

Devenir et pronostication de la personne âgée aux soins intensifs

Han Ting Wang

Intensiviste CHUM

28 mai 2023

Conflits d'intérêt

Aucun



Plan et objectif



Cas clinique



Définir le critère d'âge



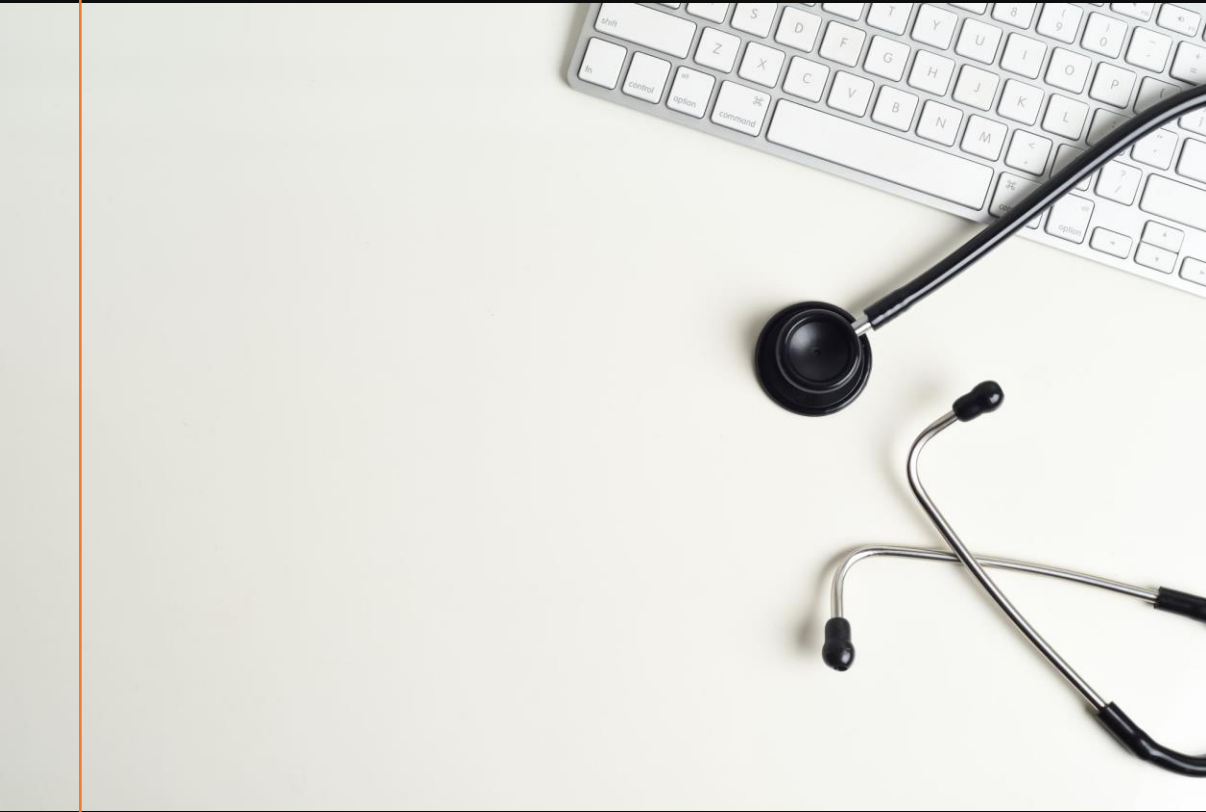
Le devenir post arrêt
cardio-respiratoire



Admission et ventilation
mécanique: impact sur
la mortalité



Séjour aux soins
intensifs: syndrome post
soins-intensifs (PICS)



Cas numéro 1

- Homme de 87 ans
- ATCD: HTA, DBII, régurgitation mitrale 2/4, début Alzheimer mais conduit encore sa voiture.
- H pour volvulus du grêle, lactate à 4, pneumonie aspiration.
- SOP urgente. Résection du grêle ischémique.
- Intubé aux soins intensifs en post-op. FiO2 40%.
- Lévo-phed 10 mcg/min. créatinine en augmentation à 150.

Question

- Survie intra-hospitalière?
- Orientation si survie ?
- Survie à 1 an ?
- Si vous avez à rediscuter du niveau de soins avec la famille...



Vignette clinique 2

- Patiente de 72 ans,
- Connu: HTA, DBII, parkinson diagnostiqué x 5 ans sous cinemet.
- Selon le fils, difficulté AVD x 1 an.
- H x 72h pour COVID. OF 100%
- Consultation demandé pour prise en charge.
- Discussion préalable par la résidente de l'étage :
 - Niveau 2 pas de RCR ni d'intubation



Question

- Survie intra-hospitalière?
- Orientation si survie ?
- Survie à 1 an ?
- Si vous avez à rediscuter du niveau de soins avec la famille...

