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THE NEW YORKER

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RICH PEOPLE ARE HAPPIER THAN POOR, HEALTHY, HAPPIER THAN SICK; YOUNG, HAPPIER THAN OLD

BY HARRY L. MOUNTZOURES

October 22, 1971

RASMUS DAHLIN BOJESEN

DEPARTMENT OF SURGERY,
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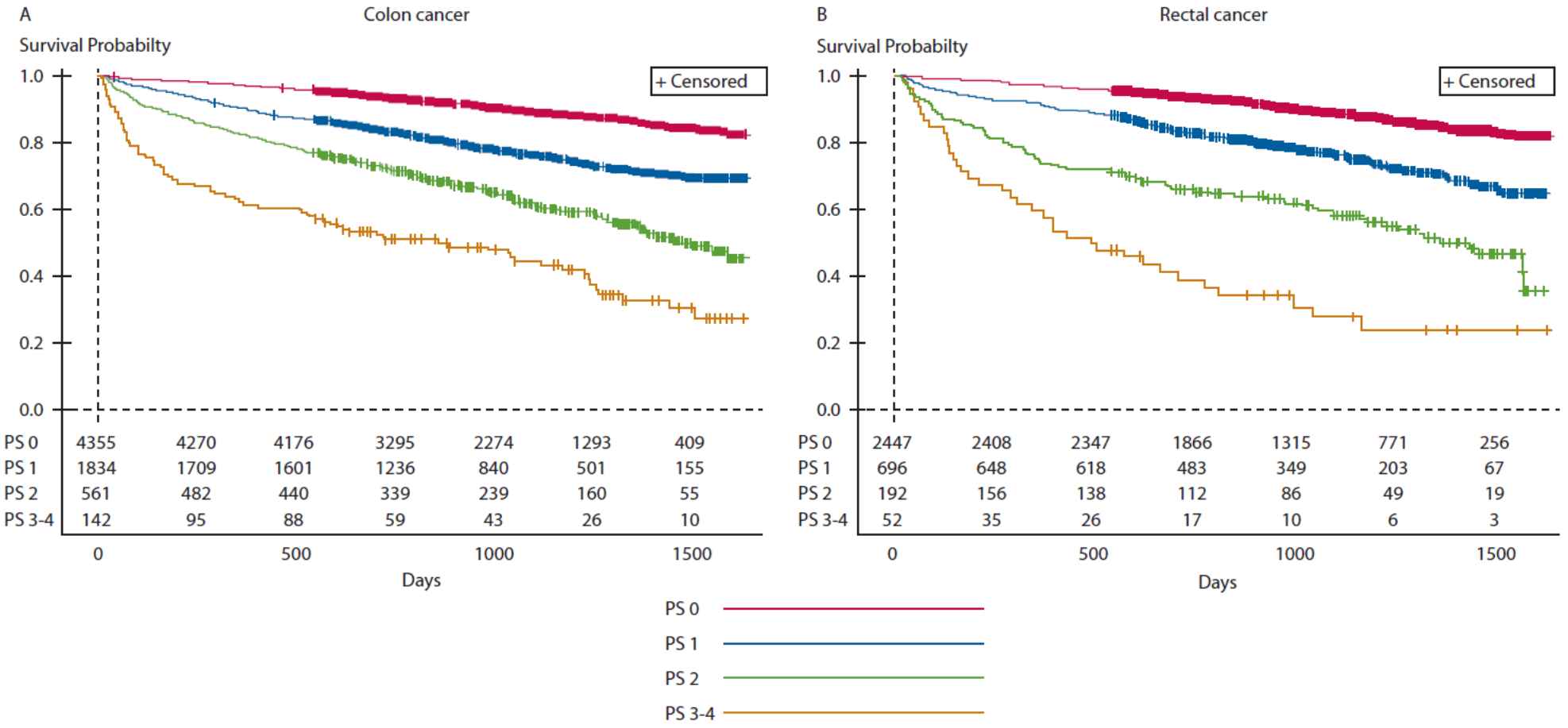
LONG TERM SURVIVAL



The vulnerable patient – Assesment

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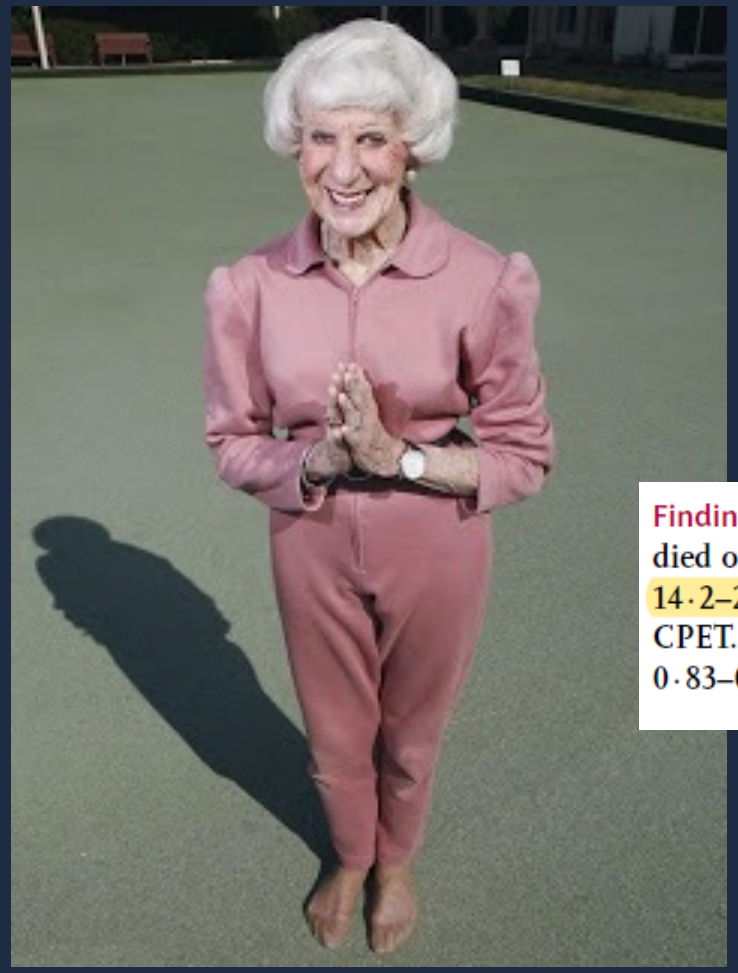

Findings Between March 1, 2013, and March 25, 2016, we included 1401 patients in the study. 28 (2%) of 1401 patients died or had a myocardial infarction within 30 days of surgery. Subjective assessment had 19·2% sensitivity (95% CI 14·2–25) and 94·7% specificity (93·2–95·9) for identifying the inability to attain four metabolic equivalents during CPET. Only DASI scores were associated with predicting the primary outcome (adjusted odds ratio 0·96, 95% CI 0·83–0·99; p=0·03).

