Highlights 2016

Endoskopie und Onkologie

Thomas Rösch, Hamburg

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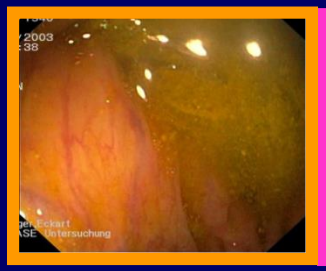
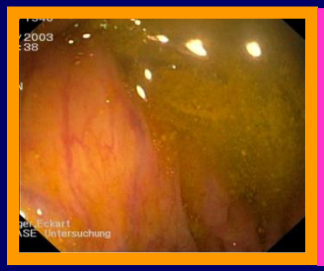


Koloskopie-Vorbereitung

Geteilte Vorbereitung (split prep)

Sauberkeit und Akzeptanz besser

Bessere Ausbeute ?



Koloskopie-Vorbereitung

ORIGINAL ARTICLE

Split-dose preparation for colonoscopy increases adenoma detection rate: a randomised controlled trial in an organised screening programme

F Radaelli,[1] S Paggi,[1] C Hassan,[2] C Senore,[3] R Fasoli,[4] A Anderloni,[5] F Buffoli,[6] M F Savarese,[6] G Spinzi,[1] D K Rex,[7] A Repici[5]

N=869, RCT, multizentrisch

Radaelli et al. Gut 2015 online

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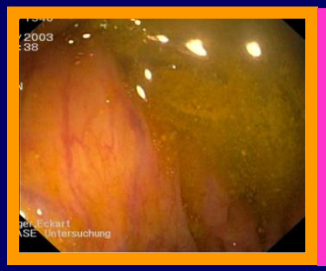
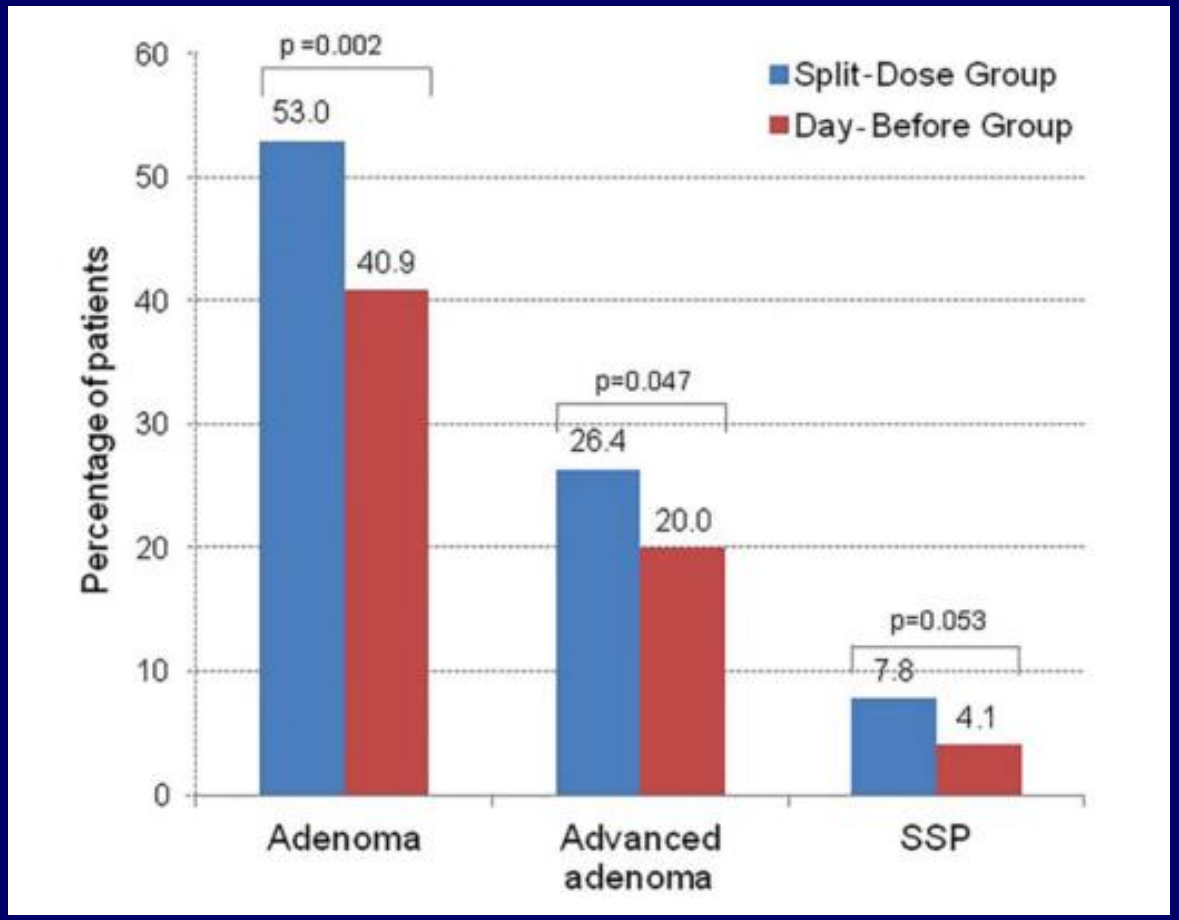
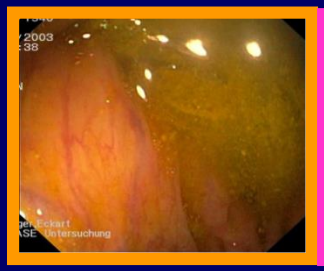


Koloskopie-Vorbereitung



Radaelli et al. Gut 2015 online

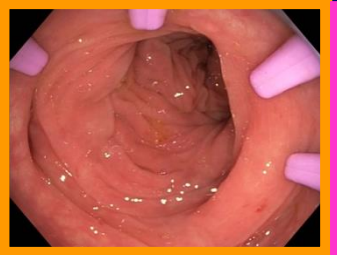


Koloskopie-Vorbereitung

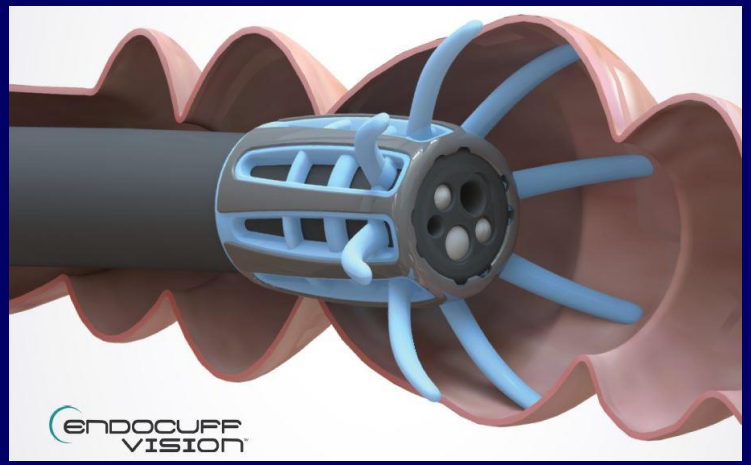
Table 3 Quality of bowel cleansing by study arm

	Split-Dose Group (n=345)	Day-Before Group (n=345)	p Value
Quality of colon cleansing, overall			
Success (HCS grade A or B), n (%)	329 (95.4)	307 (89.0)	0.001
Grade A—overall very good/ excellent, n (%)	275 (79.7)	189 (54.8)	<0.001
Grade B—overall good, n (%)	54 (15.7)	118 (34.2)	
Failure (HCS grade C or D), n (%)			
Grade C—overall bad, n (%)	10 (2.9)	28 (8.1)	
Grade D—overall very bad, n (%)	6 (1.7)	10 (2.9)	

Radaelli et al. Gut 2015 online

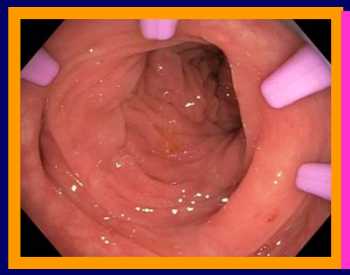


Endocuff



ADR	mit Kappe	ohne Kappe
N=449	36%	28%
N=500	35%	21%

Bieker et al. J Clin Gastro 2014
Floer et al. PLoS One 2014



Endocuff

ORIGINAL ARTICLE

Adenoma detection with Endocuff colonoscopy versus conventional colonoscopy: a multicentre randomised controlled trial

SC van Doorn,[1] M van der Vlugt,[1] ACTM Depla,[2] CA Wientjes,[3] RC Mallant-Hent,[4] PD Siersema,[5] KMAJ Tytgat, H Tuynman,[1,2] SD Kuiken,[3] GMP Houben,[2] PCF Stokkers,[3] LMG Moons,[5] PMM Bossuyt,[6] P Fockens,[1] MW Mundt,[4] E Dekker[1]

N=869, RCT, multizentrisch

Van Doorn et al. Gut 2015 online

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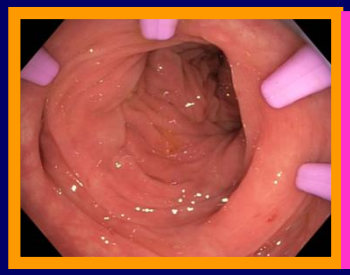

