

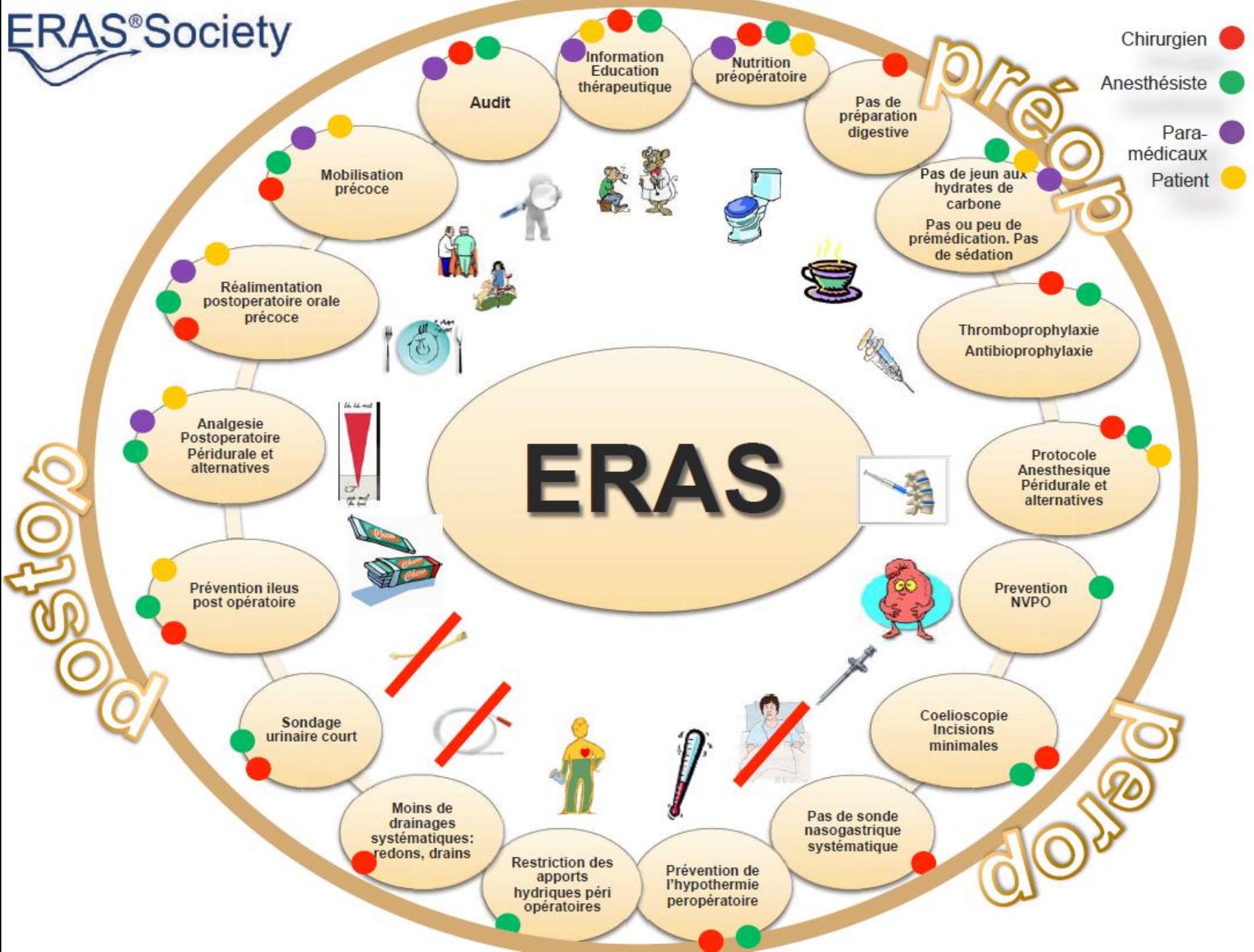
Réhabilitation précoce Chirurgie colo rectale

