

**10 dicembre 2024 ore 9.30-17.00**

Firenze – Sala Blu, Il Fuligno, CSF Montedomini, via Faenza 48

*L'osservazione degli esiti per le famiglie professionali: le reti cliniche in chirurgia generale e vascolare*

# La chirurgia oncologica: il tumore maligno del retto

**Dott. Piero V. Lippolis**

U.O. Chirurgia Generale e Peritoneale SSN

D.A.I. Chirurgia Addominale e Urologia - AOUP

**Dott.ssa Claudia Bartolini**

Agenzia Regionale di Sanità della Toscana

# Epidemiologia del tumore del retto: **incidenza**

- Tumore più frequente (13 % di tutte le diagnosi di neoplasia)
  - in particolare, rappresenta la terza neoplasia più frequente negli uomini (dopo i tumori della prostata e del polmone) e la seconda nelle donne (dopo il tumore della mammella).
- 2010-2015 in Italia 138 nuovi casi su 100.000
  - (86 casi / 100.000 negli uomini e 52 casi / 100.000 nelle donne)
- 2010-2015, in Italia sono stati diagnosticati circa 52.000 nuovi casi di tumore del grosso intestino, di cui circa 15.000 localizzati al retto (circa 8.800 negli uomini e 6.500 nelle donne)

Associazione Italiana Registri Tumori. I numeri del cancro in Italia. Available from: <https://www.registri-tumori.it/cms/pubblicazioni/i-numeri-del-cancro-italia-2019>

# Epidemiologia del tumore del retto: mortalità

- I dati ISTAT indicano per il 2019 poco meno di 20.000 decessi attribuibili a tumori del colon-retto-ano.
- Di questi, il 30% circa può essere ricondotto ad una localizzazione a livello rettale.
- Mentre fino a metà degli anni 2000 i tassi di mortalità mostravano un aumento lieve e non significativo, dal 2005 in poi si è registrata una riduzione statisticamente significativa del 2% annuo sia nei maschi che nelle femmine.

Le principali cause di morte in Italia, Istituto nazionale di statistica Istat. 2012 Available from: [http://www.istat.it/it/files/2014/12/Principali\\_cause\\_morte\\_2012.pdf](http://www.istat.it/it/files/2014/12/Principali_cause_morte_2012.pdf)

# Incidenza e mortalità per età (NCCN 2024)

- Incidenza (in aumento per < 65 anni)
  - 1% tra 50 e 64 anni
  - 2% sotto i 50 anni
  - Si stima incremento incidenza tra i 20 e i 34 anni del 124% nel 2030 (entità patologica differente)
- Mortalità
  - Diminuzione del 3% >65 anni
  - Diminuzione 0,6 % tra 50 e 64 anni
  - Aumento 1,3% sotto 50 anni



National  
Comprehensive  
Cancer  
Network®

**NCCN Guidelines Version 4.2024**  
**Rectal Cancer**

# Fattori di rischio

- 20% dei casi sono genetici (sindrome di Lynch, FAP)
- Difetto di vit D
- Colite ulcerosa
- Morbo di Crohn
- Fumo
- Alcool
- DM
- Scarsa attività fisica
- Alto BMI
- Scarso consumo di latticini

## Staging and risk assessment

The UICC TNM staging (8th edition) classification for colon and rectal cancer

\*, †, ‡, §, ||

For details please see following slide

Brierley JD et al. TNM Classification of Malignant Tumours, 8th edition: John Wiley & Sons, Inc., Oxford, 2016. Reprinted with permission from John Wiley & Sons, Inc.

TNM Clinical Classification	
T – Primary Tumour	
TX	Primary tumour cannot be assessed
T0	No evidence of primary tumour
Tis	Carcinoma <i>in situ</i> : Invasion of lamina propria*
T1	Tumour invades submucosa
T2	Tumour invades muscularis propria
T3	Tumour invades subserosa or into non-peritonealised pericolic or perirectal tissues
T4	Tumour directly invades other organs or structures <sup>†,‡,§</sup> and/or perforates visceral peritoneum
T4a	Tumour perforates visceral peritoneum
T4b	Tumour directly invades other organs or structures

TNM Clinical Classification	
N – Regional Lymph Nodes	
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Metastasis in 1 to 3 regional lymph nodes
N1a	Metastasis in 1 regional lymph node
N1b	Metastasis in 2–3 regional lymph nodes
N1c	Tumour deposit(s), i.e. satellites, <sup>  </sup> in the subserosa, or in non-peritonealised pericolic or perirectal soft tissue <i>without</i> regional lymph node metastasis
N2	Metastasis in 4 or more regional lymph nodes
N2a	Metastasis in 4–6 regional lymph nodes
N2b	Metastasis in 7 or more regional lymph nodes
M – Distant Metastasis	
M0	No distant metastasis
M1	Distant metastasis
M1a	Metastasis confined to one organ (liver, lung, ovary, non-regional lymph node(s)) without peritoneal metastases
M1b	Metastasis in more than one organ
M1c	Metastasis to the peritoneum with or without organ involvement

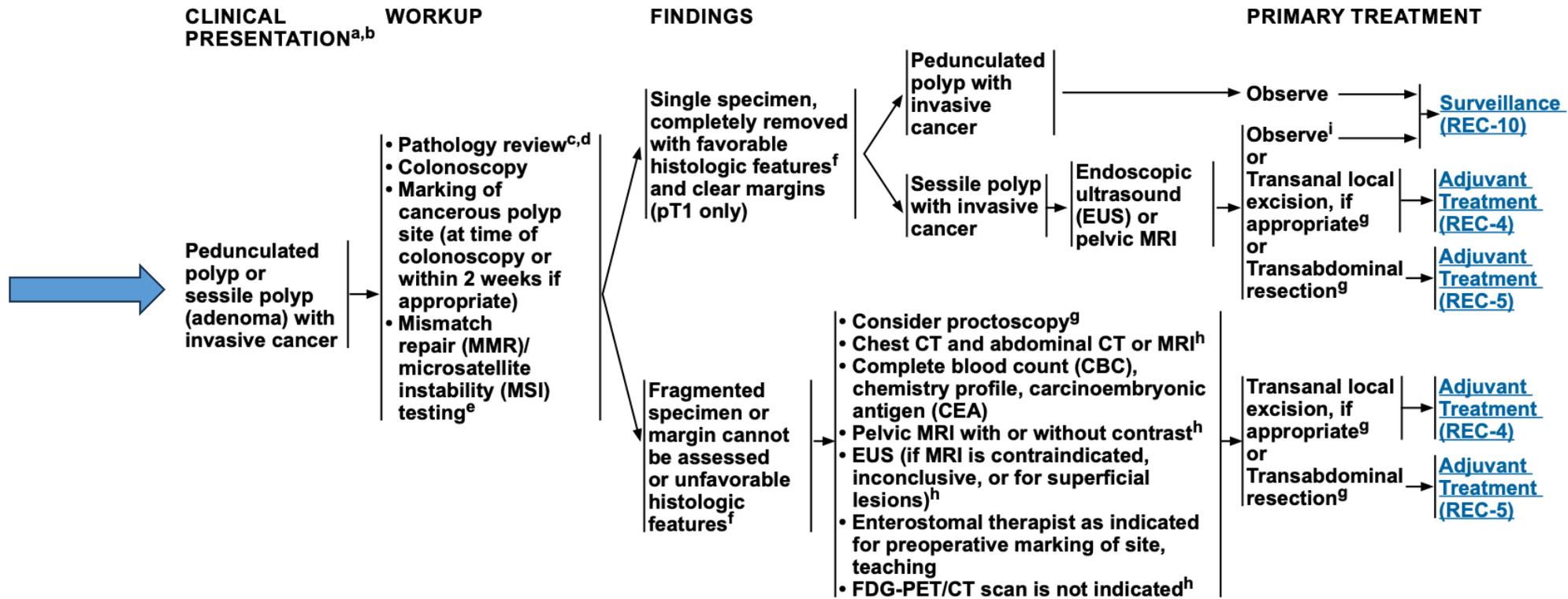
## Staging and risk assessment

Notes to previous slide:  
The UICC TNM staging (8th edition) classification for colon and rectal cancer

Brierley JD et al. TNM Classification of Malignant Tumours, 8th edition: John Wiley & Sons, Inc., Oxford, 2016. Reprinted with permission from John Wiley & Sons, Inc.



Stage		T - Primary Tumour
Tis	Carcinoma <i>in situ</i> : invasion of lamina propria*	*includes cancer cells confined within the mucosal lamina propria (intramucosal) with no extension through the muscularis mucosae into the submucosa
T4	Tumour directly invades other organs or structures†,‡,§ and/or perforates visceral peritoneum	†Invades through to visceral peritoneum to involve the surface ‡Direct invasion in T4b includes invasion of other organs or segments of the colorectum by way of the serosa, as confirmed on microscopic examination, or for tumours in a retroperitoneal or subperitoneal location, direct invasion of other organs or structures by virtue of extension beyond the muscularis propria § Tumour that is adherent to other organs or structures, macroscopically, is classified cT4b. However, if no tumour is present in the adhesion, microscopically, the classification should be pT1–3, depending on the anatomical depth of wall invasion
N1c	Tumour deposit(s), i.e. satellites,   in the subserosa, or in non-peritonealised pericolic or perirectal soft tissue <i>without</i> regional lymph node metastasis	Tumour deposits (satellites) are discrete macroscopic or microscopic nodules of cancer in the pericorectal adipose tissue's lymph drainage area of a primary carcinoma that are discontinuous from the primary and without histological evidence of residual lymph node or identifiable vascular or neural structures. If a vessel wall is identifiable on H&E, elastic or other stains, it should be classified as venous invasion (V1/2) or lymphatic invasion (L1). Similarly, if neural structures are identifiable, the lesion should be classified as perineural invasion (Pn1). The presence of tumour deposits does not change the primary tumour T category, but changes the node status (N) to pN1c if all regional lymph nodes are negative on pathological examination



<sup>a</sup> All patients with rectal cancer should be counseled for family history. Patients with suspected Lynch syndrome (LS), familial adenomatous polyposis (FAP), and attenuated FAP, see the [NCCN Guidelines for Genetic/Familial High-Risk Assessment: Colorectal](#).

