

PRO CARE

PROJECT ON CANCER OF THE RECTUM

THE PROCARE PROJECT

A. KARTHEUSER
L. VAN EYCKEN
F. PENNINCKX

On behalf of the
PROCARE steering group

PROCARE
PROJECT ON CANCER OF THE RECTUM



PROCARE

A. Que signifie « PROCARE » ?

PROCARE

PROCARE est un projet multidisciplinaire national belge pour la prise en charge du **cancer du rectum**.

PROJECT ON CANCER OF THE RECTUM

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**B. Pourquoi un projet « PROCARE »
en Belgique ?**

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AIM

**Improve the outcome
of rectal cancer treatment
in Belgium**

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Un organe :

RECTUM



Une pathologie :

CANCER



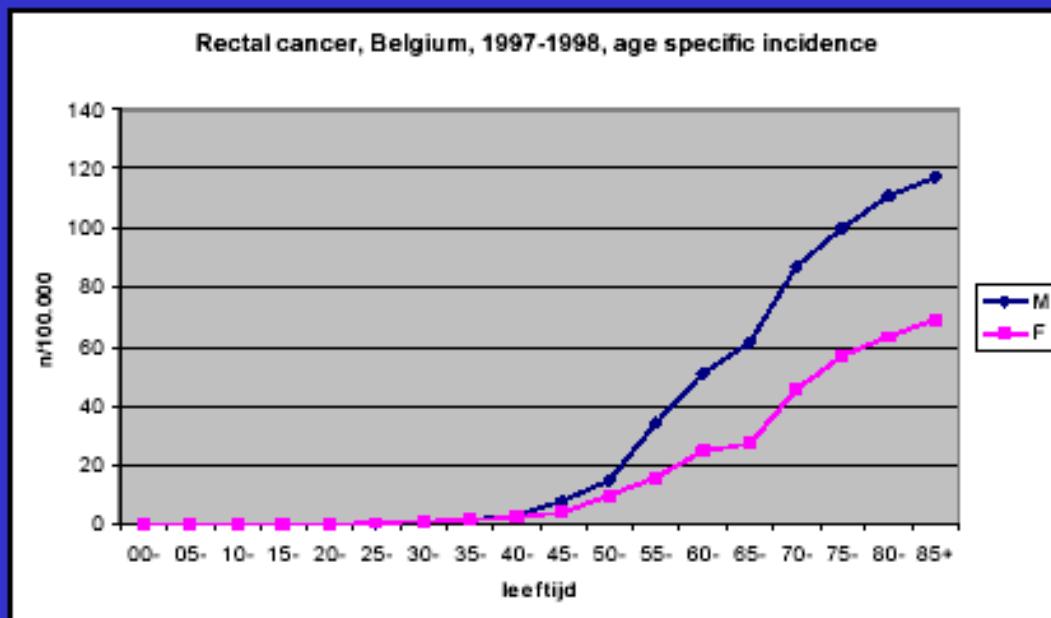
1^{ère} expérience en Belgique !

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Rectal cancer, Belgium, 1997-1998

National Cancer Registry

- N=3079
 - Males: 1.773
 - Females: 1.306



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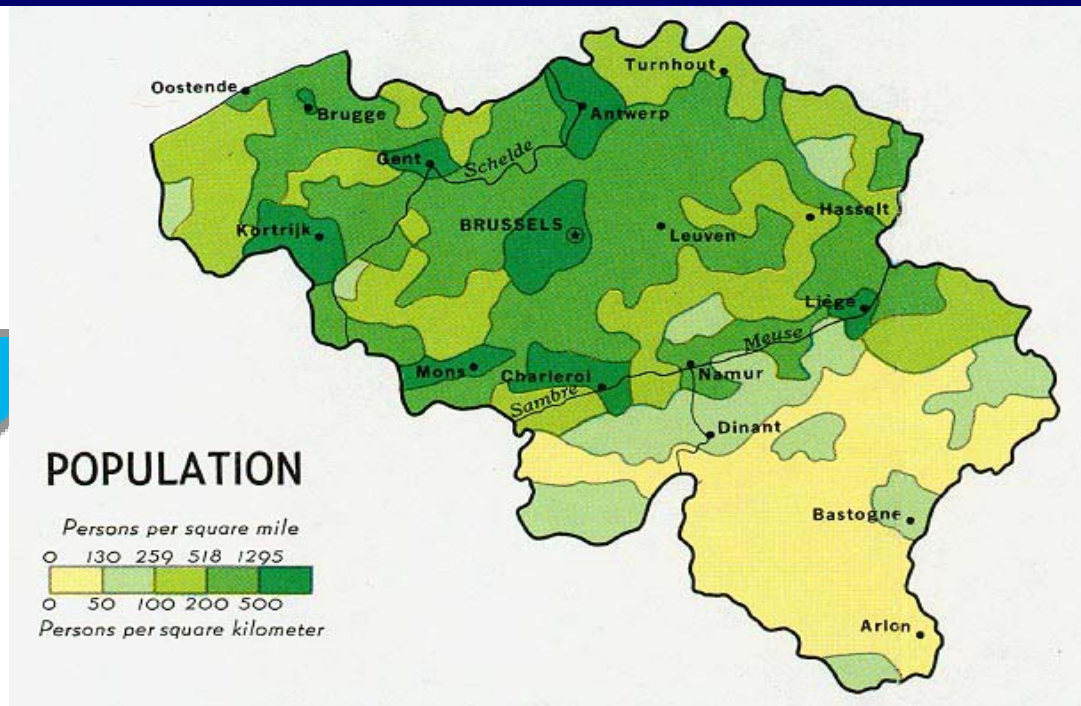
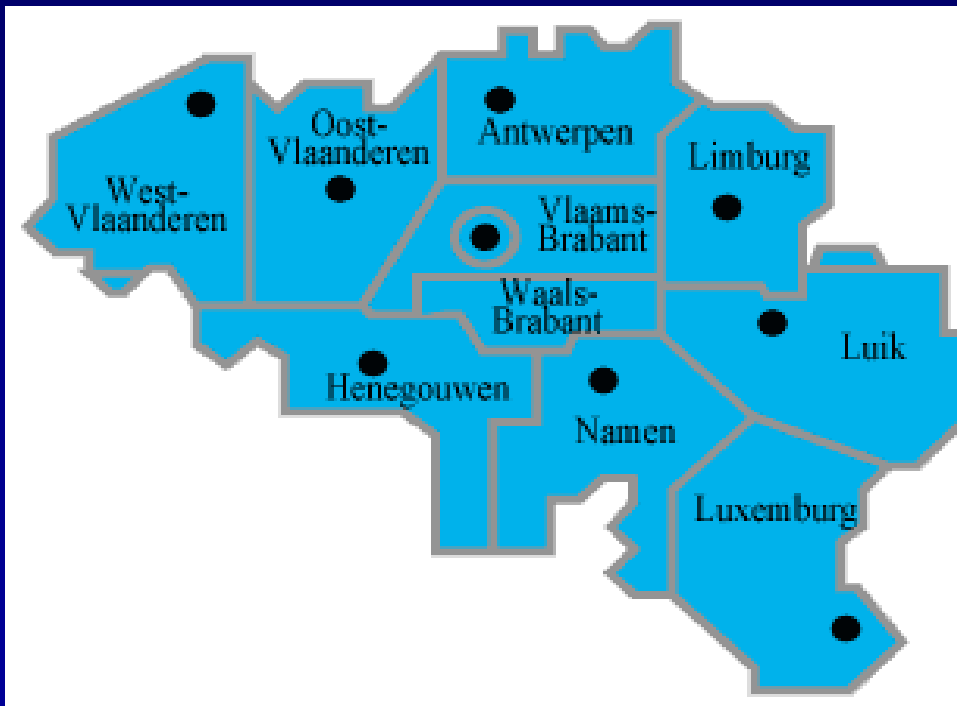
1. **National** :

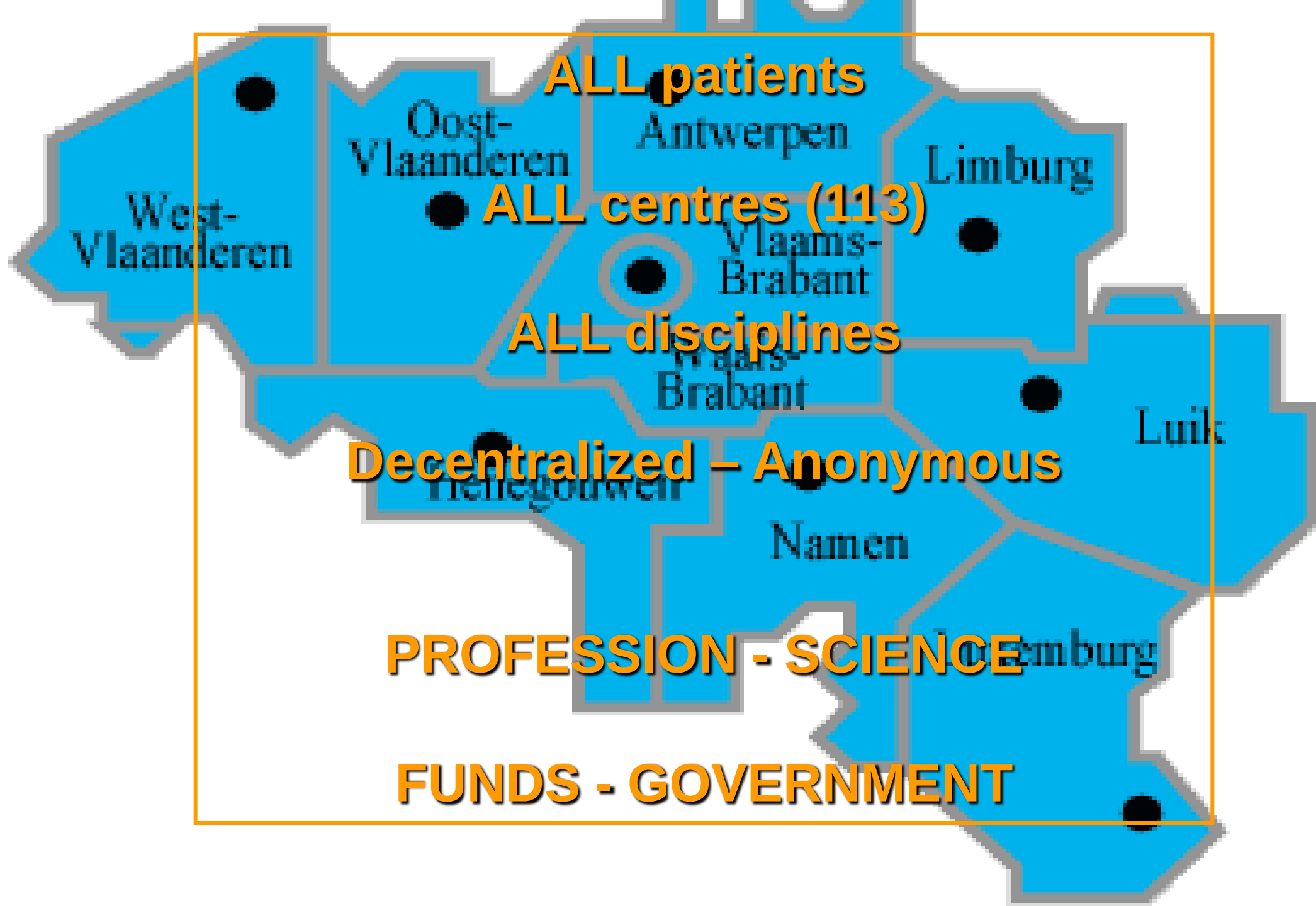
- Réduire variabilité prise en charge
- Réduire récidives locales
- Augmenter la survie

2. **International** : expériences Angleterre, Hollande, Suède, Danemark, Norvège

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A Nation-wide Project





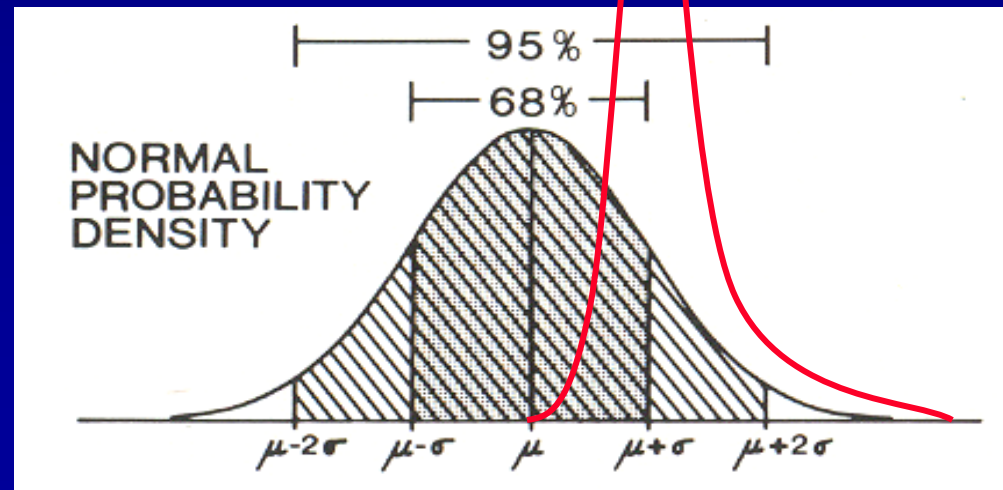
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C. Pourquoi un « benchmarking » ?

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Benchmarking ?

1. To know where 'we' stand (Belgium, team)
2. To illustrate variability in management and outcome
3. To induce improvement in all teams

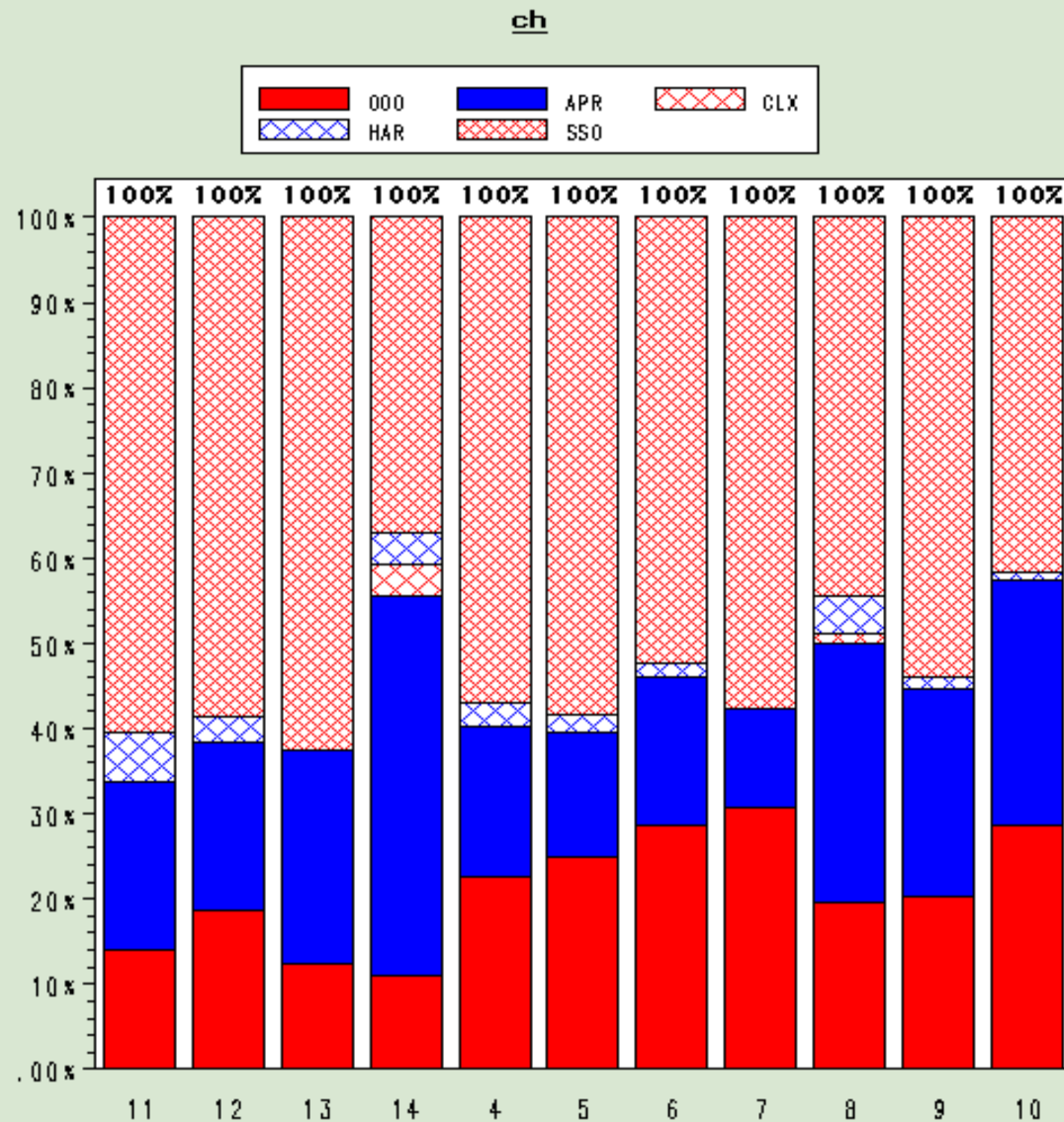


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Problèmes de variabilité

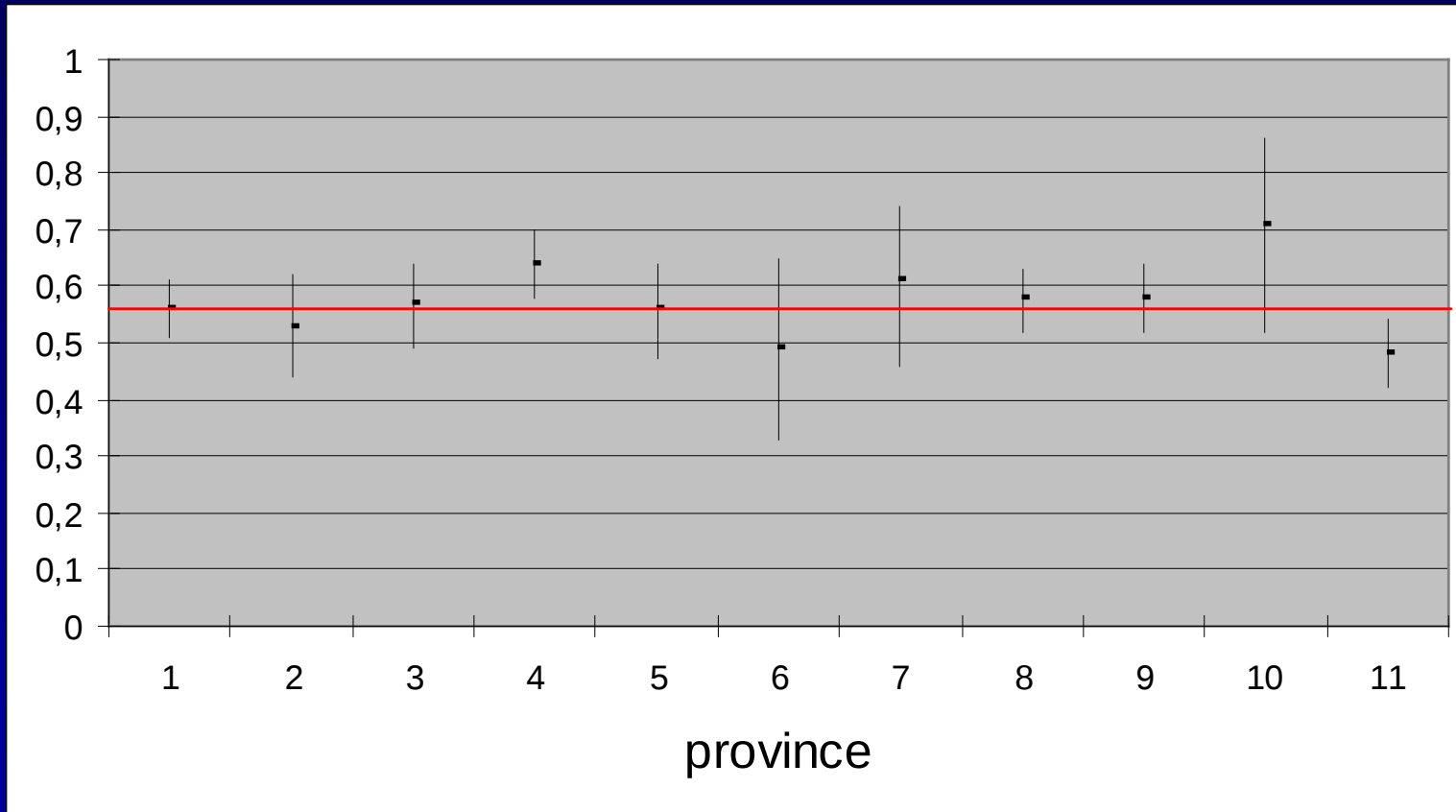
1. Au niveau **international**
2. Au niveau **national** :
 - Provinces !
 - Hôpitaux ?
 - Chirurgiens ?