Il y a vieux et vieux



Arrêt cardio-respiratoire extra-hospitalier

- Étude de cohorte américaine multi-centrique
- Cardiac Arrest Registry to Enhance Survival 2013 – 2019
- 26,000 patients de 65 ans et plus

Table 1. Comparison of Patients in CARES From 2013 to 2019 Who Were Linked or Not Linked to Medicare Files

	Total (N=56 425)	Not Linked (n=29 550)	Linked (n=26 875)	Standardized Difference, %*
Age group, y				
65–74	28 581 (50.7)	15 096 (51.1)	13 485 (50.2)	1.8
75–84	18 871 (33.4)	9927 (33.6)	8944 (33.3)	0.7
≥85	8973 (15.9)	4527 (15.3)	4446 (16.5)	3.3

Chan et al. *Circulation*. 2022.

Arrêt cardio-respiratoire extra-hospitalier

Table 1. Comparison of Patients in CARES From 2013 to 2019 Who Were Linked or Not Linked to Medicare Files

	Total (N=56 425)	Not Linked (n=29 550)	Linked (n=26 875)	Standardized Difference, %*
Favorable neurological discharge				
Died or missing neuro status	38 970 (69.1)	20 640 (69.9)	18 330 (68.2)	3.6
Mild or no disability	13 205 (23.4)	6769 (22.9)	6436 (24.0)	2.5
Moderate or severe disability	4250 (7.5)	2141 (7.3)	2109 (7.9)	2.3

Chan et al. Circulation. 2022.

Plus âgés encore

Table 2. Outcomes of Patients After Out-of-Hospital Cardiac Arrest Stratified by Location of the Cardiac Arrest

Outcome	Patients, No. (%)			P Value ^a
	Residential (n = 157 087)	Public (n = 29 911)	Nursing Home (n = 46 513)	
Prehospital ROSC	10 656 (6.8)	3545 (11.9)	3379 (7.3)	<.001
1-mo Survival	4379 (2.8)	2373 (7.9)	1226 (2.6)	<.001
CPC 1 or 2	1555 (1.0)	1351 (4.5)	301 (0.6)	<.001

Arrêt cardiorespiratoire intra-hospitalier

Table 1. Characteristics of the Study Cohort.*

Characteristic	Patients (N = 6972)
Age — yr	75.8±7.0
Male sex — no. (%)	3872 (55.5)
Race — no./total no. (%)†	
White	5634/6576 (85.7)
Black	778/6576 (11.8)
Other	164/6576 (2.5)
Initial cardiac-arrest rhythm — no. (%)	
Asystole	1707 (24.5)
Pulseless electrical activity	2031 (29.1)
Pulseless ventricular tachycardia	1109 (15.9)
Ventricular fibrillation	2125 (30.5)
CPC score at discharge — no./total no. (%)‡	
1	2943/6114 (48.1)
2	2097/6114 (34.3)
3	879/6114 (14.4)
4	195/6114 (3.2)

* The plus-minus value is a mean ±SD.

† Race was self-reported. Data on race were missing for 396 patients.

‡ The cerebral-performance category (CPC) scores are used to assess neurologic status after a cardiac arrest. Scores range from 1 to 5, with 1 indicating mild or no neurologic disability, 2 mild neurologic disability, 3 severe neurologic disability, 4 coma or vegetative state, and 5 brain death. The CPC score was missing for 858 patients.

Attention aux biais

Table 5 Results categorized by age

From: [The outcome of in- and out-hospital cardiopulmonary arrest in the older population: a scoping review](#)

	70–79 years	80–89 years	≥ 90 years
IHCA			
Survival until discharge	20.1–27.9% [18, 19, 26]	15.3–21.5% [18, 19, 26]	11–15.1% [18, 19]
One-month survival	27.9% [18]	20% [18]	14% [18]
CPC 1–2 at discharge	22.7% [18]	16.5% [18]	11.5% [18]
	≥ 70 years	≥ 80 years	≥ 90 years
OHCA			
Survival until discharge	4.3–12.0% [30, 40, 45]	2.8–8% [30, 45]	1.7–3.9% [42]
One-month survival	5.4–5.7% [36, 43, 44]	0.9–7% [36, 38, 41, 43, 44]	0–2.4% [36, 43, 44]
CPC 1–2 at discharge/1-month	10.5% [44]	0.9% [33]	0.5–1.8% [28, 33]
One-year survival	3.2–10% [36, 45]	0–6% [36, 38, 45]	0% [36]

Ventilation mécanique et mortalité

Table 4. Univariate and Multivariate Analysis of Factors Associated With Intensive Care Unit (ICU) Mortality in Ventilated Patients*

	ICU Mortality, % (95% Confidence Interval)	Univariate Analysis		Multivariate Analysis	
		Odds Ratio (95% Confidence Interval)	<i>P</i> Value	Odds Ratio (95% Confidence Interval)	<i>P</i> Value
Factors Present at the Initiation of Mechanical Ventilation					
Geographical area					
United States and Canada	27 (25-29)	1.00] <.001		
Europe	31 (29-33)	1.21 (1.04-1.40)			
Latin America	34 (31-37)	1.38 (1.17-1.63)			
Age, y					
<40	21 (19-24)	1.00] <.001	1.00] <.001
40-70	30 (28-32)	1.60 (1.33-1.91)		1.58 (1.27-1.98)	
>70	36 (34-39)	2.11 (1.75-2.55)		2.18 (1.71-2.76)	

Esteban et al. JAMA. 2002.