<sup>b</sup> For melanoma histology, see the [NCCN Guidelines for Melanoma: Cutaneous](#).

<sup>c</sup> Confirm the presence of invasive cancer (pT1). pT1s has no biological potential to metastasize.

<sup>d</sup> It has not been established if molecular markers (other than MSI-H/dMMR) are useful in treatment determination (predictive markers) and prognosis. Compton CC, et al. Arch Pathol Lab Med 2000;124:979-994.

<sup>e</sup> [Principles of Pathologic Review \(REC-B, 5 of 11\)](#) - MSI or MMR Testing.

<sup>f</sup> [Principles of Pathologic Review \(REC-B\)](#) - Endoscopically removed malignant polyp.

<sup>g</sup> [Principles of Surgery and Locoregional Therapies \(REC-C\)](#).

<sup>h</sup> [Principles of Imaging \(REC-A\)](#).

<sup>i</sup> Observation may be considered, with the understanding that there is significantly greater incidence of adverse outcomes (residual disease, recurrent disease, mortality, or hematogenous metastasis, but not lymph node metastasis) than pedunculated malignant polyps. See [Principles of Pathologic Review \(REC-B\)](#) - Endoscopically removed malignant polyp.

CLINICAL  
PRESENTATION<sup>a,b</sup>

WORKUP

Rectal cancer  
without  
suspected or  
proven distant  
metastases<sup>j,k</sup>

- Biopsy
- MMR/MSI testing<sup>e</sup>
- Pathology review
- Colonoscopy
- Consider proctoscopy<sup>g</sup>
- Chest CT and abdominal CT or MRI<sup>h</sup>
- CBC, chemistry profile, CEA
- Pelvic MRI with or without contrast<sup>h</sup>
- Endorectal ultrasound (if MRI is contraindicated or inconclusive, or for superficial lesions)<sup>h</sup>
- Enterostomal therapist as indicated for preoperative marking of site, teaching
- FDG-PET/CT scan is not indicated<sup>h</sup>
- Multidisciplinary team evaluation, including formal surgical evaluation
- Fertility risk discussion/counseling in appropriate patients

REC-3

Rectal  
cancer with  
suspected or  
proven distant  
metastases

- Colonoscopy
- Consider proctoscopy
- Chest CT and abdominal CT or MRI<sup>h</sup>
- Pelvic MRI with or without contrast<sup>h</sup>
- CBC, chemistry profile, CEA
- Molecular testing, including<sup>l,m</sup>:
  - ▶ RAS and BRAF mutations; HER2 amplifications; MMR or MSI status (if not previously done)
  - ▶ Testing should be conducted as part of broad molecular profiling, which would identify rare and actionable mutations and fusions such as POLE/POLD1, RET, and NTRK.
- Biopsy, if clinically indicated
- Consider FDG-PET/CT scan (skull base to mid-thigh) if potentially surgically curable M1 disease in selected cases<sup>h</sup>
  - ▶ Consider MRI of liver for patients who are potentially resectable
- If potentially resectable, then multidisciplinary team evaluation, including a surgeon experienced in the resection of hepatobiliary or lung metastases

Proficient  
MMR (pMMR)/  
microsatellite  
stable (MSS)

REC-7

Deficient  
MMR (dMMR)/  
MSI-high  
(MSI-H) or  
POLE/POLD1  
mutation

REC-15

<sup>a</sup>All patients with rectal cancer should be counseled for family history. Patients with suspected LS, FAP, and attenuated FAP, see the [NCCN Guidelines for Genetic/Familial High-Risk Assessment: Colorectal](#).

<sup>b</sup>For melanoma histology, see the [NCCN Guidelines for Melanoma: Cutaneous](#).

<sup>e</sup>[Principles of Pathologic Review \(REC-B, 5 of 11\)](#) - MSI or MMR Testing.

<sup>g</sup>[Principles of Surgery and Locoregional Therapies \(REC-C\)](#).

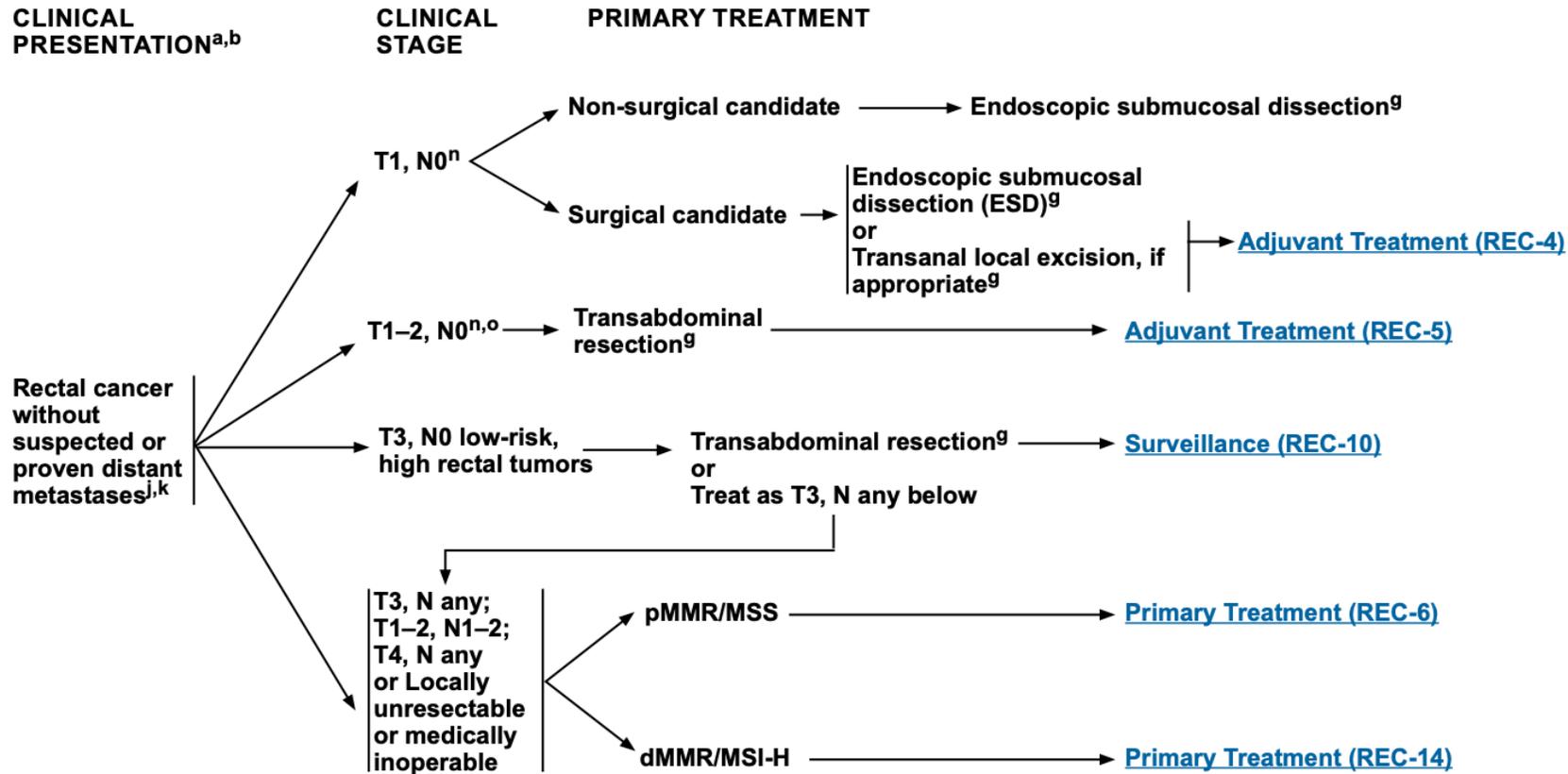
<sup>h</sup>[Principles of Imaging \(REC-A\)](#).

<sup>j</sup>For tools to aid optimal assessment and care of older adults with cancer, see the [NCCN Guidelines for Older Adult Oncology](#).

<sup>k</sup>The rectum lies below a virtual line from the sacral promontory to the upper edge of the symphysis as determined by MRI.

<sup>l</sup>[Principles of Pathologic Review \(REC-B 5 of 11\)](#) - KRAS, NRAS, and BRAF Mutation Testing and Microsatellite Instability or Mismatch Repair Testing.

<sup>m</sup>Tissue- or blood-based NGS panels have the ability to pick up rare and actionable mutations and fusions.



<sup>a</sup> All patients with rectal cancer should be counseled for family history. Patients with suspected LS, FAP, and attenuated FAP, see the [NCCN Guidelines for Genetic/Familial High-Risk Assessment: Colorectal](#).

<sup>b</sup> For melanoma histology, see the [NCCN Guidelines for Melanoma: Cutaneous](#).

<sup>g</sup> [Principles of Surgery and Locoregional Therapies \(REC-C\)](#).

<sup>j</sup> For tools to aid optimal assessment and care of older adults with cancer, see the [NCCN Guidelines for Older Adult Oncology](#).

<sup>k</sup> The rectum lies below a virtual line from the sacral promontory to the upper edge of the symphysis as determined by MRI.

<sup>n</sup> T1-2, N0 should be based on assessment of pelvic MRI (preferred) or endorectal ultrasound.

<sup>o</sup> In select cases (eg, requiring an APR), these may be treated with neoadjuvant therapy with the goal of organ preservation (as in the bottom pathway in the above flowchart).

# Chirurgia mininvasiva

Surg Endosc (2013) 27:295–302  
DOI 10.1007/s00464-012-2444-8



## Laparoscopic versus open surgery for rectal cancer: results of a prospective multicentre analysis of 4,970 patients

J. Lujan · G. Valero · S. Biondo · E. Espin ·  
P. Parrilla · H. Ortiz

Received: 14 December 2011 / Accepted: 7 June 2012 / Published online: 27 June 2012  
© Springer Science+Business Media, LLC 2012

The NEW ENGLAND JOURNAL of MEDICINE

COLOR II trial

ORIGINAL ARTICLE

## A Randomized Trial of Laparoscopic versus Open Surgery for Rectal Cancer

H. Jaap Bonjer, M.D., Ph.D., Charlotte L. Deijen, M.D., Gabor A. Abis, M.D., Miguel A. Cuesta, M.D., Ph.D., Martijn H.G.M. van der Pas, M.D., Elly S.M. de Lange-de Klerk, M.D., Ph.D., Antonio M. Lacy, M.D., Ph.D., Willem A. Bemelman, M.D., Ph.D., John Andersson, M.D., Eva Angenete, M.D., Ph.D., Jacob Rosenberg, M.D., Ph.D., Alois Fuerst, M.D., Ph.D., and Eva Haglind, M.D., Ph.D., for the COLOR II Study Group\*

*Conclusions* According to these results, laparoscopic surgery is the best option for the surgical treatment of rectal cancer, with similar rates of local recurrence and survival, although there are oncological indicators in this study to suggest that these results can be improved with laparoscopic surgery.

