

	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
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		
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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
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

Part 2: General data	PROCARE			PROCARE	
	N	%	p25	median	p75
A. General data					
Male/female ratio					
Number of male patients	748	60			
Number of female patients	501	40			
Male/Female ratio	1,49		1	1,4	2,25
Age					
Mean	67		65,5	67	70
Median	68		66	68	71,25
ASA					
ASA 1	335	31,5	15,4	30,8	55,3
ASA 2	473	44,5	25	35,7	54,5
ASA 3	240	22,6	9,1	20	33,3
ASA > 3	15	1,4	0	0	0
Level of tumour					
High	218	18,1	0	14,3	23
Mid	461	38,3	32	40	50
Low	524	43,6	35,7	42,9	55,6
B. Pretreatment data					
Imaging					
Use of TRUS (any stage)	572	45,8	16,8	40	66,7
Use of CT pelvis (any stage)	752	60,2	27	59,6	88,35
Use of MRI pelvis (any stage)	452	36,2	0	18,5	50
Use of TRUS in cT1/cT2	122	48,8	0	53,8	100
Use of MRI in cT3/cT4	357	40,5	0	21,1	58,3
cStage					
cStage 0	1	0,1	0	0	0
cStage I	152	13,5	4,8	9,1	20
cStage II	223	19,8	9,8	21,1	30
cStage III	541	48	31	46,2	60
cStage IV	177	15,7	5,9	13,8	20,7
cStage X	33	2,9	0	0	4,2

Accuracy of cT staging if no or short radiotherapy

	PROCARE			
	(y)pT1	(y)pT2	(y)pT3	(y)pT4
cTis	1	0	0	0
cT1	17	5	3	2
cT2	16	60	50	3
cT3	10	40	168	18
cT4	0	0	10	11
cTx	3	3	11	3
cT missing	7	5	27	6

Accuracy of cN staging if no or short radiotherapy

	PROCARE		
	pN0	pN+	pNx
cN0	164	68	9
cN+	60	108	3
cNx	11	14	1
cN missing	29	9	3

	PROCARE		PROCARE		
	N	%	p25	median	p75
C. Neoadjuvant treatment					
Neoadjuvant treatment in cStage II-III					
level of tumour = high (> 10 cm)	45	40,9	0	50	75
level of tumour = mid (> 5 - 10 cm)	216	79,7	66,7	86,7	100
level of tumour = low (≤ 5 cm)	309	89	80	100	100
Neoadjuvant treatment if cCRM ≤ 2 mm on MRI/CT	112	87	67	100	100
long course	96	74			
short course	9	7			
course unknown	7	6			
No neoadjuvant treatment if cCRM ≤ 2 mm on MRI/CT	17	13			
Neoadjuvant treatment in cStage I	26	19,4	0	0	33
Interruption in neoadjuvant therapy					
short course RT	2	2,5	0	0	0
long course RT	28	5,6	0	0	0
D. Surgery					
1) LE/TEMS					
Global	16	1,3	0	0	0
For cT1N0M0	0	0	0	0	0
For cT2N0M0	0				
2) Radical resection					
Intraoperative break	64	6	0	3,5	10
3) Reconstruction					
APR/Hartmann					
Level of tumour = high (> 10 cm)	9	4,3	0	0	0
Level of tumour = mid (> 5 - 10 cm)	29	6,8	0	0	14,3
Level of tumour = low (≤ 5 cm)	229	47,7	40,2	57,8	80
Type of reconstruction after SSO					
Straight	247	41,1	13,3	40	88,5
Side-to-end	64	10,6	0	0	7,6
Coloplasty	20	3,3	0	0	0
Pouch	270	44,9	0	26,5	75
Stapled anastomosis at SSO for RC in lower third	167	67,1	50	92,3	100
Derivative stoma after SSO					
at PME	10	6,7	0	0	5
at TME	415	58,7	38,5	66,7	93,8

	PROCARE		PROCARE		
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E. Postoperative course					
Postoperative in hospital death	32	2,8	0	0	4,2
Median length of hospital stay	11		10	12	14
Clinical leaks after SSO	70	8	0	5,5	14
F. Pathology - radical resection					
TME good/moderate quality	291	92,1	90,45	100	100
Radical excision: (y)pCRM positive					
Global	117	10,3	0	8,3	15,4
Level of tumour = high (> 10 cm)	22	16,9	0	0	36,65
Level of tumour = mid (> 5 - 10 cm)	43	14,4	0	7,9	20
Level of tumour = low (≤ 5 cm)	51	14,4	0	0	25
(y)p distal margin positive	10	1,2	0	0	0
Mean tumour free distal margin (cm):					
Level of tumour = high (> 10 cm)	4,4		3,3	4	5,4
Level of tumour = mid (> 5 - 10 cm)	3,1		2,4	2,9	3,5
Level of tumour = low (≤ 5 cm)	1,9		1,3	1,6	2,3
(y)pT					
ypT0	73	6,9	0	3,4	10
ypTis	5	0,5	0	0	0
(y)pT1	82	7,8	0	3,5	12,5
(y)pT2	250	23,7	12,5	23,1	33,3
(y)pT3	569	53,9	41,5	55,6	69
(y)pT4	76	7,2	0	5,2	11,1
(y)pN					
(y)pN +	386	37,5	25	37,5	50
(y)pStage					
ypStage 0	40	4,4	0	0	6,5
(y)pStage I	234	25,5	11,1	20	37,9
(y)pStage II	244	26,6	17,4	25	37,5
(y)pStage III	248	27	13,3	24,3	35,3
(y)pStage IV	151	16,5	0	14,3	20