Assessment of functional capacity before major non-cardiac surgery: an international, prospective cohort study

Duminda N Wijeysundera, Rupert M Pearse, Mark A Shulman, Tom E F Abbott, Elizabeth Torres, Althea Ambosta, Bernard L Croal, John T Granton, Kevin E Thorpe, Michael P W Grocott, Catherine Farrington, Paul S Myles, Brian H Cuthbertson, on behalf of the METS study investigators

Lancet 2018; 391: 2631–40

Wijeysundera DN et al Lancet. 2018 Jun 30;391(10140):2631-2640. doi: 10.1016/S0140-6736(18)31131-0.

Risk – Cardiopulmonary Exercise Test (CPET)

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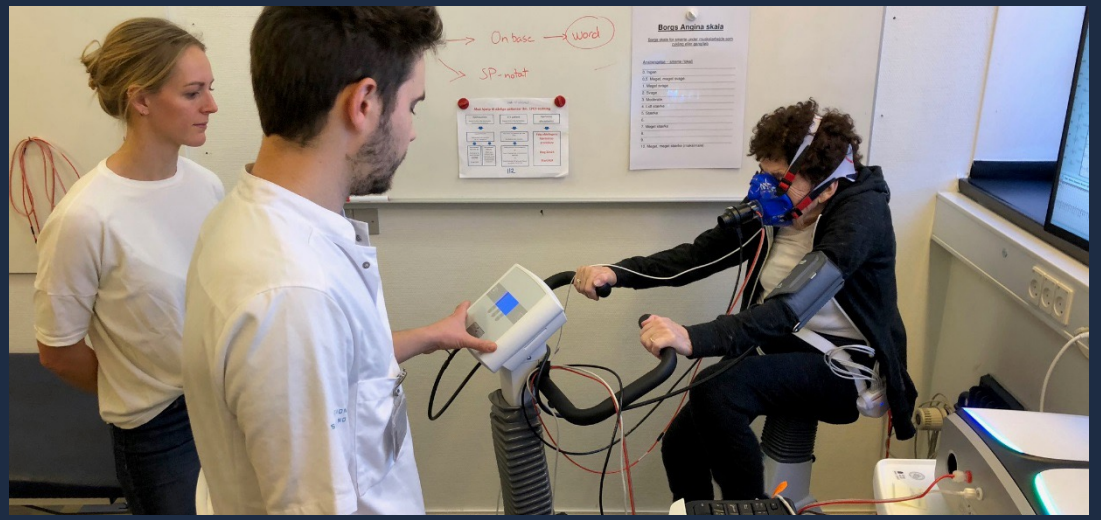

37 studies – predictive of:

90 – 3 year mortality • Postoperative morbidity • ICU admissions • LOS

Review Articles
Editor's choice

Role of cardiopulmonary exercise testing as a risk-assessment method in patients undergoing intra-abdominal surgery: a systematic review

J. Moran [1], F. Wilson [1], E. Guinan [1], P. McCormick [2], J. Hussey [1], J. Moriarty [3]

Intra-abdominal surgery:

mortality AT <10.9 ml/kg/min
morbidity AT <10.1 ml/kg/min

ROC: 0.87 (0.78 – 0.95)

Moran et al. Br J Anaesth. 2016 Feb;116(2):177-91. doi: 10.1093/bja/aev454.

PREHABILITATION

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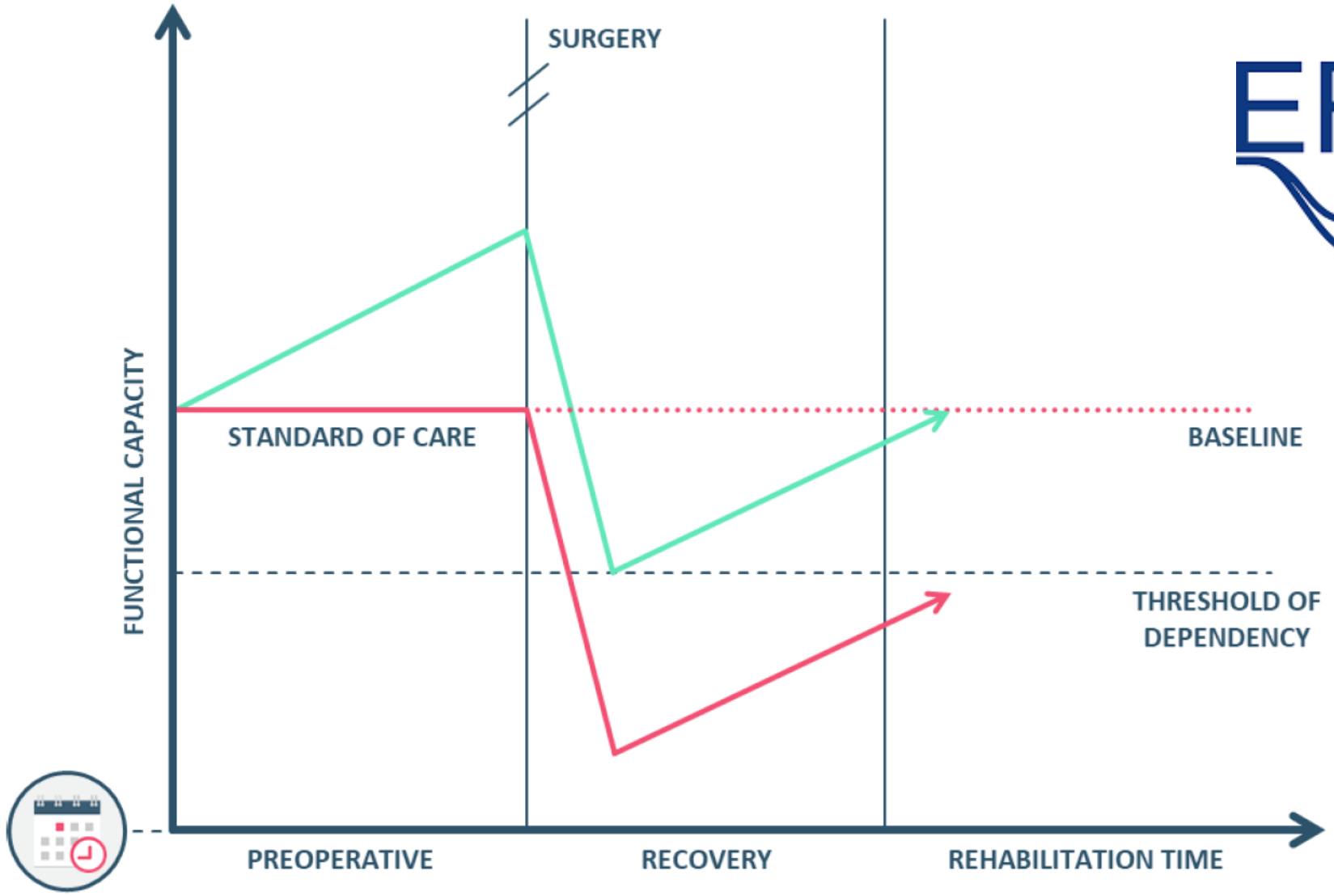