### CONCLUSIONS

Laparoscopic surgery in patients with rectal cancer was associated with rates of locoregional recurrence and disease-free and overall survival similar to those for open surgery. (Funded by Ethicon Endo-Surgery Europe and others; COLOR II ClinicalTrials.gov number, NCT00297791.)

# Chirurgia mininvasiva



Clinical Trial > [JAMA](#). 2015 Oct 6;314(13):1356-63. doi: 10.1001/jama.2015.12009.

## Effect of Laparoscopic-Assisted Resection vs Open Resection on Pathological Outcomes in Rectal Cancer: The ALaCaRT Randomized Clinical Trial

[Andrew R L Stevenson](#)<sup>1</sup>, [Michael J Solomon](#)<sup>2</sup>, [John W Lumley](#)<sup>3</sup>, [Peter Hewett](#)<sup>4</sup>, [Andrew D Clouston](#)<sup>1</sup>, [Val J GebSKI](#)<sup>5</sup>, [Lucy Davies](#)<sup>5</sup>, [Kate Wilson](#)<sup>5</sup>, [Wendy Hague](#)<sup>5</sup>, [John Simes](#)<sup>5</sup>; [ALaCaRT Investigators](#)

Collaborators, Affiliations + expand

PMID: 26441180 DOI: [10.1001/jama.2015.12009](#)

**Results:** A successful resection was achieved in 194 patients (82%) in the laparoscopic surgery group and 208 patients (89%) in the open surgery group (risk difference of -7.0% [95% CI, -12.4% to ∞]; P = .38 for noninferiority). The circumferential resection margin was clear in 222 patients (93%) in the laparoscopic surgery group and in 228 patients (97%) in the open surgery group (risk difference of -3.7% [95% CI, -7.6% to 0.1%]; P = .06), the distal margin was clear in 236 patients (99%) in the laparoscopic surgery group and in 234 patients (99%) in the open surgery group (risk difference of -0.4% [95% CI, -1.8% to 1.0%]; P = .67), and total mesorectal excision was complete in 206 patients (87%) in the laparoscopic surgery group and 216 patients (92%) in the open surgery group (risk difference of -5.4% [95% CI, -10.9% to 0.2%]; P = .06). The conversion rate from laparoscopic to open surgery was 9%.

**Conclusions and relevance:** Among patients with T1-T3 rectal tumors, noninferiority of laparoscopic surgery compared with open surgery for successful resection was not established. Although the overall quality of surgery was high, these findings do not provide sufficient evidence for the routine use of laparoscopic surgery. Longer follow-up of recurrence and survival is currently being acquired.

# Chirurgia mininvasiva

- Panel NCCN d'accordo su esecuzione della procedura da parte di chirurghi esperti

The panel defined principles by which minimally invasive resection of rectal cancer can be considered: the procedure can be considered by an experienced surgeon, should include thorough abdominal exploration, and should be limited to lower-risk tumors, as outlined in the guidelines. An international group of experts has defined standards for the technical details of laparoscopic TME.<sup>289</sup>



## Linee guida

# NEOPLASIE DEL RETTO E ANO

Edizione 2021

In collaborazione con



**Quesito 1: I pazienti con carcinoma del retto devono essere sempre sottoposti a valutazione multidisciplinare o possono essere trattati da singoli specialisti?**

Qualità Globale delle prove	Raccomandazione clinica	Forza della raccomandazione
<b>Bassa</b>	Nei pazienti con carcinoma del retto una valutazione multidisciplinare dovrebbe essere presa in considerazione come prima opzione indipendentemente dallo stadio di malattia (1-3).	<b>Forte a favore</b>
<b>COI: nessun conflitto dichiarato</b>		

**Quesito 2: I pazienti con carcinoma del retto devono essere trattati da gruppi multidisciplinari con adeguata expertise?**

Qualità Globale delle prove	Raccomandazione clinica	Forza della raccomandazione
<b>Moderata</b>	I pazienti con carcinoma del retto dovrebbero essere trattati da gruppi multidisciplinari con adeguata expertise (5).	<b>Forte a favore</b>
√	La qualità del trattamento migliora con l'aumentare del numero di pazienti gestiti. Un gruppo multidisciplinare ottimale dovrebbe trattare almeno <u>20 casi</u> all'anno. Strutture con casistiche inferiori dovrebbero avere un rapporto di collaborazione sistematica con strutture di riferimento.	
<b>COI: Dr Pucciarelli astenuto dalla votazione della raccomandazione</b>		

# Anatomia patologica

- Margini CRM (margine di resezione circonferenziale) e integrità TME
  - CRM <1mm e piano di TME non integro si associano a aumentato tasso di recidive e peggiore OS
- Linfonodi
  - Almeno 12, secondo alcuni studi 14 o 10
- Risposta al trattamento
  - Il patologo dovrebbe commentare il grado di risposta al trattamento NA (score da 0 a 3)
- Invasione perineurale
- Tumor deposits
- Tumor budding



National  
Comprehensive  
Cancer  
Network®

**NCCN Guidelines Version 4.2024**  
**Rectal Cancer**

## Histopathology

Objective grading of technical quality of TME surgery specimen	
Mesorectal plane (good plane of surgery achieved)	Intact mesorectum with only minor irregularities of a smooth mesorectal surface; no defect deeper than 5 mm; no coning; and smooth circumferential resection margin on slicing
Intra-mesorectal plane (moderate plane of surgery achieved)	Moderate bulk to mesorectum, with irregularities of the mesorectal surface; moderate distal coning; muscularis propria not visible with the exception of levator insertion; and moderate irregularities of circumferential resection margin
Muscularis propria plane (poor plane of surgery achieved)	Little bulk to mesorectum with defects down onto muscularis propria; very irregular circumferential resection margin; or both

The specimen is examined as a whole (fresh) and as cross-sectional slices (fixed) to make an adequate interpretation. A TME specimen ideally should have a smooth surface, without incisions, defects or cracks, as an indication of successful surgical excision of all mesorectal tissue. 'Coning' represents the tendency for the surgeon to cut inwards towards the central tube of the rectum during distal dissection, rather than staying outside the visceral mesorectal fascia. The specimen then shows a tapered, conical appearance representing suboptimal surgical quality.

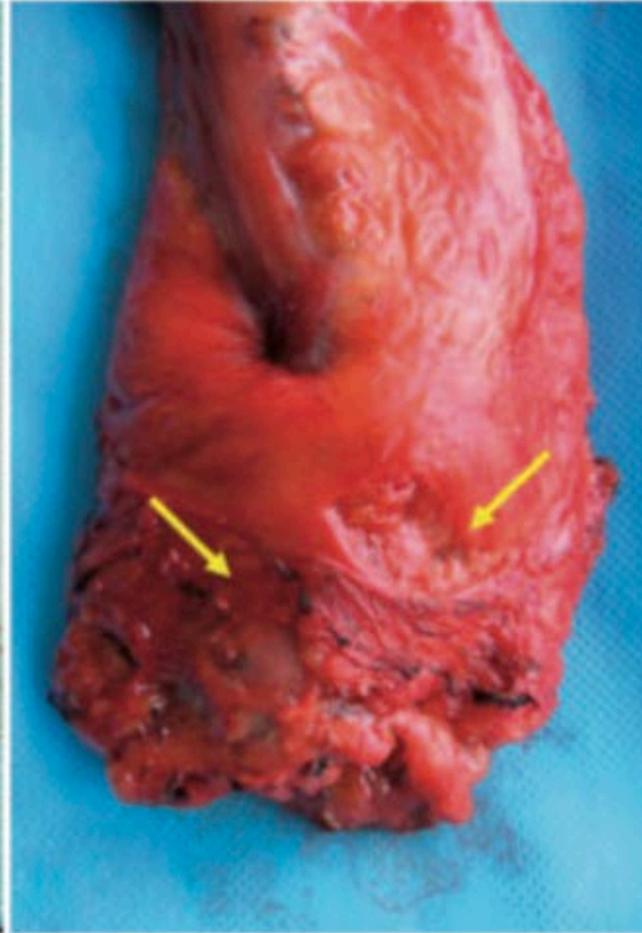
Quirke P et al. Lancet 2009;373:821–8.  
Reprinted with permission.