Dr. S. Ponsonnard

26/05/2018

ALIADE

Liens d'intérêts

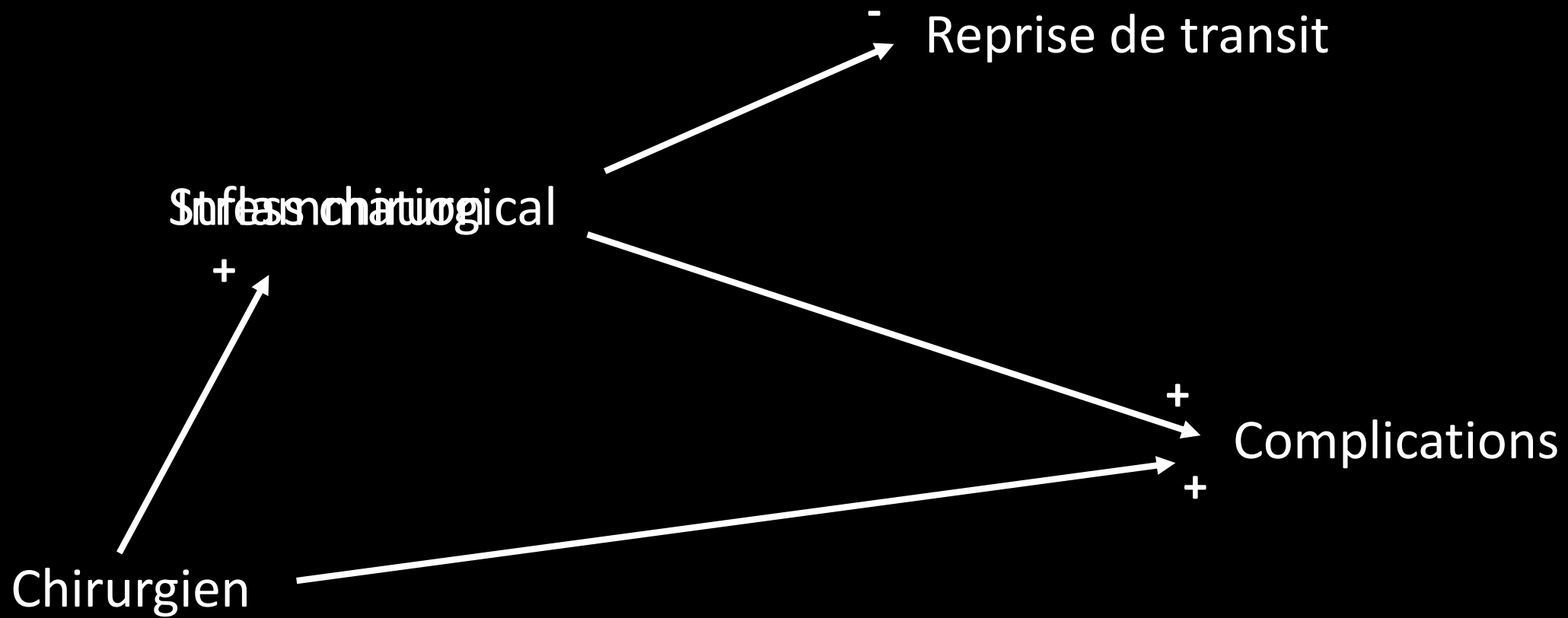


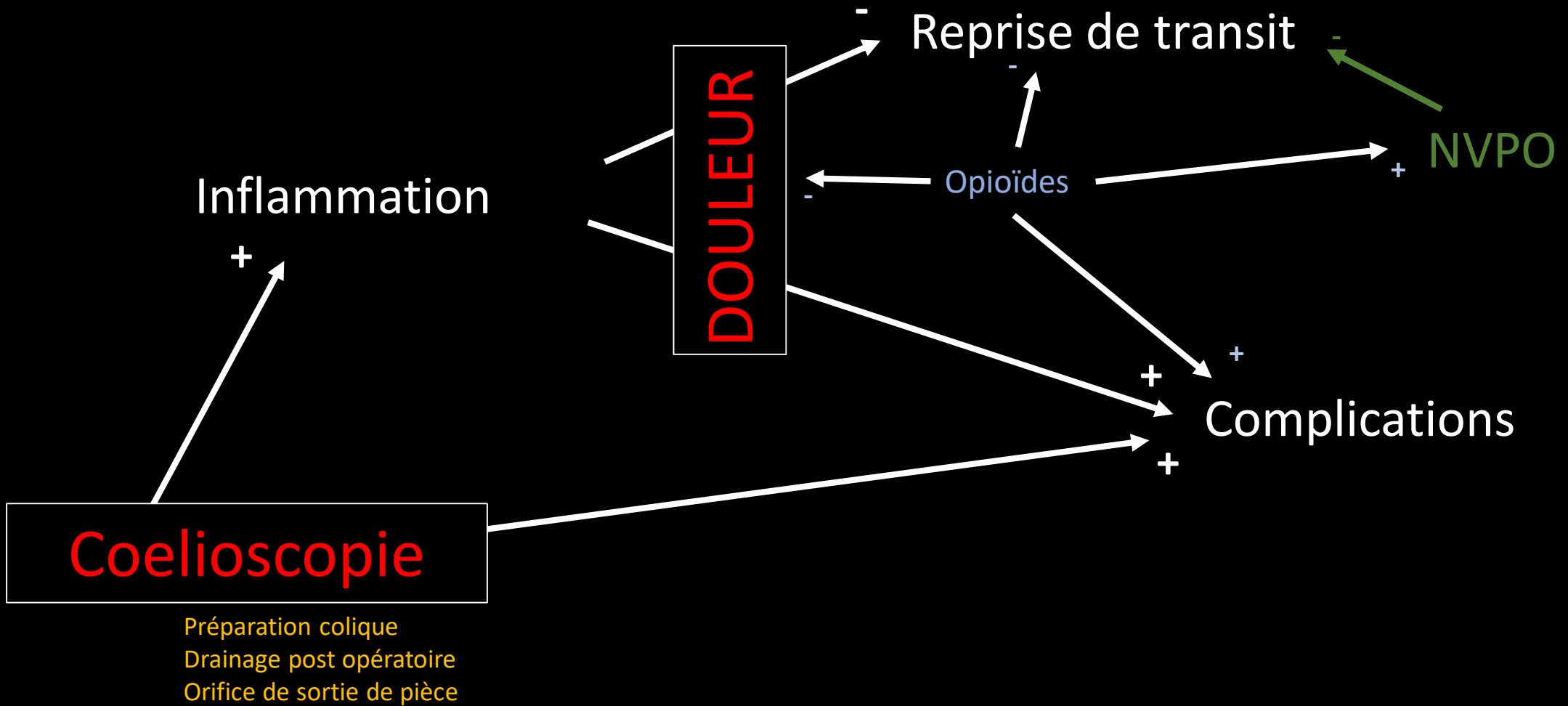


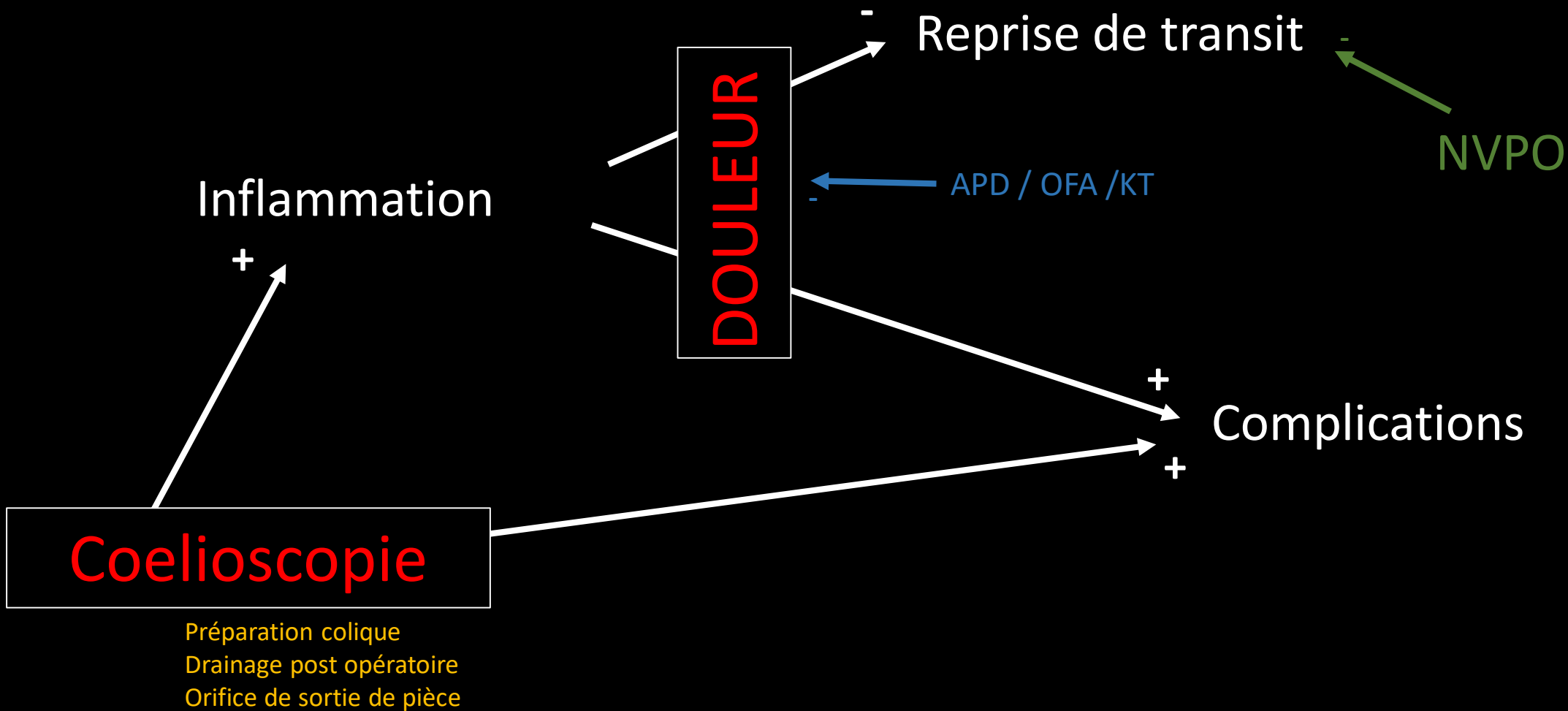
Enhanced Recovery After Surgery



Guideline for enhanced recovery after elective colorectal surgery. Ann Fra Anesth Reanim. 2014.







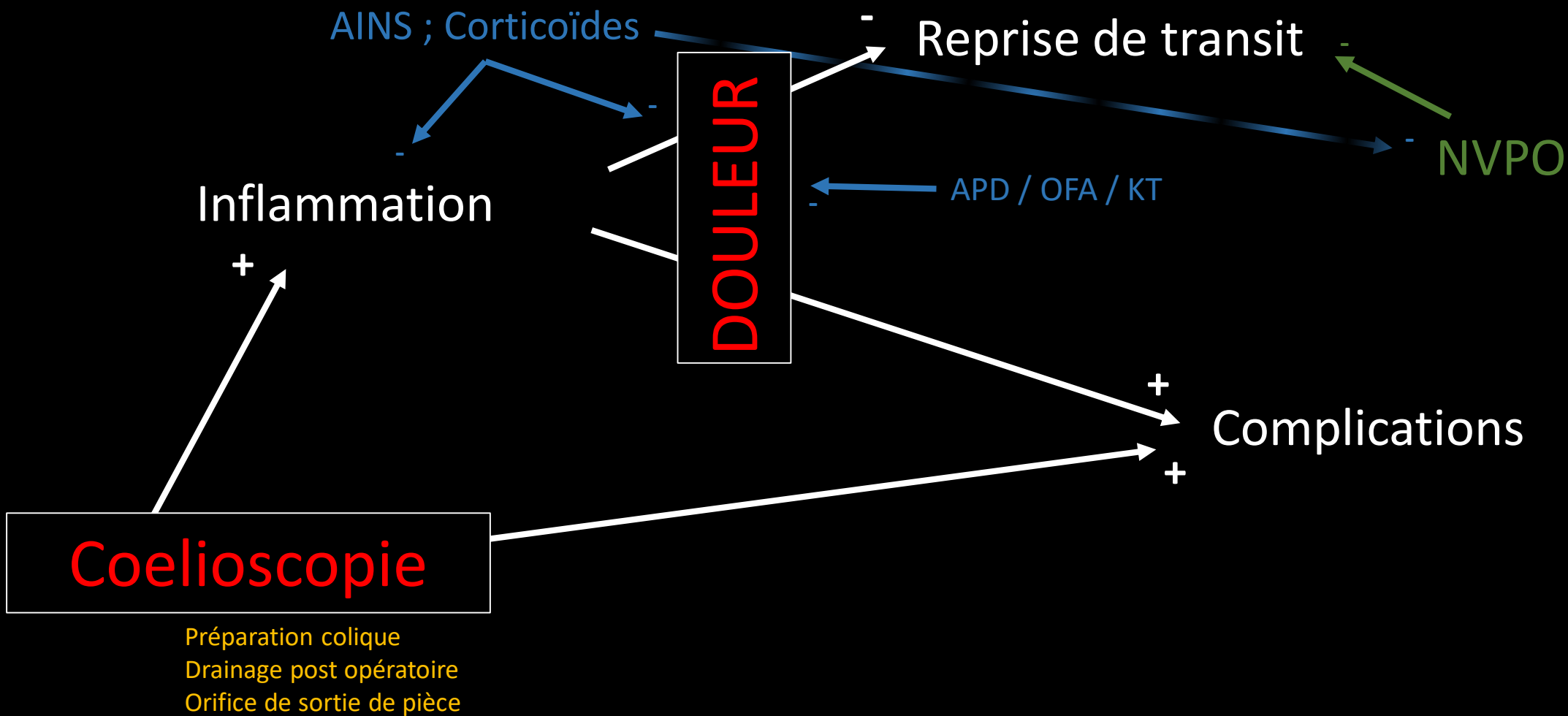
Reprise du transit

- 36 h

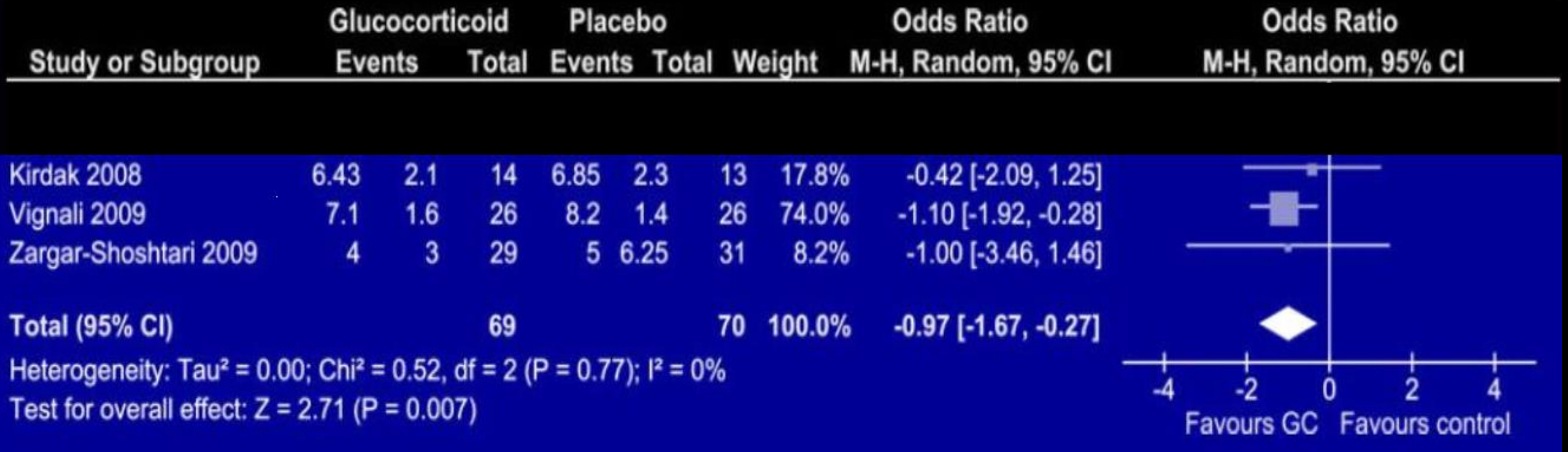
Complications respiratoires

Endpoint	Frequency of endpoint (%)		p*
	Control (n=441)	Epidural (n=447)	
Postoperative death	4.3	5.2	0.67
Respiratory failure	30.2	23.3	0.02
Cardiovascular event	24.0	25.7	0.61
Renal failure	8.2	7.4	0.75
GI failure	6.8	6.5	0.95
Hepatic failure	2.9	2.2	0.65
Haematological failure	4.1	3.4	0.69
Inflammation/sepsis	46.7	42.7	0.26
At least one morbid endpoint	60.5	56.6	0.26
Death or at least one morbid endpoint	60.7	57.1	0.29

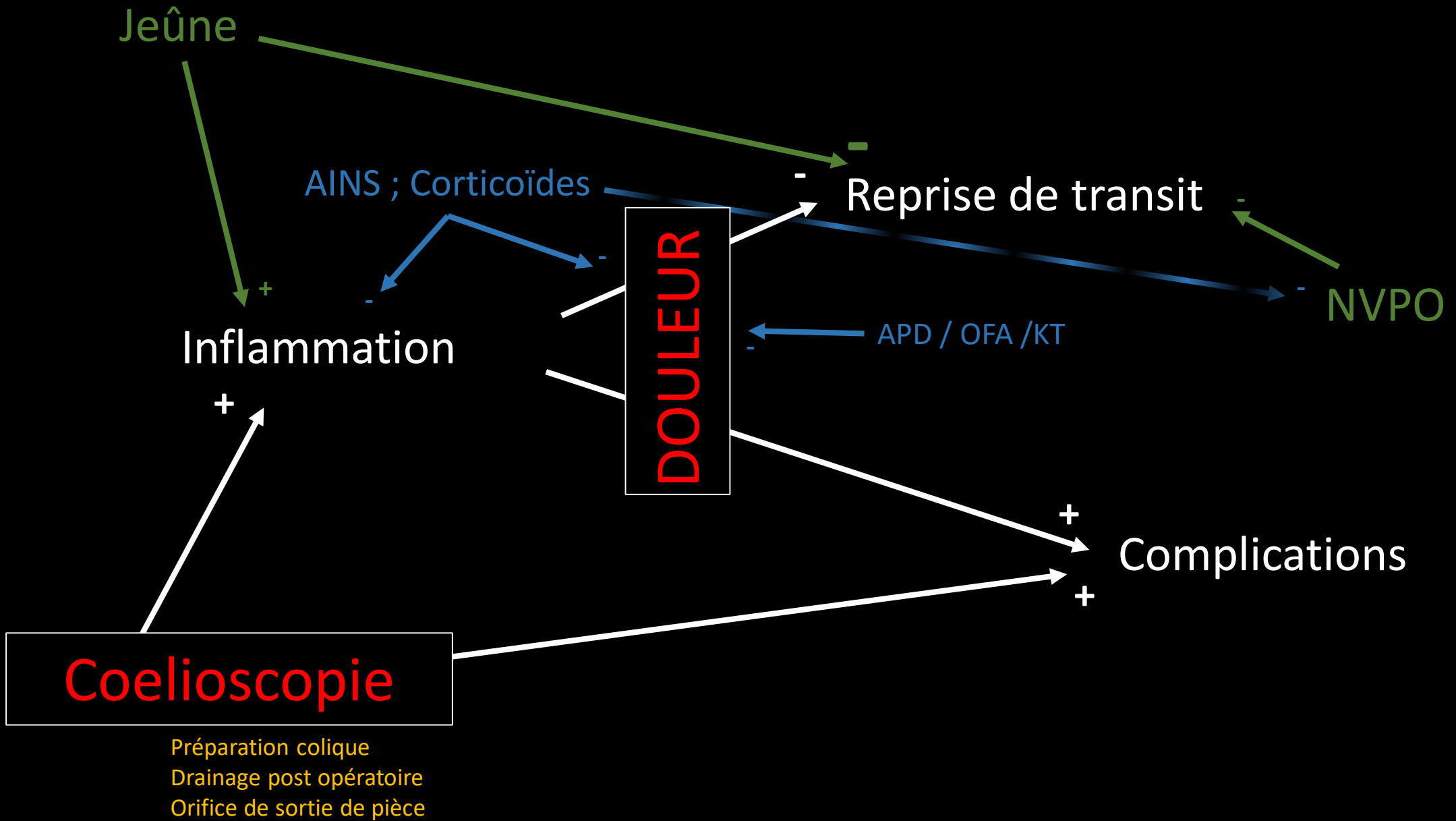
Prospective
Randomisée
Contrôlée
889 patients
ITT



