

Patient âgé et réanimation

Critères d'admission

Hélène Vallet MD PhD
Hôpital Saint Antoine

Conflits d'intérêt

Aucun

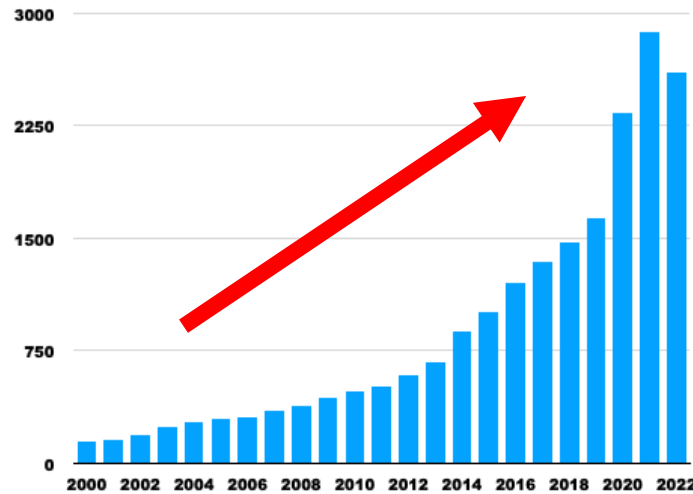
Objectifs

- Décrire le pronostic du patient âgé en réanimation
- Décrire les principaux facteurs associés à la mortalité
- Focus sepsis et choc septique
- Discuter des critères d'admission

Epidémiologie

Table 1 Proportion of VOPs in recent large epidemiological studies

Author	Country	Published	Number (≥80 years old)	Period	Results
Docherty [56]	Scotland	2016	3865	2005–2009	Decrease from 10% to 8.4%
Haas [57]	Netherlands	2015	39,558	2005–2014	Increase from 13.4% to 13.9%
Nielsson [58]	Denmark	2014	6266	2005–2011	Increase from 11.7% to 13.8%
Ihra [59]	Austria	2012	17,126	1998–2008	Increase from 11.5% to 15.3%
Bagshaw [6]	Australia and New Zealand	2009	15,640	2000–2005	Annual increase 5.6%



Referenced publication extracted from **pubmed**. Keywords ("intensive care" OR "critical care" OR "icu") AND ("elderly" OR "old" OR "older") AND outcome

Le % de patients âgés en réanimation augmente depuis 20 ans
Même tendance pour les publications

COVER STORY: AGEING POPULATION



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Lessons From the "Very Old Intensive Care Patients" (VIP) Project



Flaatten et al. Int Care Med 2017
Flaatten et al. ICU Management & Practice 2020

Mortalité des patients de ≥ 75 ans

- Mortalité intra-réa: 1 - 50%
- Mortalité intra-hospitalière: 10 - 70%
- Mortalité 6 mois: 20 - 60%
- Mortalité 1 an: 30 - 70%

1 an = 50%

Grande hétérogénéité+++

Liée à?

- politique d'admission
- limitation de traitement
- organisation de la trajectoire patient

Mortalité des patients de ≥ 75 ans

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- Mortalité 6 mois: 20 - 60%
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1 an = 50%

Grande hétérogénéité+++

Liée à?

- politique d'admission
- limitation de traitement
- **organisation de la trajectoire patient**

Période à risque



Demiselle et al. *Ann. Intensive Care* (2021) 11:35
<https://doi.org/10.1186/s13613-021-00804-w>

Annals of Intensive Care

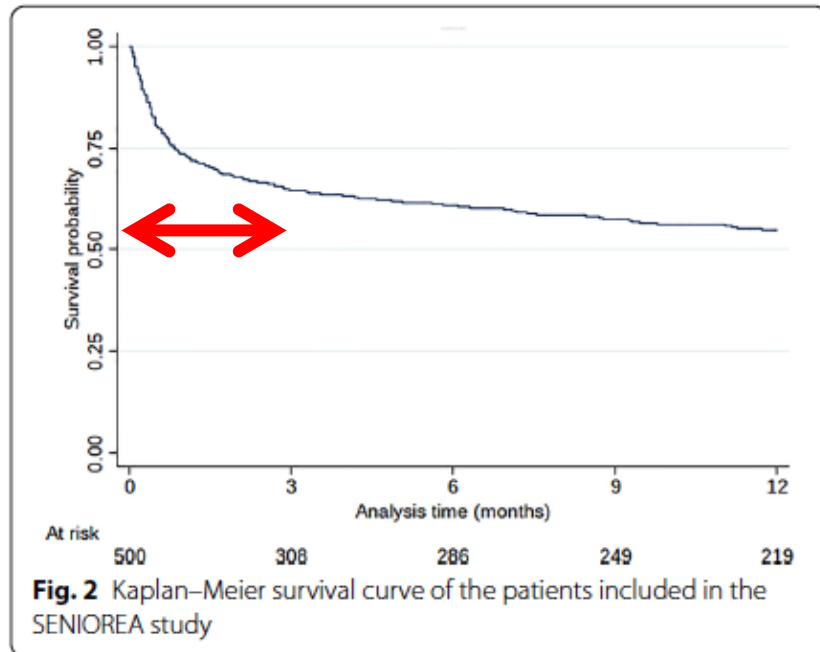
RESEARCH

Open Access



Determinants of hospital and one-year mortality among older patients admitted to intensive care units: results from the multicentric SENIOREA cohort

Julien Demiselle¹, Guillaume Duval^{2,3}, Jean-François Hamel⁴, Anne Renault⁵, Laetitia Bodet-Contentin⁶, Laurent Martin-Lefèvre⁷, Dr Philippe Markowicz⁷, Sylv Cédric Annweiler^{2,3,17} and I

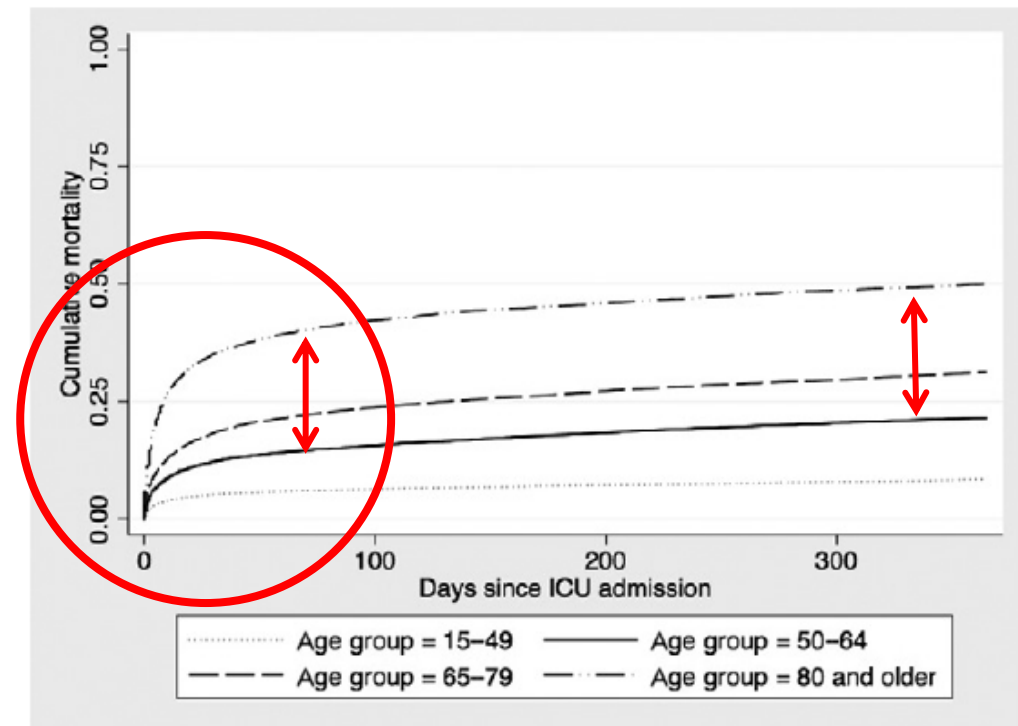


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doi: 10.1111/aas.12211

Mortality in elderly ICU patients: a cohort study

M. S. NIELSSON^{1,3}, C. F. CHRISTIANSEN¹, M. B. JOHANSEN¹, B. S. RASMUSSEN³, E. TØNNESEN² and M. NØRGAARD¹



Facteurs associés à la mortalité en/après un séjour en réanimation

L'âge

Intensive Care Med (2012) 38:1654–1661
DOI 10.1007/s00134-012-2629-6

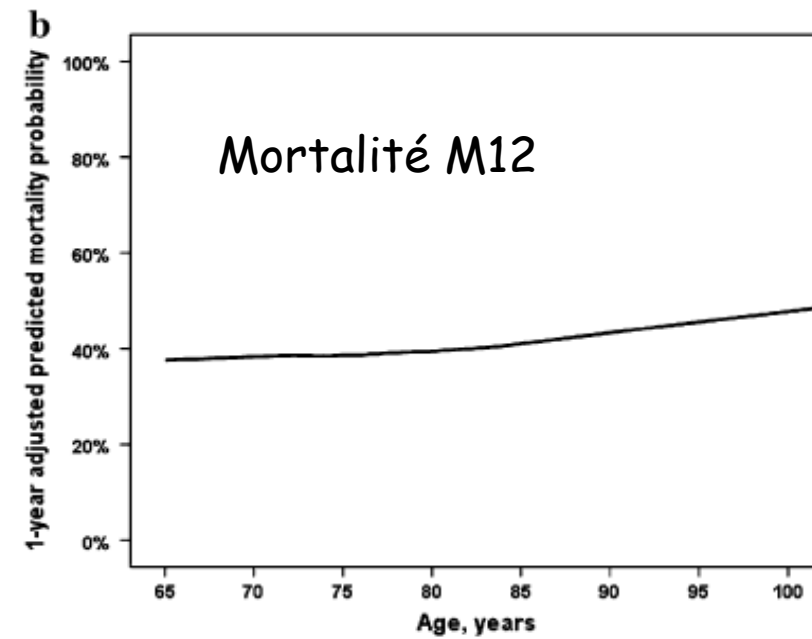
ORIGINAL

Lior Fuchs
Catherine E. Chronaki
Shinhyuk Park
Victor Novack
Yael Baumfeld
Daniel Scott
Stuart McLennan
Daniel Talmor
Leo Celi

