

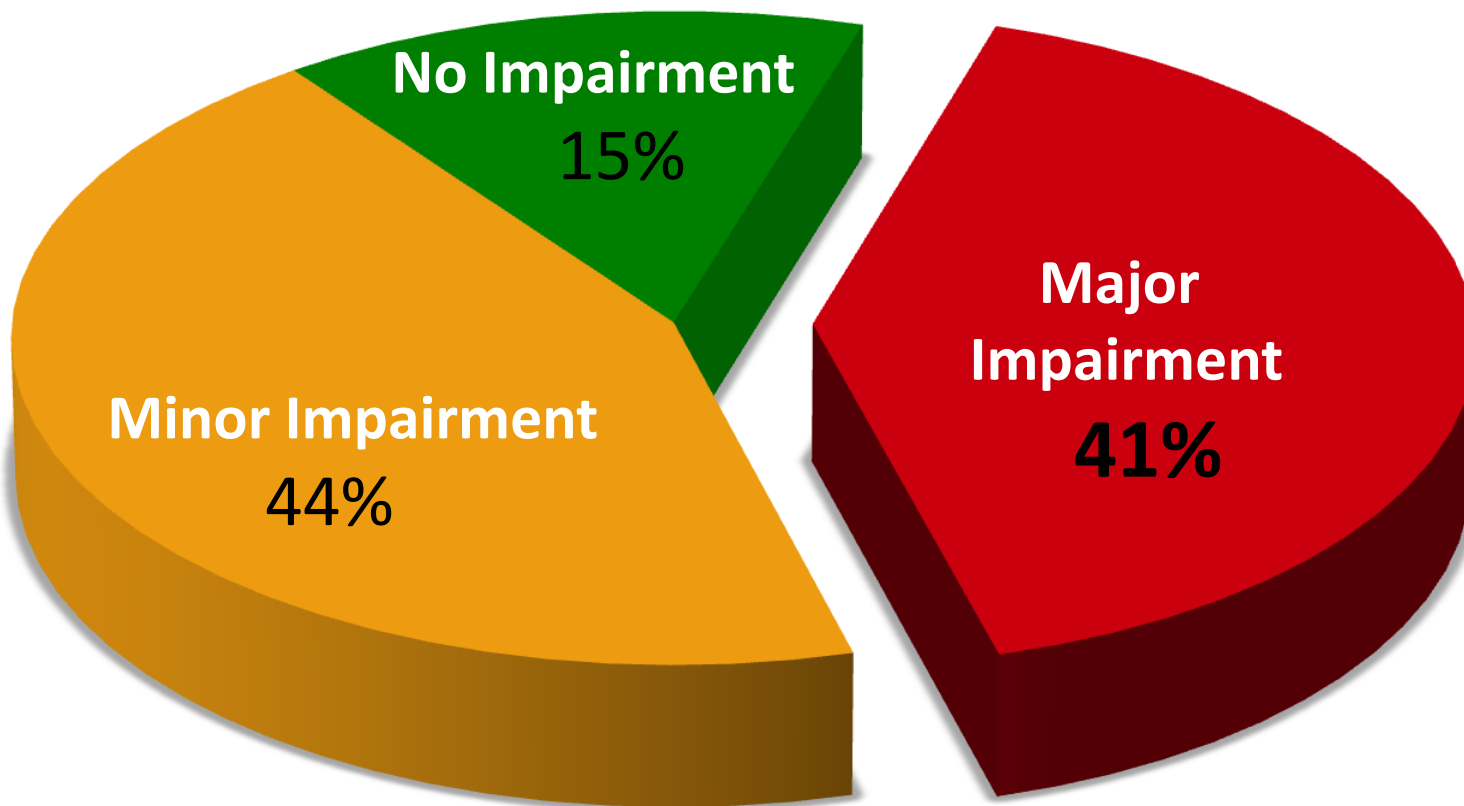
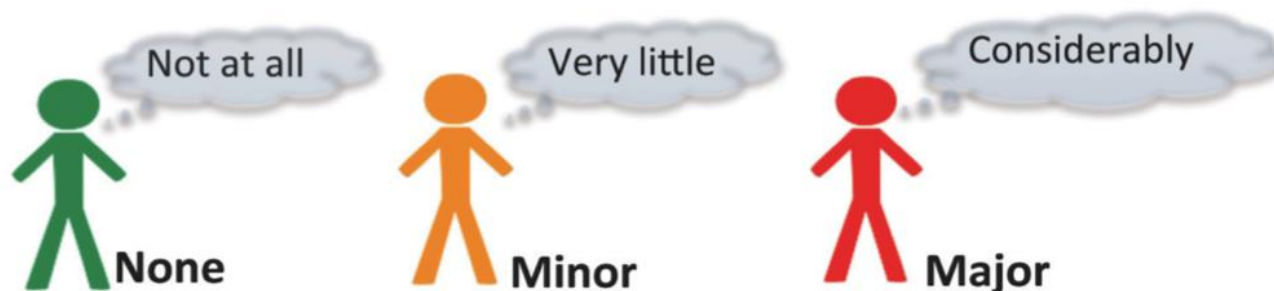
## INFORMING PATIENTS OF POST ANTERIOR RESECTION BOWEL DYSFUNCTION