Corticoides



Métanalyse
439 patients

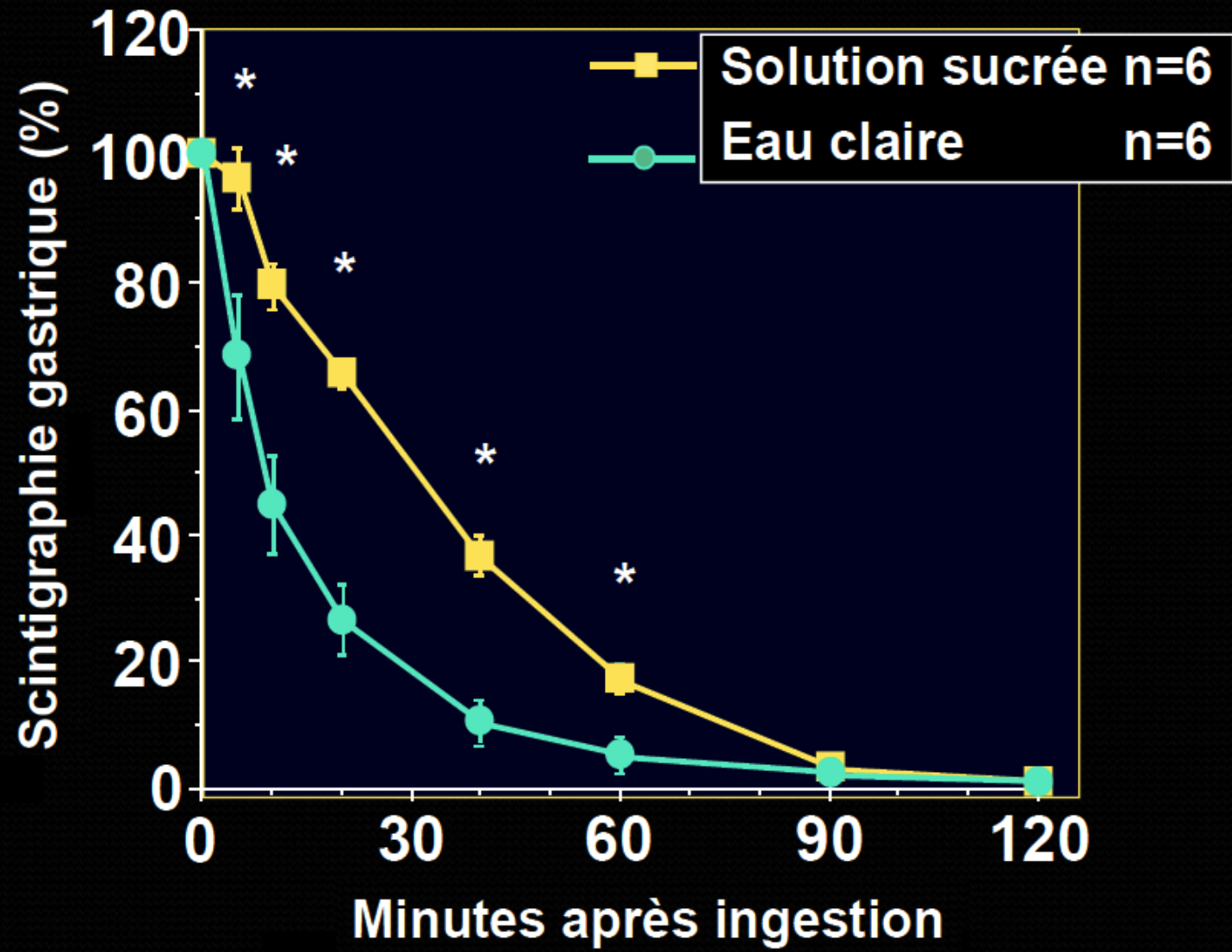


Règles du jeûne

Liquides clairs : 2 h. Eau, thé, café,
jus de pommes

Liquides non clairs et solides : 6 h.

Traumatisés : jamais a jeun.



Prospective
Randomisée
Contrôlée
Volontaires sains

Nygren et al. Ann surg. 1995.

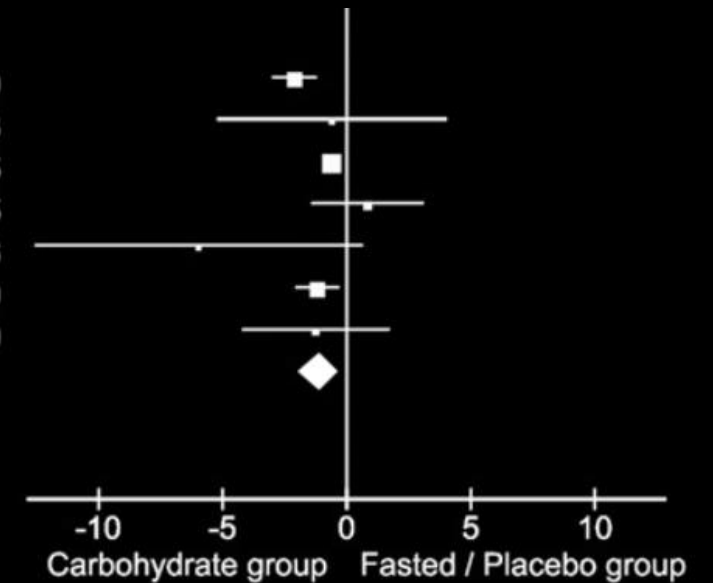
Dextrine de maltose

1.2.2 Major abdominal surgery

Nygren	6.9	0.9	7	9	0.8	7	24.0%	-2.10 [-2.99, -1.21]	1999
Henriksen	13.5	7.3	17	14.1	8.7	31	2.7%	-0.60 [-5.23, 4.03]	2003
Yuill	10.6	0.7	49	11.2	0.8	53	32.9%	-0.60 [-0.89, -0.31]	2005
Hausel (b)	11.66	8.25	80	10.82	8.96	172	9.1%	0.84 [-1.41, 3.09]	2005
Noblett	6.5	2.42	12	12.47	15.8	23	1.4%	-5.97 [-12.57, 0.63]	2006
Kaska	9.07	1.99	74	10.25	3.37	75	24.0%	-1.18 [-2.07, -0.29]	2010
Mathur	8.68	6.68	80	9.93	11.89	82	5.9%	-1.25 [-4.21, 1.71]	2010
Subtotal (95% CI)			319			443	100.0%	-1.08 [-1.87, -0.29]	

Heterogeneity: $\text{Tau}^2 = 0.47$; $\text{Chi}^2 = 15.13$, $\text{df} = 6$ ($P = 0.02$); $I^2 = 60\%$

Test for overall effect: $Z = 2.68$ ($P = 0.007$)



Métanalyse
1685 patients

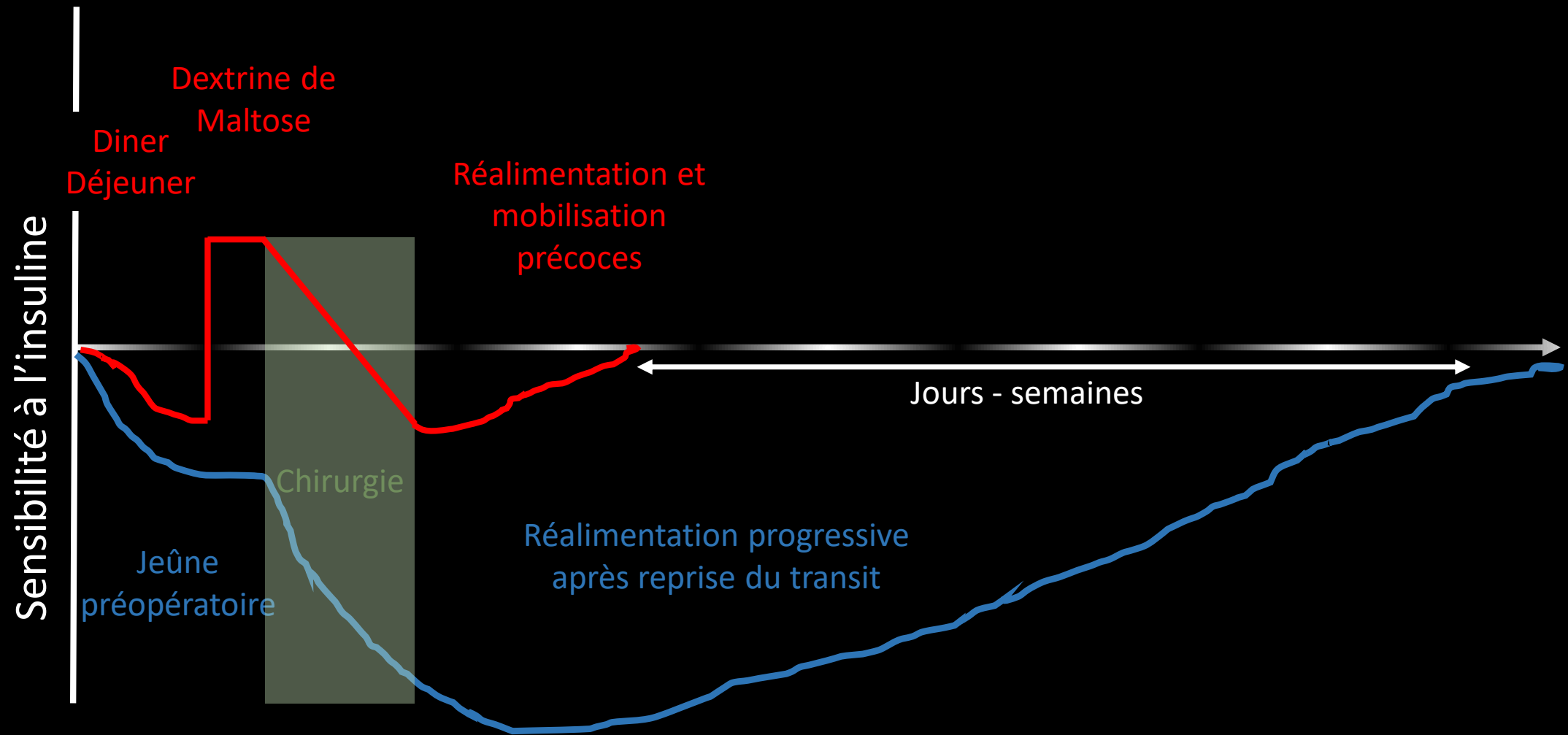
Reprise alimentaire précoce – Chewing-gum