ORIGINAL ARTICLE

The RECOVER Program: Disability Risk Groups and 1-Year Outcome after 7 or More Days of Mechanical Ventilation

Herridge, Chu, Matte, *et al.*: RECOVER Program: Outcomes and Disability Risk Groups after Critical Illness

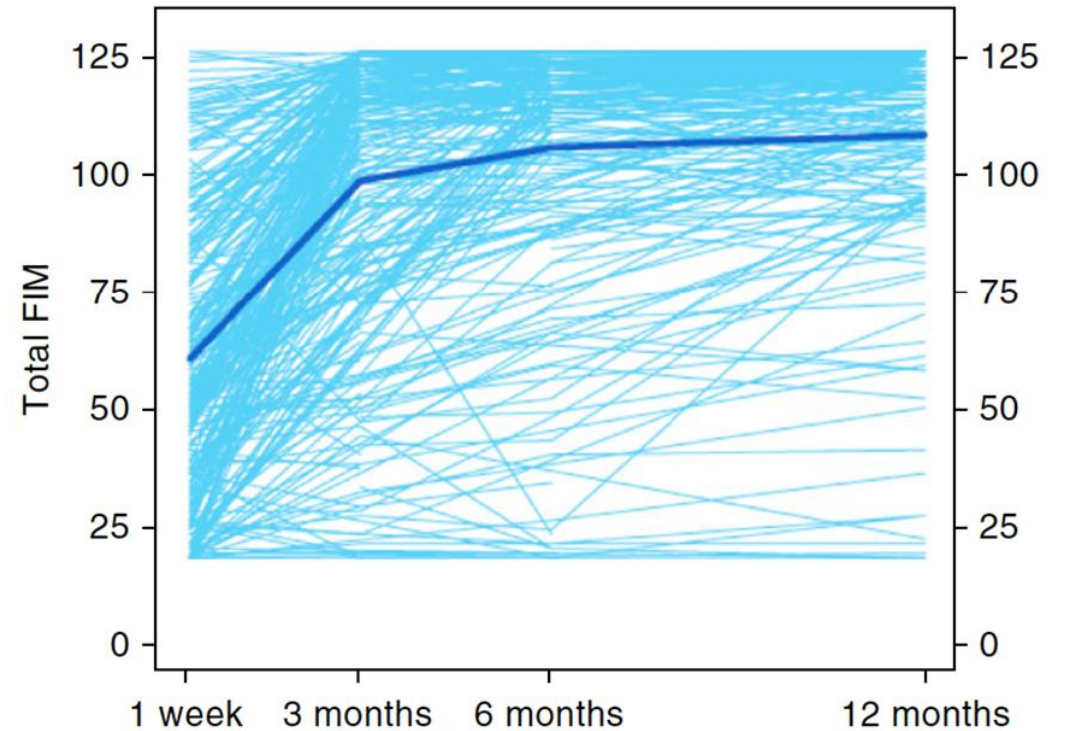
Am J Respir Crit Care Med Vol 194, Iss 7, pp 831–844, Oct 1, 2016

