



Cancer colique et laparoscopie: quelles limites?

A. Valverde

Centre hospitalier d'Argenteuil

Séminaire DESC VISCERAL
Vendredi 12 Février 2010

Pourquoi l'abord laparoscopique?



Pourquoi l'abord laparoscopique?

- Diminution du traumatisme chirurgical
 - Complications pulmonaires et pariétales
 - Ileus
 - Douleurs post-opératoires

- Bénéfice global
 - Durée d'hospitalisation
 - morbidité globale

Pourquoi l'abord laparoscopique?

- Diminution du traumatisme chirurgical
 - Complications pulmonaires et pariétales
 - Ileus
 - Douleurs post-opératoires

- Bénéfice global
 - Durée d'hospitalisation
 - morbidité globale

Mais beaucoup de réticences...

- Les récurrences sur sites de trocart
 - 0,6 à 0,8% ! **Dis Colon Rectum 1983;26:571**
 - Mais Mécanisme? Preuve?
- Qualité du geste chirurgical?
 - Marges de résection
 - n ganglions prélevés
- Survie globale? Survie sans récurrence?

Les « limites » ont toujours reculé...

- Les premières colectomies « coelio » en 1991

Surg Laparosc Endosc 1991;1:144

- Puis les études de Faisabilité

Franklin Surg Endosc 2000;14:612

- puis les études non contrôlées

Milsom J Am Coll Surg 1998;187:46

- 2004 K.SLIM « Technique toujours en cours d'évolution »...

J Chir 2003; 140:197

Et les essais sont arrivés!...

- Etude espagnole de LACY 2002
- Etude chinoise de LEUNG 2004
- Etude américaine du groupe COST 2004
- Etude anglaise du MRC CLASICC trial grp 2005
- Etude européenne COLOR 2007 et 2009

Et of course des Meta-analyses

- Bonjer Arch Surg 2007
- Cochrane database Syst Rev 2008;16

Du « Factuel » sinon Rien!

- Règles de l'Evidence Based Medecine
analyse méthodologique, niveaux de preuve,
recommandations
- Et des critères précis:
 - Survie Globale
 - Survie Sans Récidive
 - récidives

Laparoscopy-assisted colectomy versus open colectomy for treatment of non-metastatic colon cancer: a randomised trial

Espagne

THE LANCET • Vol 359 • June 29, 2002 • www.thelancet.com

Antonio M Lacy, Juan C Garcia-Valdecasas, Salvadora Delgado, Antoni Castells, Pilar Tauri, Josep M Pique, Josep Visa

- Monocentrique, n=208 (111Coel vs 108 Lap)

Meilleur confort
Moins de Morbidité

	Laparoscopy-assisted colectomy (n=111)	Open colectomy (n=108)	p
Duration of intervention (min)	142 (52)	118 (45)	0.001
Blood loss (mL)	105 (99)	193 (212)	0.001
Initiation of peristalsis (h)	36 (31)	55 (40)	0.001
Reinsertion of nasogastric tube	3	9	0.08
Initiation of oral intake (h)	54 (42)	85 (67)	0.001
Duration of hospital stay (days)	5.2 (2.1)	7.9 (9.3)	0.005
Morbidity	12	31	0.001
Postoperative complications			
Wound infection	8	18	..
Persistent ileus	3	9	..
Evisceration	..	2	..
Intraperitoneal haemorrhage	..	1	..
Intraluminal haemorrhage	..	1	..
Anastomotic leak	..	2	..
Intra-abdominal collection	..	1	..
Pneumonia
Acute renal failure	2	1	..
Hepatic cirrhosis	..	2	..
decompensation			
Infection of the urinary tract	1

Data are mean (SD) or number of patients.