Surgery vs. Province



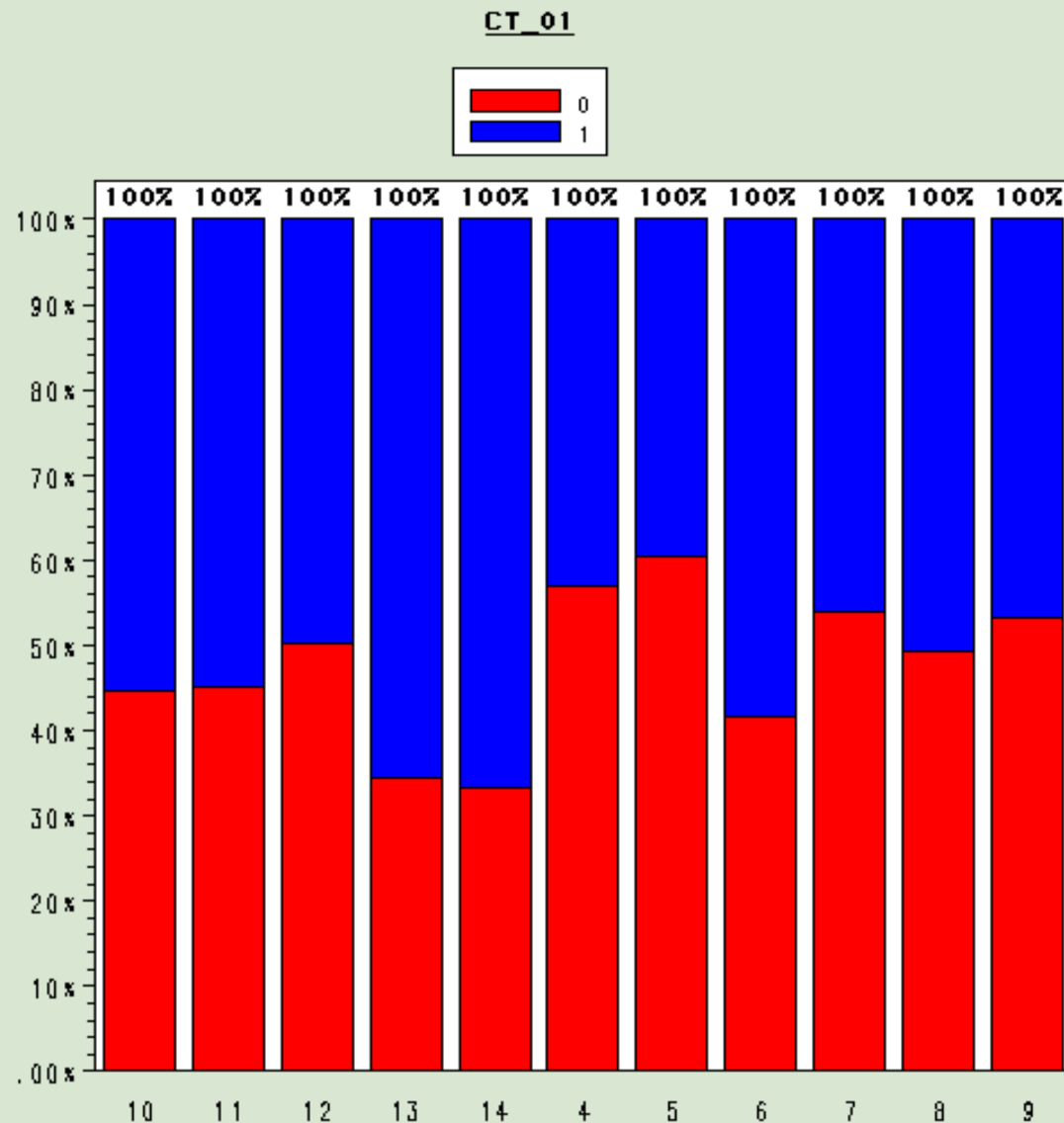
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5-yr RS with 95% CI per province (standardized for age, all stages) - Belgium 1997-1998

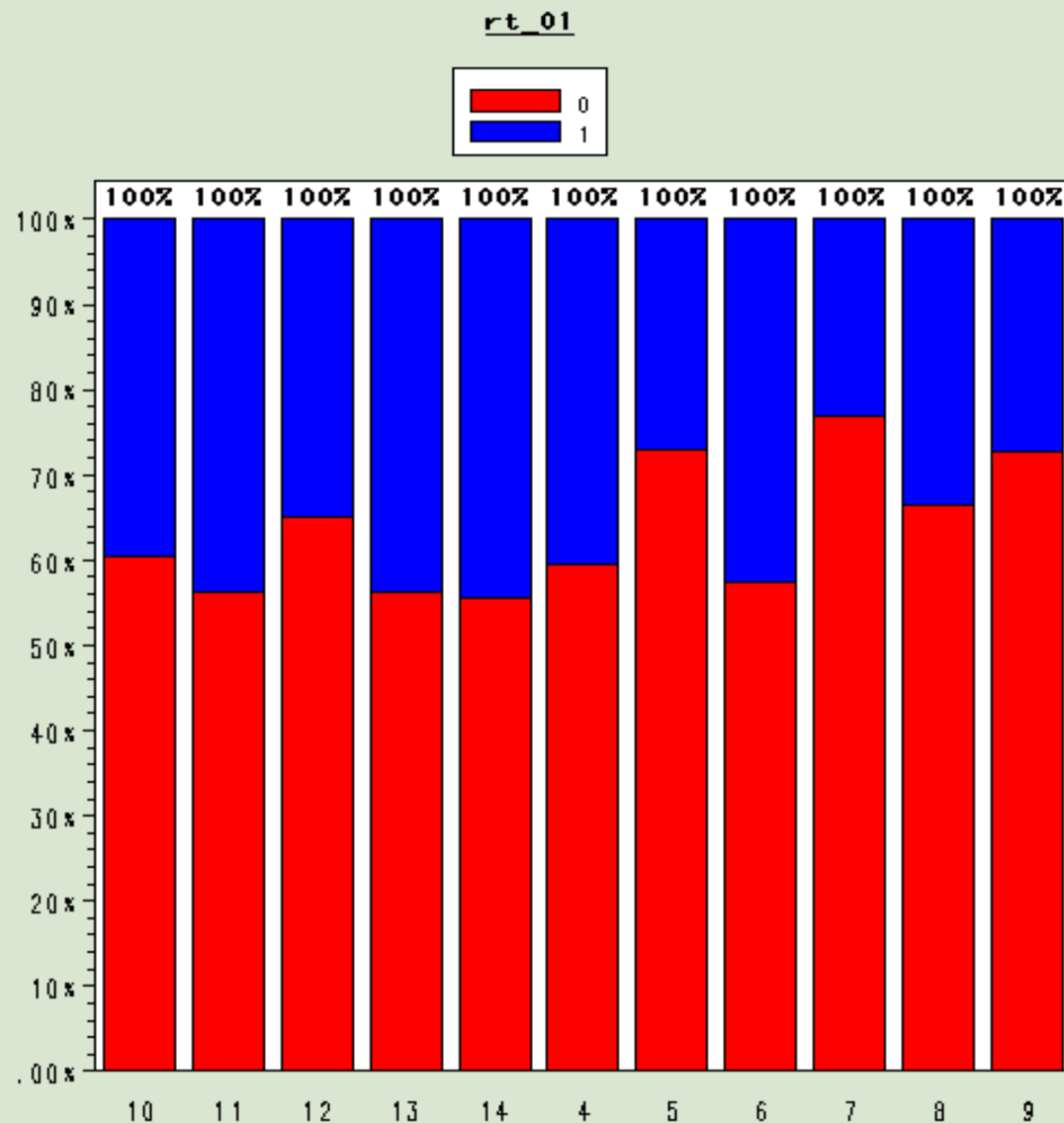


58%

Chemotherapy Y/N vs. Province



Radiotherapy Y/N vs. Province



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(Neo)adjuvant radio(chemo)therapy in <70 yrs
NCR Belgium 1997-1998

Stage II	57 %
Stage III	53 %
Stage II - III	55 %

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Surgeon volume, LRR and survival

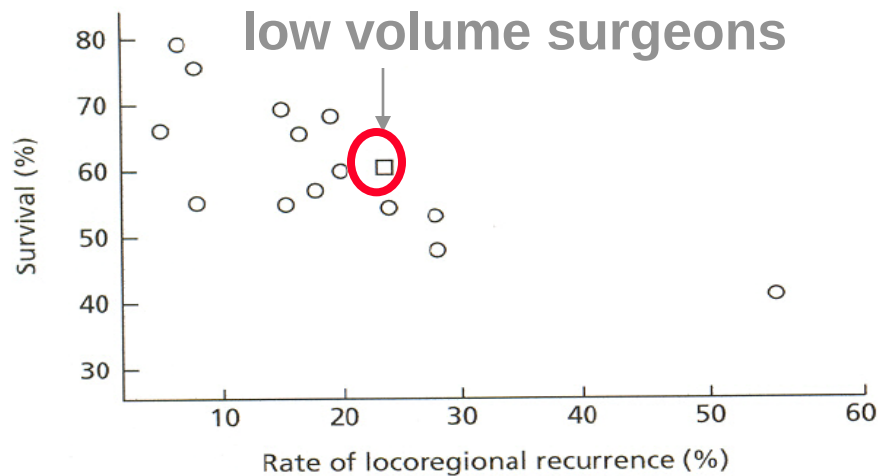
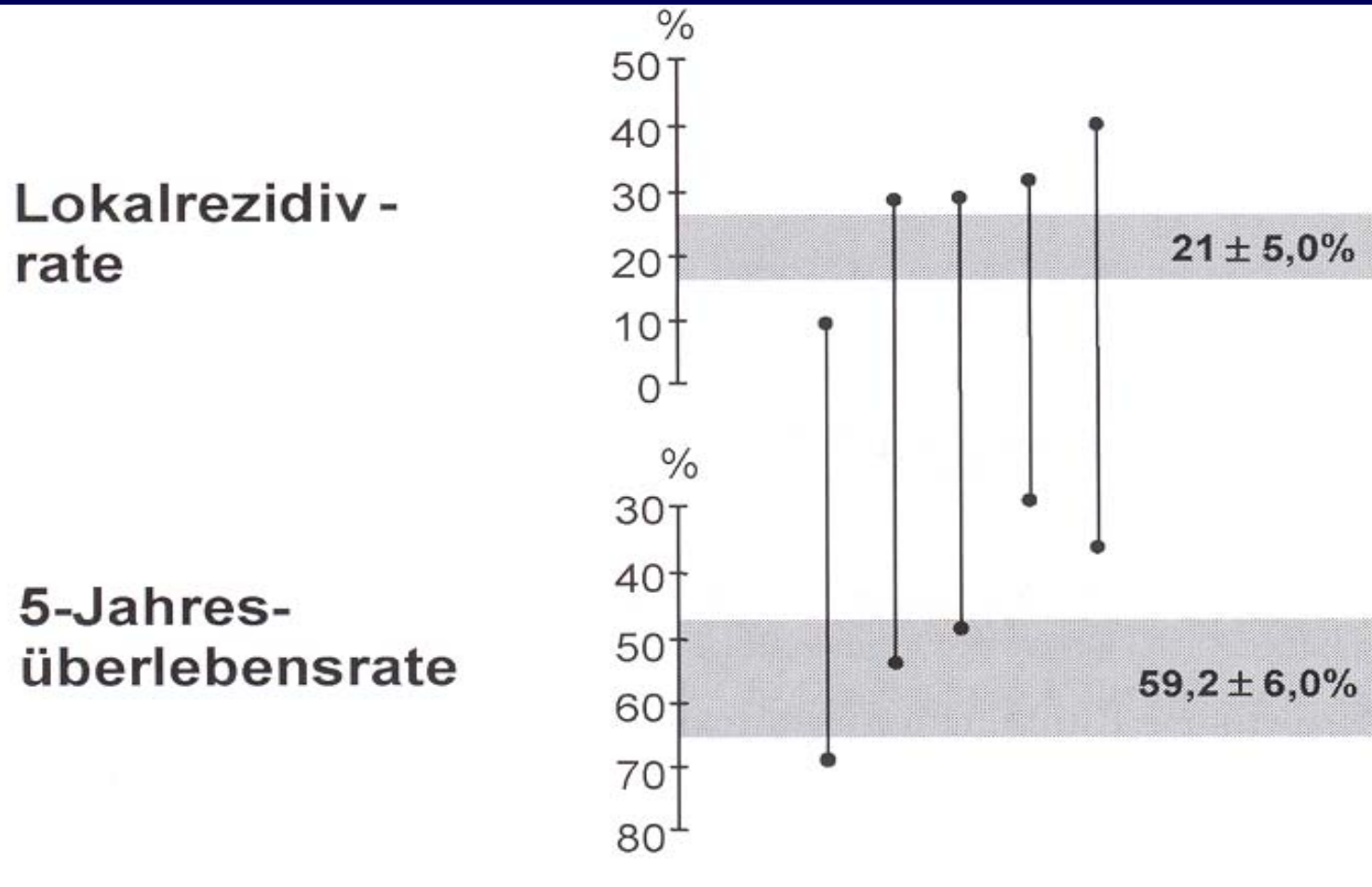


Fig. 3.1 Correlation between locoregional recurrence and 5-year survival. Circles indicate the values for individual surgeons with more than 15 rectal excisions during the study period. The square relates to the group of surgeons with a low frequency of operations. Redrawn with permission from [7].

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The surgeon is an independent prognostic factor



Number of
cases per
hospital

1	710322	66	4,28
2	710159	47	3,05
3	710396	44	2,85
4	710290	43	2,79
5	710371	38	2,46
6	710012	37	2,4
7	710017	34	2,2
8	710026	32	2,08
9	710117	30	1,95
10	710126	28	1,82
11	710049	26	1,69
12	710595	26	1,69
13	710689	26	1,69
14	710243	25	1,62
15	710403	25	1,62
16	710536	25	1,62
17	710719	24	1,56
18	710090	23	1,49
19	710176	23	1,49
20	710395	23	1,49
21	710709	22	1,43
22	710032	21	1,36
23	710710	21	1,36
24	710143	20	1,3
25	710717	20	1,3
26	710104	19	1,23
27	710397	19	1,23
28	710682	19	1,23
29	710057	18	1,17
30	710111	18	1,17
31	710204	18	1,17
32	710715	18	1,17
33	710217	17	1,1

34	710063	16	1,04
35	710071	16	1,04
36	710222	16	1,04
37	710231	16	1,04
38	710247	16	1,04
39	710412	15	0,97
40	710670	15	0,97
41	710020	14	0,91
42	710097	14	0,91
43	710314	14	0,91
44	710716	14	0,91
45	710018	13	0,84
46	710099	13	0,84
47	710108	13	0,84
48	710256	13	0,84
49	710317	13	0,84
50	710106	12	0,78
51	710109	12	0,78
52	710124	12	0,78
53	710152	12	0,78
54	710100	11	0,71
55	710310	11	0,71
56	710525	11	0,71
57	710550	11	0,71
58	710714	11	0,71
59	710002	10	0,65
60	710140	10	0,65

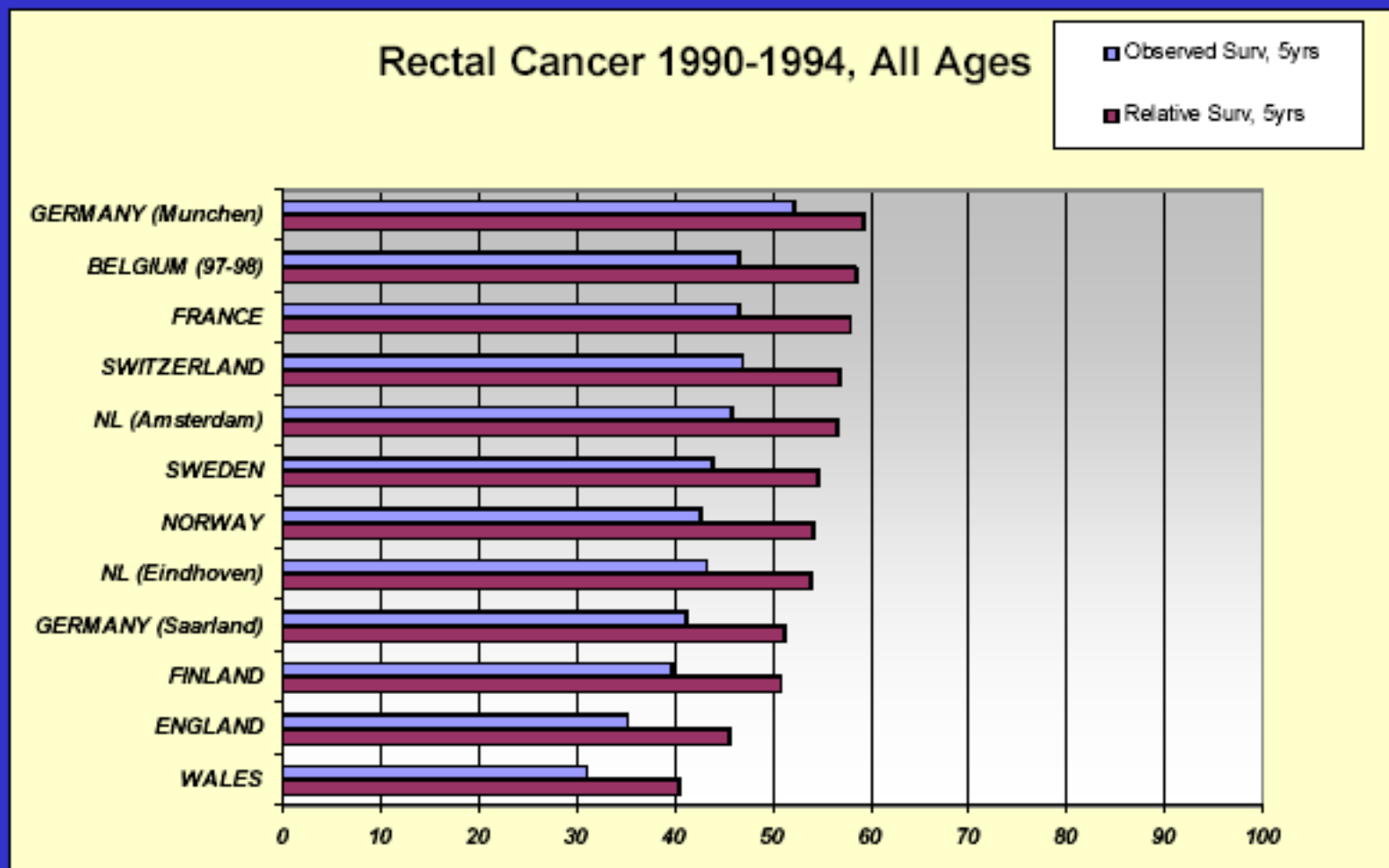
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Rectal carcinoma in Belgium

- approx. 1500 / yr (any stage)
- treated by approx. 113 teams (hospitals)

N treated/yr	N surgeons	N patients
< 5	6	18
5 – 20	62	620
20 - 50	29	870
> 50	3	150
	100	1658

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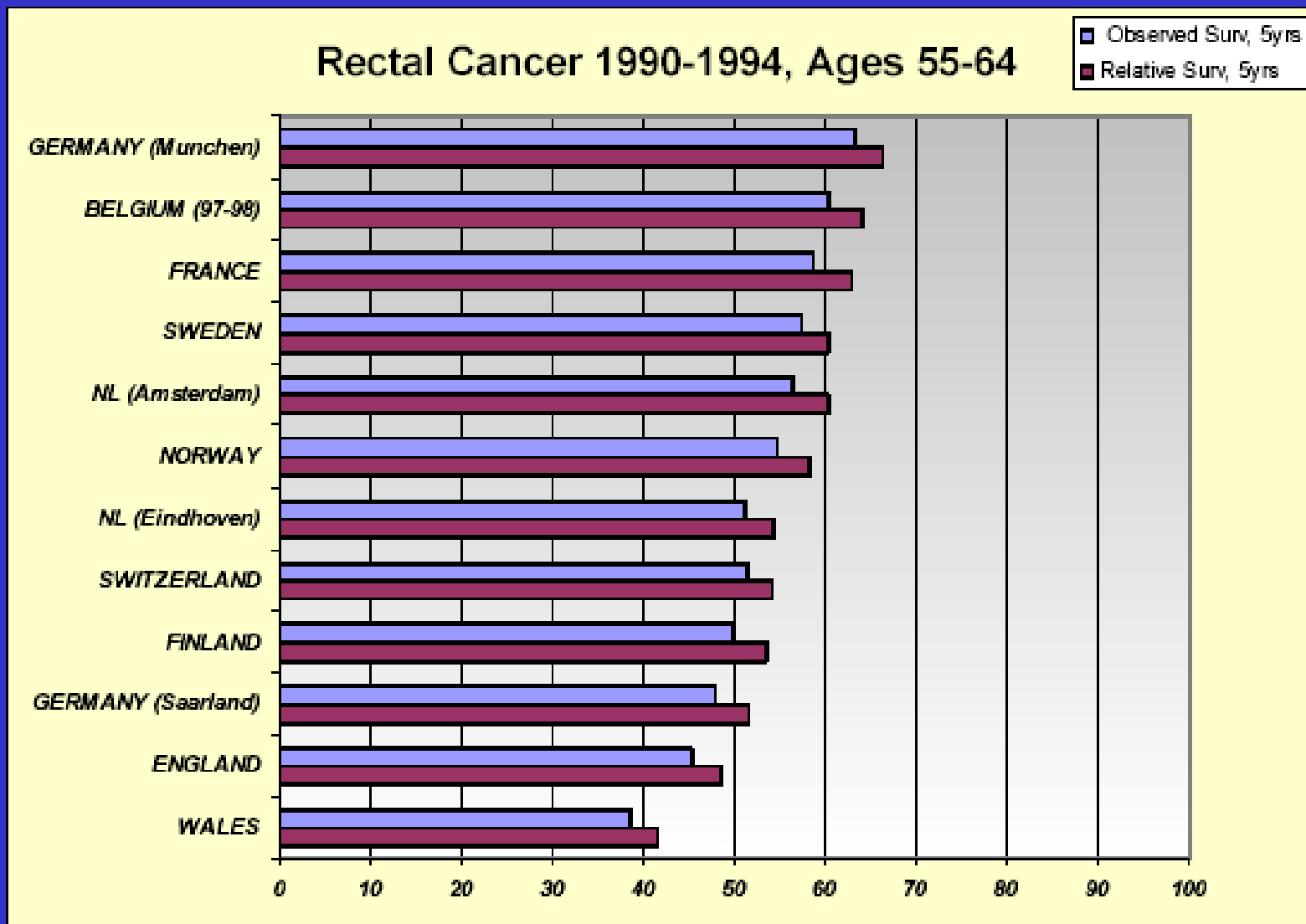
5yrs rel survival:

Regio Amsterdam: 96-98: 57%

Norway: 93-97: 58%

Regio Eindhoven: 93-97: <70j: 60% (B:63%), >70j: 45% (B:53%)

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**D. Quels sont les objectifs-cibles du
PROCARE ?**

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TARGETS

- R0 > 60%
- APR < 30%
- Postop mortality < 4%
- LRR 2 yr < 10%
- Survival 2 yr 80% after R0
- Improved survival in advanced disease
- Patient satisfaction

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**Achievements of a national audit
followed by TME training in Norway
Colorectal Disease 2003; 5: 471-7**

	1986-88 conventional	1993-99 TME
LRR (5 yr)	28%	8 %
Survival (5 yr)	55%	71%

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E. Motivations pour le PROCARE

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Motivation

- **Multidisciplinary professional initiative**
- **A nation wide project**
- **Decentralised instruction/training**
- **'Clubs' (LOK, GLEM, workshops)**
- **Anonymised database**
- **Newsletters, feedback**
- **Governmental support (Min Health)**

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F. Quelles sont les craintes, les menaces ?

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Les craintes

1. « Big brother is watching you »
2. Centralisation des cancers du rectum

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1. How to overcome our fear for audit and benchmarking ?

- **Guarantee of confidentiality, privacy**
- **Audit by clinicians + expert support**
- **Educational nature of audit**
 - No shame, no blame**
 - No search for excuses**
- **'Unconditional' willingness to improve**
- **(Re)act as appropriate**
- **Avoid external interference**

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2. Centralisation des cancers du rectum

- a. Décentralisation de la **formation**
- b. **Impossibilité** matérielle :
 - 15 % lits universitaires
 - 85 % lits non-universitaires

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Rectal Cancer in Belgium

± 1600 / yr (1200 resectable)

± 113 hospitals

Non-univ. hosp. < 450 beds	66 %
Non-univ. hosp. > 450 beds	20 %
Univ. hosp.	14 %

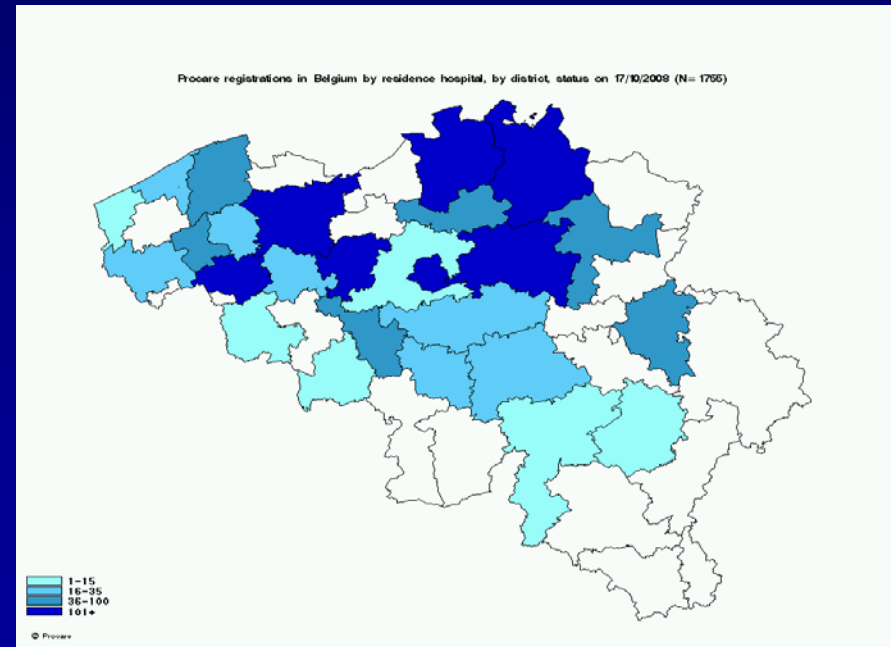
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G. Naissance et vie du projet

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Who made it possible ?

