ClinicalTrials.gov Protocol Registration and Results System (PRS) Receipt
Release Date: June 23, 2025

ClinicalTrials.gov ID: NCT06823297

Study Identification

Unique Protocol ID:	KA24/461
Brief Title:	Can Neoadjuvant Chemoradiotherapy be Ommited in Mid-rectal Cancer (CANO)
Official Title:	Can Neoadjuvant Chemoradiotherapy be Omitted in cT2N+ and cT3 Mid-rectal Cancer: A Prospective, Observational Cohort Study
Secondary IDs:	

Study Status

Record Verification:	June 2025
Overall Status:	Not yet recruiting
Study Start:	August 1, 2025 [Anticipated]
Primary Completion:	August 1, 2030 [Anticipated]
Study Completion:	August 1, 2035 [Anticipated]

Sponsor/Collaborators

Sponsor:	Turkish Society of Colon and Rectal Surgery
Responsible Party:	Sponsor
Collaborators:	Baskent University Dokuz Eylul University Halic University Acibadem Kent Hospital Istanbul Health and Technology University

Oversight

U.S. FDA-regulated Drug:	No
U.S. FDA-regulated Device:	No
U.S. FDA IND/IDE:	No
Human Subjects Review:	Board Status: Approved Approval Number: E-91694447-604.01-420449 Board Name: Ethics Committee for Non-Interventional Clinical Research Board Affiliation: Baskent University Phone: +90312 212 90 65 Email: arastirma@baskent.edu.tr Address:

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Data Monitoring: Yes

FDA Regulated Intervention: No

Study Description

Brief Summary: This project aims to compare the oncological and functional outcomes of patients with mid-rectal cancer who have a low risk of local recurrence (without MRF involvement) and who either receive or do not receive neoadjuvant chemoradiotherapy (nCRT).

Main Question:

H0: In mid-rectal cancer patients without MRF involvement (cT2N+ and cT3Nx), there is no difference in 3-year disease-free survival between direct TME and TME after nCRT.

H1: In mid-rectal cancer patients without MRF involvement (cT2N+ and cT3Nx), direct TME is associated with worse 3-year disease-free survival compared to TME after nCRT.

Participants already taking both interventions as part of their regular medical care for rectal cancer will be recruited in a prospective database for 5 years.

Detailed Description: Neoadjuvant chemoradiotherapy (nCRT) followed by total mesorectal excision (TME) is the standard treatment for patients with locally advanced rectal cancer. This approach has been shown to improve local control and reduce recurrence rates. However, there is no clear evidence showing the advantage of neoadjuvant CRT in high and middle rectal tumors without involvement of mesorectal fascia (MRF). The MERCURY study demonstrated that preoperative MRI-predicted positive CRM is an independent factor for local recurrence. Following this study, the selective use of nCRT in patients at high risk of local recurrence has been proposed.

The ESMO guidelines indicate that T3a/b rectal tumors located above the levator muscles, without involvement of the circumferential resection margin (CRM) or extramural venous invasion (EMVI), are associated with a very low risk of local recurrence. Consequently, they suggest that upfront TME may be an appropriate treatment option for this subgroup of patients. This recommendation remains unchanged in the presence of lymph node involvement within the same group. For clinically staged cT3a/b mid- or high-rectal tumors with clear CRM and no evidence of EMVI, the routine use of nCRT remains a subject of debate. If the surgeon consistently performs high-quality total mesorectal excision (TME), upfront surgery may be a suitable treatment option for this subgroup of patients.

In line with these recommendations, some surgeons perform upfront TME for patients with T2-3 node-positive mid-rectal cancer in the absence of MRF involvement. However, in these cases, the common approach is to administer neoadjuvant chemoradiotherapy. This study seeks to observe whether upfront TME achieves similar 3-year disease-free survival compared to the standard approach of nCRT followed by TME in patients with cT2N+ and cT3Nx mid-rectal cancer without mesorectal fascia involvement.