ICU admission characteristics and mortality rates among elderly and very elderly patients



LOESS: LOcally wEighted Scatterplot Smoothing



LOESS: LOcally wEighted Scatterplot Smoothing

Ajusté sur sexe, SOFA, DNR statut, comorbidités (Elixhauser)

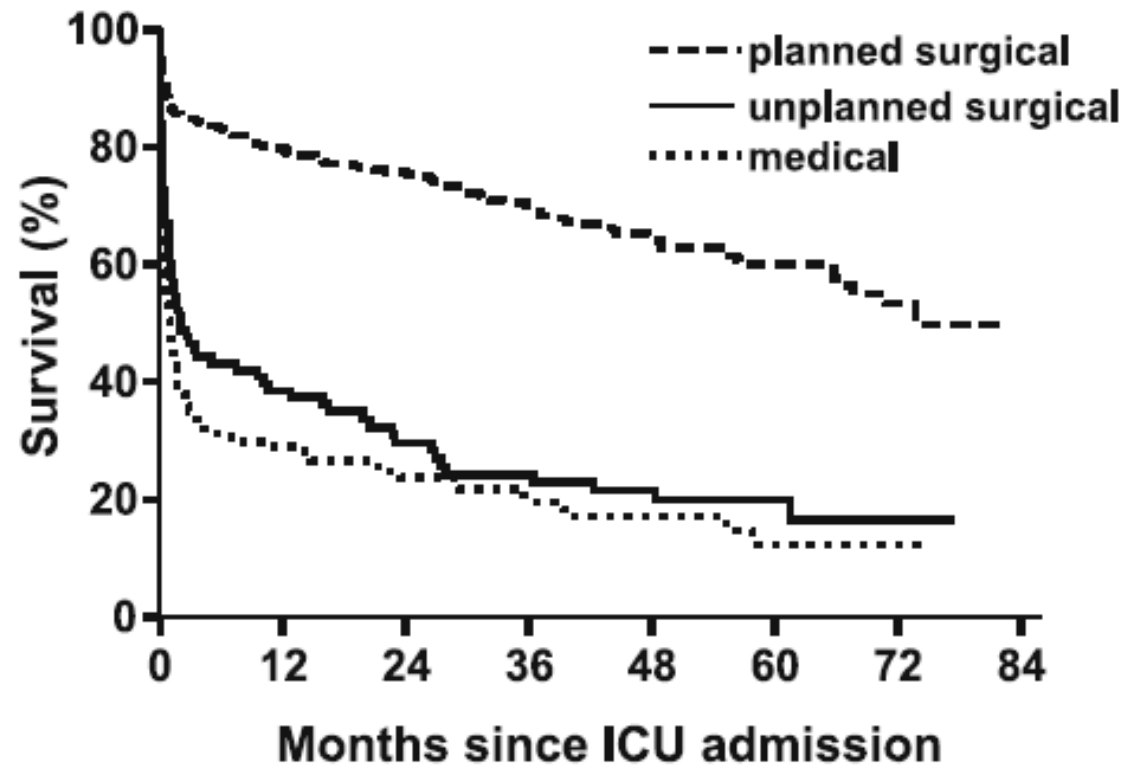
Le type d'hospitalisation

Intensive Care Med (2006) 32:1039–1044
DOI 10.1007/s00134-006-0171-0

ORIGINAL

S. E. de Rooij
A. Govers
J. C. Korevaar
A. Abu-Hanna
M. Levi
E. de Jonge

Short-term and long-term mortality in very elderly patients admitted to an intensive care unit



La gravité du patient à l'admission en réanimation (IGSII, APACHE...), les comorbidités, l'autonomie fonctionnelle

Intensive Care Med (2012) 38:1654–1661
DOI 10.1007/s00134-012-2629-6

ORIGINAL

Lior Fuchs
Catherine E. Chronaki
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Daniel Scott
Stuart McLennan
Daniel Talmor
Leo Celi

ICU admission characteristics and mortality rates among elderly and very elderly patients

Critically ill elderly patients in a developing world—mortality and functional outcome at 1 year: A prospective single-center study ☆☆☆☆

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Journal of Critical Care

Zampieri and Colombari *BMC Anesthesiology* 2014, **14**:59
<http://www.biomedcentral.com/1471-2253/14/59>



RESEARCH ARTICLE

Open Access

The impact of performance status and comorbidities on the short-term prognosis of very elderly patients admitted to the ICU

Fernando G Zampieri^{1,2*} and Fernando Colombari¹

Intensive Care Med (2006) 32:1039–1044
DOI 10.1007/s00134-006-0171-0

ORIGINAL

S. E. de Rooij
A. Govers
J. C. Korevaar
A. Abu-Hanna
M. Levi
E. de Jonge

Short-term and long-term mortality in very elderly patients admitted to an intensive care unit

Aparté sur les scores de gravité APACHE et IGS

- Paramètres clinico-biologiques colligés à l'admission ou dans les 24h suivant l'admission
- Scores prédictifs de la mortalité hospitalière

Aparté sur les scores de gravité APACHE et IGS(SAPS)

APACHE	IGS
Température	Température
PA	PA
Fc	Fc
FR	<i>Diurèse</i>
PaO2	PaO2/FiO2
pH ou HCO3-	pH ou HCO3-
Natrémie	Natrémie
Kaliémie	Kaliémie
Créatinine	Urée
Hématocrite	<i>Mode d'admission</i>
Leucocytes	Leucocytes
Glasgow	Glasgow
Insuffisance chronique d'organe	Insuffisance chronique d'organe
Age	Age

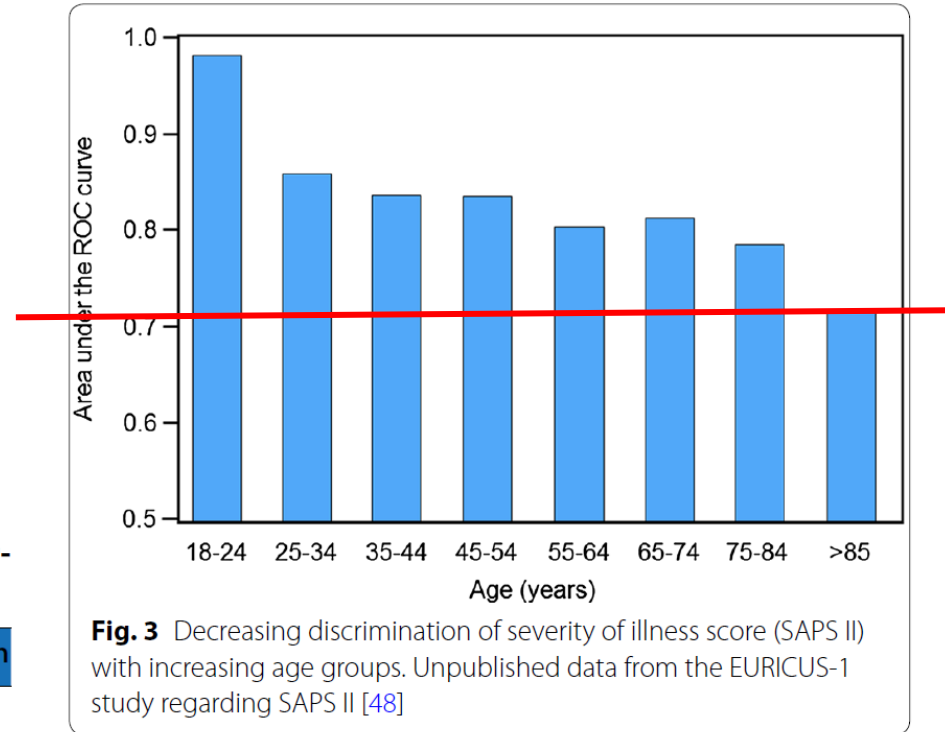
Aparté sur les scores de gravité APACHE et IGS(SAPS)

- Exemple: patient de 80 ans admis pour sepsis, mono-défaillant hémodynamique, non acide, fébrile
 - APACHE: 11 → 13% de mortalité
 - IGSII: 42 → 28.5% de mortalité
- Dans les 2 cas, quasiment la moitié des points est du à l'âge
- Les 2 scores ne prennent en compte que l'âge civil