Table 2: **Data related to surgical intervention and morbidity**

Laparoscopy-assisted colectomy versus open colectomy for treatment of non-metastatic colon cancer: a randomised trial

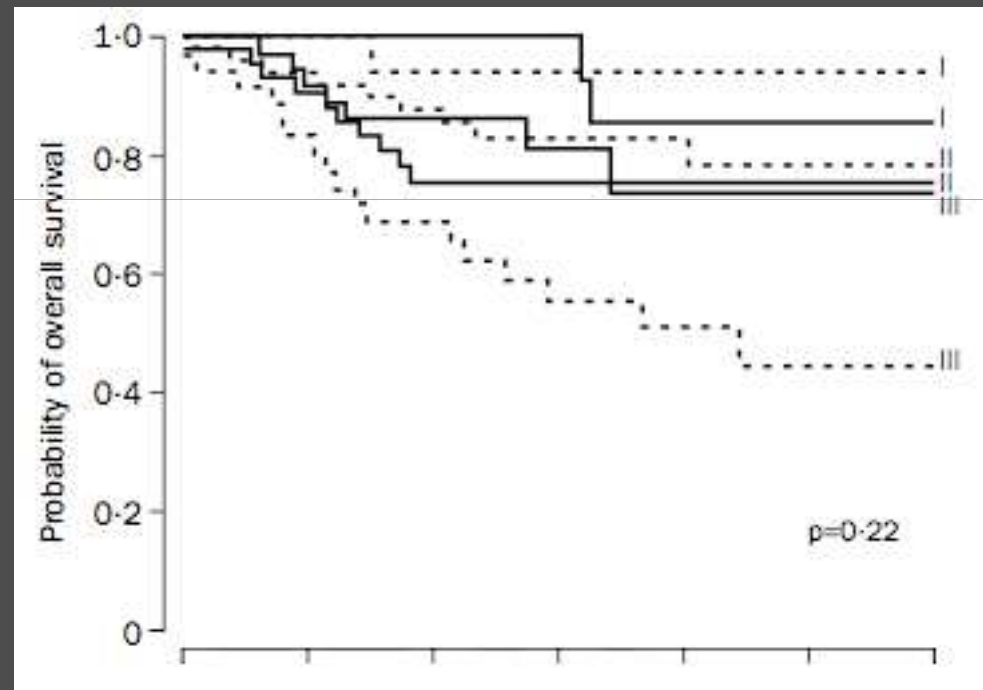
Espagne

THE LANCET • Vol 359 • June 29, 2002 • www.thelancet.com

Antonio M Lacy, Juan C Garcia-Valdecasas, Salvadora Delgado, Antoni Castells, Pilar Tauri, Josep M Pique, Josep Visa

- Meilleur pronostic des stades III

Mortalité 9 vs 21%



**Laparoscopy-assisted colectomy versus open colectomy
for treatment of non-metastatic colon cancer: a randomised
trial**

Espagne

THE LANCET • Vol 359 • June 29, 2002 • www.thelancet.com

Antonio M Lacy, Juan C Garcia-Valdecasas, Salvadora Delgado, Antoni Castells, Pilar Tauri, Josep M Piqué, Josep Visa

- Mais Biais méthodologiques...

essai d'équivalence avec seuil trop élevé 15%

Plus de ChimioT dans Groupe Coelio

Morbidité élevée dans Lap (17% abcès paroi)

Récidives locales trop élevé dans Lap (19%)

... Niveau de preuve 2

Laparoscopic resection of rectosigmoid carcinoma: prospective randomised trial

CHINE

Ka Lau Leung, Samuel P.Y Kwok, Steve C.W Lam, Janet F.Y Lee, Raymond Y.C Yiu, Simon S.M Ng, Peter B.C Fui, Wan Yee Lau

- CHINE
- monocentrique,
- 203 C vs 200 Lap

	Laparoscopic group	Open resection group
Intra-abdominal bleeding	..	1
Anastomotic bleeding	2	3
Anastomotic leak	1 (1)	4 (1)
Colonic stump infarct	..	1
Intra-abdominal abscess	1	2
Rectovaginal fistula	1	..
Rectovesical fistula	1 (1)	..
Chest infection	4 (1)	3 (1)
Respiratory failure	2	2
Reactivation of tuberculosis	1	..
Pneumothorax (iatrogenic)	..	1 (1)
Arrhythmia	2	2
Angina or heart attack	2	1
Transient ischaemic attack or CVA	2	..
Surgical emphysema	1	..
Urinary tract infection	8 (1)	7
Urinary retention	5	3
Epididymo-orchitis	1	..
Paralytic ileus	4 (2)	6 (1)
Perforated peptic ulcer	1	..
Salmonella enteritis	1	..
Deep vein thrombosis	..	4
Wound infection	9 (2)	15
Strangulated incisional hernia	2 (1)	..
Prolapsed intervertebral disc	..	1
Jaw dislocation	..	1
Gouty attack	..	1
Glaucoma	..	1
Reoperation	6 (4)	5 (1)
Operative death	5 (2)	4 (1)
Total number of patients	40 (7)	45 (2)

