Debate: Rectal cancer management
Radiation Sparing vs Nonoperative Management

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MEDICINE

The Case for Non-Operative Management in Rectal Cancer

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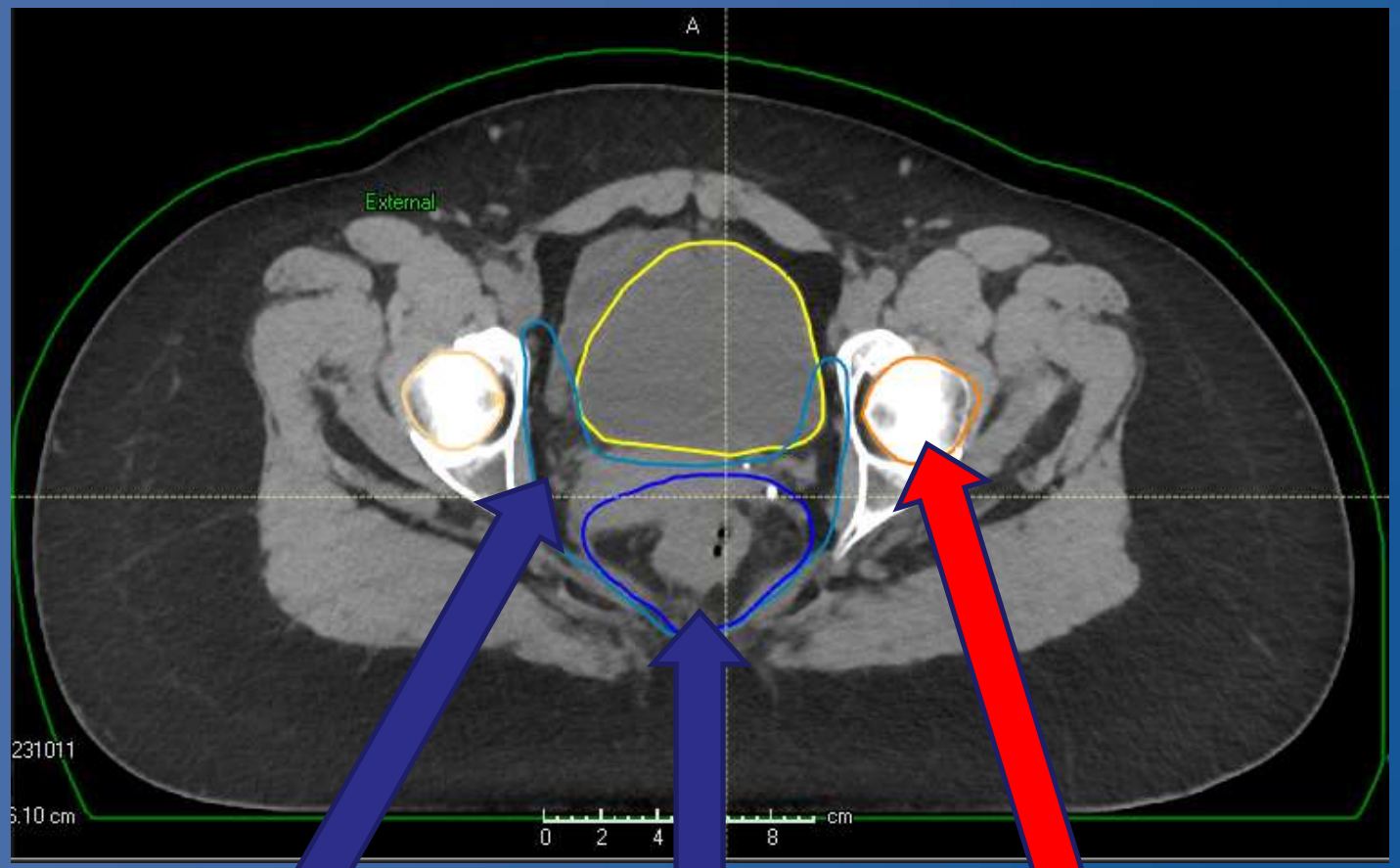
Disclosures