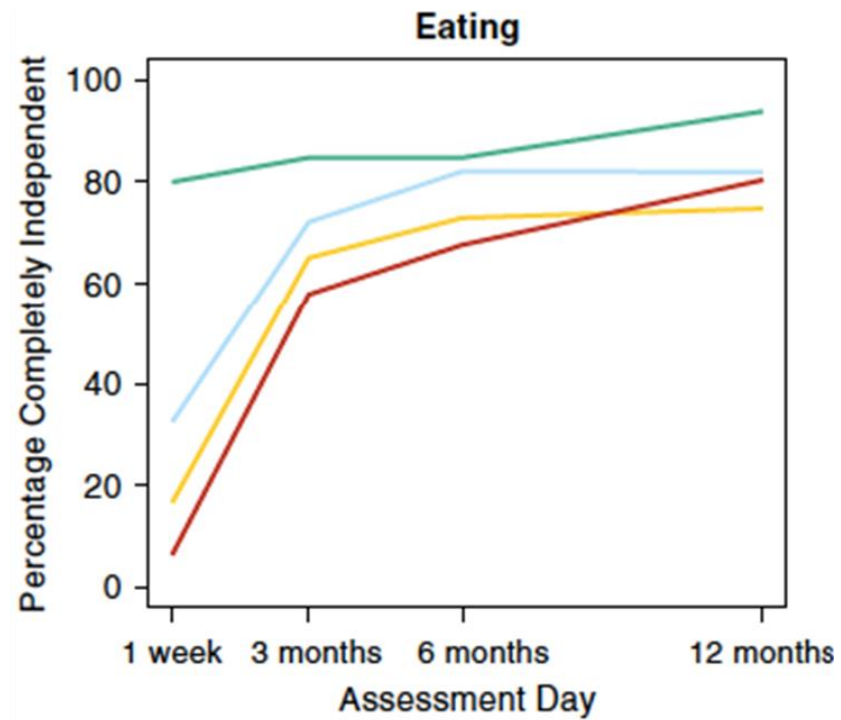
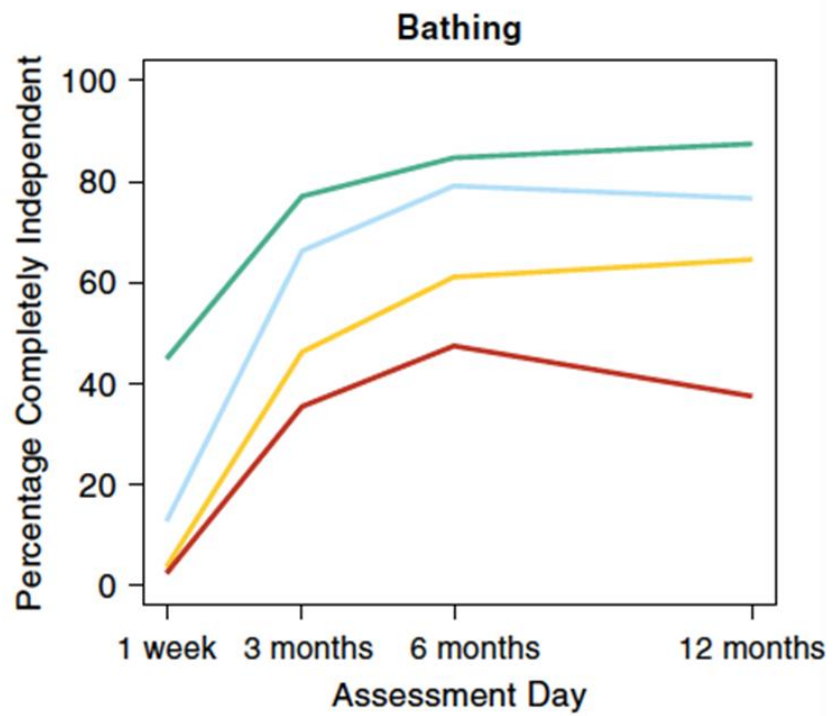
Score FIM