Endocuff

N=1063	mit Kappe	ohne Kappe
ADR	54%	53%
Adenome pro Patient	1.44	1.19

Van Doorn et al. Gut 2015 online

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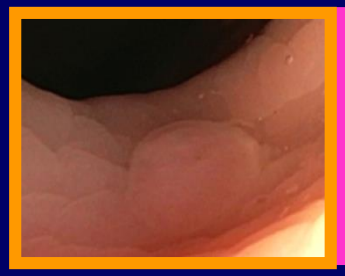
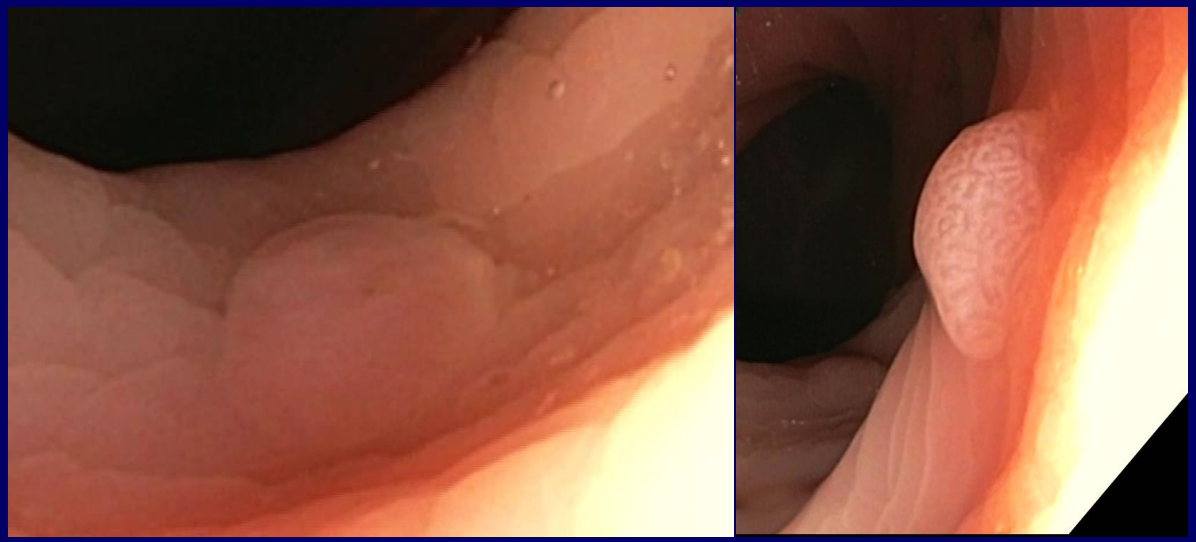


DISCARD

Werfen wir kleine Polypen weg ?

Follow-up-Intervalle dann nach endoskopischem Aspekt ?



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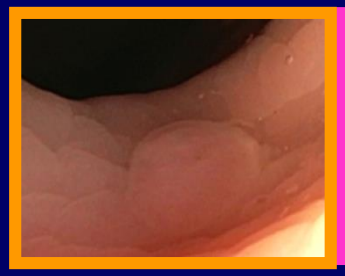
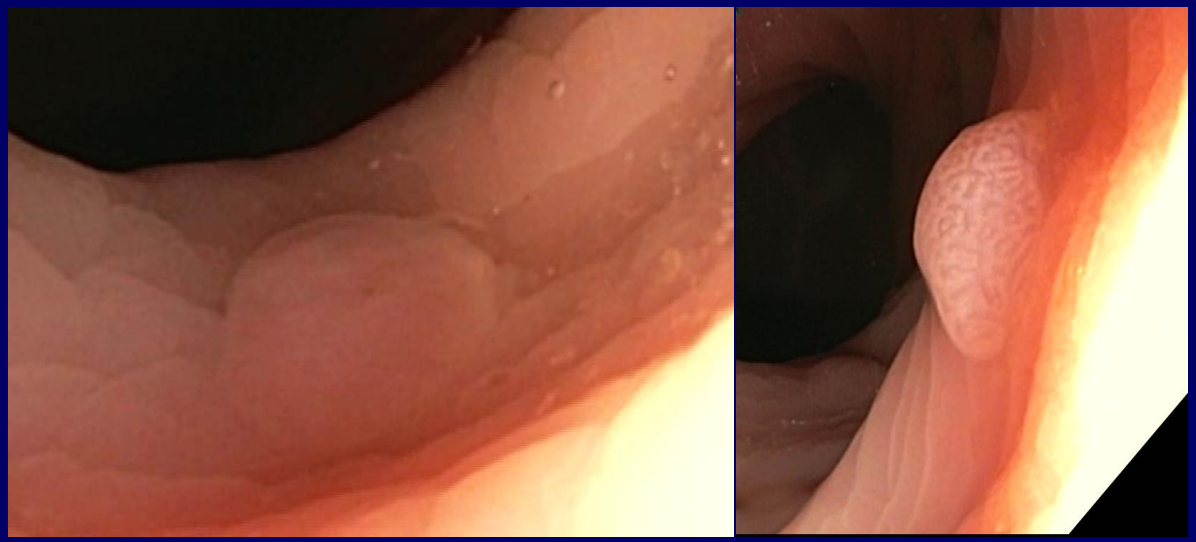
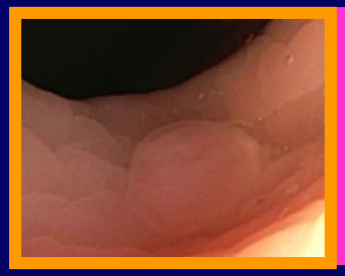


DISCARD

Differentialdiagnose Adenom-Hyperplast

Benchmark US (ASGE)
90% Beurteilbarkeit, 90% NPV





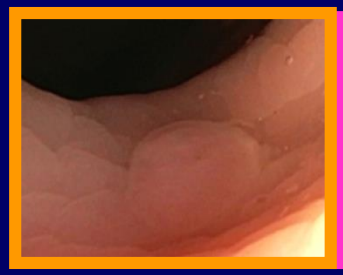
DISCARD

Differentialdiagnose Adenom-Hyperplast

Alltag…

	Sensitivität	Spezifität
Berlin/Hamburg (iScan)	78%	73%
US Westküste (NBI)	85%	78%

Schachschal et al. Gut 2014, N=1069
Ladabaum et al. Gastro 2013, N=1673



DISCARD

ORIGINAL ARTICLE

Narrow band imaging optical diagnosis of small colorectal polyps in routine clinical practice: the Detect Inspect Characterise Resect and Discard 2 (DISCARD 2) study

Colin J Rees,[1,2,3] Praveen T Rajasekhar,[1,3] Ana Wilson,[4] Helen Close,[5] Matthew D Rutter,[2,3,6] Brian P Saunders,[4] James E East,[7] Rebecca Maier,[5] Morgan Moorghen,[4] Usman Muhammad,[5] Helen Hancock,[5] Anthoor Jayaprakash,[8] Chris MacDonald,[9] Arvind Ramadas,[10] Anjan Dhar,[11] James M Mason[12]

N=1688, multizentrisch

Rees et al. Gut 2016 online

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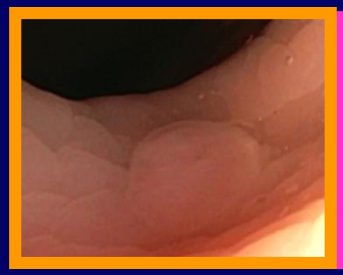

DISCARD

Table 4 Test performance: summary findings

NBI colonoscopy vs histology (reference)	Estimate (%)	95% CI
Adenoma (yes/no)*		
Sensitivity	83.4	79.6% to 86.9%
Specificity	74.8	67.6% to 81.1%
PPV	89.2	85.9% to 92.4%
NPV	64.5	57.3% to 71.8%
Surveillance (yes/no)*		
Sensitivity	73.0	66.5% to 79.9%
Specificity	75.6	70.9% to 80.1%
PPV	59.2	52.3% to 66.0%
NPV	85.2	81.0% to 89.1%
Exact match	67.9	64.1% to 71.9%
Conservative match	87.6	84.6% to 90.4%

*For explanation see table 3.
NBI, narrow band imaging; NPV, negative predictive value; PPV, positive predictive value.

Rees et al. Gut 2016 online

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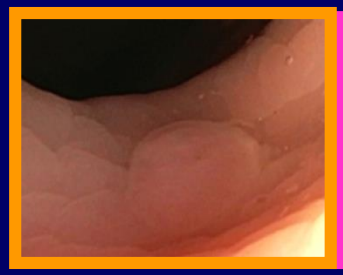

DISCARD

Table 1. Survey respondents

Physician type	Years post training mean (s.d.)	Number of respondents (%)	Identification of malignancy	Referred for surgery
Gastroenterologist	11.4 (±11.3)	67 (43.5%)	61.2 %	5.1 %
Gastroenterologist – specialist in complex polypectomy	8.7 (±8.7)	24 (15.6%)	87.5 %	1.5 %
Gastroenterology trainee	NA	34 (22.0%)	44.1%	0.0%
Surgeon	14.1 (±9.7)	29 (18.8%)	58.6 %	16.7 %
Total	11.5	154 (100%)		

NA, not applicable.

Wie gut kann man Polypen makroskopisch beurteilen ?