Part 3: MISSING data	PROCARE		PROCARE		
	N	%	p25	median	p75
A. Pretreatment data					
MISSING date of first contact	50	4	0	0	3,55
MISSING date pathol. diagnosis	184	15,5	0	0	24,15
MISSING lower limit tumour	46	3,7	0	0	3,1
MISSING staging					
cT	76	6,1	0	1	12,25
cN	78	6,2	0	0	8,2
cM	55	4,4	0	0	4,85
cStage	122	9,8	0	6,6	19,15
MISSING cCRM	981	78,5	78,75	94,1	100
MISSING CEA	192	15,4	0	10	22,25
MISSING imaging					
Total colonoscopy	31	2,5	0	0	0
Contrast enema	13	1	0	0	0
MISSING anorectal function	100	8	0	0	9

	PROCARE		PROCARE		
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B. Operative data					
MISSING ASA	186	14,9	0	7,7	23
MISSING planned type of resection	132	10,9	0	9,1	20
MISSING date of surgery	17	1,4	0	0	0
MISSING mode of surgery	22	1,8	0	0	0
MISSING surgical exploration					
Approach if radical resection	6	0,5	0	0	0
Metastasis	40	3,5	0	0	2,4
Localisation of tumour	56	4,9	0	0	3,8
Invasion of other organs	12	1,1	0	0	0
MISSING surgical resection					
Irrigation rectal stump	2	0,2	0	0	0
Resection y/n	11	0,9	0	0	0
Approach if radical resection	4	0,4	0	0	0
en bloc resection	89	7,8	0	2,1	8,1
Deviation from en bloc resection	25	2,2	0	0	0
Resection of other organ	97	8,5	0	5,1	15,4
Perforation of the rectum	53	4,7	0	0	2,9
Distal level of resection if SSO	16	1,9	0	0	0
Technique (PME,TME,conv.)	20	1,8	0	0	0
Type (R0/R1/R2) at surgery	19	1,7	0	0	0
MISSING surgical reconstruction					
Approach if radical resection	19	1,7	0	0	0
Type of reconstruction	11	1	0	0	0
Distal anastomosis technique if SSO	8	0,9	0	0	0
Derivative stoma if SSO	1	0,1	0	0	0
Intraoperative transfusion	111	9,2	0	0	14,3

	PROCARE		PROCARE		
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C. Postoperative data					
MISSING postop in hospital death	7	0,6	0	0	0
MISSING discharge date	63	5,5	0	3,1	8,3
MISSING postop complications	45	4	0	0	4,1
D. RT data					
MISSING treatment position	179	22,5	0	11,1	40
MISSING belly board	213	26,8	0	14,3	51,7
MISSING date of first irradiation	87	10,9	0	2,8	14,3
MISSING date of last irradiation	99	12,4	0	4	17,8
MISSING number of fractions	102	12,8	0	9,5	24,4
MISSING total dose	115	14,4	0	9,1	28
MISSING radiation compliance	149	18,7	0	10	25
MISSING custom shielding	185	23,2	0	10	42,7
MISSING photon energy used	155	19,5	0	9,5	30
MISSING number of beams	231	29	8,3	20	50
MISSING technique used	189	23,7	0	11,8	37,9
MISSING PTV	268	33,7	8,3	20	69
MISSING Concomitant chemotherapy	94	11,8	0	6,3	17,6
E. Pathology in radical excision					
MISSING TME quality	640	66,5	47,2	85,7	100
MISSING (y)pCRM	340	29,9	15,4	26,5	50
MISSING distal margin					
(y)p distal margin at SSO or Hartmann free/invaded	78	8,7	0	2,8	12,5
tumour free distal margin (cm) at SSO or Hartmann	120	13,4	0	9	20,8
MISSING (y)pStaging					
(y)pT	84	7,4	0	0	8,1
(y)pN	111	9,7	0	2,6	8,1
R status	100	8,8	0	4,2	9,1
(y)p Stage	222	19,5	3,3	12,9	23,1
F. Follow-up					
Diagnosis before 1st july 2007	756	62,3	33,3	66,7	87,8