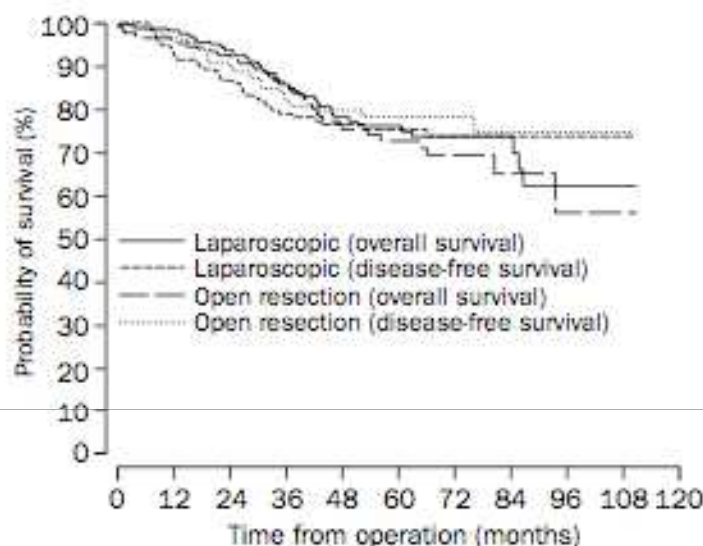
CVA=cerebrovascular accident. Numbers in parentheses are complications contributed by patients with local invasion.

Table 3: Complications of surgery

Laparoscopic resection of rectosigmoid carcinoma: prospective randomised trial

CHINE

Ka Lau Leung, Samuel P.Y Kwok, Steve C.W Lam, Janet F.Y Lee, Raymond Y.C Yiu, Simon S.M Ng, Paul B.S Lai, Wan Yee Lau

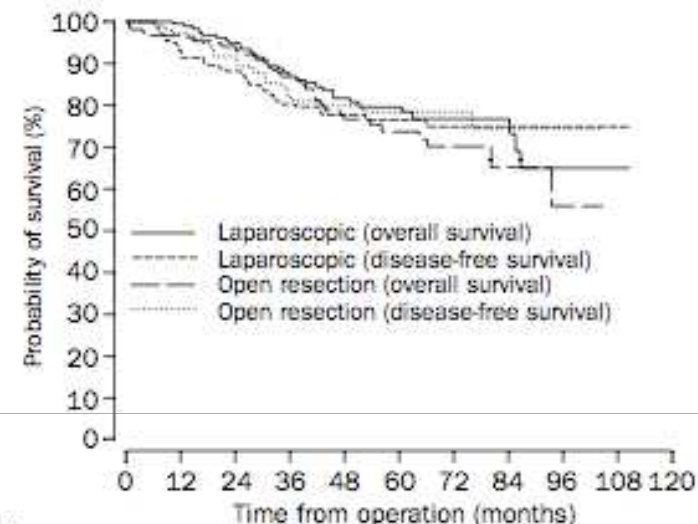


Numbers at risk

Laparoscopic (disease-free survival)	167	147	127	105	79	59	38	21	6	1
Laparoscopic (overall survival)	167	159	140	116	87	62	40	22	6	1
Open resection (disease-free survival)	170	152	128	97	70	46	27	11	4	0
Open resection (overall survival)	170	157	140	113	76	52	29	14	5	0

Figure 2: Overall survival and disease-free survival (stage I-III disease)

Overall survival $p=0.61$; disease-free survival $p=0.45$.



Numbers at risk

Laparoscopic (disease-free survival)	156	139	121	101	78	58	38	21	6	1
Laparoscopic (overall survival)	156	150	131	110	86	61	40	22	6	1
Open resection (disease-free survival)	160	144	123	93	67	44	25	9	4	0
Open resection (overall survival)	160	148	134	109	73	50	27	12	5	0

Figure 6: Overall survival and disease-free survival (stage I-III disease) if local invasion excluded

Survival if local invasion excluded $p=0.35$; disease-free survival $p=0.60$.