- None

Radiation for Rectal Cancer



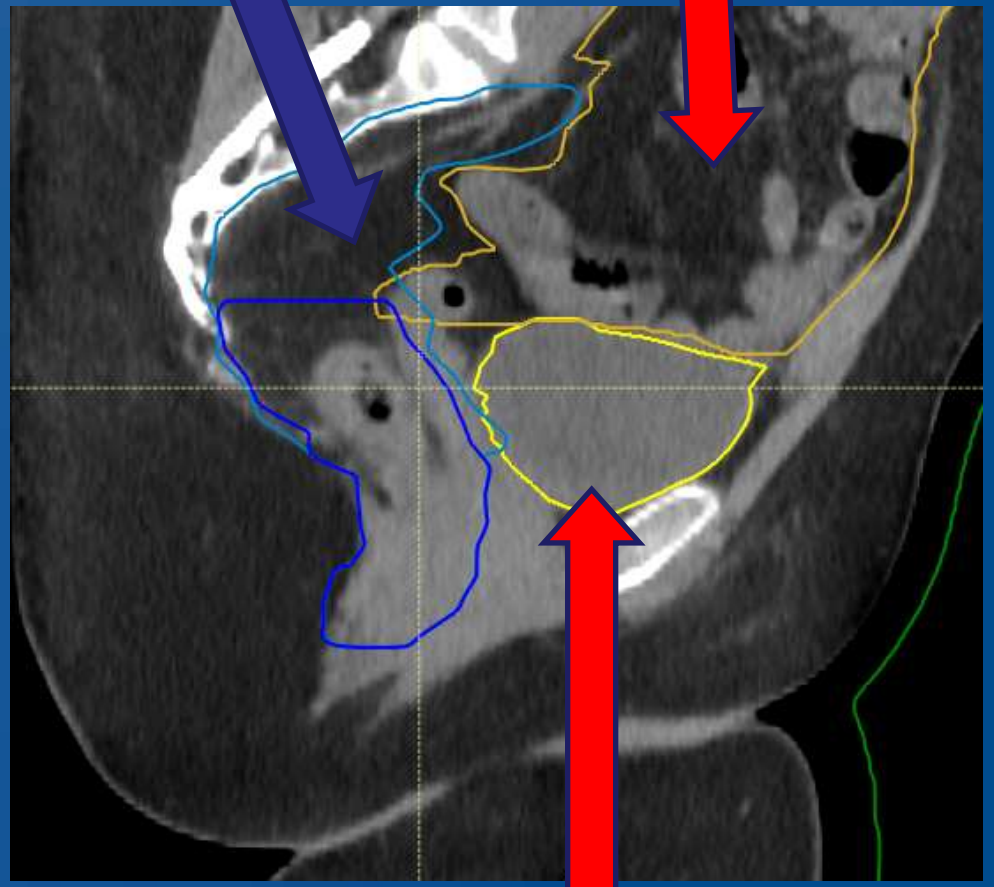
Target internal iliacs

Target mesorectum

Avoid femoral heads

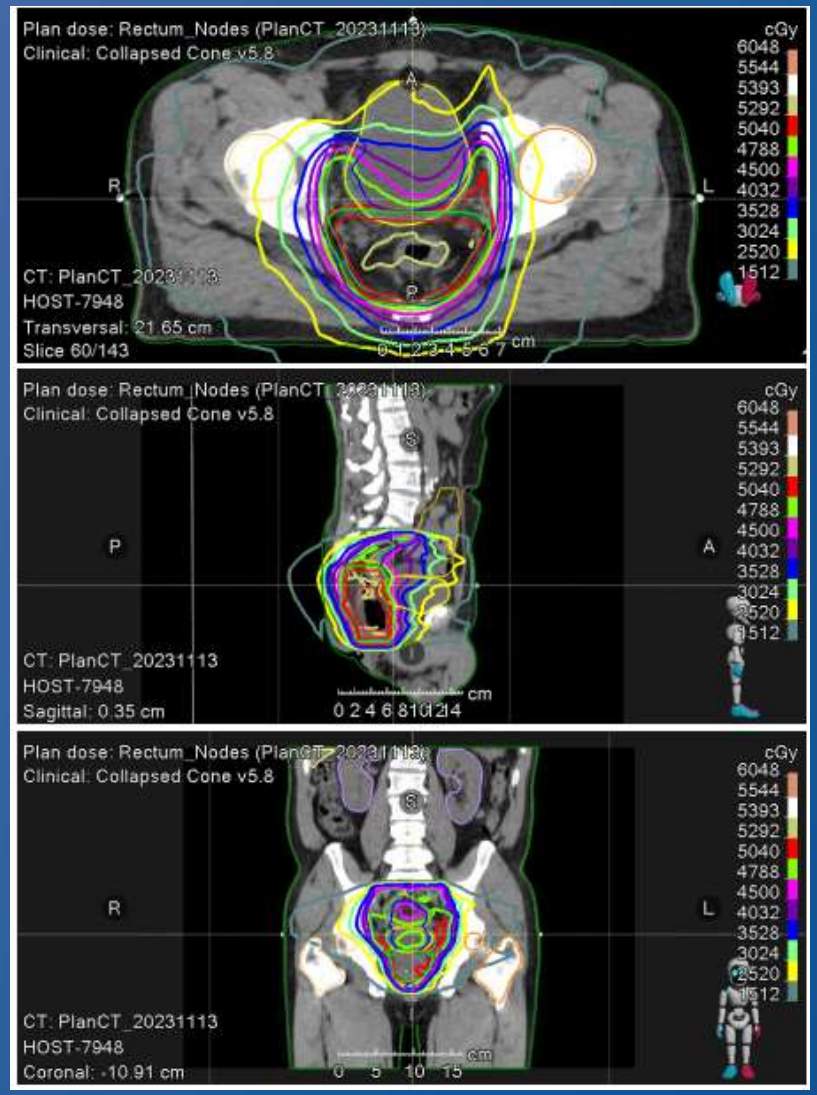
Target common iliacs

Avoid bowel

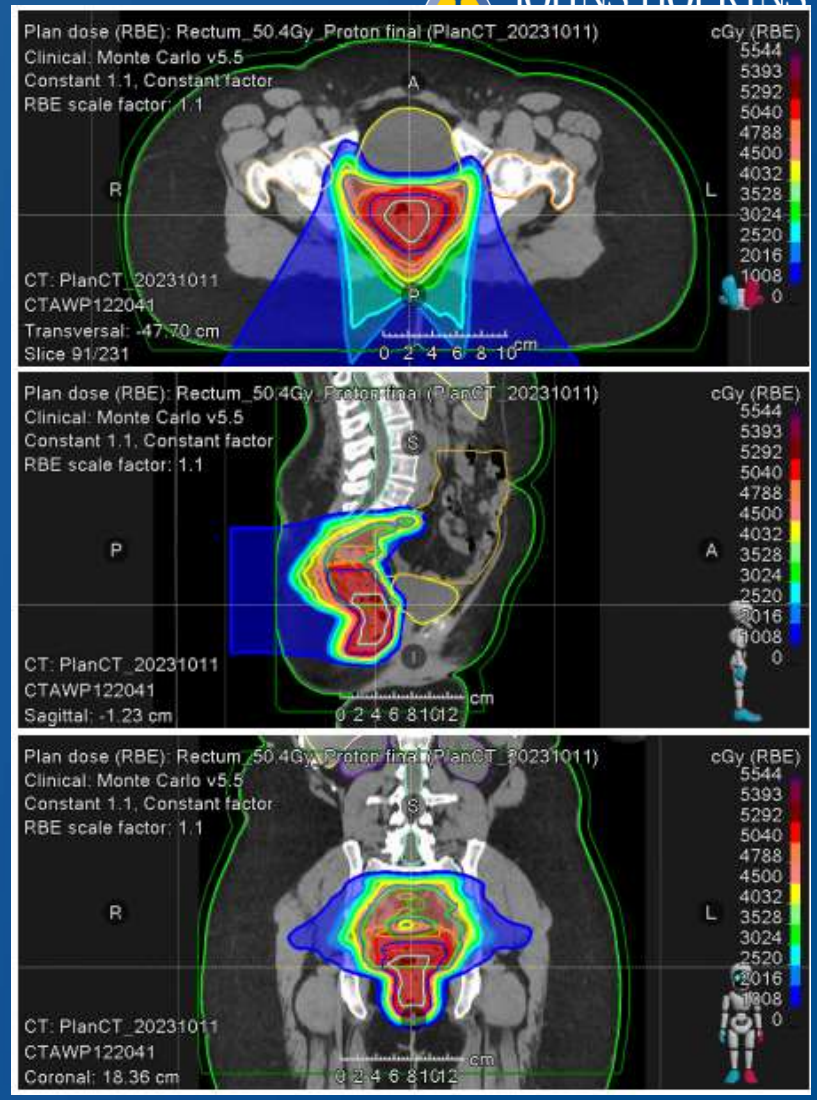


Avoid bladder

3D Conformal Radiation



Intensity Modulated Radiation Therapy



Proton Beam Therapy

Challenges Associated with Surgery

- Low Anterior Resection (LAR)
  - Mid to upper rectum
  - Low anterior resection syndrome (LARS)
    - Frequency/urgency of stools
    - Clustered stools
    - Bowel incontinence
    - Increased flatulence
- Abdominal Perineal Resection (APR)
  - Low rectal/anal canal
  - Permanent colostomy
    - Major lifestyle change
    - Infection/inflammation at ostomy site
    - Lifelong need for care
    - No re-anastomosis option

Operative Versus Nonoperative Treatment for Stage 0 Distal Rectal Cancer Following Chemoradiation Therapy

Long-term Results

Angelita Habr-Gama, MD, Rodrigo Oliva Perez, MD,* Wladimir Nadalin, MD,† Jorge Sabbaga, MD,† Ulysses Ribeiro Jr, MD,‡ Afonso Henrique Silva e Sousa Jr, MD,* Fábio Guilherme Campos, MD,* Desidério Roberto Kiss, MD,* and Joaquim Gama-Rodrigues, MD‡*