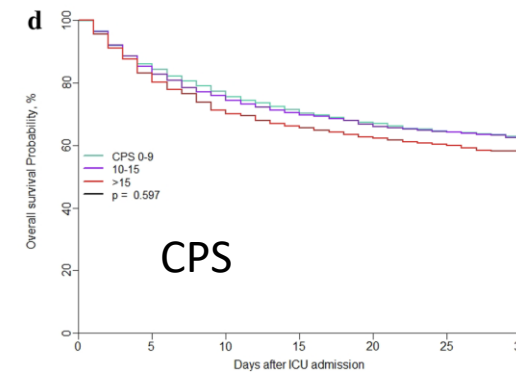
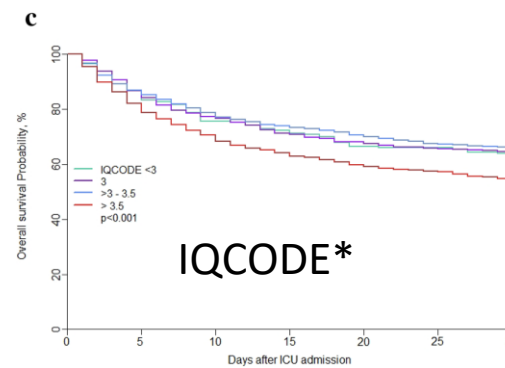
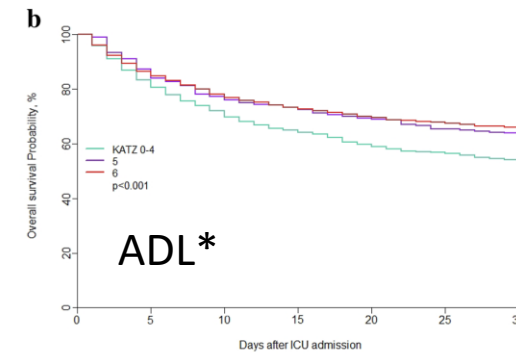
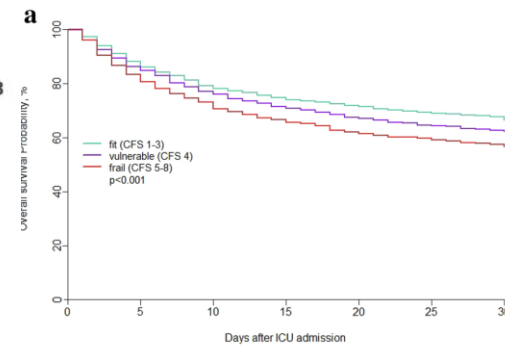
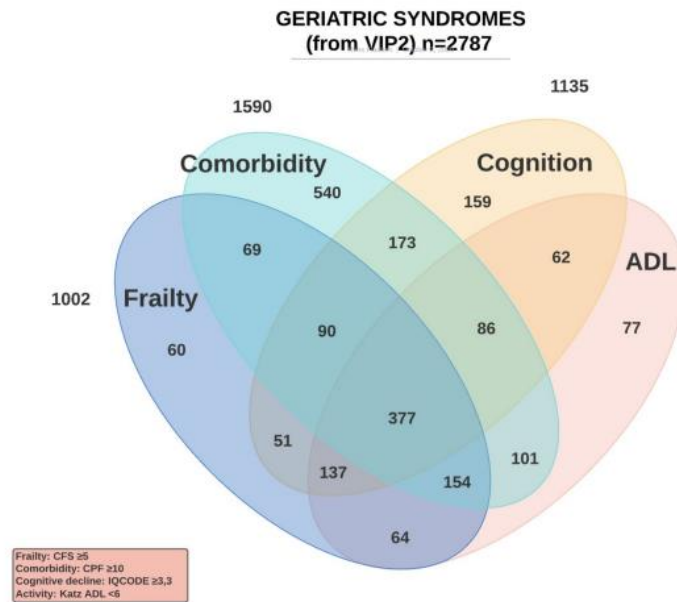
Aparté sur les scores de gravité APACHE et IGS(SAPS)

Table 2 Mean age of included patients in published severity scores

Severity score	Mean age	Year of publication
Apache II	Patients >65 years: 24–54%	1985
SAPS II	57.2	1993
APACHE II in UK	56.3	1993
MPM II	Survivors 55.4; non survivors 62.9	1993
APACHE III	59.6	1991
SAPS II revisited	57.3	2005
SAPS III	60.7	2005
APACHE IV	61.5	2006
CUB-REA network*	52.4	1993
CUB-REA network	57.4	2005
CUB-REA network	62.6	2014



les comorbidités, l'autonomie fonctionnelle, la cognition



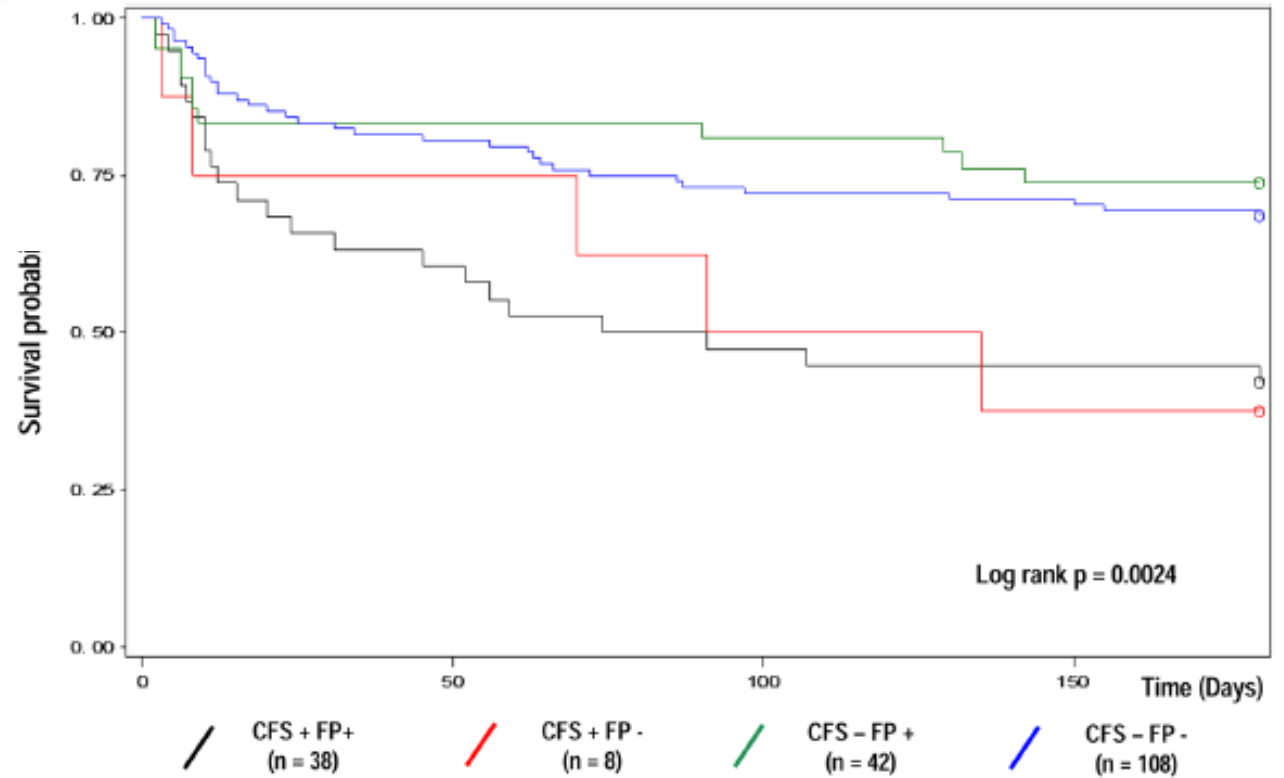
Le niveau de fragilité du patient âgé

Intensive Care Med (2014) 40:674–682
DOI 10.1007/s00134-014-3253-4

ORIGINAL

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Yannick Malledant
Philippe Seguin

Prevalence and impact of frailty on mortality in elderly ICU patients: a prospective, multicenter, observational study



Le niveau de fragilité du patient âgé

ORIGINAL

The impact of frailty on ICU and 30-day mortality and the level of care in very elderly patients (≥ 80 years)



Hans Flaatten^{1,2*}, Dylan W. De Lange³, Alessandro Morandi^{4,5}, Finn H. Andersen^{6,7}, Antonio Artigas⁸, Guido Bertolini¹⁰, Ariane Boumendil¹¹, Maurizio Cecconi¹², Steffen Christensen⁹, Loredana Faraldi¹³, Jesper Fjølner⁹, Christian Jung¹⁴, Brian Marsh¹⁵, Rui Moreno¹⁶, Sandra Oeyen¹⁷, Christina Aqwald Öhman¹⁸, Bernardo Bollen Pinto¹⁹, Ivo W. Soliman²⁰, Wojciech Szczeklik²¹, Andreas Valentin²², Xii Tilemachos Zaferidis²³, Bertrand Guidet^{24,25,26} on behalf of the VIP1 study group



