

# Improving colorectal cancer care: treatment and outcomes of patients with colorectal cancer

Breugom, A.J.

#### Citation

Breugom, A. J. (2021, December 8). *Improving colorectal cancer care: treatment and outcomes of patients with colorectal cancer*. Retrieved from https://hdl.handle.net/1887/3245764

Version:	Publisher's Version
License:	Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden
Downloaded from:	https://hdl.handle.net/1887/3245764

**Note:** To cite this publication please use the final published version (if applicable).

## IMPROVING COLORECTAL CANCER CARE

Treatment and outcomes of patients with colorectal cancer

Anne J. Breugom

#### Colophon

Cover art: detail of a fresco made by Linda Overzee (Cover) Lay-out: Ilse Modder, www.ilsemodder.nl Printing: Gildeprint Enschede, www.gildeprint.nl



Improving colorectal cancer care - treatment and outcomes of patients with colorectal cancer

Thesis, Leiden University Medical Centre, the Netherlands, 2021

© Anne J. Breugom, Leiden, the Netherlands 2021

ISBN: 978-94-6419-365-7

#### Improving colorectal cancer care

Treatment and outcomes of patients with colorectal cancer

Proefschrift

ter verkrijging van de graad van doctor aan de Universiteit Leiden, op gezag van rector magnificus prof.dr.ir. H. Bijl, volgens besluit van het college voor promoties te verdedigen op woensdag 8 december 2021 klokke 15.00 uur

> door Anne Johanna Breugom Geboren te Den Haag in 1988

Promotor:
Copromotor:
Leden promotiecommissie:

Prof.dr. C.J.H. van de Velde dr. E. Bastiaannet Prof.dr. J.E.A. Portielje Prof.dr. C.A.M. Marijnen Prof.dr. G.A.P. Hospers, UMC Groningen dr. J.W.T. Dekker, Reinier de Graaf Gasthuis

### CONTENTS

CHAPTER 1	General introduction and outline of this thesis	11
PART I	EVALUATING TREATMENT OF PATIENTS WITH STAGE I-III COLORECTAL CANCER	21
CHAPTER 2	Association between the most frequent complications after surgery for stage I-III colon cancer and short-term survival, long-term survival, and recurrences	23
CHAPTER 3	Decrease in 30-day and one-year mortality over time in patients aged ≥75 years with stage I-III colon cancer: a population-based study	41
CHAPTER 4	Adjuvant chemotherapy for rectal cancer patients treated with preoperative (chemo)radiotherapy and total mesorectal excision: a Dutch Colorectal Cancer Group (DCCG) randomised phase III trial	55
CHAPTER 5	Adjuvant chemotherapy after preoperative (chemo) radiotherapy and surgery for patients with rectal cancer: a systematic review and meta-analysis of individual patient data	71
PART II	INTERNATIONAL COMPARISONS ON TREATMENT AND OUTCOMES OF PATIENTS WITH COLORECTAL CANCER	89
CHAPTER 6	Quality assurance in the treatment of colorectal cancer: the EURECCA initiative	91
CHAPTER 7	Adjuvant chemotherapy and relative survival of patients with stage II colon cancer - a EURECCA international comparison between the Netherlands, Denmark, Sweden, England, Ireland, Belgium, and Lithuania	109
CHAPTER 8	Oncologic treatment strategies and relative survival of patients with stage I-III rectal cancer - a EURECCA international comparison between the Netherlands, Belgium, Denmark, Sweden, England, Ireland, Spain, and Lithuania	125
CHAPTER 9	Treatment strategies and overall survival for incurable metastatic colorectal cancer - a EURECCA international comparison including 21,196 patients from the Netherlands and Norway	143

Chapter 10	Summary, general discussion and future perspectives	161
Appendices	Nederlandse samenvatting	185
	List of publications	201
	Curriculum vitae	205
	Dankwoord	207