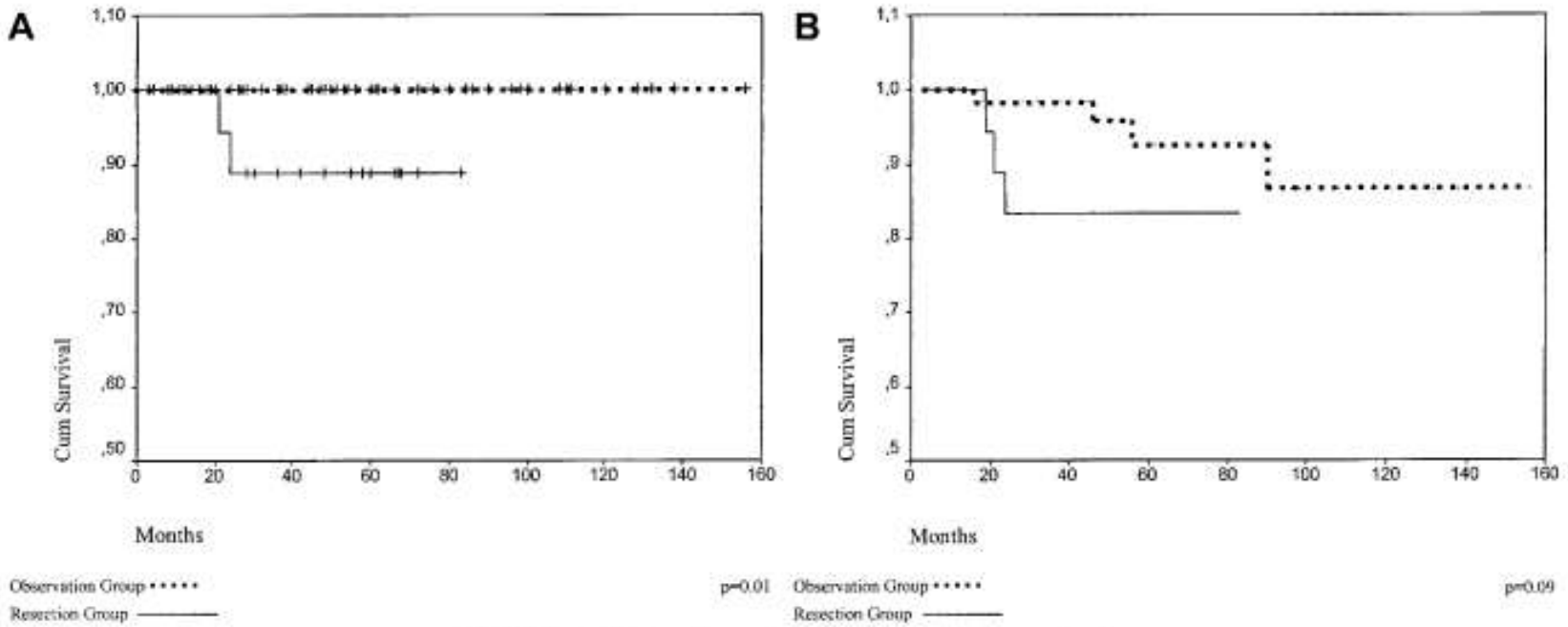


FIGURE 1. A, Overall survival. B, Disease-free survival.

Conditional recurrence-free survival of clinical complete responders managed by watch and wait after neoadjuvant chemoradiotherapy for rectal cancer in the International Watch & Wait Database: a retrospective, international, multicentre registry study

*Laura M Fernandez, Guilherme P São Julião, Nuno L Figueiredo, Geerard L Beets, Maxime J M van der Valk, Renu R Bahadoer, Denise E Hilling, Elma Meershoek-Klein Kranenbarg, Annet G H Roodvoets, Andrew G Renehan, Cornelis J H van de Velde, Angelita Habr-Gama, Rodrigo O Perez, the International Watch & Wait Database Consortium**