# Integrità TME

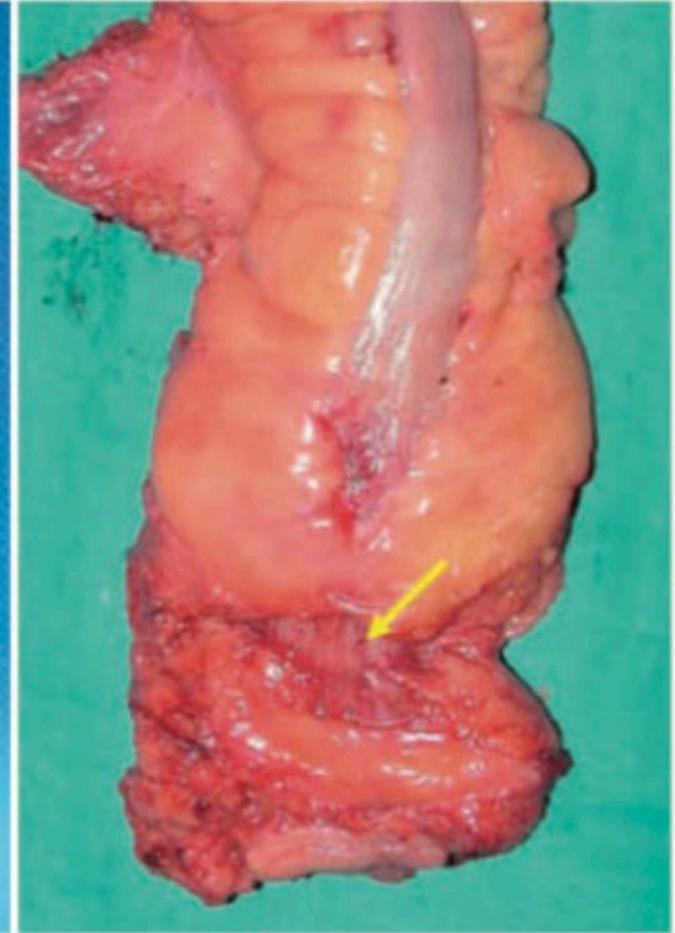
A



B



C

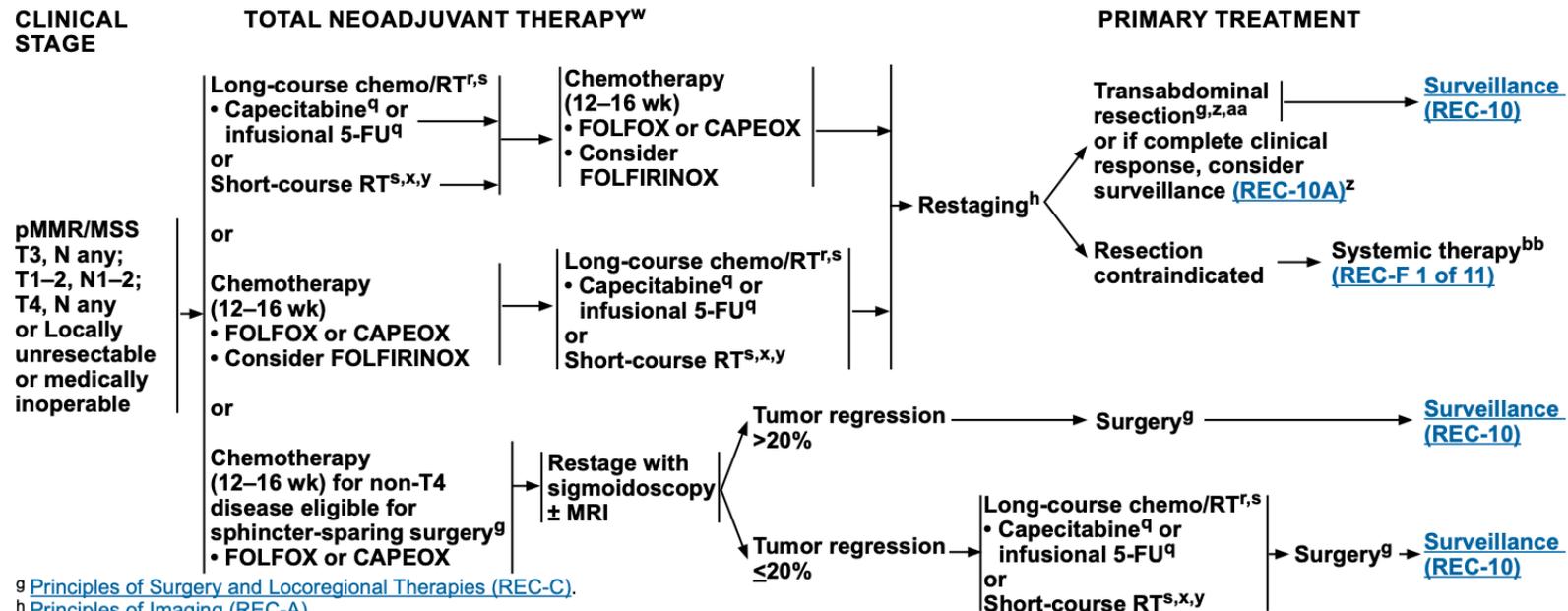


# Total neoadjuvant chemotherapy



## NCCN Guidelines Version 4.2024 pMMR/MSS Rectal Cancer

[NCCN Guidelines Index](#)  
[Table of Contents](#)  
[Discussion](#)



<sup>g</sup> [Principles of Surgery and Locoregional Therapies \(REC-C\).](#)

<sup>h</sup> [Principles of Imaging \(REC-A\).](#)

<sup>q</sup> Bolus 5-FU/leucovorin/RT is an option for patients not able to tolerate capecitabine or infusional 5-FU.

<sup>r</sup> [Principles of Perioperative Therapy \(REC-D\).](#)

<sup>s</sup> [Principles of Radiation Therapy \(REC-E\).](#)

<sup>w</sup> In select cases (eg, a patient who is not a candidate for intensive therapy) neoadjuvant therapy with chemo/RT or RT alone may be considered prior to surgery.

<sup>x</sup> Evaluation for short-course RT should be in a multidisciplinary setting, with a discussion of the need for downstaging and the possibility of long-term toxicity.

<sup>y</sup> While short-course RT can be considered for preoperative radiation, for high-risk rectal cancer (clinical tumor stage cT4a or cT4b, extramural vascular invasion (EMVI), clinical nodal stage cN2, involved mesorectal fascia (MRF), or enlarged lateral lymph nodes considered to be metastatic), the 5-year follow-up of the RAPIDO trial now indicates a statistically higher locoregional recurrence rate (10%) in the experimental arm of short-course RT → chemotherapy → surgery versus control arm (6%) of chemoRT → surgery → adjuvant chemotherapy.

<sup>z</sup> In those patients who achieve a complete clinical response with no evidence of residual disease on digital rectal examination (DRE), rectal MRI, and direct endoscopic evaluation, a "watch and wait," nonoperative (chemotherapy and/or RT) management approach may be considered in centers with experienced multidisciplinary teams.

The degree to which risk of local and/or distant failure may be increased relative to standard surgical resection has not yet been adequately characterized. Decisions for nonoperative management (NOM) should involve a careful discussion with the patient of their risk tolerance. See [Principles of Nonoperative Management \(REC-H\)](#).

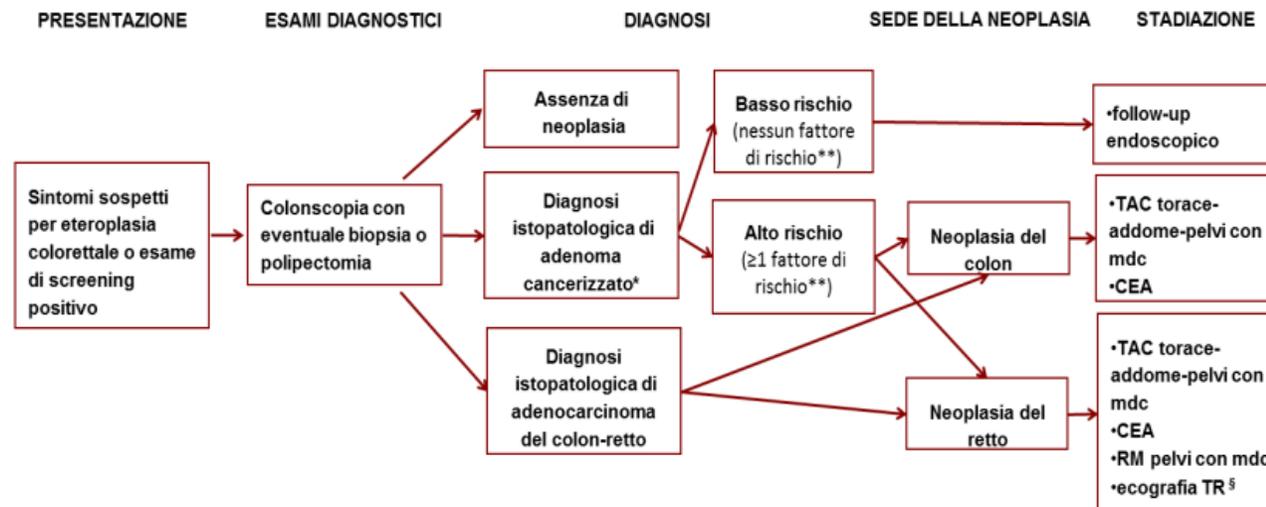
<sup>aa</sup> For select patients who may be candidates for intraoperative RT (IORT), see [Principles of Radiation Therapy \(REC-E\)](#).

<sup>bb</sup> FOLFIRINOX is not recommended in this setting.

Percorsi diagnostici  
terapeutici e assistenziali  
Tumori del colon-retto

rev. 9 febb 2021

**DIAGNOSI E STADIAZIONE**



\*rivalutare il caso da un secondo operatore all'interno dello stesso servizio di anatomia

\*\*fattori di rischio: margine di resezione (positivo o <1mm vs ≥1mm), invasione linfovaskolare (presente vs assente), grado di differenziazione (G1-2 vs G3-4), tumor budding (assente o basso grado vs presente o alto grado), grado di infiltrazione della sottomucosa sec. Kikuchi [in caso di polipo sessile] (sm1 vs sm2 o sm3) o Haggitt [in caso di polipo peduncolato] (1 e 2 vs 3 e 4)

§ negli stadi iniziali cT1-2 e nei tumori del retto basso (esame complementare alla RM pelvica)

	<p align="center"><b>PERCORSO DI SCREENING PER I TUMORI DEL COLON RETTO: GESTIONE DEL PAZIENTE, DAL SANGUE OCCULTO FECALE POSITIVO AL FOLLOW-UP</b></p>	<p>PAS AZ 008 Rev. 0 Pubblicato il 17-04-2024 Prescrittivo dal 1-5-2024 Pag. 1 di 23</p>
--	---	--

## PERCORSO DI SCREENING PER I TUMORI DEL COLON RETTO: GESTIONE DEL PAZIENTE, DAL SANGUE OCCULTO FECALE POSITIVO AL FOLLOW-UP

Questo documento descrive il percorso dei soggetti sottoposti a screening aziendale del colon-retto con il fine di uniformare comportamenti e modalità di approccio in tutta l'ASL TNO