A Comparison of Laparoscopically Assisted and Open Colectomy for Colon Cancer

N. ENGL J MED 350:20 WWW.NEJM.ORG MAY 13, 2004

The Clinical Outcomes of Clinical Therapeutic Study Council

USA

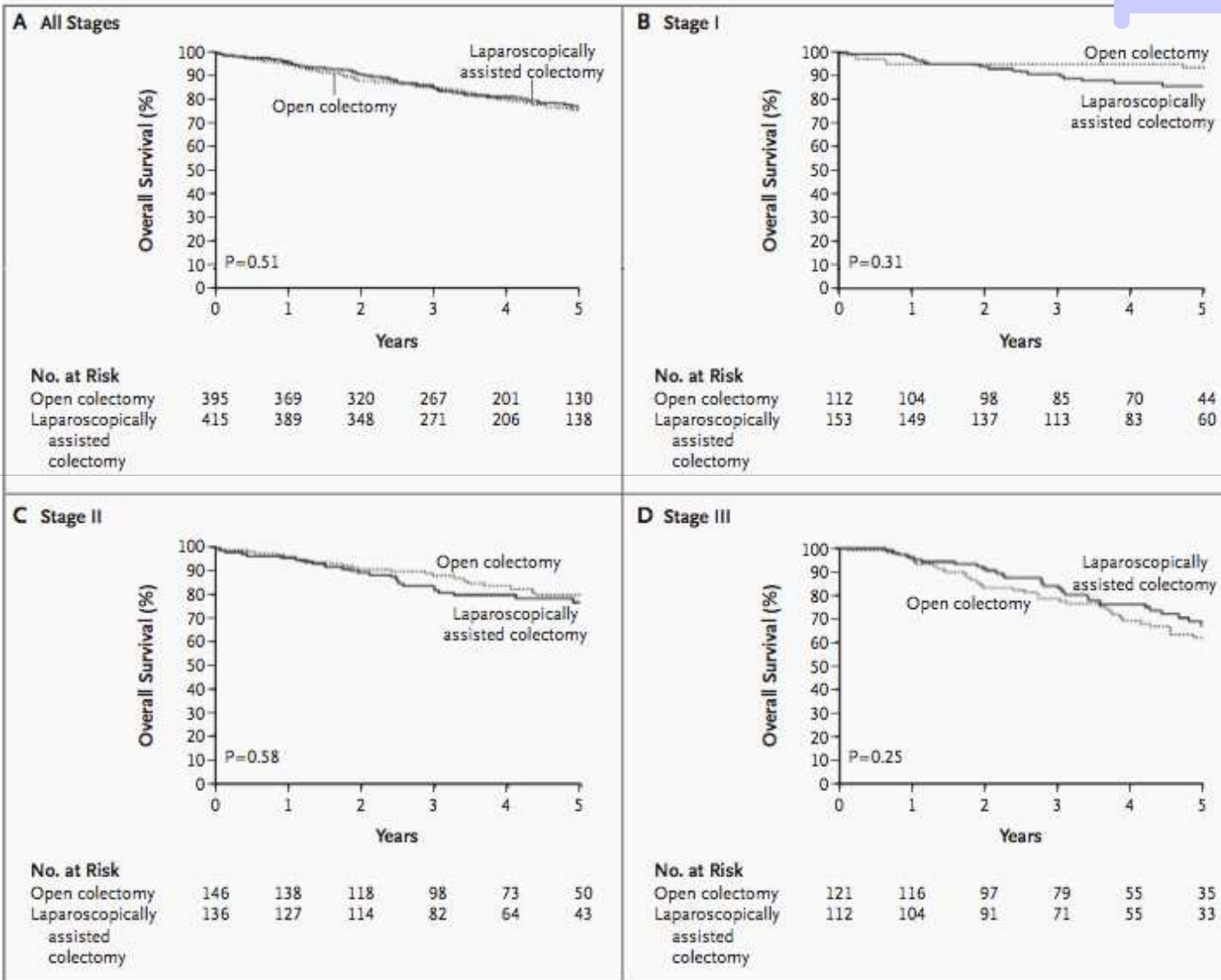


Figure 3. Overall Survival among Patients with Colon Cancer of Any Stage (Panel A), Stage I (Panel B), Stage II (Panel C), or Stage III (Panel D). The tumor-node-metastasis stage was used. Patients with benign pathological conditions were excluded from this analysis.