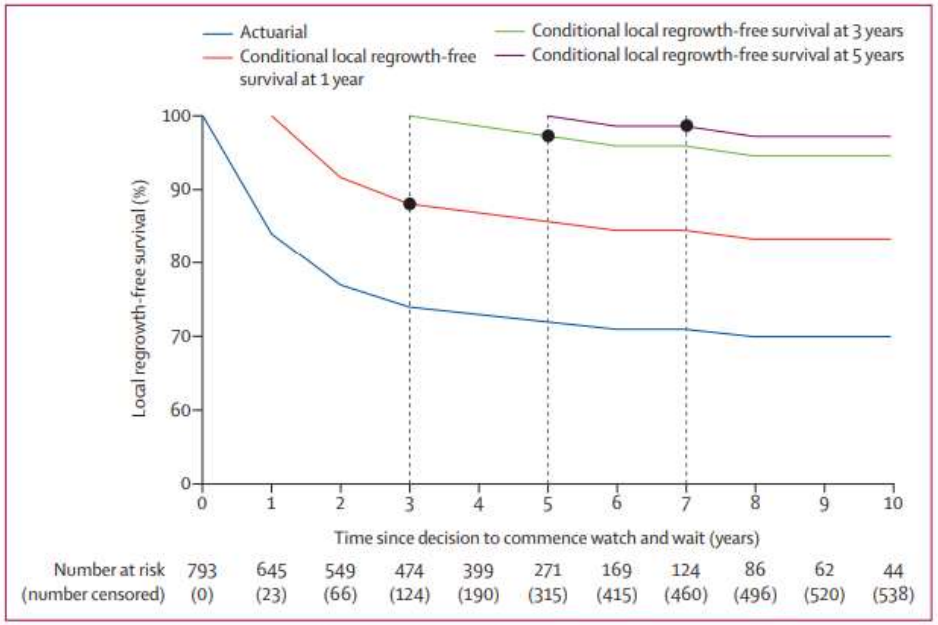


***Figure 1*: Actuarial and 2-year conditional local regrowth-free survival of patients managed by watch and wait after sustaining a clinical complete response for 1, 3, and 5 years**
The black circles represent the probability of remaining local regrowth-free for an additional 2 years once a clinical complete response had been reached and sustained for 1, 3, and 5 years.

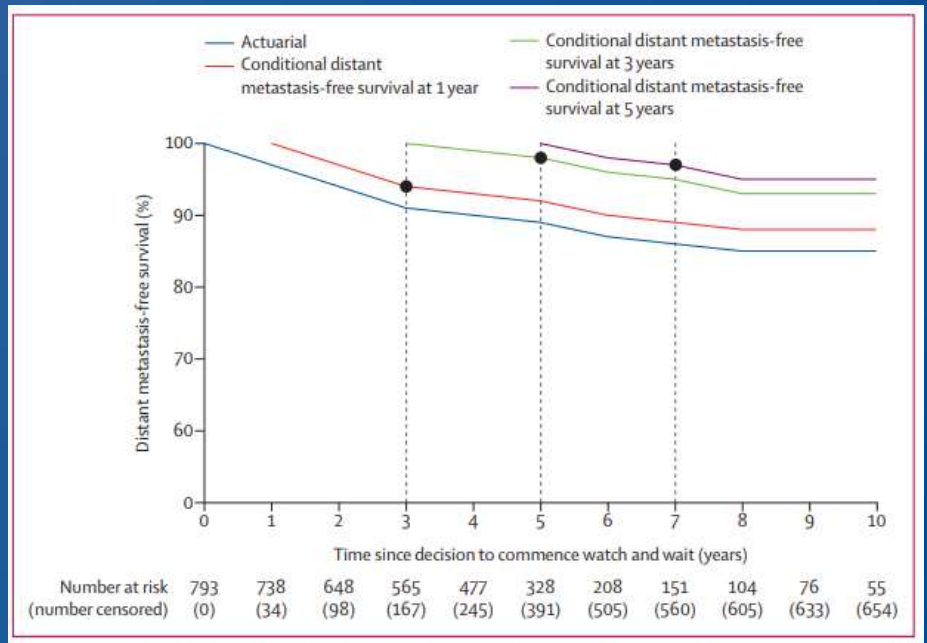
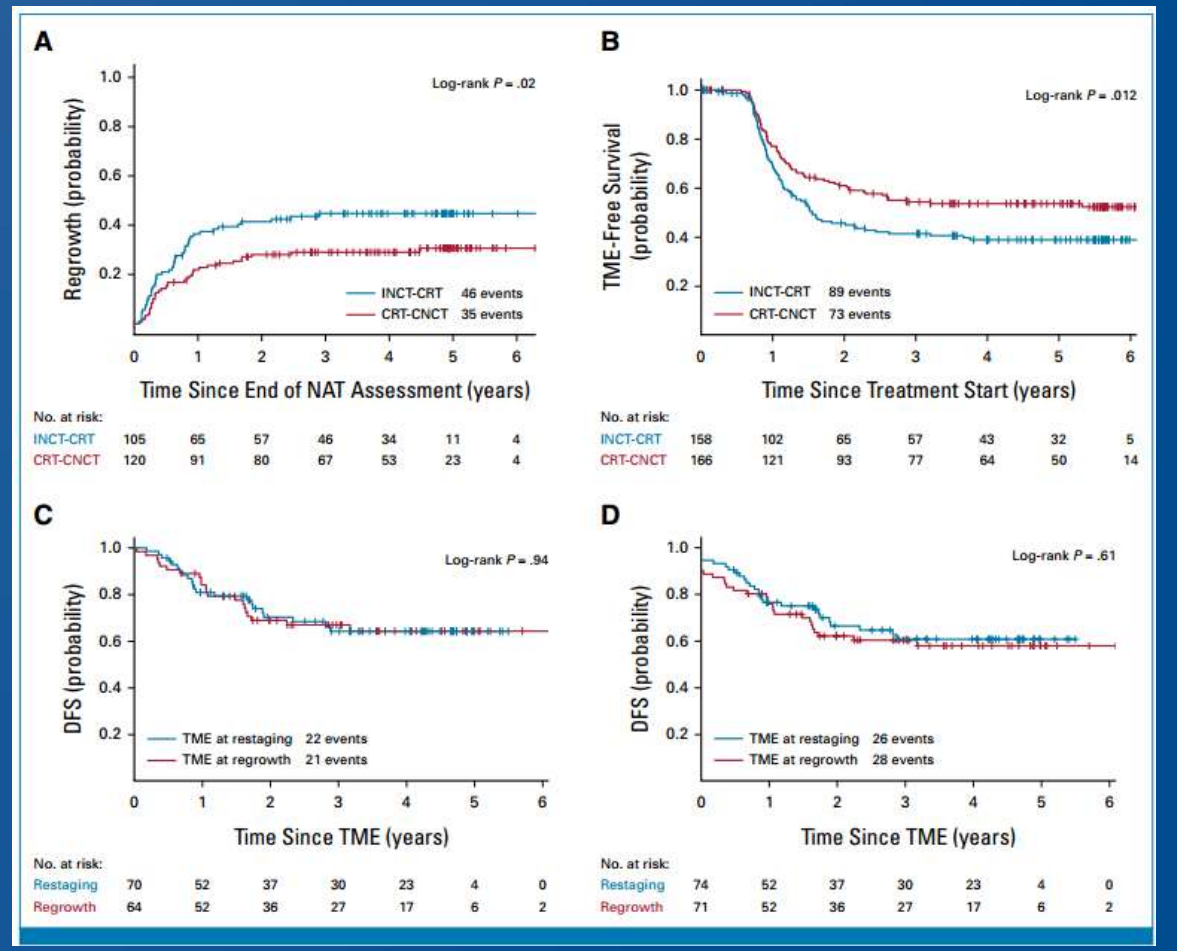