Aziz et al. Am J Gastroenterol. 2014 Sep;109(9):1312-24

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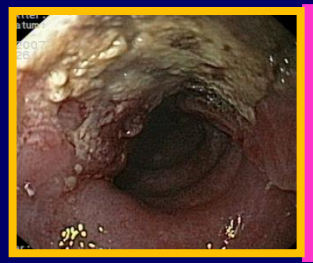
Take home Koloskopie

- Geteilte Vorbereitung (split dose) Standard
- Endocuff vielversprechend

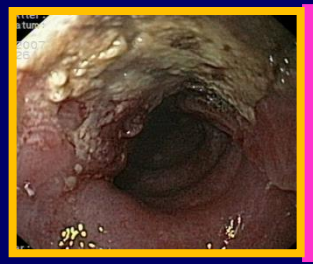
- Kein DISCARD

T



Ösophaguskarzinom

Neoadjuvante Therapie: neue Studien



Ösophaguskarzinom

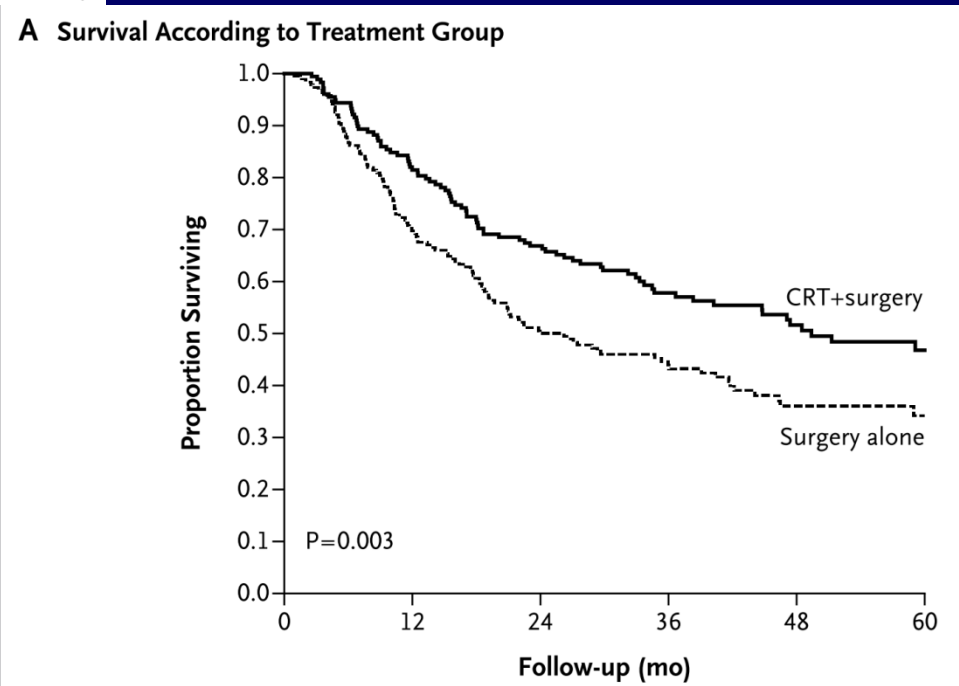
The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

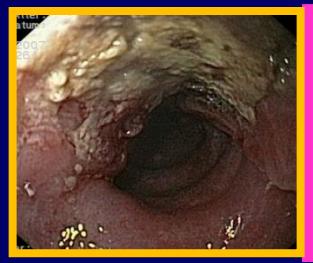
Preoperative Chemoradiotherapy for Esophageal or Junctional Cancer

P. van Hagen, M.C.C.M. Hulshof, J.J.B. van Lanschot, E.W. Steyerberg, M.I. van Berge Henegouwen, B.P.L. Wijnhoven, D.J. Richel, G.A.P. Nieuwenhuijzen, G.A.P. Hospers, J.J. Bonenkamp, M.A. Cuesta, R.J.B. Blaisse, O.R.C. Busch, F.J.W. ten Kate, G.-J. Creemers, C.J.A. Punt, J.T.M. Plukker, H.M.W. Verheul, E.J. Spillenaar Bilgen, H. van Dekken, M.J.C. van der Sangen, T. Rozema, K. Biermann, J.C. Beukema, A.H.M. Piet, C.M. van Rij, J.G. Reinders, H.W. Tilanus, and A. van der Gaast, for the CROSS Group*

N=368, 75% Adenokarzinom



No. at Risk						
CRT+surgery	178	145	119	75	49	28
Surgery alone	188	131	94	62	33	17
Total	366	276	213	137	82	45



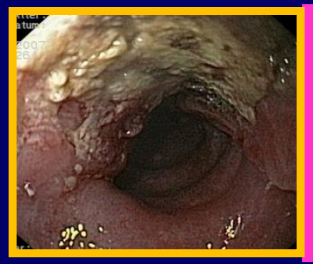
Ösophaguskarzinom

Neoadjuvant chemoradiotherapy plus surgery versus surgery alone for oesophageal or junctional cancer (CROSS): long-term results of a randomised controlled trial

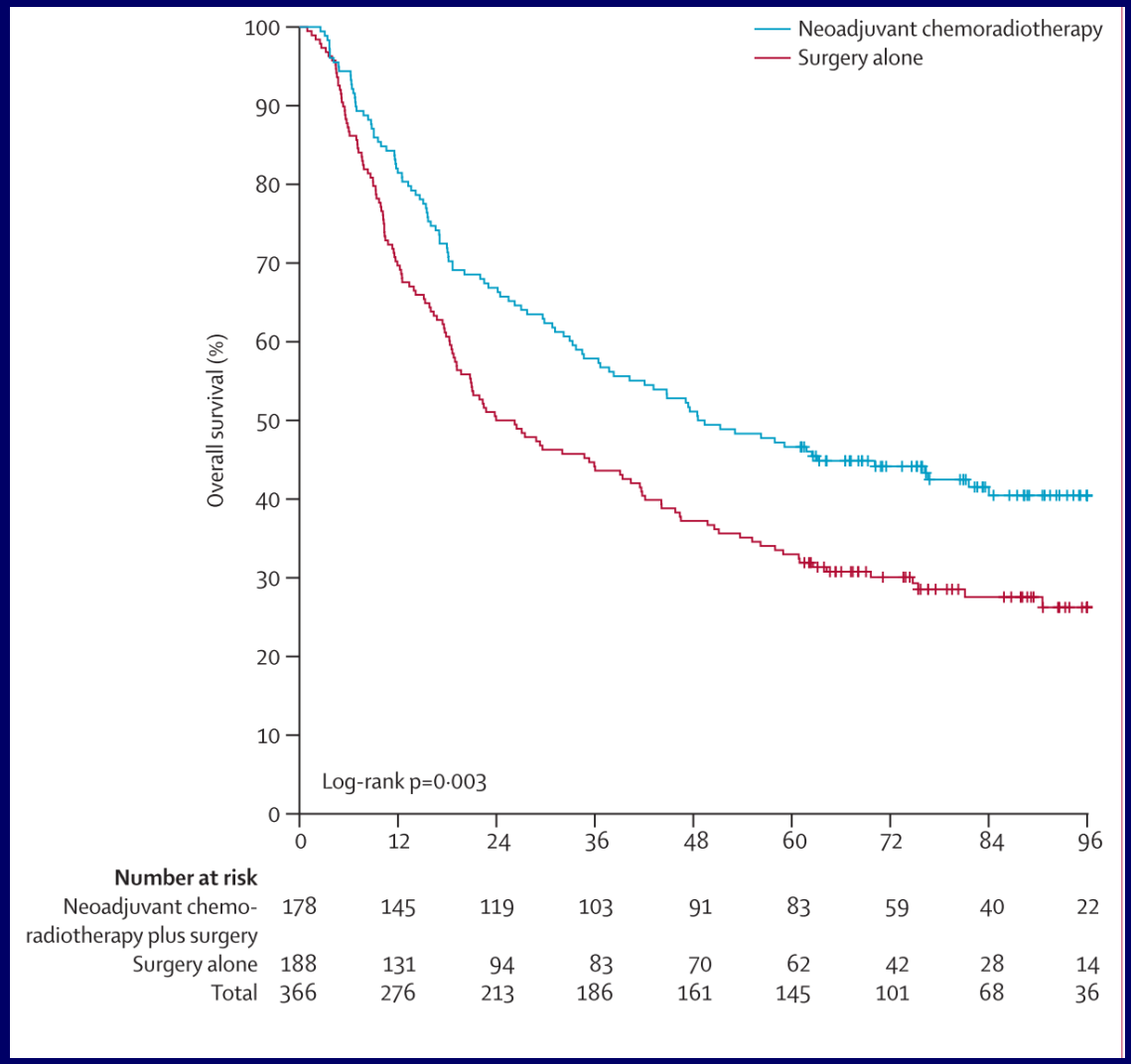
Joel Shapiro, J Jan B van Lanschot, Maarten C C M Hulshof, Pieter van Hagen, Mark I van Berge Henegouwen, Bas P L Wijnhoven, Hanneke W M van Laarhoven, Grard A P Nieuwenhuijzen, Geke A P Hospers, Johannes J Bonenkamp, Miguel A Cuesta, Reinoud J B Blaisse, Olivier R C Busch, Fiebo J W ten Kate, Geert-Jan M Creemers, Cornelis J A Punt, John Th M Plukker, Henk M W Verheul, Ernst J Spillenaar Bilgen, Herman van Dekken, Maurice J C van der Sangen, Tom Rozema, Katharina Biermann, Jannet C Beukema, Anna H M Piet, Caroline M van Rij, Janny G Reinders, Hugo W Tilanus, Ewout W Steyerberg, Ate van der Gaast, for the CROSS study group