Short-term endpoints of conventional versus laparoscopic-assisted surgery in patients with colorectal cancer (MRC CLASSIC trial): multicentre, randomised controlled trial

Pierre J Guillaou, Philip Quirke, Helen Thorpe, Joanne Walker, David G Jayne, Adrian M H Smith, Richard M Heath, Julia M Brown, for the MRC CLASSIC trial group*

UK

- Essai Multicentrique du groupe MRC CLASSIC
- N 794 (droit, gauche, rectum)
- 526 coel vs 268 lap
- Essai de supériorité
- Inclusion de RECTUM

Short-term endpoints of conventional versus laparoscopic-assisted surgery in patients with colorectal cancer (MRC CLASSIC trial): multicentre, randomised controlled trial

Pierre J Guillaou, Philip Quirke, Helen Thorpe, Joanne Walker, David G Jayne, Adrian M H Smith, Richard M Heath, Julia M Brown, for the MRC CLASSIC trial group*

- Essai Multicentrique du groupe MRC CLASSIC
- N 794 (droit, gauche, rectum)
- 526 coel vs 268 lap
- Essai de supériorité
- Inclusion de RECTUM

CLASICC trial

UK

- Conversion 34%

	Laparotomie	Laparoscopie	Convertis	Non-convertis
Morbidité	37%	40%	45%	29%
Mortalité	5%	4%	9%	1%

Guillou et al. Lancet 2005

Plus de marges positives ?

UK

- CLASICC trial
- Laparoscopie (n=242) vs. laparotomie (n=132)
- Marges circonférentielles 16% vs. 14% (p=0,8)
 - Pour les résections antérieures 12% vs. 6% (p=0,19)
 - Pour les AAP 20% vs. 26% (NS)



Survival after laparoscopic surgery versus open surgery for colon cancer: long-term outcome of a randomised clinical trial

*The Colon Cancer Laparoscopic or Open Resection Study Group**

Europe

- Etude COLOR Européenne, multicentrique
- Laparoscopie (n=627) vs. laparotomie (n=621)
- Critère de Jugement 1°:
 - Survie sans récurrence à 3 ans

Lancet Oncol 2009;10:44



Survival after laparoscopic surgery versus open surgery for colon cancer: long-term outcome of a randomised clinical trial

The Colon Cancer Laparoscopic or Open Resection Study Group*

Europe

- Essai de non infériorité
- Δ de 7%
- IC à 95% > borne

Mais en Perprotocole (11 patients convertis)
non infériorité de la laparoscopie démontrée

	Open colectomy	laparoscopic colectomy	Difference
Disease-free survival			
3 years	76.2 (72.6–79.8)	74.2 (70.4–78.0)	2.0 (–3.2 to 7.2)
5 years	67.9 (63.6–72.2)	66.5 (62.2–70.7)	1.4 (–4.6 to 7.5)
Overall survival			
3 years	84.2 (81.1–87.3)	81.8 (78.4–85.1)	2.4 (–2.1 to 7.0)
5 years	74.2 (70.1–78.2)	73.8 (69.7–77.9)	0.4 (–5.3 to 6.1)