***Figure 2*: Actuarial and 2-year conditional distant metastasis-free survival of patients managed by watch and wait after remaining distant metastasis-free for 1, 3, and 5 years**
The black circles represent the probability of remaining distant metastasis-free for an additional 2 years once patients had been distant metastasis-free for 1, 3, and 5 years.

Long-Term Results of Organ Preservation in Patients With Rectal Adenocarcinoma Treated With Total Neoadjuvant Therapy: The Randomized Phase II OPRA Trial

Floris S. Verheij, BSc[1]; Dana M. Omer, MD[1]; Hannah Williams, MD[1]; Sabrina T. Lin, MSc[2]; Li-Xuan Qin, PhD[2]; James T. Buckley, BSc[1]; Hannah M. Thompson, MD[1]; Jonathan B. Yuval, MD[1]; Jin K. Kim, MD[1]; Richard F. Dunne, MD[3]; Jorge Marcet, MD[4]; Peter Cataldo, MD[5]; Blase Polite, MD[6]; Daniel O. Herzig, MD[7]; David Liska, MD[8]; Samuel Oommen, MD[9]; Charles M. Friel, MD[10]; Charles Ternent, MD[11]; Andrew L. Coveler, MD[12]; Steven Hunt, MD[13]; Anita Gregory, MD[14]; Madhulika G. Varma, MD[15]; Brian L. Bello, MD[16]; Joseph C. Carmichael, MD[17]; John Krauss, MD[18]; Ana Gleisner, MD[19]; José G. Guillem, MD[20]; Larissa Temple, MD[21]; Karyn A. Goodman, MD[22]; Neil H. Segal, MD, PhD[23]; Andrea Cercek, MD[23]; Rona Yaeger, MD[23]; Garrett M. Nash, MD[1]; Maria Widmar, MD[1]; Iris H. Wei, MD[1]; Emmanouil P. Pappou, MD[1]; Martin R. Weiser, MD[1]; Philip B. Paty, MD[1]; J. Joshua Smith, MD, PhD[1]; Abraham J. Wu, MD[24]; Marc J. Gollub, MD[25]; Leonard B. Saltz, MD[23]; and Julio Garcia-Aguilar, MD, PhD[1]

- Chemo -> CRT vs CRT -> Chemo
- After initial therapy, if cCR or nCR, then WW
- Chemo – FOLFOX (x3) or CapeOx (x5)
- Radiation – 45 Gy to pelvis, 50-56 Gy to tumor
- Assess for response at 8 +/- 4 weeks after TNT
- Primary Outcome – DFS
  - 71% vs 69% (p=ns)
- Secondary Outcome – TME-free survival
  - 39% vs 54% (favors radiation first)
- Overall Survival (5 Year)
  - 88% vs 85% (p=ns)