Récupération
dans les
premiers 6 mois

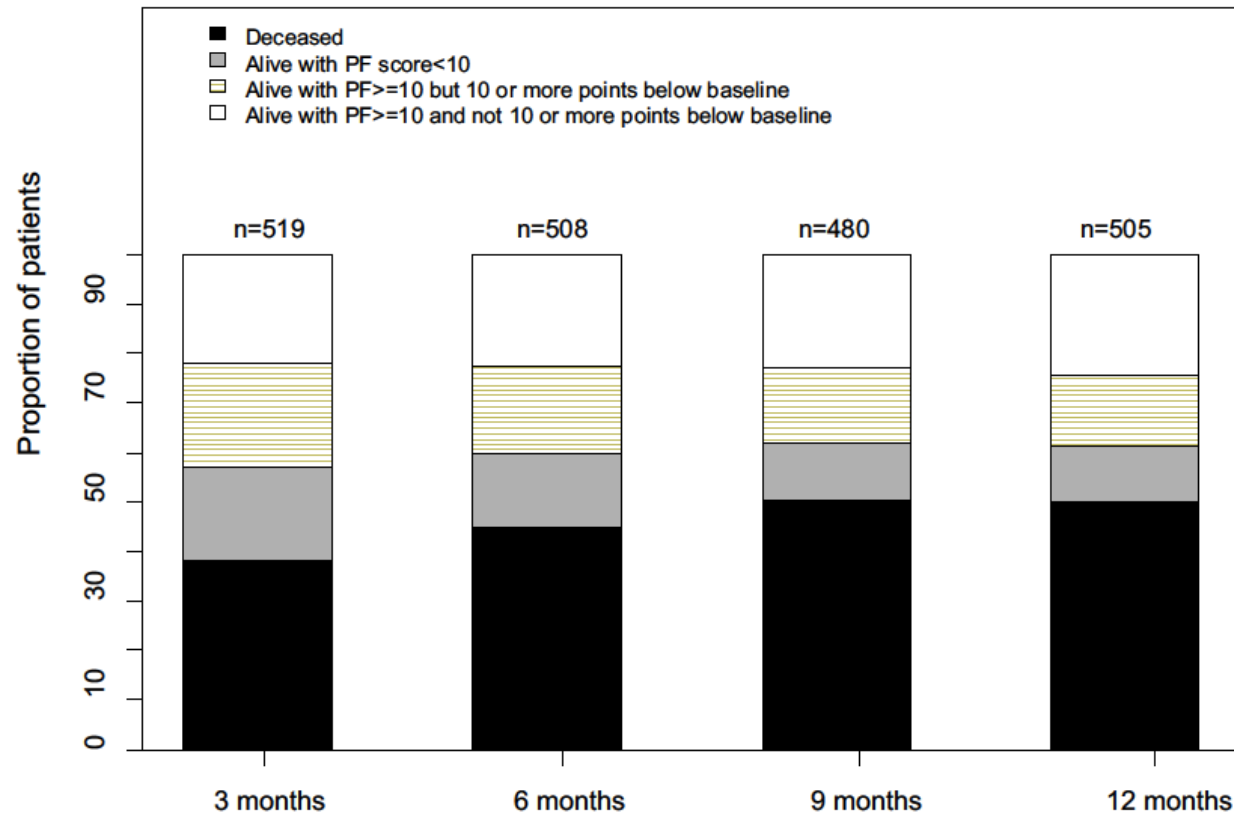
Score 60 =
CHSLD

Score 80 =
retour à
domicile





Les personnes âgées



- Étude multicentrique canadienne
- 400 octagénaires admis aux soins intensifs
- Autonomie préservée pour 40% à 1 an