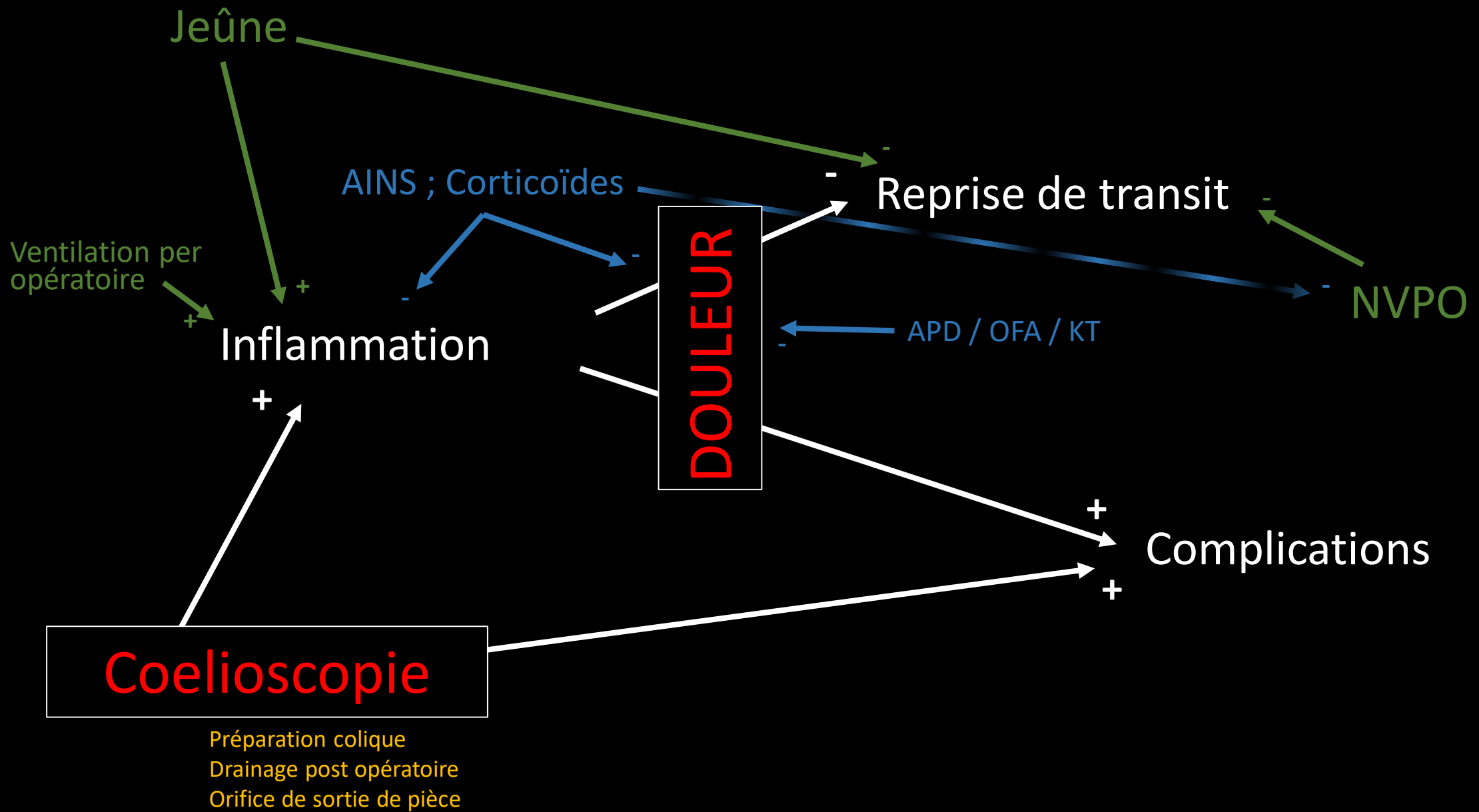
Study or Subgroup	Gum chewing			Control			Weight	Mean Difference IV, Random, 95% CI [Days]	Mean Difference IV, Random, 95% CI [Days]
	Mean [Days]	SD [Days]	Total	Mean [Days]	SD [Days]	Total			
1.3.1 Colorectal surgery									
Asao 2002	13.5	3	10	14.5	6.1	9	0.1%	-1.00 [-5.40, 3.40]	
Atkinson 2014	7	61.3	198	7	38	202	0.0%	0.00 [-10.02, 10.02]	
Bahena-Aponte 2010	4.25	12.7	16	6.25	15.5	16	0.0%	-2.00 [-11.82, 7.82]	
Bonventre 2014	6.75	2.25	25	7	2.5	25	1.1%	-0.25 [-1.57, 1.07]	
Fan 2009	13.6	1.3	21	14.2	1.5	21	1.9%	-0.60 [-1.45, 0.25]	
Forrester 2014	6.31	5.47	13	6.26	5.83	18	0.1%	0.05 [-3.96, 4.06]	
Li 2012b	6.24	1.78	38	7.31	1.07	35	2.5%	-1.07 [-1.74, -0.40]	
Lim 2013	9.97	12.7	77	12.03	15.5	80	0.1%	-2.06 [-6.49, 2.37]	
Matros 2006	5.17	1.58	22	5.71	3	21	0.9%	-0.54 [-1.98, 0.90]	
McCormick 2005	4.4	1.5	62	5.2	2	40	2.3%	-0.80 [-1.52, -0.08]	
Quah 2006	9.4	2.5	19	11.1	7.3	19	0.2%	-1.70 [-5.17, 1.77]	
Schluender 2005	7.51	12.7	17	6.75	15.5	19	0.0%	0.76 [-8.46, 9.98]	
Schuster 2006	4.3	0.43	17	6.8	1.38	17	2.4%	-2.50 [-3.19, -1.81]	
Schweizer 2010	7.77	5.48	11	7.45	3.43	13	0.2%	0.32 [-3.42, 4.06]	
Wang 2011a	8.35	3.44	78	11.73	4.26	77	1.2%	-3.38 [-4.60, -2.16]	
Watson 2008	5.42	2.37	26	6.13	2.77	27	1.0%	-0.71 [-2.10, 0.68]	
Zaghiyan 2013	4.7	0.7	54	4.5	1.9	60	3.0%	0.20 [-0.32, 0.72]	
Zhong 2009	11.4	2.8	60	12.2	2.5	60	1.7%	-0.80 [-1.75, 0.15]	
Subtotal (95% CI)			764			759	18.7%	-1.01 [-1.61, -0.41]	

Heterogeneity: Tau² = 0.81; Chi² = 57.57, df = 17 (P < 0.00001); I² = 70%
 Test for overall effect: Z = 3.29 (P = 0.001)