Short vs Long Course Radiation

- Short Course Radiation
  - Pro
    - More efficient (5 days)
    - Quicker initiation of systemic therapy
  - Cons
    - Potentially worse local control
    - More significant acute side effects
  - Biologically Effective Dose
    - α/β_{10} = 37.5 Gy
    - α/β_{3} = 66.67 Gy

- Long Course Radiation
  - Pro
    - Potentially better for organ preservation
    - Less significant acute side effects
  - Cons
    - More time intensive (28-30 days)
    - Longer time until chemotherapy
  - Biologically Effective Dose
    - α/β_{10} = 63.72 Gy
    - α/β_{3} = 86.4 Gy

ORIGINAL ARTICLE

Organ preservation after neoadjuvant long-course chemoradiotherapy versus short-course radiotherapy

A. Bercz[1†], B. K. Park[1,2†], E. Pappou[1], D. Nemirovsky[3], R. Sarkar[4], M. Yamner[4], D. Omer[1], F. Verheij[1], J. Alvarez[1], P. Atri[3], M. Reyngold[4], R. Yaeger[4], I. H. Wei[1], A. Wu[4], N. Raj[5], M. Widmar[1], C. Hajj[4], M. J. Kim[1], D. Rao[5], G. M. Nash[1], V. Williams[4], J. Shia[6], N. H. Segal[5], L. Diaz[5], K. Ganesh[5], M. R. Weiser[1], M. J. Gollub[7], P. B. Paty[1], N. Horvat[7], M. Zinovoy[4], D. Roth O'Brien[4], F. Sanchez-Vega[3], L. B. Saltz[5], C. H. Crane[4], A. Cercek[5], M. Gonen[3], J. Garcia-Aguilar[1], J. J. Smith[1*] & P. B. Romesser[4,8*]

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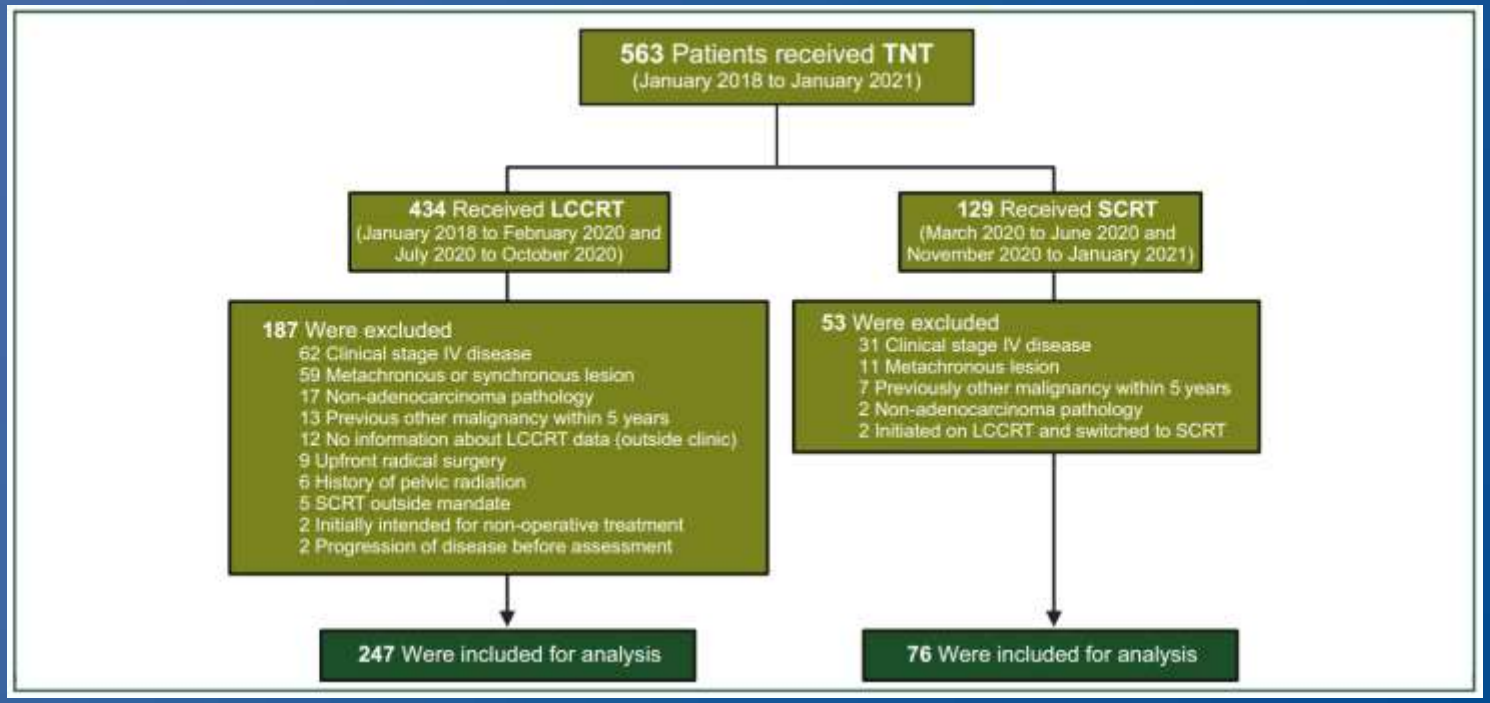

