literature, societal guidelines and state/national recommendations.*

## INDICATIONS FOR RADIATION THERAPY

Three-dimensional conformal radiation therapy (3D-CRT) is considered medically necessary for the following with the following clinical indications<sup>1</sup>:

- Pre-operative (Potentially Resectable) T2, T3, or T4 Any N, M0
- OR**
- Primary Therapy (Unresectable/Medically Unfit) Any N, Any T, M0
- OR**
- Post-operative -Surgical Resection T2, T3, T4, Any N or Any T, N+ or Positive margins

### Dosage Guidelines:

- 45-50.4 Gy up to 28 fractions
- Higher doses may be used for positive surgical margins in selected cases as a boost to that area.

## TREATMENT OPTIONS TO BE REVIEWED ON A CASE-BY-CASE BASIS

### **Intensity Modulated Radiation Therapy (IMRT)<sup>1</sup>**

IMRT is not indicated as a standard treatment option and should not be used routinely for the delivery of radiation therapy for gastric cancer. IMRT is strictly defined by the utilization of inverse planning modulation techniques. IMRT may be appropriate for limited circumstances in which radiation therapy is indicated and 3D conformal radiation therapy (3D-CRT) techniques cannot adequately deliver the radiation prescription without exceeding normal tissue radiation tolerance, the delivery is anticipated to contribute to potential late toxicity or tumor volume dose heterogeneity is such that unacceptable hot or cold spots are created. The role of intensity modulated radiation therapy, according to current

National Comprehensive Cancer Network Guidelines may be appropriate in selected cases to reduce dose to normal structures, such as heart, lungs, kidneys, and liver. However, uncertainties from variations in stomach filling and respiratory motion need to be considered.

Clinical rationale and documentation for performing IMRT rather than 2D or 3D-CRT treatment planning and delivery will need to:

- Demonstrate how 3D-CRT isodose planning cannot produce a satisfactory treatment plan (as stated above) via the use of a patient-specific dose volume histograms and isodose plans.
- Provide tissue constraints for both the target and affected critical structures.

### **Proton Beam Radiation Therapy**

Proton beam is not an approved treatment option for gastric cancer. There are limited clinical studies comparing proton beam therapy to 3-D conformal radiation. Overall, studies have not shown clinical outcomes to be superior to conventional radiation therapy.

### **Stereotactic Body Radiation Therapy**

Stereotactic Body Radiation Therapy (SBRT) is not an approved treatment option for the treatment of gastric cancer.

---

## **BACKGROUND**

For patients with resectable gastric cancer, radiation therapy has been used both in the pre-operative and post-operative settings. External beam radiation therapy alone is of limited use for patients with locally unresectable gastric cancer with no evidence of improved survival. Combined chemoradiation, however, does result in improved survival, and thus combined modality treatment is typically supported. The role of IMRT (intensity modulated radiation therapy) may be appropriate in selected cases to reduce dose to normal structures, such as heart, lungs, kidneys, and liver, but should be considered on a case-by-case basis.

The goal of these guidelines is to delineate appropriate indications of the employment of radiation therapy in the treatment of gastric cancer and to define suitable methods of delivery of radiation therapy for these indications.

## REFERENCES

1. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines): Gastric Cancer Version 2.2022. National Comprehensive Cancer Network (NCCN). Updated January 11, 2022. Accessed December 2, 2022. [https://www.nccn.org/professionals/physician\\_gls/pdf/gastric.pdf](https://www.nccn.org/professionals/physician_gls/pdf/gastric.pdf)

**POLICY HISTORY**

<b>Date</b>	<b>Summary</b>
May 2023	<ul style="list-style-type: none"><li>• Added to dosage guidelines: Higher doses may be used for positive surgical margins in selected cases as a boost to that area</li><li>• Deleted Additional Resources</li><li>• Heading changed from “Treatment Options Requiring Physician Review” to “Treatment Options to be reviewed on a case-by-case basis”</li></ul>
January 2022	No significant changes

## Reviewed / Approved by Clinical Guideline Committee

**Disclaimer:** *Evolut Clinical Guidelines do not constitute medical advice. Treating health care professionals are solely responsible for diagnosis, treatment and medical advice. Evolut uses Clinical Guidelines in accordance with its contractual obligations to provide utilization management. Coverage for services varies for individual members according to the terms of their health care coverage or government program. Individual members' health care coverage may not utilize some Evolut Clinical Guidelines. A list of procedure codes, services or drugs may not be all inclusive and does not imply that a service or drug is a covered or non-covered service or drug. Evolut reserves the right to review and update this Clinical Guideline in its sole discretion. Notice of any changes shall be provided as required by applicable provider agreements and laws or regulations. **Members should contact their Plan customer service representative for specific coverage information.***