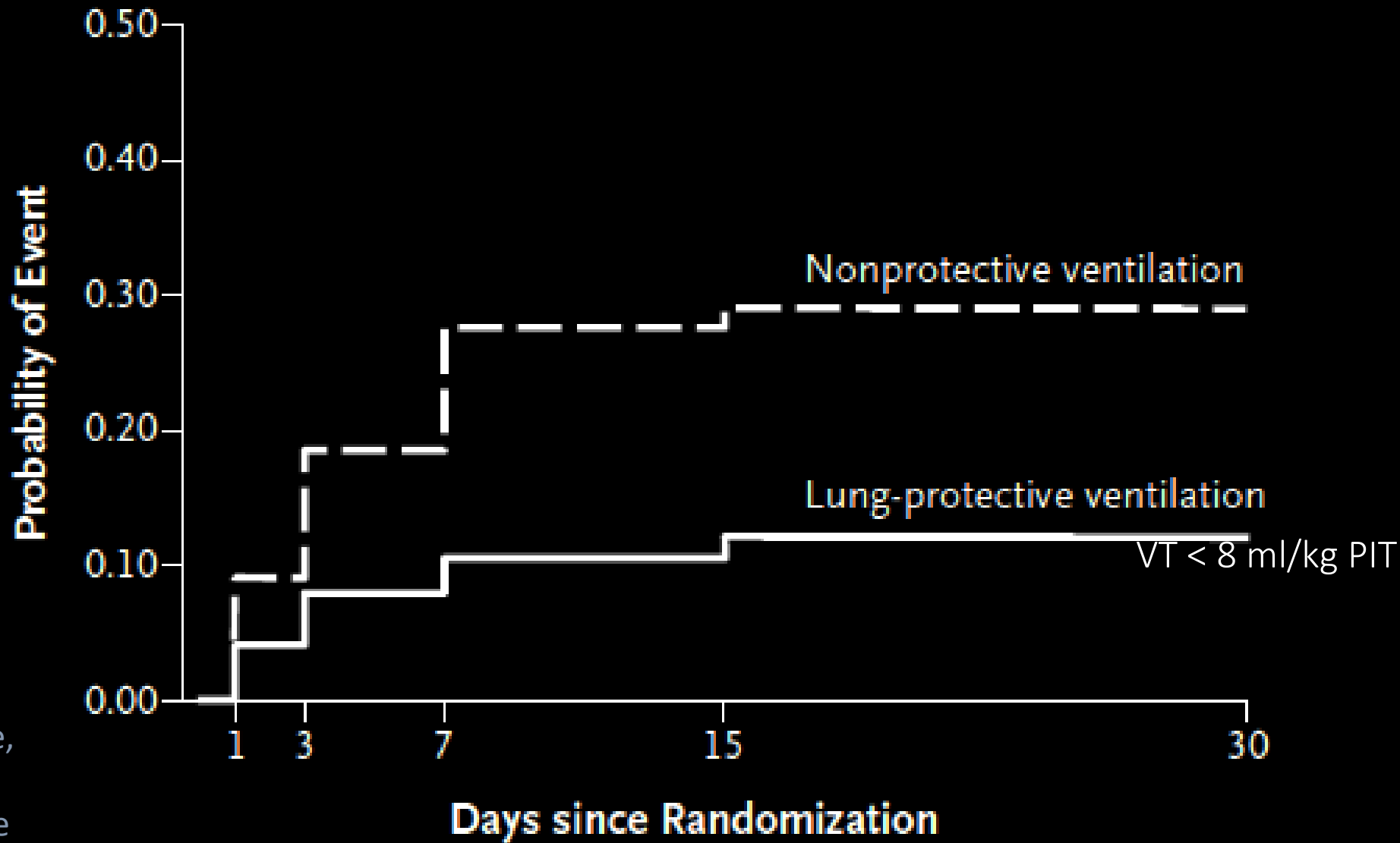


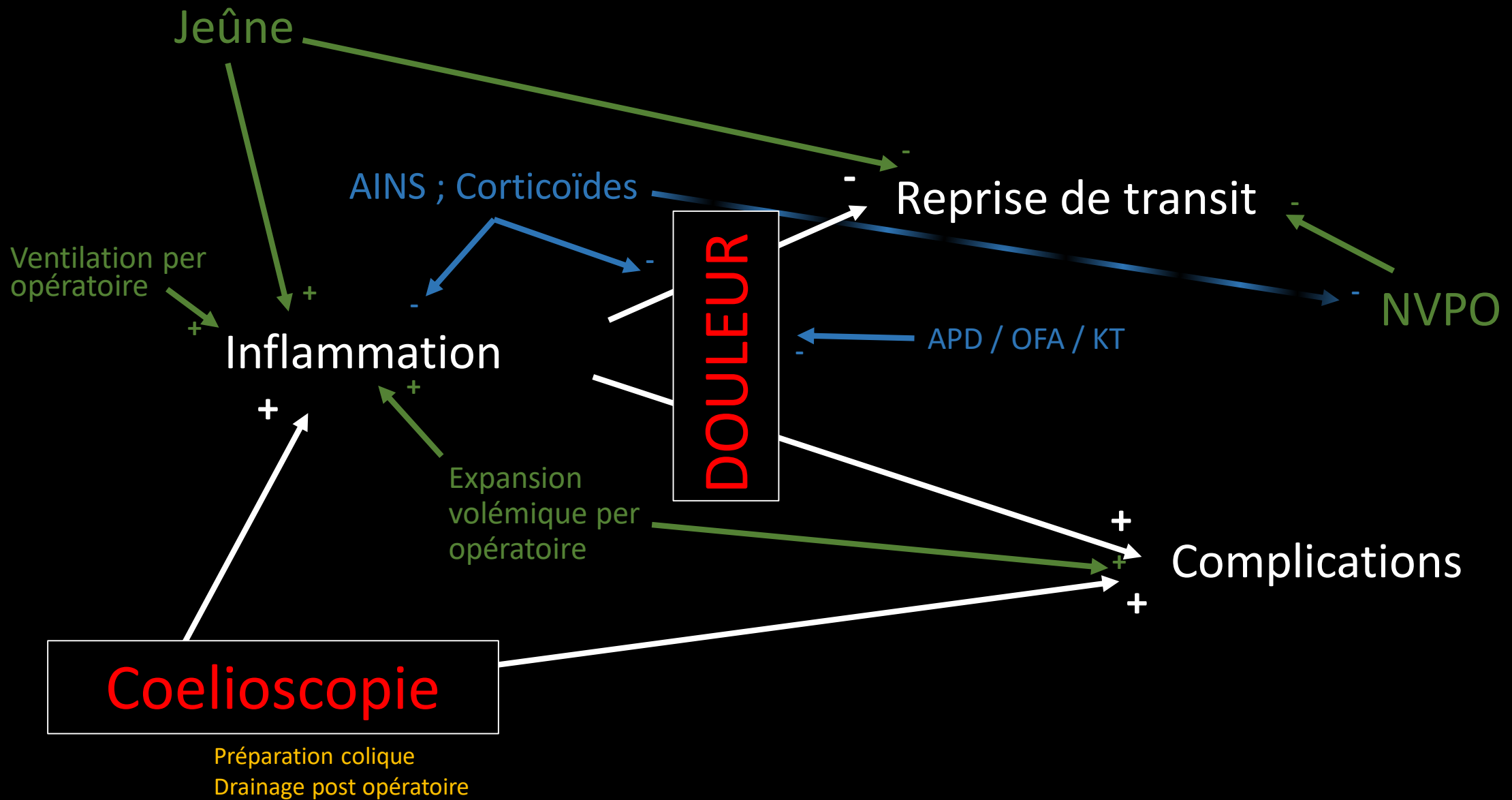
Métanalyse
9072 patients

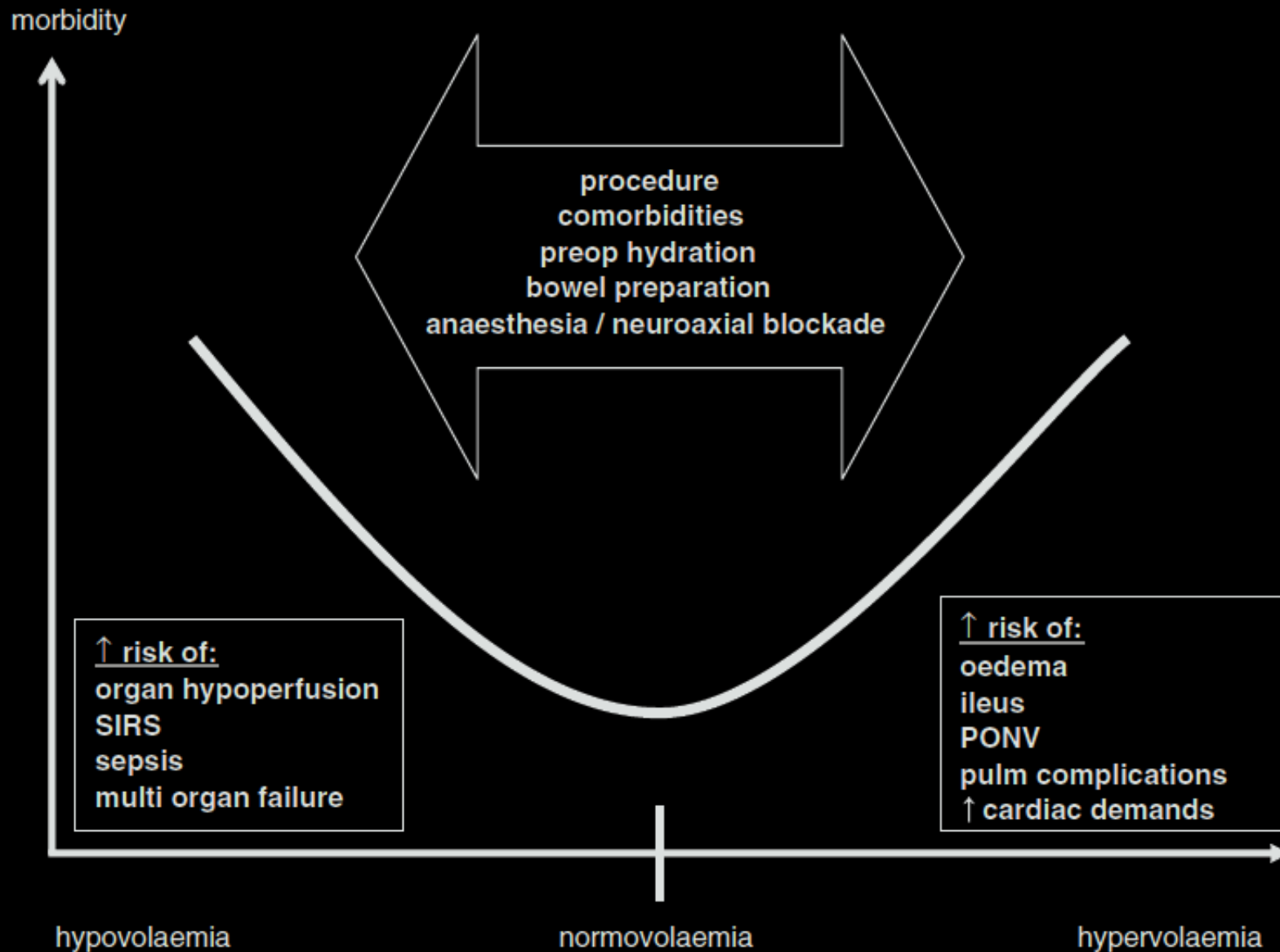




Prospective,
Multicentrique,
Randomisée
Double aveugle
400 patients

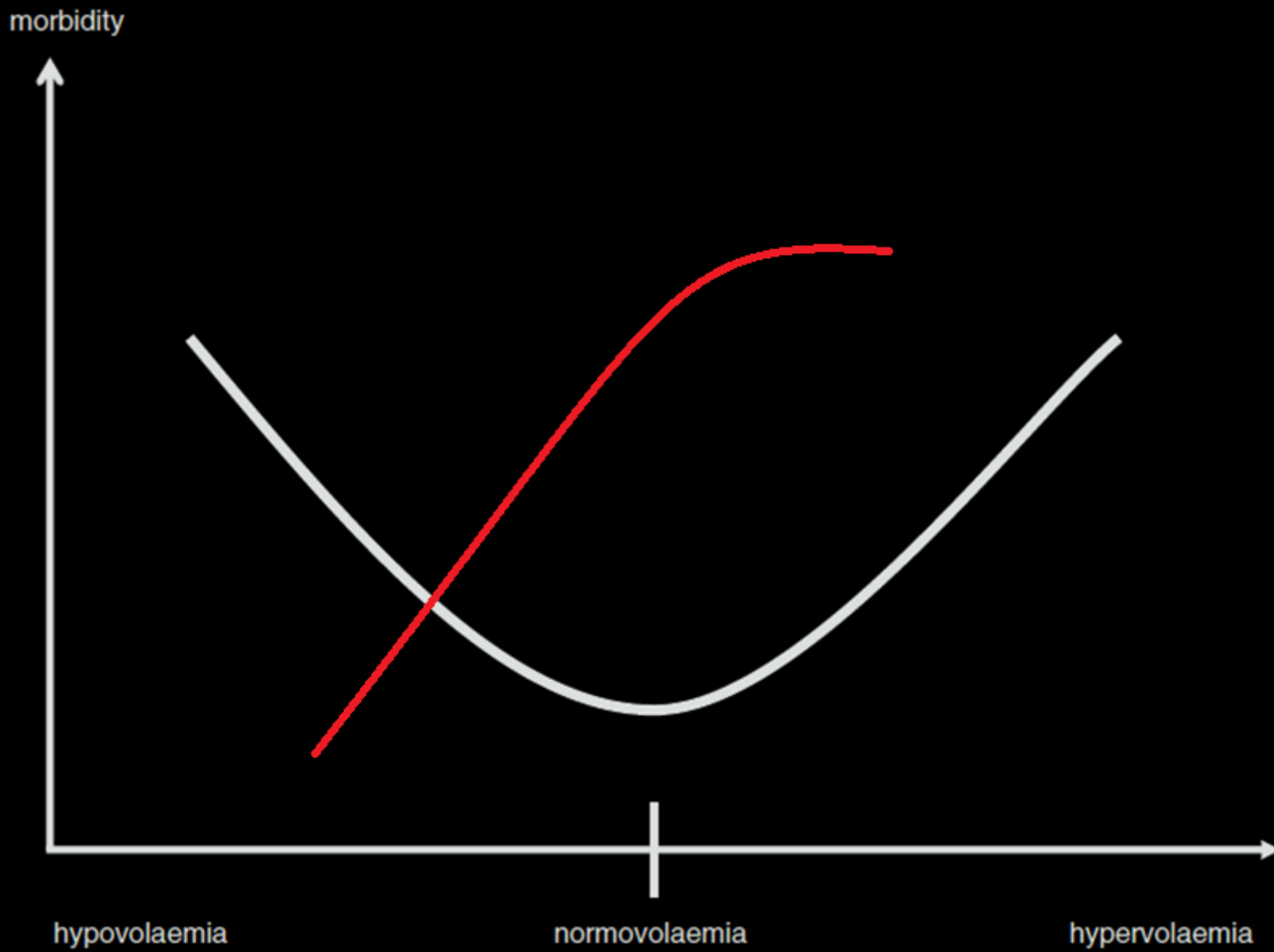




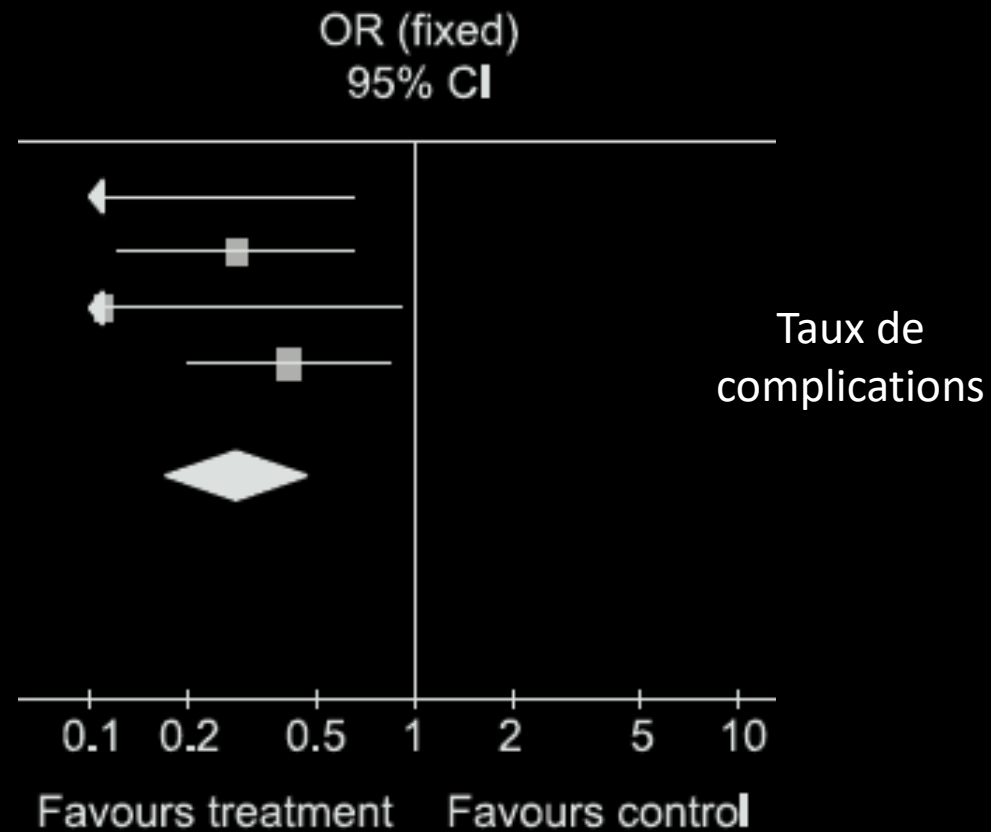


Review

Bundgaard-Nielsen et al. *Acat Anaesthesiol Scand.* 2009.



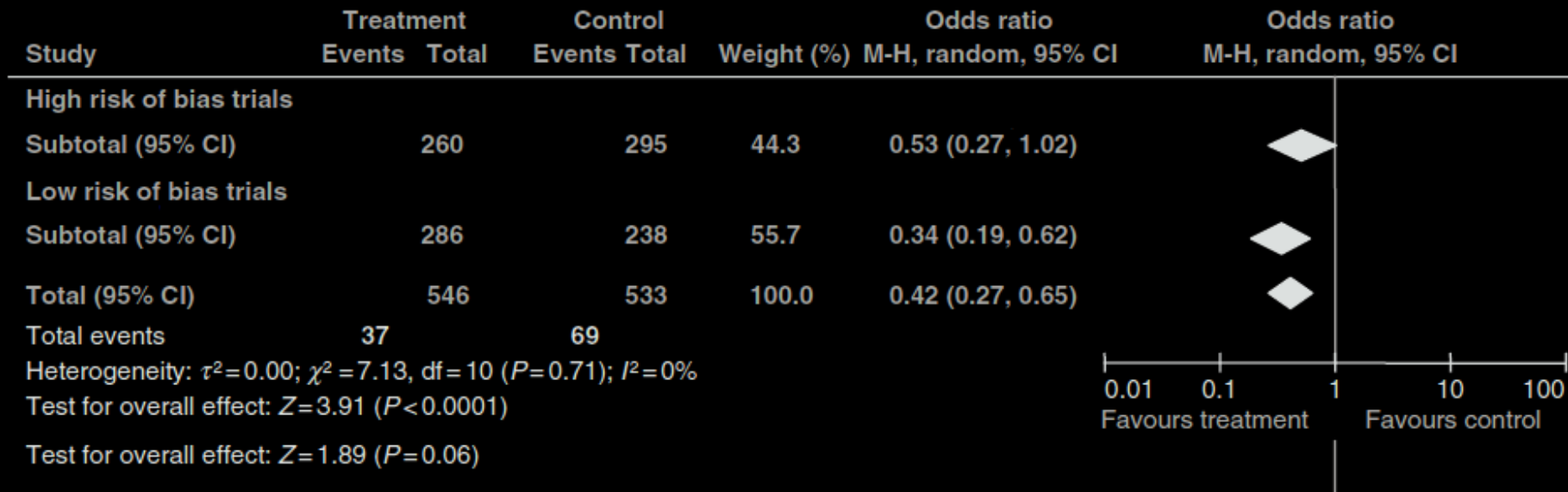
Doppler œsophagien



Meta-analysis
5 study
420 patients