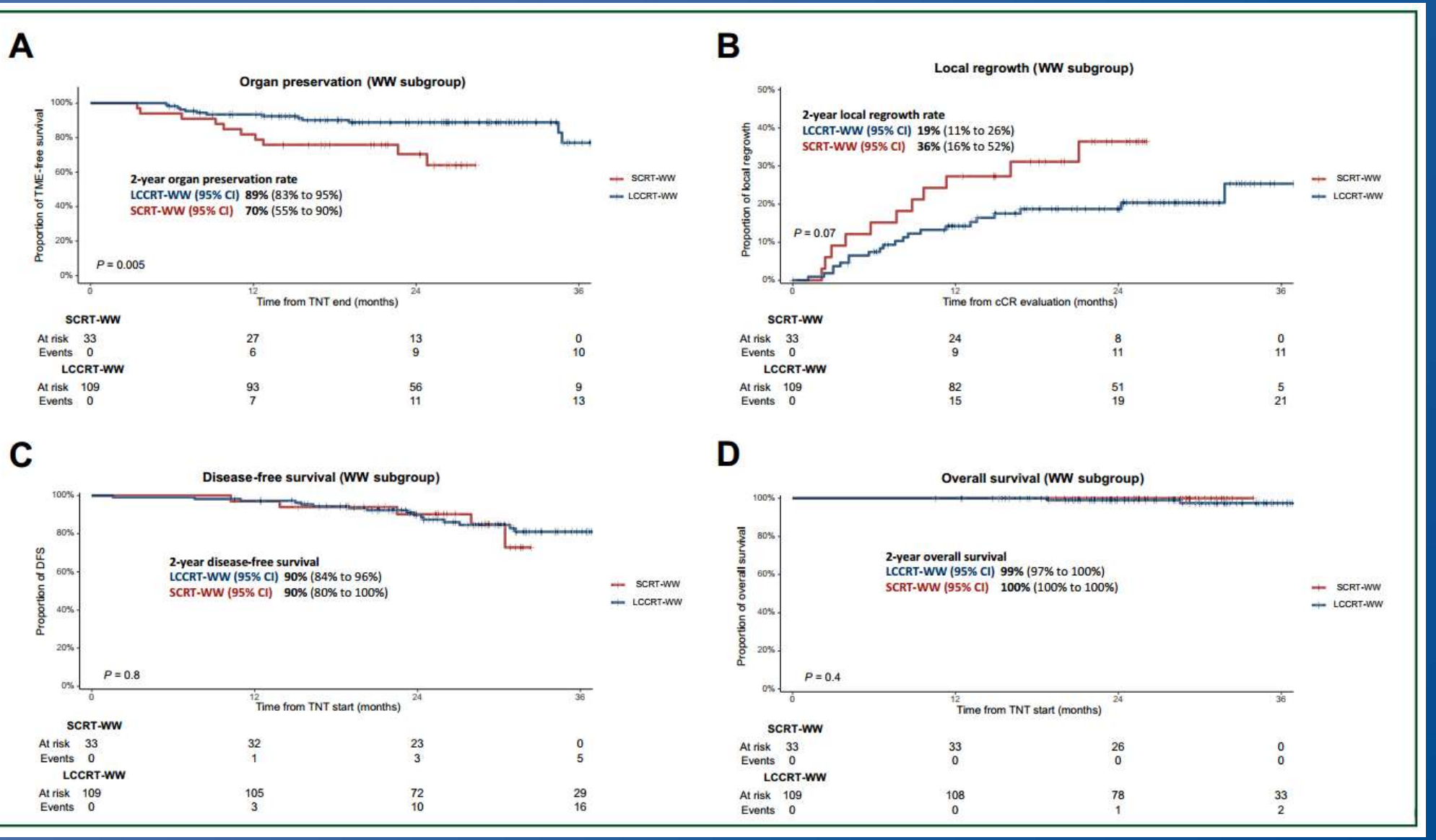

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Bercz et al., Ann Oncol 2024

Monitoring After Non-Operative Management

- DRE
  - Q4 months x 2 years
  - Then Q6 months x 3 years
- Flex Sig
  - Q4 months x 2 years
  - Then Q6 months x 3 years
- CEA
  - Q4 months x 2 years
  - Then Q6 months x 3 years
- MRI
  - Q6 months x 2 years
  - Then annually x 3 years
- CT Chest/Abdomen/Pelvis
  - Annually x 5 years
- Colonoscopy
  - Years 1 and 5

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Thank You!