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Common conditions in CRC patients

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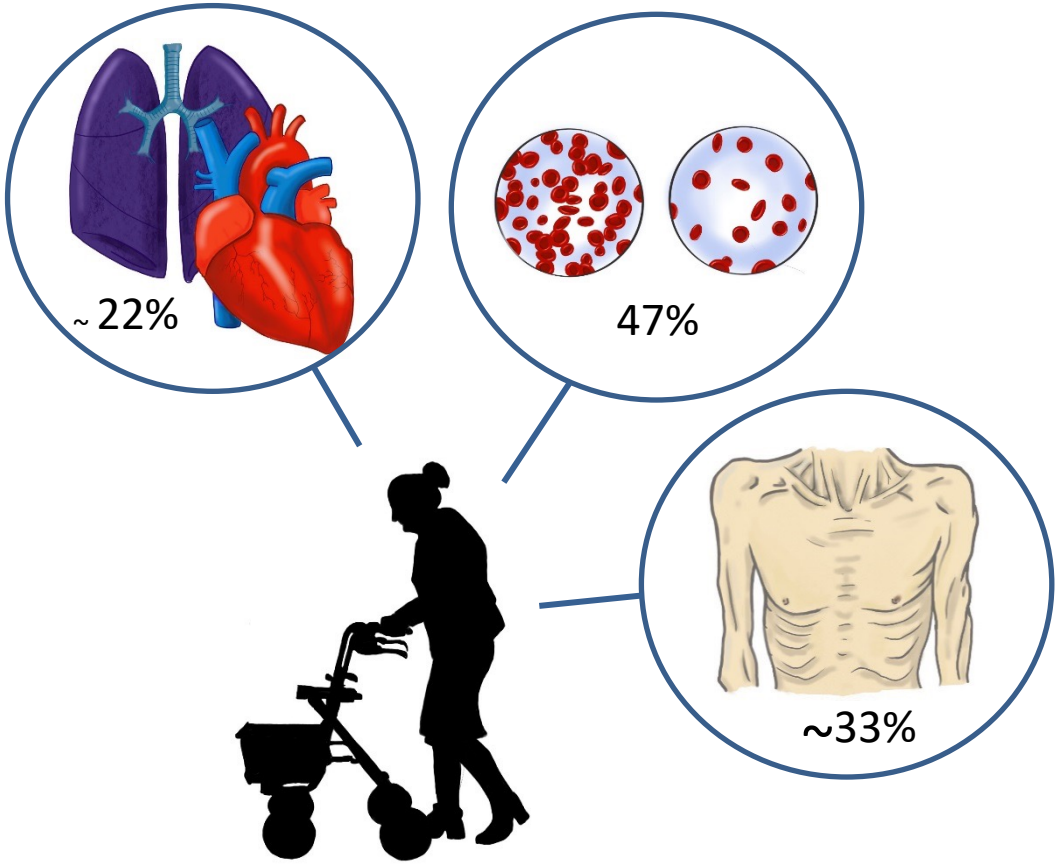

Prehabilitation – Multimodal intervention

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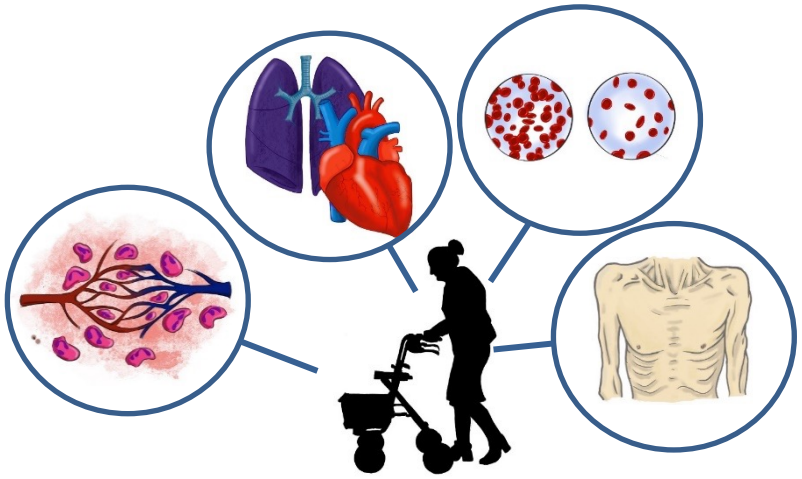