PROCARE steering group & participating teams



Steering group PROCARE project

Penninckx, Kartheuser, De Coninck, Van de Stadt, Vaneerdeweg, Bertrand, Duinslaeger, Claeys (BSSO), Burnon (BGES)	BSCS (RBSS) BSSO BGES
Spaas, Scalliet, Haustermans	BSRadiotherapy - Oncology
Ectors, Jouret, Sempoux	BSPathology (Dig Path Club)
Bleiberg, Humblet	BSMOncology
Van Cutsem, Laurent	BGDO, EORTC
Danse, Smeets, Op de Beeck	RBSRadiology
Peeters, Pattyn, Cabooter	VVGE
Rahier, Melange	SRBGE
Busset	BSEndoscopy
Haeck, Mansvelt	BPSA
Van Eycken E	NCR

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Who made it possible ?

PROCARE steering group & participating teams

Foundation Belgian Cancer Registry

Belgian Federation against Cancer

KCE

RIZIV / INAMI

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**H. Quel est le support financier
du Procare ?**

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26390

MONITEUR BELGE — 15.05.2007 — BELGISCH STAATSBAD

SERVICE PUBLIC FEDERAL SECURITE SOCIALE

F. 2007 — 1967

[C — 2007/22704]

26 AVRIL 2007. — Arrêté royal fixant les conditions auxquelles une intervention de l'assurance obligatoire soins de santé et indemnités peut être accordée dans le cadre de projets temporaires concernant le diagnostic et le traitement du cancer du rectum

ALBERT II, Roi des Belges,

A tous, présents et à venir, Salut.

Vu la loi relative à l'assurance obligatoire soins de santé et indemnités, coordonnée le 14 juillet 1994, notamment l'article 56, § 2, alinéa 1^{er}, 3^o, remplacé par la loi du 10 août 2001 et modifié par la loi du 22 août 2002;

FEDERALE OVERHEIDSDIENST SOCIALE ZEKERHEID

N. 2007 — 1967

[C — 2007/22704]

26 APRIL 2007. — Koninklijk besluit tot vaststelling van de voorwaarden waaronder een tegemoetkoming van de verplichte ziekte- en invaliditeitsverzekering mag worden verleend in tijdelijke projecten in verband met de diagnose en de behandeling van endeldarmkanker

ALBERT II, Koning der Belgen,

Aan allen die nu zijn en hierna wezen zullen, Onze Groet.

Gelet op de wet betreffende de verplichte verzekering voor geneeskundige verzorging en uitkeringen, gecoördineerd op 14 juli 1994, inzonderheid op artikel 56, § 2, eerste lid, 3^o, vervangen bij de wet van 10 augustus 2001 en gewijzigd bij de wet van 22 augustus 2002;

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Financial Support

- **Stichting tegen Kanker**
Fondation contre le Cancer
Stiftung gegen Krebs
120 000 €
- **KCE (project)**
74 000 €
- **RIZIV / INAMI**
1 418 000 €

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Financial Cost Benefit Estimate (in €)

	COST	BENEFIT *
2005	530 000	2 000 000
2006	430 000	2 900 000
2007	135 000	3 700 000
2008	85 000	4 450 000
2009	85 000	5 150 000

* due to reduced LRR and APR rate (stoma costs)

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I. Comment implémenter le projet ?

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HOW ?

- **Standardisation (guidelines)**
- **Implementation of guidelines**
- **Quality assurance**

Registration

Feedback

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Belgian Section of Colorectal Surgery
Section of the Belgian Society for Surgery



Bruxelles, le 13 septembre 2004.

A tous les chirurgiens digestifs impliqués
dans le traitement du cancer du rectum

Cher Confrère,

La Section Belge de Chirurgie Colorectale (BSCRS) souhaite vous informer d'un vaste projet national en préparation, le projet « **PROCARE** », concernant le traitement du cancer du rectum en Belgique et auquel elle souhaite que chacun d'entre vous adhère et participe.

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Belgian Section of Colorectal Surgery
Section of the Belgian Society for Surgery



PROCARE PROJECT FORMULAIRE D'INSCRIPTION

Nom :

Prénom :

Service ou département :

Institution :

Adresse :

Tél. :

GSM :

Fax :

E-mail :

- ☐ est impliqué dans la chirurgie du cancer du rectum
- ☐ souhaite recevoir un exemplaire des guidelines du traitement du cancer du rectum
- ☐ souhaite participer à l'étude rétrospective en rapport avec le projet PROCARE
- ☐ souhaiterait participer au projet PROCARE et bénéficier d'un training personnel « side-by-side »
- ☐ souhaiterait participer activement au projet PROCARE avec un éventuel rôle de « teacher » (après training « side-by-side » personnel)

Date :

Signature :

A renvoyer : A. KARTHEUSER
c/o Société Royale Belge de Chirurgie
Avenue Circulaire 138A
1180 BRUXELLES

Nous nous permettons d'insister pour que chacun d'entre vous renvoie le formulaire en annexe, qu'il soit impliqué ou non dans la chirurgie du cancer du rectum, et ce afin d'éviter toute surcharge de courrier inutile.

PROCARE PROJECT - NATIONAL SURVEY

Final results (01.01.2005)

	n forms	Implication in rectal cancer	Interest in guidelines	Side-by-side training	Instructors
Yes	-	198	209	164	97
N.S.*	-	-	-	13	28
No	-	27	16	48	100
Total	225	225	225	225	225

**n =
177**

**n =
125**

* N.S. = not specified

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Etapes d'implémentation

- 2002-2003 : Projet né de la BSCRS, une section de la SRBC → Project leader : F. PENNINCKX
- 2003-2004 : guidelines
- Nov. 2004 : création « Steering Group »
- Déc. 2004, mai 2005, juin 2005 : workshops
- 1er oct. 2005 : enregistrement 1^{er} cas
- 2007 : rapport KCE
- 2009 : premières évaluations

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GI PATHOLOGY
CLUB



Belgian Section of Colorectal Surgery
Section of the Belgian Society for Surgery

RECTAL CANCER

PROCARE NATIONAL PROJECT

WORKSHOPS

25th May 2005

6th June 2005

PROGRAMME

8:30	Welcome - Coffee	
9:00	Procure Project	F. PENNINGCKX (KUL, Leuven) C. BERTRAND (Jolimont)
	TME live Surgery	R.J. HEALD (U.K.)
11:30	Coffee Break	
12:00	Chemotherapy for rectal cancer Pathology live demonstration	E. VAN CUTSEM (KUL, Leuven) Ph. QUIRKE (U.K.)
13:00	Lunch	
14:00	TME Lecture	R.J. HEALD (U.K.)
	Pathology Lecture	Ph. QUIRKE (U.K.)
15:00	Coffee Break	
15:30	Round Table Discussions : Procure Project implementation	
18:00	End of the Workshop	

Venue :

SODEHOTEL LA WOLUWE
Auditorium Lindbergh
Avenue E. Mounier 5
1200 BRUXELLES
02/775.25.30

Information :

M. ECTORS, GI Pathology Club
016/34.42.35
A. KARTHEUSER, BSCRS
02/764.14.62
F. PENNINGCKX, Procure Project
016/34.42.65

MAJOR SPONSORS

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Healthcare

 ETHICON ENDO-SURGERY
a Johnson & Johnson company

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Participation aux workshops

1. Workshop 25 mai 2005 :	136
2. Workshop 6 juin 2005 :	190
	326

Atlas CTV Rectum

S. Roels, W. Duthoy, K. Haustermans

In collaboration with:

F. Penninckx, W. De Neve, V. Vandecaveye, P. Scalliet

PROCARE NATIONAL PROJECT WORKSHOPS

25th May 2005 6th June 2005

PROGRAMME

14:00 TME Lecture
Pathology Lecture
15:00 Coffee Break
15:30 Round Table Discussions :
Procure Project implementation
18:00 End of the Workshop

Venue :

SODEHOTEL LA WOLUWE

F. PENNINCKX (KUL, Leuven)
C. BERTRAND (Jolimont)
R.J. HEALD (U.K.)

E. VAN CUTSEM (KUL, Leuven)
Ph. QUIRKE (U.K.)

R.J. HEALD (U.K.)
Ph. QUIRKE (U.K.)

De Geneesheer-Specialist

Orgaan van het Verbond der Belgische
Beroepsverenigingen van
Geneesheren Specialisten
Verantwoordelijke uitgever : Dr L. HAECK
Redactiesecretariaat : J. Van den Nieuwenhof
Kroonlaan 20 - 1050 Brussel
Tel. 02-649.21.47 - Fax : 02-649.26.90
E-mail : info@VBS-GBS.org
ISSN 0770-8130 - MAANDBLAD
Speciaal nummer NOVEMBER 2004
Afgifte Kantoor : BRUSSEL 5

Remember, don't forget to visit the Belgian Surgical Website !
www.belsurg.org
It is the official website of the Belgian Surgical Community.
Please ask your login and password to get access on the website
itself.
Each Society has his own pages accessible for members.
So visit the page of the Belgian Professional Surgical Association
in order to find hot news upon professional items and for
assessing the accreditation via the VBS/GBS website:
www.vbs-gbs.org (members only)



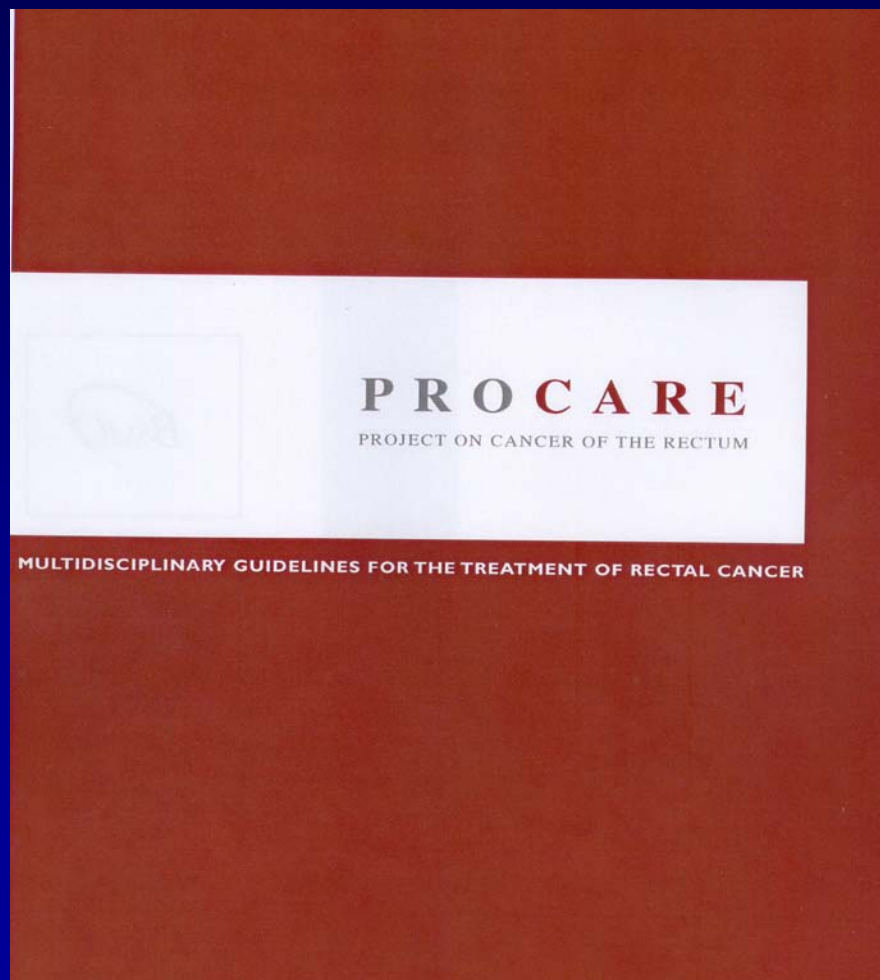
CD-ROM for pathologists

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J. Standardisation des traitements : Guidelines

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Guidelines for standardisation



■ CONTENTS	
• AIM	p7
• Levels of evidence	p7
• Grades of recommendation	p7
• Categories of consensus	p7
• DEFINITIONS	p8
• 1. The rectum	p8
• 2. Staging	p8
• 3. Extent of resection and radial margin	p10
• 4. Other Definitions related to surgery	p10
• GUIDELINES	p13
• Access to treatment	p13
• Preoperative investigation, staging	p13
• Radiotherapy	p14
• Chemotherapy in preoperative setting in combination with radiotherapy	p16
• Preparation for elective surgery	p17
• Elective surgery	p18
• Emergency treatment	p20
• Treatment of metastatic rectal cancer	p20
• Pathology	p21
• Adjuvant therapy	p26
• Follow-up	p26
• Outcomes	p27
• APPENDICES	p28
• Appendix 1: the surgical report	p28
• Appendix 2: the pathology report	p29
• ALGORITHM FOR RESECTABLE RECTUM CANCER	p30

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K. EBM – Evidence Based Medecine :
Le projet KCE



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KCE project 2006-01-27 N. 000774

- **Evaluation of existing guidelines and recent evidence on rectal cancer**
- **Identification of quality indicators**
- **Evaluation of existing databases**
- **Applicability of indicators in oncological care programs**

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KCE project 2006-01-27 N. 000774

- **Report on KCE website**
- **Guidelines update**

Assurance de Qualité pour
le cancer du rectum
– Phase I -
Recommandation de bonne pratique
pour
la prise en charge du cancer rectal

KCE reports 69B

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L. Registre National pour le Procure

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PROCARE data entry from January 2006

PROCARE study – prospective registration

Patient data

National number / Mutuality number:

Name: First name:

Date of birth:

Sex:

- ☐ Male
- ☐ Female

Zipcode of residence:

Registration number: provided by the data center:.....

General practitioner:.....

Hospital data

Contact person

contact details: Address

Tel. Number.....

Email address

Name Hospital (1):

Treatment (indicate treatments within the same hospital):

☐ Surgery: name surgeon(s)

.....

- ☐ Radiotherapy
- ☐ Chemotherapy
- ☐ Pathology report

Name Hospital (2):

Treatment:

- ☐ Radiotherapy
- ☐ Chemotherapy
- ☐ Pathology report

Name Hospital (3):

Treatment:

- ☐ Radiotherapy
- ☐ Chemotherapy
- ☐ Pathology report

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Foundation Belgian Cancer Registry

- Data entry (help)
- Data management (Q & Q control, analysis, report)
- Feedback
- Benchmarking (national, international)
- Newsletter

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**M. Chirurgie : Exérèse totale du
mésorectum**

Technique de Heald

CANCER DU RECTUM MOYEN

PROBLEMES POSES

- 1. Risque de récurrence locale ?**
- 2. Lésion des nerfs pelviens ?**
- 3. Conservation appareil sphinctérien ?**

CANCER DU RECTUM MOYEN

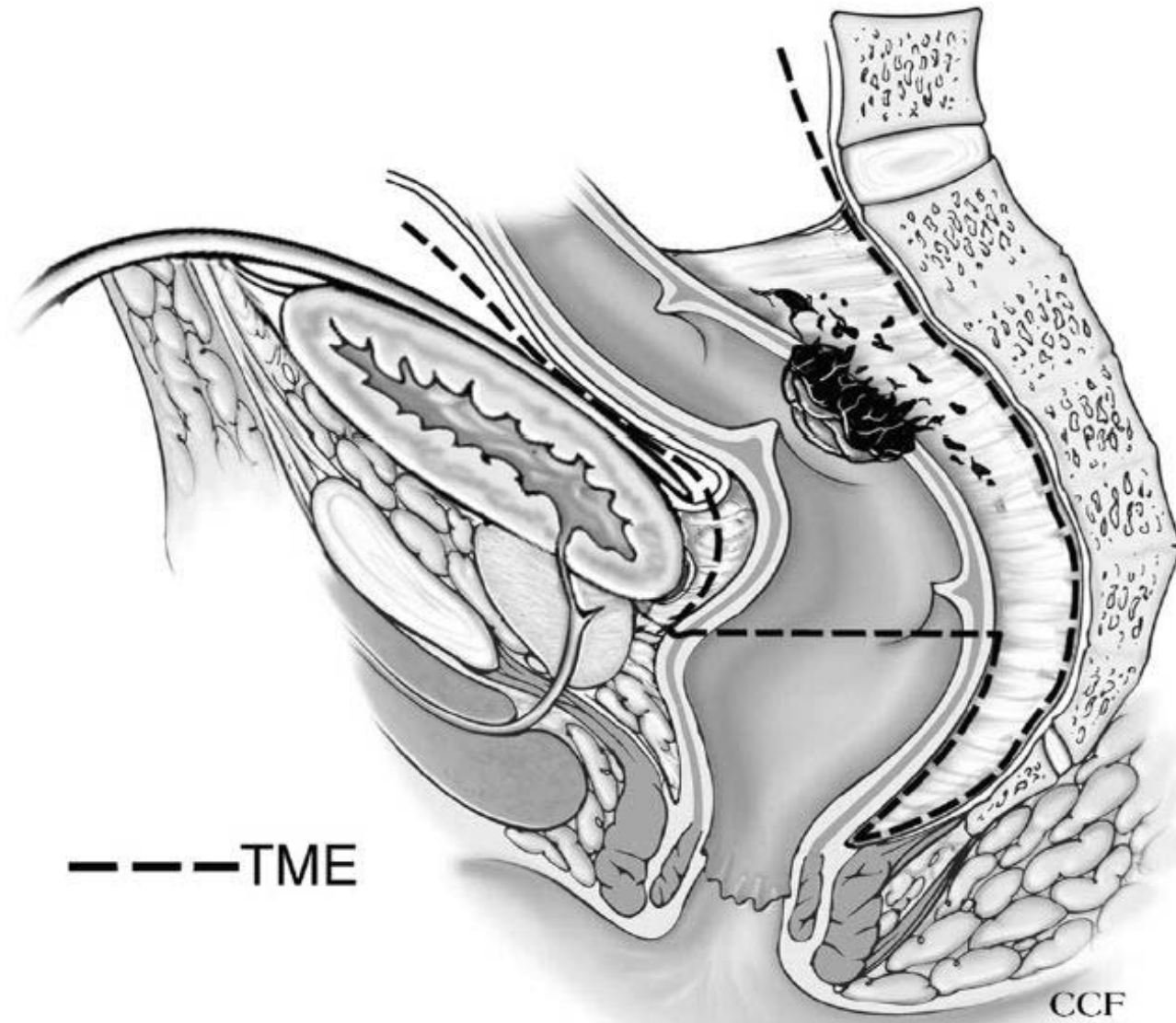
- Exérèse totale du mésorectum = **technique de Heald** :
→ exérèse + complète, + carcinologique du rectum
- Préservation des plexus nerveux autonomes :
→ respect intégrité corporelle

CANCER DU RECTUM MOYEN

EXÉRÈSE TOTALE DU MÉSOPECTUM TECHNIQUE DE HEALD

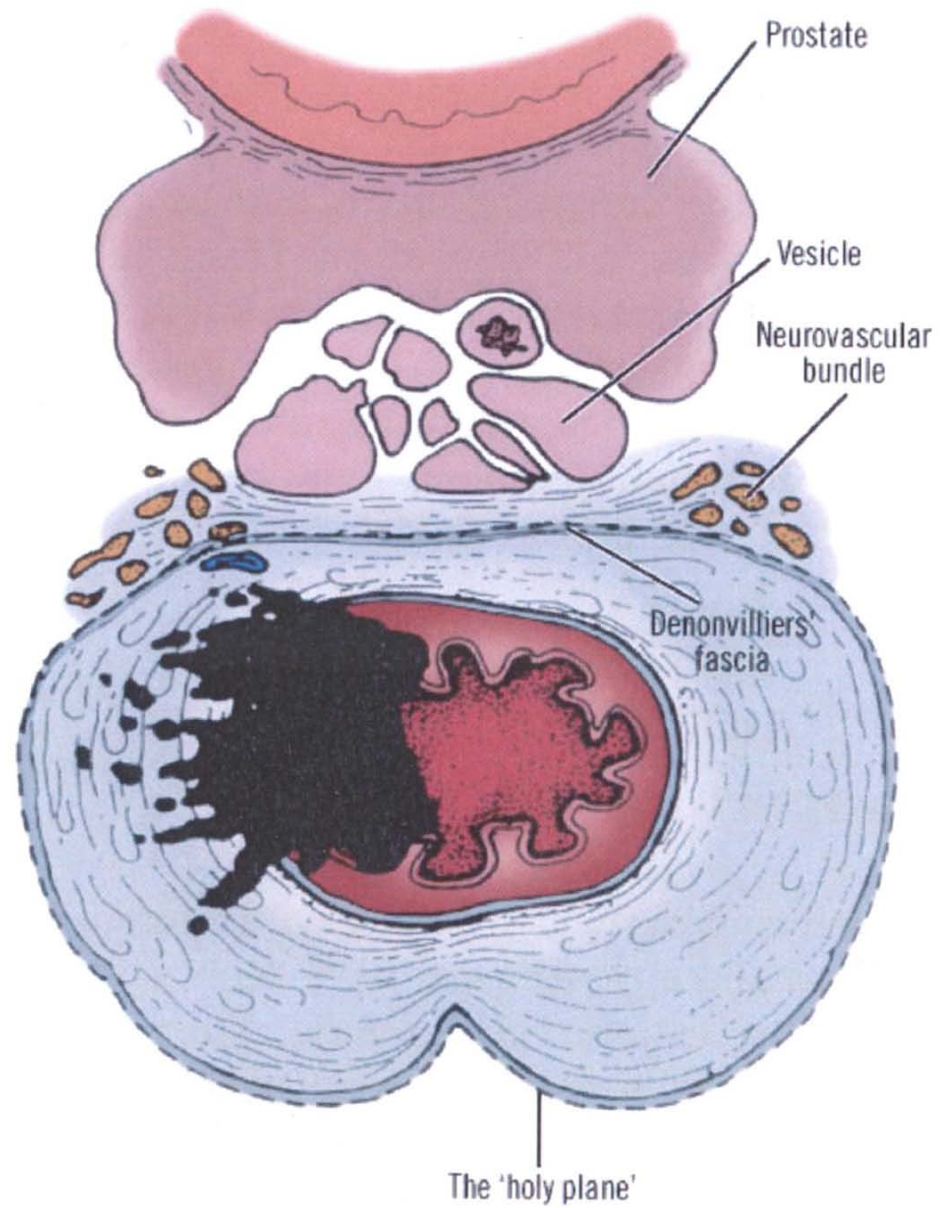
« Le plan sacré » - « The holy plane » :