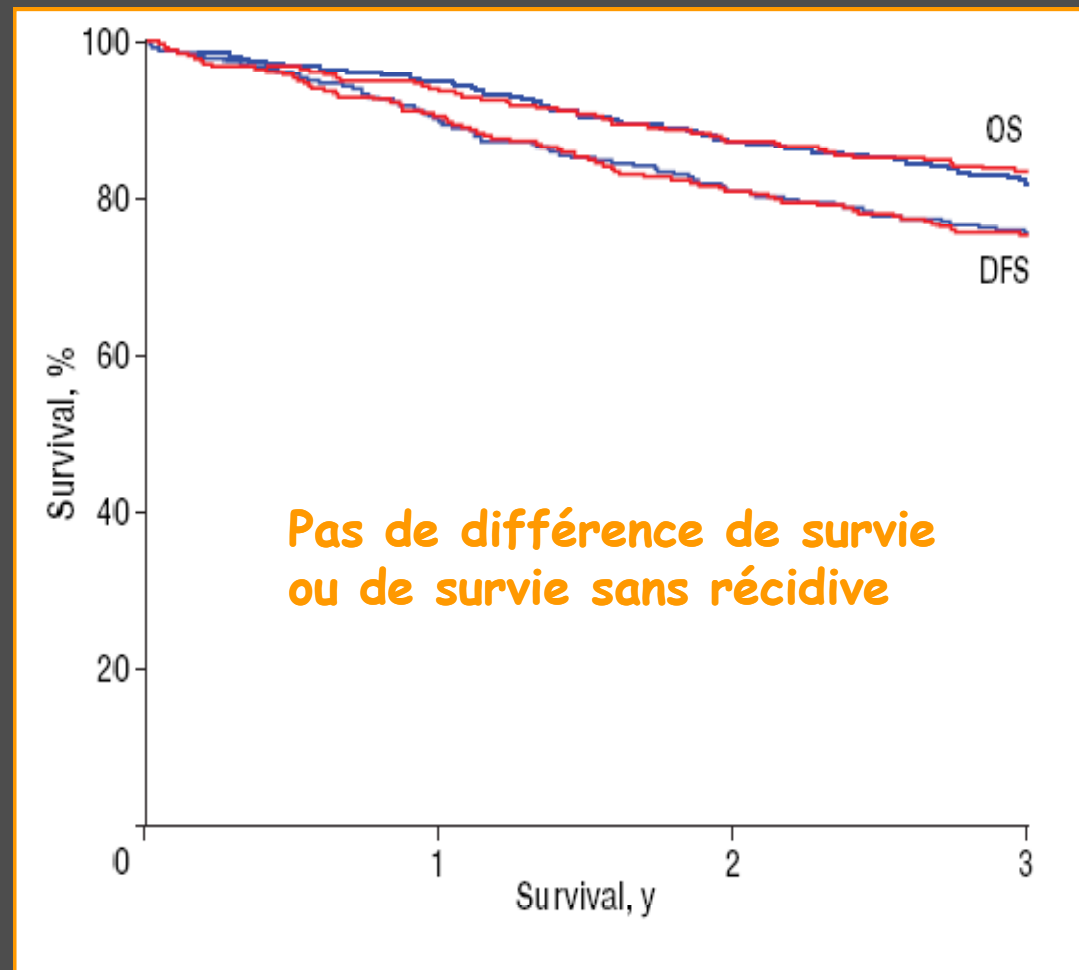
Data given are percentages (95% CI).

Table 4: Survival at 3 and 5 years according to procedure

Lancet Oncol 2009;10:44

META-ANALYSE

- Qualité de la résection identique
- Conversion 19%
- 4 essais



Bonjer, Arch Surg 2007

META-ANALYSE

- Analyse multivariée

Table 2. Multivariate Analysis of Disease-Free Survival According to Various Factors*

Factor	Hazard Ratio (95% Confidence Interval)	P Value
Procedure†	0.99 (0.80-1.22)	.92
Stage II vs stage I	2.10 (1.50-2.94)	<.001
Stage III vs stage I	3.81 (2.75-5.28)	<.001
Female vs male	0.81 (0.66-0.99)	.04
Age >70 vs ≤70 y	1.27 (1.03-1.57)	.03

Table 3. Multivariate Analysis of Overall Survival According to Various Factors*

Factor	Hazard Ratio (95% Confidence Interval)	P Value
Procedure†	1.07 (0.83-1.37)	.61
Stage II vs stage I	1.89 (1.29-2.77)	<.001
Stage III vs stage I	2.88 (1.98-4.20)	<.001
Female vs male	0.72 (0.56-0.92)	.009
Age >70 vs ≤70 y	1.81 (1.40-2.34)	<.001


Ce qui est donc sûr en 2010

- Pas de différence de survie Globale
 - Niveau de preuve 1 (preuve scientifique)
- « Les malades présentant un cancer du côlon curable chirurgicalement peuvent donc être opérés par l'une ou l'autre de ces 2 voies d'abord avec un grade A de recommandation »

Evidence based medicine J Am Med Assoc 2000;284:1290



Alors quelles limites?

- Carcinologiques? non
- Techniques? Sans doute...
 - Bénéfices immédiats attendus de la voie d'abord 
 - Coelio: douleur, ileus, durée hospi
 - Laparo: durée op, coûts directs
 - Taux de conversion <20%