N=366, F-up 84 Monate

Shapiro et al. Lancet Oncol 2015

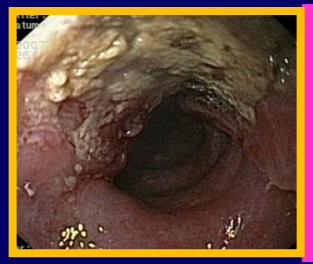


Ösophaguskarzinom

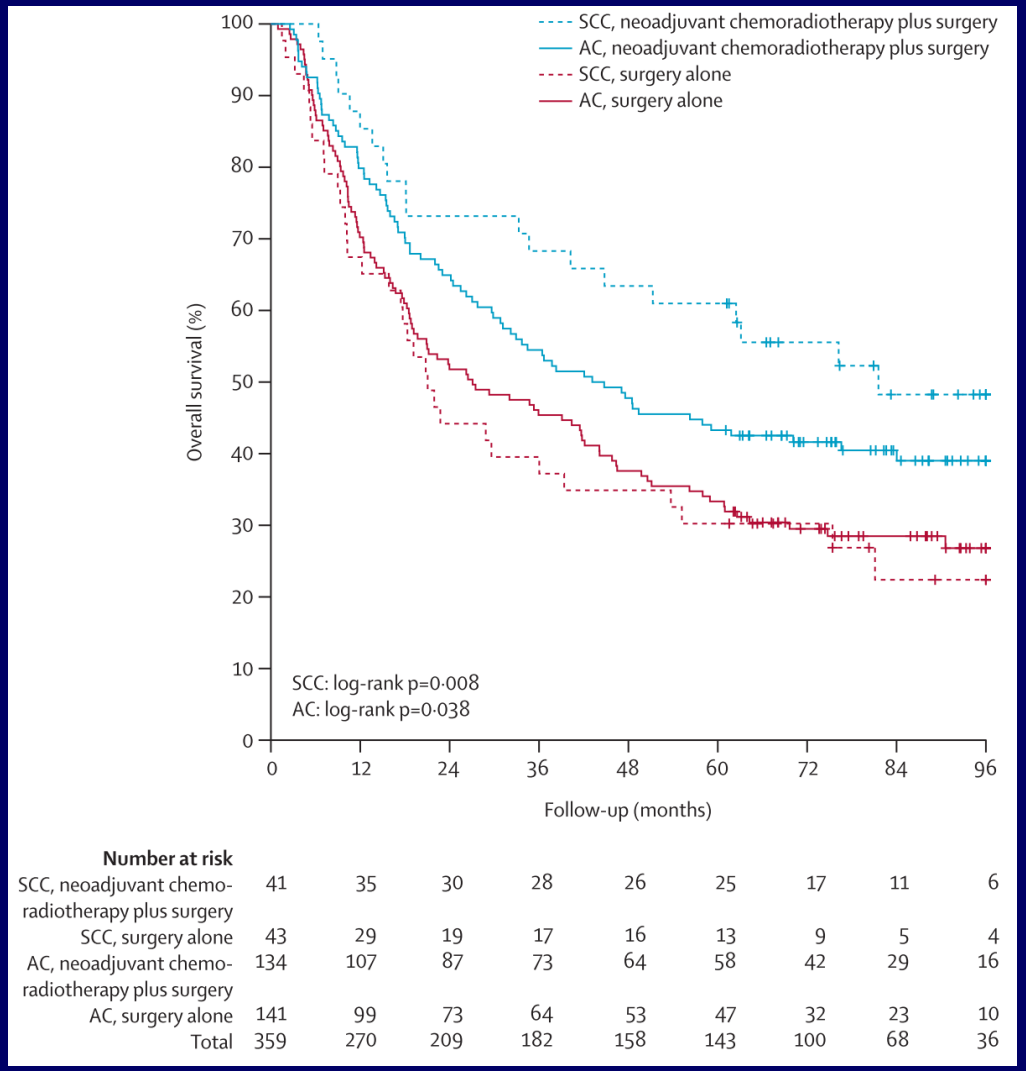


48.6 vs. 24.0 Monate

Shapiro et al. Lancet Oncol 2015



Ösophaguskarzinom

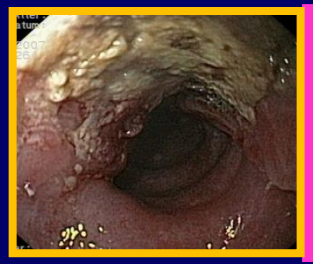


Number at risk									
SCC, neoadjuvant chemo-radiotherapy plus surgery	41	35	30	28	26	25	17	11	6
SCC, surgery alone	43	29	19	17	16	13	9	5	4
AC, neoadjuvant chemo-radiotherapy plus surgery	134	107	87	73	64	58	42	29	16
AC, surgery alone	141	99	73	64	53	47	32	23	10
Total	359	270	209	182	158	143	100	68	36

SCC 81.6 vs. 21.1 Monate

ACC 43.2 vs. 27.1 Monate

Shapiro et al. Lancet Oncol 2015



Ösophaguskarzinom

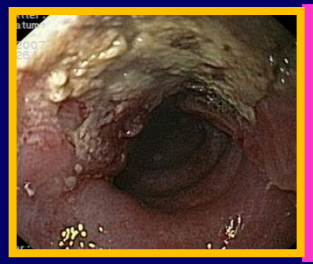
A randomized clinical trial of neoadjuvant chemotherapy versus neoadjuvant chemoradiotherapy for cancer of the oesophagus or gastro-oesophageal junction

F. Klevebro[1*], G. Alexandersson von Döbeln[2], N. Wang[3], G. Johnsen[4], A.-B. Jacobsen[5], S. Friesland[2], I. Hatlevoll[6], N. I. Glenjen[7], P. Lind[8], J. A. Tsai[1], L. Lundell[1] & M. Nilsson[1]

[1]Division of Surgery, Department of Clinical Science Intervention and Technology, Karolinska Institutet and Centre for Digestive Diseases, Karolinska University Hospital, Stockholm; Departments of [2]Oncology; [3]Pathology, Karolinska University Hospital, Karolinska Institutet, Stockholm, Sweden; [4]Department of Gastrointestinal Surgery, St Olavs Hospital, Trondheim University Hospital, Trondheim; [5]Department of Oncology, Oslo University Hospital, Oslo; [6]Department of Oncology, St Olavs Hospital, Trondheim University Hospital, Trondheim; [7]Department of Oncology, Haukeland University Hospital, Bergen, Norway; [8]Department of Oncology, Mälarsjukhuset Eskilstuna, Karolinska Institutet, Stockholm, Sweden

N=181, 73% Adenokarzinom

Klevebro et al Ann Oncol 2016

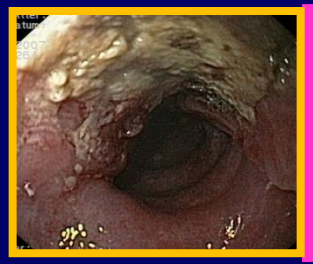


Ösophaguskarzinom

Table 3. Outcome of treatment according to allocated neoadjuvant therapy and subgroup analysis of adenocarcinoma and squamous-cell carcinoma

(%)	nCT	nCRT	*P*-value
Tumour regression grade[a,b]			<0.001
1: Histological complete response	7 (9)	22 (28)	0.002
2: 1%–10% tumour cells	5 (6)	19 (24)	
3: >10%–50% tumour cells	5 (6)	14 (18)	
4: >50% tumour cells	61 (78)	23 (29)	
Surgical resection[c]	78 (86)	78 (87)	0.85
R0 resection[b,d]	58 (74)	68 (87)	0.042

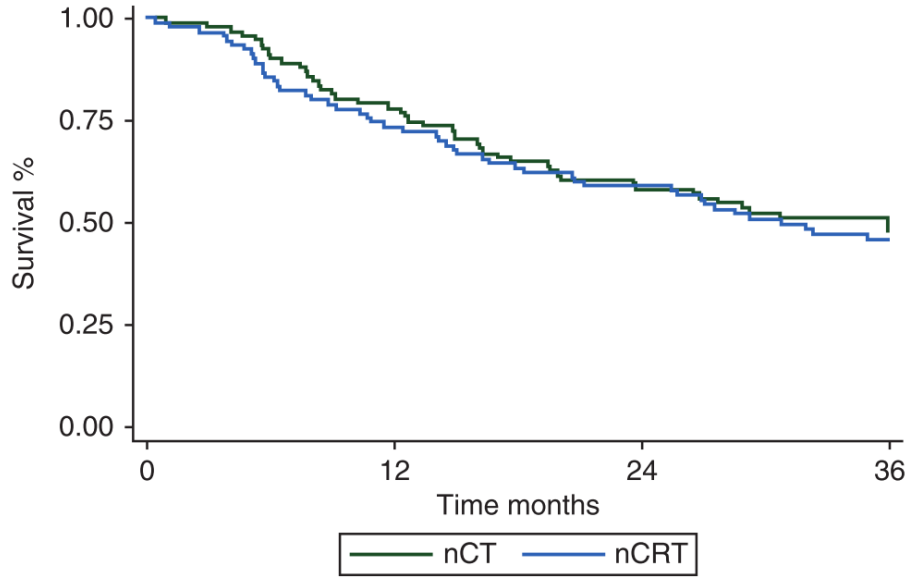
Klevebro et al Ann Oncol 2016



Ösophaguskarzinom

A

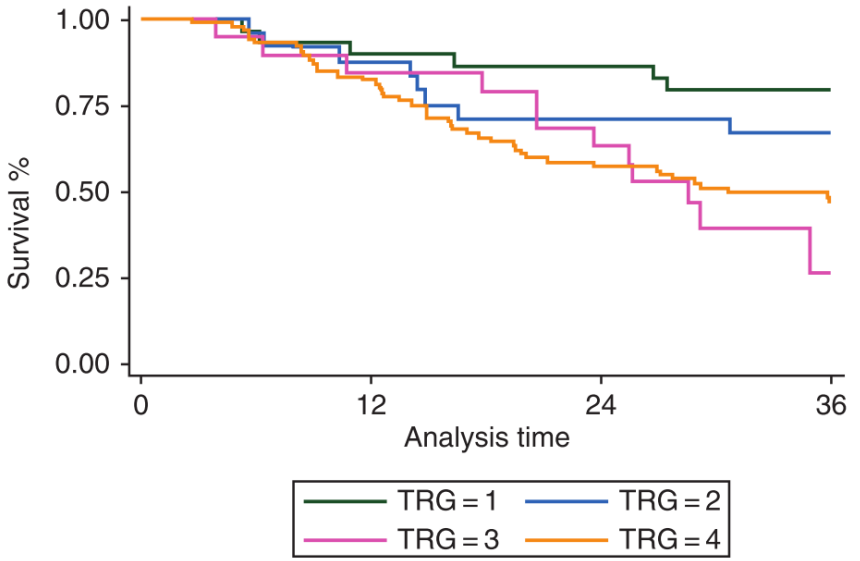
Three-year survival according to treatment group



