



# Effective Health Care

## Preoperative Radiation Therapy to Prevent Recurrence in Rectal Cancer Nomination Summary Document

### Results of Topic Selection Process & Next Steps

- Preoperative radiation therapy to prevent recurrence in rectal cancer was found to be addressed by a 2011 evidence review titled *The Diagnosis and Management of Colorectal Cancer* by the National Institute for Health and Clinical Excellence (NICE). Given that the existing review covers this nomination, no further activity will be undertaken on this topic.
  - National Institute for Health and Clinical Excellence. The diagnosis and management of colorectal cancer: evidence review. November 2011. Available at: <http://guidance.nice.org.uk/CG131>

### Topic Description

**Nominator:** Organization

**Nomination Summary:** The nominators question the added value of radiation therapy prior to surgical removal of local rectal tumors.

#### Staff-Generated PICO

**Population(s):** Adults with resectable rectal cancer without any evidence of distant disease; subgroups of interest include patients based on disease stage

**Intervention(s):** Radiation therapy followed by local or mesorectal excision of primary rectal tumor

**Comparator(s):** Local or mesorectal excision of primary rectal tumor without adjuvant radiation therapy

**Outcome(s):** Rates of local recurrence, overall survival, quality of life, adverse effects of irradiation (toxicity, gastrointestinal complications), hospital admissions

**Key Questions from Nominator:**

1. For patients with rectal cancer, what is the comparative effectiveness of neoadjuvant (preoperative) radiation therapy plus surgery versus surgery alone to reduce risk of local recurrence and improve net health outcomes?

### Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)

- Topic was found to be addressed by an existing high-quality evidence review by NICE titled *The Diagnosis and Management of Colorectal Cancer*. The review addresses the effectiveness of preoperative short course radiotherapy or chemoradiotherapy in patients with operable rectal cancer. The NICE review divides patients into three separate risk groups by predicted risk of recurrence based on magnetic resonance imaging (MRI) data and reviews the evidence for each group. This categorization addresses the nominator's question related to differences in benefits and harms for patient subgroups based on disease stage.