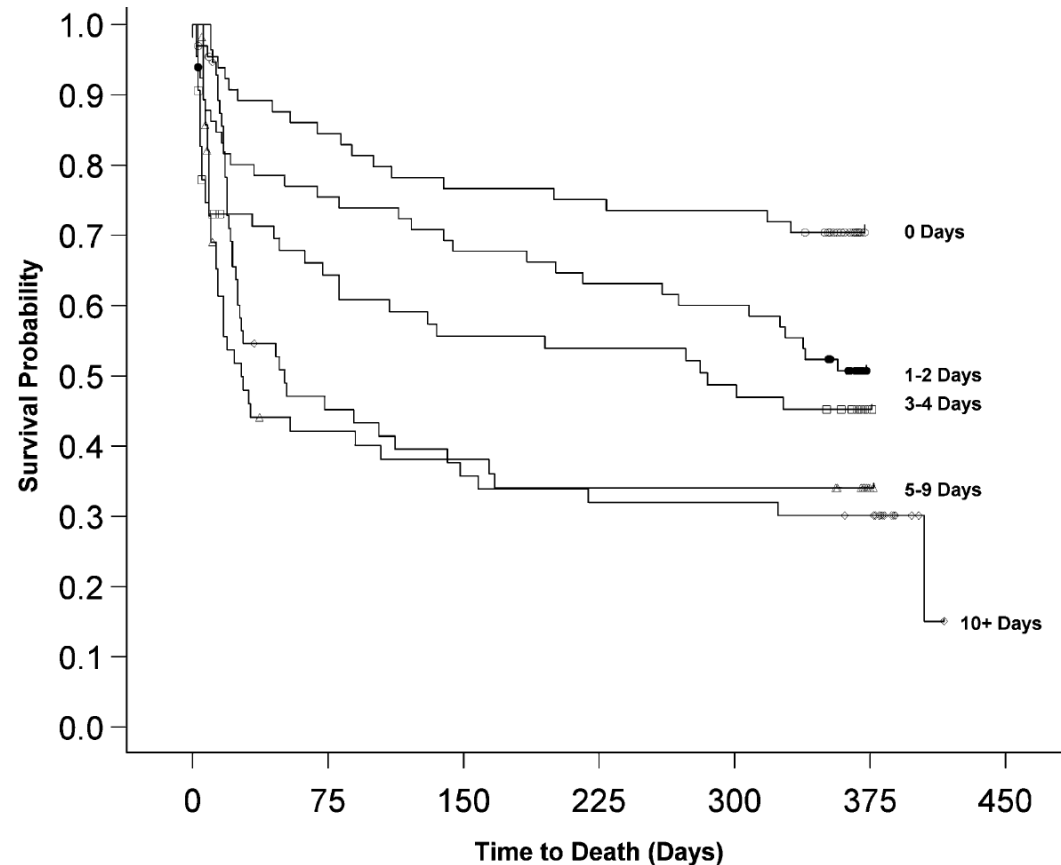
	HR (95% CI)	p
Multivariate analysis		
Frailty		
Vulnerable (4) vs fit (1-3)	1.19 (1.03-1.38)	0.021
Frail (5-9) vs fit (1-3)	1.54 (1.38-1.73)	< 0.001

n= 5021
Clinical Frailty Scale

La confusion en réanimation

Days of Delirium Are Associated with 1-Year Mortality in an Older Intensive Care Unit Population

Margaret A. Pisani¹, So Yeon Joyce Kong², Stanislav V. Kasl², Terrence E. Murphy³, Katy L. B. Araujo³, and Peter H. Van Ness^{2,3}



La décision de limitations (sur 1 ou plusieurs défaillances)

Mortalité J28

	Odds ratio	95 % CI	p-value
Age groups (vs. 65–74)			
75–84	1.52	1.32–1.74	<0.001
85 and up	1.85	1.57–2.17	<0.001
Gender, male	1.06	0.95–1.20	0.31
SOFA, per point	1.23	1.21–1.24	<0.001
DNR at admission	3.64	3.14–4.21	<0.001
Elixhauser score, per point	1.04	1.03–1.05	<0.001

Mortalité M12

	Hazard ratio	95 % CI	p-value
Age groups (vs. 65–74)			
75–84	1.21	1.06–1.38	0.01
85 and over	1.59	1.37–1.85	<0.001
Gender, male	1.06	0.95–1.18	0.30
SOFA, per point	1.04	1.02–1.05	<0.001
DNR at admission	1.87	1.61–2.17	<0.001
Elixhauser score, per point	1.07	1.05–1.07	<0.001

Fuchs et al, Intensive Care Med, 2012

Table 2 Results of final model and 10,000 replications bootstrap

Variable	Odds ratio	95% CI	Bootstrap bias	Bootstrap 95% CI	P
SAPS 3, per point increase	1.08	1.06-1.10	<0.001	1.061-1.095	<0.001
Charlson comorbidity index, per point increase	1.16	1.07-1.27	0.001	1.070-1.271	0.001
Performance status					
0	Ref	Ref	Ref	Ref	-
1	1.61	1.05-2.64	0.003	1.072-2.657	0.033
2	2.39	1.38-4.13	0.008	1.355-4.264	<0.001
Non-full code status	11.74	6.22-22.16	0.04	5.783-24.057	<0.001

Zampieri et al, BMC Anesthesiol, 2014

Intensité thérapeutique moindre chez les patients âgés: une des raisons de cette surmortalité?

Intensive Care Med (2012) 38:1654–1661
DOI 10.1007/s00134-012-2629-6

ORIGINAL

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ICU admission characteristics and mortality rates among elderly and very elderly patients

	Age group			p-value
	65–74 n = 2,585 (35.4 %)	75–84 n = 3,003 (41.1 %)	Over 84 n = 1,677 (23.5 %)	
Intensity of care				
RRT during hospitalization	228 (11.1 %)	229 (7.6 %)	80 (4.8 %)	<0.001
Use of vasopressors	707 (27.4 %)	782 (26.0 %)	405 (24.2 %)	0.07
Mechanical ventilation	1346 (52.1 %)	1452 (48.4 %)	666 (39.7 %)	<0.001
DNR at admission	176 (6.8)	461 (15.4)	496 (29.6)	<0.001

ED emergency department, GI gastrointestinal, GU genitourinary, SOFA sequential organ failure assessment, SAPS simplified acute physiology score, RRT renal replacement therapy, DNR do not resuscitate

JAGS JANUARY 2005-VOL. 53, NO. 1

Treatment Intensity and Outcome of Patients Aged 80 and Older in Intensive Care Units: A Multicenter Matched-Cohort Study

Ariane Boumendil, MSc,* Philippe Aegerter, PhD, MD,*† Bertrand Guidet, MD,*‡ and the CUB-Rea Network

Table 2. Comparisons of Admission and Intensive Care Unit (ICU) Stay Characteristics and Outcome of Oldest-Old (80) and Matched Young-Old Patients (65–79)

Characteristic	Young Old (n = 3,175)	Oldest Old (n = 3,175)	P-value*
Support and ICU stay characteristics, n (%)			
Circulatory support	1,188 (37.4)	1,233 (38.8)	.19
Mechanical ventilation	1,249 (39.3)	1,064 (33.5)	<.001
Renal support	214 (6.7)	123 (3.9)	<.001
Tracheostomy	172 (5.4)	70 (2.2)	<.001

Intensité thérapeutique moindre chez les patients âgés: une des raisons de cette surmortalité?

ORIGINAL



Withholding or withdrawing of life-sustaining therapy in older adults (≥ 80 years) admitted to the intensive care unit

Bertrand Guidet^{1,2*}, Hans Flaatten^{3,4}, Ariane Boumendil^{1*}, Alessandro Morandi^{5,6}, Finn H. Andersen^{7,8}, Antonio Artigas⁹, Guido Bertolini¹⁰, Maurizio Cecconi¹¹, Steffen Christensen¹², Loredana Faraldi¹³, Jesper Fjølner¹², Christian Jung¹⁴, Brian Marsh¹⁵, Rui Moreno¹⁶, Sandra Oeyen¹⁷, Christina Agwald Öhman¹⁸, Bernardo Bollen Pinto¹⁹, Ivo W. Soliman²⁰, Wojciech Szczeklik²¹, Andreas Valentin²², Ximena Watson¹¹, Tilemachos Zafeiridis²³ and Dylan W. De Lange²⁰ on behalf of The VIP1 study group.

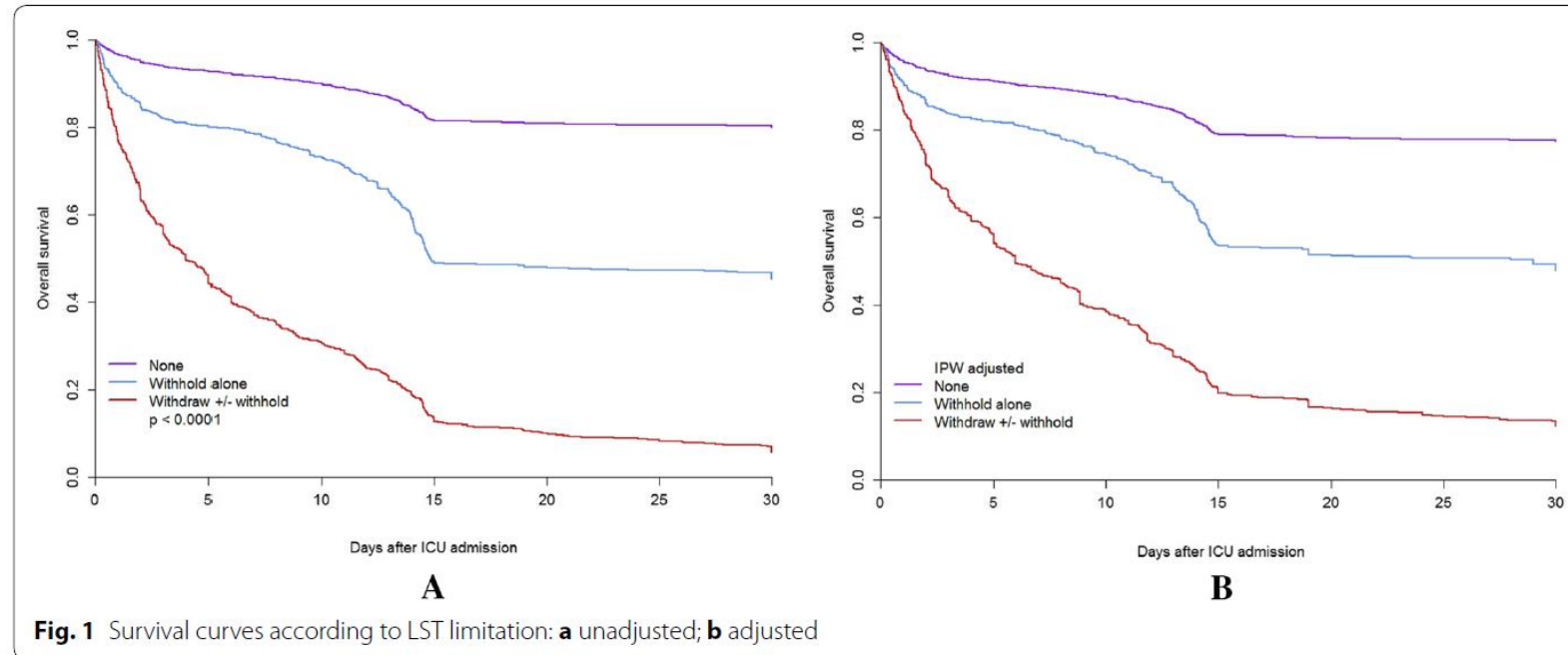


Fig. 1 Survival curves according to LST limitation: **a** unadjusted; **b** adjusted