Number at risk				
Follow up (months)	0	12	24	36
nCT	91	71	53	45
nCRT	90	66	53	42

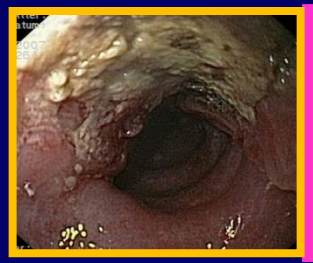
B

Three-year survival according to tumour regression grade



TRG Number at risk				
Follow up (months)	0	12	24	39
1	28	25	24	22
2	24	21	17	16
3	19	16	12	7
4	85	70	49	71

Klevebro et al Ann Oncol 2016



Ösophaguskarzinom

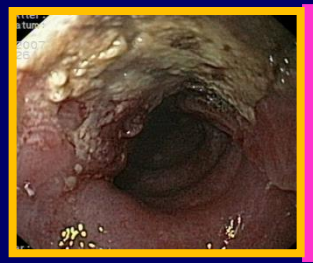
Perioperative versus Preoperative Chemotherapy with Surgery in Patients with Resectable Squamous Cell Carcinoma of Esophagus

A Phase III Randomized Trial

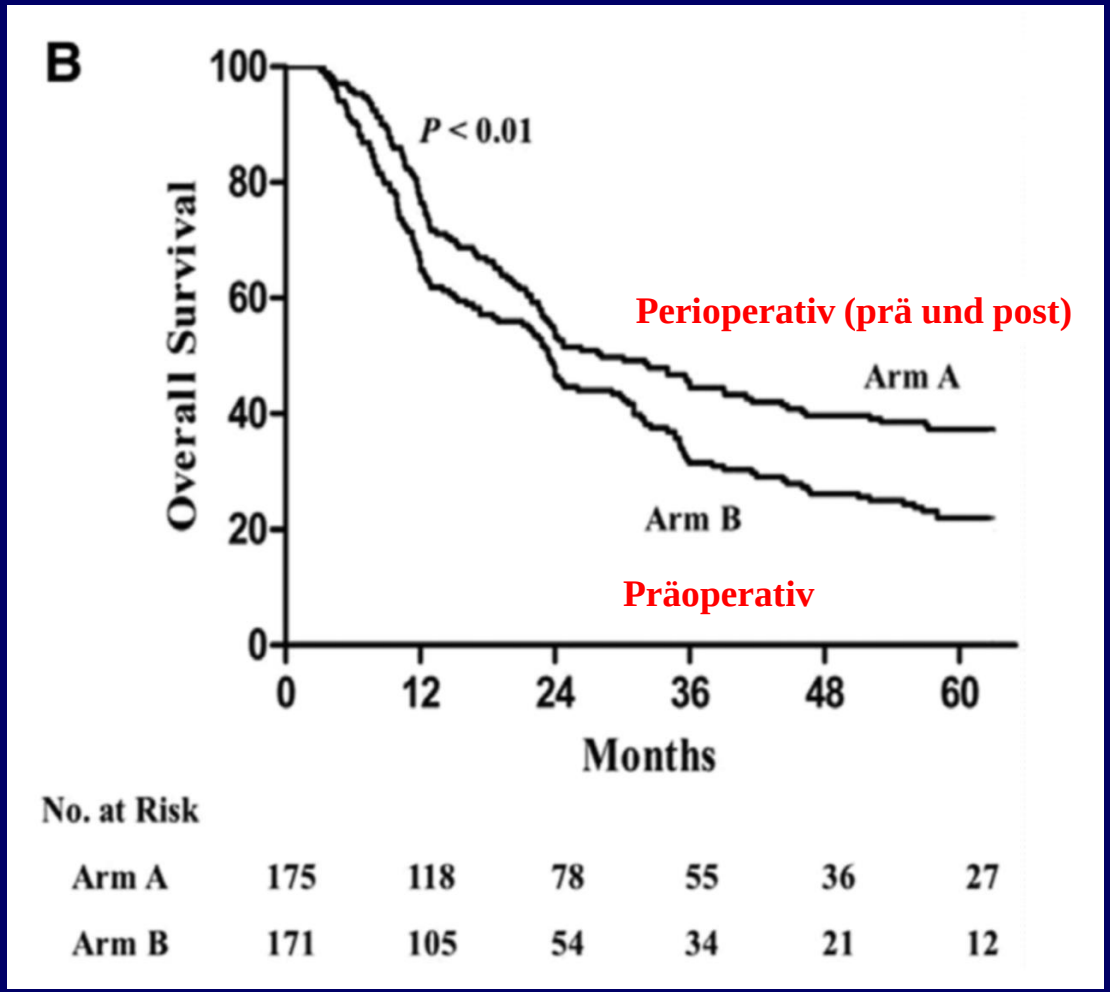
Yang Zhao, MD, ZhiJun Dai, PhD,* WeiLi Min, MD,* Xin Sui, PhD,† HuaFeng Kang, MD,* YunFeng Zhang, MD,‡ Hong Ren, MD, PhD,‡ and XiJing Wang, MD**

N=346, Plattenepithelkarzinom

Zhao et al J Thorac Oncol 2015



Ösophaguskarzinom



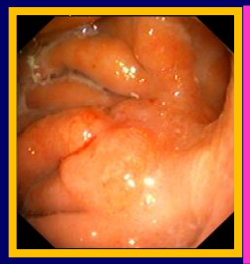
5-J-ÜLR
35.0% vs. 19.1%

Zhao et al J Thorac Oncol 2015

Take home: Ösophaguskarzinom multimodal

Macht Sinn

Details weiterhin unklar (Art, Zeitpunkt, welche CTx.)



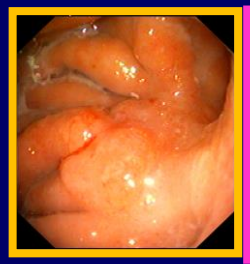
Magenkarzinom: palliative OP ?

Gastrectomy plus chemotherapy versus chemotherapy alone for advanced gastric cancer with a single non-curable factor (REGATTA): a phase 3, randomised controlled trial

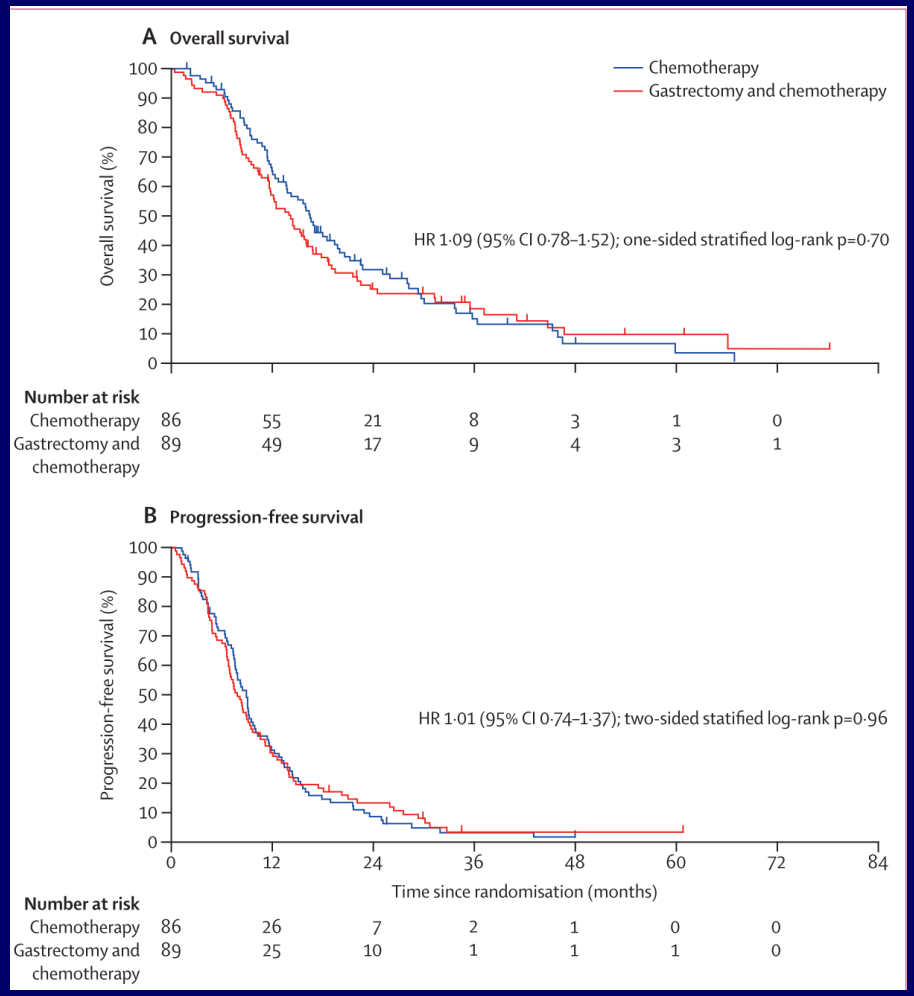
Kazumasa Fujitani, Han-Kwang Yang*, Junki Mizusawa, Young-Woo Kim, Masanori Terashima, Sang-Uk Han, Yoshiaki Iwasaki, Woo Jin Hyung, Akinori Takagane, Do Joong Park, Takaki Yoshikawa, Seokyung Hahn, Kenichi Nakamura, Cho Hyun Park, Yukinori Kurokawa, Yung-Jue Bang, Byung Joo Park, Mitsuru Sasako, Toshimasa Tsujinaka, for the REGATTA study investigators†*