 **POLARS**  
Pre-Operative Low Anterior Resection Syndrome Score

Nick Battersby, Surgical Registrar,  
Basingstoke, UK  
UK & Danish LARS Study Group

# How does bowel function affect your quality of life?



## Major Impact on Quality of life

### EORTC C30 symptom scores

Insomnia

Fatigue

> 20 points

Bowel Dysfunction

### EORTC C30 functional domains

> 20 points difference for:

- Global Quality of Life
- Role (work and responsibilities)
- Social

How might my bowel function affect my quality of life?

Not at all

Very little

Considerably



None

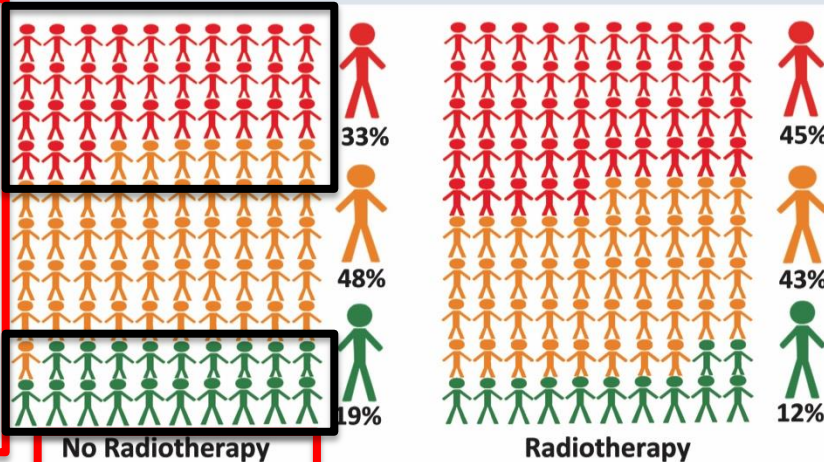


Minor

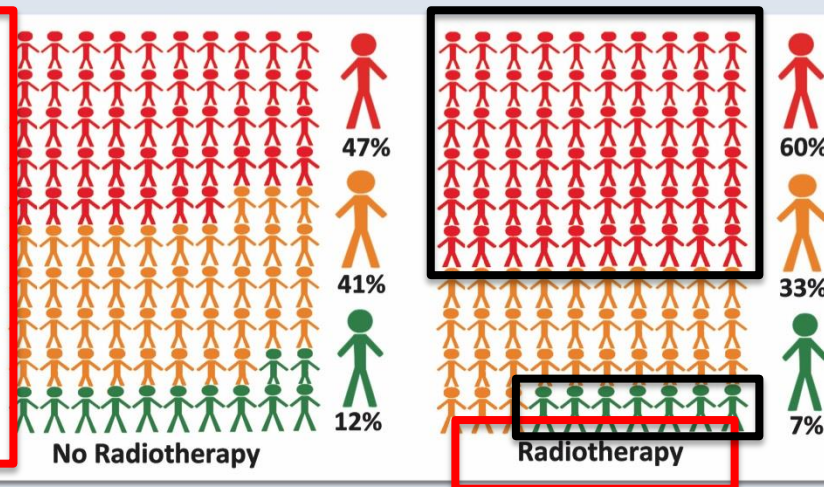


Major

Mid/Upper rectal cancer  
(more than 6cm from the outer anus)



Low rectal cancer  
(less than 6cm from the outer anus)