- fascia Waldeyer
- apon. Denonvilliers
- cloison recto-vaginale



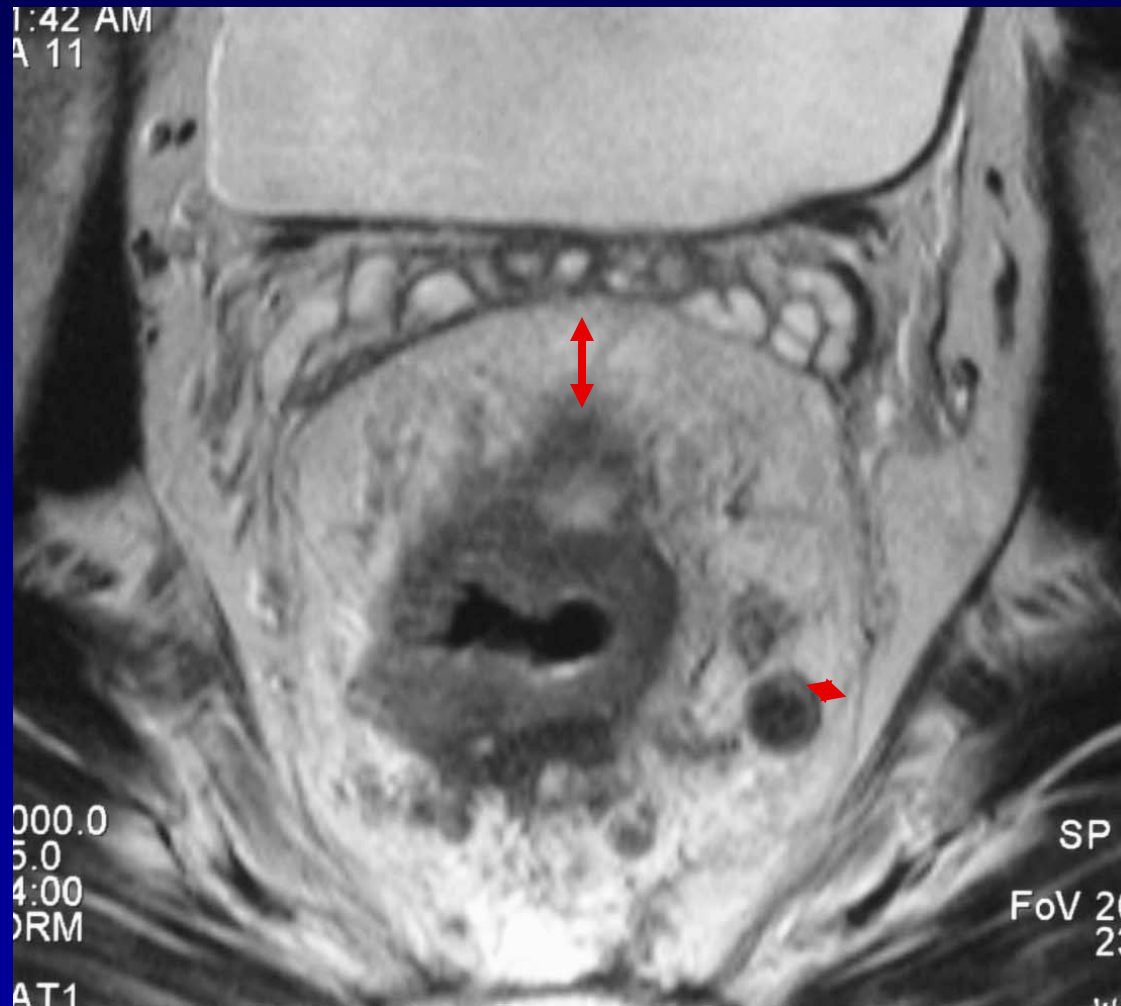
---TME

CCF
©1998



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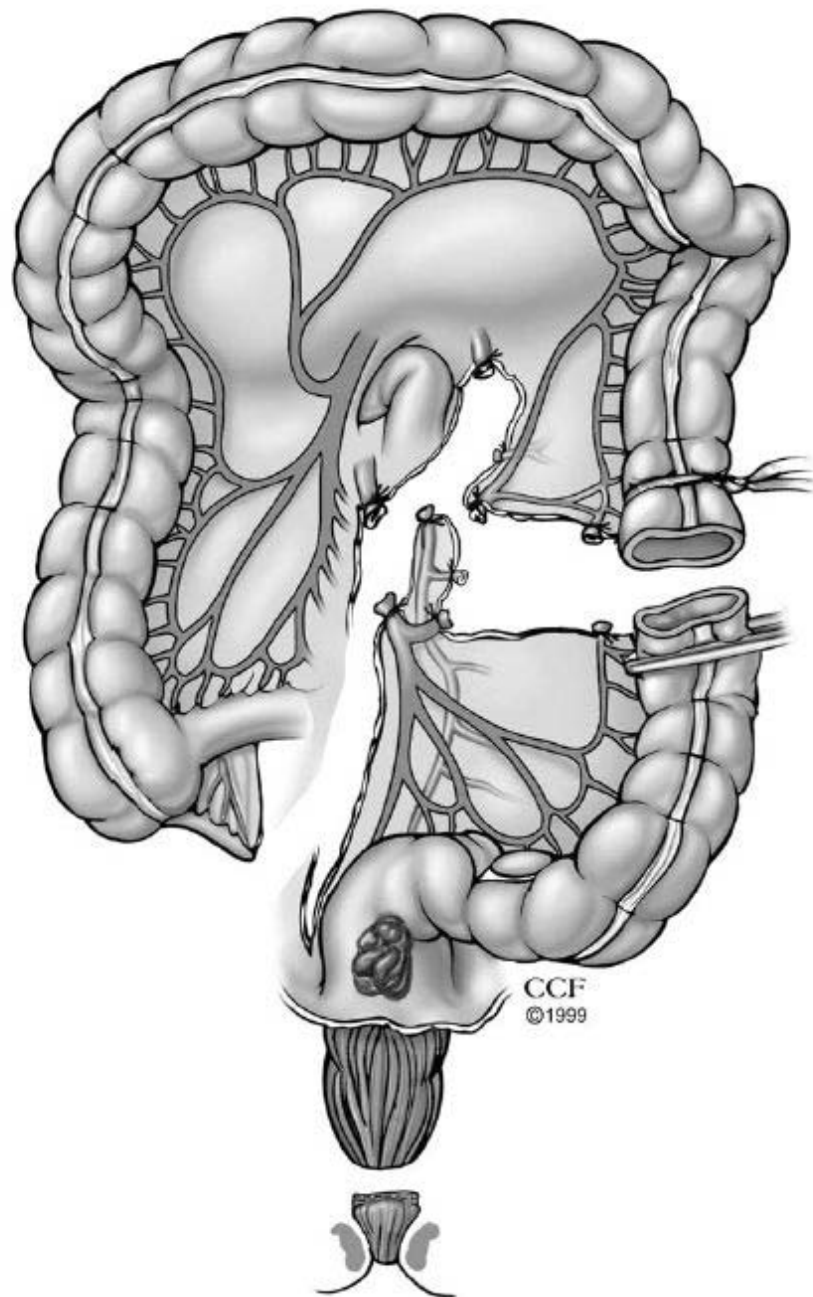
Pelvic HRMRI for cTN staging and cCRM

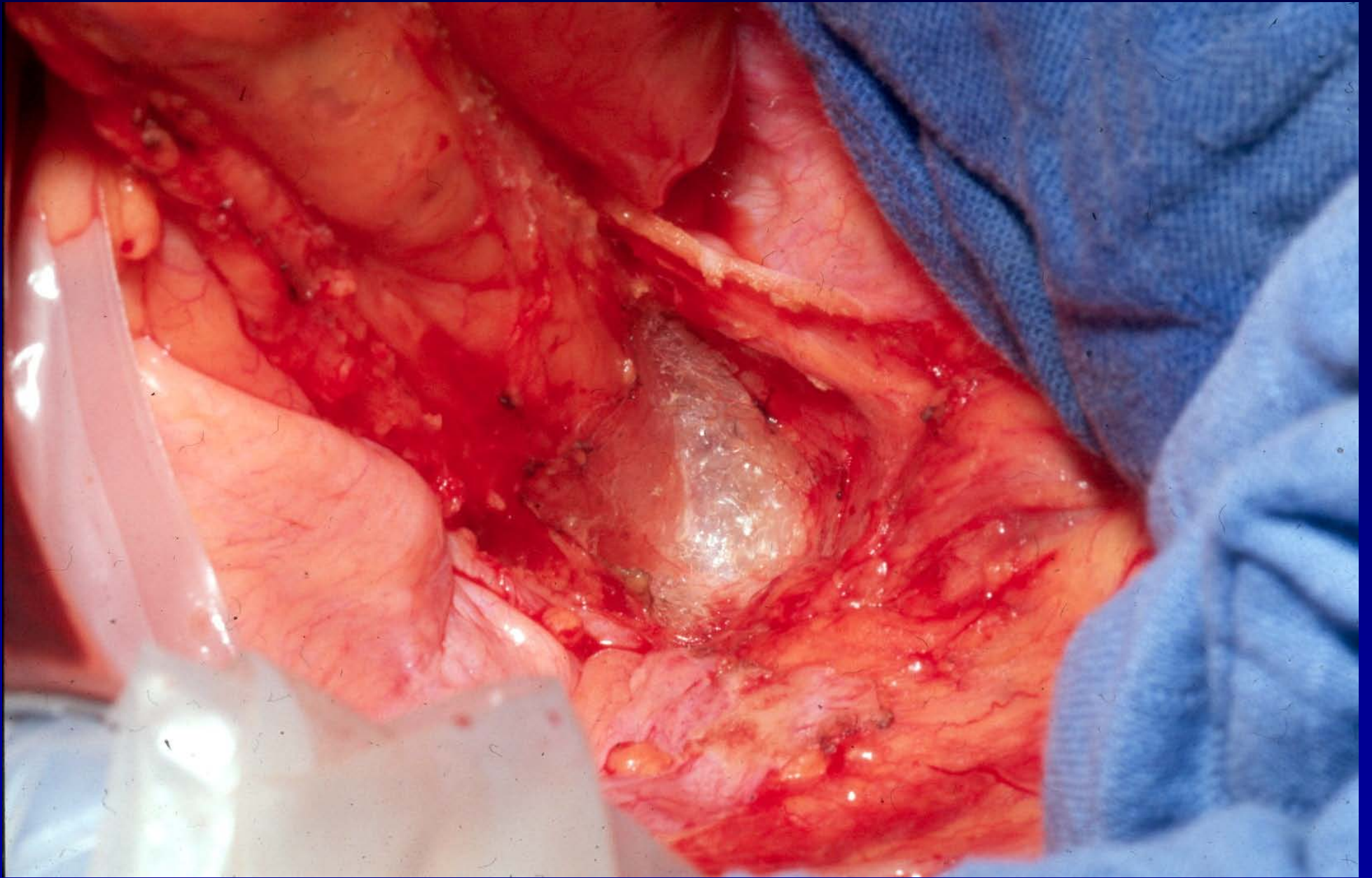


R0 resection feasible if cCRM > (1, 2) 5 mm

CANCER DU RECTUM MOYEN

- Exérèse totale du mésorectum : Heald
- Présentation des nerfs pelviens
- Anastomose colo-anale (ACA)





CANCER DU RECTUM MOYEN

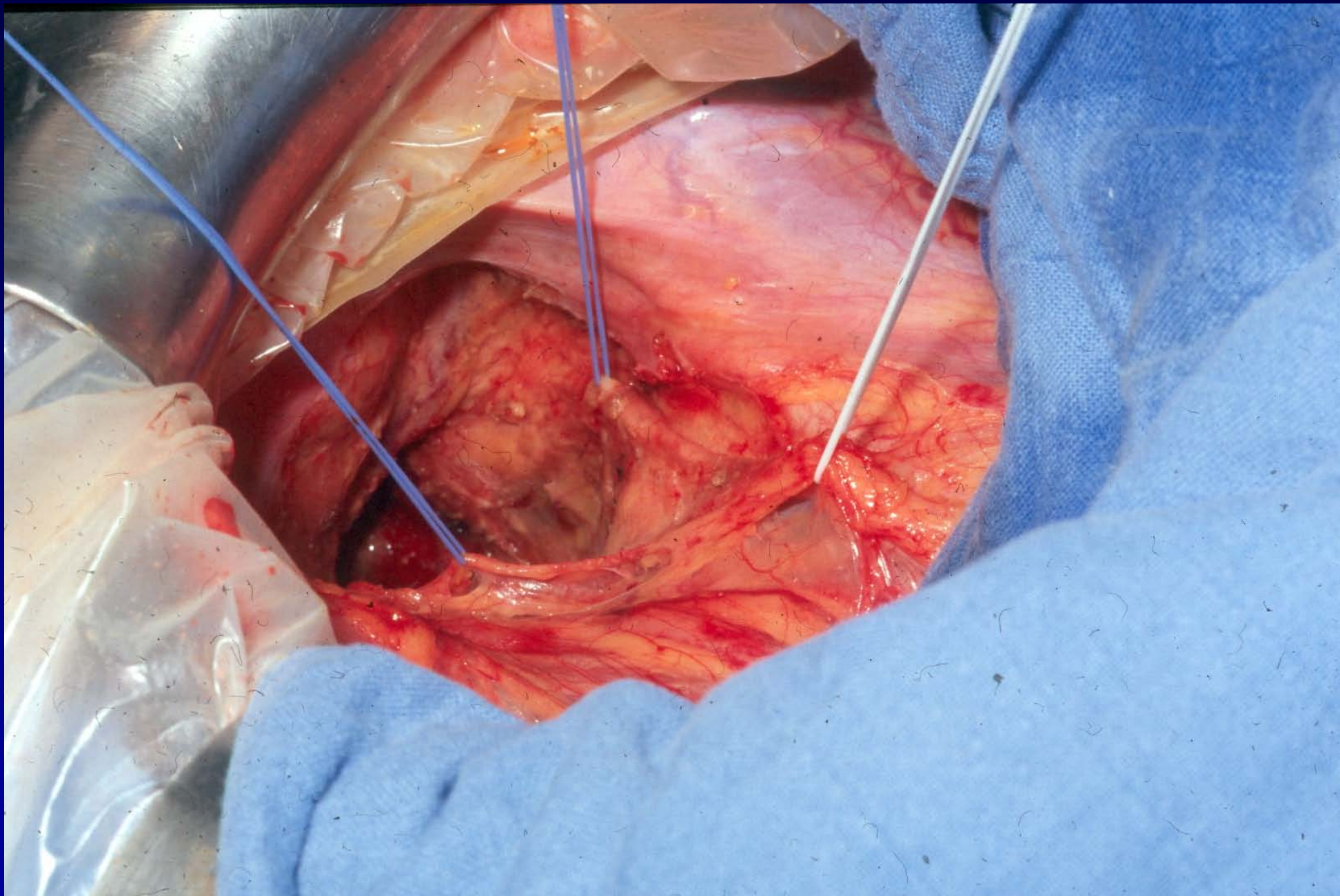
EXÉRÈSE TOTALE DU MÉSOPECTUM TECHNIQUE DE HEALD

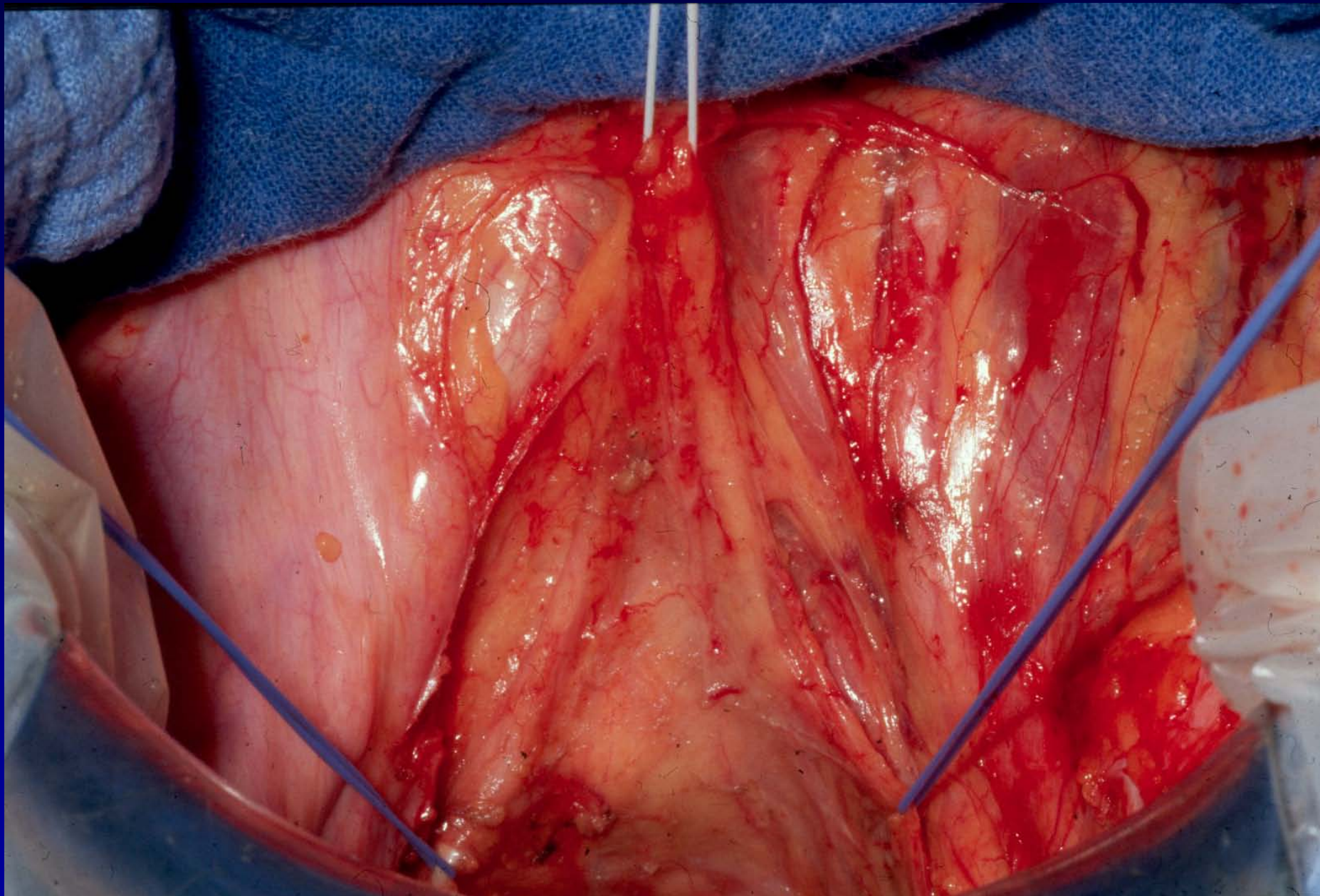
Résultats : ↓ **récidives locales**

- avant Heald : 15-40 % à 5 ans
- après Heald : **4-7 % à 5 ans**

CANCER DU RECTUM MOYEN

- Exérèse totale du mésorectum : Heald
- Présentation des nerfs pelviens
- Anastomose colo-anale (ACA)





CANCER DU RECTUM MOYEN

EXÉRÈSE TOTALE DU MÉSOPECTUM TECHNIQUE DE HEALD

Préservation des nerfs pelviens : Résultats

	Avant préservation	Avec préservation
Tr. urinaires	10-70 %	16 %
Tr. sexuels	40-90 %	13 %

CANCER DU RECTUM MOYEN

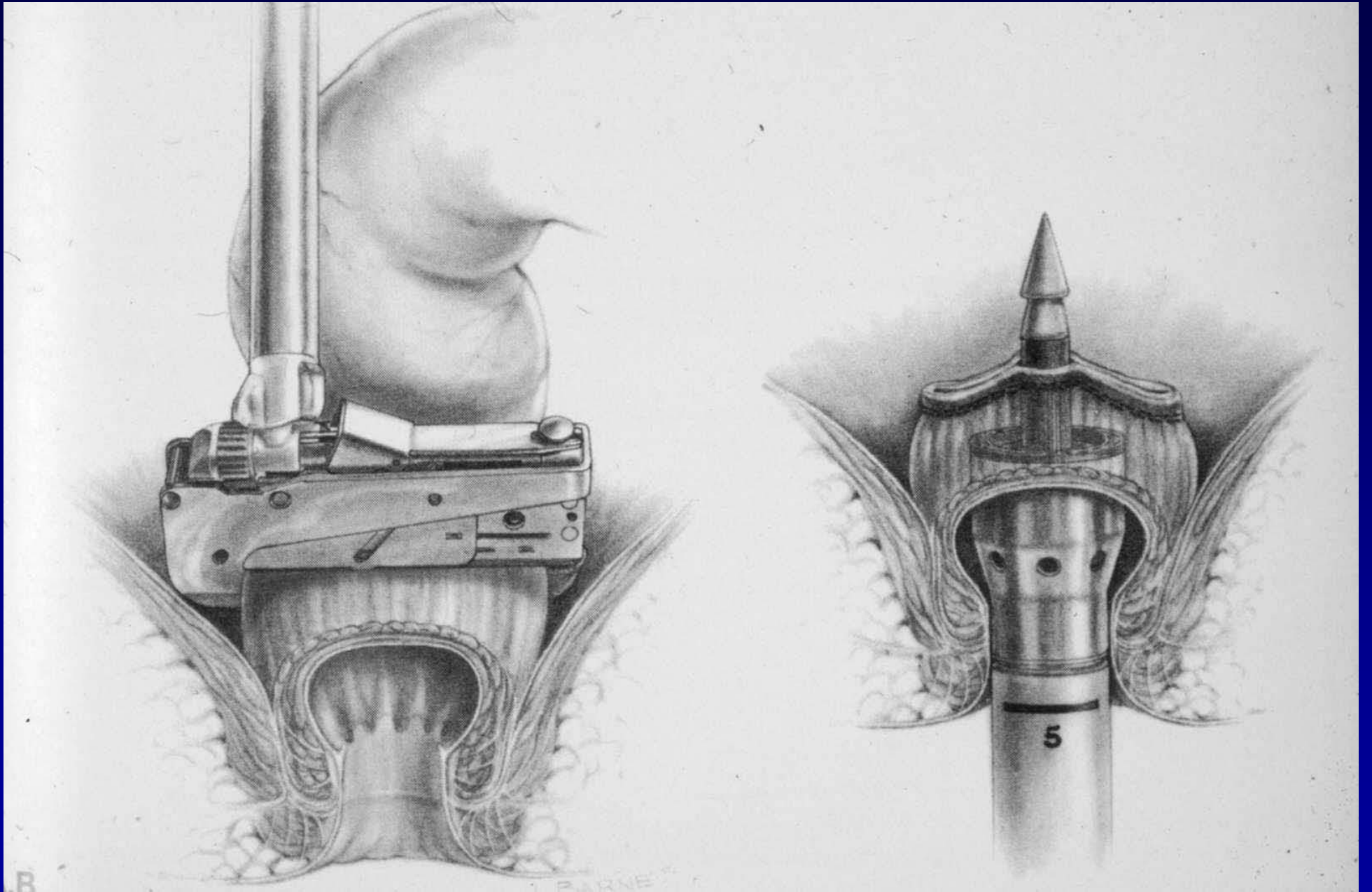
- Exérèse totale du mésorectum : Heald
- Présentation des nerfs pelviens
- Anastomose colo-anale (ACA)