<b>Redatto</b>	<b>Verificato</b>	<b>Approvato</b>
<p>Coord. Gruppo di Lavoro Referente Clinico Aziendale Screening Colon Retto Dott. Giovanni Finucci</p> <p>Dir. UOC Screening Aziendale Coord. Gruppo di lavoro screening Dott.ssa Lidia Di Stefano</p>	<p><b>VERIFICA TECNICA/SOSTANZIALE</b> Coordinatore Rete Aziendale delle Malattie dall'Apparato Digerente P.O. di Livorno, Pontedera, Lucca, Versilia e Massa-Carrara Dott. Raffaele Manta</p> <p><b>VERIFICA FORMALE</b> Dir. UOC Sistema Qualità Accreditamento Dott. Ivano Cerretini</p>	<p>Direttore Generale Dott.ssa Maria Letizia Casani</p> <p>Direttore Sanitario Dott. Giacomo Corsini</p> <p>Dir. Staff Unico Dott. Francesco Bellomo</p>
<p><b>Referente del documento</b> UOSD Endoscopia PO Lucca: Responsabile Clinico Aziendale Dott. Giovanni Finucci</p>		

# Watch and wait for CCR (clinical complete responders)

- Database Watch and Wait
  - 880 pz
  - 25% recidiva a 2 aa
  - 88% delle recidive nei primi 2 aa
  - OS a 5 anni 85%

*Lancet 2018; 391: 2537-45*

**Long-term outcomes of clinical complete responders after neoadjuvant treatment for rectal cancer in the International Watch & Wait Database (IWWD): an international multicentre registry study**



*Maxime J M van der Valk, Denise E Hilling, Esther Bastiaannet, Elma Meershoek-Klein Kranenborg, Geerard L Beets, Nuno L Figueiredo, Angelita Habr-Gama, Rodrigo O Perez, Andrew G Renehan, Cornelis J H van de Velde, and the IWWD Consortium\**

**Interpretation** This dataset has the largest series of patients with rectal cancer treated with a W&W approach, consisting of approximately 50% data from previous cohort series and 50% unpublished data. Local regrowth occurs mostly in the first 2 years and in the bowel wall, emphasising the importance of endoscopic surveillance to ensure the option of deferred curative surgery. **Local unsalvageable disease after W&W was rare.**

Az. Osp. – Univ. Pisana	<b>PERCORSO DIAGNOSTICO TERAPEUTICO ASSISTENZIALE AZIENDALE</b> <b>ADENOCARCINOMA DEL RETTO LOCALMENTE AVANZATO: PERCORSO DEL PAZIENTE CANDIDATO A STRATEGIA DI PRESERVAZIONE D'ORGANO</b>	<b>PDTAA36</b>  Rev.00  Pag. 1 di 16
----------------------------	---	--

**PDTAA36**  
**ADENOCARCINOMA DEL RETTO LOCALMENTE AVANZATO:  
PERCORSO DEL PAZIENTE CANDIDATO A  
STRATEGIA DI PRESERVAZIONE D'ORGANO**

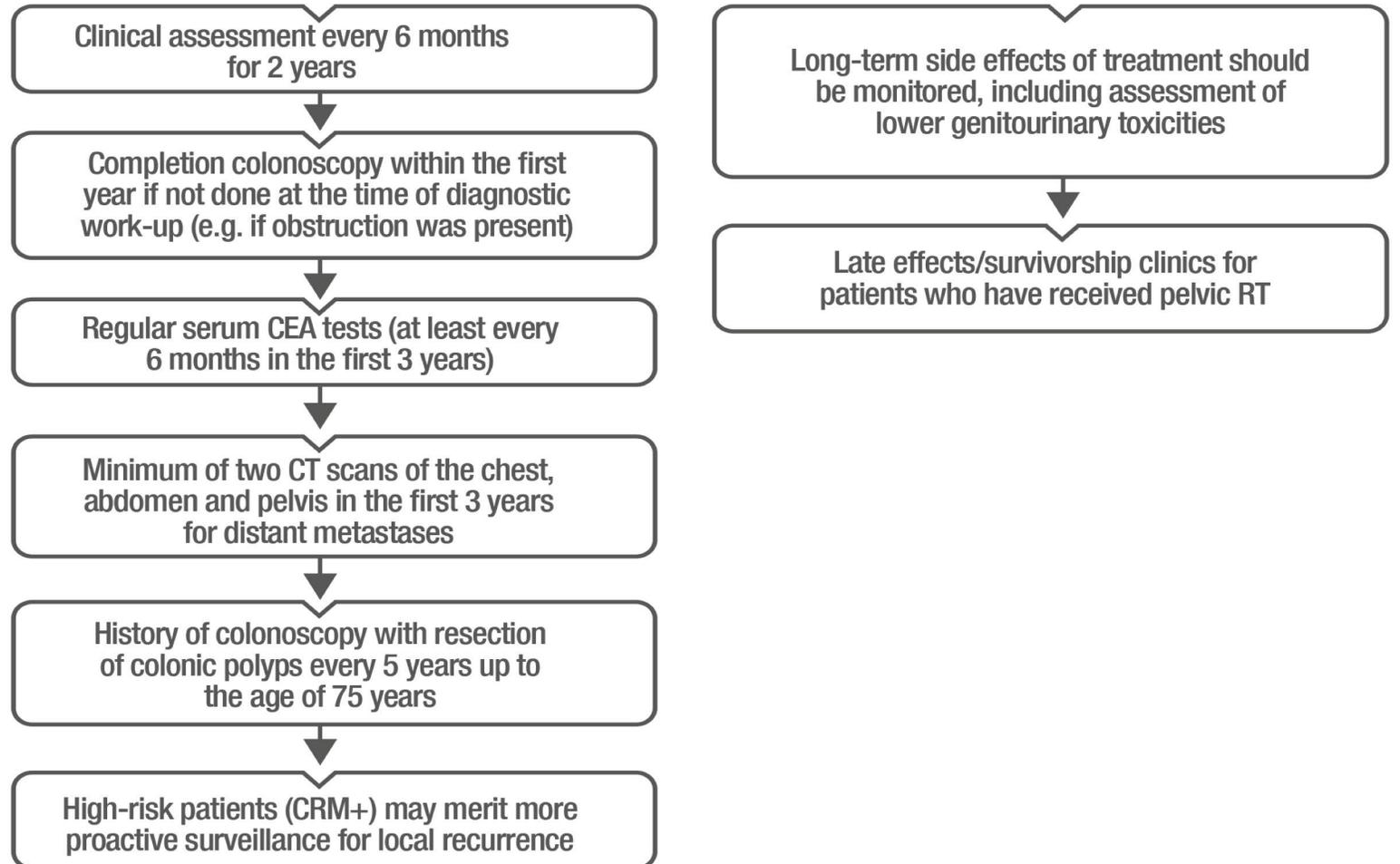
FASI	NOME	FUNZIONE	DATA	FIRMA
REDATTO	Dott. P. Buccianti	Referente PDTAA - Direttore UO Chirurgia Generale	11 09 2024	
	Dott. R. Moretto	Coordinatore GOM Tumori del tratto digerente inferiore - Medico UO Oncologia Medica 2	11 09 2024	
VERIFICATO	Prof. E. Neri	Direttore UO Radiodiagnostica 1		
	Dott.ssa A. De Liperi	Direttrice UO Radiodiagnostica 2		
	Dott.ssa S. Ortori	Direttrice SOD Radiologia Cisanello		
	Prof.ssa F. Paiar	Direttrice UO Radioterapia		
	Dott. P. Lippolis	Direttore DAI Chirurgia Addominale ed Urologia		
	Prof. G. Masi	Direttore DAI Oncologico - direttore UO Oncologia Medica 2		
	Dott. R.D. Damone	Direttore UO Organizzazione dei Servizi Ospedalieri		
APPROVATO	Dott.ssa G. Luchini	Direttrice Sanitaria		
EMESSO	Dott. S. Giuliani	Direttore UO Accreditamento e Qualità		

# CLINICAL PRACTICE GUIDELINES

## Follow-up, long-term implications and survivorship

Surveillance and follow-up

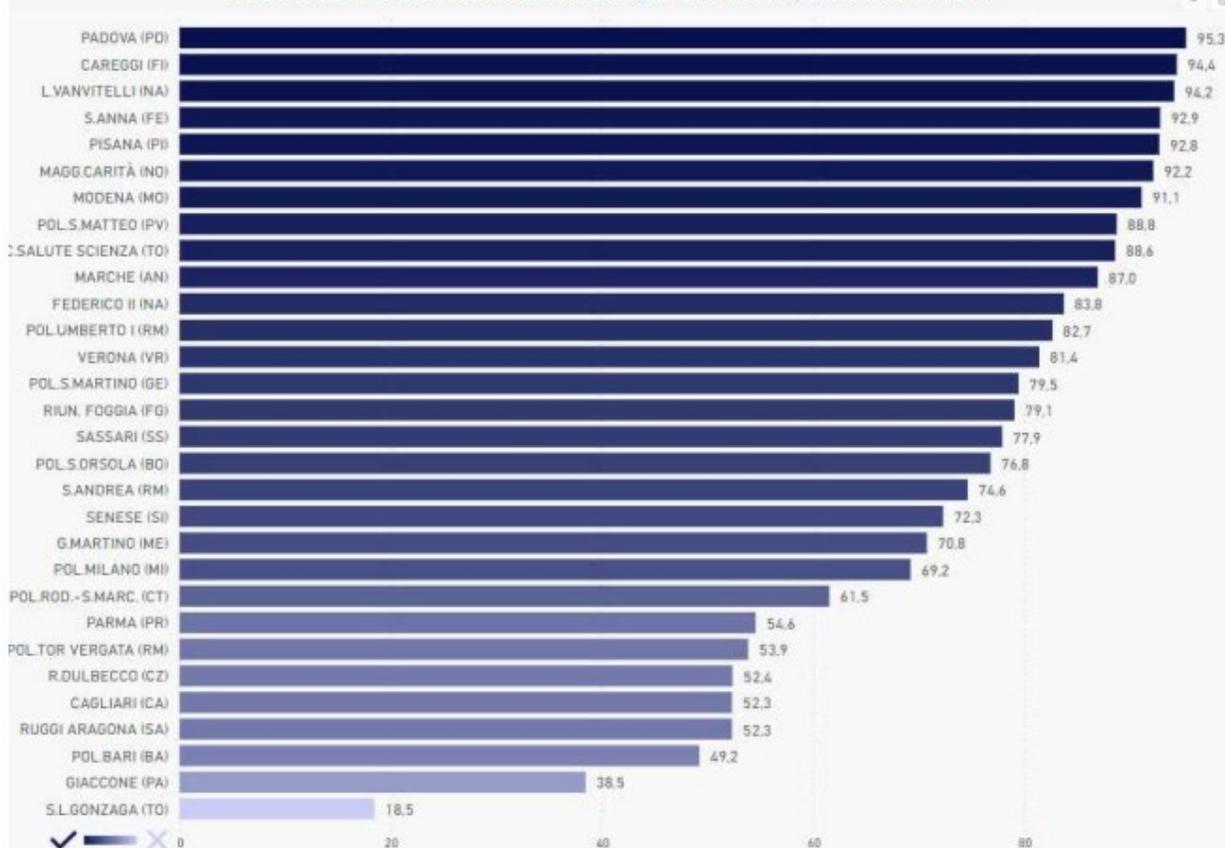
### Surveillance and follow-up



© 2018 ESMO. All rights reserved. [esmo.org/Guidelines/Gastrointestinal-Cancers/Rectal-Cancer](http://esmo.org/Guidelines/Gastrointestinal-Cancers/Rectal-Cancer)