Synthèse des facteurs associés à la mortalité

Intra réa
facteurs liés à la gravité initiale >
caractéristiques patients

Long terme
poids plus important des
caractéristiques patients

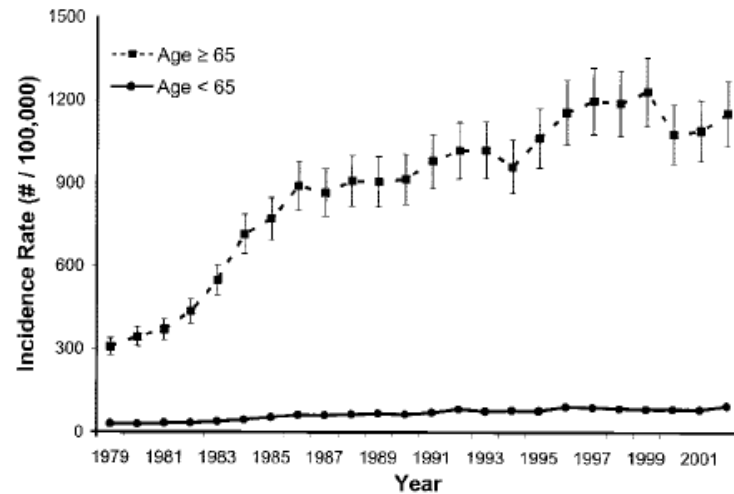
Type of Factor Evaluated	Factor Evaluated	n	Significantly Associated (Yes/No)
ICU mortality		N = 10	
Baseline status	Age	4	Yes in 2/4
	Sex	2	Yes in 1/2
	Comorbidities	6	Yes in 1/6
	Frailty score	1	Yes
Factors at admission	Severity score ^a	13 ^c	Yes in 8/13
	Type of admission	3	No in all
	Diagnosis at admission	10	Yes in 8/10
	Glasgow Coma Scale	1	Yes
Factors during ICU stay	Biological factors ^b	5	Yes in 1/5
	Invasive or noninvasive ventilation	6	Yes in 4/6
	Vasopressor use	2	No in all
	Renal replacement therapy	2	Yes in 1/2
	Weaning failure or reintubation	2	Yes in 1/2
	Length of stay	1	Yes
	DNR	1	Yes
	Acute respiratory distress syndrome	1	No
	Transfusion	1	No
Positive blood culture	1	No	

Type of Factor Evaluated	Factor Evaluated	$\frac{n}{N = 10}$	Significantly associated (Yes/No)
Baseline status	Age	8	Yes in 6/8
	Male sex	2	No in all
	Comorbidities	10	Yes in 9/10
	Functional status	4	Yes in all
	Frailty score	1	Yes
	Factors at admission	Type of admission	5
Severity score ^a		7	Yes in 6/7
Glasgow		1	Yes
Acute renal failure		2	Yes in all
Factors during ICU stay	Mechanical ventilation	2	Yes in all
	Septic complications	1	Yes
	Do not resuscitate	1	Yes

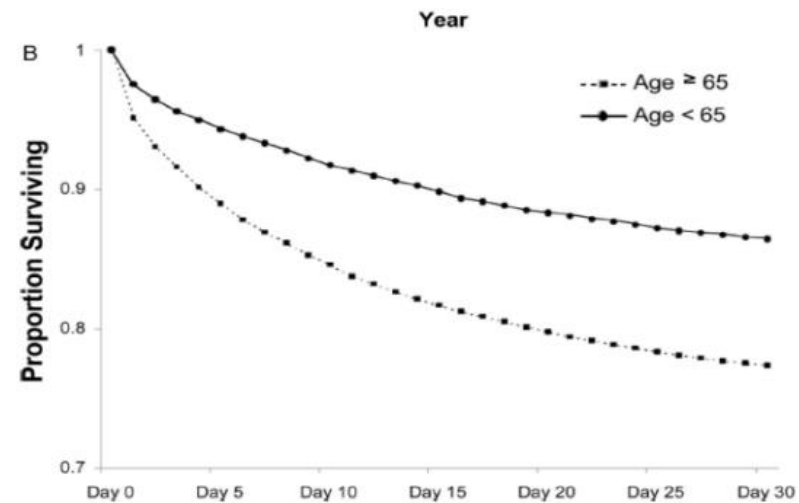
Focus sepsis / choc septique

Plus fréquent et plus grave chez le sujet âgé

Augmentation incidence



Augmentation taux de mortalité



- 40 à 50% des bactériémie surviennent chez des patients âgés
- Taux de mortalité du choc septique 50-60% (contre 30-40% chez le jeune)

Associé à la mortalité court terme comparativement aux plus jeunes

Sepsis

TABLE 3 | Associations of old vs. very old septic patients with mortality and management strategies in three multi-level logistic regression models.

	Total cohort				
	Crude events		Model 1 aOR (95% CI, p-value)	Model 2 aOR (95% CI, p-value)	Model 3 aOR (95% CI, p-value)
	Old n (%)	Very old n (%)			
ICU mortality	692 (11)	412 (13)	1.21 (1.06–1.38; 0.005)	1.28 (1.06–1.54; 0.01)	1.32 (1.09–1.59; 0.004)
Management	-	-	-	-	-
Mechanical ventilation	1,418 (23)	562 (18)	0.72 (0.64–0.81; <0.001)	0.72 (0.61–0.85; <0.001)	-
Vasopressor use	2,075 (34)	1,045 (33)	0.99 (0.90–1.10; 0.91)	0.99 (0.86–1.14; 0.86)	-

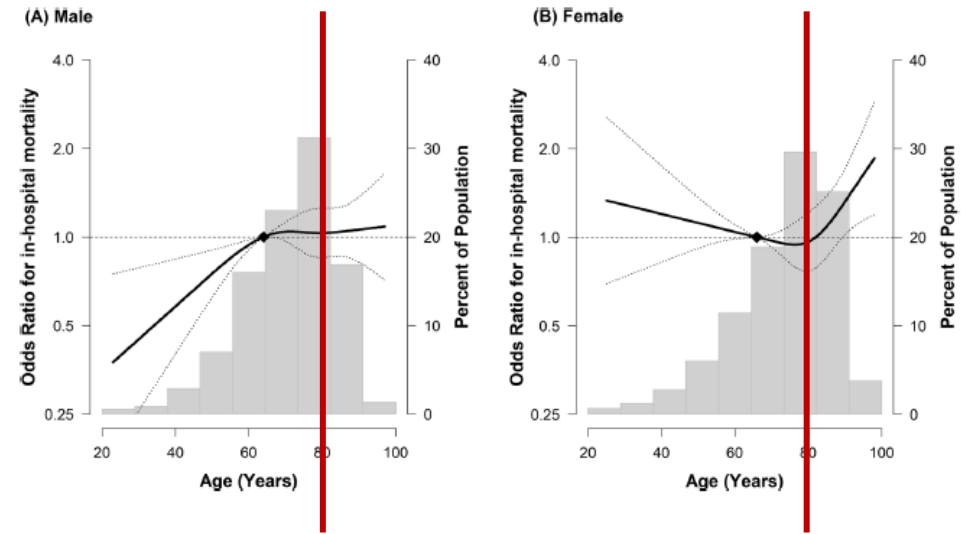
Model 1, ICU cluster as random effect; Model 2, Model 1 plus patient level (SOFA, BMI, sex, ethnics, infection focus, lactate concentration); Model 3, Model 2 plus management strategies (mechanical ventilation, vasopressor use); SOFA, Sepsis-related organ failure assessment; BMI, body mass index.

Choc septique

TABLE 4 | Association of old vs. very old septic shock patients with mortality and management strategies in three multi-level logistic regression models.

	Septic shock patients				
	Crude events		Model 1 aOR (95% CI, p-value)	Model 2 aOR (95% CI, p-value)	Model 3 aOR (95% CI, p-value)
	Old n (%)	Very old n (%)			
ICU mortality	260 (36)	122 (38)	1.10 (0.84–1.45; 0.49)	1.46 (1.07–1.99; 0.02)	1.50 (1.10–2.06; 0.01)
Management	-	-	-	-	-
Mechanical ventilation	404 (55)	136 (42)	0.60 (0.46–0.79; <0.001)	0.68 (0.49–0.93; 0.02)	-
Vasopressor use	730 (100)	324 (100)	-	-	-

Model 1, ICU cluster as random effect; Model 2, Model 1 plus patient level (SOFA, BMI, sex, ethnics, infection focus, lactate concentration); Model 3, Model 2 plus management strategies (mechanical ventilation, vasopressor use); SOFA, Sepsis-related organ failure assessment; BMI, body mass index.