Major abdominal surgery

Complications intestinales

Major gastrointestinal complications

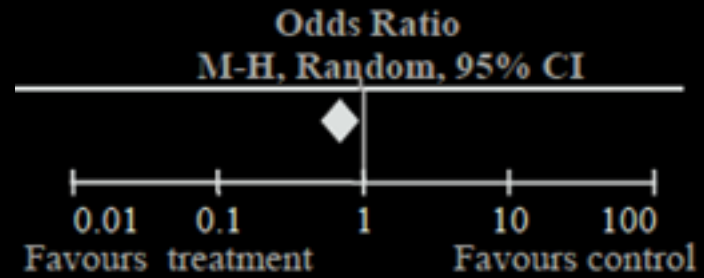
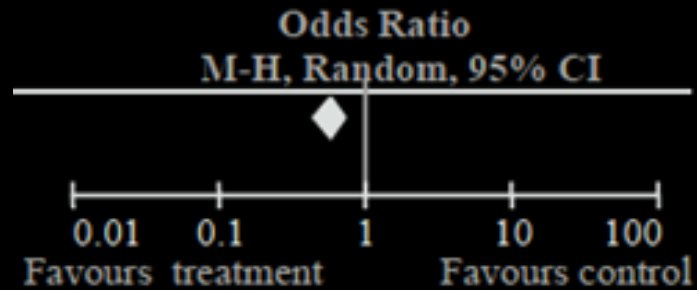


Meta-analysis
16 study
3410 patients

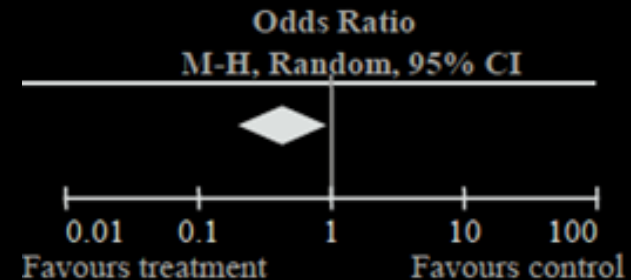
Giglio et al. Brit J Anesth. 2009.

Infections

Infections de site opératoire



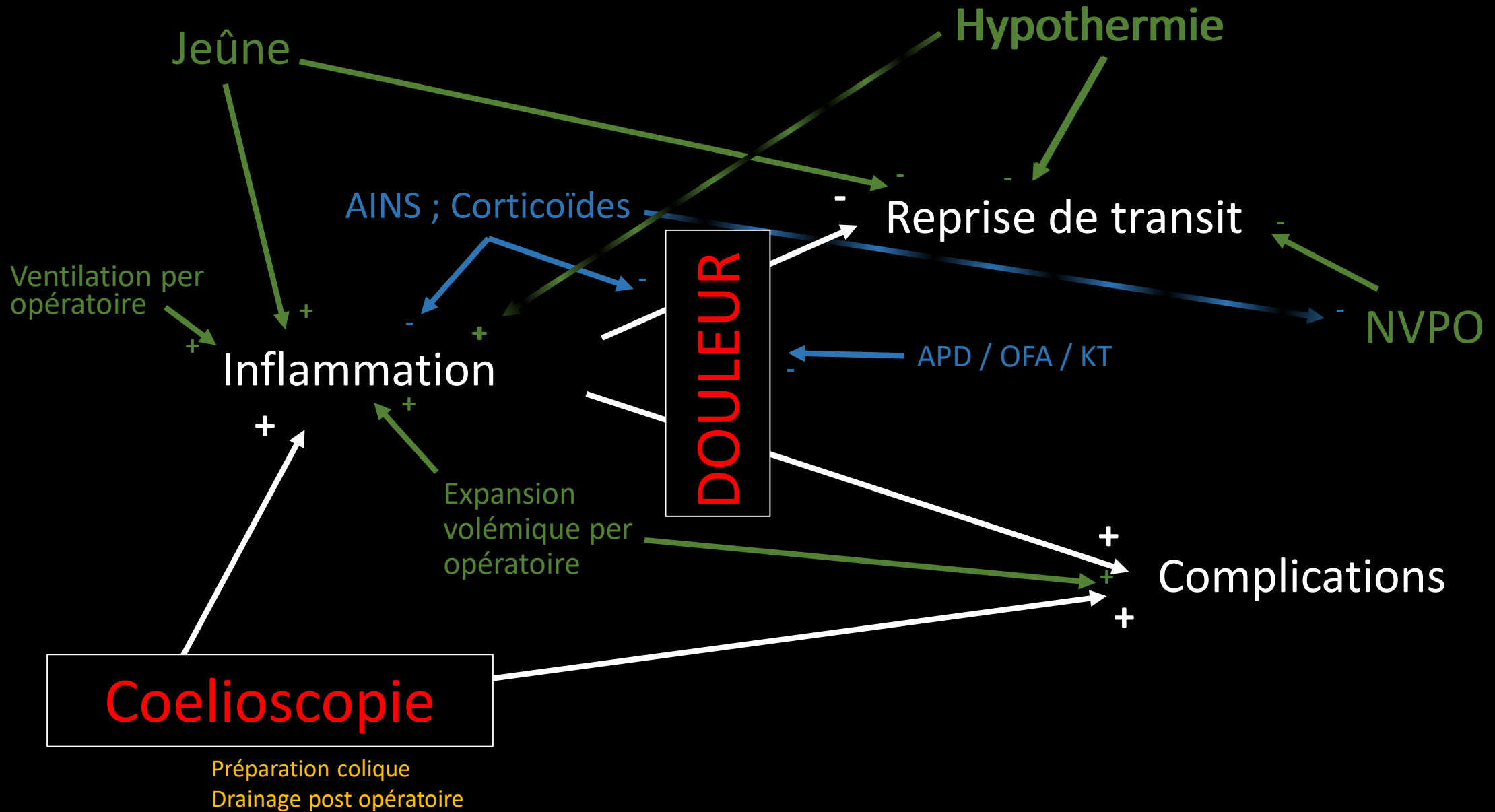
Pneumopathies bactériennes



Infections urinaires

Meta-analysis
26 study
4188 patients

Giglio et al. Brit J Anesth. 2009.