Percentuale di interventi tumore colon entro 30 giorni dalla data di prenotazione intervento



dati Agenas

## Tumori. Da Nord a Sud tempi di attesa ancora a macchia di leopardo. Ecco quanto bisogna aspettare per fare un intervento

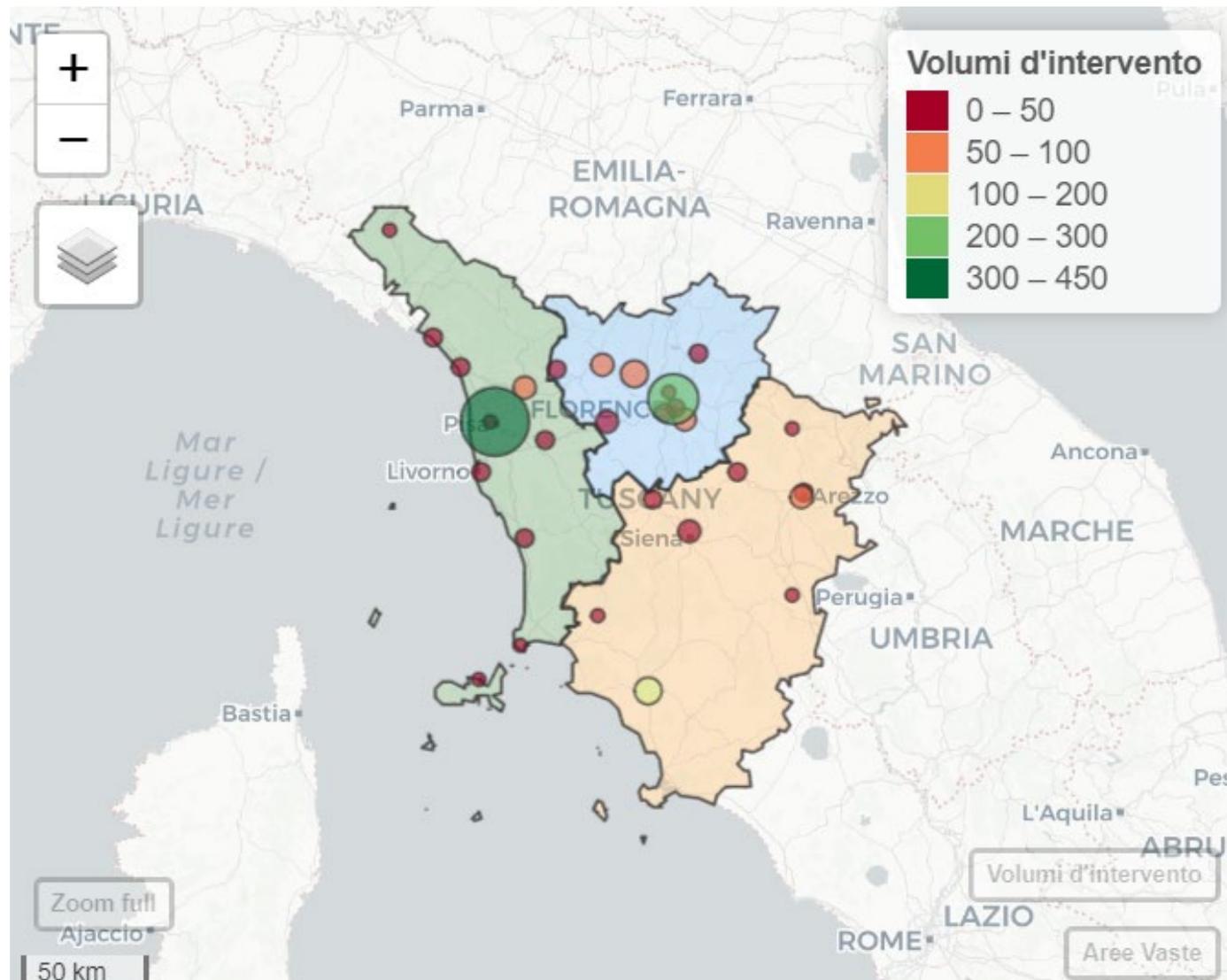
di Barbara Di Chiara

**tumore del colon**, ai primi posti per rispetto dei tempi entro i quali sarebbe necessario procedere con l'intervento di asportazione, dal momento della prenotazione: l'Aou di Padova (95,3%), il Careggi di Firenze (94,4%), il Vanvitelli di Napoli (94,2%) il S. Croce e Carle di Cuneo (93,9%) e il S. Anna di Ferrara (92,9%). Male il Papardo di Messina (7,7%), il Cannizzaro di Catania (16,9%), il S. Luigi Gonzaga di Torino (18,5%).

# Analisi dei dati di ARS Toscana

Claudia Bartolini

# Volumi d'intervento per ospedale e area vasta negli anni 2021-2023



Fonte:  
RT Scheda di  
Dimissione  
Ospedaliera (SDO)

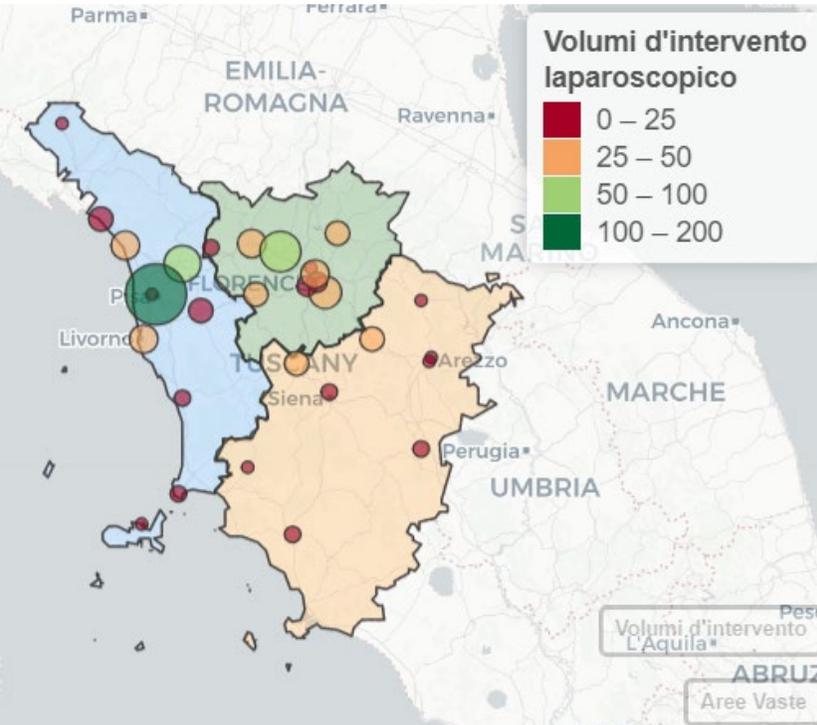
# Volumi d'intervento per area vasta, anno e **tecnica operatoria**

	Nord-Ovest			Centro			Sud-Est			Totale regionale			
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021-2023
Open	28	38	38	52	34	31	26	24	16	106	96	85	287
Robot	44	54	69	56	71	51	40	69	63	140	194	183	456
Laparoscopica	113	132	81	104	100	112	35	34	28	252	266	221	739
<i>Totale anno</i>	185	224	188	212	205	194	101	127	107	498	556	489	
<i>Totale</i>	597			611			335			1543			1543

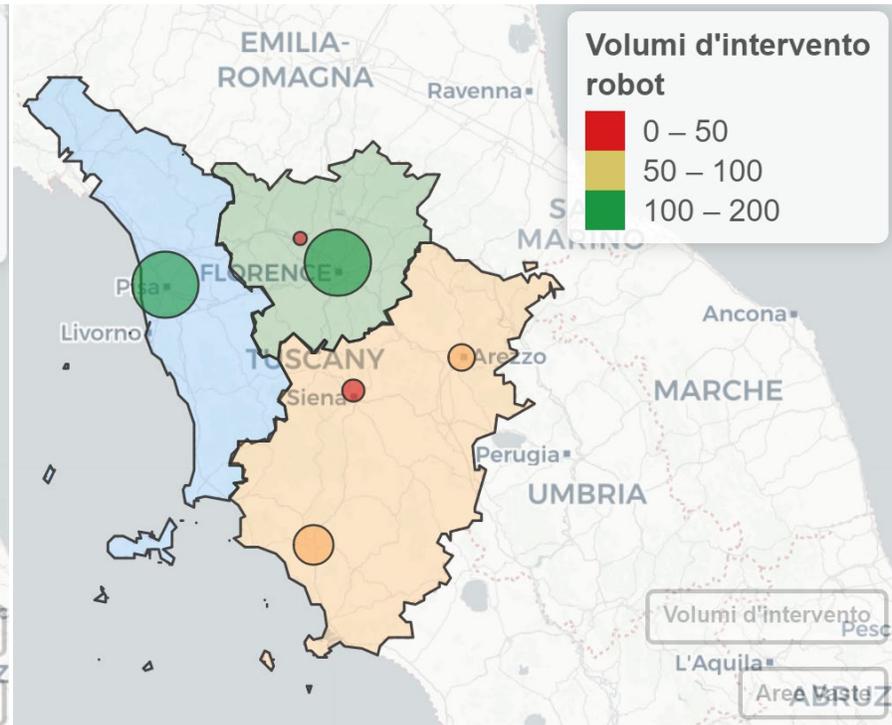
Fonte: RT Scheda di Dimissione Ospedaliera (SDO)