# POLARS

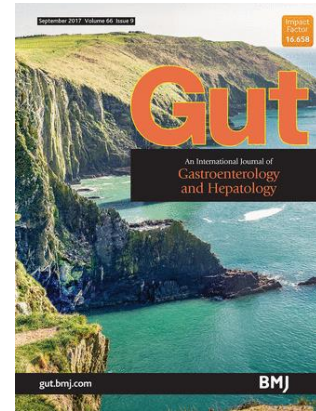
Pre-Operative Low Anterior Resection Syndrome Score

ORIGINAL ARTICLE

## Development and external validation of a nomogram and online tool to predict bowel dysfunction following restorative rectal cancer resection: the POLARS score

Nick J Battersby,<sup>1,2</sup> George Bouliotis,<sup>3</sup> Katrine J Emmertsen,<sup>4</sup> Therese Juul,<sup>4</sup> Rob Glynne-Jones,<sup>5</sup> Graham Branagan,<sup>6</sup> Peter Christensen,<sup>4</sup> Søren Laurberg,<sup>4</sup> Brendan J Moran,<sup>1,2</sup> on behalf of the UK and Danish LARS Study Groups

[http://www.pelicanancer.org/our-research/bowel-cancer-research/polars/.](http://www.pelicanancer.org/our-research/bowel-cancer-research/polars/)





# Scenario 1

70 year old male

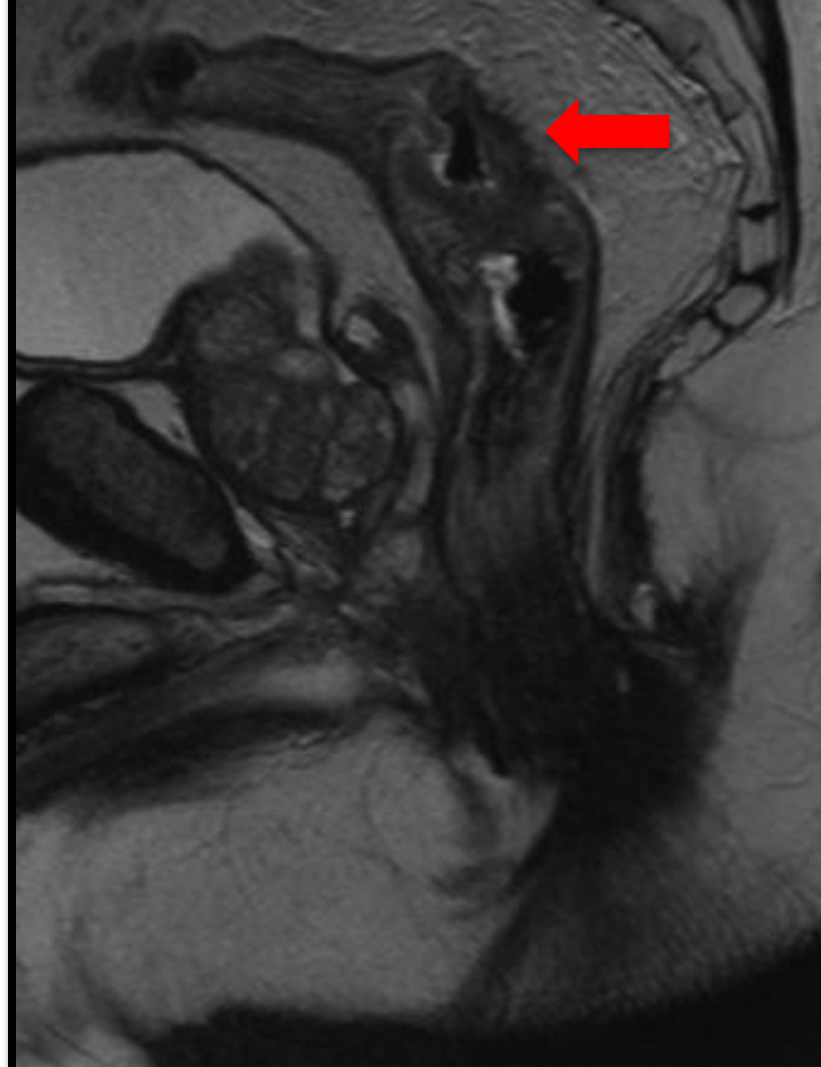
Tumour Height - 14cm from  
Anal Verge

Plan:

- No Radiotherapy
- TME Surgery

[http://www.pelcancancer.org/our-research/bowel-cancer-research/polars/.](http://www.pelcancancer.org/our-research/bowel-cancer-research/polars/)

## Upper Rectal Cancer



## POLARS



## Pre-operatively Predict The LARS Score

POLARS, or the Pre-Operative Low Anterior Resection Syndrome Score, is a mathematical model, accessed by the internet that has been designed to help patients and doctors understand the risk of poor bowel function after rectal cancer surgery.