CANCER DU RECTUM MOYEN

EXÉRÈSE TOTALE DU MÉSOPECTUM TECHNIQUE DE HEALD

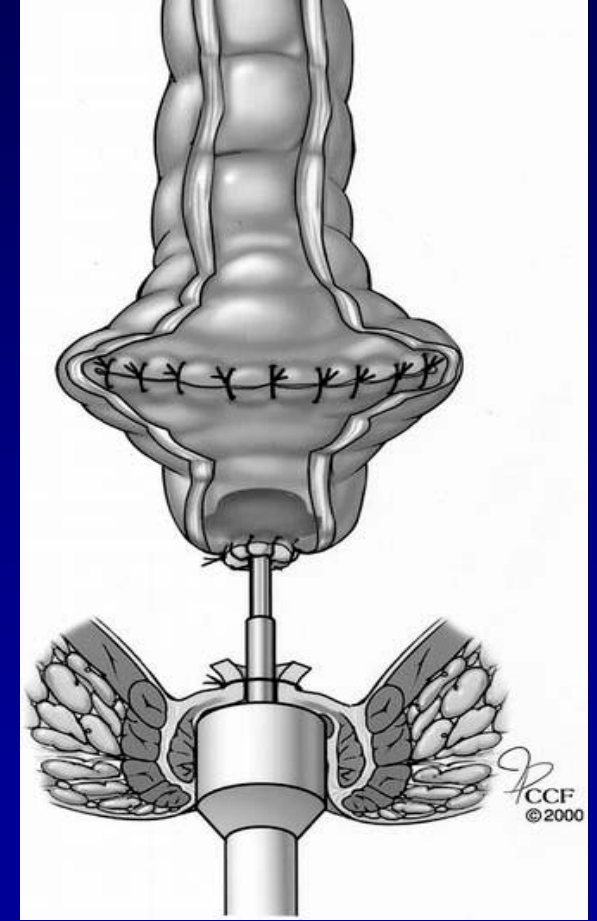
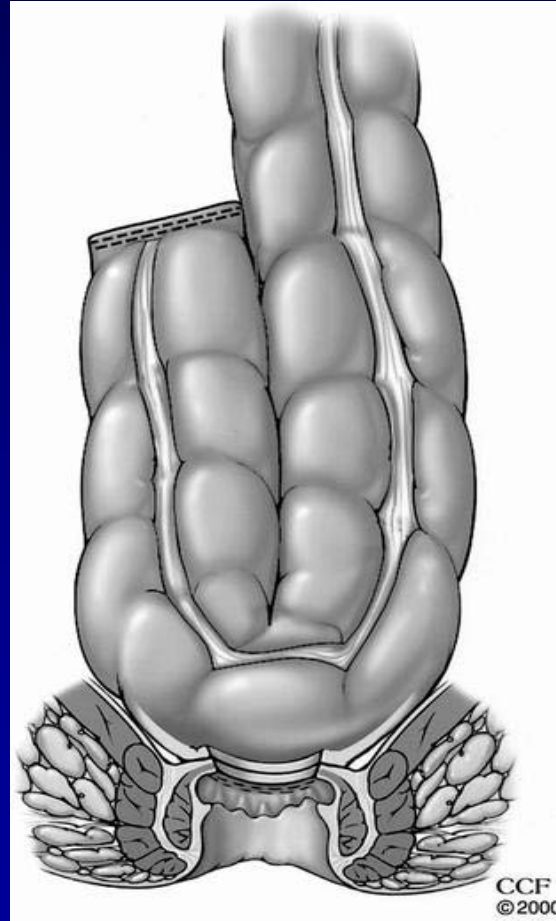
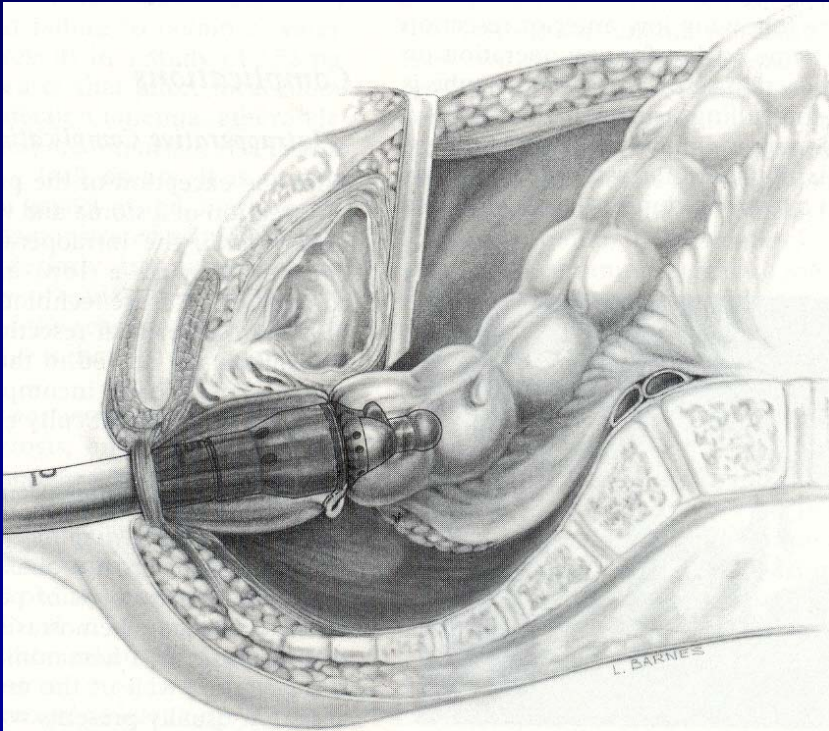
Reconstruction :

- réservoir colique J
- anastomose mécanique trans-suturale
- ± iléostomie de protection



PROCARE

Low AR, CPAA, coloplasty



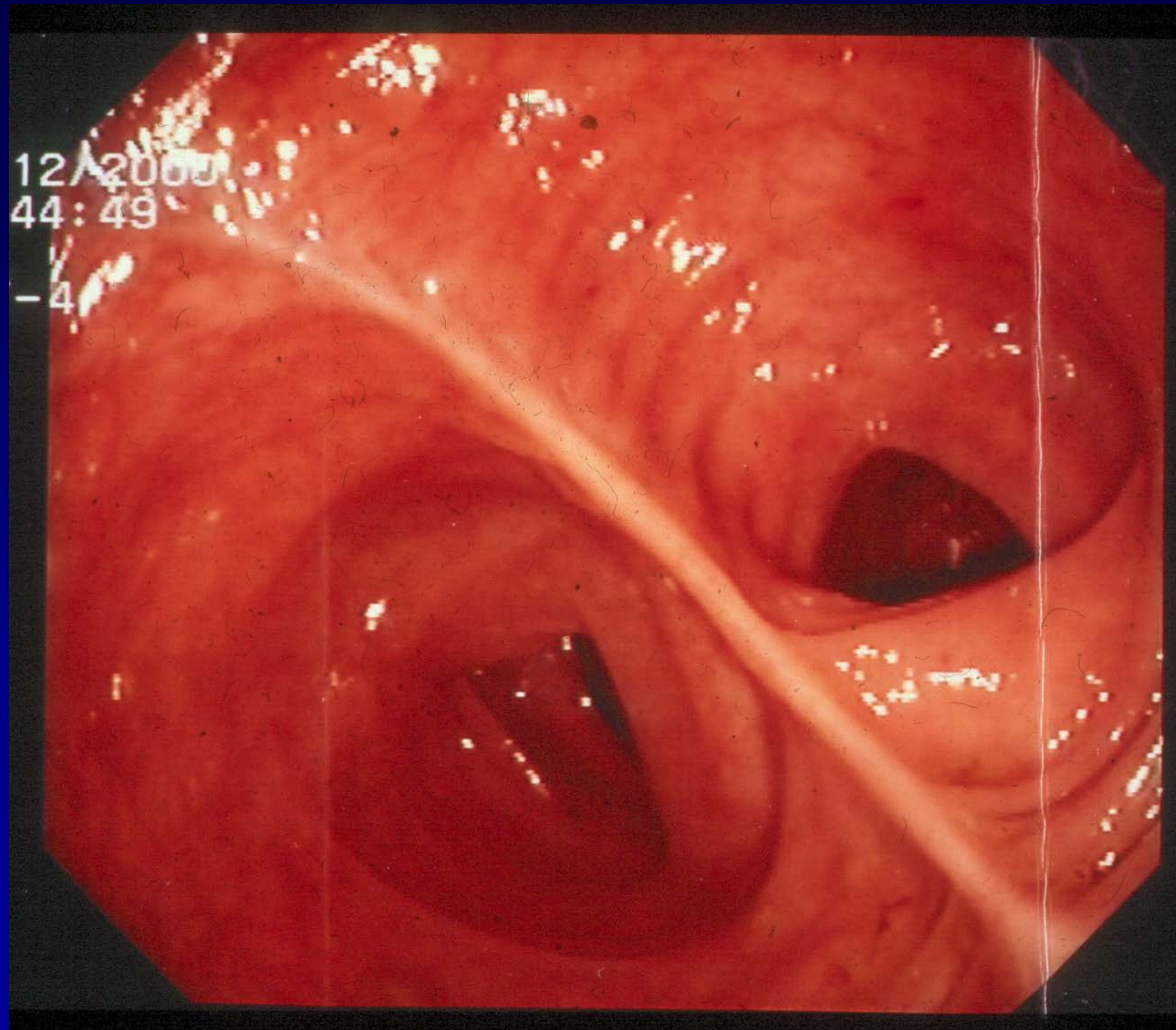
Leak rate = < 5 – 30 %



12/2000

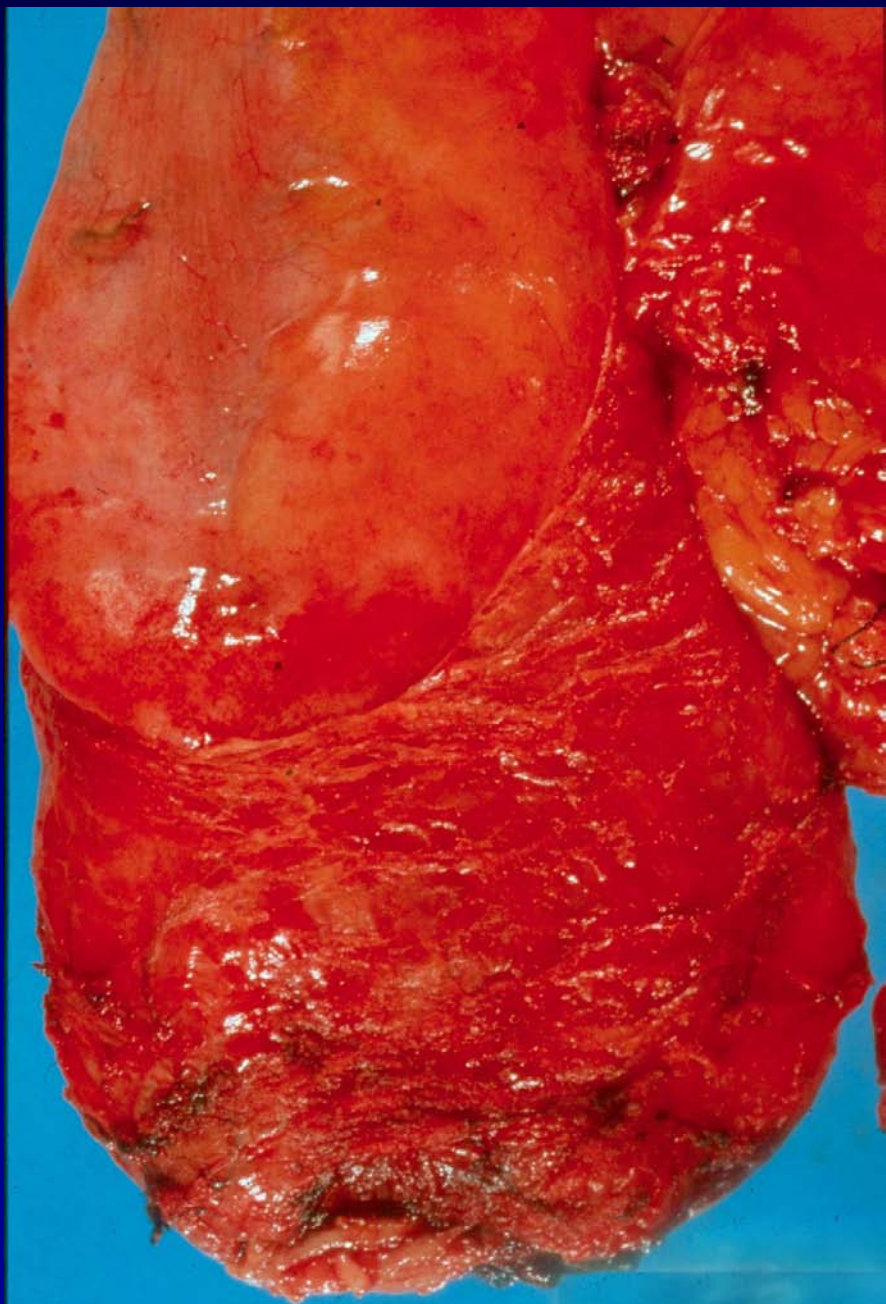
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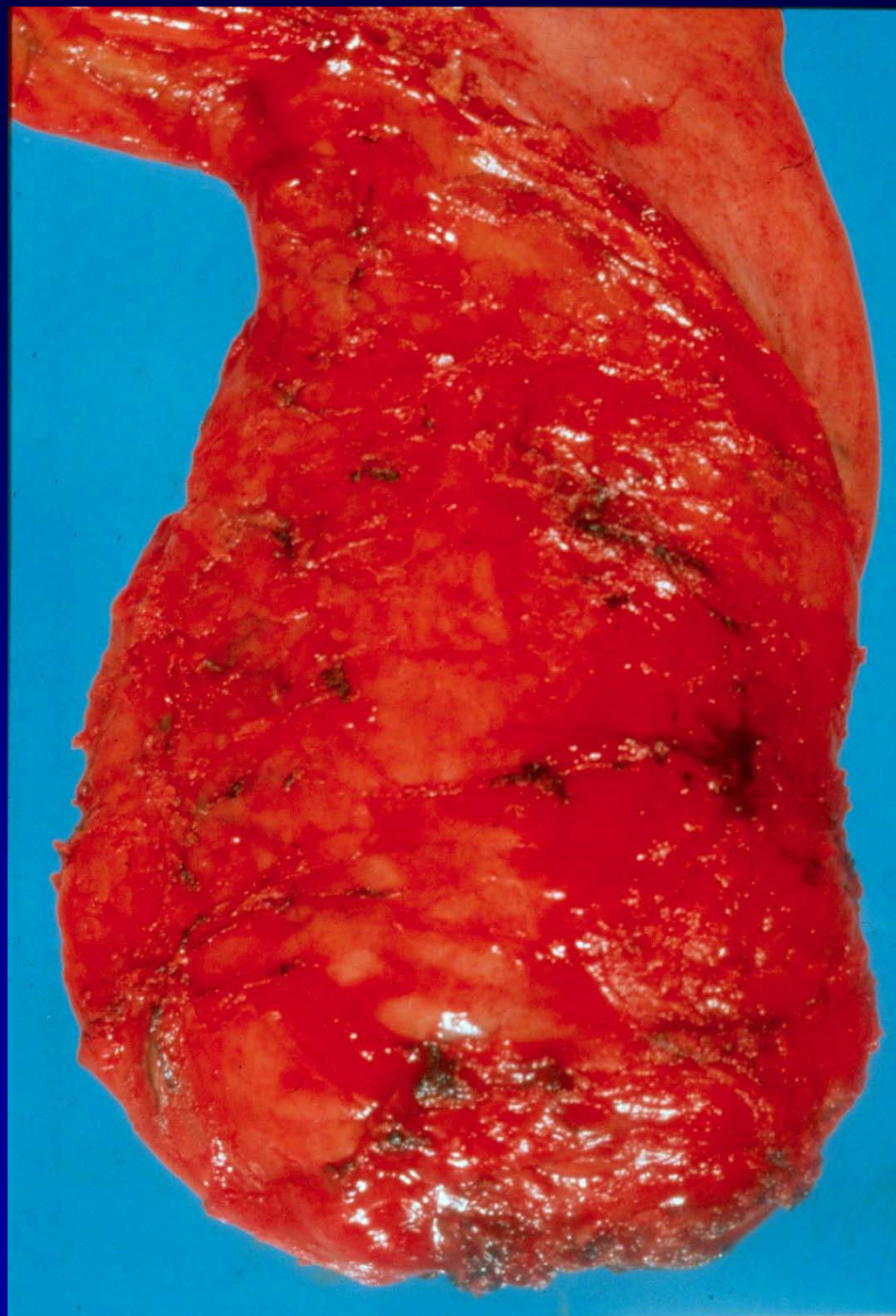
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PROCARE