# Volumi d'intervento per **tecnica operatoria**, ospedale e area vasta negli anni 2021-2023

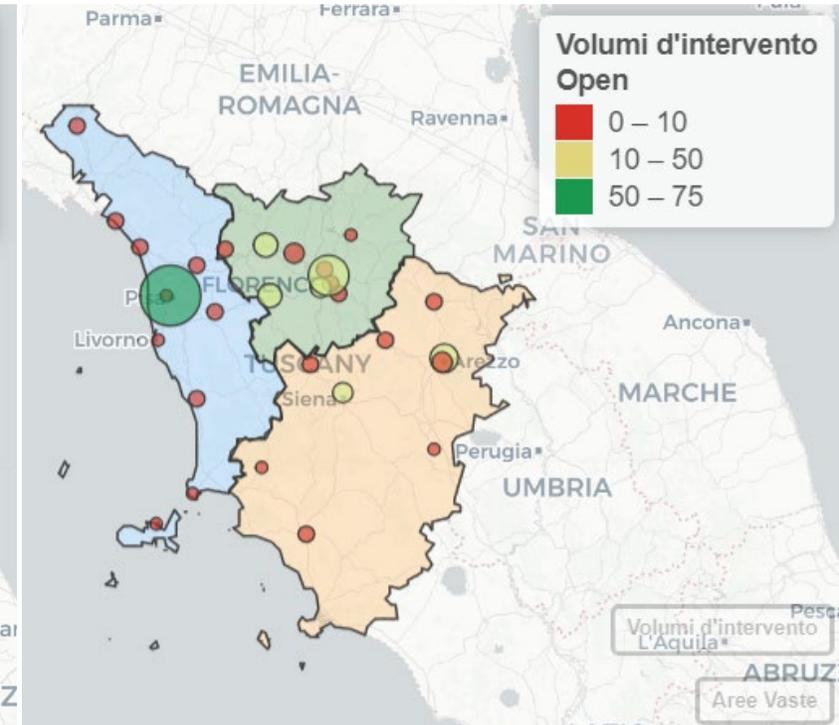
Laparoscopica



Robot



Open



# Volumi d'intervento e conversioni a open per area vasta e **tecnica operatoria** negli anni 2021-2023

	<b>Nord-Ovest</b> (n, %conversioni a open)	<b>Centro</b> (n, %conversioni a open)	<b>Sud-Est</b> (n, %conversioni a open)	<b>Totale</b> (n, %conversioni a open)
Conversione da laparoscopica o robot a open	8 (1,62%*)	26 (5,23%*)	8 (2,96%*)	42 (3,33%*)
<i>Tecniche:</i>				
• Laparoscopica	318	293	90	701
• Robot	167	178	172	517
<b>Totale convertibili</b>	<b>485</b>	<b>471</b>	<b>262</b>	<b>1218</b>
• Open	104	114	65	283
<b>Totale</b>	<b>597</b>	<b>611</b>	<b>335</b>	<b>1543</b>

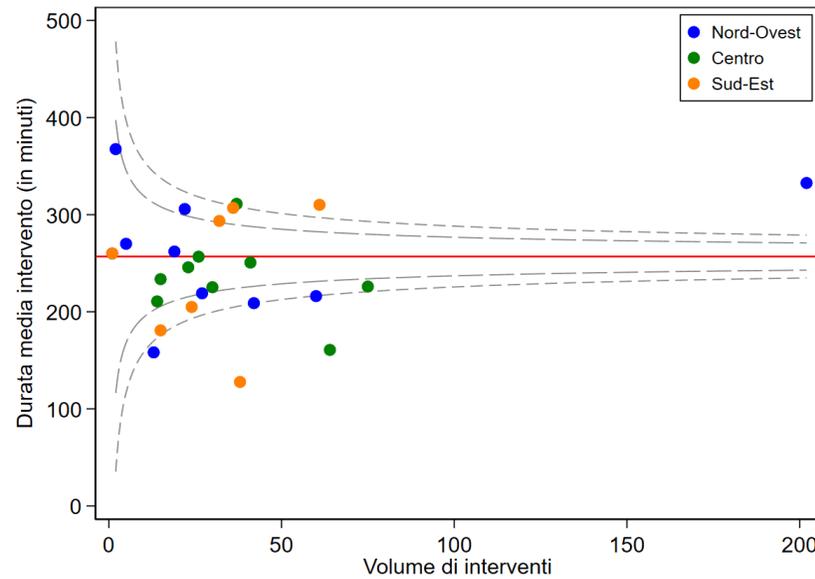
\* Percentuale di conversioni sul totale di interventi in laparoscopica e robot