Ko et al. Crit Care 2023
Bruno et al, Front in Med 2021

Pas de différence de mortalité comparativement aux autres mode d'entrée après 80 ans

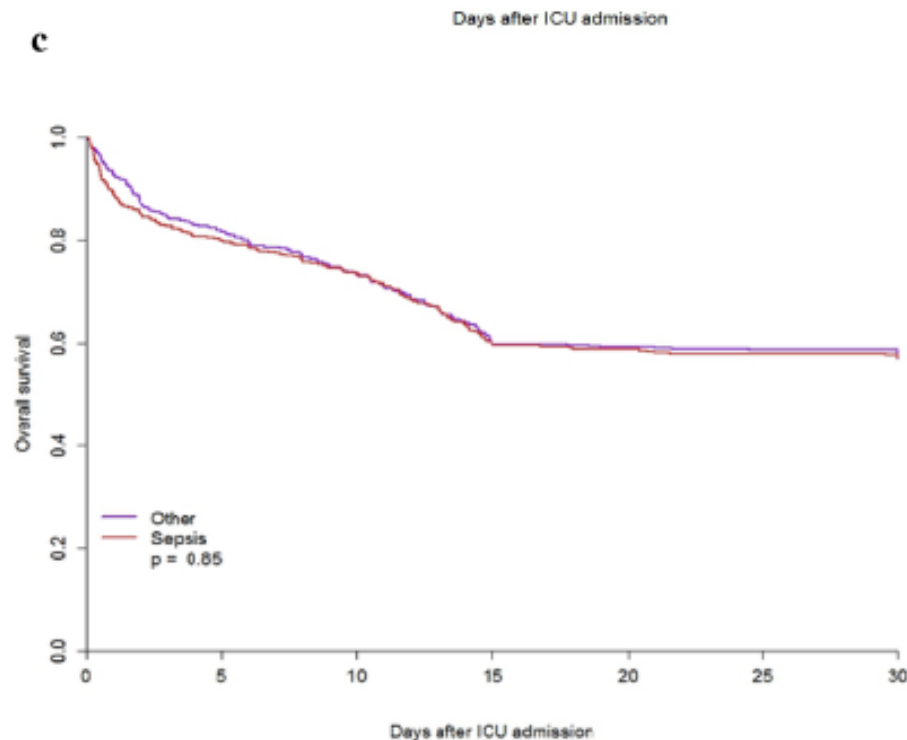


Fig. 2 Kaplan–Meyer survival curves in septic and acute non-septic patients. **a** Non-adjusted. **b** Inverse-probability weight (IPW)-adjusted overall survival (the weights were estimated using frailty, age, gender, type of admission, and SOFA score). **c** Matched cohort survival analysis

>80 ans: le sepsis n'est pas associé à la mortalité, la défaillance HDM et respiratoire oui

Predictors	ICU mortality				30-day mortality			
	Null model	Patient-level variables			Null model	Patient-level variables		
	–	OR	95% CI	P-value	–	OR	95% CI	P-value
Sex: female vs male		0.98	0.87–1.11	0.80		0.84	0.76–0.94	0.002
Reason for admission (reference category: respiratory failure)								
Circulatory failure		1.38	1.13–1.68	0.002		1.18	0.98–1.41	0.074
Combined respiratory & circulatory failure		1.54	1.25–1.90	<0.001		1.40	1.15–1.71	0.001
Sepsis		0.93	0.76–1.14	0.506		0.87	0.73–1.05	0.141
Emergent surgery		0.58	0.45–0.74	<0.001		0.61	0.50–0.75	<0.001
Elective admission		0.14	0.09–0.21	<0.001		0.18	0.13–0.24	<0.001
CNS disease		1.68	1.30–2.17	<0.001		1.78	1.41–2.26	<0.001
Multiple trauma (head involvement)		1.76	1.13–2.76	0.013		1.80	1.19–2.72	0.005
Multiple trauma		1.59	1.01–2.51	0.046		1.10	0.73–1.66	0.661
Head trauma		1.75	1.17–2.61	0.006		1.80	1.25–2.60	0.001
Other		0.55	0.43–0.72	<0.001		0.56	0.45–0.69	<0.001
SOFA score (per 1 point)		1.23	1.21–1.25	<0.001		1.19	1.17–1.20	<0.001
Age (per 1 yr)		1.01	1.00–1.03	0.09		1.03	1.02–1.05	<0.001
CFS score (per 1 point)		1.10	1.06–1.14	<0.001		1.18	1.15–1.22	<0.001


Complications post-réanimation

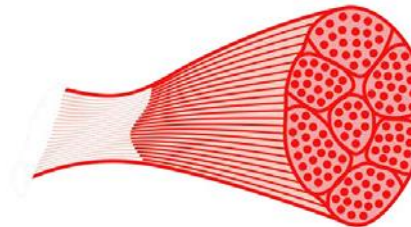
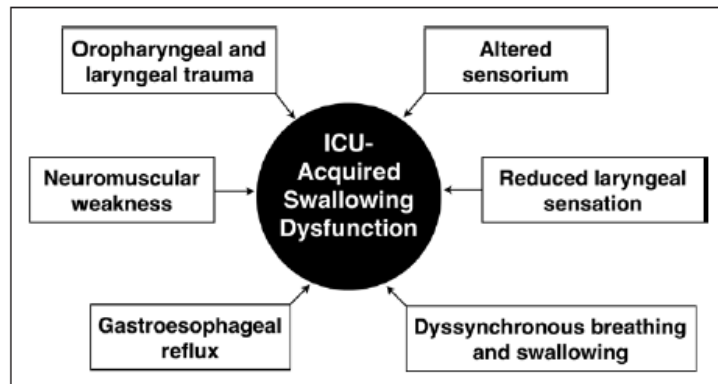
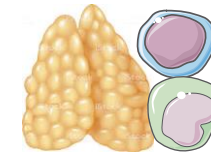
Décompensation de comorbidité

Post-intensive care syndrome (PICS)

Perte d'autonomie

Complications post-réanimation

- Décompensation cardiaque 
- Infections 2R (immunosenescence, immunoparalysie...)
- Confusion
 - 20 à 80% des patients en réanimation
 - Mauvais pronostic → Surmortalité, troubles cognitifs à distance
- Troubles de la déglutition



Shi Q et al. , *Neuropsychiatric Dis and Treat*, 2013

Salluh et al., *BMJ* 2015

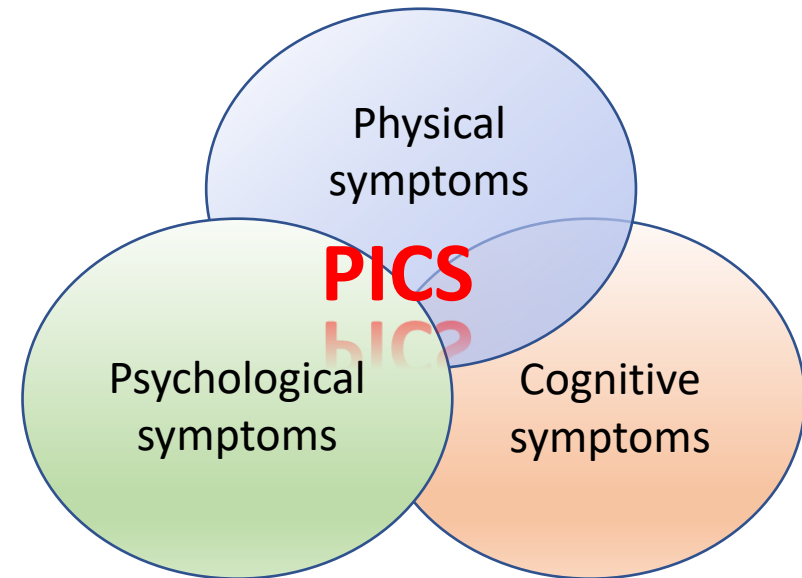
Macht et al. *Crit Care Med* 2013

Hamers H et al. *Minerva Anesthesiol* 2015

Le syndrome post-réanimation ou « Post-Intensive Care Syndrome » (PICS)

Définition

Survenue ou aggravation de **symptômes physiques, psychologiques et/ou cognitifs** dans les suites d'un séjour en réanimation et qui peuvent entraîner une **limitation d'activité, une altération de la qualité de vie et de l'autonomie**



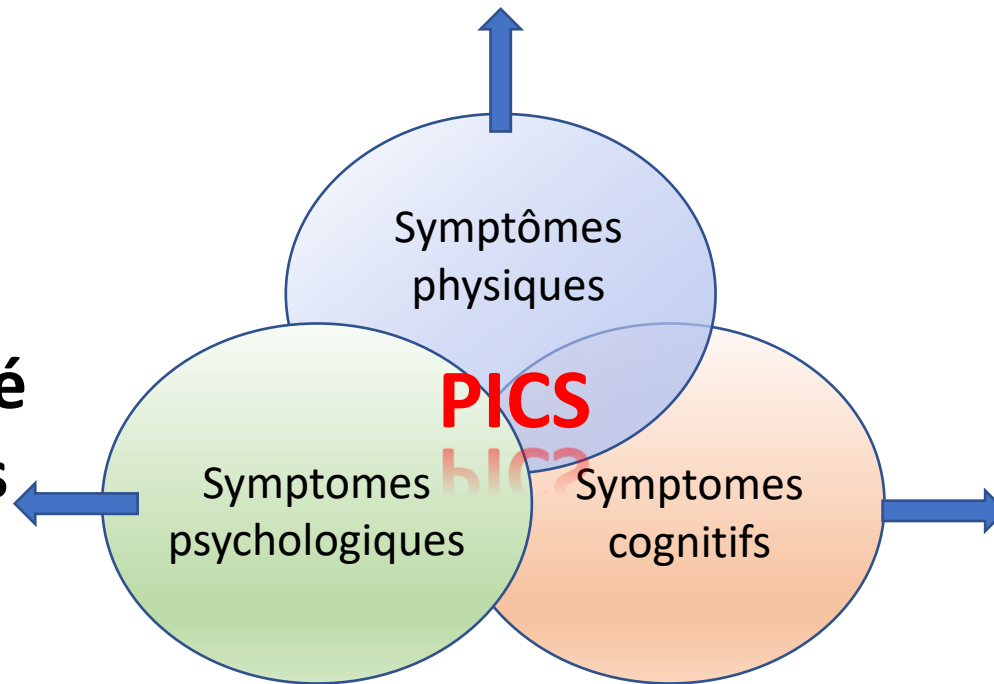
Faiblesse acquise en réanimation

ICU acquired weakness

50 à 80% des patients admis en réanimation

Facteurs de risque: âge, comorbidités, sarcopénie

Dépression / anxiété
Syndrome de stress
post-traumatique



Troubles neurocognitifs



Fig. 2 Frequency distribution of MMSE categories at ICU discharge in all patients, and in patients with and without delirium during ICU stay