Prévention hypothermie

x3 ISO

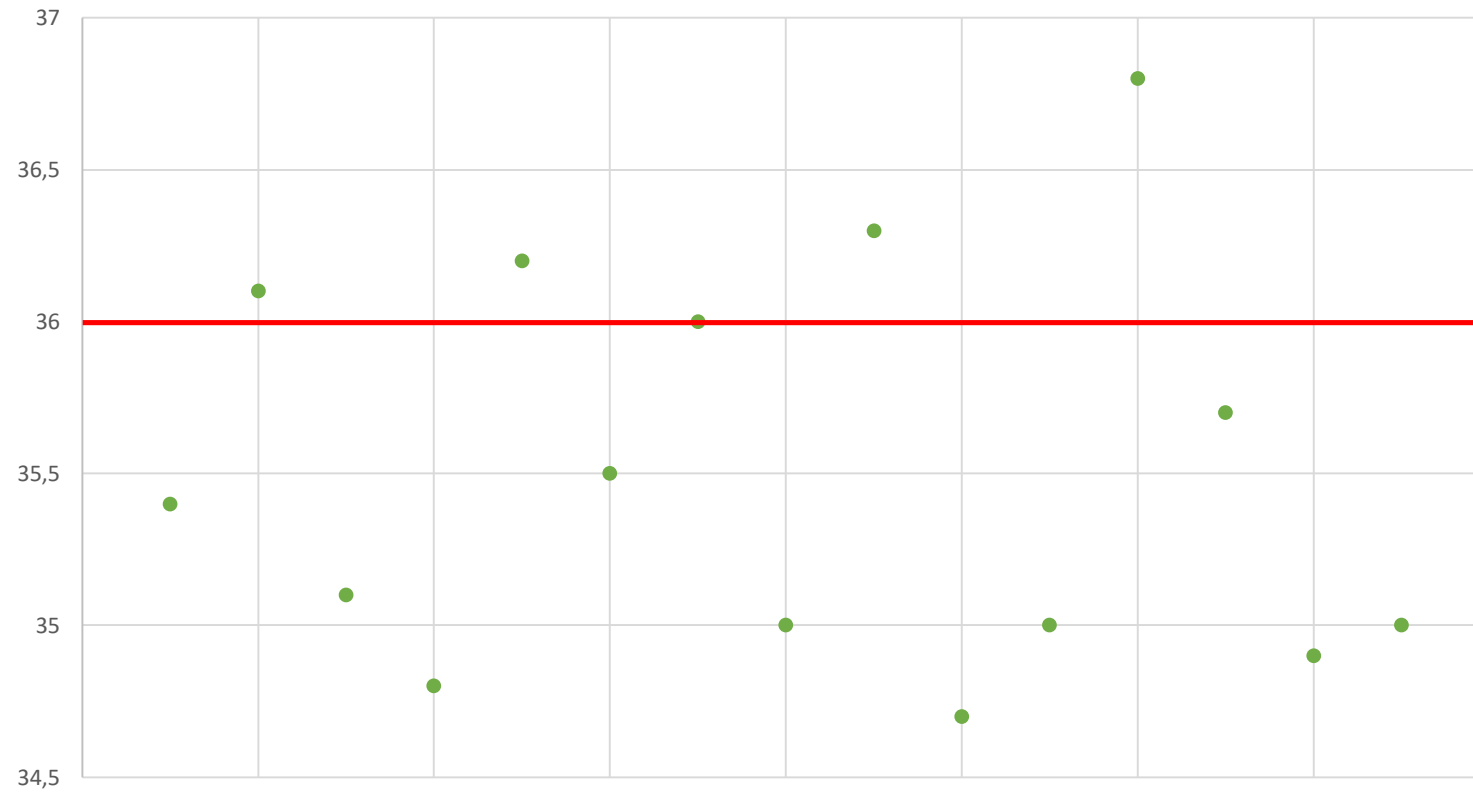
Augmentation
20 % DMS

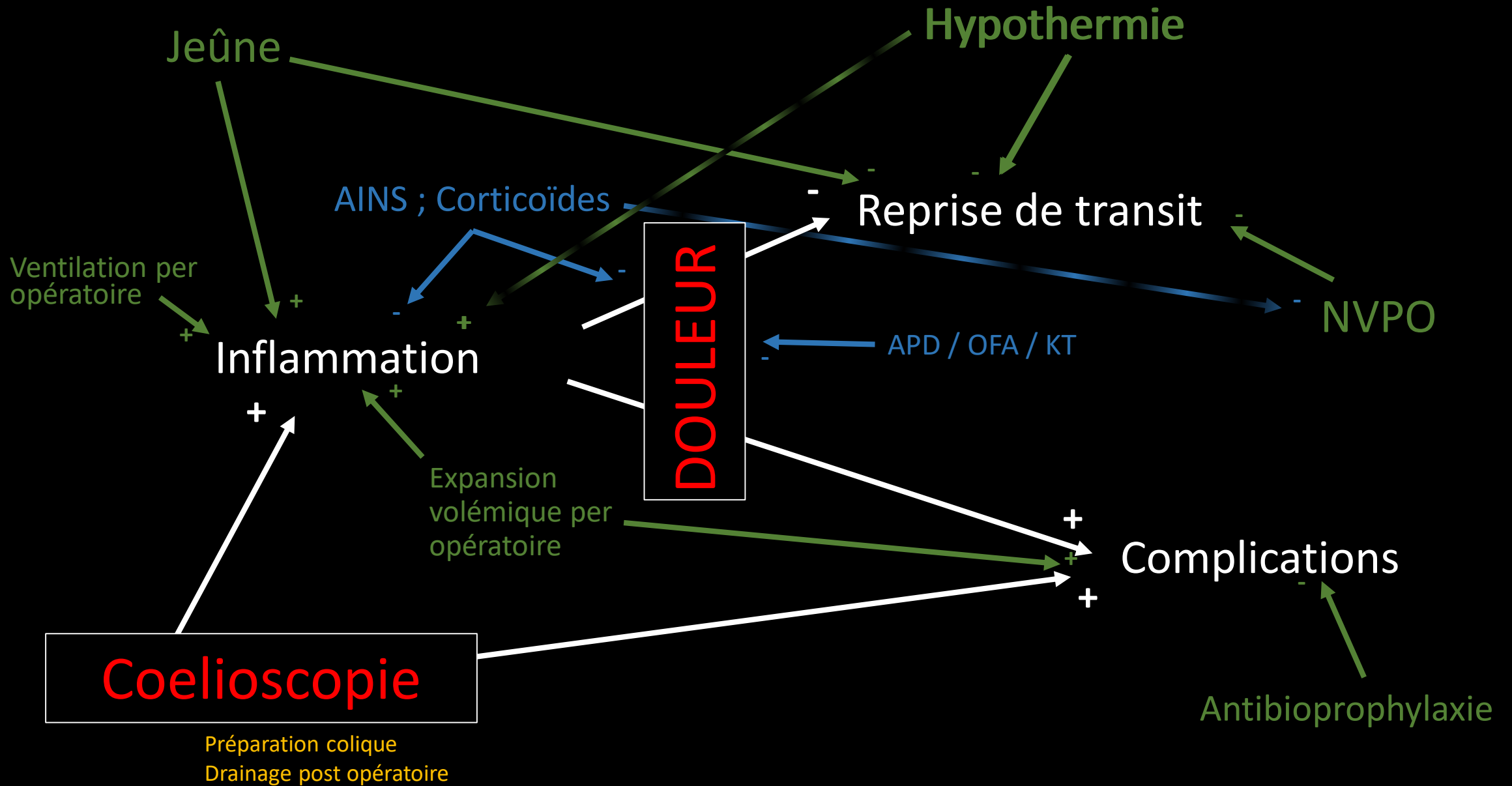
Table 2. Postoperative Findings in the Two Study Groups.*

VARIABLE	NORMOTHERMIA (N = 104)	HYPOTHERMIA (N = 96)	P VALUE
All patients			
Infection — no. of patients (%)	6 (6)	18 (19)	0.009
ASEPSIS score	7±10	13±16	0.002
Collagen deposition — $\mu\text{g}/\text{cm}$	328±135	254±114	0.04
Days to first solid food	5.6±2.5	6.5±2.0	0.006
Days to suture removal	9.8±2.9	10.9±1.9	0.002
Days of hospitalization	12.1±4.4	14.7±6.5	0.001
Uninfected patients			
No. of patients	98	78	
Days to first solid food	5.2±1.6	6.1±1.6	<0.001
Days to suture removal	9.6±2.6	10.6±1.6	0.003
Days of hospitalization	11.8±4.1	13.5±4.5	0.01

*Plus-minus values are means \pm SD.