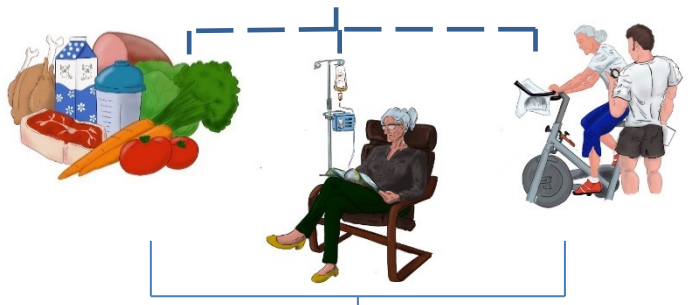

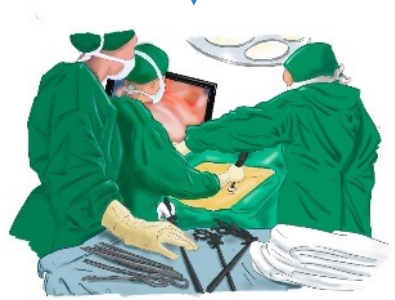

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Supervisered træning – Metanalyse (n=1258)

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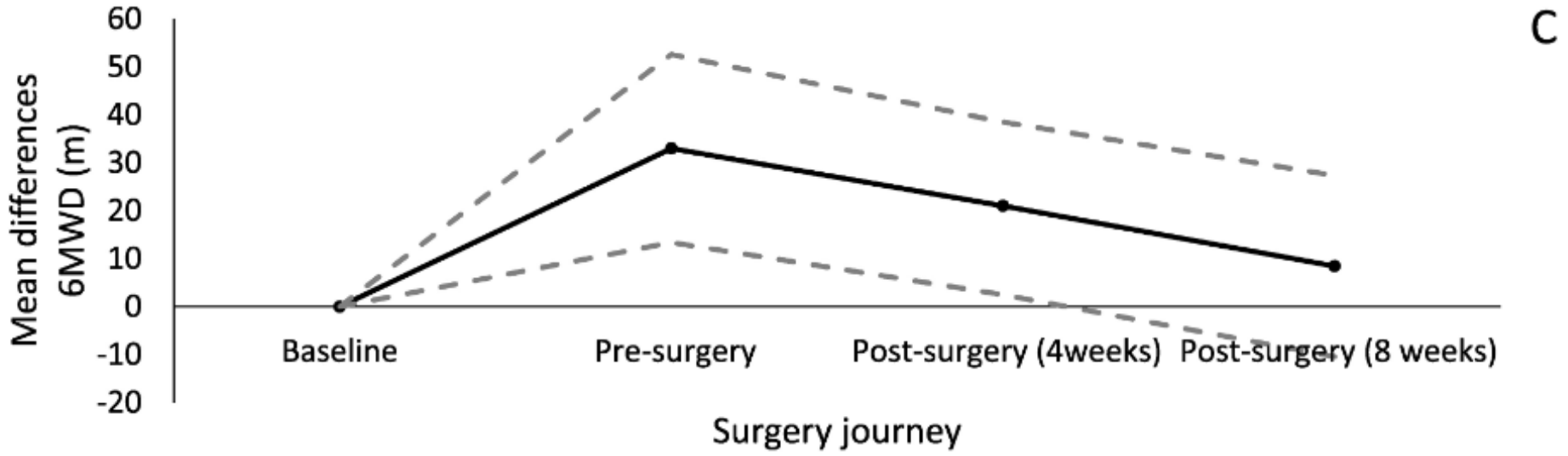

Superviseret training ≥1 weekly: Mean difference: 47 m, 95% [CI]: [20–75], $P < 0.01$

VO_2 peak +1.47 mL·kg $^{-1}$ ·min $^{-1}$ (95% CI: [0.68, 2.25], $P < 0.01$)

Duro-Orcana: Journal of Clinical Anesthesia, 2023-06-01, Volume 86, Article 111053

