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ASO Visual Abstract

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Published in:
Annals of surgical oncology

DOI:
[10.1245/s10434-022-12720-9](https://doi.org/10.1245/s10434-022-12720-9)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2023

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Heil, T. C., Verdaasdonk, E. G. G., Maas, H. A. A. M., van Munster, B. C., Olde Rikkert, M. G. M., de Wilt, J. H. W., & Melis, R. J. F. (2023). ASO Visual Abstract: Improved Postoperative Outcomes After Prehabilitation for Colorectal Cancer Surgery in Older Patients: An Emulated Target Trial. *Annals of surgical oncology*, 30(1), 257-258. <https://doi.org/10.1245/s10434-022-12720-9>

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ASO Visual Abstract: Improved Postoperative Outcomes After Prehabilitation for Colorectal Cancer Surgery in Older Patients: An Emulated Target Trial

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This study (<https://doi.org/10.1245/s10434-022-12623-9>) aimed to assess the effect of a multimodal prehabilitation program on perioperative outcomes in colorectal

cancer patients using an emulated target trial design. The study identified potential benefits of prehabilitation in daily clinical practice.

Improved Postoperative Outcomes After Prehabilitation for Colorectal Cancer Surgery in Older Patients

Research question:

What is the effect of a multimodal prehabilitation program on perioperative outcomes in higher risk colorectal cancer patients?



Emulated target trial design:

Using observational real-world data to mimic a RCT as close as possible

Usual preoperative care vs. usual preoperative care + prehabilitation

Inclusion:

- ✓ Multidisciplinary team consultation before colorectal cancer surgery (2016-2021)
- ✓ Age \geq 65 years and or ASA score III/IV

Results:

251 patients included: median age 73 years, 40% ASA III/IV
 > Number Needed to Treat to reduce 1 perioperative complication: **4**

- > Postoperative comprehensive complication score: **55% lower**
- > Length of stay: **2 days shorter**

Conclusion:



The study methodology used may serve as an example for further larger multicenter comparative effectiveness research on prehabilitation.

Heil TC, et al. *Ann Surg Oncol*.
 Visual Abstract for @AnnSurgOncol

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**SURGICAL
 ONCOLOGY**

DISCLOSURE None.

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