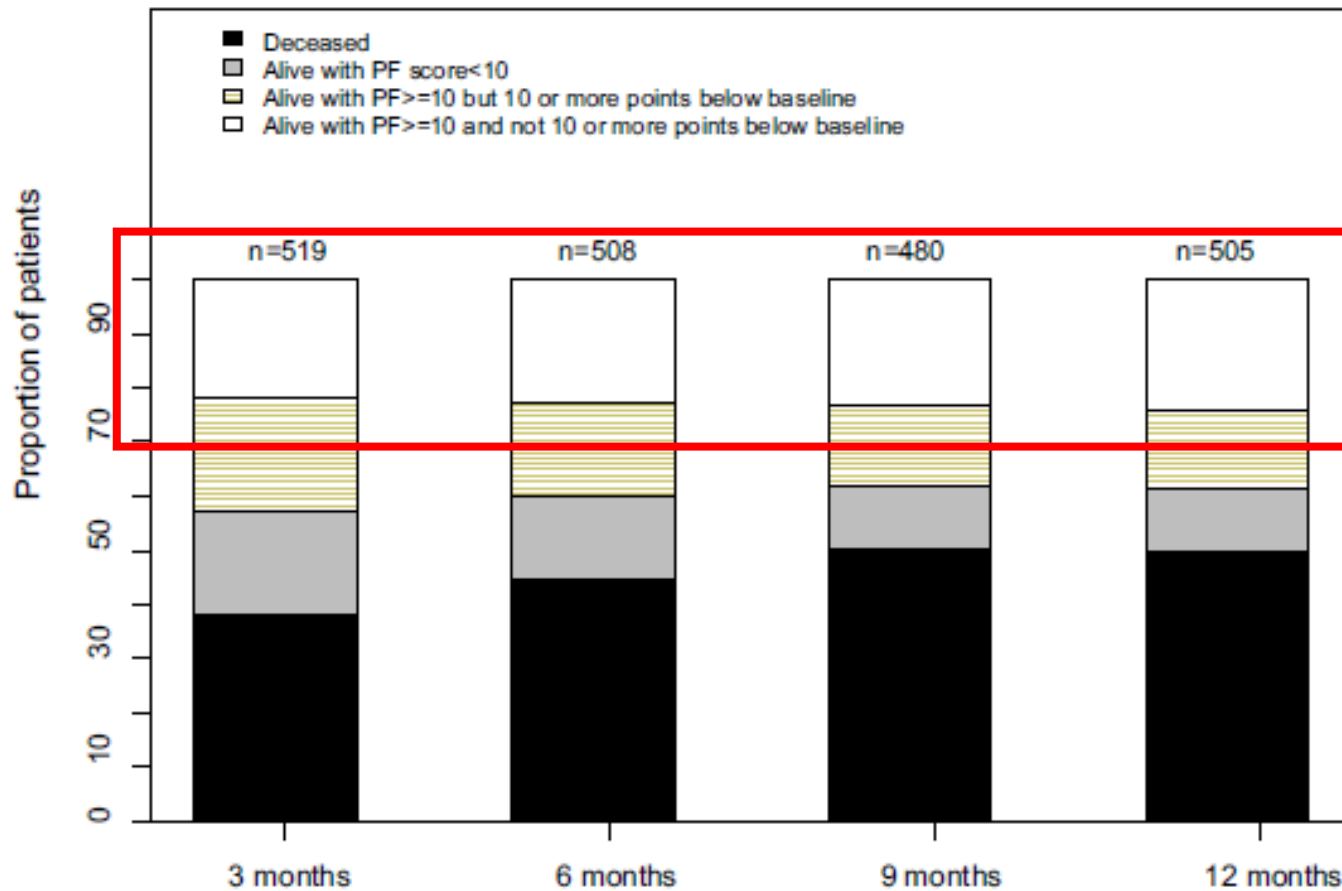
Bat J, Am J Respir Crit Care Med 2013

Jolley et al., Chest 2016

Bulic D, Ann Intensive Care 2020

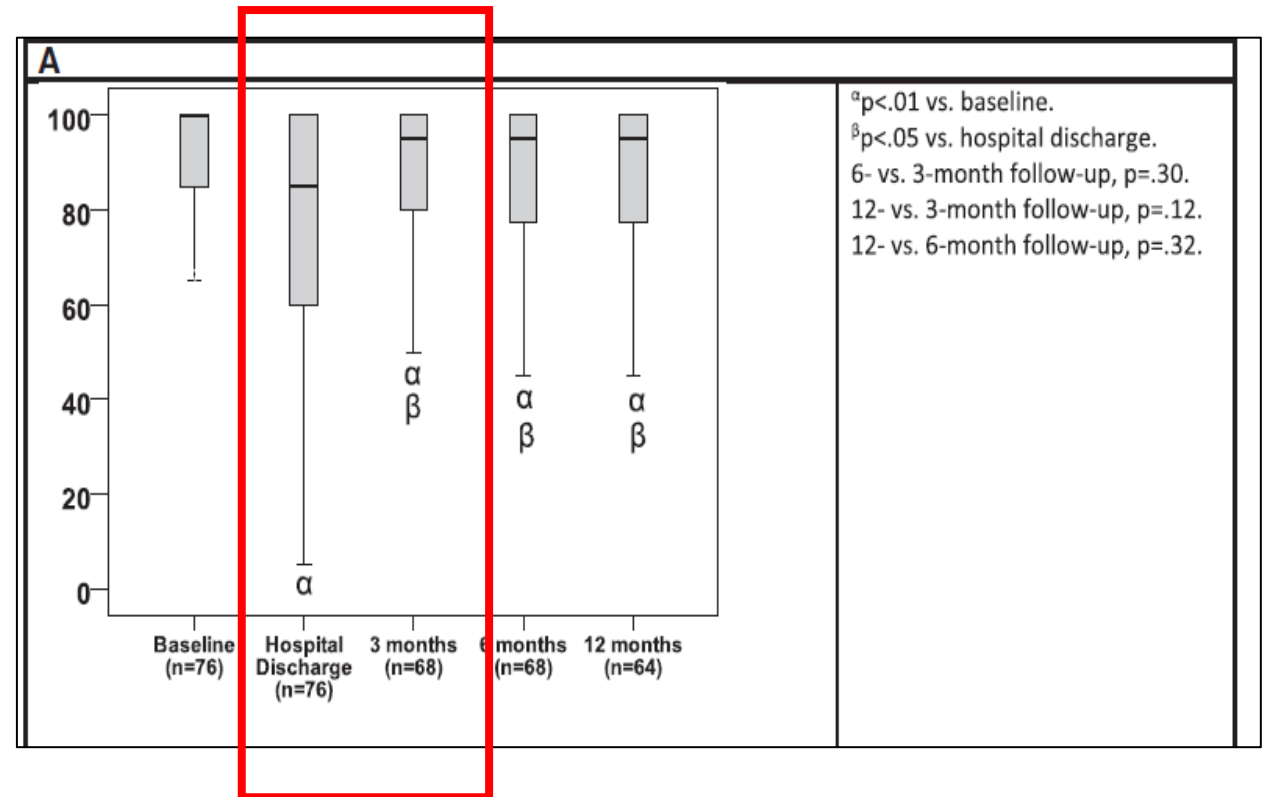
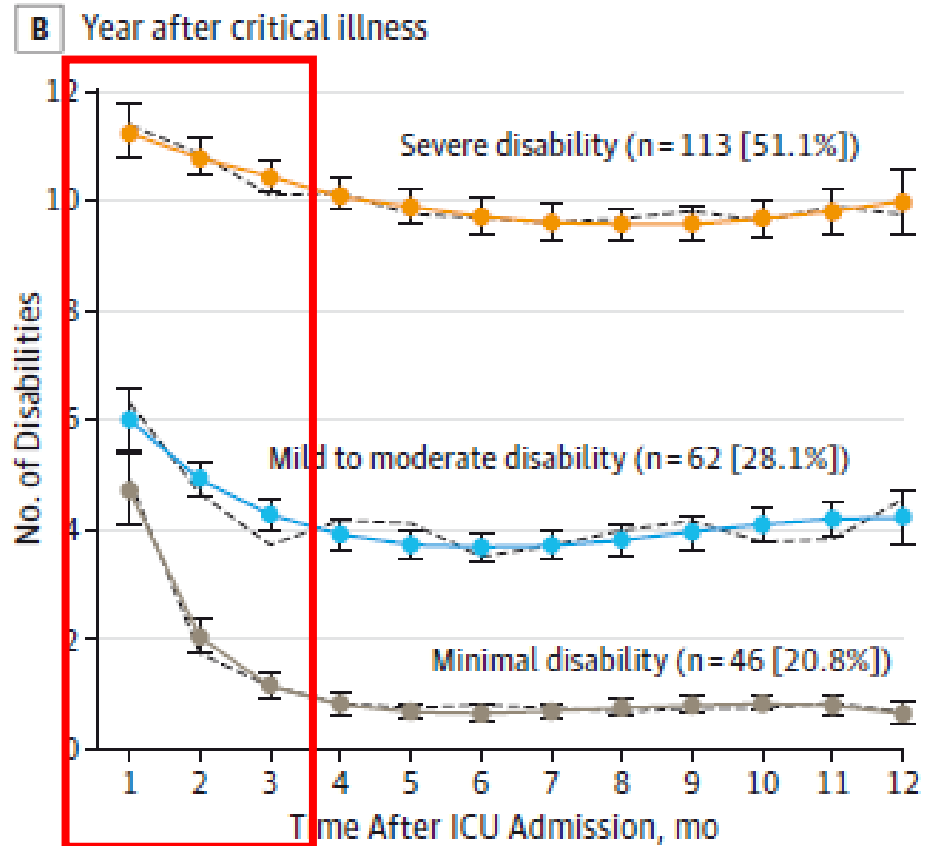
Hiser SL et al., J Intensive Care 2023