N. Anatomico-pathologie :
Technique de Quirke



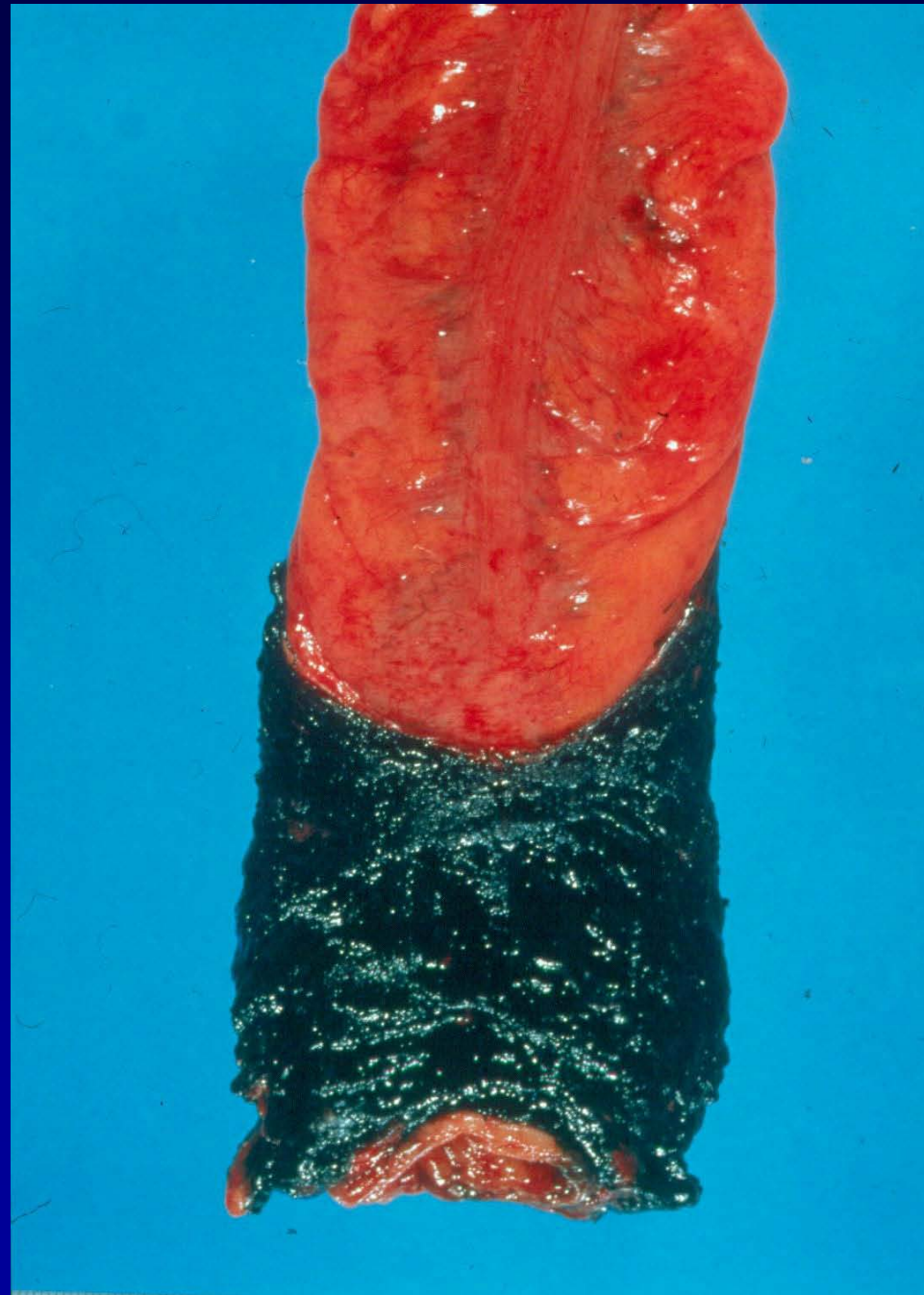


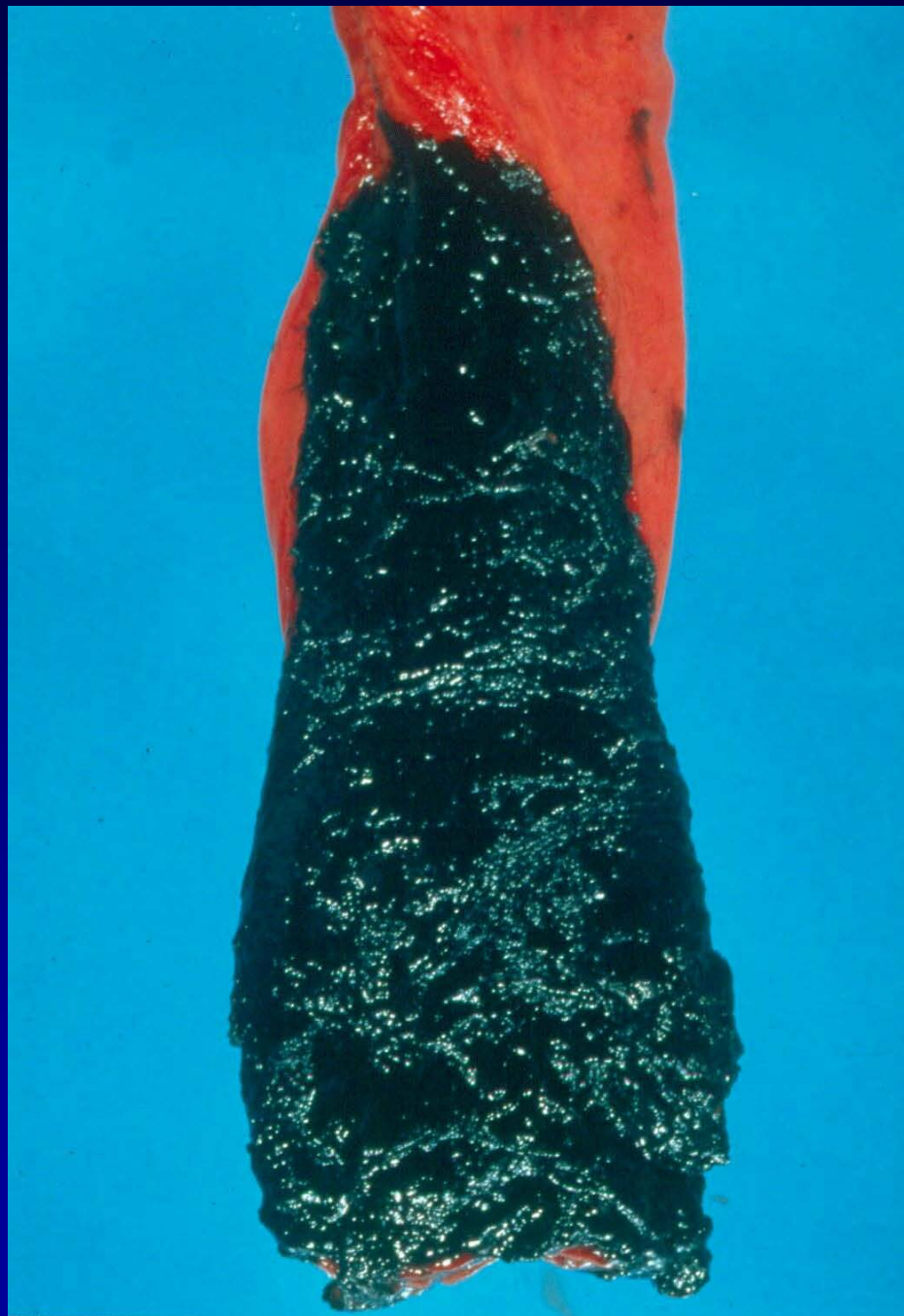
CANCER DU RECTUM MOYEN

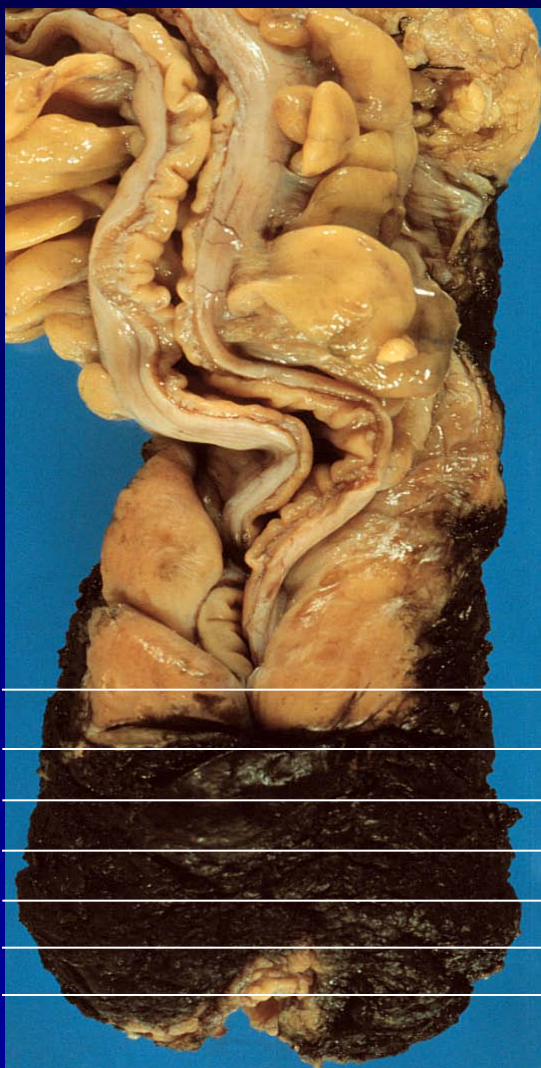
EXÉRÈSE TOTALE DU MÉSOPECTUM TECHNIQUE DE HEALD

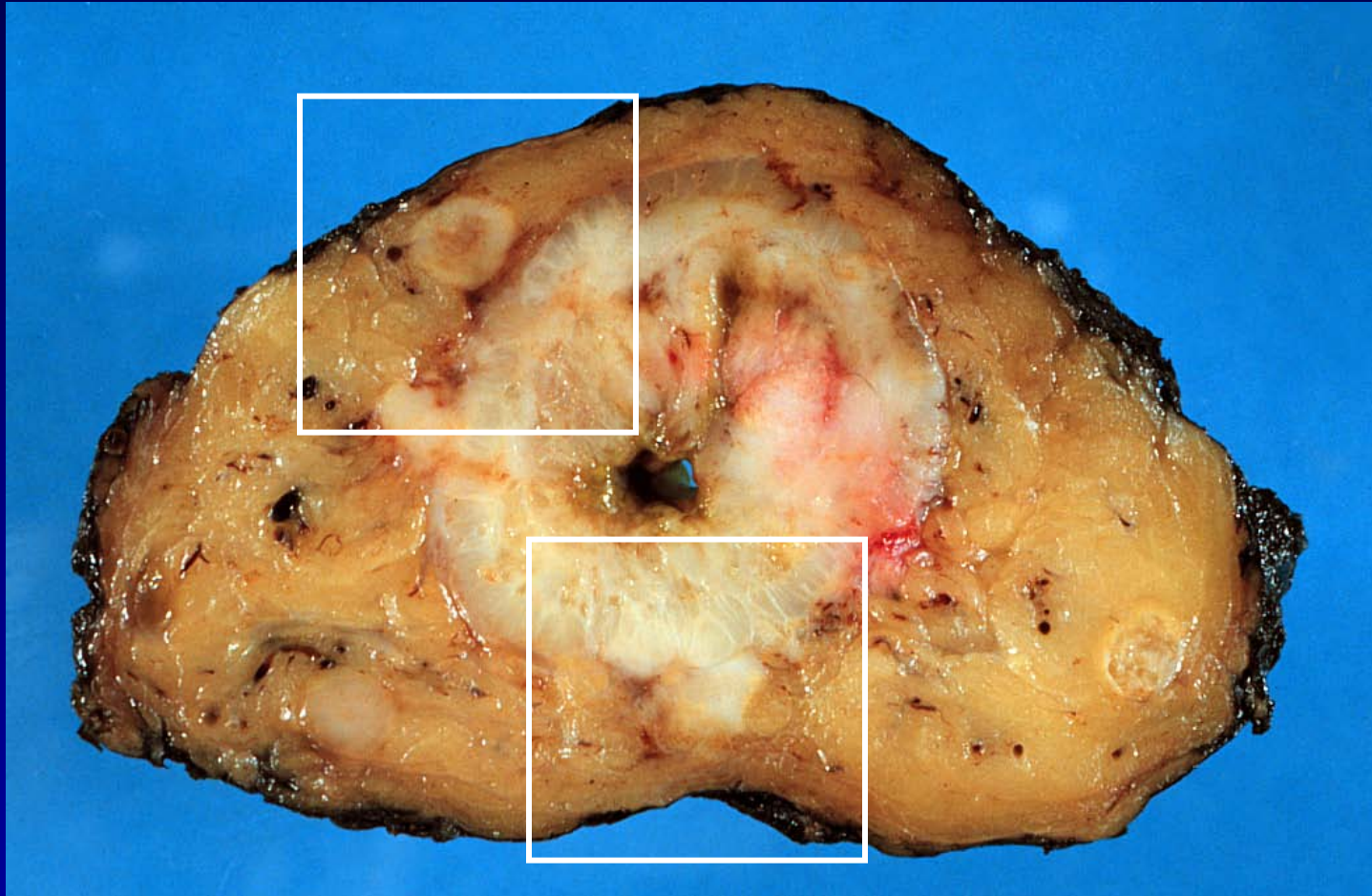
Examen anatomo-pathologique :

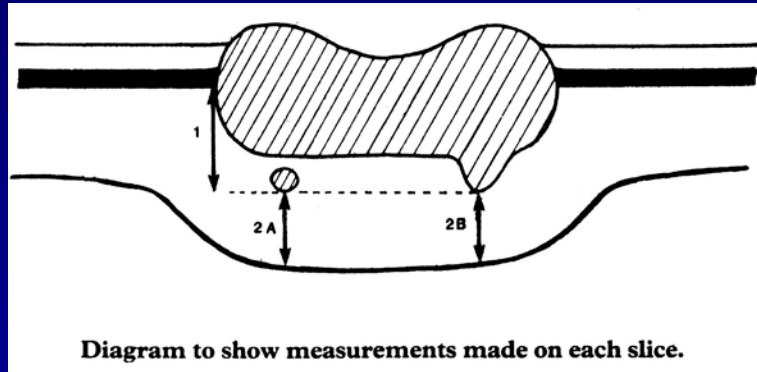
- technique de Quircke
- encre de Chine
- marge sécurité latérale ≥ 2 mm



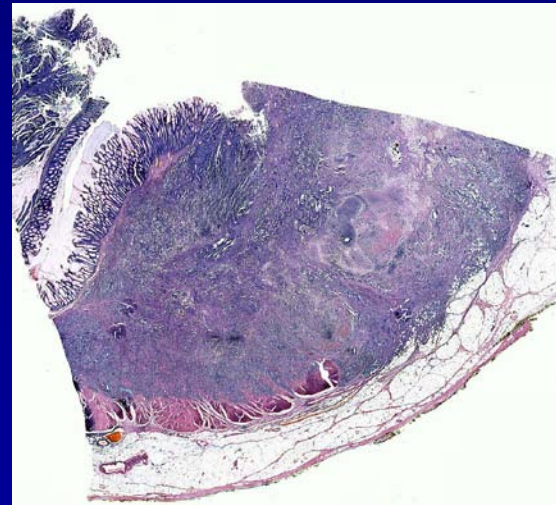
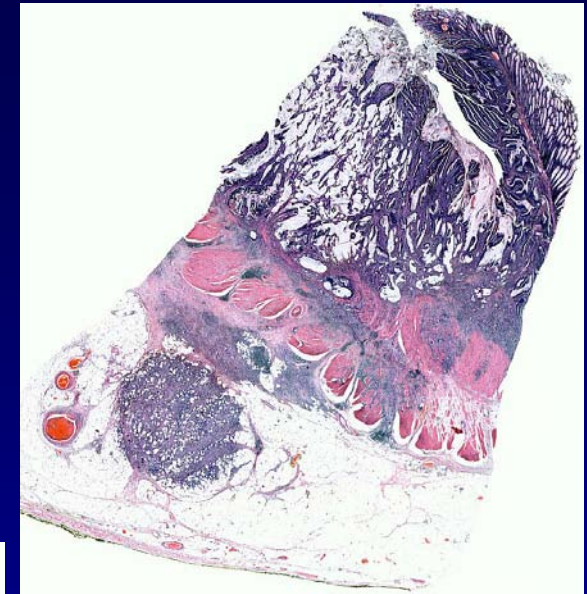
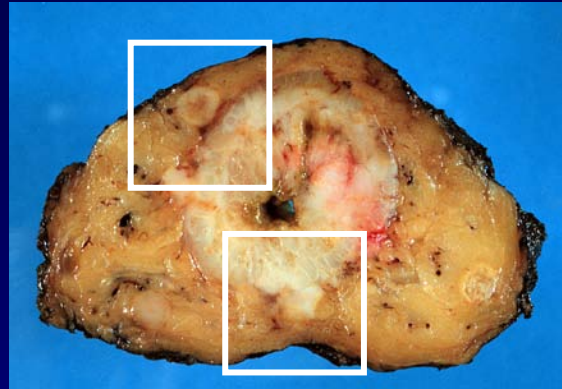






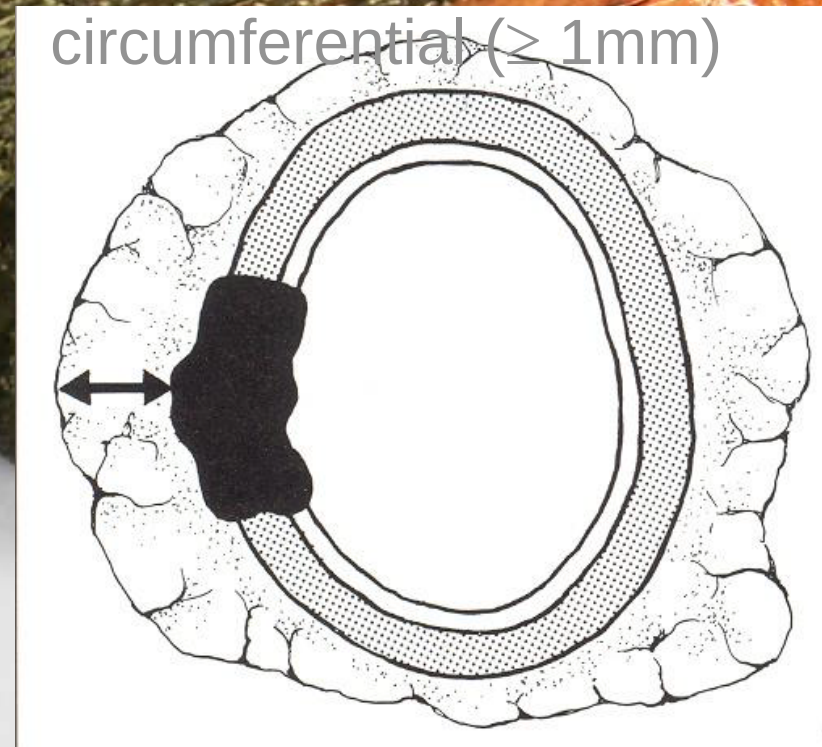
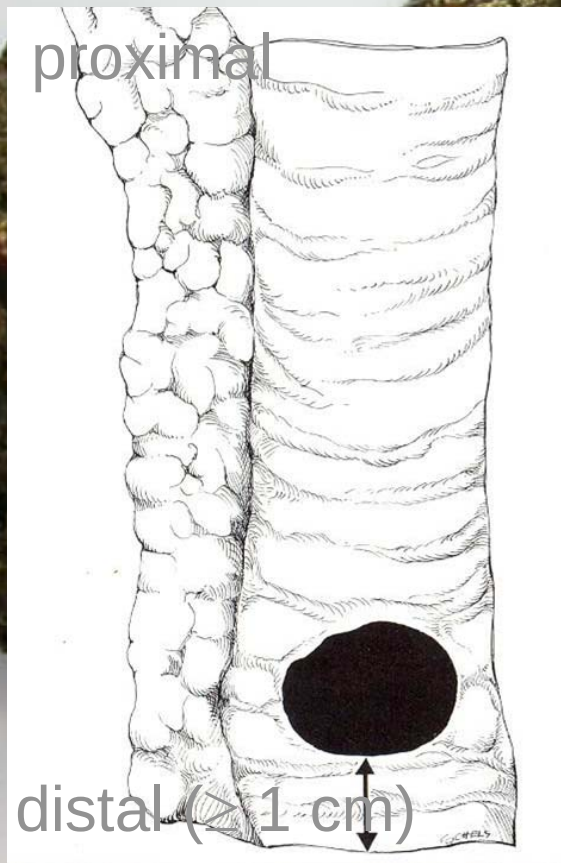


Quirke et al. Lancet 1986
Int J Colon Dis 1988



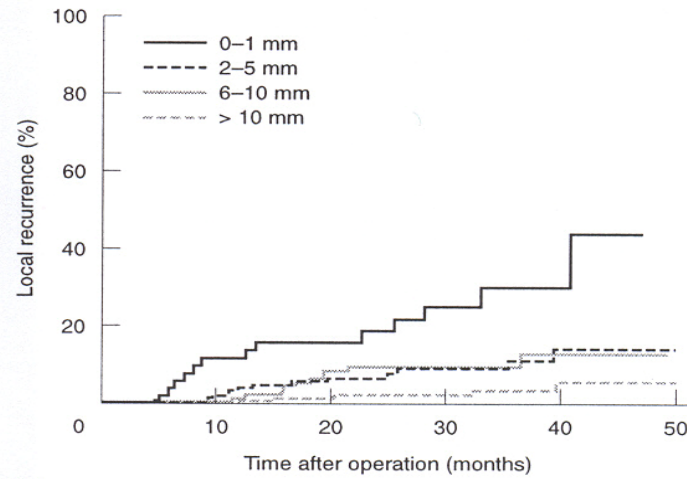
PROCARE

Margins to be controlled by pathologist



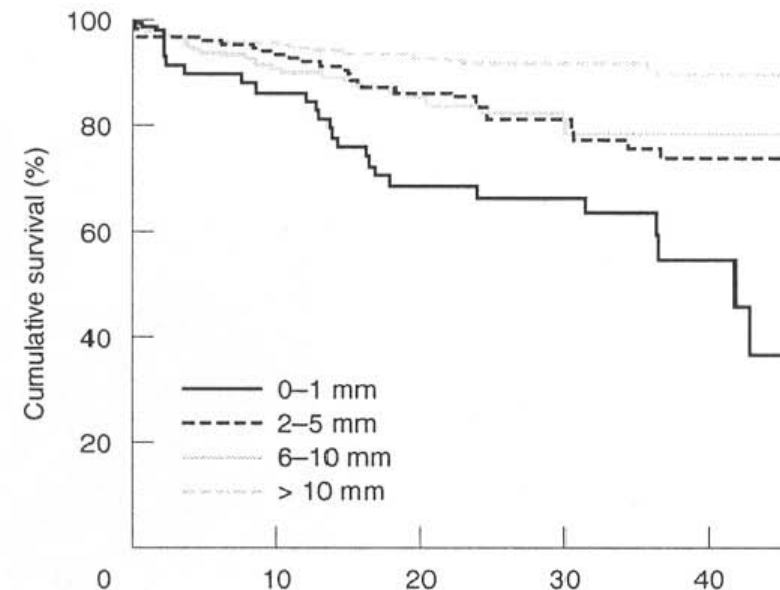
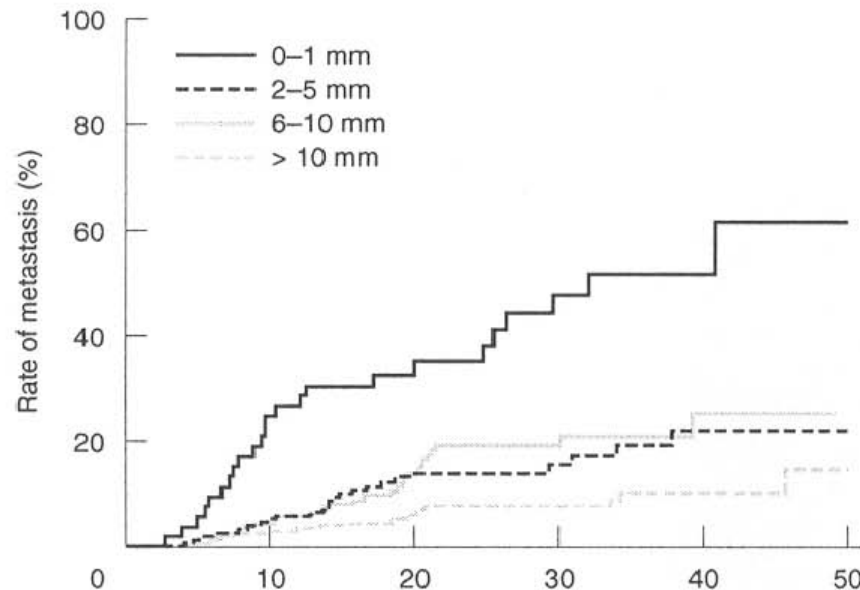
PROCARE

**pCRM =
independent
prognostic factor**



No. at risk						
0-1 mm	65	51	41	29	14	7
2-5 mm	170	152	107	64	34	7
6-10 mm	168	157	110	73	35	20
> 10 mm	283	271	204	136	70	23

Fig. 3 Local recurrence (%) according to circumferential resection margin (Kaplan-Meier analysis)



PROCARE

O. Formation décentralisée

PROCARE

Formation continue décentralisée

- Anatomopathologie
- Chirurgie
- Radiologie
- Radiothérapie
- ...

PROCARE

Formation « décentralisée » en chirurgie

- Formation de « **moniteurs** » ou d'« **entraîneurs** »
- Formation . décentralisée
 - . side-by-side
 - . sur base volontaire

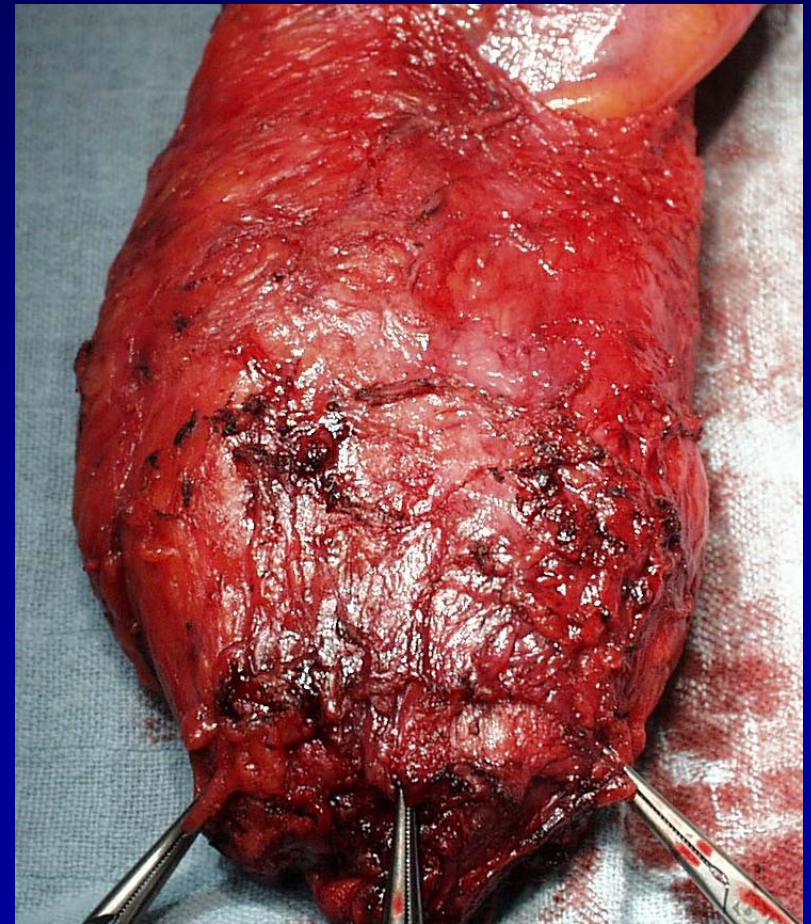
Original article

Impact of the introduction and training of total mesorectal excision on recurrence and survival in rectal cancer in The Netherlands

E. Kapiteijn, H. Putter*, C. J. H. van de Velde and cooperative investigators of the Dutch ColoRectal Cancer Group

In each participating hospital the first five TMEs were supervised by an instructor surgeon

The DUTCH model



PROCARE

Candidate trainers

CANDIDATE TRAINER

TRAINER

BELGIAN CANCER REGISTRY

Anonymization

Collection of material (pathology)

Pathology report

BSCRS

Nomination by President

PATHOLOGY REVIEW BOARD

Photographs of TME specimen

Anterior, posterior, slices

Micro slices (TN, CRM)

Review conclusion

BSCRS committee

Review CRF

Pathology review

P/F conclusion

PROCARE

CANDIDATE TRAINERS - BSCRS criteria

- Regular or mildly irregular TME specimen
Macroscopic photographs, (microscopic review)
- Six out of 10 consecutive cases
- Maximum 15 cases
- « Mooving window »

PPPFPP	FFP	FFFPPF
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PROCARE

Procare trainers

	No candidate trainers	Trainers
Dutch	65	15
French	28	6
	93	21

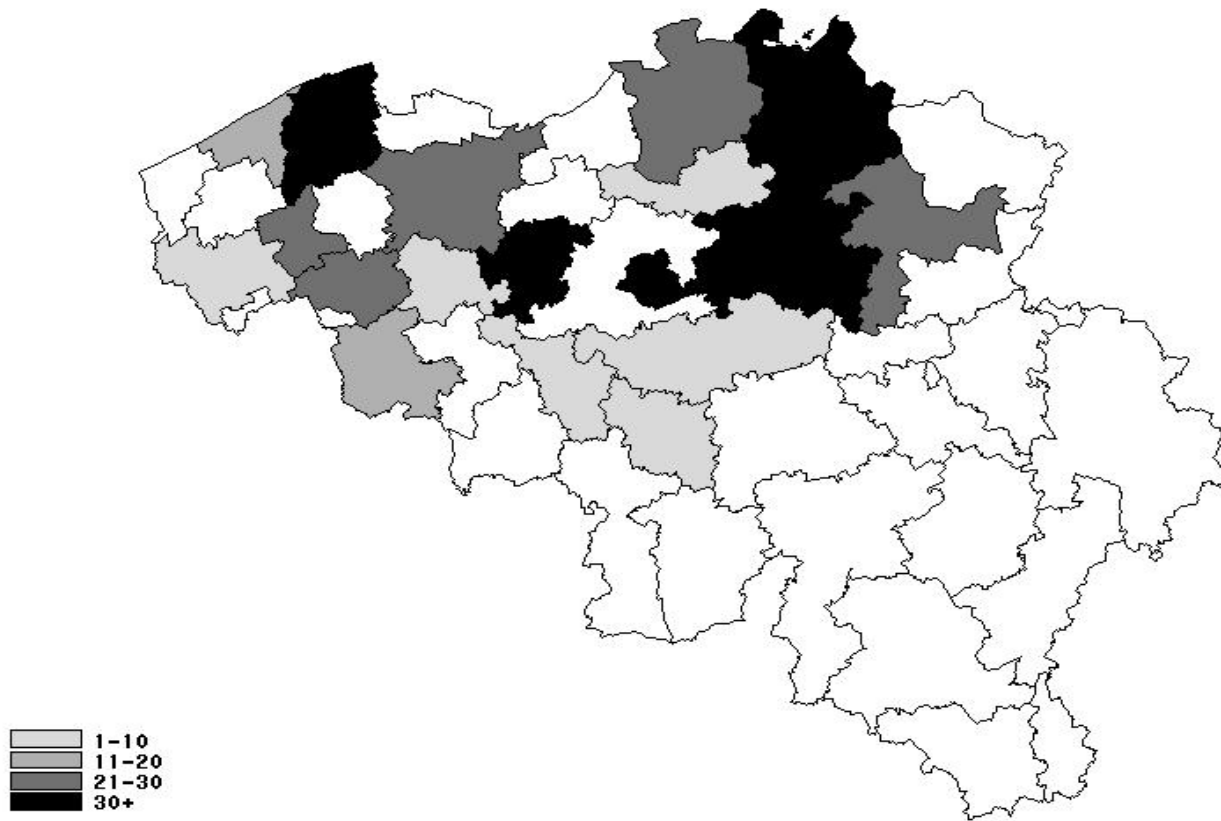
PROCARE

**P. Premières évaluations de
l'enregistrement**

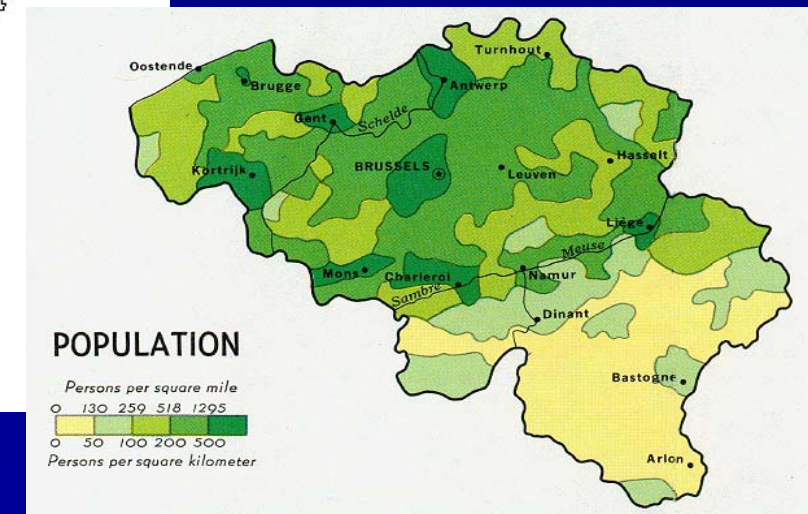
PROCARE

Registration: status 05-01-2007

Procure registrations in Belgium by residence hospital, 01/01/2006—09/01/2007 (N= 425)