N=175, nicht kurativ operabel

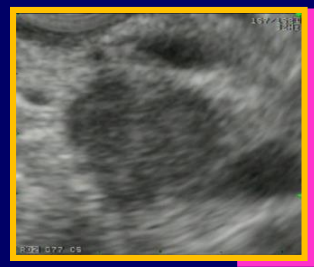
Fujitani et al Lancet Oncol 2016



Magenkarzinom



Fujitani et al Lancet Oncol 2016



Pankreaskarzinom: Realität/Qualität

RANDOMIZED CONTROLLED TRIAL

OPEN

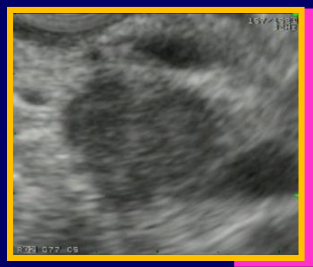
Pancreatogastrostomy Versus Pancreatojejunostomy for RECOnstruction After PANCreatoduodenectomy (RECOPANC, DRKS 00000767)

Perioperative and Long-term Results of a Multicenter Randomized Controlled Trial

Tobias Keck, MD, MBA, FACS,† U. F. Wellner, MD,*† M. Bahra, MD,‡ F. Klein, MD,‡ O. Sick, MSc,† M. Niedergethmann, MD,§ T. J. Wilhelm, MD,§ S. A. Farkas, MD,¶ T. Börner, MD,¶ C. Bruns, MD,|| A. Kleespies, MD,|| J. Kleeff, MD,** A. L. Mihaljevic, MD,** W. Uhl, MD,†† A. Chromik, MD,†† V. Fendrich, MD,‡‡ K. Heeger, MD,‡‡ W. Padberg, MD,§§ A. Hecker, MD,§§ U. P. Neumann, MD,¶¶ K. Junge, MD,¶¶ J. C. Kalff, MD,|||| T. R. Glowka, MD,|||| J. Werner, MD,*** P. Knebel, MD,*** P. Piso, MD,††† M. Mayr, MD,††† J. Izbicki, MD,‡‡‡ Y. Vashist, MD,‡‡‡ P. Bronsert, MD,§§§¶¶¶ T. Bruckner, PhD,|||||| R. Limprecht, MSc,|||||| M. K. Diener, MD,******* I. Rossion, MD,**** I. Wegener, MD,**** and U. T. Hopt, MD†*

N=320

Keck et al Ann Surg 2016

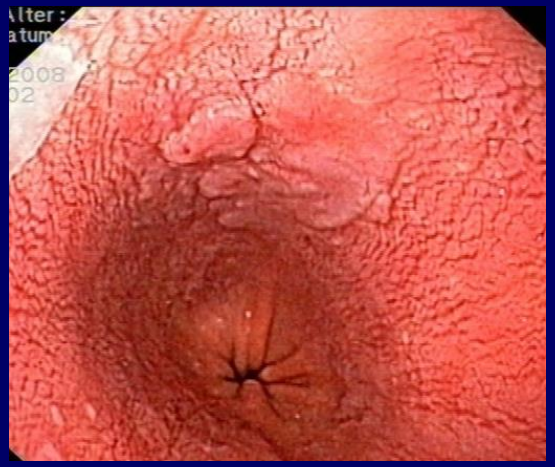


Pankreaskarzinom

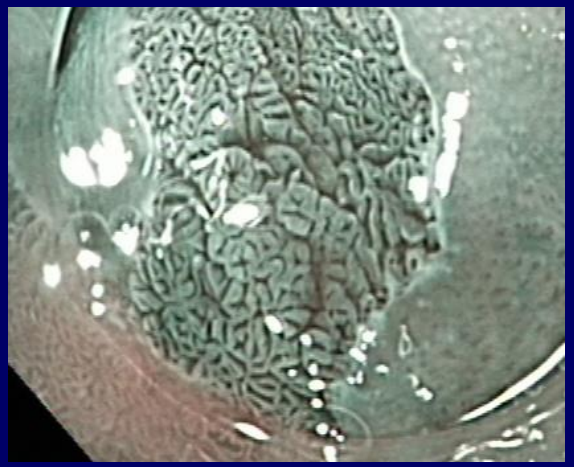
Conclusions: The rate of grade B/C fistula after PG versus PJ was not different. There were more postoperative bleeding events with PG. Perioperative morbidity and mortality of pancreatoduodenectomy seem to be underestimated, even in the high-volume center setting.

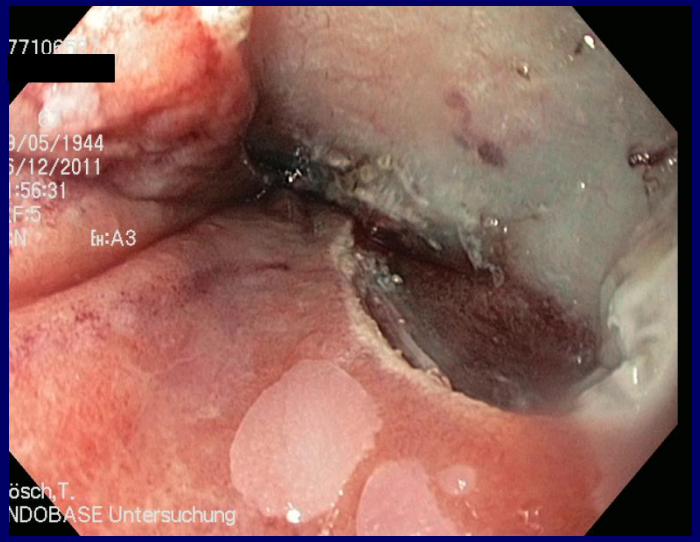
Keck et al Ann Surg 2016

Barrett-Ösophagus

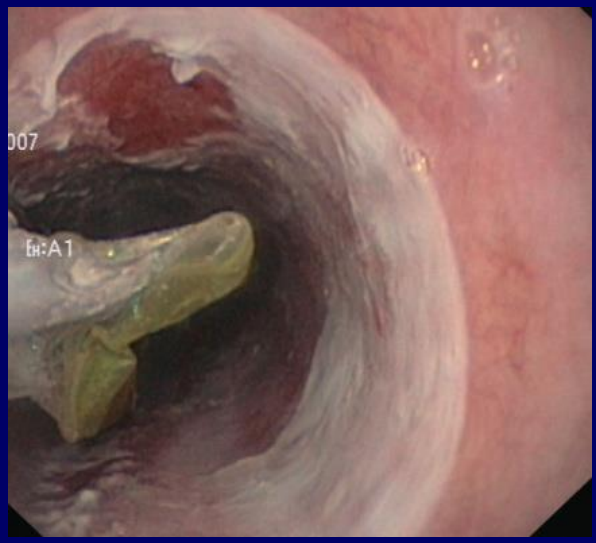


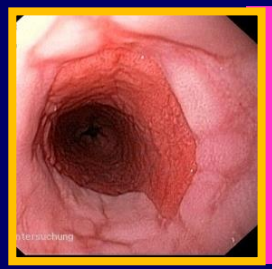
Endoskopische Überwachung





<u>Neoplasie</u>: Endoskopische Kombinations-therapie





Barrett-Ösophagus: EMR vs ESD

Gastroenterology 2016;150:591–598

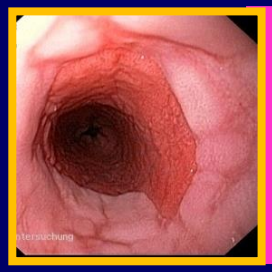
Development and Validation of a Classification System to Identify High-Grade Dysplasia and Esophageal Adenocarcinoma in Barrett's Esophagus Using Narrow-Band Imaging

Prateek Sharma,[1] Jacques J. G. H. M. Bergman,[2] Kenichi Goda,[3] Mototsugu Kato,[4] Helmut Messmann,[5] Benjamin R. Alsop,[1] Neil Gupta,[6] Prashanth Vennalaganti,[1] Matt Hall,[1] Vani Konda,[7] Ann Koons,[7] Olga Penner,[5] John R. Goldblum,[8] and Irving Waxman[7]

[1]Department of Gastroenterology and Hepatology, Veterans Affairs Medical Center and University of Kansas School of Medicine, Kansas City, Missouri; [2]Department of Gastroenterology and Hepatology, Academic Medical Center, Amsterdam, The Netherlands; [3]Department of Endoscopy, The Jikei University School of Medicine, Tokyo, Japan; [4]Division of Endoscopy, Hokkaido University Hospital, Sapporo, Japan; [5]Department of Internal Medicine, Clinic Augsburg, Augsburg, Germany; [6]Department of Gastroenterology, Loyola University Medical Center, Maywood, Illinois; [7]Center for Endoscopic Research and Therapeutics (CERT), The University of Chicago Medicine, Chicago, Illinois; and [8]Department of Anatomic Pathology, Cleveland Clinic Foundation, Cleveland, Ohio