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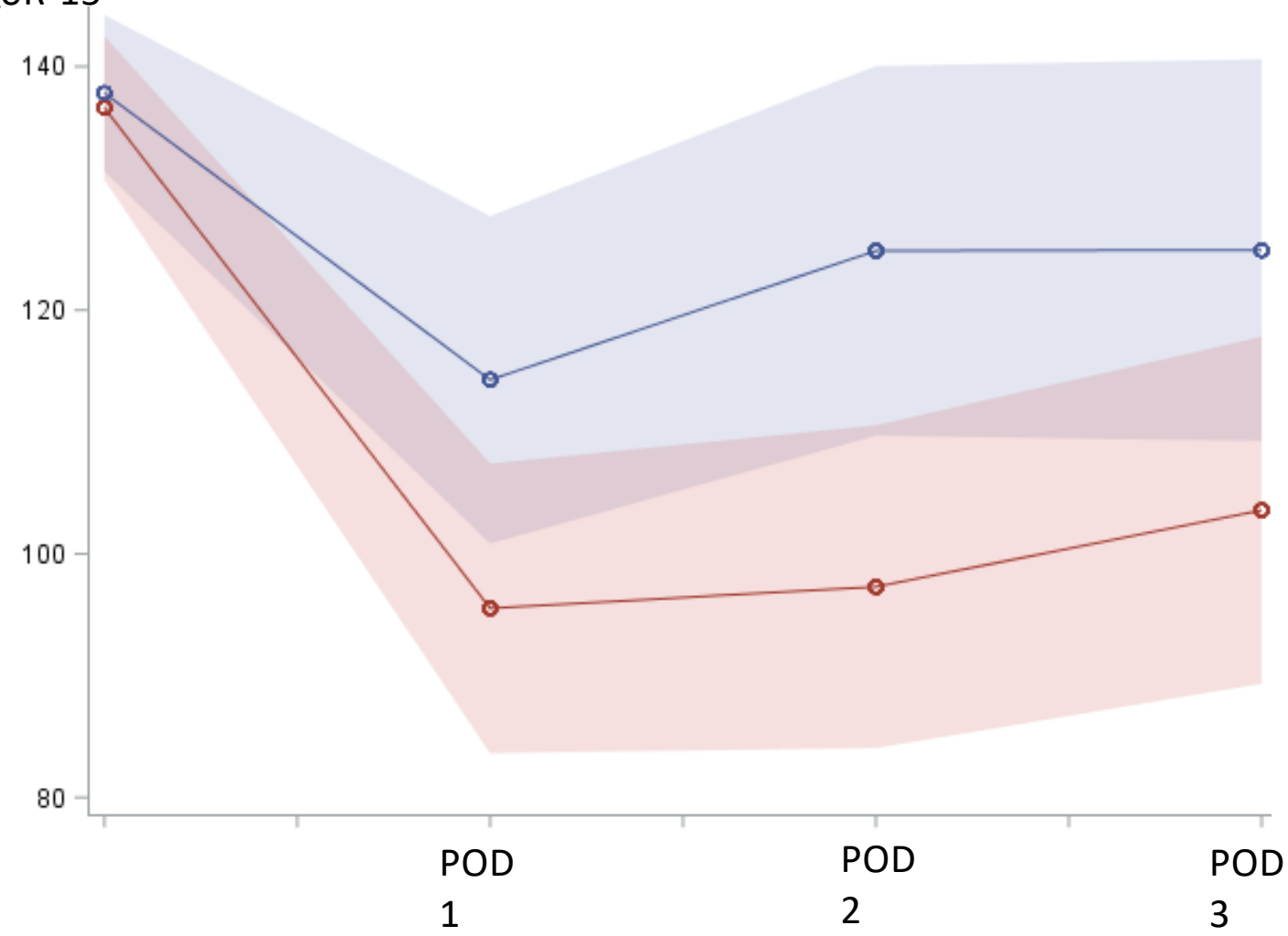
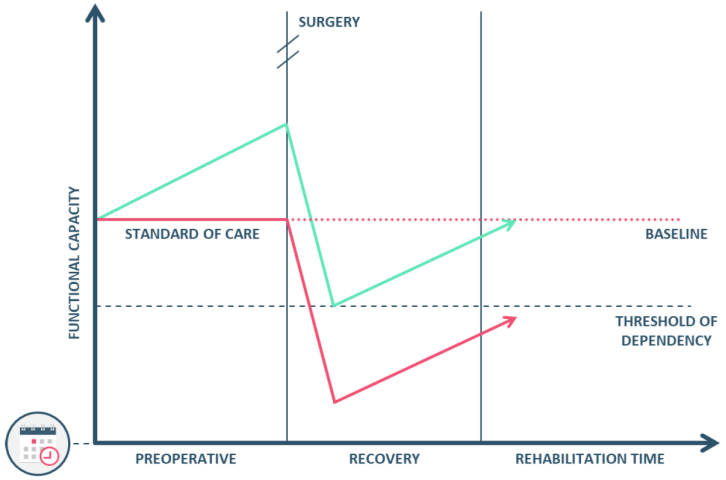
QoR-15





Overall treatment effect:

21.9 (95%CI: 4.50-39.31)
p=0.0153

MCRD: 8

First of the 'Large' RCT´s

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POPULATION

138 Men, 113 Women

Adults scheduled for elective surgical resection of nonmetastasized primary colorectal cancer

Median age, 69 y

INTERVENTION

251 Participants randomized and analyzed

123 Multimodal prehabilitation

4-wk High-intensity supervised exercise and nutritional, mental health, and smoking cessation support

128 Standard care

Perioperative care per local standards

JAMA Surg. Published online March 29, 2023. doi:10.1001/jamasurg.2023.0198

First of the 'Large' RCT´s

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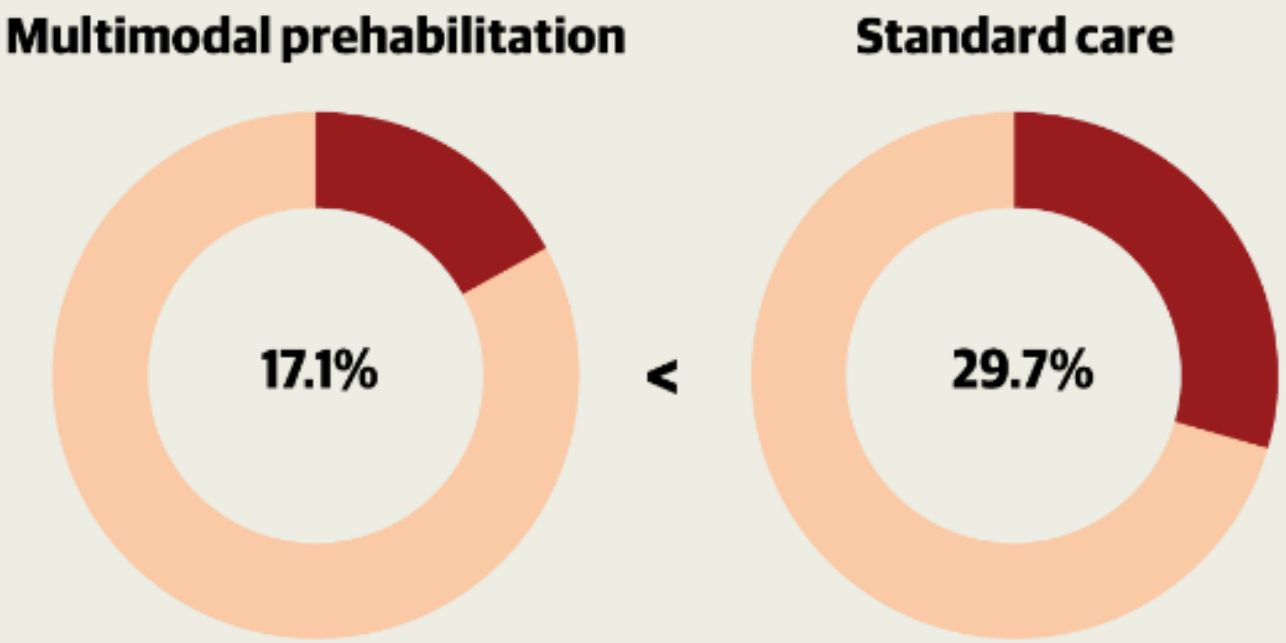
Rate of severe postoperative complications (CCI >20):