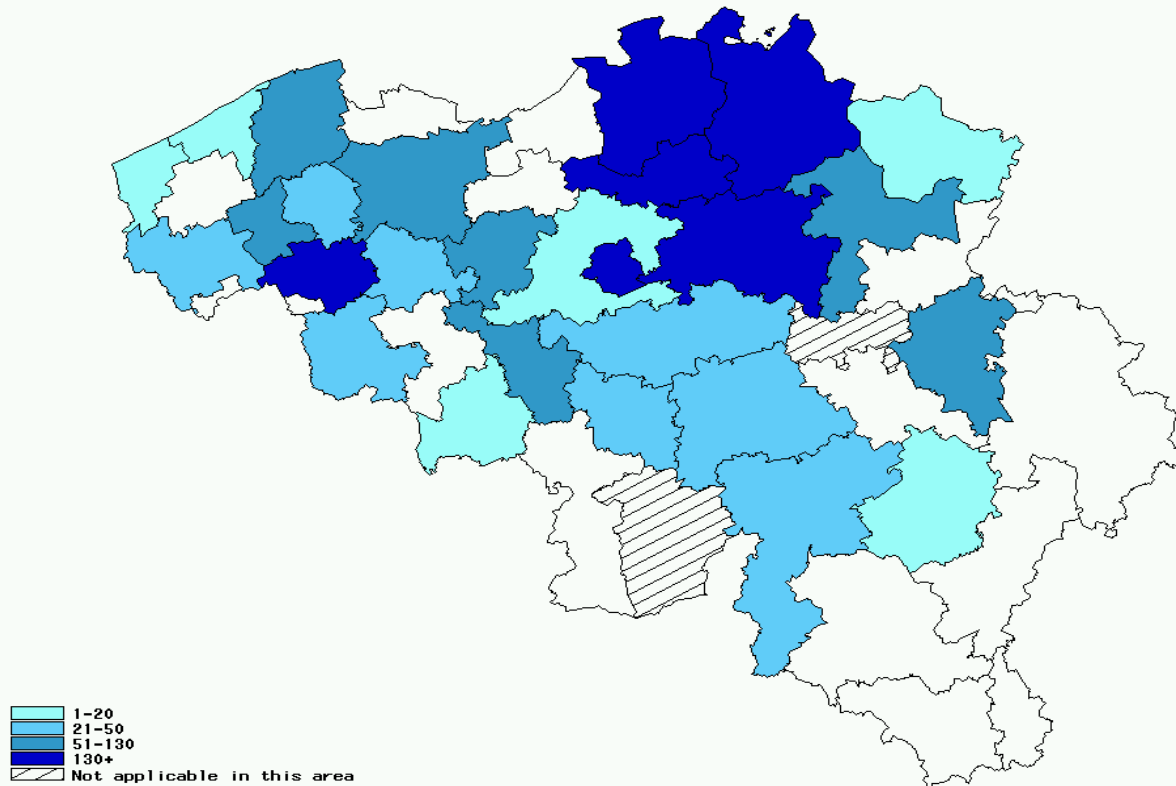


© Procure



PROCARE

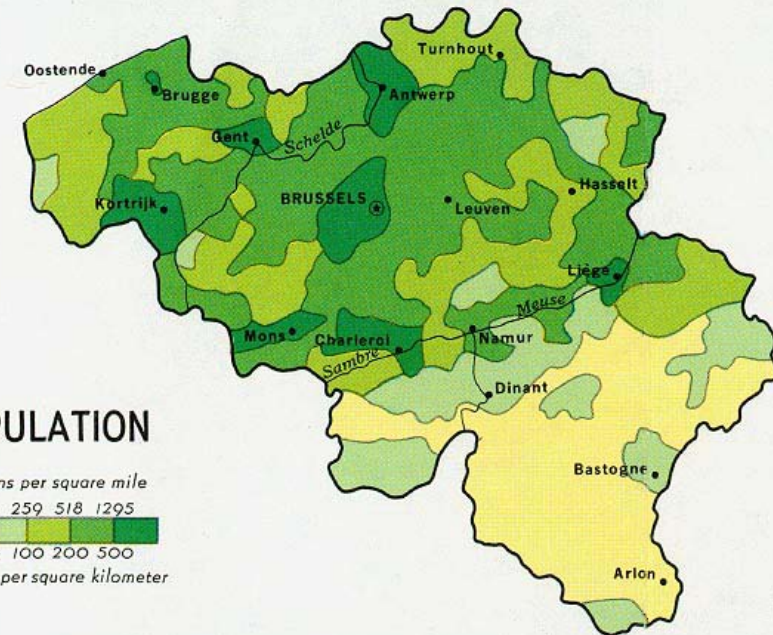
Procure registrations in Belgium by residence hospital, by district, status on 25/03/2009 (N= 2186)



© Procure

POPULATION

Persons per square mile
 0 130 259 518 1295
 0 50 100 200 500
 Persons per square kilometer



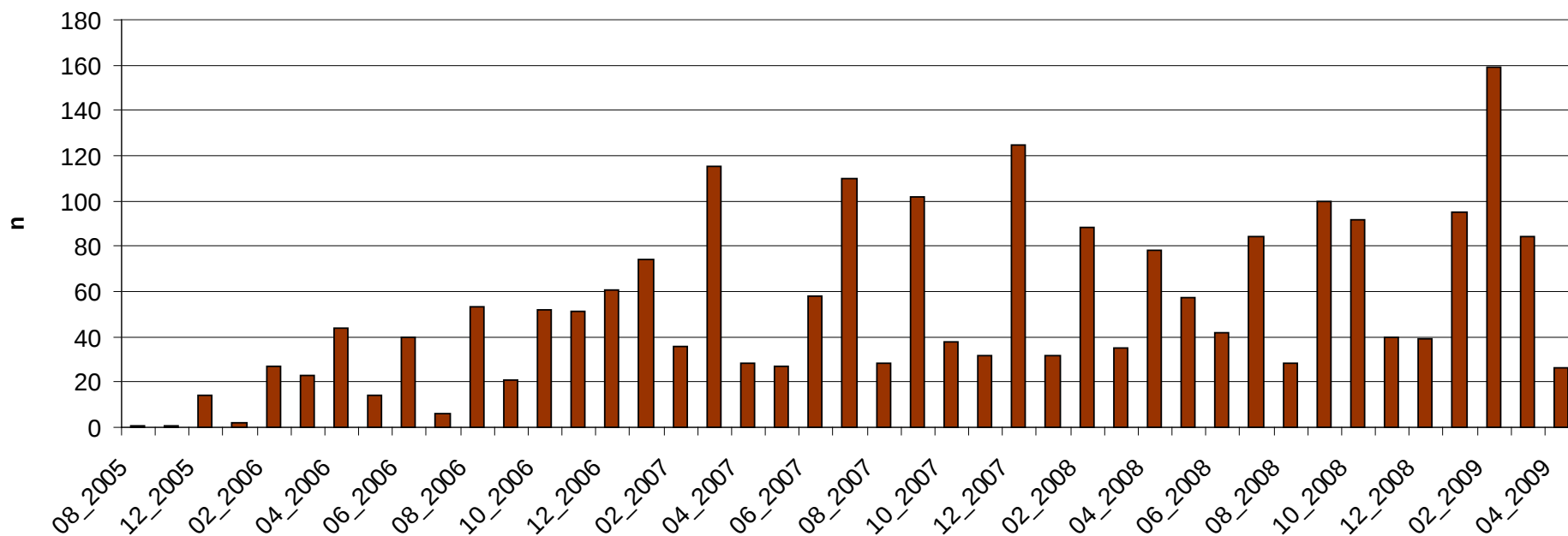
PROCARE

Procure registrations

	Hospitals	Surgeons	Cases
Dutch	49	87	2333
French	21	50	
	70	137	

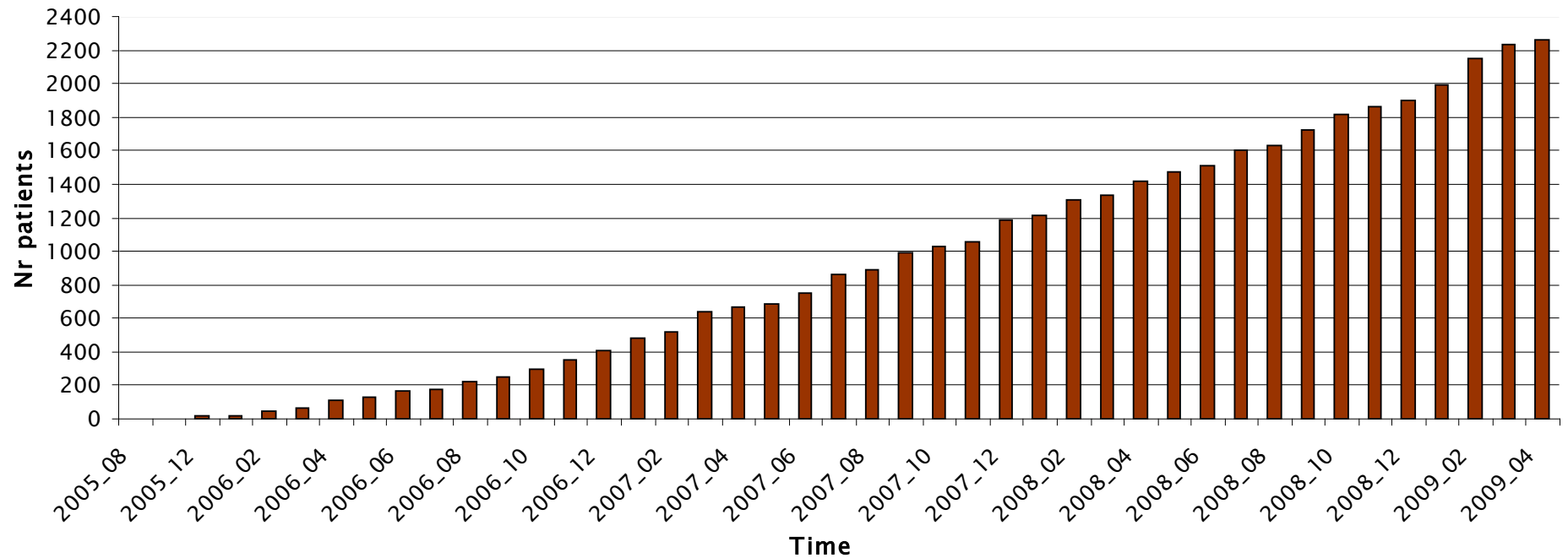
PROCARE

Procare registrations by month



PROCARE

PROCARE registrations



PROCARE

PROCARE

**Q. Premières analyses des
indicateurs de qualité**

PROCARE

	PROCARE		PROCARE		
	N	%	p25	median	p75
Registration					
Number of patients registered	1249		8,5	14	31,5
Part 1: Quality of care indicators					
A. Quality indicators related to pretreatment diagnosis and staging					
Documented distance from anal verge	1168	96,8	99	100	100
CEA before any treatment	1057	84,6	77,75	90	100
Complete large-bowel imaging	947	98,4	100	100	100
TRUS + CT and/or MRI	416	33,3	7	21,9	39,25
Reported cCRM in cStage II-III	211	27,8	0	9,1	20
Median time first contact to treatment (days)					
global	24		19,5	25	31
first treatment: surgery	20		15	21	29,5
first treatment: (C)RT	26		21	26	37,5
first treatment: palliative C(R)T	22		15	22,5	36,5

PROCARE

	PROCARE		p25	PROCARE median	p75
Registration	N	%			
Number of patients registered	1249		8,5	14	31,5
Part 1: Quality of care indicators					
B. Quality indicators related to neoadjuvant treatment					
Short course RT in cStage II-III	65	9,2	0	0	7,1
Long course (C)RT in cStage II-III	470	66,4	50	70	83,3
Long course (C)RT in cStage II-III within (planned) timing	447	95,1	100	100	100
Surgery 6 to 8 weeks after (C)RT in cStage II-III	273	61,9	40	50	71,4

PROCARE

	PROCARE		p25	PROCARE median	p75
	N	%			
Registration					
Number of patients registered	1249		8,5	14	31,5
Part 1: Quality of care indicators					
C. Quality indicators related to surgery					
R0/R1/R2 resection					
R0 resection	791	76,1	67,9	79,3	85,7
R1 resection	93	9	0	6,7	13,7
R2 resection	155	14,9	4,5	13,5	20
Intra-operative rectal perforation	87	7,9	0	5,3	14,3
APR and Hartmann's procedure	278	24,4	16	25	38,5
Major leakage of the anastomosis	42	5,1	0	0	8,6
In hospital mortality	35	2,9	0	0	6,3

PROCARE

	PROCARE			PROCARE	
	N	%	p25	median	p75
Registration					
Number of patients registered	1249		8,5	14	31,5
Part 1: Quality of care indicators					
D. Quality indicators related to histopathologic examination					
Use of report sheet (since 1/2007)	394	92,7	93,8	100	100
Quality of TME (since 1/2007)	145	43	0	43,7	74,6
Distal tumour-free margin mentioned	816	96,2	96	100	100
Median number of nodes examined					
no or short course neoadj RT	13		10	12	15
long course neoadj RT	10		7	9	13
other course neoadj RT	8		4,75	10	14
course type missing	12		6	9,8	16
(y)pCRM mentioned	799	74,2	57,1	75,7	87

PROCARE

**R. Premières évaluations de
la chirurgie**

PROCARE

Candidate trainers

CASES n=362

- **40 candidates-trainers**
- **Not evaluable n=96 (27%)**
 - insufficient material for review
 - partial mesorectal excision
- **266 TME** specimens graded by the central review board

PROCARE

Candidate trainers

CASES n=266

TME quality	N	%
Mesorectal plane	56	21
Intramesorectal plane	124	47
Muscular plane	86	32

PROCARE

Candidate trainers

UNIVARIATE ANALYSIS	N	OR (95%CI)	p
1. Surgeon	266		0,01
2. Surgical Load	265		0,5
3. Age	264		0,91
4. BMI	221		0,0026
5. Gender <i>male vs female</i>	266	0,43 (0,23;0,78)	0,004
6. Approach <i>laparotomy vs laparoscopy and conversion</i>	266	0,43 (0,20;0,91)	0,027
7. Technique Resection <i>APR vs SSO</i>	266	3,65 (1,72;7,77)	0,0006 0,0014
8. Lower limit <i>low vs high</i>	246	1,12 (1,02;1,25)	0,009
9. Tumor size (longitudinal)	160		0,17
10. Circumferential localisation <i>Number of Quadrants involved</i>	221		0,4
<i>Ventral Localisation</i>	215		0,58
<i>Circular</i>	215		0,44
11. cT stage	257		0,1

PROCARE

Candidate trainers

MULTIVARIATE ANALYSIS	OR (95%CI)	p
1. Surgeon		0,04
2. BMI		0,1
3. Gender <i>male vs female</i>	0,467 (0,229;0,950)	0,029
4. Approach <i>laparotomy vs laparoscopy and conversion</i>	0,400 (0,163;0,982)	0,038
5. Technique Resection <i>APR vs SSO</i>	3,135 (1,163;8,403)	0,028
6. Lower limit INTG <i>low vs high</i>		0,23
7. cN stage		0,053

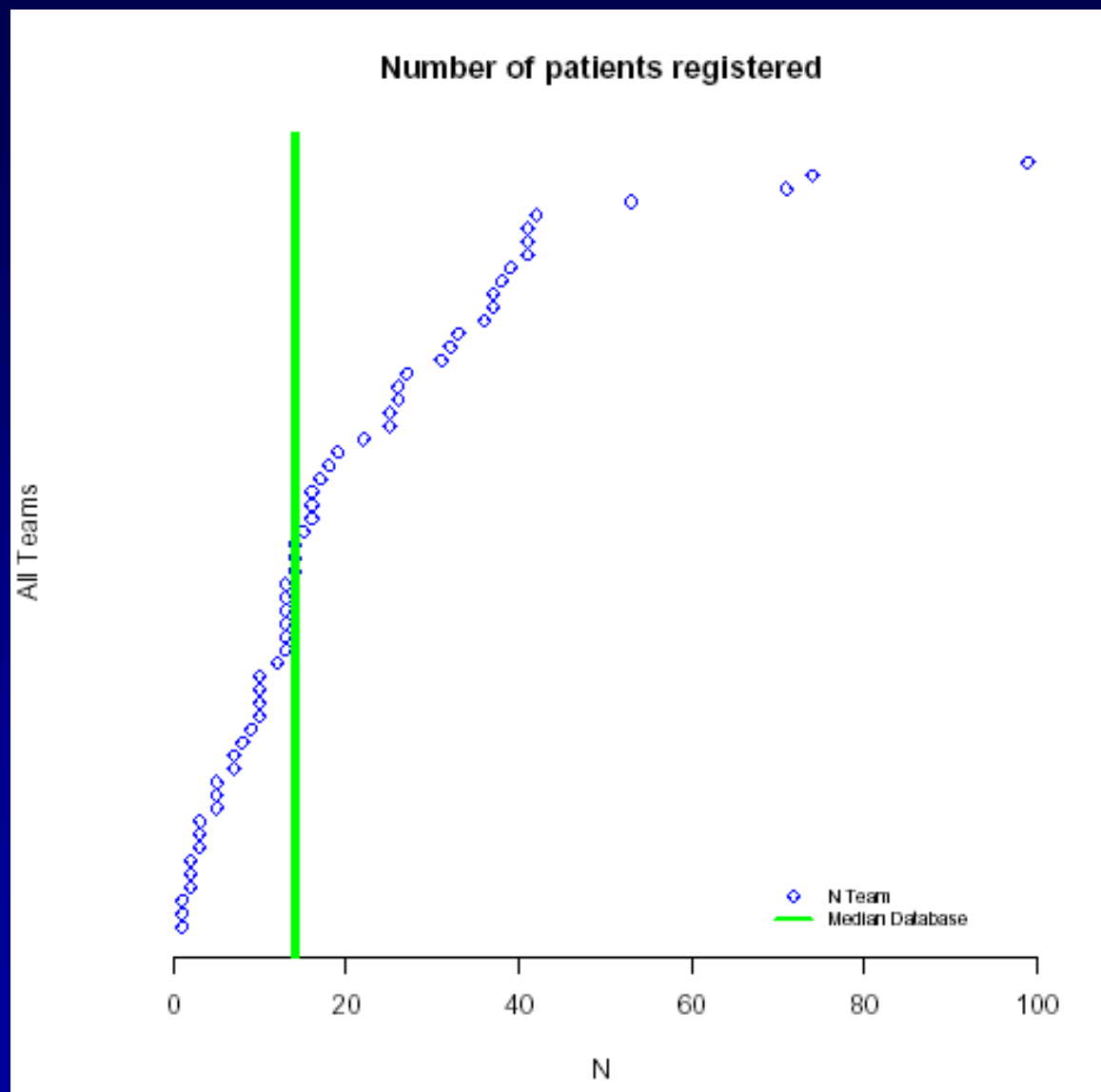
PROCARE

**S. Feed-back vers tous les centres.
Information continue**

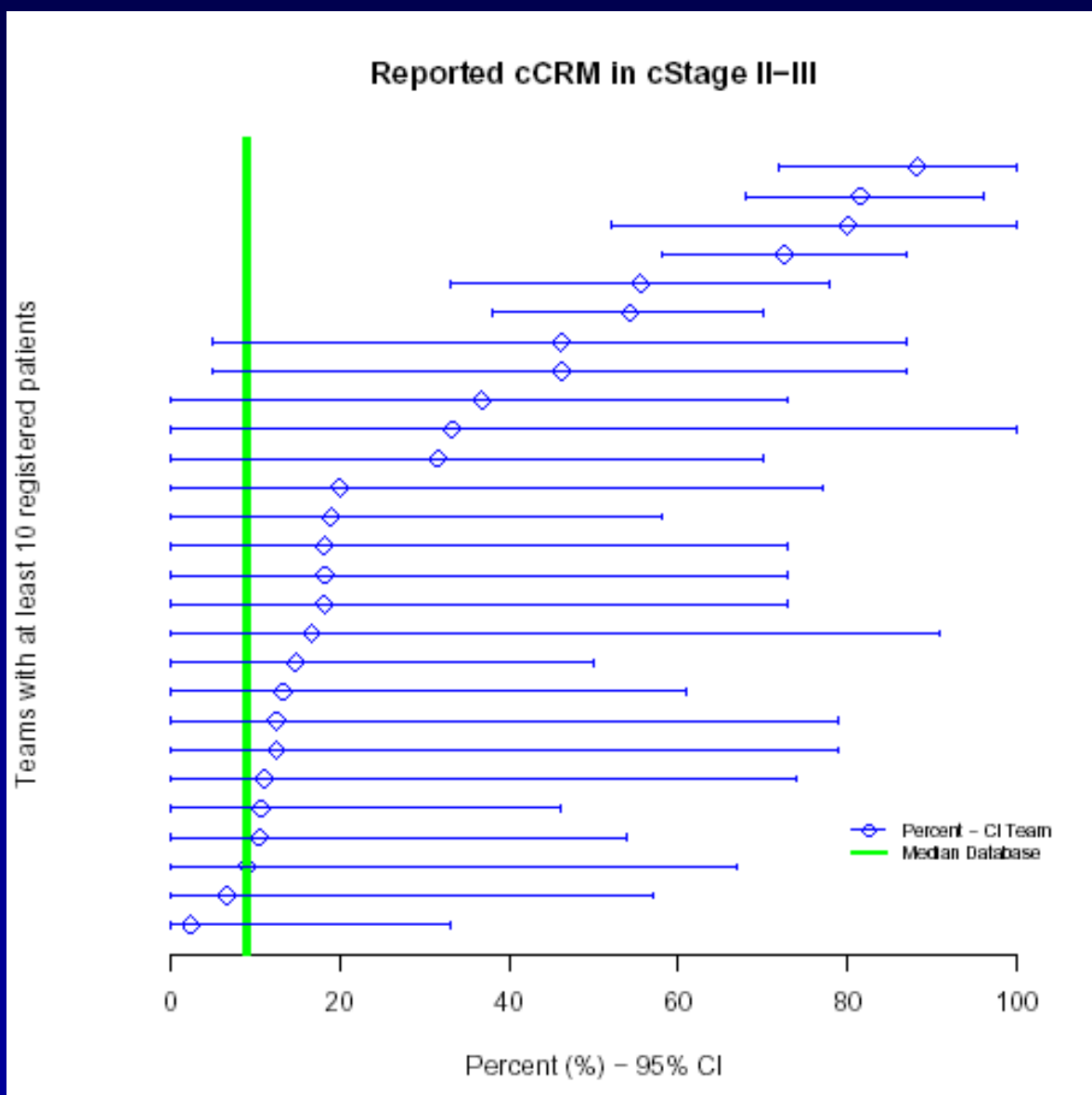
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1. **Feed-back** vers chaque centre
2. La « **Newsletter** »