BING classification

Sharma et el. Gastro 2016



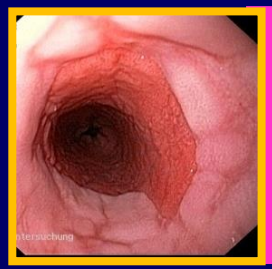
Barrett-Ösophagus: EMR vs ESD

BING classification

Table 1. Consensus-Driven NBI Classification of Barrett's Epithelium

Morphologic characteristics	Classification
Mucosal pattern	
Circular, ridged/villous, or tubular patterns	Regular
Absent or irregular patterns	Irregular
Vascular pattern	
Blood vessels situated regularly along or between mucosal ridges and/or those showing normal, long, branching patterns	Regular
Focally or diffusely distributed vessels not following normal architecture of the mucosa	Irregular

Sharma et el. Gastro 2016



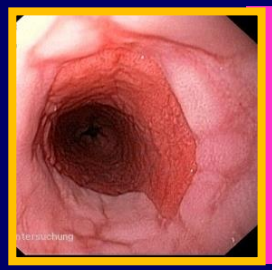
Barrett-Ösophagus: EMR vs ESD

BING classification

Table 4. Accuracy and Sensitivity Analysis of the BING Criteria for the Prediction of D

Predictions	Accuracy, % (95% CI)	Sensitivity, % (95% CI)	Specificity, % (95% CI)
Overall	85.4 (82.6–87.9)	80.4 (75.6–85.1)	88.4 (85.4–91.4)
High-confidence	92.2 (89.3–94.5)	91.1 (86.8–95.4)	92.9 (89.8–95.9)
Low-confidence	74.1 (68.4–79.2)	62.4 (52.9–71.8)	81.1 (75.1–87.0)

Sharma et el. Gastro 2016



Barrett-Ösophagus: EMR vs ESD

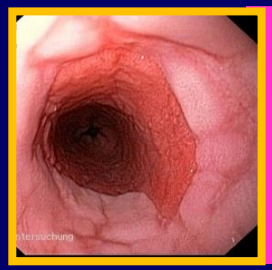
ORIGINAL ARTICLE

A randomised trial of endoscopic submucosal dissection versus endoscopic mucosal resection for early Barrett's neoplasia

Grischa Terheggen,[1] Eva Maria Horn,[2] Michael Vieth,[3] Helmut Gabbert,[4] Markus Enderle,[5] Alexander Neugebauer,[5] Brigitte Schumacher,[6] Horst Neuhaus[2]

N=40, RCT, unizentrisch

Terheggen et al. Gut 2016



Barrett-Ösophagus: EMR vs ESD

N=40, RCT, unizentrisch, plus Ablation

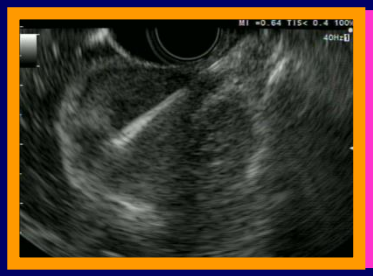
	EMR	ESD
R0-Rate	12%	59%
Remission	94%	88%
Rezidiv	0	1
Komplikationen	0	2

Terheggen et al. Gut 2016

Take home Barrett

Noch eine NBI-Klassifikation

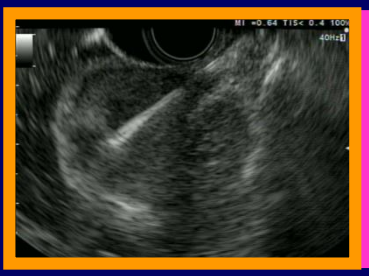
EMR reicht aus, ESD wohl ohne Vorteile



Endosonographie

Punktionsergebnisse verbessern sich, wenn der Zytologe vor Ort die Präparate ansieht

(ROSE rapid on site cytology)



Endosonographie

nature publishing group

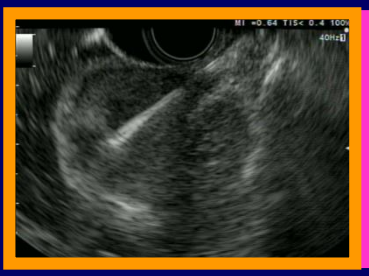
ORIGINAL CONTRIBUTIONS

The Clinical Impact of Immediate On-Site Cytopathology Evaluation During Endoscopic Ultrasound-Guided Fine Needle Aspiration of Pancreatic Masses: A Prospective Multicenter Randomized Controlled Trial

Sachin Wani, MD[1,2], Daniel Mullady, MD[3], Dayna S. Early, MD[3], Amit Rastogi, MD[4], Brian Collins, MD[3], Jeff F. Wang, MD[3], Carrie Marshall, MD[1], Sharon B. Sams, MD,MPH[1], Roy Yen, MD,MPH[1], Mona Rizeq, MD[1,2], Maria Romanas, MD[4], Ozlem Ulusarac, MD[4], Brian Brauer, MD[1], Augustin Attwell, MD[1], Srinivas Gaddam, MD[3], Thomas G. Hollander, MS[3], Lindsay Hosford, BA[1], Sydney Johnson, BA[4], Vladimir Kushnir, MD[3], Stuart K. Amateau, MD,PhD[1], Cara Kohlmeier[3], Riad R. Azar, MD[3], John Vargo, MD,MPH[5], Norio Fukami, MD[1], Raj J. Shah, MD[1], Ananya Das, MD[6] and Steven A. Edmundowicz, MD[3]

N=241, RCT, multizentrisch

Wani et al. Am J Gastroenterol 2015



Endosonographie

Table 3. Comparison of two groups with regard to primary outcomes, procedure details, and cytopathology characteristics

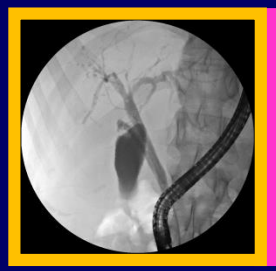
Variable	Overall	OCE absent (*n*=120)	OCE present (*n*=121)	*P* value
Median number of passes (range)		7 (7–10)	4 (1–8)	<0.0001
Mean procedure time—(min, s.d.)		43.9 (16.1)	42.6 (16.2)	0.54
Mean FNA time—(min, s.d.)		19.3 (8.2)	23.8 (14.2)	0.003
Primary outcomes				
Inadequate specimens (*n*, %)		16 (13.3)	12 (9.8)	0.31
EUS–FNA cytology diagnosis				0.45
Benign	28 (11.6)	16 (13.3)	12 (9.9)	
Atypical	12 (4.9)	8 (6.6)	4 (3.3)	
Suspicious	17 (7)	6 (5)	11 (9)	
Malignant	177 (73.4)	86 (71.6)	91 (75.2)	
Inadequate	7 (2.9)	4 (3.3)	3 (2.5)	
Suspicious+Malignant	194 (80.5)	92 (76.7)	102 (84.3)	0.13

Wani et al. Am J Gastroenterol 2015

Take home EUS-FNA

Es geht auch ohne Zytologie vor Ort

Wie oft soll man punktieren ?



Post-ERCP-Pankreatitis

Gastroenterology 2016;150:911–917

CLINICAL—PANCREAS

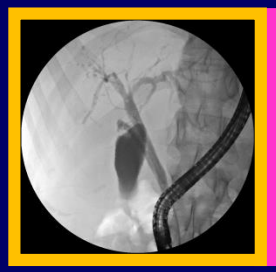
Rectal Indomethacin Does Not Prevent Post-ERCP Pancreatitis in Consecutive Patients

John M. Levenick,[1,2] Stuart R. Gordon,[1] Linda L. Fadden,[1] L. Campbell Levy,[1] Matthew J. Rockacy,[1] Sarah M. Hyder,[1] Brian E. Lacy,[1] Steven P. Bensen,[1] Douglas D. Parr,[3] and Timothy B. Gardner[1]