The interactive POLARS tool is easy to use. Simply input an individual's data for the variables shown below and press calculate.

The POLARS webpage does not collect or store any personal information.

Please enter the following:

Age at surgery:

Gender:

☐ Female

☐ Male

TME / PME:

☐ Total Mesorectal Excision

☐ Partial Mesorectal Excision

Tumour height (cms):

Stoma?

☐ No

☐ Yes

# Scenario 1

70 year old male

Tumour Height - 14cm from  
Anal Verge

Plan:

- No Radiotherapy
- TME Surgery

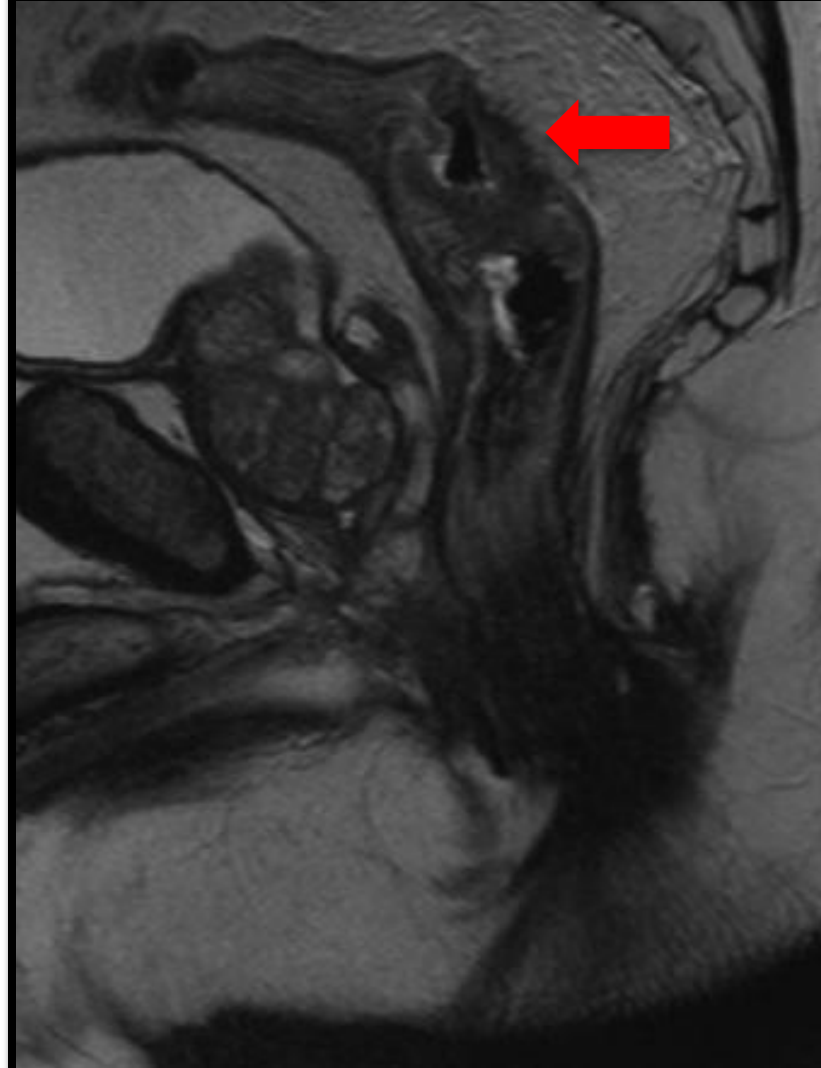
**Predicted LARS Score**

**20** (95% CI 19.0 – 21.2)

**No LARS**



## Upper Rectal Cancer



## Scenario 2

65 year old male

Tumour Height - 4cm from  
Anal Verge

Plan:

- Radiotherapy (CRT)
- TME Surgery
- Defunctioning ileostomy

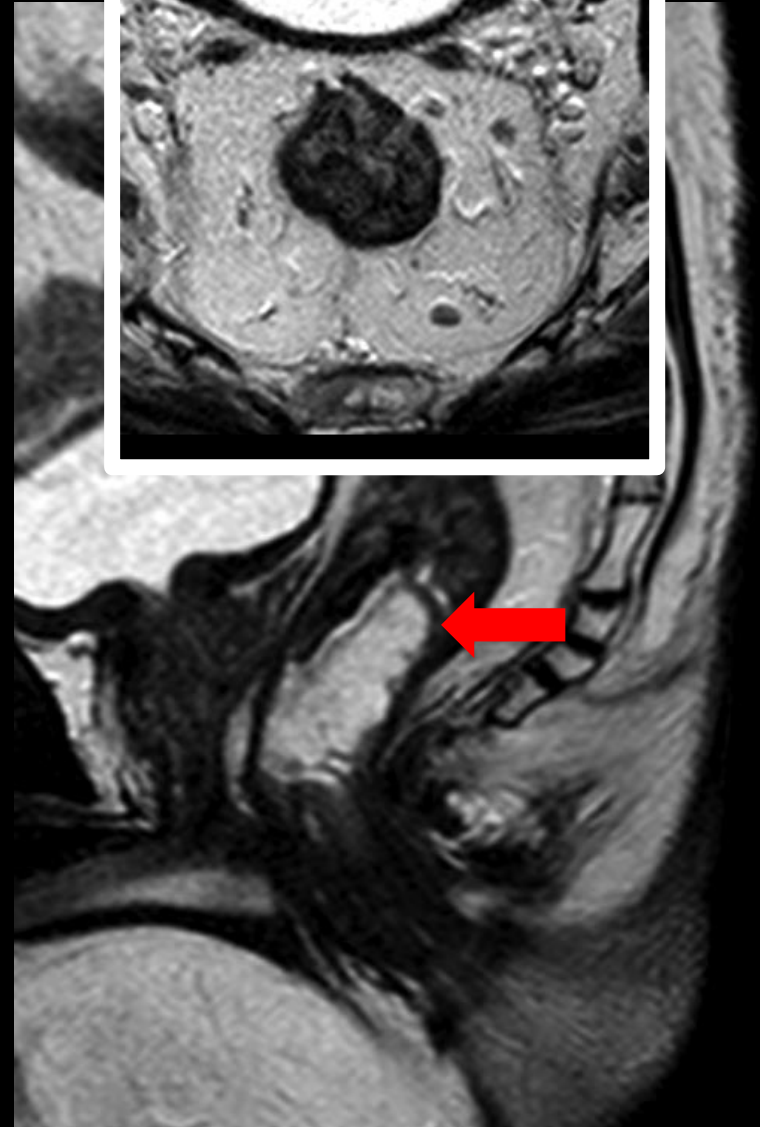
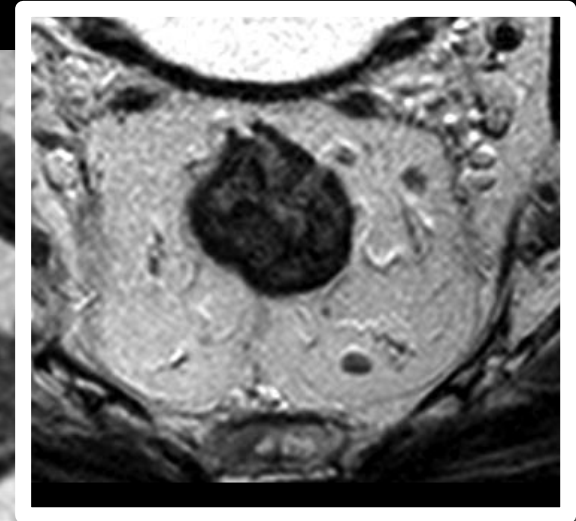
**Predicted LARS Score**

