Annexes

ASA Physical Status Classification System

1 : Patient normal

2 : Patient avec anomalie systémique modérée

3 : Patient avec anomalie systémique sévère

4 : Patient avec anomalie systémique sévère représentant une menace vitale constante

5 : Patient moribond dont la survie est improbable sans l'intervention

6 : Patient déclaré en état de mort cérébrale dont on prélève les organes pour greffe

Ces définitions sont disponibles dans l'édition annuelle du "ASA Relative Value Guide".

Source : http://www.sfar.org/scores/asa.php

Score de l'AFC mortalité

Facteurs indépendants de mortalité postopératoire

- Age supérieur à 70 ans,
- Amaigrissement de plus de 10% dans les 6 derniers mois
- Antécédents neurologiques
- Chirurgie en urgence

Nombre d'items	Taux de mortalité attendu (étude 1)	Taux de mortalité attendu (étude 2)
0	**0**	**0**
1	**2**	**2**
2	**10**	**7**
3	**20**	**50**
4	**50**	**70**

(Etude 1) Slim K, et al. Predicting postoperative mortality in patients undergoing colorectal surgery. World J Surg 2006;30:100-6.

(Etude2) Alves A, et al. The AFC score: validation of a 4-item predicting score of postoperative mortality after colorectal resection for cancer or diverticulitis: results of a prospective multicenter study in 1049 patients. Ann Surg 2007;246:91-6.

Score POSSUM colorectal (risque de mortalité)

Table 6 The colorectal POSSUM scoring system

	Score				
	1	2	3	4	8
Physiological Score					
Age group (years)	≤60		61–70	71–80	≥81
Cardiac failure	None or mild	Moderate	Severe		
Systolic blood pressure (mmHg)	100–170	>170 or 90–99	<90		
Pulse (beats/min)	40–100	101–120	>120 or <40		
Urea (mmol/l)	≤10	10·1–15·0	>15·0		
Haemoglobin (g/dl)	13–16	10–12·9 or 16·1–18	<10 or >18		
Operative Severity Score					
Operative severity	Minor		Intermediate	Major	Complex major
Peritoneal soiling	None or serous fluid	Local pus	Free pus or faeces		
Operative urgency	Elective		Urgent		Emergency
Cancer staging	No cancer or Dukes' A–B	Dukes' C	Dukes' 'D'		

Colorectal POSSUM equation: $\ln[R/(1-R)] = -9{\cdot}167 + (0{\cdot}338 \times \text{PS}) + (0{\cdot}308 \times \text{OSS})$, where PS is the total Physiological Score and OSS is the total Operative Severity Score.

Tekkis PP, Prytherch DR, Kocher HM, Senapati A, Poloniecki JD, Stamatakis JD, Windsor AC. Development of a dedicated risk-adjustment scoring system for colorectal surgery (colorectal POSSUM). Br J Surg 2004;91:1174-82.

Score de hollandais de fistule anastomotique

Items scored in the prospective study

Item	Normal value	Score (points)	Abnormal value	Score (points)
General				
Fever	≤38.0 °C	0	>38.0 °C	1
Heart rate	≤100/min	0	>100/min	1
Respiratory rate	≤30/min	0	>30/min	1
Urinary production	≥30 ml/h or 700 ml/day	0	<30 ml/h or 700 ml/day	1
Mental status	Normal mental status	0	Agitation or lethargic	2
Clinical condition	Stable or improving condition	0	Deterioration	2
Local physical examination				
Signs of ileus	No ileus	0	Ileus	2
Gastric retention	No gastric retention	0	Gastric retention	2
Fascial dehiscence	No fascial dehiscence	0	Fascial dehiscence	2
Abdominal pain, other than wound pain	No pain other than wound pain	0	Pain other than wound pain	2
Laboratory investigation				
Signs of infection	No increase in leukocyte number or CRP	0	Increase of ≥5% in leukocyte number or CRP	1
Kidney function	No increase in urea or creatinine	0	Increase of ≥5% in urea or creatinine	1
Diet				
Nutritional status	Normal diet	0	Tube feeding/TPN	1/2

The leakage-score is the sum of all points. If a patient receives both tube feeding and TPN, only tube feeding is scored (1 point). CRP = C-reactive protein, TPN = total parenteral nutrition.

- **≤ 3 points** SURVEILLANCE
- **de 4 à 7 points** contrôle clinique et biologique dans 12h + discuter TDM
- **≥ 8 points** TDM avec opacification rectale
  Si normale : discuter autre examen, exploration chirurgicale, contrôle biologique dans 12h
  Si fistule confirmée : traitement médical +/- chirurgical
- **si fistule cliniquement évidente** : traitement adapté médical ± chirurgical

den Dulk M, Noter SL, Hendriks ER, Brouwers MA, van der Vlies CH, Oostenbroek RJ, Menon AG, Steup WH, van de Velde CJ. Improved diagnosis and treatment of anastomotic leakage after colorectal surgery. Eur J Surg Oncol 2009;35:420-6.