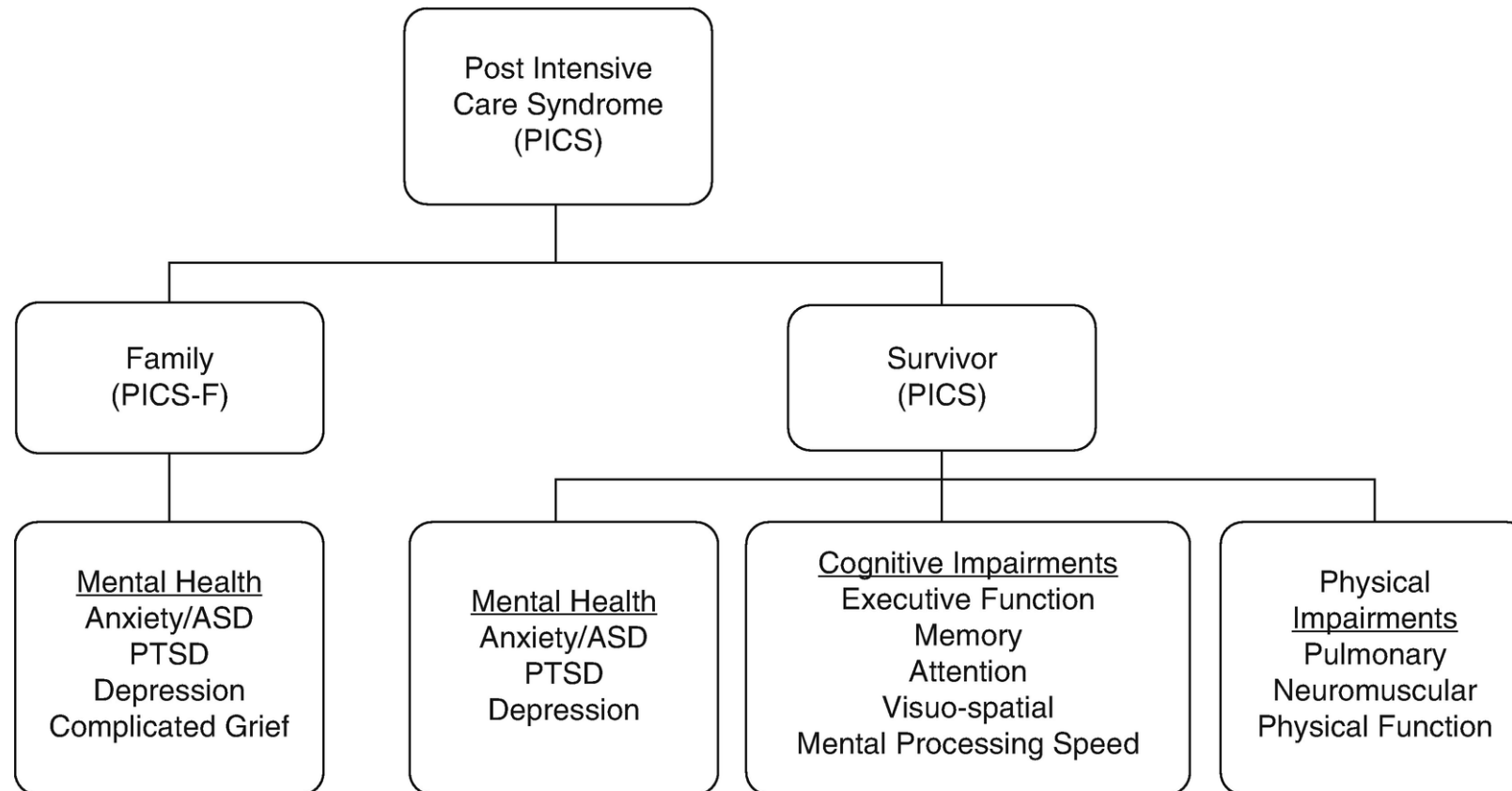
Heyland et al. ICM 2015. 41(11):1911-20

Perte d'autonomie à 1 an

Facteurs	OR (IC)	P-value
Homme	0.51 (0.28-0.89)	0.0017
Apache II (chaque 9 points)	0.52 (0.37-0.74)	0.0003
Charlson (chaque 2 points)	0.59 (0.43-0.80)	0.0008
CFS (chaque 2 points)	0.42 (0.25-0.71)	0.001

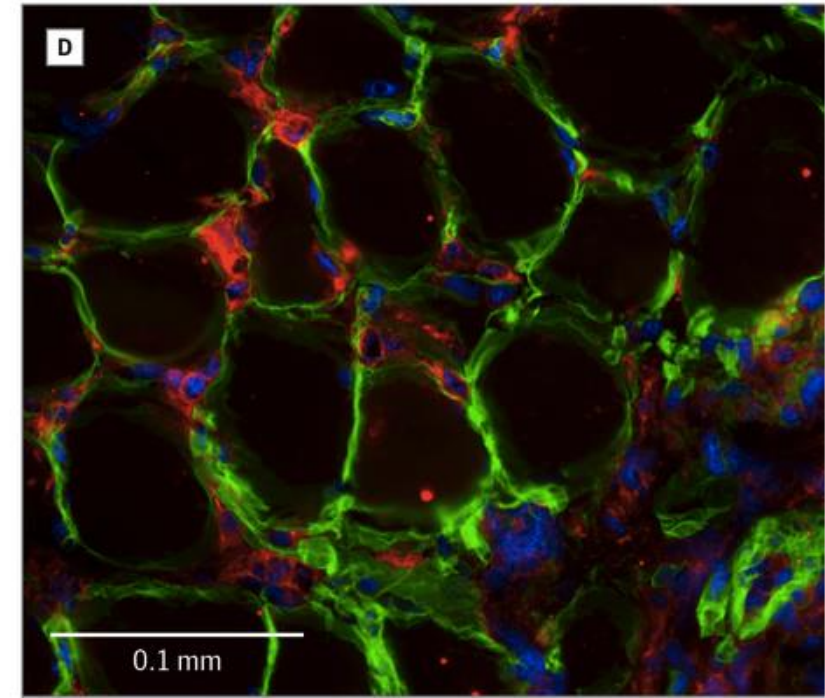
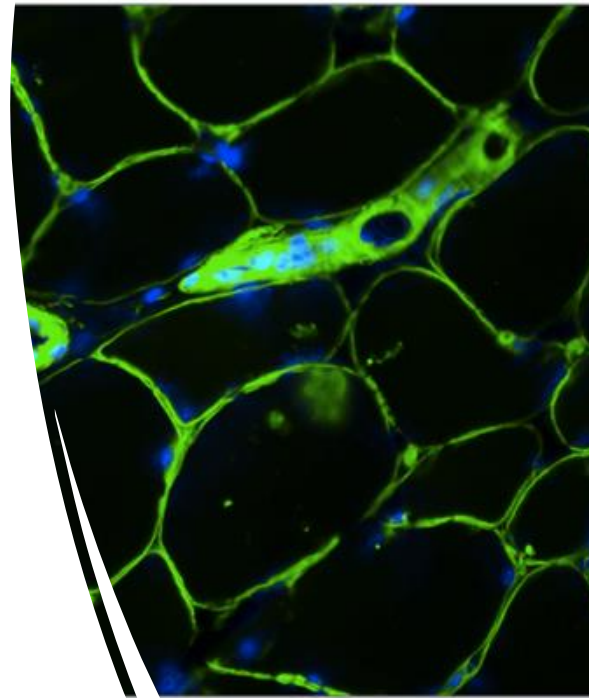
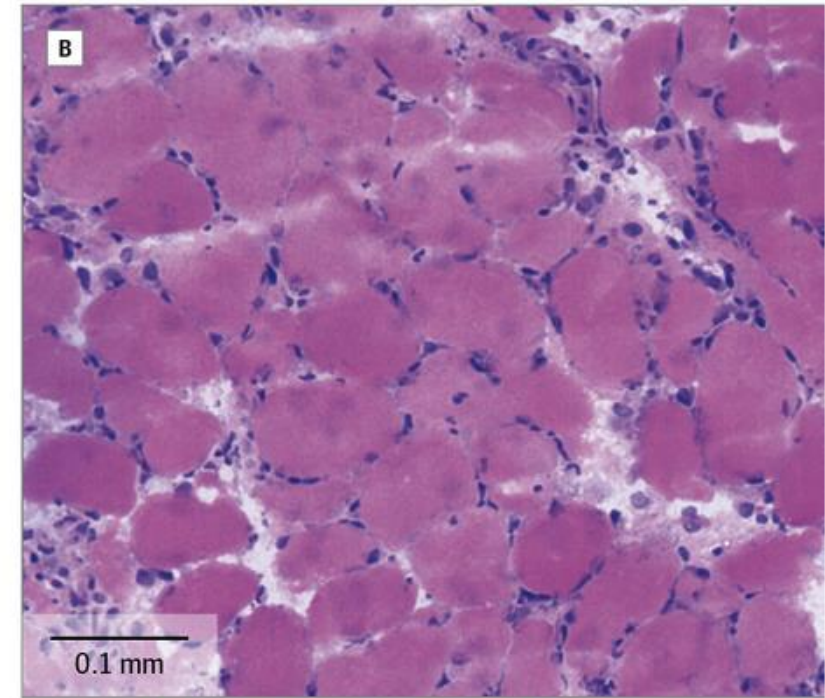
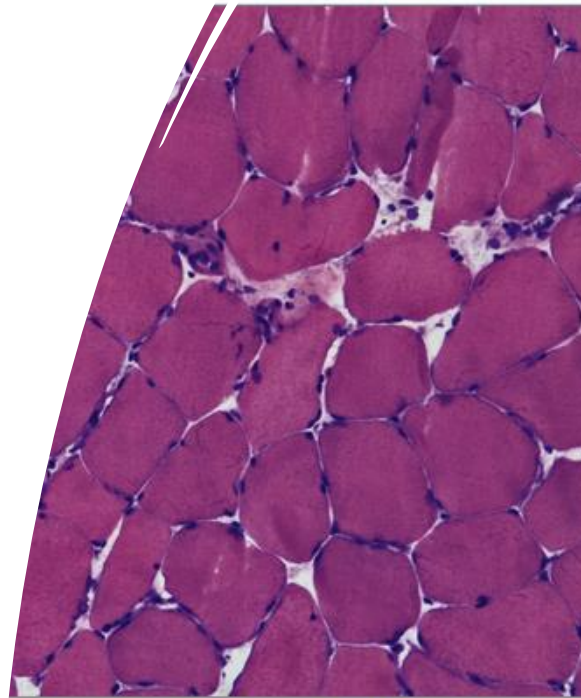
Post-ICU Syndrome