Perte d'autonomie fonctionnelle



→ 50% des survivants récupèrent totalement leur autonomie fonctionnelle à 12 mois

Période à risque



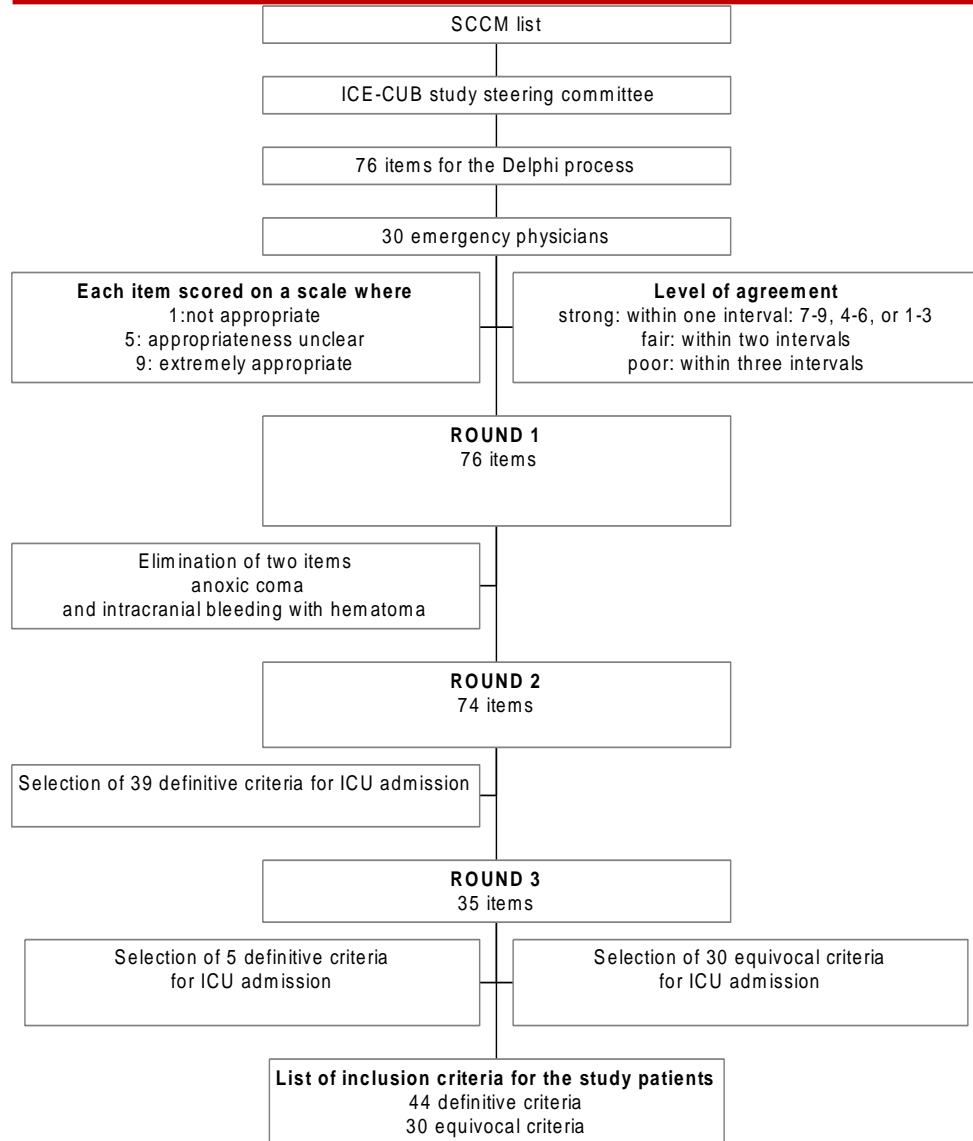
Ferrante et al. JAMA Intern Med 2015

Villa et al. JAGS 2016

Critères d'admission

Ou quel est le patient capable de survivre sans perte fonctionnelle à un séjour en réanimation?

ICE-CUB1



- 1426 patients avaient des critères d'admission,
 - 441 (31%) ont été proposé pour une admission
 - 231/441 (52%) ont été finalement admis
- 1041 patients avaient des critères équivoques
 - 181 (17%) ont été proposé pour une admission
 - 79/181 (44%) ont été finalement admis .

ICE-CUB1

Variability of Intensive Care Admission Decisions for the Very Elderly

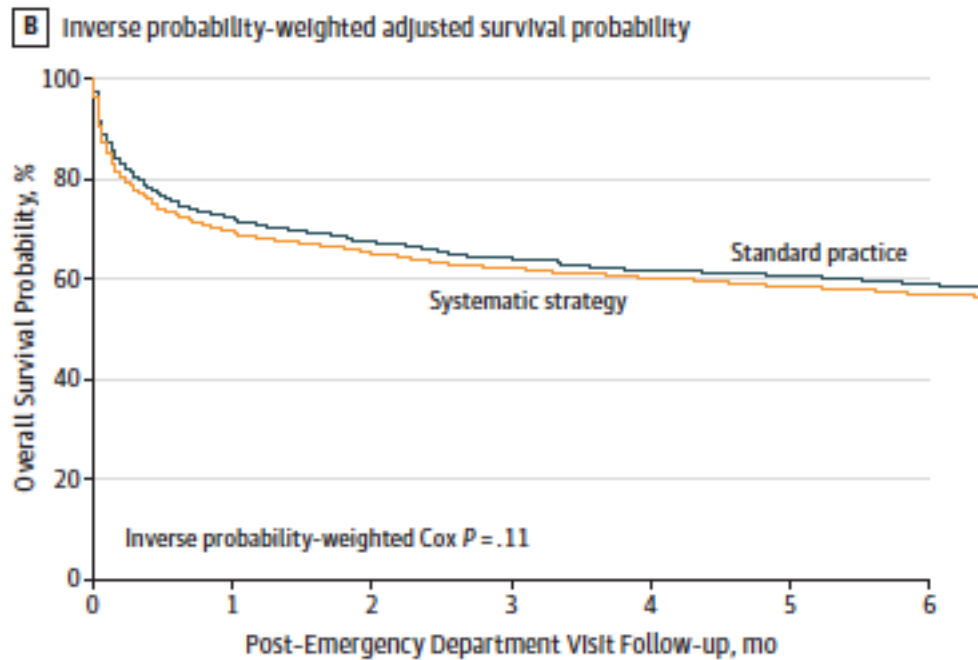
Ariane Boumendil^{1,2,3*}, Derek C. Angus⁴, Anne-Laure Guitonneau⁵, Anne-Marie Menn⁶, Christine Ginsburg⁷, Khalil Takun⁷, Alain Davido⁸, Rafik Masmoudi⁸, Benoît Doumenc⁹, Dominique Pateron¹⁰, Maité Garrouste-Orgeas¹¹, Dominique Somme¹², Tabassome Simon^{13,14}, Philippe Aegerter^{3,15}, Bertrand Guidet^{1,2,16} on behalf of the ICE-CUB study group¹

Table 4. Multivariate models of outcome following the ED visit.

Outcome	ICU eligibility	In-hospital death
Number of observations used	1834	2095
	OR (95%CrI)	OR (95%CrI)
Fixed effet		
Age (grand mean centered) per year	0.91 (0.87–0.94)	
ADL per one point increase	1.32 (1.19–1.46)	0.79 (0.75–0.84)
Demented (yes vs no)		0.61 (0.44–0.85)
Cancer (yes vs no)	0.60 (0.33–1.05)	
Normal appearance (vs appears emaciated)	0.42 (0.20–0.82)	
Appears somewhat malnourished (vs appears emaciated)	1.06 (0.68–1.60)	
Decubitus ulcer (yes vs no)		1.53 (0.97–2.26)
Psychotropic drugs (yes vs no)	0.66 (0.45–0.95)	
Diuretics (yes vs no)		

ICE-CUB2

Effect of Systematic Intensive Care Unit Triage on Long-term Mortality Among Critically Ill Elderly Patients in France A Randomized Clinical Trial



No. at risk	0	1	2	3	4	5	6
Standard practice	1518	1126	1042	992	961	941	912
Systematic strategy	1518	1029	966	919	887	860	826

Critères d'admission

Ou quel est le patient capable de survivre sans perte fonctionnelle à un séjour en réanimation?

Critères d'admission

Ou

AUCUN CONSENSUS INTERNATIONAL
AUCUNE RECOMMANDATIONS

capable de survivre sans perte

ne a un séjour en réanimation?

Fragilité

Comorbidités

**Autonomie
fonctionnelle**

Gravité initiale



**Diagnostic à
l'entrée?**

**Souhait du
patient**

**Nb de lits
dispo?**

Take home messages



- Patient âgé en réanimation = patient à risque
 - Mortalité élevée
 - Perte d'autonomie au décours
- Facteurs associés à la mortalité: fragilité, autonomie, gravité à l'admission
- Aucun consensus pour définir quel patient admettre → travail en cours au niveau européen