**32** (95% CI 29.0 – 34.2)

**Major LARS**



## Low Rectal Cancer





## Scenario 3

65 year old male

Tumour Height - 4cm from  
Anal Verge

Plan: **No Radiotherapy**

- ~~Radiotherapy (CRT)~~
- TME Surgery
- Defunctioning ileostomy

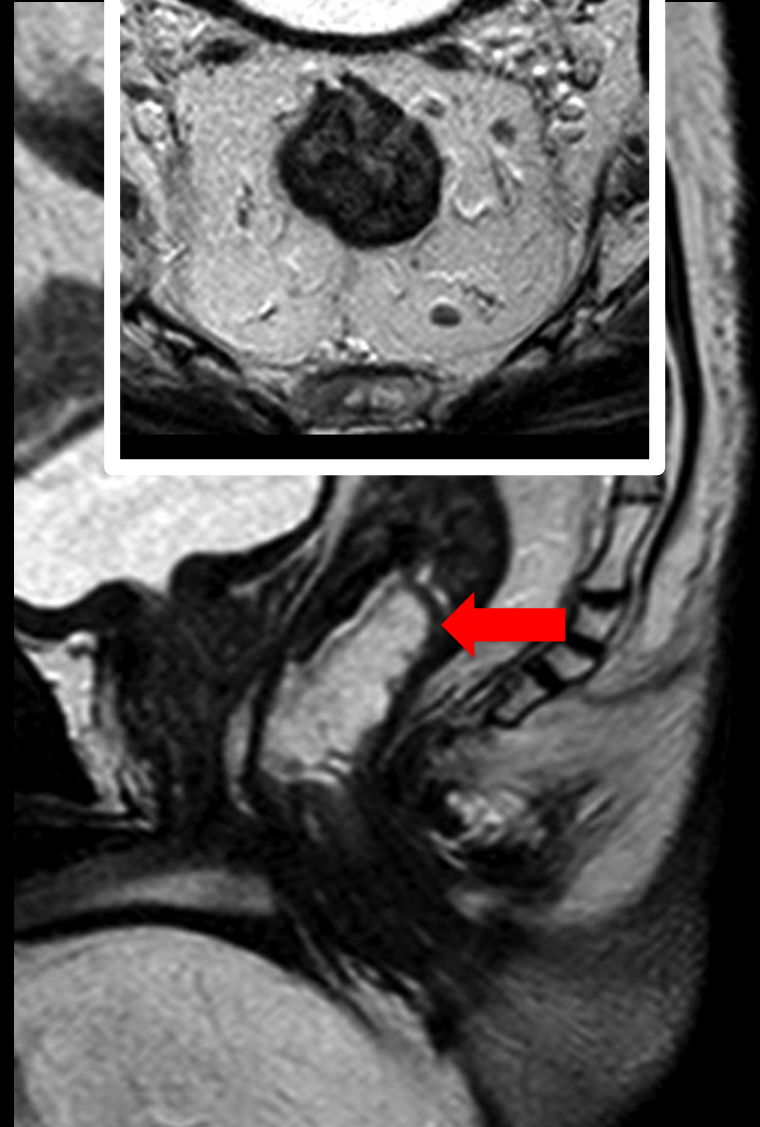
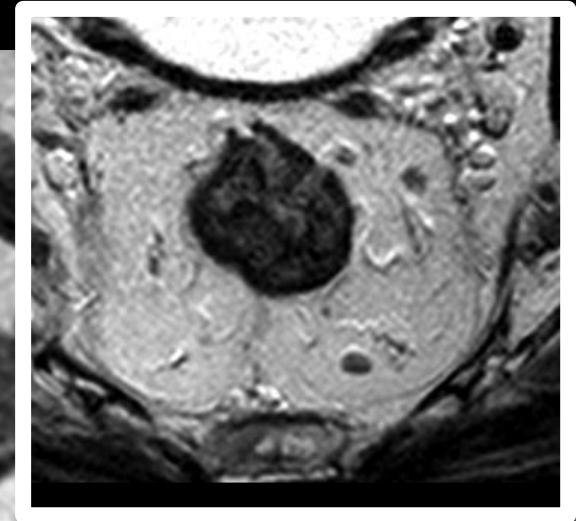
**Predicted LARS Score**

**28** (95% CI 26.5 – 31.7)

**Minor LARS**



## Low Rectal Cancer



# Impact on clinical practice in the foreseeable future?

- ▶ POLARS may provide a practical means of preoperatively highlighting patients at significant risk of postoperative bowel dysfunction.
- ▶ Inform multidisciplinary team discussions and enable patient-tailored consent.
- ▶ High-risk patients should understand the consequences of bowel dysfunction and be aware that colostomy formation is one of several strategies for managing LARS.
- ▶ Use in clinical trials to identify the high-risk patients - most likely to require intervention.

[http://www.pelicancancer.org/our-research/bowel-cancer-research/polars/.](http://www.pelicancancer.org/our-research/bowel-cancer-research/polars/)

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