Needham et al. 2012



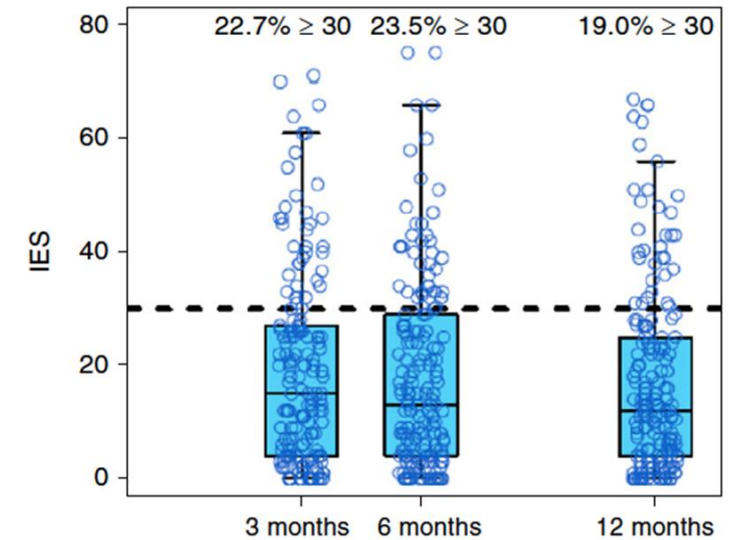
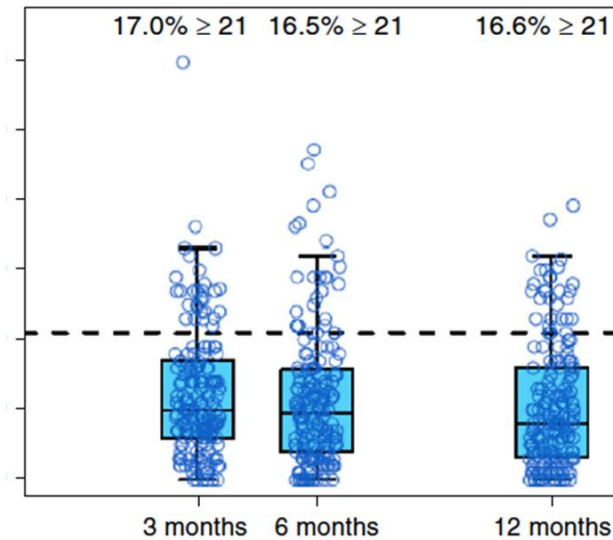
Neuromyopathie