Classification de Clavien-Dindo pour les complications postopératoires

TABLE 1. Classification of Surgical Complications

Grade	Definition
Grade I	Any deviation from the normal postoperative course without the need for pharmacological treatment or surgical, endoscopic, and radiological interventions
	Allowed therapeutic regimens are: drugs as antiemetics, antipyretics, analgetics, diuretics, electrolytes, and physiotherapy. This grade also includes wound infections opened at the bedside
Grade II	Requiring pharmacological treatment with drugs other than such allowed for grade I complications
	Blood transfusions and total parenteral nutrition are also included
Grade III	Requiring surgical, endoscopic or radiological intervention
Grade IIIa	Intervention not under general anesthesia
Grade IIIb	Intervention under general anesthesia
Grade IV	Life-threatening complication (including CNS complications)* requiring IC/ICU management
Grade IVa	Single organ dysfunction (including dialysis)
Grade IVb	Multiorgan dysfunction
Grade V	Death of a patient
Suffix "d"	If the patient suffers from a complication at the time of discharge (see examples in Table 2), the suffix "d" (for "disability") is added to the respective grade of complication. This label indicates the need for a follow-up to fully evaluate the complication.

*Brain hemorrhage, ischemic stroke, subarrachnoidal bleeding, but excluding transient ischemic attacks.
CNS, central nervous system; IC, intermediate care; ICU, intensive care unit.

Dindo D, Demartines N, Clavien PA. Classification of surgical complications: a new proposal with evaluation in a cohort of 6336 patients and results of a survey. Ann Surg 2004;240:205-13.

Clavien PA, Barkun J, de Oliveira ML, Vauthey JN, Dindo D, Schulick RD, de Santibañes E, Pekolj J, Slankamenac K, Bassi C, Graf R, Vonlanthen R, Padbury R, Cameron JL, Makuuchi M. The Clavien-Dindo classification of surgical complications: five-year experience. Ann Surg 2009;250:187-96.

Exemples d'utilisation de la classification de Clavien-Dindo

TABLE 2. Clinical Examples of Complication Grades

Grades	Organ System	Examples
Grade I	Cardiac	Atrial fibrillation converting after correction of K^+-level
	Respiratory	Atelectasis requiring physiotherapy
	Neurological	Transient confusion not requiring therapy
	Gastrointestinal	Noninfectious diarrhea
	Renal	Transient elevation of serum creatinine
	Other	Wound infection treated by opening of the wound at the bedside
Grade II	Cardiac	Tachyarrhythmia requiring β-receptor antagonists for heart rate control
	Respiratory	Pneumonia treated with antibiotics on the ward
	Neurological	TIA requiring treatment with anticoagulants
	Gastrointestinal	Infectious diarrhea requiring antibiotics
	Renal	Urinary tract infection requiring antibiotics
	Other	Same as for I but followed by treatment with antibiotics because of additional phlegmonous infection
Grade IIIa	Cardiac	Bradyarrhythmia requiring pacemaker implantation in local anesthesia
	Neurological	See grade IV
	Gastrointestinal	Biloma after liver resection requiring percutaneous drainage
	Renal	Stenosis of the ureter after kidney transplantation treated by stenting
	Other	Closure of dehiscent noninfected wound in the OR under local anesthesia
Grade IIIb	Cardiac	Cardiac temponade after thoracic surgery requiring fenestration
	Respiratory	Bronchopleural fistulas after thoracic surgery requiring surgical closure
	Neurological	See grade IV
	Gastrointestinal	Anastomotic leakage after descendorectostomy requiring relaparotomy
	Renal	Stenosis of the ureter after kidney transplantation treated by surgery
	Other	Wound infection leading to eventration of small bowel
Grade IVa	Cardiac	Heart failure leading to low-output syndrome
	Respiratory	Lung failure requiring intubation
	Neurological	Ischemic stroke/brain hemorrhage
	Gastrointestinal	Necrotizing pancreatitis
	Renal	Renal insufficiency requiring dialysis
Grade IVb	Cardiac	Same as for IVa but in combination with renal failure
	Respiratory	Same as for IVa but in combination with renal failure
	Gastrointestinal	Same as for IVa but in combination with hemodynamic instability
	Neurological	Ischemic stroke/brain hemorrhage with respiratory failure
	Renal	Same as for IVa but in combination with hemodynamic instability
Suffix "d"	Cardiac	Cardiac insufficiency after myocardial infarction (IVa–d)
	Respiratory	Dyspnea after pneumonectomy for severe bleeding after chest tube placement (IIIb–d)
	Gastrointestinal	Residual fecal incontinence after abscess following descendorectostomy with surgical evacuation. (IIIb–d)
	Neurological	Stroke with sensorimotor hemisyndrome (IVa–d)
	Renal	Residual renal insufficiency after sepsis with multiorgan dysfunction (IVb–d)
	Other	Hoarseness after thyroid surgery (I–d)

TIA, transient ischemic attack; OR, operating room.

Définition d'autres termes utilisés dans la fiche de recueil des données

Diabète
De type I ou de type II

Corticothérapie
Traitement au long cours pour une co-morbidité ou pour une maladie inflammatoire chronique de de l'intestin (MICI)

Insuffisance rénale chronique
Défaillance rénale « chronique » documentée traitée ou non par épuration extra-rénale

Urgence
Intervention décidée et réalisée en dehors du programme réglé, du fait de la maladie (cela exclut les interventions ajoutées au programme opératoire pour des raisons logistiques)