RÉSULTATS





Take home message

Prise en charge pluridisciplinaire



RETEX RAAC 01/06/2018

Dr Langlois – Dr Ponsonnard
N. Vaucher – C. Marsaudon
Et toutes les équipes

La RAAC

Diminution de
l'inflammation

Prise en charge de la
douleur

Diminution du temps de
reprise du transit

Préopératoire

- Immun nutrition préopératoire
- Diminution du temps de jeûne

- Diminution du temps de jeûne

Peropératoire

- Technique chirurgicale
- AINS et AIS
- Ventilation
- Gestion de la volémie

- OFA
- Analgésie balancée

- Eviction des morphiniques

Post opératoire

- Diminution du temps de jeun
- Mobilisation
- AINS

- Anesthésiques locaux
- Analgésie balancée

- Reprise alimentaire
- Mobilisation
- PEC NVPO
- Eviction des morphiniques

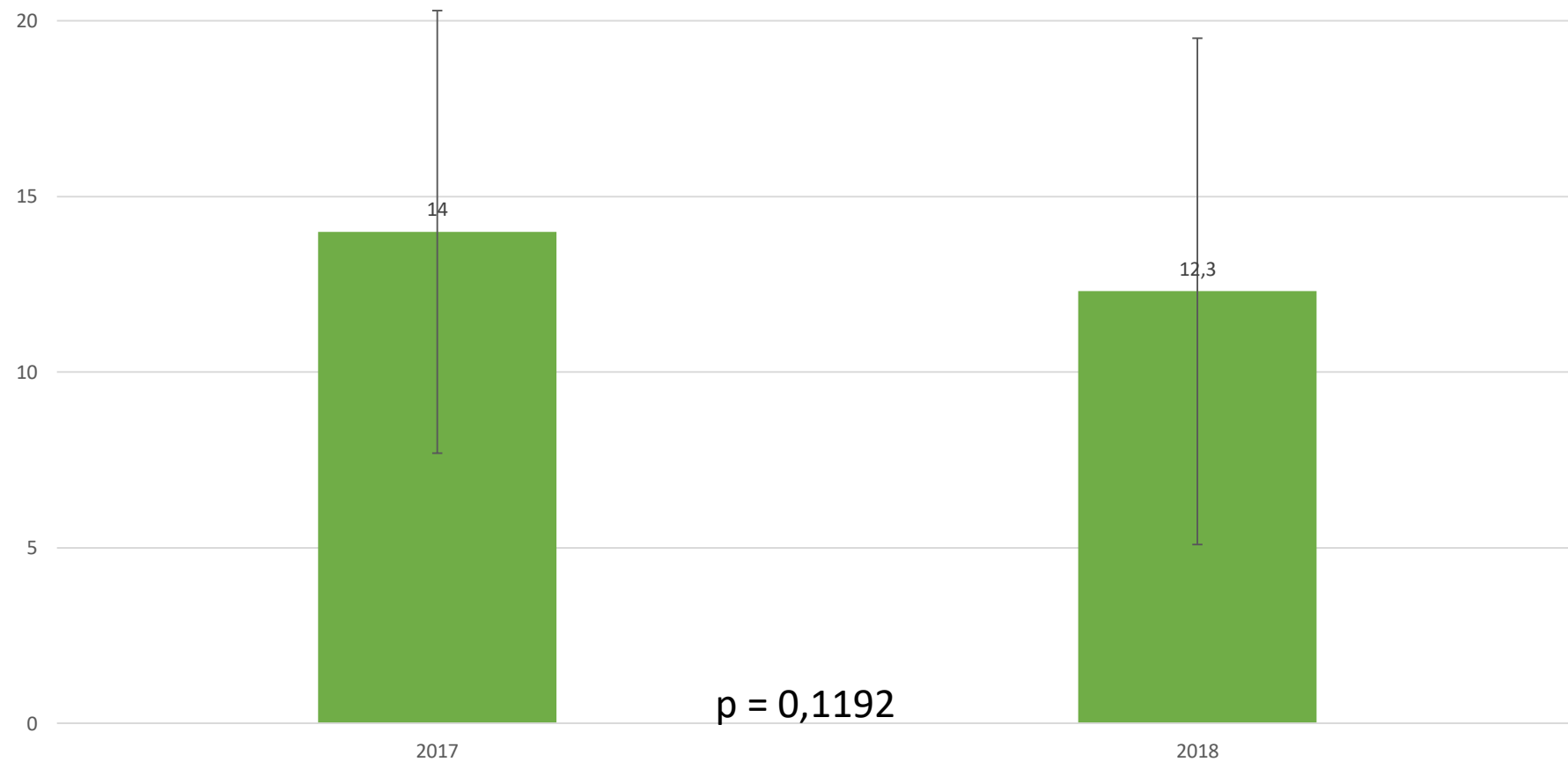
RÉSULTATS

Du 01/01/2018 au 31/03/2018

	2017	2018	
		NRAAC	RAAC
n	138	14	15
Sex ratio	1,8	1,5	1,3
Age	68,1 ± 12,3	65,6 ± 17,1	63,6 ± 13,0
Sévérité GHM	2 [2 - 3]	3 [2 - 3]	1 [1 - 3]

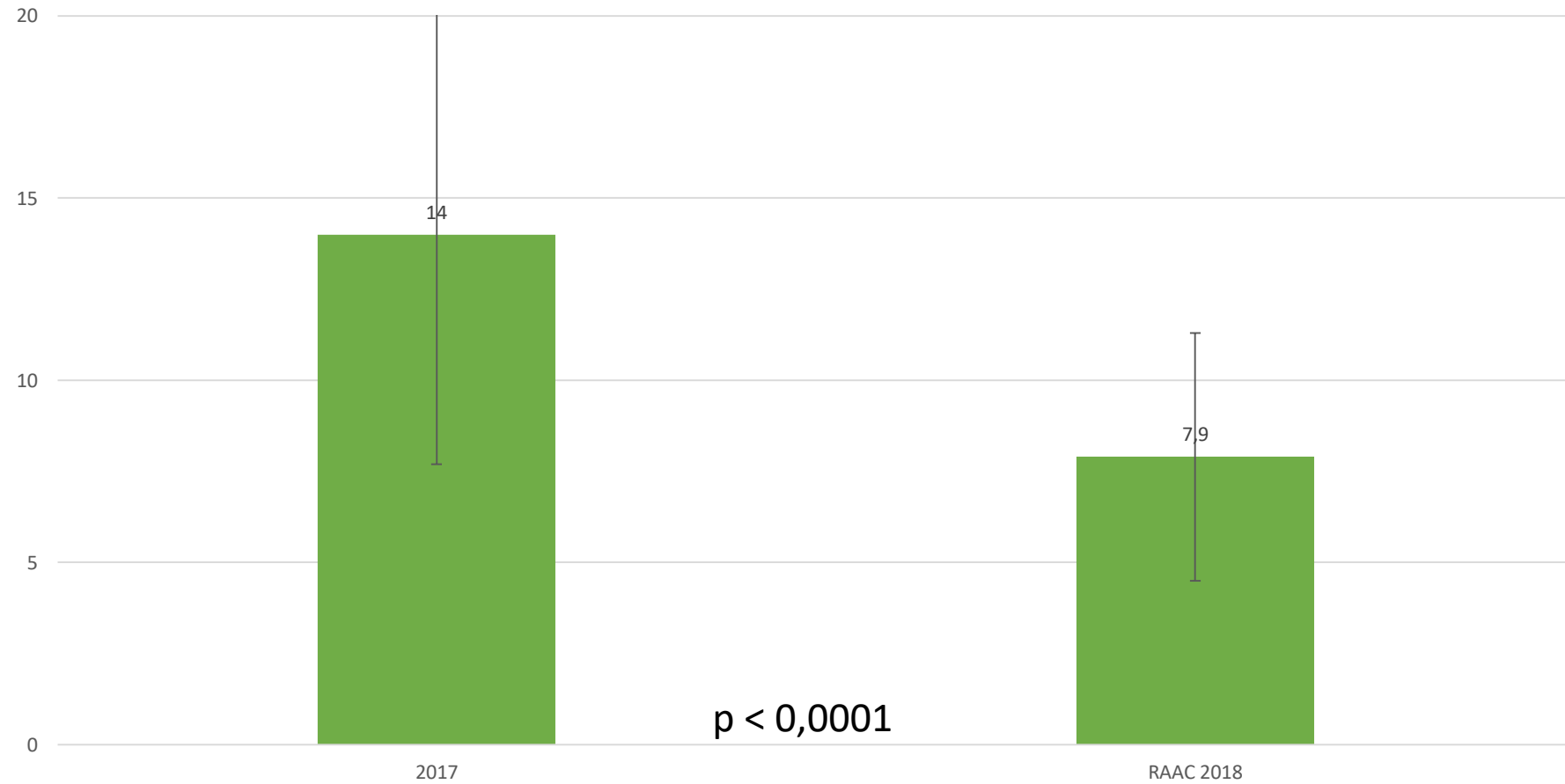
RÉSULTATS

Global 2017 vs T1 2018



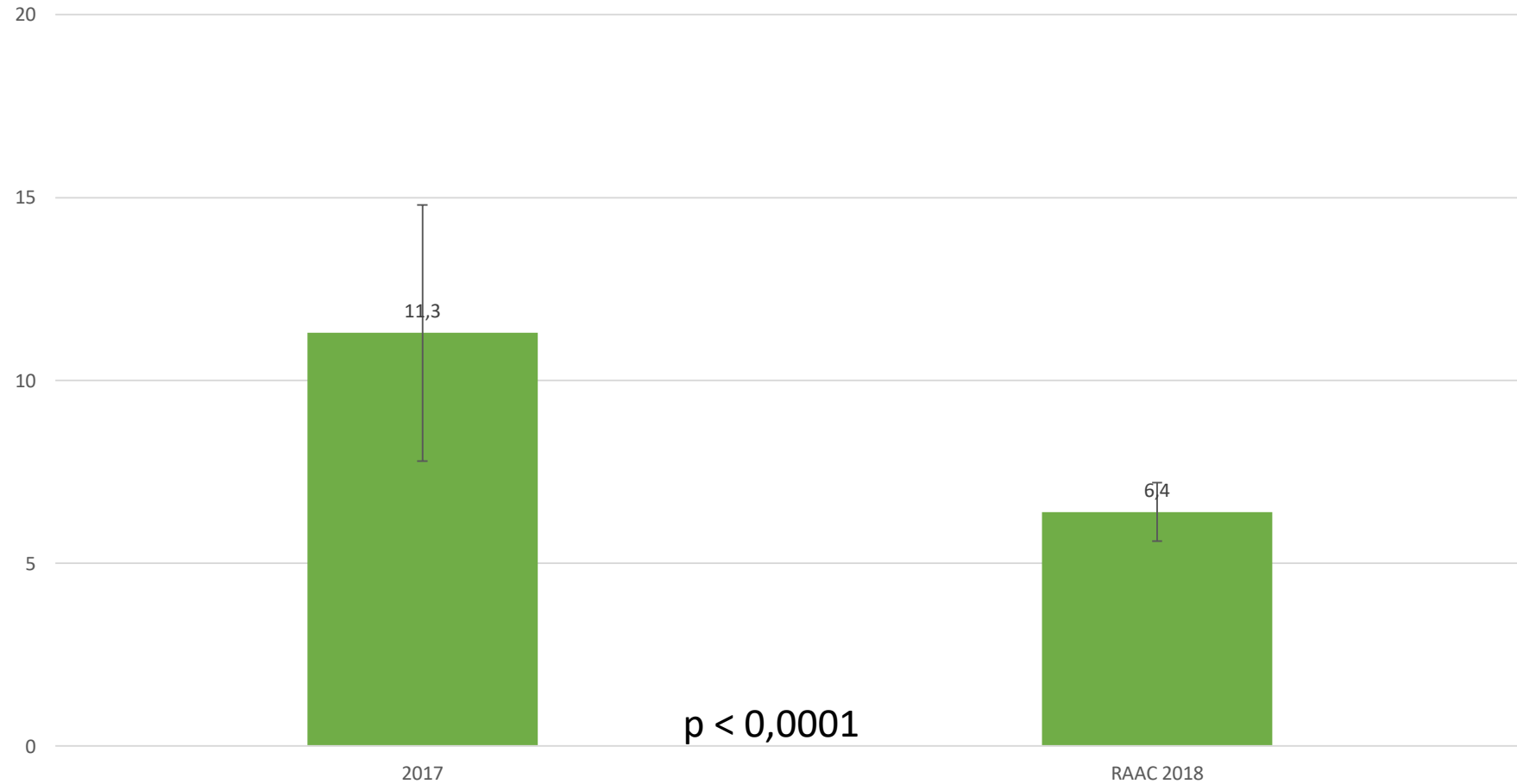
RÉSULTATS

2017 vs RAAC T1 2018



RÉSULTATS

GHM1/2 2017 vs GHM1/2 T1 2018 RAAC



RÉSULTATS

	T1 2017	T1 2018
n patients	39	29
n jours d'hospitalisation	591	358

81 jours

RÉSULTATS

		n	%
Préopératoire	Supplémentation nutritionnelle	15	100,0
	Pas de préparation colique	15	100,0
	Pas de prémédication	13	86,7
	Bas de contention	12	80,0
	Repas veille au soir	8	53,3
	Repas matin pour les colons après 14:00	8	88,9
	Liquides clairs matin pour les colons avant 14:00	6	85,7

RÉSULTATS

		n	%
Per opératoire	Voie d'abord laparoscopique	14	93,3
	Antibioprophylaxie	15	100,0
	Dexaméthasone	13	86,7
	Hypothermie < 36°C	9	60
	VT < 7 ml/kg PIT	8	53,3
	Absence d'utilisation de morphiniques	8	53,3
	Evaluation volémie per opératoire	0	0,0
	Pose SAD	14	93,3
	Pas de SNG en sortie de BO	15	100,0
	Absence de drainage de la cavité péritonéale	1	6,7

RÉSULTATS

		n	%
Post opératoire	AINS 48h	12	80,0
	Analgésie plurimodale non morphinique	14	93,3
	NVPO	5	33,3
	Prophylaxie antithrombose par HBPM	15	100,0
	Levée 30 min le jour de l'intervention	0	0,0
	Levée 6h/j dès de lendemain	14	93,3
	Alimentation J0	4	26,7
	Chewing gum J0	8	53,3
	Alimentation J1	13	86,7
	Chewing gum J1	13	86,7
	Alimentation J2	13	86,7
	Chewing gum J2	15	100,0
	Alimentation J3	13	86,7
	Chewing gum J3	15	100,0

MERCI!
THANK YOU!



FRAPAR.