Between-group differences, prehabilitation vs standard care:

Decrease in severe complications (CCI >20):

Odds ratio, 0.47 (95% CI, 0.26 to 0.87); *P*=.02

JAMA Surg. Published online March 29, 2023. doi:10.1001/jamasurg.2023.0198

First of the 'Large' RCT´s

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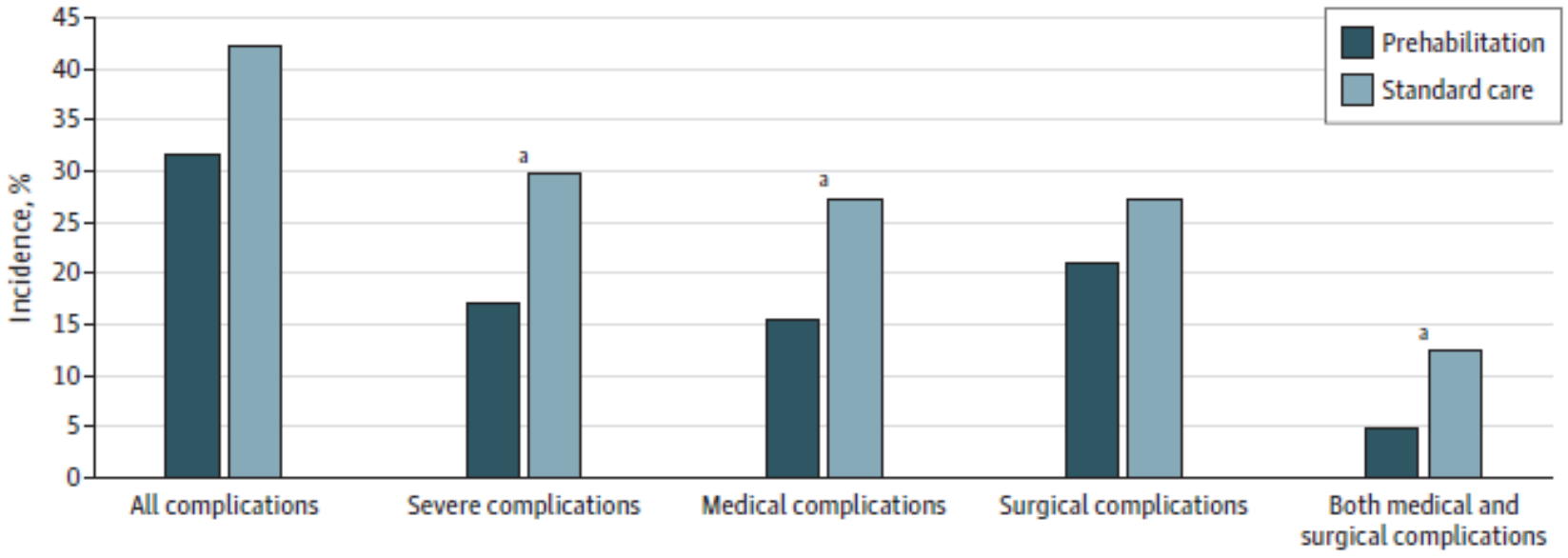
Research Original Investigation

Effect of Prehabilitation on Postoperative Complications and Functional Capacity for Colorectal Cancer Surgery

Figure 2. Complications Within 30 Days After Surgery



Complications in the intention-to-treat population (n = 251) are reported as percentage of patients having at least 1 complication, a severe complication (Comprehensive Complication Index score >20), at least 1 medical or surgical complication, and having at least 1 medical and 1 surgical complication.

[a] $P < .05$.

JAMA Surg. Published online March 29, 2023. doi:10.1001/jamasurg.2023.0198

ANDRE GI CANCERE

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Effect of home-based prehabilitation on postoperative complications after surgery for gastric cancer: randomized clinical trial

Augustinas Bausys[1,2,3,*], Martynas Luksta[2], Giedre Anglickiene[4], Vyte V. Maneikiene[5], Marius Kryzauskas[2], Andrius Rybakovas[2], Audrius Dulskas[1,2], Justas Kuliavas[1,2], Eugenijus Stratilatovas[1], Lina Macijauskiene[5], Toma Simbelyte[5], Jelena Celutkiene[5], Ieva E. Jamontaite[6], Alma Cirtautas[6], Svetlana Lenickiene[6], Dalia Petrauskiene[2], Evelina Cikanaviciute[7], Edita Gaveliene[7], Gertruda Klimaviciute[8], Kornelija Rauduvyte[8], Rimantas Bausys[1,2] and Kestutis Strupas[1,3]

BJS, 2023, **110**, 1800–1807
https://doi.org/10.1093/bjs/znad312
Advance Access Publication Date: 26 September 2023
Randomized Clinical Trial

Results: Between February 2020 and September 2022, 128 participants were randomized to prehabilitation (64) or standard care (64), and 122 (prehabilitation 61, control 61) were analysed. The prehabilitation group had increased physical capacity before the operation compared with baseline (mean 6-min walk test change +31 (95 per cent c.i. 14 to 48) m; $P = 0.001$). The prehabilitation group had a decreased rate of non-compliance with neoadjuvant treatment (risk ratio (RR) 0.20, 95 per cent c.i. 0.20 to 0.56), a 60 per cent reduction in the number of patients with postoperative complications at 90 days after surgery (RR 0.40, 0.24 to 0.66), and improved quality of life compared with the control group.