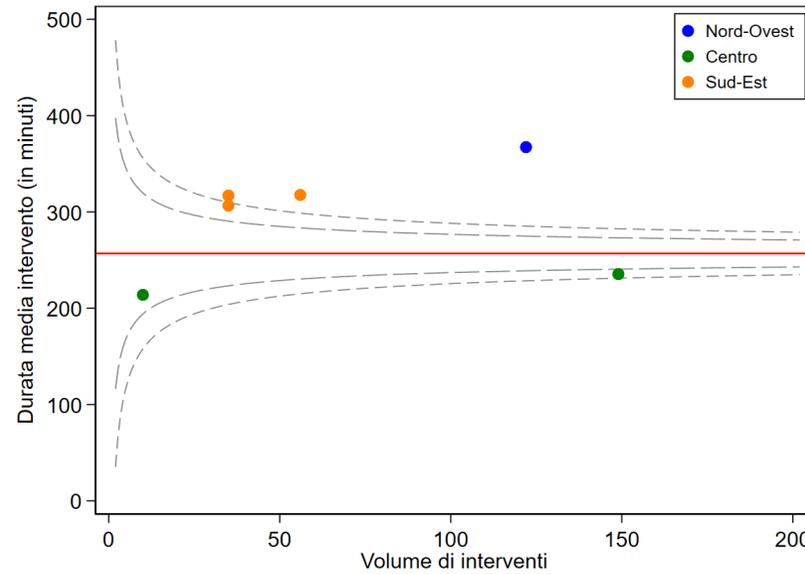
# Volumi e durata d'intervento

per **tecnica operatoria**, ospedale e area vasta negli anni 2021-2023

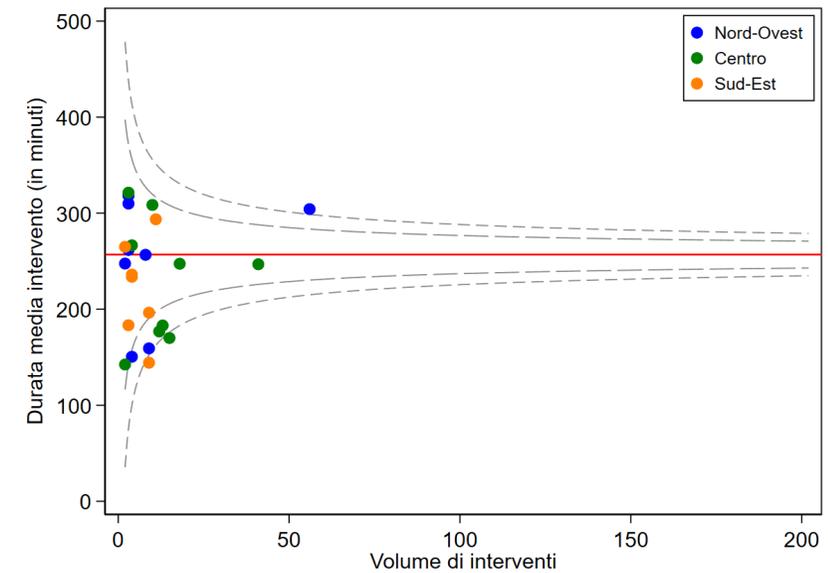
Laparoscopica



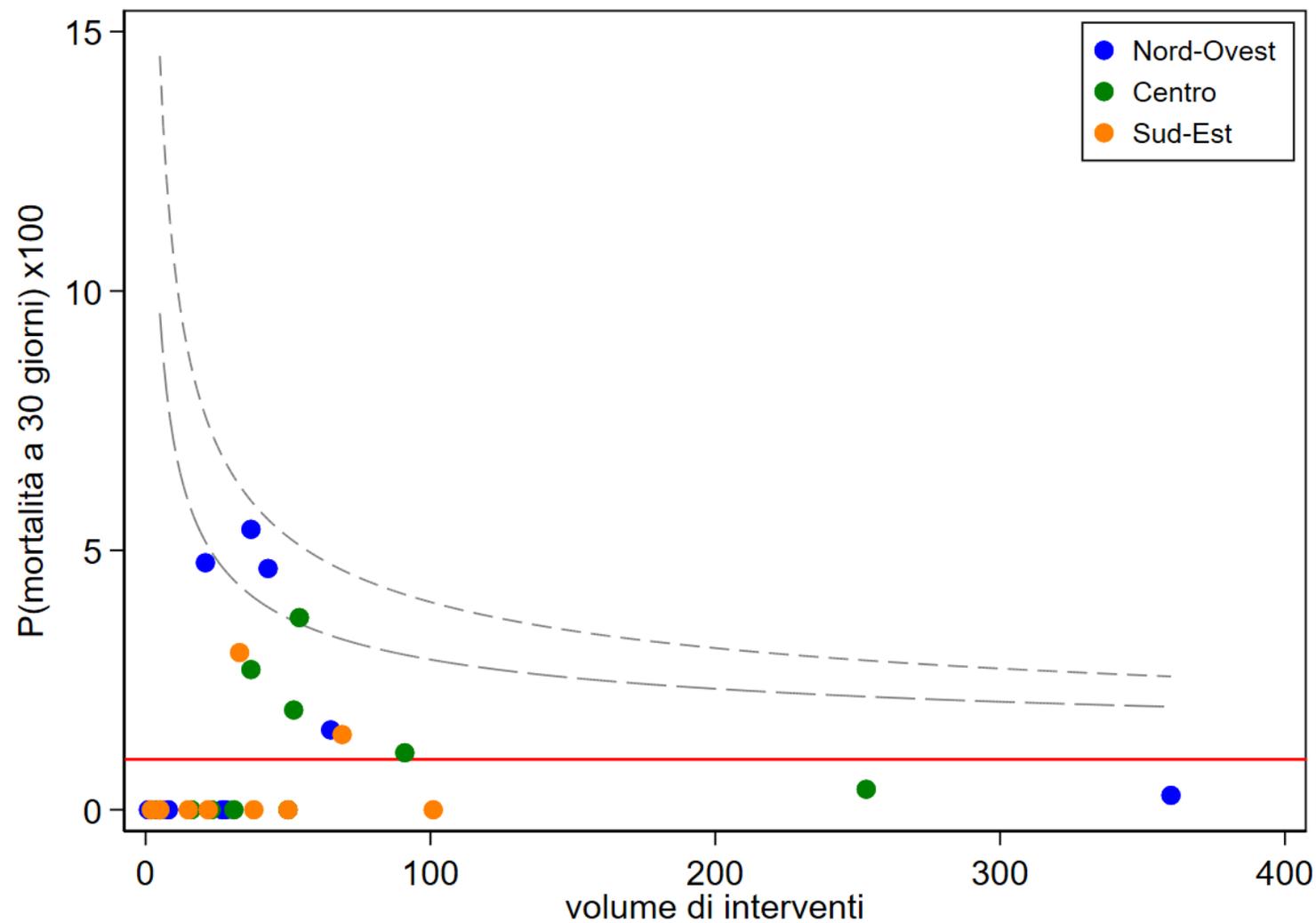
Robot



Open



# Mortalità a 30 giorni per volumi d'intervento negli anni 2021-2023



Fonte:  
RT Anagrafe assistibili,  
RT SDO

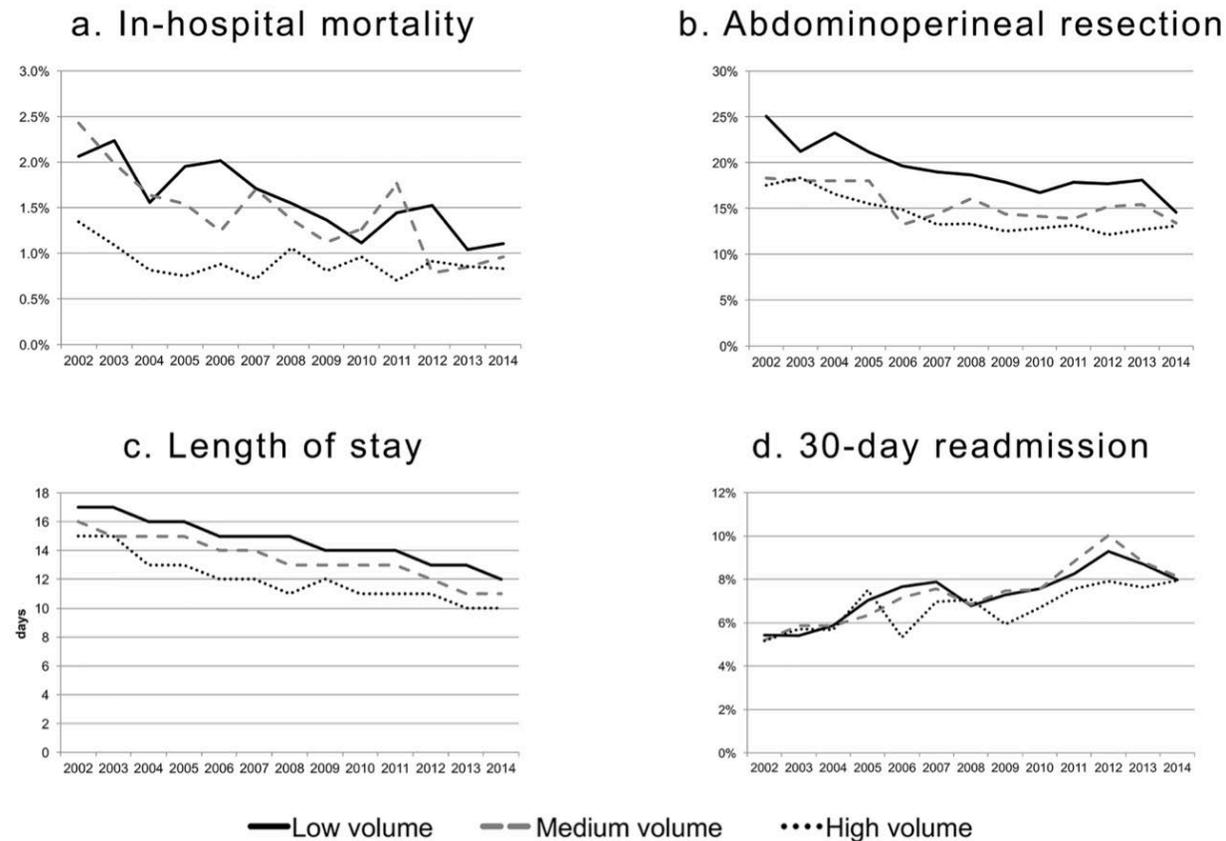
# Question time

- Quando incontrate un paziente con sospetto o diagnosi di tumore del retto, quali criteri utilizzate per decidere il centro a cui inviarlo?
- Ritenete che il volume di casi trattati e l'esperienza del team multidisciplinare possano influire sugli esiti del trattamento?

## Relationship between hospital volume and short-term outcomes: a nationwide population-based study including 75,280 rectal cancer surgical procedures

Salvatore Pucciarelli<sup>1</sup>, Manuel Zorzi<sup>2</sup>, Nicola Gennaro<sup>3</sup>, Francesco Marchegiani<sup>1</sup>, Andrea Barina<sup>1</sup>, Massimo Rugge<sup>2,4</sup>, Matteo Zuin<sup>1</sup>, Alessandro Perin<sup>1</sup>, Isacco Maretto<sup>1</sup>, Francesca Bergamo<sup>5</sup>, Caterina Boso<sup>6</sup>, Emanuele Damiano Luca Urso<sup>1</sup>, Patrick Frambach<sup>1</sup> and Maria Chiara Corti<sup>3</sup>

Figure 2: Distribution of patients according to the hospitals' annual volume of procedures, by period.



# Question time

- Quanto ritenete che la curva di apprendimento della laparoscopia, rispetto alla robotica, influenzi la qualità complessiva degli interventi eseguiti da operatori meno esperti?
- In che misura questo si riflette sui risultati per i pazienti?

Observational Study

Medicine®

OPEN

# Outcomes of robotic versus laparoscopic surgery for mid and low rectal cancer after neoadjuvant chemoradiation therapy and the effect of learning curve

Yu-Min Huang, MD, PhD<sup>a,b,c</sup>, Yan Jiun Huang, MD, PhD<sup>a,d</sup>, Po-Li Wei, MD, PhD<sup>a,c,d,e,f,g,\*</sup>

Although the robotic approach may offer potential advantages for rectal surgery, comparable short-term outcomes may be achieved when laparoscopic surgery is performed by experienced surgeons. However, our results suggested a shorter learning curve for robotic surgery for rectal cancer, even in patients who exhibited more advanced disease after undergoing nCRT.

Randomized Controlled Trial > JAMA. 2017 Oct 24;318(16):1569-1580.

doi: 10.1001/jama.2017.7219.

# Effect of Robotic-Assisted vs Conventional Laparoscopic Surgery on Risk of Conversion to Open Laparotomy Among Patients Undergoing Resection for Rectal Cancer: The ROLARR Randomized Clinical Trial

David Jayne <sup>1</sup>, Alessio Pigazzi <sup>2</sup>, Helen Marshall <sup>3</sup>, Julie Croft <sup>3</sup>, Neil Corrigan <sup>3</sup>, Joanne Copeland <sup>3</sup>, Phil Quirke <sup>4</sup>, Nick West <sup>4</sup>, Tero Rautio <sup>5</sup>, Niels Thomassen <sup>6</sup>, Henry Tilney <sup>7</sup>, Mark Gudgeon <sup>7</sup>, Paolo Pietro Bianchi <sup>8</sup>, Richard Edlin <sup>9</sup>, Claire Hulme <sup>10</sup>, Julia Brown <sup>3</sup>

**Conclusions and relevance:** Among patients with rectal adenocarcinoma suitable for curative resection, robotic-assisted laparoscopic surgery, as compared with conventional laparoscopic surgery, did not significantly reduce the risk of conversion to open laparotomy. These findings suggest that robotic-assisted laparoscopic surgery, when performed by surgeons with varying experience with robotic surgery, does not confer an advantage in rectal cancer resection.

# Question time

- In base alla vostra esperienza, quale tecnica consente di raggiungere il miglior equilibrio tra radicalità oncologica, rispetto della funzione sfinteriale e riduzione delle complicanze?
- La robotica offre qualcosa che gli approcci tradizionali non possono garantire?

Meta-Analysis > [Ann Surg](#). 2018 Jun;267(6):1034-1046.

doi: [10.1097/SLA.0000000000002523](https://doi.org/10.1097/SLA.0000000000002523).

## Robotic Versus Laparoscopic Minimally Invasive Surgery for Rectal Cancer: A Systematic Review and Meta-analysis of Randomized Controlled Trials

Francesco Paolo Prete <sup>1 2</sup>, Angela Pezzolla <sup>1</sup>, Fernando Prete <sup>3</sup>, Mario Testini <sup>4</sup>,  
Rinaldo Marzaioli <sup>1</sup>, Alberto Patriti <sup>5</sup>, Rosa Maria Jimenez-Rodriguez <sup>6</sup>, Angela Gurrado <sup>4</sup>,  
Giovanni F M Strippoli <sup>3 7 8</sup>

Affiliations + expand

PMID: 28984644 DOI: [10.1097/SLA.0000000000002523](https://doi.org/10.1097/SLA.0000000000002523)

**Conclusion:** Evidence of moderate quality supports that robotic surgery for rectal cancer produces similar perioperative outcomes of oncologic procedure adequacy to conventional laparoscopic surgery. Robotic surgery portrays lower rate of conversion to open surgery, while operating time is significantly longer than by laparoscopic approach.

# CONCLUSIONI

- Sviluppare e potenziare la rete oncologica: prevenzione !
- Importanza della multidisciplinarietà
- Esperienza e Formazione