Zudin et al. JAMA (2013)



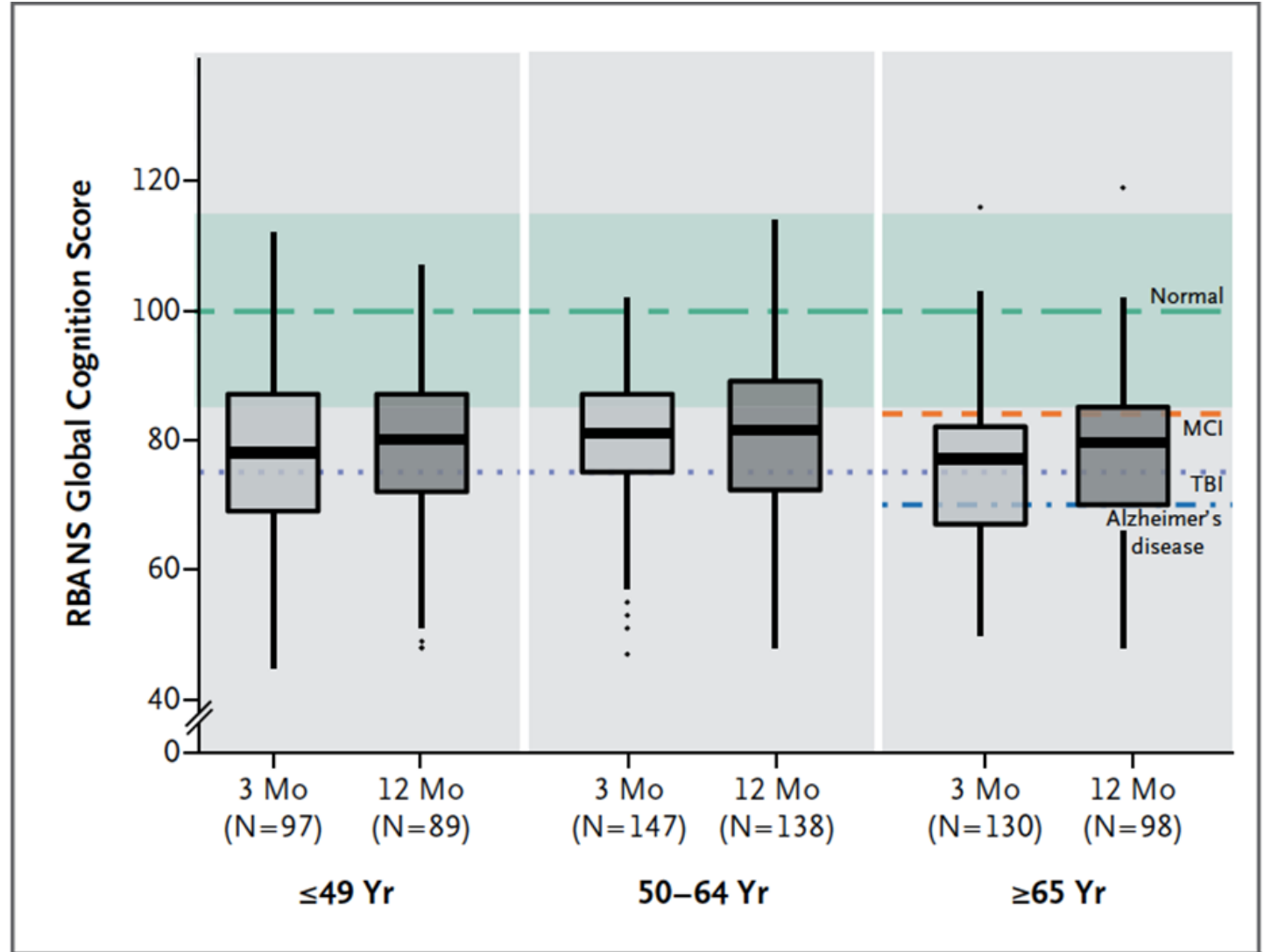
La santé mentale

- Symptômes persistent au delà de 6 mois
- Environ 1/5 patient souffrira de sx psychologiques significatifs



Atteinte cognitive

- Étude BRAIN-ICU
- Cohorte américaine
- 821 patients
- Le tier 65 et plus




Pandharipande et al. NEJM. 2013.



Retour sur les cas

- Patiente 1 : 1 semaines de soins intensifs, 3 semaines hospitalisations. Réadaptation.
- Patiente 2: 4 jours VM. 10 jours d'hospitalisation. Retour à domicile sans compromis supplémentaire

Merci!



Growing OLD is inevitable, growing UP is optional.