↑ 6-MWT (31m)

↓ Risk of complications (RR: 0.40)

↓ Risk of non-compliance with neoadjuvant treatment (RR: 0.20)

British Journal of Surgery, Volume 110, Issue 12, December 2023, Pages 1800–1807

The effect of modifiable high-risk indicator screening and prehabilitation prior to colorectal cancer surgery: A controlled before and after study – Bojesen et al. BJS open 2022

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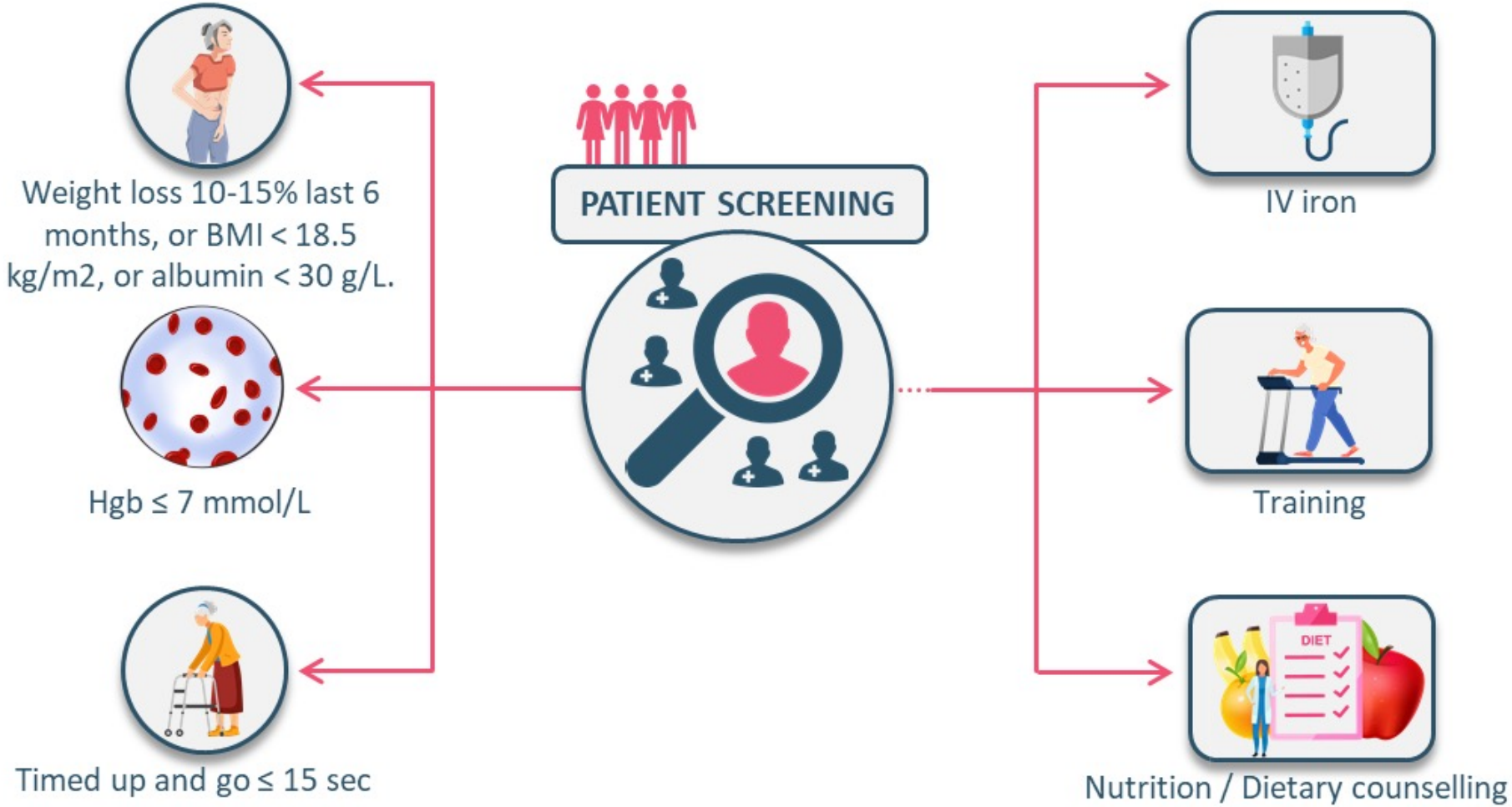

The effect of modifiable high-risk indicator screening and prehabilitation prior to colorectal cancer surgery: A controlled before and after study – Bojesen et al. BJS open 2022

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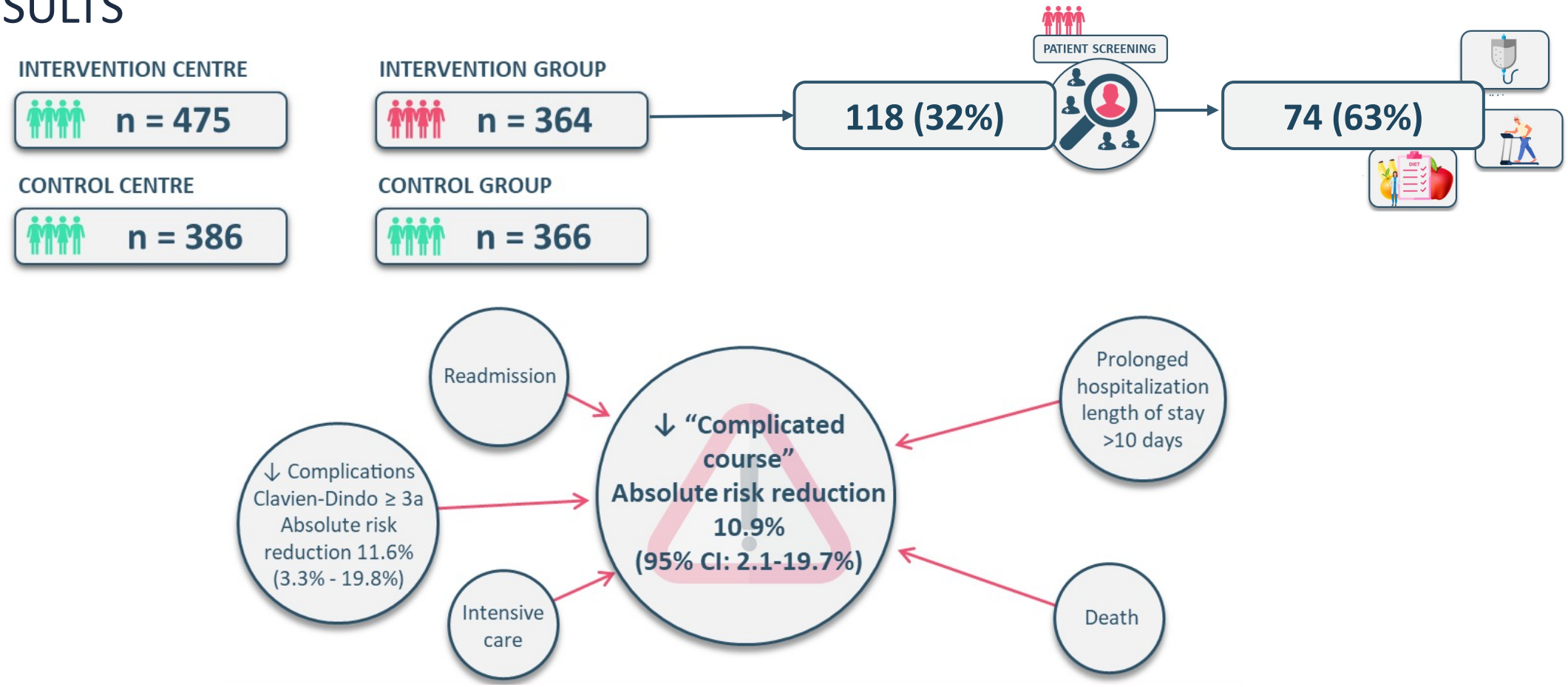
RESULTS