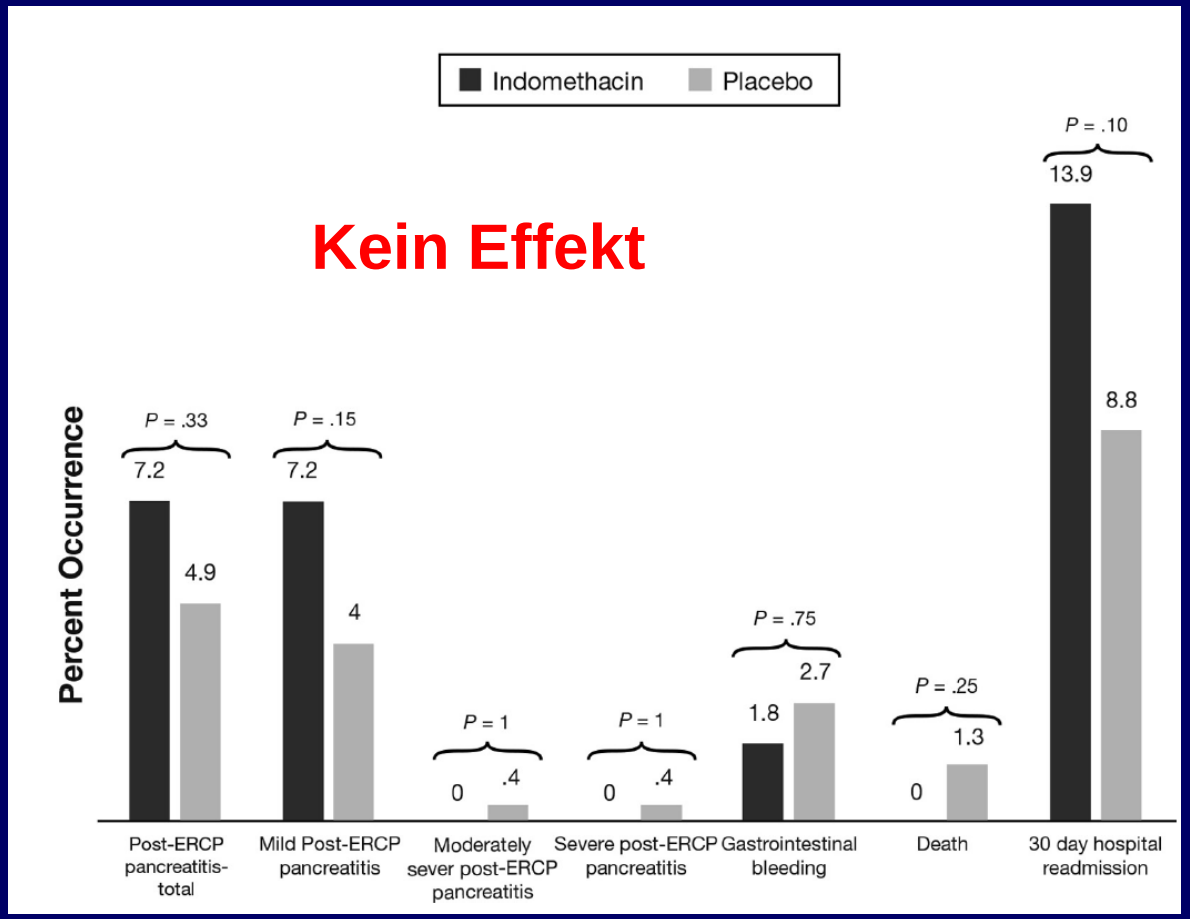
[1]Section of Gastroenterology and Hepatology, [3]Investigational Pharmacy, Dartmouth-Hitchcock Medical Center, Lebanon, New Hampshire; [2]Section of Gastroenterology and Hepatology, Penn State Hershey Medical Center, Hershey, Pennsylvania

N=449, RCT, unizentrisch

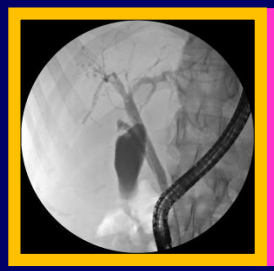
Levenick et al. Gastro 2016



Post-ERCP-Pankreatitis



Levenick et al. Gastro 2016



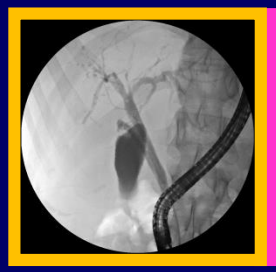
Post-ERCP-Pankreatitis

Table 1. Baseline Patient Characteristics

Characteristic	Indomethacin (n = 223)	Placebo (n = 226)	*P* value
Age, *y*	64.9	64.3	.68
Female sex, n (%)	118 (52.9)	118 (52.2)	.92
Indication, n (%)			
Acute cholangitis	12 (5.4)	13 (5.8)	1.00
Choledocholithiasis	59 (26.4)	52 (23.0)	.44
Malignant biliary obstruction[a]	53 (23.8)	50 (22.1)	.74
Biliary stent change	25 (11.2)	25 (11.1)	1.00
Biliary leak	11 (4.9)	12 (5.3)	1.00
Increased liver test results/jaundice	13 (5.8)	9 (4.0)	.39
Pancreatic stricture	3 (1.3)	5 (2.2)	.72
Suspected sphincter of Oddi dysfunction	6 (2.7)	8 (3.5)	.79
Pancreatic leak/disruption	11 (4.9)	12 (5.3)	1.00
Pancreatic duct stone	3 (1.3)	2 (0.9)	.68
Recurrent acute pancreatitis	5 (2.2)	2 (0.9)	.28
Ampullectomy	6 (2.7)	5 (2.2)	.77
Other[b]	16 (7.2)	31 (13.7)	**.03**
History of post-ERCP pancreatitis, n (%)	9 (4.0)	9 (4.0)	1.00
Previous sphincterotomy, n (%)	72 (31.8)	71 (31.4)	.61
Previous ERCP, n (%)	81 (36.3)	79 (35.0)	.77

[a]Malignant biliary obstruction includes pancreatic head malignancy, cholangiocarcinoma, and indeterminate biliary stricture.
[b]Most common indications for "Other" included primary sclerosing cholangitis, papillary stenosis, and choledochal cyst evaluation.

Levenick et al. Gastro 2016



Post-ERCP-Pankreatitis

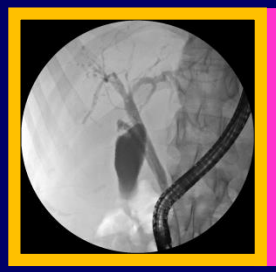
Routine pre-procedural rectal indometacin versus selective post-procedural rectal indometacin to prevent pancreatitis in patients undergoing endoscopic retrograde cholangiopancreatography: a multicentre, single-blinded, randomised controlled trial

Hui Luo, Lina Zhao*, Joseph Leung*, Rongchun Zhang, Zhiguo Liu, Xiangping Wang, Biaoluo Wang, Zhanguo Nie, Ting Lei, Xun Li, Wence Zhou, Lingen Zhang, Qi Wang, Ming Li, Yi Zhou, Qian Liu, Hao Sun, Zheng Wang, Shuhui Liang, Xiaoyang Guo, Qin Tao, Kaichun Wu, Yanglin Pan, Xuegang Guo, Daiming Fan*

Alle versus Risikogruppe

N=2600, RCT, multizentrisch

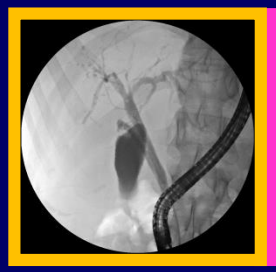
Luo et al. Lancet 2016



Post-ERCP-Pankreatitis

	Pre-procedural indometacin in all patients (n=1297)	Post-procedural indometacin in high-risk patients* (n=1303)	Relative risk (95% CI)	p value
Post-ERCP pancreatitis	47 (4%)	100 (8%)	0·47 (0·34–0·66)	<0·0001
Mild	36 (3%)	77 (6%)	0·47 (0·32–0·69)	<0·0001
Moderate to severe	11 (1%)	23 (2%)	0·48 (0·24–0·98)	0·040

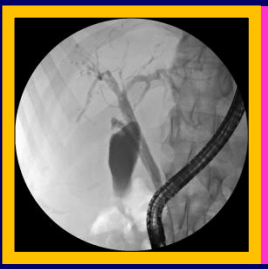
Luo et al. Lancet 2016



Post-ERCP-Pankreatitis

Gruppe A alle	Zäpfchen vor ERCP
Gruppe B Risiko	Zäpfchen nach der ERCP
Indometacin rectal	30-120 min

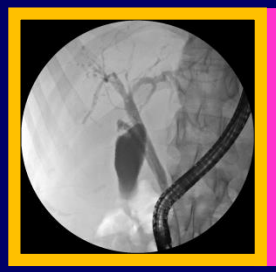
Luo et al. Lancet 2016



Post-ERCP-Pankreatitis

Alle Patienten	Nur Risikogruppe
N=1297	N=1303, davon 281
darunter auch	d.h. 1022 kein Zäpfchen
Risikogruppe	Risikogruppe
N=305	n=281

Luo et al. Lancet 2016



Post-ERCP-Pankreatitis

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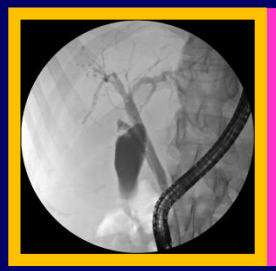
Mild	36 (3%)	77 (6%)	0·47 (0·32–0·69)	<0·0001
Moderate to severe	11 (1%)	23 (2%)	0·48 (0·24–0·98)	0·040
Post-ERCP pancreatitis in high-risk patients*	18/305 (6%)	35/281 (12%)	0·47 (0·27–0·82)	0·0057
Mild	14 (5%)	29 (10%)	0·45 (0·24–0·82)	0·0079
Moderate to severe	4 (1%)	6 (2%)	0·61 (0·18–2·15)	0·44

Luo et al. Lancet 2016



Post-ERCP-Pankreatitis

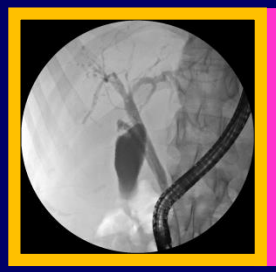
GASTROENTEROLOGY 2003;124:1786–1791

CLINICAL–LIVER, PANCREAS, AND BILIARY TRACT

Diclofenac Reduces the Incidence of Acute Pancreatitis After Endoscopic Retrograde Cholangiopancreatography

BILL MURRAY, ROSS CARTER, CLEM IMRIE, SUSAN EVANS, and CRIOSTOIR O'SUILLEABHAIN
Lister Department of Surgery, Glasgow Royal Infirmary, Glasgow, Scotland

N=207, keine Fallzahlberechnung
Annahme 12-18% Ausgangswert, Analyse nach 200 Fällen



Post-ERCP-Pankreatitis

2015/16 mehr negative Studien (rectal, oral, i.m.)

Fallzahlberechnung	5% vs 2.5%	2600
	12% vs. 5%	207

Patientenselektion

usw

Take home ERCP und NSAR

Unsicherheit trotz zahlreicher RCT

Metaanalysen sind das Problem, nicht die Lösung