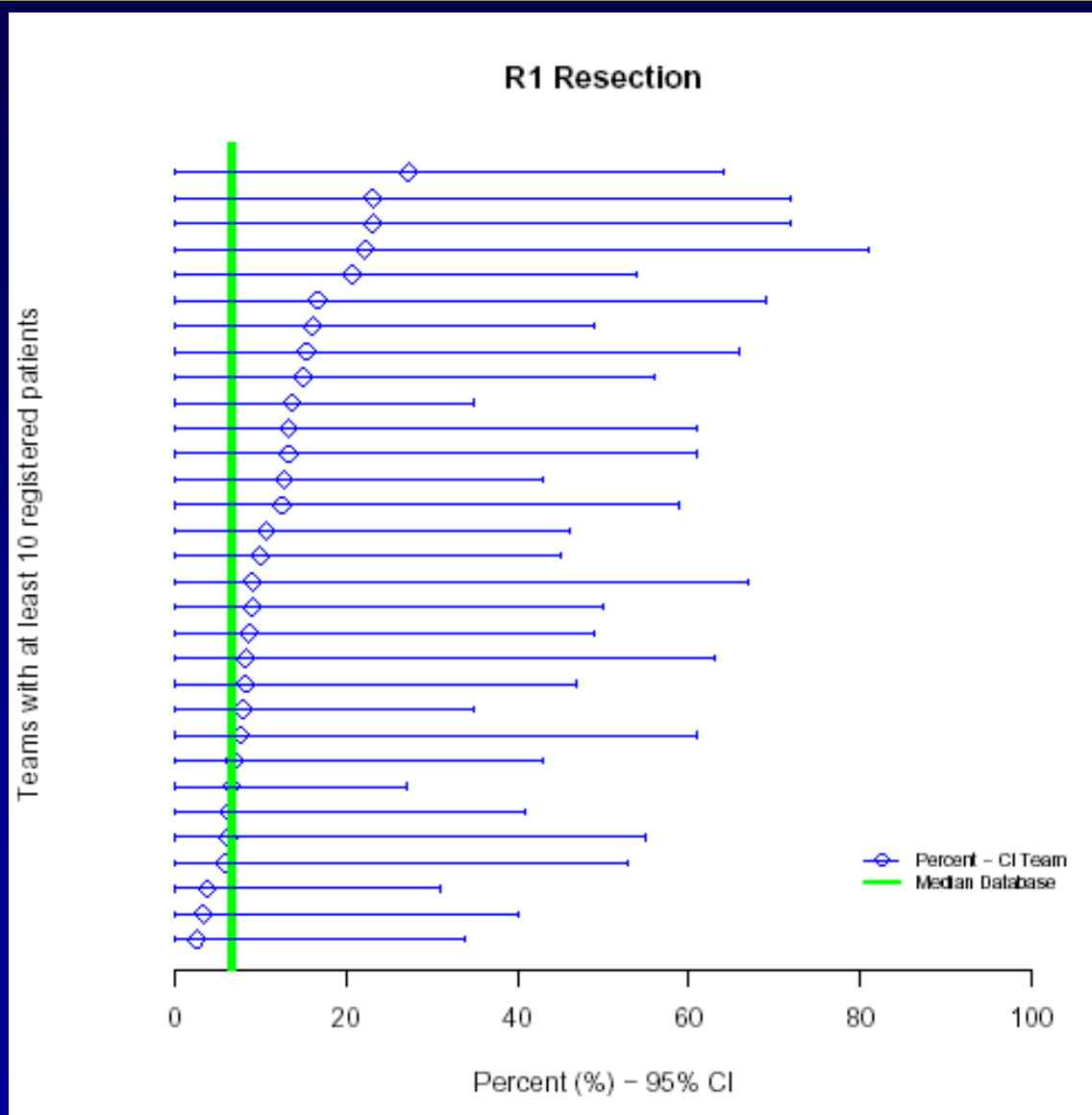
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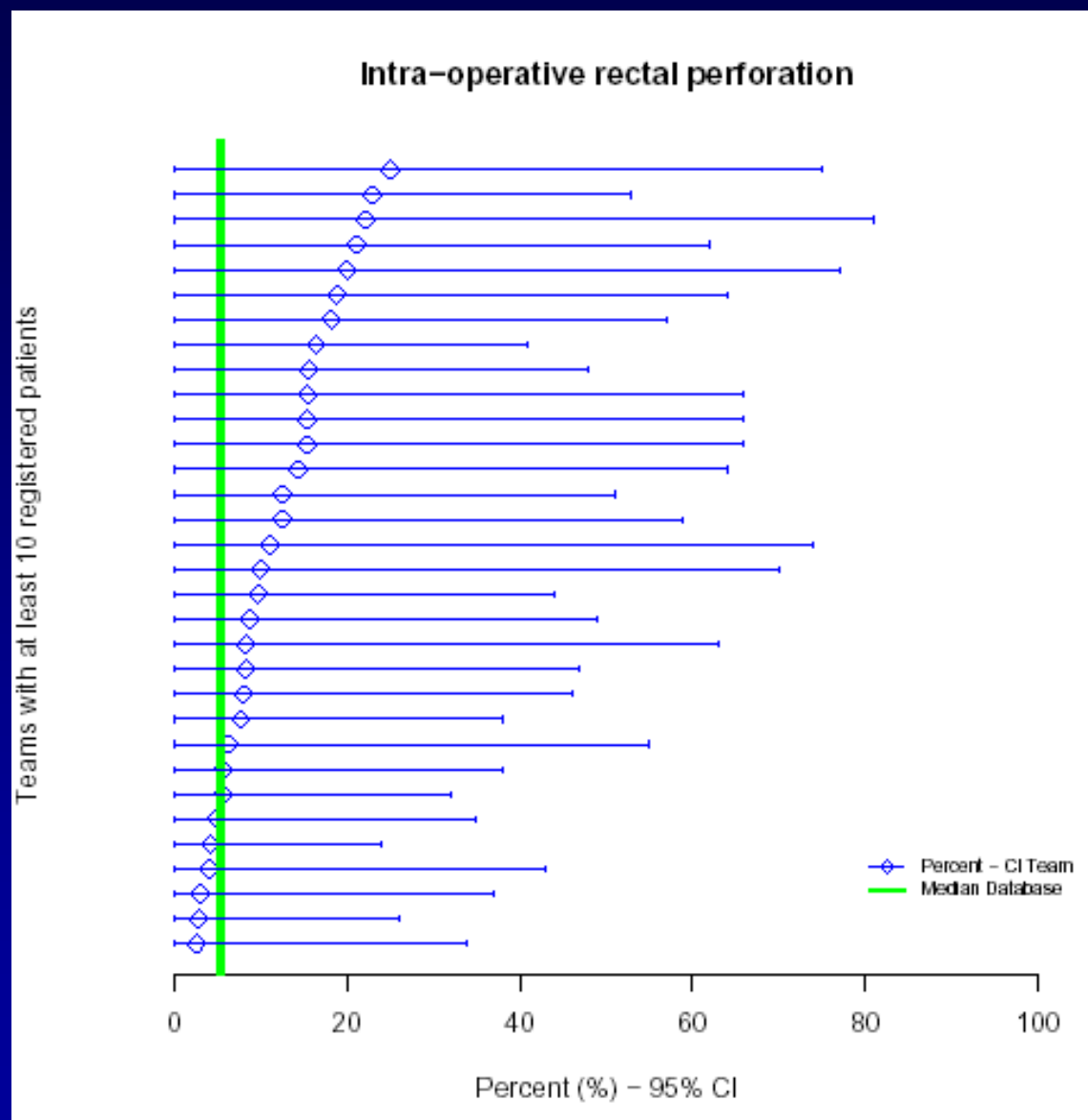
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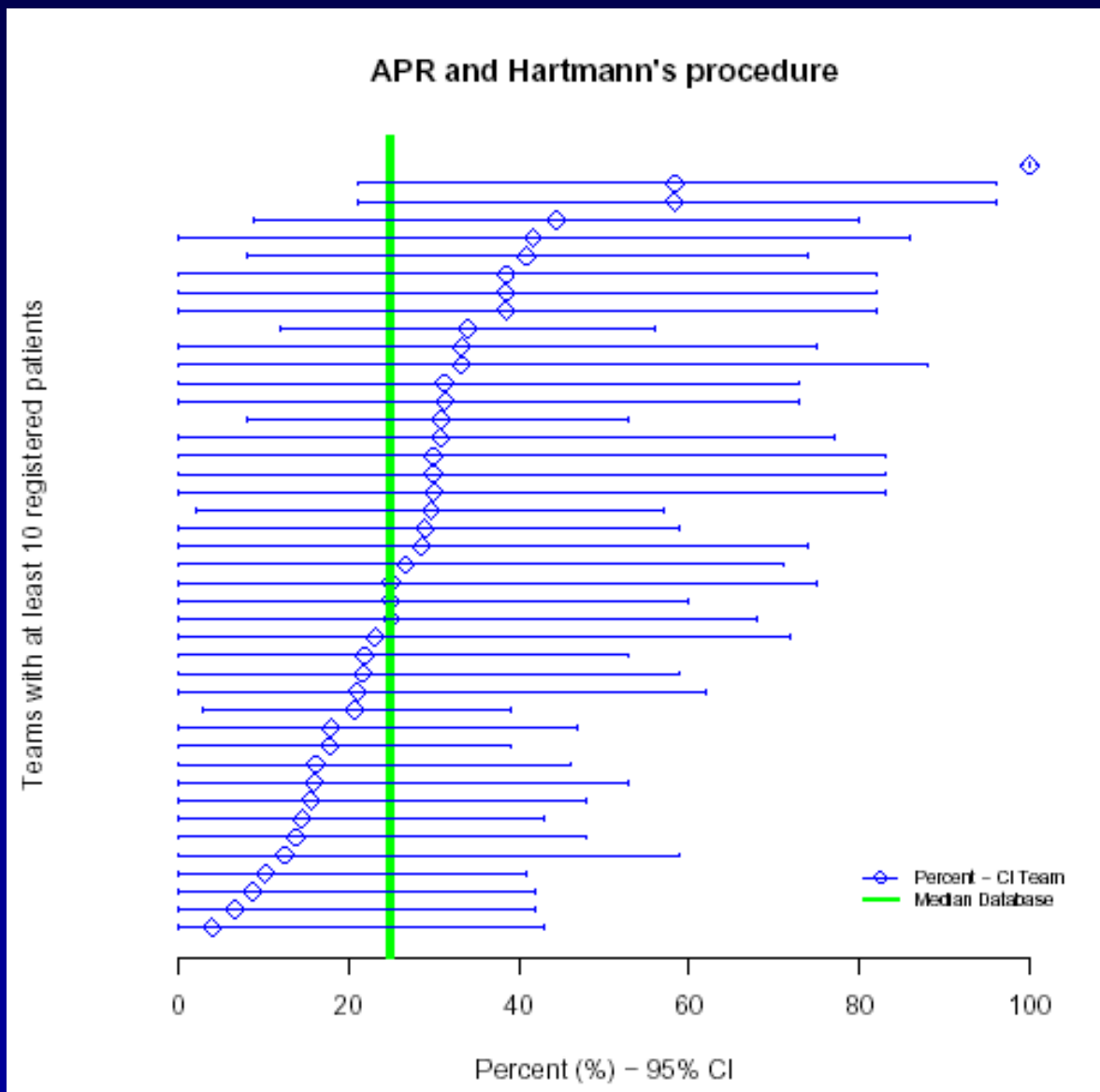
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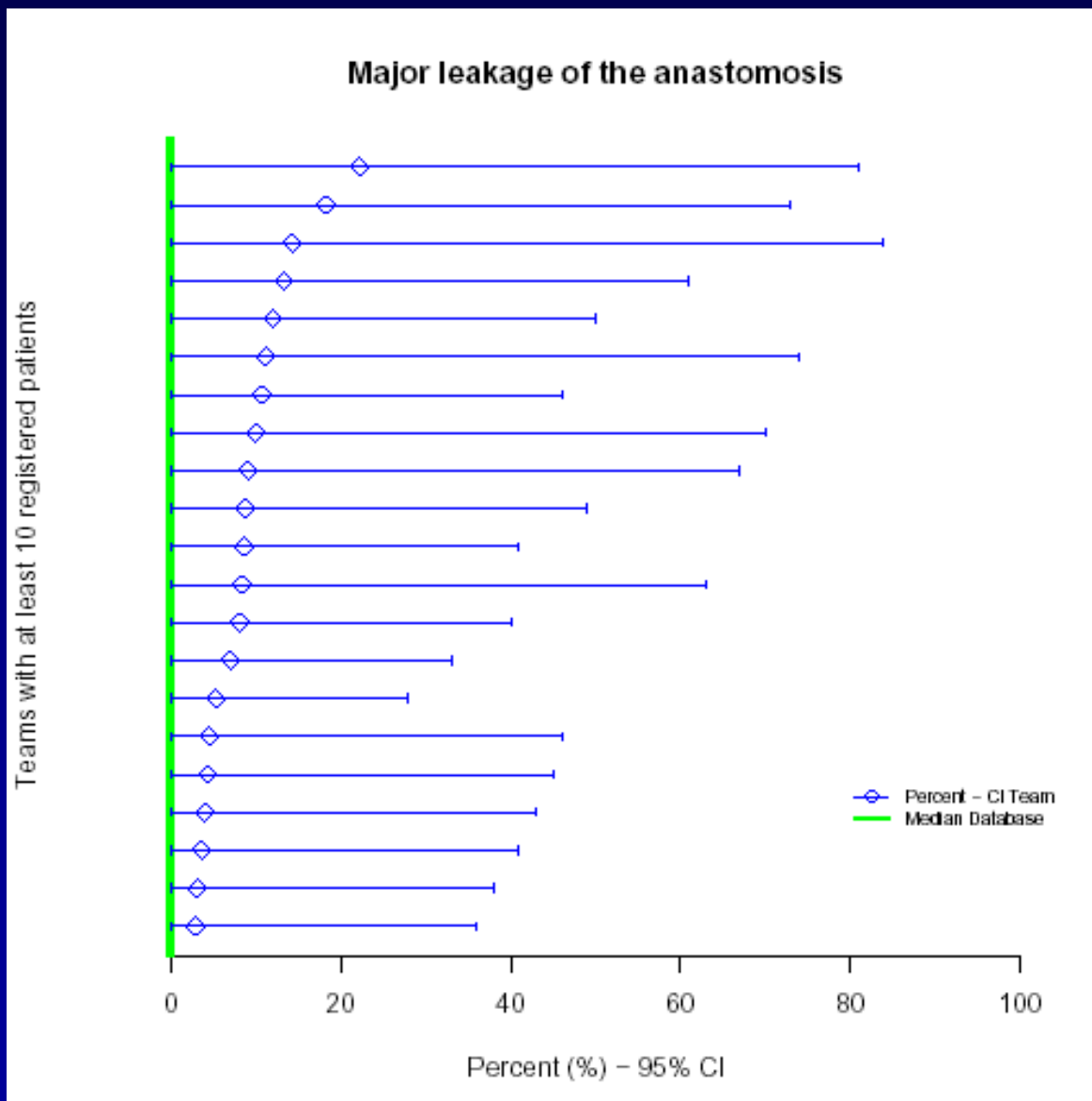
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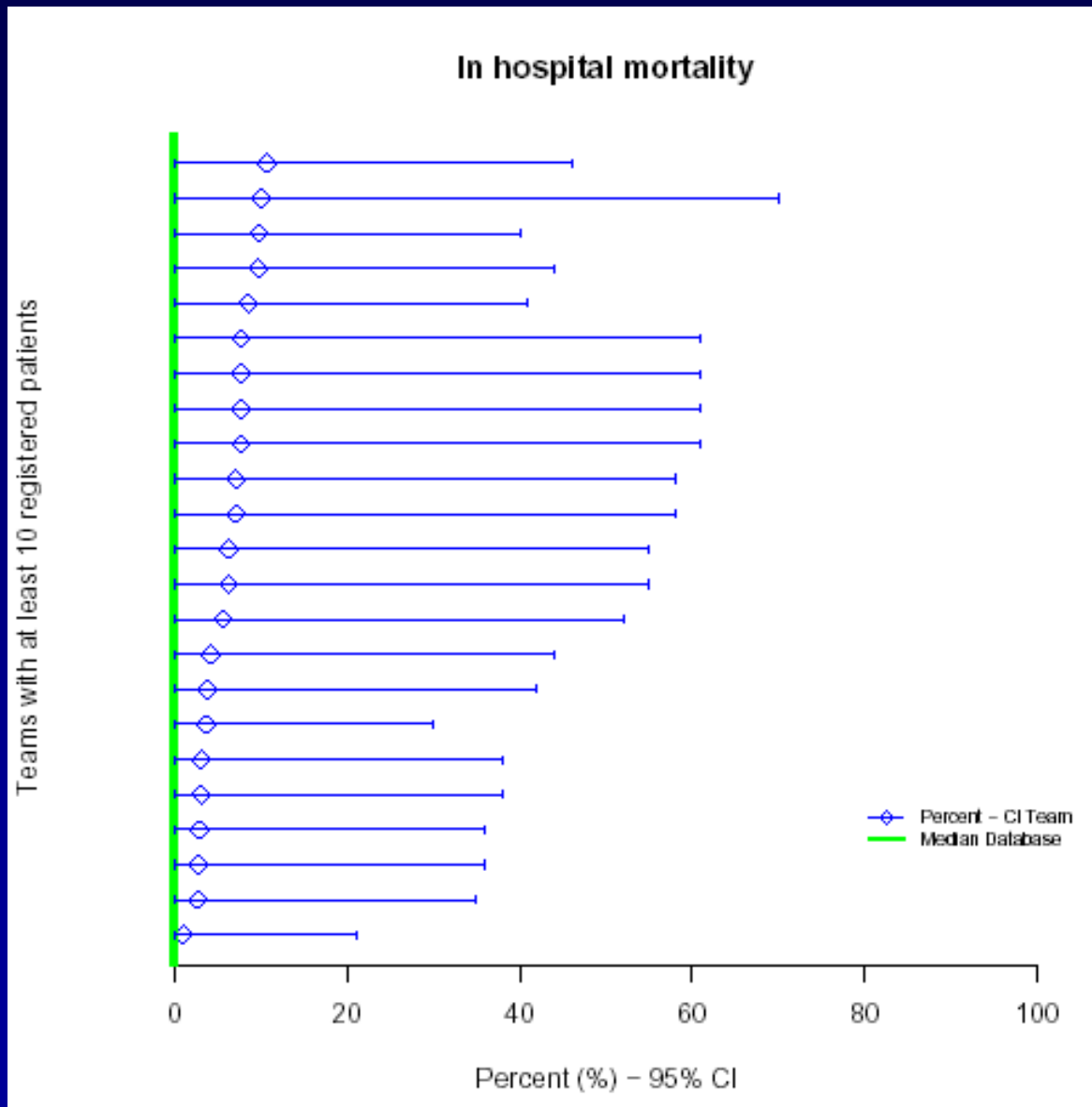
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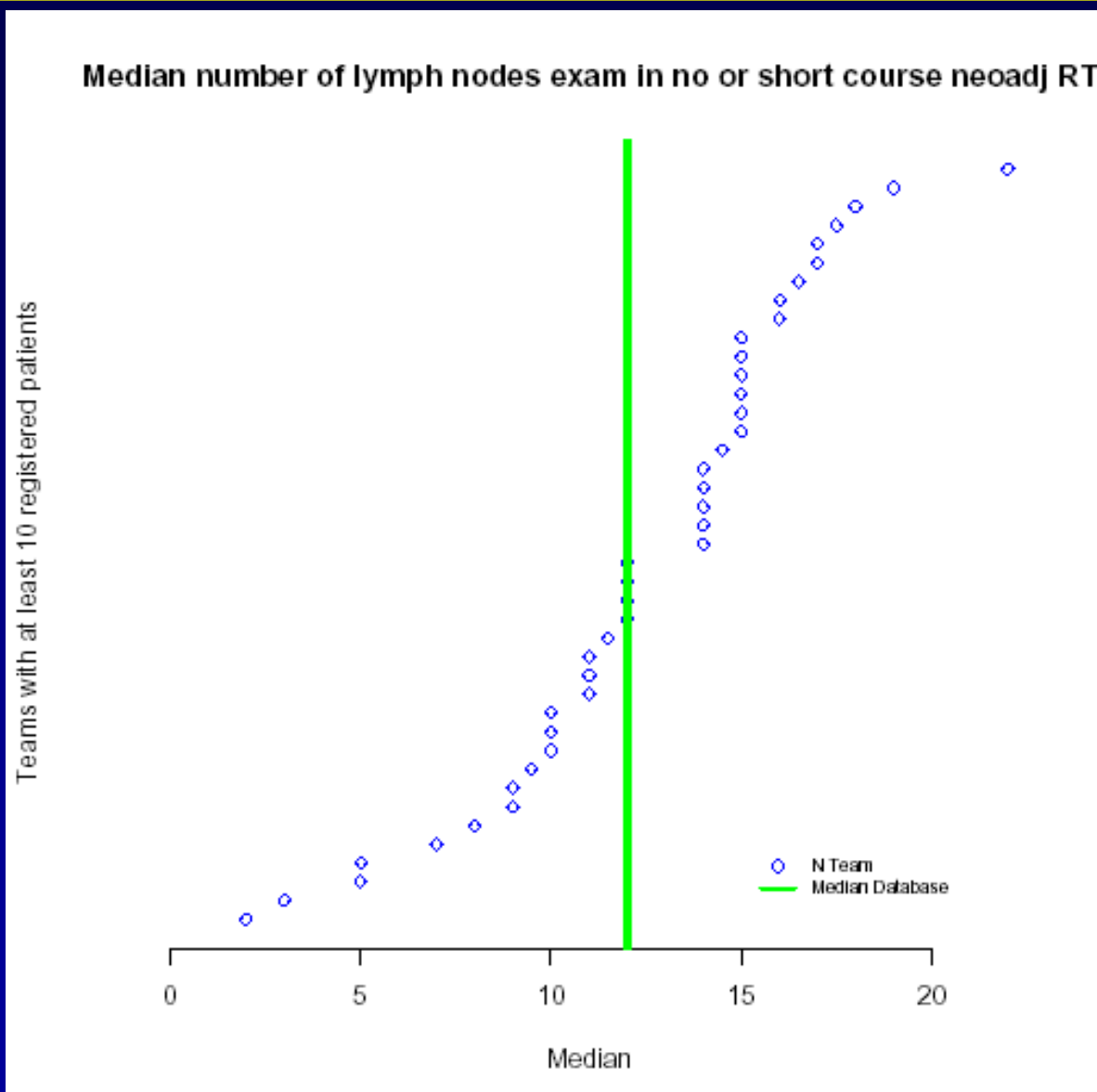
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PROCARE



PROCARE



PROCARE

T. Réflexions pour le futur



P R O C A R E

PROJECT ON CANCER OF THE RECTUM

**Reflections on the first feedback
and how to move on**

PROCARE

U. Conclusion

PROCARE

Conclusion

Le projet PROCARE est un projet national original par la prise en charge par les médecins eux-mêmes de leur propre évaluation, de la comparaison au niveau national et de l'amélioration de la **qualité des soins** qu'ils offrent à leurs patients atteints du **cancer du rectum**.

**Je vous remercie pour
votre attention ...**

PRO CARE

PROJECT ON CANCER OF THE RECTUM