Implementering – Ka' det betale sig

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Contents lists available at ScienceDirect

European Journal of Surgical Oncology

journal homepage: www.ejso.com

Prehabilitation in colorectal cancer surgery improves outcome and reduces hospital costs

Charissa R. Sabajo [a,b], David W.G. ten Cate [a], Margot H.M. Heijmans [a], Christian T.G. Koot [c], Lisanne V.L. van Leeuwen [d], Gerrit D. Slooter [a,*]

Results: A total of 196 patients completed prehabilitation whereas 390 patients received standard care. Lower overall complication rates (31 % vs 40 %, p = 0.04) and severe complication rates (20 % vs 31 %, p = 0.01) were observed in the prehabilitation group compared to standard care. Length of stay was shorter in the prehabilitation group (mean 5.80 days vs 6.71 days). In hospital cost savings were €1109 per patient, while the calculated investment for prehabilitation was €969. *Conclusion:* Implementation of a multimodal prehabilitation program in colorectal surgery reduces postoperative complication rates, length of stay and hospital costs.

Sabajo et al. Nov 2023 European Journal of Surgical Oncol 50 (2024) 107302

Prehabilitation – Multimodal intervention

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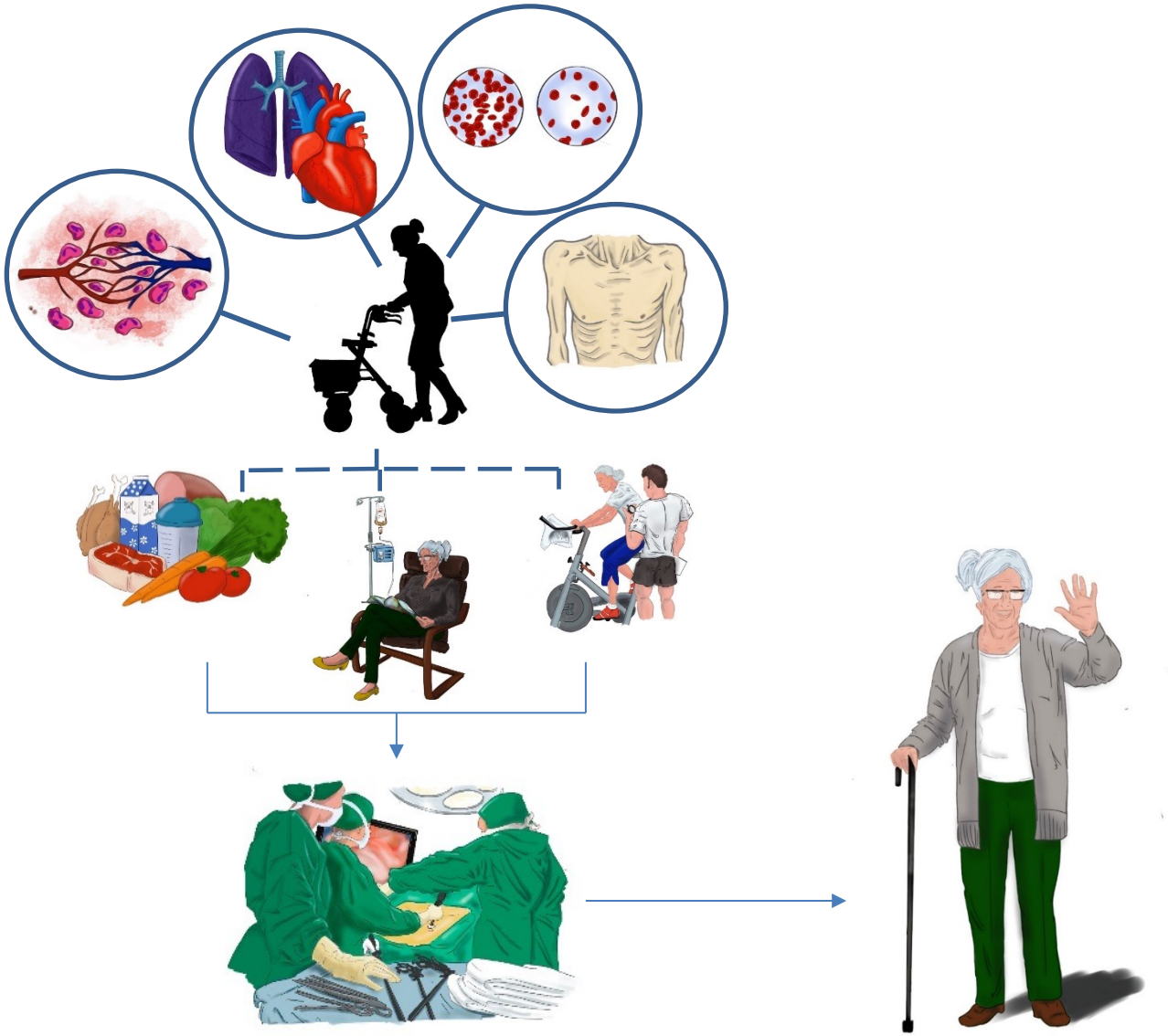

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