Conditions

Conditions: Mid-Rectal Cancer

Rectal Cancer Stage II
Rectal Cancer Stage III

Keywords: Mid-Rectal Cancer
Radiotherapy
Mesorectal fascia

Study Design

Study Type:	Observational [Patient Registry]
Observational Study Model:	Cohort
Time Perspective:	Prospective
Biospecimen Retention:	None Retained
Biospecimen Description:	
Enrollment:	436 [Anticipated]
Number of Groups/Cohorts:	2
Target Follow-Up Duration:	5 Years

Groups and Interventions

Groups/Cohorts	Interventions
Upfront TME group Patients who underwent surgery without receiving neoadjuvant chemoradiotherapy	Total mesorectal excision Direct surgery without receiving neoadjuvant chemoradiotherapy
Neoadjuvant chemoradiotherapy group Patients who received neoadjuvant chemoradiotherapy before surgery	Neoadjuvant Chemotherapy followed by total mesorectal excision Neoadjuvant chemoradiotherapy treatment regimens (including conventional chemoradiotherapy/ radiotherapy/chemotherapy regimens or total neoadjuvant chemoradiotherapy regimens) before surgery

Outcome Measures

Primary Outcome Measure:

1. Disease-free survival (DFS)
   The proportion of patients who remain free of disease recurrence (local or distant) three years after surgical intervention. DFS will be assessed through clinical evaluations, imaging studies, and pathology reports at regular follow-up intervals.

   [Time Frame: 3 years]

Secondary Outcome Measure:

2. Overall Survival
   The proportion of patients alive at 3 and 5 years post-treatment, regardless of disease status.

   [Time Frame: 3 and 5 years]
3. Local Recurrence Rate
   The percentage of patients experiencing tumor recurrence at the primary site (anastomosis or pelvis) within 3 and 5 years.

   [Time Frame: 3 years and 5 years]

4. Colorectal Cancer Specific Quality of Life
   Patient-reported outcomes assessed using the New Cleveland Clinic Colorectal Cancer Quality of Life Questionnaire

   [Time Frame: Baseline, 1 year, 3 years and 5 years]
5. Bowel Dysfunction Related Quality of Life
   Patient-reported outcomes assessed using the low-anterior resection syndrome (LARS) score.

   [Time Frame: Baseline, 1 year, 3 years and 5 years]

Eligibility

Study Population:	Histologically proven rectal cancer patients with locally advanced disease (cT2N0-T3N0-N+), but without distant metastases or high-risk features such as mesorectal fascia involvement, lateral nodes, EMVI or adjacent organ invasion (cT4).
Sampling Method:	Probability Sample
Minimum Age:	18 Years
Maximum Age:	
Sex:	All
Gender Based:	No
Accepts Healthy Volunteers:	No

Criteria: Inclusion Criteria:

- Pathologically confirmed rectal cancer
- Rectal cancer within 6-12 cm from anal verge confirmed by sigmoidoscopy or located between the anorectal junction and peritoneal reflection identified by MRI
- Clinical local staging performed by MRI
- cT2N+, cT3N0 and cT3N+ tumors
- Patients without mesorectal fascia involvement assessed by MRI (≤1 mm)
- Patients without pathological (short axis ≥7 mm) lateral (extramesorectal) lymph nodes on MRI
- Patients without EMVI on MRI

Exclusion Criteria:

- cT4 tumors
- Stage IV disease
- Patients with MSI (+) in TME pathology
- PAtients who received neoadjuvant immunotherapy
- Emergency surgery
- Clinical obstruction
- Previous pelvic radiotherapy
- Patients treated without a multidisciplinary council decision
- Inflammatory bowel diseases (Crohn's disease, Ulcerative colitis)
- Familial adenomatous polyposis (FAP), attenuated FAP, and other polyposis syndromes
- Hereditary non-polyposis colorectal cancer (Lynch syndrome)
- Synchronous colon tumors

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IPDSharing

Plan to Share IPD: Yes

Yes, we plan to share de-identified individual participant data (IPD) related to primary and secondary outcomes. The data will be available to qualified researchers upon reasonable request, starting 6 months after publication of the study results and for up to 5 years. Data will be shared via a secure data repository, and access will require an approved data-sharing agreement

Supporting Information:
- Study Protocol
- Statistical Analysis Plan (SAP)
- Informed Consent Form (ICF)
- Clinical Study Report (CSR)
- Analytic Code

Time Frame:
6 months to 5 years

Access Criteria:
URL: https://arastirma.tkrcd.org.tr/

References

Citations: Patel UB, Taylor F, Blomqvist L, George C, Evans H, Tekkis P, Quirke P, Sebag-Montefiore D, Moran B, Heald R, Guthrie A, Bees N, Swift I, Pennert K, Brown G. Magnetic resonance imaging-detected tumor response for locally advanced rectal cancer predicts survival outcomes: MERCURY experience. J Clin Oncol. 2011 Oct 1;29(28):3753-60. doi: 10.1200/JCO.2011.34.9068. Epub 2011 Aug 29. PubMed 21876084

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Links:

Available IPD/Information: