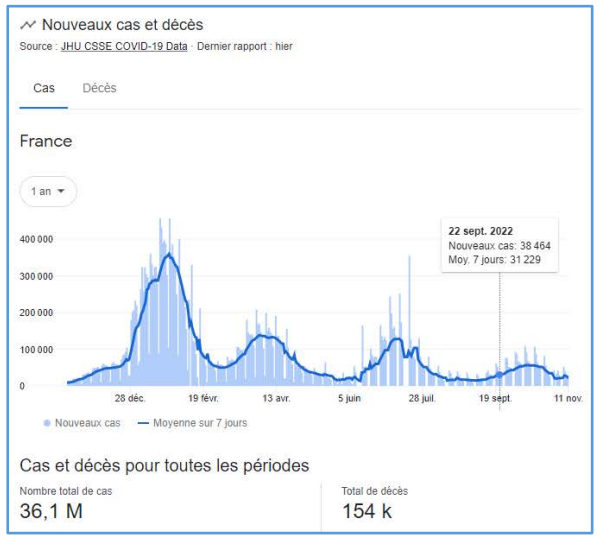
SESSION	QUE RETENIR DE 2022 ? (1) **Modérateurs :** P. BEURET (Roanne) - F. PÈNE (Paris)	
14 h 30 - 15 h 00	**Diagnostic microbiologique**	**K. Razazi** *(Créteil)*
15 h 00 - 15 h 30	**COVID-19**	**L. Bouadma** *(Paris)*
15 h 30 - 16 h 00	**SDRA**	**L. Papazian** *(Bastia)*



HÔPITAUX UNIVERSITAIRES PARIS NORD VAL DE SEINE
Beaujon | Bichat - Claude Bernard | Bretonneau | Louis-Mourier | Charles Richet

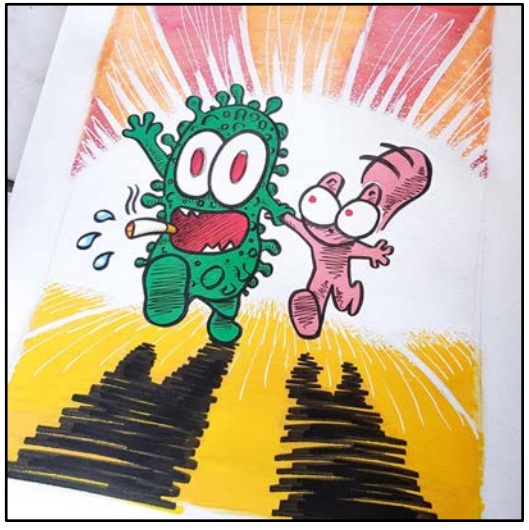
iame UMR 1137
Infection • Antimicrobials • Modelling • Evolution

Université Paris Cité

Lila Bouadma
Medical and Infectious Diseases ICU
Bichat Hospital
Inserm UMR 1137 IAME
University Paris Cité
Paris FRANCE

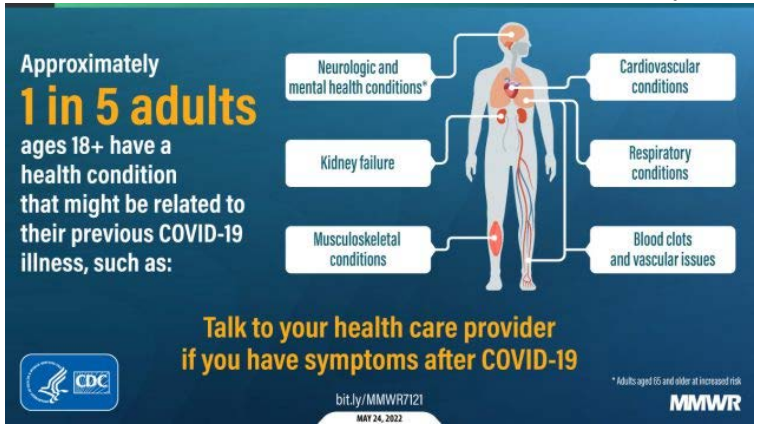
QUE RETENIR DE 2022 - COVID-19

LIVE WITH THE VIRUS



BACK TO THE BASICS

POST-ACUTE SEQUELAE OF SARS-COV-2 INFECTION (PASC)



GREAT RESIGNATION

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Articles

Estimating excess mortality due to the COVID-19 pandemic: a systematic analysis of COVID-19-related mortality, 2020–21

*COVID-19 Excess Mortality Collaborators**

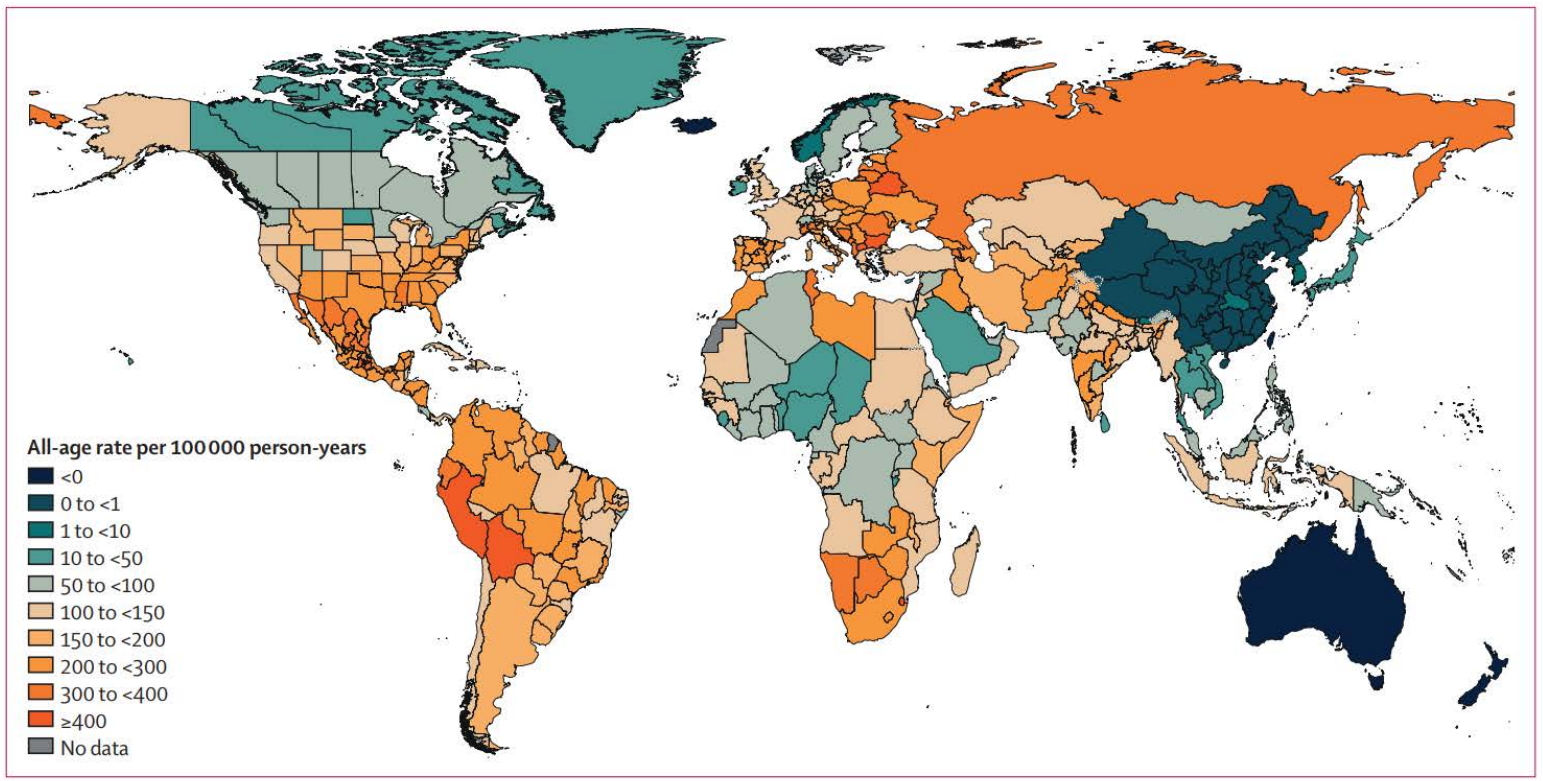

Figure 2: **Global distribution of estimated excess mortality rate due to the COVID-19 pandemic, for the cumulative period 2020–21**

ORIGINAL

Clinical and organizational factors associated with mortality during the peak of first COVID-19 wave: the global UNITE-COVID study

Massimiliano Greco[1,2], Thomas De Corte[3,4], Ari Ercole[5,6], Massimo Antonelli[7,8], Elie Azoulay[9,10], Giuseppe Citerio[11,12], Andy Conway Morris[13,14,15], Gennaro De Pascale[7,8], Frantisek Duska[16,17], Paul Elbers[18], Sharon Einav[19,20], Lui Forni[21], Laura Galarza[22], Armand R. J. Girbes[23], Giacomo Grasselli[24,25], Vitaly Gusarov[26], Alasdair Jubb[27,28,29], Jozef Kesecioglu[30], Andrea Lavinio[31], Maria Cruz Martin Delgado[32,33], Johannes Mellinghoff[34], Sheila Nainan Myatra[35], Marlies Ostermann[36], Mariangela Pellegrini[37,38], Pedro Povoa[39,40,41], Stefan J. Schaller[42,43], Jean-Louis Teboul[44], Adrian Wong[45], Jan J. De Waele[3,4*] and Maurizio Cecconi[1,2] on behalf of the ESICM UNITE-COVID investigators

2022

Multicenter (240 centers), international (46 countries), point prevalence study
Adult patients with SARS-CoV-2 infection, admitted to ICU between February 15th and May 15th, 2020

Increase in capacity from 4931 to 7630 beds
Nurse/patients ratio increased from 2.0 (SD 0.85) to 2.4 (SD 1.1) ($p<0.001$)
The number of intensivists available for clinical care increased from 4.5 (SD 4.66) to 5.4 (SD 5.38) ($p<0.001$) while the number of residents available for clinical care increased from 4.3 (SD 5.72) to 6.2 (SD 9.69) ($p<0.001$).
Non-ICU nurses and physicians were employed in 85% and 58% of the participating ICUs, respectively.

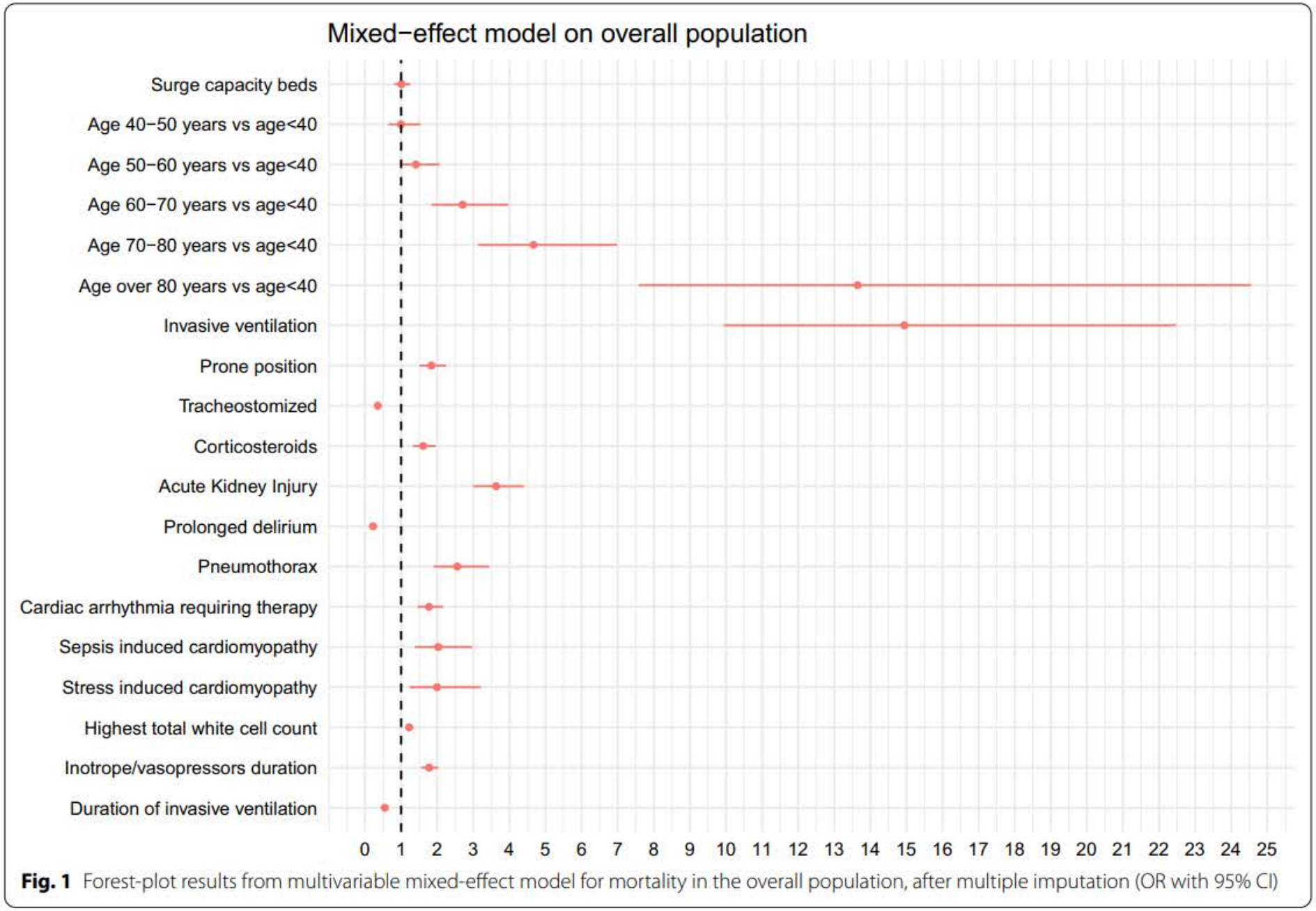

Fig. 1 Forest-plot results from multivariable mixed-effect model for mortality in the overall population, after multiple imputation (OR with 95% CI)

2022

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19 JUILLET 2022, 13H00

Avis du Conseil scientifique COVID-19

19 juillet 2022

VIVRE AVEC LES VARIANTS

- **LA PANDEMIE N'EST PAS TERMINEE**
- **MIEUX ANTICIPER**

Membres du Conseil scientifique associés à cet avis :

Jean-François Delfraissy, Président
Laetitia Atlani-Duault, Anthropologue
Daniel Benamouzig, Sociologue
Lila Bouadma, Réanimatrice
Simon Cauchemez, Modélisateur
Catherine Chirouze, Infectiologue
Angèle Consoli, Pédopsychiatre
Pierre Louis Druais, Médecine de Ville
Arnaud Fontanet, Epidémiologiste
Marie-Aleth Grard, Milieu associatif
Olivier Guérin, Gériatre
Aymeril Hoang, Spécialiste des nouvelles technologies
Thierry Lefrançois, Vétérinaire/One Health
Bruno Lina, Virologue
Denis Malvy, Infectiologue
Yazdan Yazdanpanah, Infectiologue

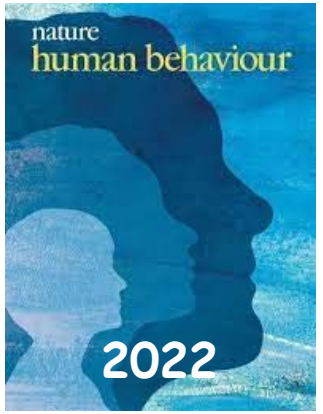
Cette approche concède que le virus ne disparaitra pas de nos vies et que l'immunité collective stérilisante est inaccessible.

Dans cette stratégie, les efforts se concentrent sur la prévention et le traitement précoce des personnes à risque de formes graves de la maladie.

Elle admet plus ou moins tacitement, si elle était adoptée par les autorités et acceptée par la société qu'un nombre important de formes graves et de décès serait socialement accepté, voire attendu, dès lors que la vie économique et sociale ainsi que les libertés individuelles seraient préservées.

nature human behaviour

Life expectancy changes since COVID-19



Received: 8 March 2022

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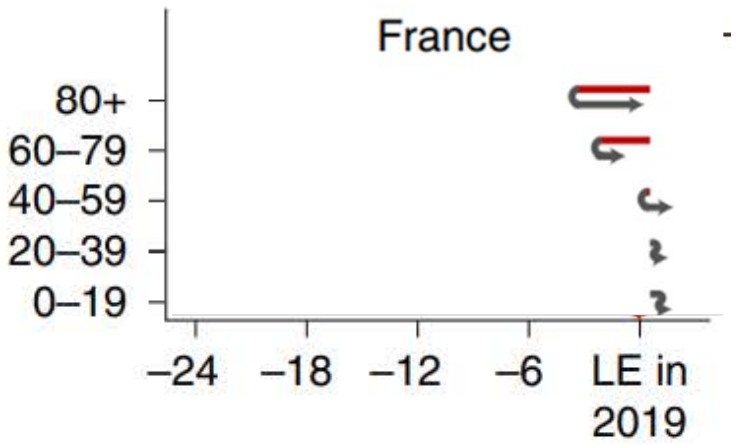
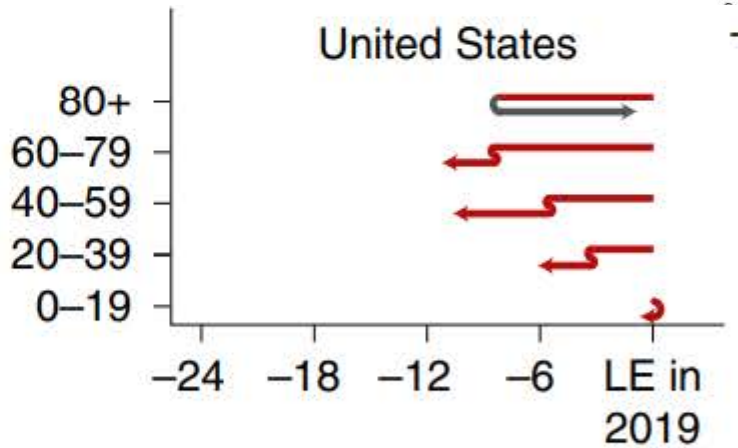
https://doi.org/10.1038/s41562-022-01450-3

Jonas Schöley [1], José Manuel Aburto [2,3,4,5], Ilya Kashnitsky [4], Maxi S. Kniffka [1], Luyin Zhang [2], Hannaliis Jaadla [6,7], Jennifer B. Dowd and Ridhi Kashyap [2,3]





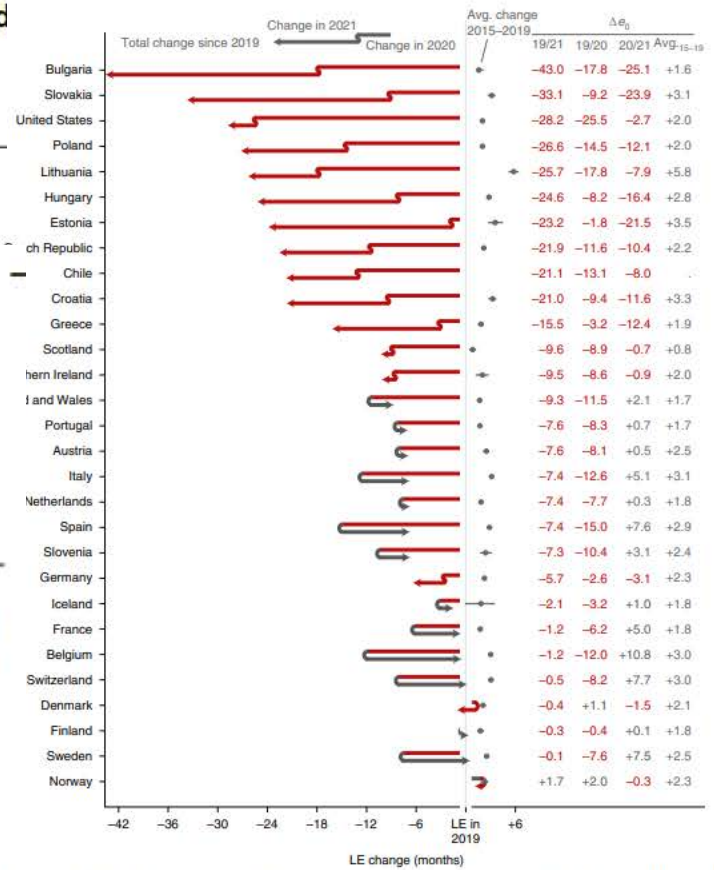
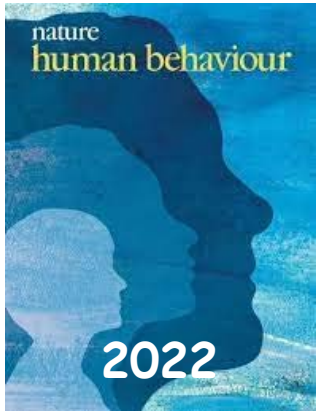


Fig. 1 | LE changes in 2019–2020 and 2020–2021 across countries. The countries are ordered by increasing cumulative LE losses since 2019. The two line segments indicate the annual changes in LE in 2020 and 2021. Red segments to the left indicate an LE drop, while grey arrows to the right indicate a rise in LE. The position of the arrowhead indicates the total change in LE from 2019 through 2021. The grey dots and lines indicate the average annual LE changes over the years 2015 through 2019 along with 95% CIs. Δe_0 marks the change in period LE over the designated period.

nature human behaviour



Life expectancy changes since COVID-19

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Jonas Schöley [1] ✉, José Manuel Aburto [2,3,4,5] ✉, Ilya Kashnitsky [4], Maxi S. Kniffka [1], Luyin Zhang [2], Hannaliis Jaadla [6,7], Jennifer B. Dowd and Ridhi Kashyap [2,3] ✉

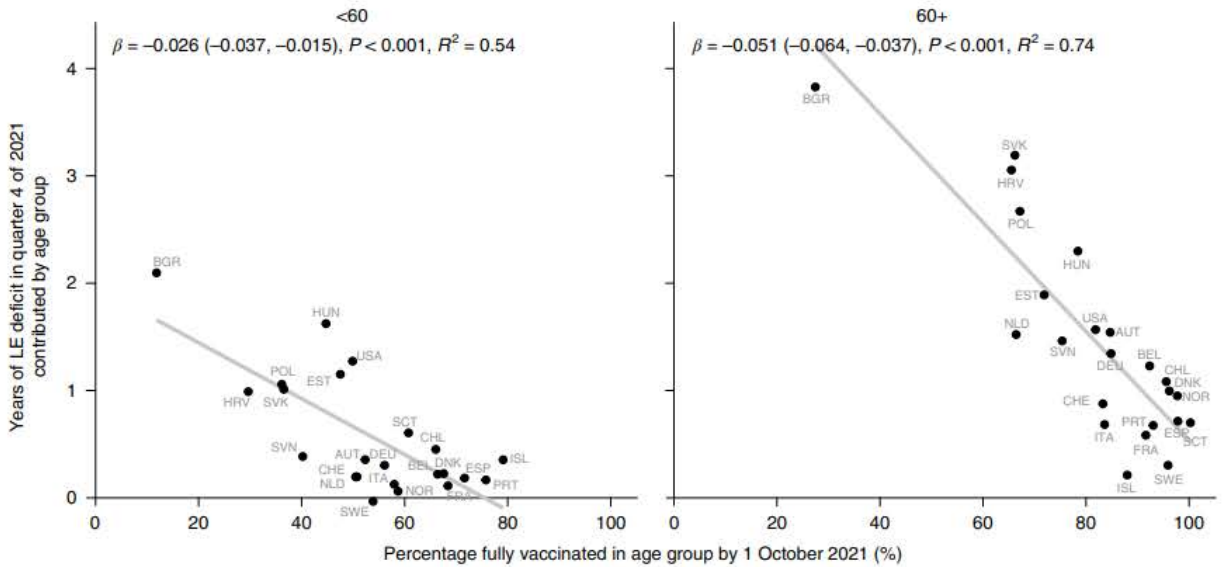
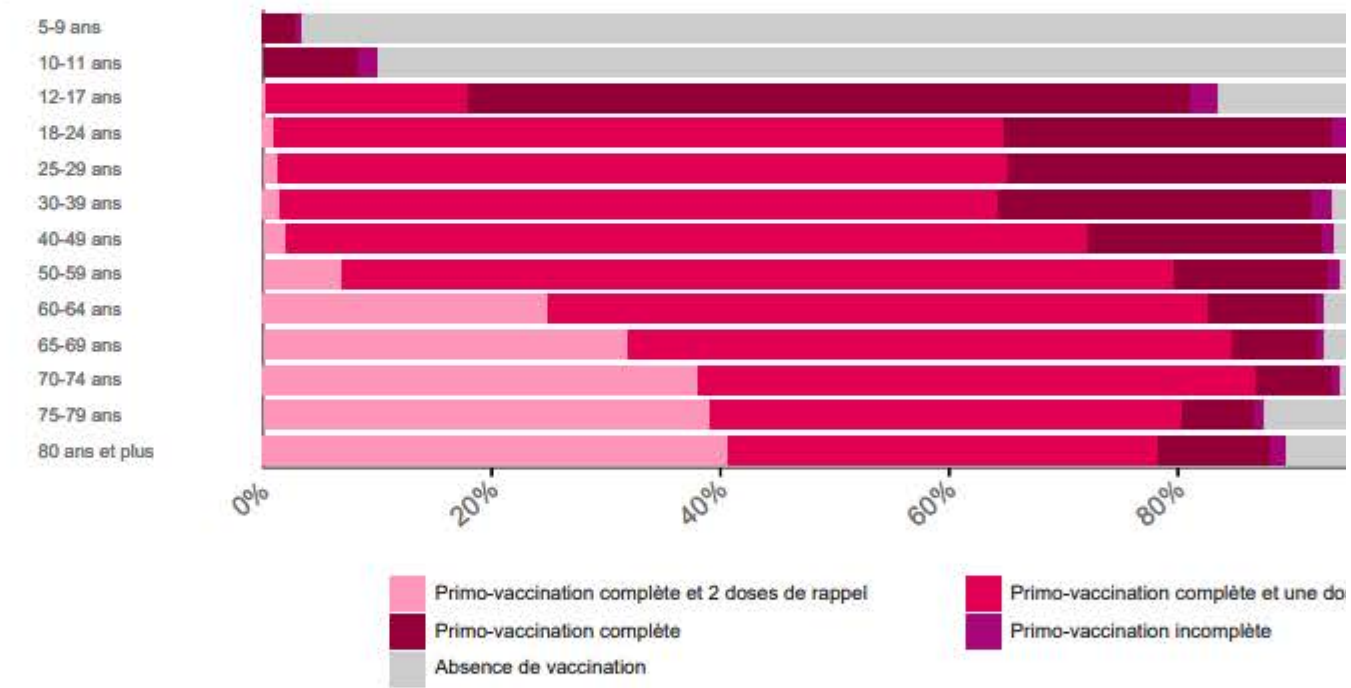


Fig. 5 | Years of LE deficit in October through December 2021 contributed by ages <60 and 60+ against percentage of population twice vaccinated by 1 October in the respective age groups. LE deficit is defined as the counterfactual LE from a Lee–Carter mortality forecast based on death rates for the fourth quarter of the years 2015 to 2019 minus observed LE. The points are labelled with ISO three-letter country codes.

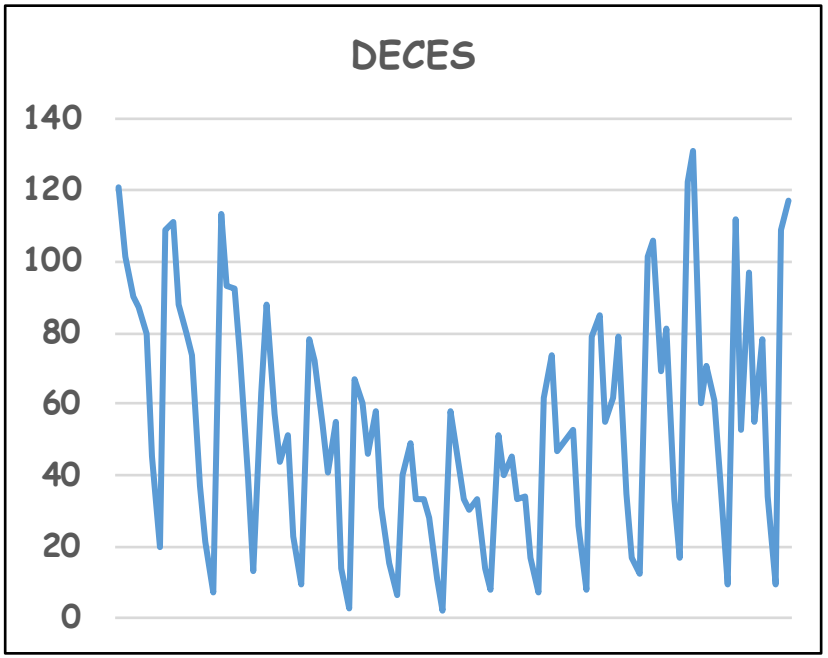
COVID-19
InfoCovidFrance

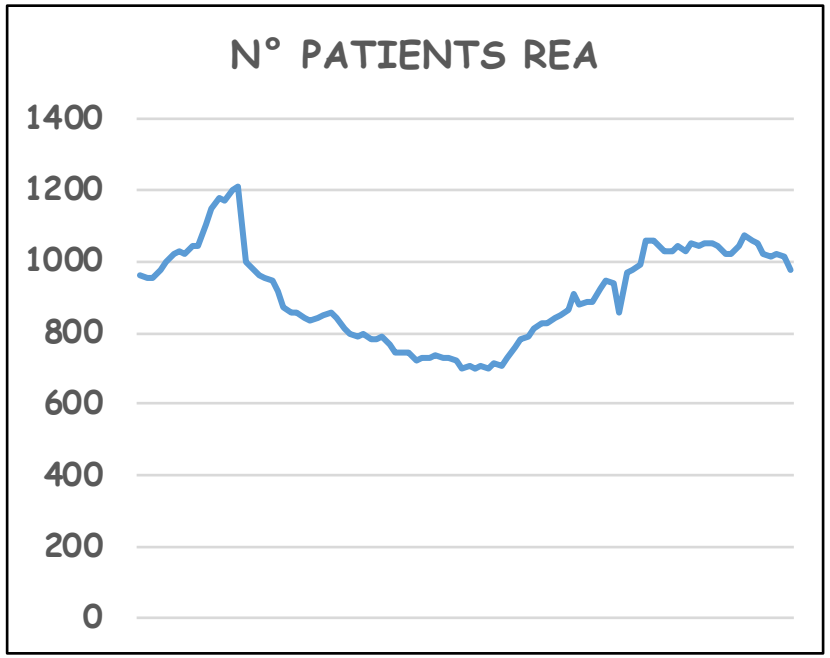
Santé publique France

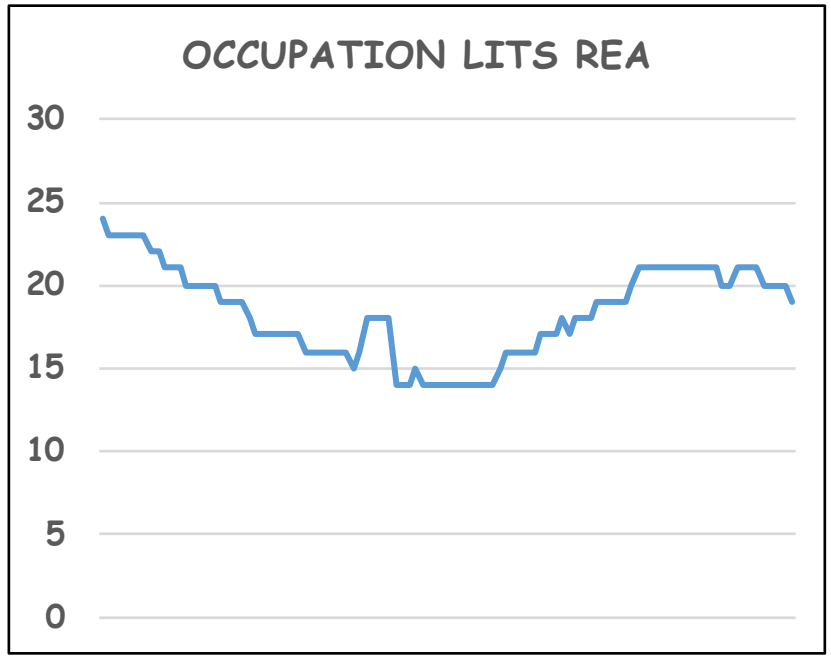
Couverture vaccinale par classe d'âge



LIVING THE VIRUS
-
CONSEQUENCES FOR INTENSIVISTS







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RESPIRATORY SUPPORT TO AVOID INTUBATION/MORTALITY in patients with COVID-19 associated AHRF

	N° of patients N° of center	Groups	Intubation rate*	*Mortality*
HENIVOT trial,	130 patients 4 Italian Hospitals	Helmet NIV for at least 48h followed by HFNO HFNO alone	30% vs 51% P = 0.03	24% Vs 25% NS
HiFLo-Covid trial	220 patients 3 Colombian Hospitals	HFNO Conventional oxygen therapy	34.3% vs 51.0% NS	The HR for death at day 28 was 0.49 (95% CI, 0.21-1.16; *P*= .11) in the high-flow oxygen therapy group compared with the conventional oxygen therapy group
Nair et al,	109 patients 1 Indian center	HFNO Face mask NIV	20% Vs 33% NS	289% Vs 29% NS
RECOVERY-RS trial	1273 patients 75 centers	CPAP (N = 780) HFNO N = 418) Conventional oxygen therapy (N = 475)	The composite primary outcome of tracheal intubation or mortality within 30 days, occurring in 36% of the patients in the CPAP group vs44% in the conventional O_2 therapy group, a difference driven by a reduction in intubation.	
COVID-high study	364 patients 27 centers	HFNO Conventional oxygen therapy	There was no significant difference in the rate of escalation of respiratory support, intensive care unit (ICU) admission, rate of recovery, or length of hospital stay between the 2 groups.8	
COVIDICUS study	333 patients 19 centers	Conventional oxygen therapy (N = 133) CPAP (N = 109) HFNO (N = 115)	There was no significant difference in the cumulative incidence of invasive mechanical ventilation assessed at day 28, nor in survival nor length of ICU or hospital stay	
SOHO-COVID trial	711 patients 34 centers	Conventional oxygen therapy (N = 354) HFNO (N = 357)	53% Vs 45% absolute difference, −7.7% [95% CI, −14.9% to −0.4%]; P = .04).	10% Vs 11% NS

The NEW ENGLAND JOURNAL of MEDICINE

REVIEW ARTICLE

C. Corey Hardin, M.D., Ph.D., *Editor*

2022

Noninvasive Respiratory Support for Adults with Acute Respiratory Failure

Laveena Munshi, M.D., Jordi Mancebo, M.D.,* and Laurent J. Brochard, M.D.

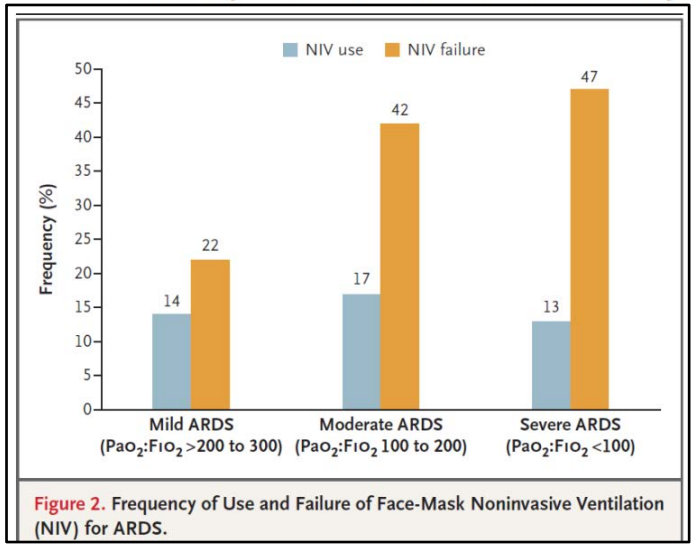


Figure 2. Frequency of Use and Failure of Face-Mask Noninvasive Ventilation (NIV) for ARDS.

4. Bellani G, Laffey JG, Pham T, et al. Noninvasive ventilation of patients with acute respiratory distress syndrome: insights from the LUNG SAFE study. Am J Respir Crit Care Med 2017;195:67-77.

Figure 1. Summary of Evidence for Noninvasive Ventilation across Acute Care Conditions.

Table 2. Monitoring for Failure of Noninvasive Respiratory Support in Patients with Acute Hypoxemic Respiratory Failure.*

Variable	Device Evaluated	Description
Pao_2:FIO_2[4,27,28]	Face-mask NIV	Pao_2:FIO_2 <200 at 1 hr after NIV associated with increased risk of intubation; Pao_2:FIO_2 <150 associated with increased risk of death (as compared with up-front strategy of invasive mechanical ventilation)
Tidal volume[4,27,28]	Face-mask NIV	Tidal volume >9 to 9.5 ml per kilogram of predicted body weight 1 hour after NIV associated with increased risk of intubation and death
Respiratory rate[53,54,75]	Face-mask NIV	Low or decreasing respiratory rate associated with greater likelihood of NIV success; respiratory rate does not always correlate with inspiratory effort
Simplified Acute Physiology Score II[27]	Face-mask NIV	Higher scores indicate higher severity of illness, which is associated with higher likelihood of failure and receipt of invasive mechanical ventilation; no definitive threshold defined in the literature
Composite scores		
ROX index[53]	HFNC	Tool for prediction of HFNC therapy failure and receipt of invasive mechanical ventilation, validated in patients with acute hypoxemia due to pneumonia who were receiving HFNC therapy; index evaluated at 2 hr, 6 hr, and 12 hr after initiation
HACOR score[54]	Face-mask NIV	Evaluation of heart rate, acidosis, consciousness, oxygenation, and respiratory rate; threshold of >5 at 1 hr after initiation of NIV associated with subsequent receipt of invasive mechanical ventilation
Measures under evaluation		
$Paco_2$[72]	Helmet NIV	Possible surrogate for inspiratory effort; $Paco_2$ <35 mm Hg associated with a greater likelihood of success with helmet NIV than with HFNC in reducing the risk of invasive mechanical ventilation (effect not seen when value is ≥35 mm Hg)
Changes in esophageal pressure at onset of inspiration[76]	Helmet NIV	Possible surrogate for inspiratory effort in patients with Pao_2:FIO_2 <200; lack of reduction in the change in esophageal pressure to <10 cm of water with application of helmet NIV in patients with a baseline value of >10 cm of water associated with a higher risk of intubation
Point-of-care lung ultrasound score[77]	Face-mask NIV, HFNC	Lung aeration and morphologic abnormalities on ultrasonography quantified with a simplified protocol in six lung ultrasound areas and assigned score of 0 to 3 for each lung area; the total lung ultrasound score was significantly higher in patients with Covid-19 who had HFNC or NIV failure leading to invasive mechanical ventilation

* The predominant cause of acute hypoxemic respiratory failure evaluated across these studies was pneumonia. Face masks may have been an oronasal mask or a full mask. $Paco_2$ denotes partial pressure of arterial carbon dioxide.

Munshi, NEJM, 2022

Awake prone positioning for COVID-19 acute hypoxaemic respiratory failure: a randomised, controlled, multinational, open-label meta-trial

Stephan Ehrmann, Jie Li*, Miguel Ibarra-Estrada*, Yonatan Perez*, Ivan Pavlov*, Bairbre McNicholas*, Oriol Roca*, Sara Mirza, David Vines, Roxana Garcia-Salcido, Guadalupe Aguirre-Avalos, Matthew W Trump, Mai-Anh Nay, Jean Dellamonica, Saad Nseir, Idrees Mogri, David Cosgrave, Dev Jayaraman, Joan R Masclans, John G Laffey, Elsa Tavernier, for the Awake Prone Positioning Meta-Trial Group†*

2021

THE LANCET

Awake prone positioning for COVID-19 acute hypoxaem respiratory failure: a randomised, controlled, multinatic open-label meta-trial

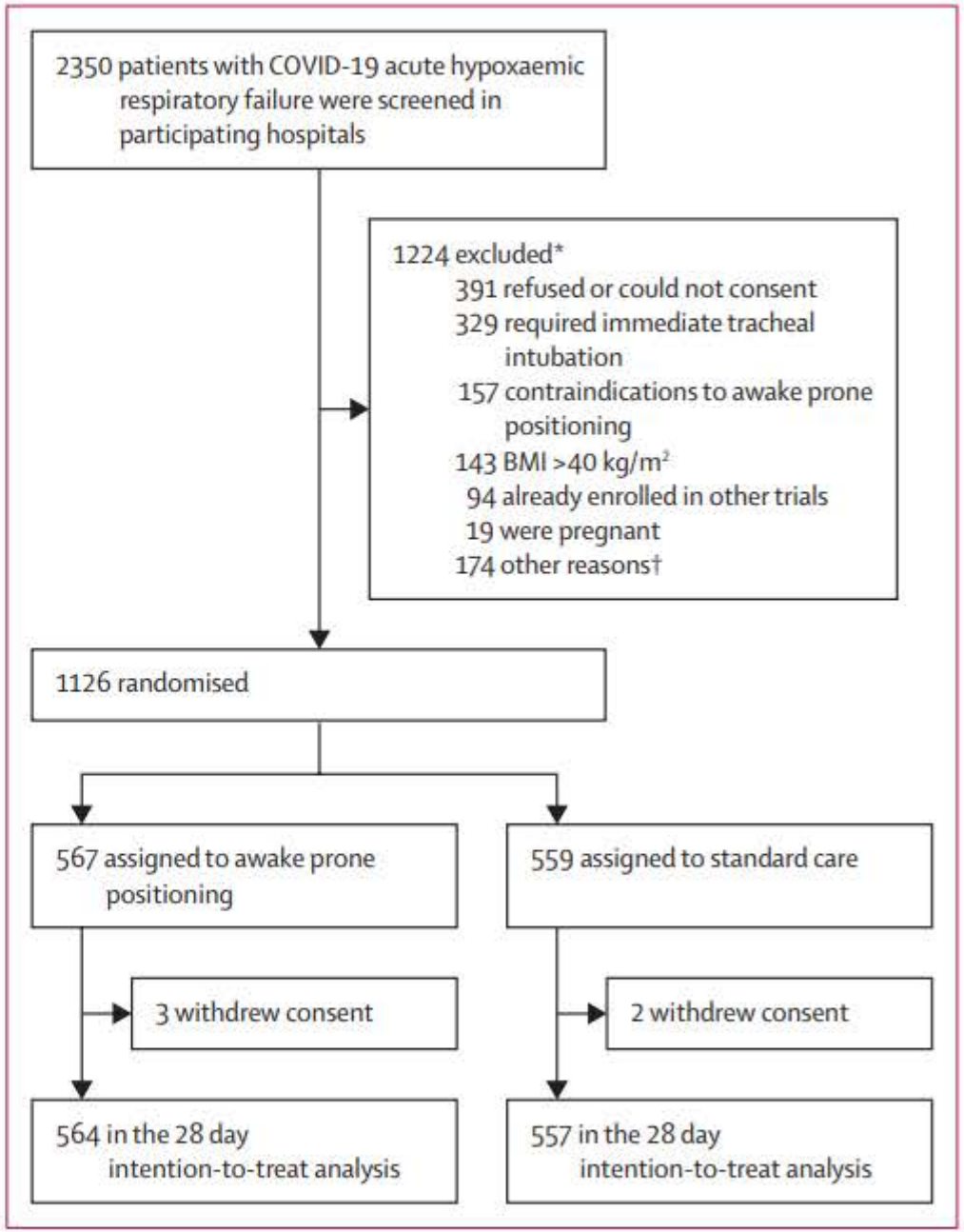
Stephan Ehrmann, Jie Li*, Miguel Ibarra-Estrada*, Yonatan Perez*, Ivan Pavlov*, Bairbre McNicholas*, Oriol Roca*, Sara Mirza, Davi Roxana Garcia-Salcido, Guadalupe Aguirre-Avalos, Matthew W Trump, Mai-Anh Nay, Jean Dellamonica, Saad Nseir, Idrees Mogri, Da Dev Jayaraman, Joan R Masclans, John G Laffey, Elsa Tavernier, for the Awake Prone Positioning Meta-Trial Group†*

In this prospective, a priori set up and defined, collaborative meta-trial of six randomised controlled open-label superiority trials
Adults who required respiratory support with high-flow nasal cannula for AHRF due to COVID-19 were randomly assigned to awake prone positioning or standard care.

Hospitals from six countries were involved: Canada, France, Ireland, Mexico, USA, Spain.

Patients or their care providers were not masked to allocated treatment.

The primary composite outcome was treatment failure, defined as the proportion of patients intubated or dying within 28 days of enrolment.



Awake prone positioning for COVID-19 acute hypoxaemic respiratory failure: a randomised, controlled, multinational, open-label meta-trial

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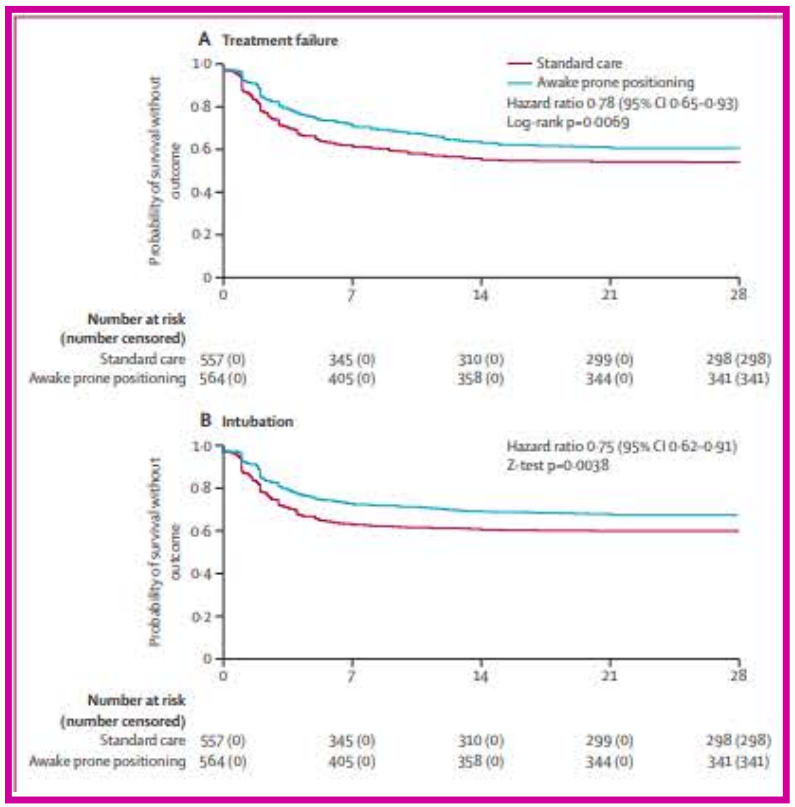
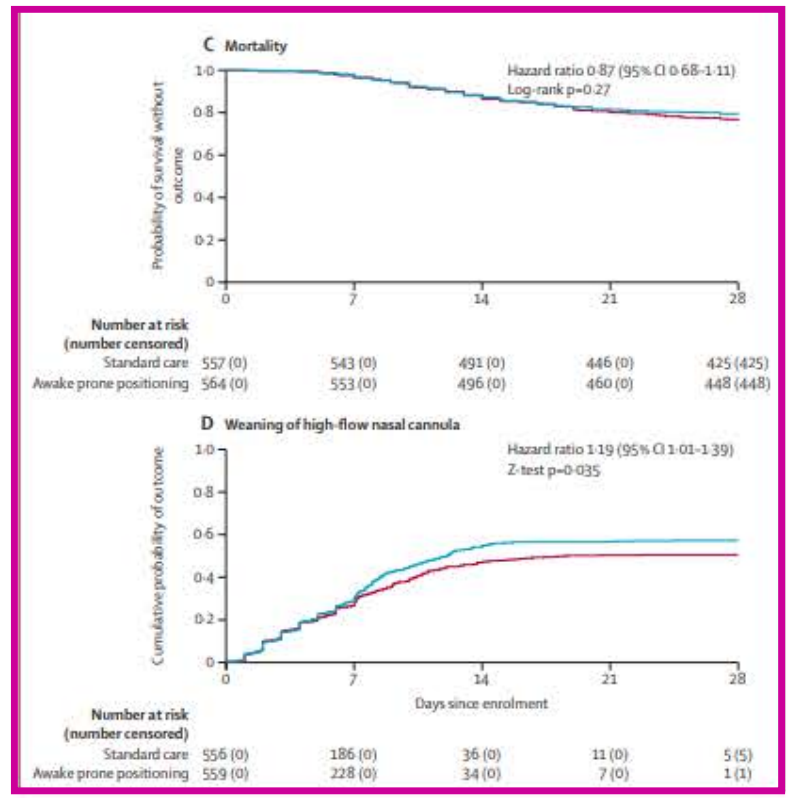
2021





Awake prone positioning for COVID-19 acute hypoxaemic respiratory failure: a randomised, controlled, multinational, open-label meta-tr

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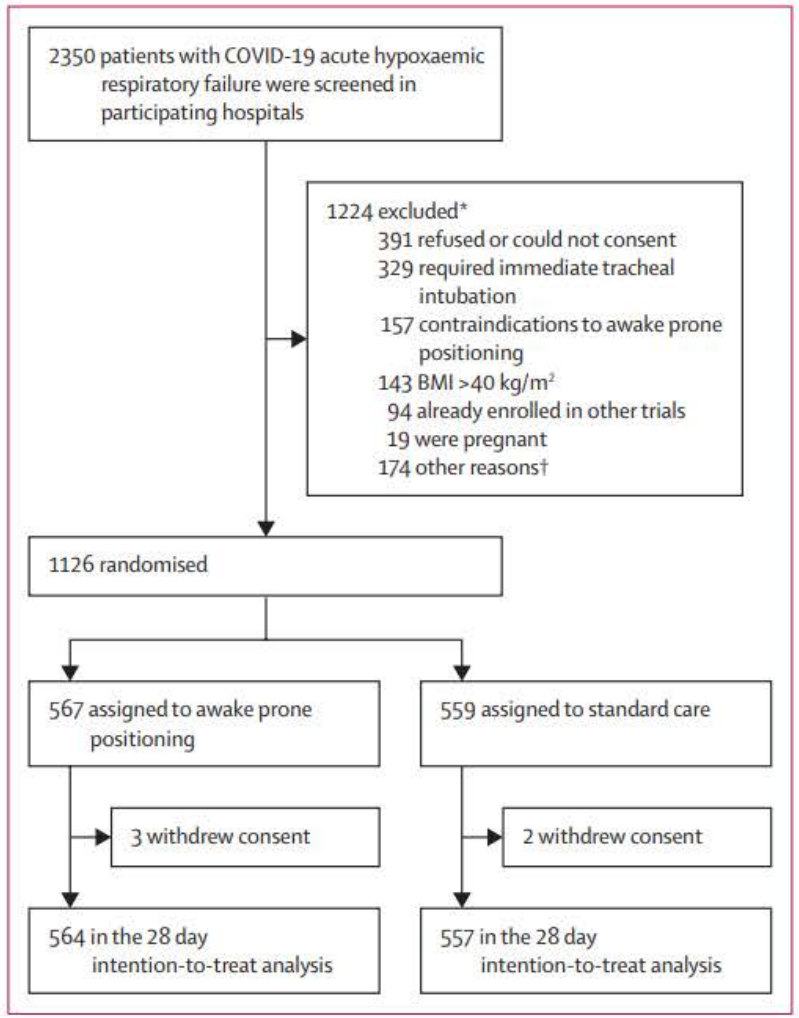
Roxana Garcia-Salcido, Guadalupe Aguirre-A
Dev Jayaraman, Joan R Masclans, John G Laff



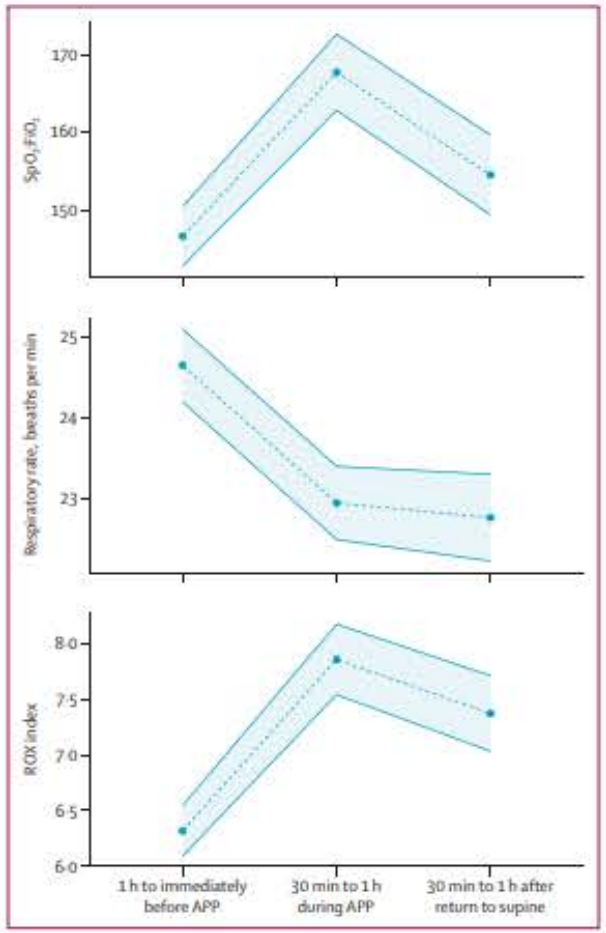
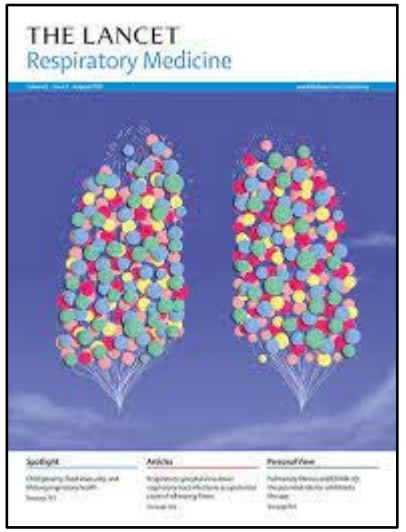


Figure 3: Physiological effects of awake prone positioning



2021

2022

RECOMMENDATIONS AND GUIDELINES

ISTH guidelines for antithrombotic treatment in COVID-19

Sam Schulman[1,2] | Michelle Sholzberg[3] | Alex C. Spyropoulos[4,5] | Ryan Zarychanski[6] | Helaine E. Resnick[7] | Charlotte A. Bradbury[8] | Lisa Broxmeyer | Jean Marie Connors[9] | Anna Falanga[10,11] | Toshiaki Iba[12] | Scott Kaatz[13] | Jerrold H. Levy[14] | Saskia Middeldorp[15] | Tracy Minichiello[16] | Eduardo Ramacciotti[17,18] | Charles Marc Samama[19] | Jecko Thachil[20] | on behalf of the International Society on Thrombosis and Haemostasis

45. Bikdeli B, Talasaz AH, Rashidi F, et al. Intermediate-dose versus standard-dose prophylactic anticoagulation in patients with COVID-19 admitted to the iIntensive care unit: 90-day results from the INSPIRATION randomized trial. *Thromb Haemost*. 2021;122:131-141.
46. Perepu US, Chambers I, Wahab A, et al. Standard prophylactic versus intermediate dose enoxaparin in adults with severe COVID-19: a multi-center, open-label, randomized controlled trial. *J Thromb Haemost*. 2021;19:2225-2234.
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TABLE 4 Recommendations for antithrombotic therapy for critically ill, hospitalized patients

COR	LOE	
3: No Benefit	B-R	9. In critically ill patients hospitalized for COVID-19, intermediate dose LMWH/UFH is not recommended over prophylactic dose LMWH/UFH to reduce risk of adverse events, including mortality and thromboembolism.[45–47]
3: No Benefit	B-R	10. In critically ill patients hospitalized for COVID-19, therapeutic dose LMWH/UFH is not recommended over usual-care or prophylactic dose LMWH/UFHs.[28,48,49*]
2b	B-R	11. In select critically ill patients hospitalized for COVID-19, add on treatment with an antiplatelet agent to prophylactic dose LMWH/UFH is not well established but might be considered to reduce mortality.[36,50]

	REMAP-CAP	RECOVERY
	50. Bradbury CA, Lawler PR, Stanworth SJ, et al. Effect of antiplatelet therapy on survival and organ support-free days in critically ill patients with COVID-19: a randomized clinical trial. *Jama*. 2022;327:1247-1259.	36. RECOVERY Investigators. Aspirin in patients admitted to hospital with COVID-19 (RECOVERY): a randomised, controlled, open-label, platform trial. *Lancet*. 2022;399:143-151.
Design	A randomized controlled, open-label adaptative platform trial	A randomized controlled, open-label adaptative platform trial
Date	Between October 30, 2020, and June 23, 2021	Between Nov 1, 2020, and March 21, 2021
Setting	105 sites 8 countries	181 hospitals UK, Indonesia (2), Nepal (2)
Intervention	- Aspirin: 75-100 mg daily (N = 565) - A P2Y12 inhibitor(mainly clopidogrel 75 mg) (N = 455) - No antiplatelet therapy (N = 529) A maximum of 14d and in addition to anticoagulation thromboprophylaxis	- Aspirine 150 mg (N = 7351) - Usual care (N = 7541) In addition to anticoagulation thromboprophylaxis
Primary end-point and analysis	Organ support free days (days alive and free of intensive care unit-based respiratory or cardiovascular organ support within 21 days, ranging from -1 for any death in hospital (censored at 90 days) to 22 for survivors with no organ support.	28-day mortality
Results	The median adjusted odds ratio for the effect of antiplatelet therapy compared with control was 1.02 (95% CrI, 0.86-1.23), yielding a posterior probability of futility of (95.7%).	In patients hospitalized with COVID-19, aspirin was not associated with reductions in 28-day mortalit.

JAMA | Original Investigation | CARING FOR THE CRITICALLY ILL PATIENT

Effect of Antiplatelet Therapy on Survival and Organ Support–Free Days in Critically Ill Patients With COVID-19

A Randomized Clinical Trial

REMAP-CAP Writing Committee for the REMAP-CAP Investigators

Figure 2. Primary Outcome: Organ Support–Free Days Up to Day 21 in Critically Ill Patients

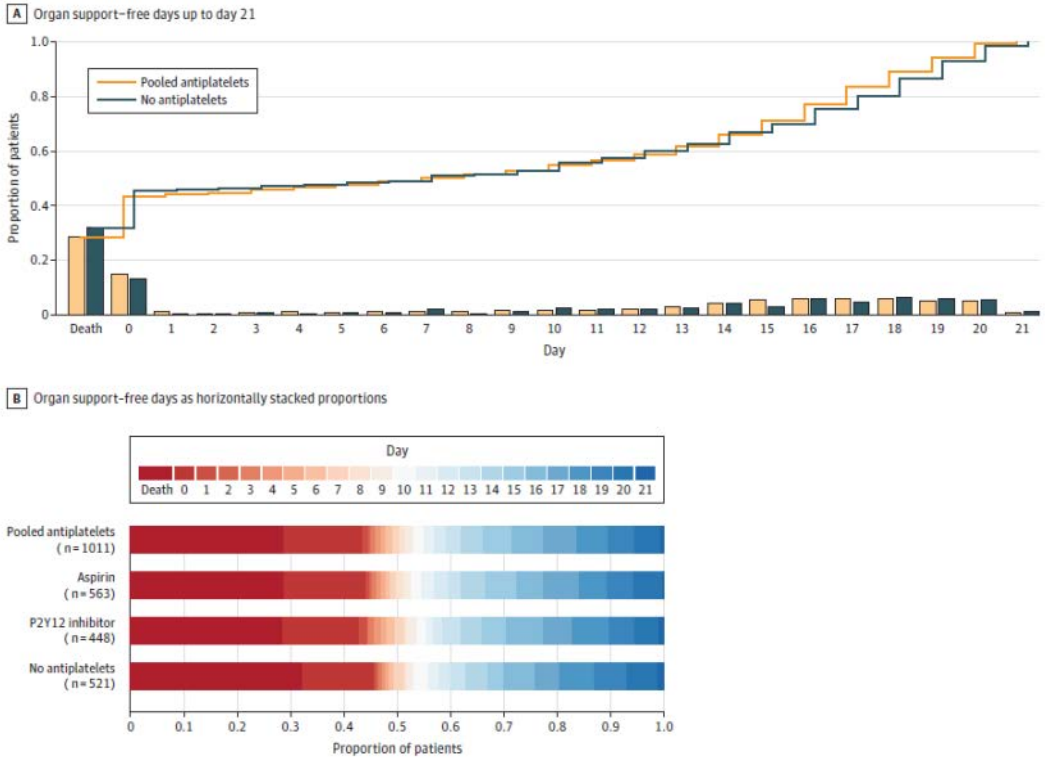
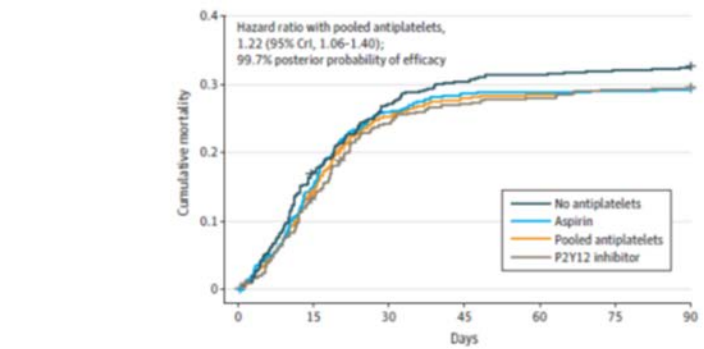


Figure 3. Survival Through 90 Days in Critically Ill Patients



No. at risk							
No antiplatelets	521	431	379	362	357	353	351
Aspirin	563	477	416	401	400	399	398
Pooled antiplatelets	1011	863	753	725	720	714	712
P2Y12 inhibitor	448	386	337	324	320	315	314

Kaplan-Meier curve of 90-day all-cause mortality in critically ill patients. Patients who survived to 90 days were censored at day 90 with no event. The pooled antiplatelet group is the composite of patients in the aspirin and P2Y12 inhibitor groups. A hazard ratio greater than 1 represents improved survival. The hazard ratio for aspirin is 1.19 (95% credible interval [CrI], 1.00-1.42; 97.5% posterior probability of efficacy) and the hazard ratio for P2Y12 inhibitors is 1.23 (95% CrI, 1.02-1.49; 98.7% posterior probability of efficacy).

2022

Aspirin in patients admitted to hospital with COVID-19 (RECOVERY): a randomised, controlled, open-label, platform trial

RECOVERY Collaborative Group*

Summary

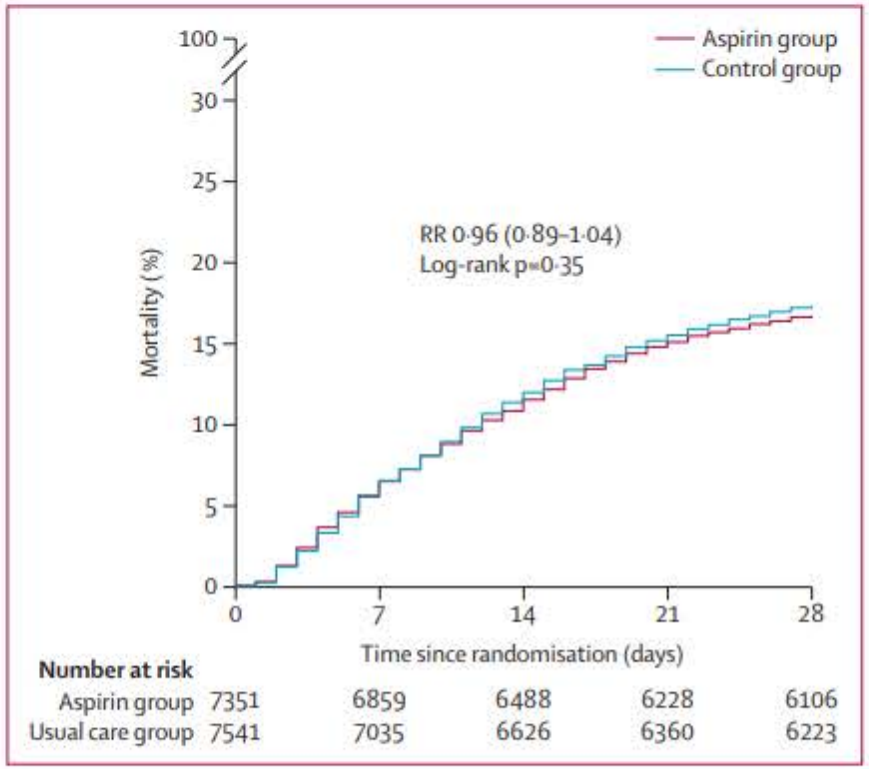


Figure 2: **Effect of allocation to aspirin on 28 day mortality**
RR=rate ratio.

	Treatment allocation		RR (95% CI)	p value
	Aspirin (n=7351)	Usual care (n=7541)		
Primary outcome				
28 day mortality	1222 (17%)	1299 (17%)	0·96 (0·89–1·04)	0·35
Secondary outcomes				
Median time to being discharged alive (IQR), days	8 (5 to >28)	9 (5 to >28)	..	..
Discharged from hospital within 28 days	5496 (75%)	5548 (74%)	1·06 (1·02–1·10)	0·0062
Receipt of invasive mechanical ventilation or death*	1473/6993 (21%)	1569/7169 (22%)	0·96 (0·90–1·03)	0·23
Invasive mechanical ventilation	772/6993 (11%)	829/7169 (12%)	0·95 (0·87–1·05)	0·32
Death	1076/6993 (15%)	1141/7169 (16%)	0·97 (0·90–1·04)	0·39
Subsidiary clinical outcomes				
Use of ventilation	1131/4936 (23%)	1198/5036 (24%)	0·96 (0·90–1·03)	0·30
Non-invasive ventilation	1101/4936 (22%)	1162/5036 (23%)	0·97 (0·90–1·04)	0·36
Invasive mechanical ventilation	296/4936 (6%)	325/5036 (6%)	0·93 (0·80–1·08)	0·35
Successful cessation of invasive mechanical ventilation	135/358 (38%)	135/372 (36%)	1·08 (0·85–1·37)	0·54
Renal replacement therapy	273/7291 (4%)	282/7480 (4%)	0·99 (0·84–1·17)	0·93

RR=rate ratio for the outcomes of 28-day mortality and hospital discharge, and rate ratio for the outcome of receipt of invasive mechanical ventilation or death (and its subcomponents). *Analyses exclude those on invasive mechanical ventilation at randomisation.

Table 2: **Effect of allocation to aspirin on key study outcomes**

	REMAP-CAP N = 1577	RECOVERY
Design	A randomized controlled, open-label adaptative platform trial	A randomized controlled, open-label adaptative platform trial
Date	Between October 30, 2020, and June 23, 2021	Between Nov 1, 2020, and March 21, 2021
Setting	105 sites 8 countries	181 hospitals UK, Indonesia (2), Nepal (2)
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LASTING LEGACY IN INTENSIVE CARE MEDICINE

Thromboprophylaxis in critical care

Julie Helms[1,2*], Saskia Middeldorp[3,4] and Alex C. Spyropoulos[5,6,7]

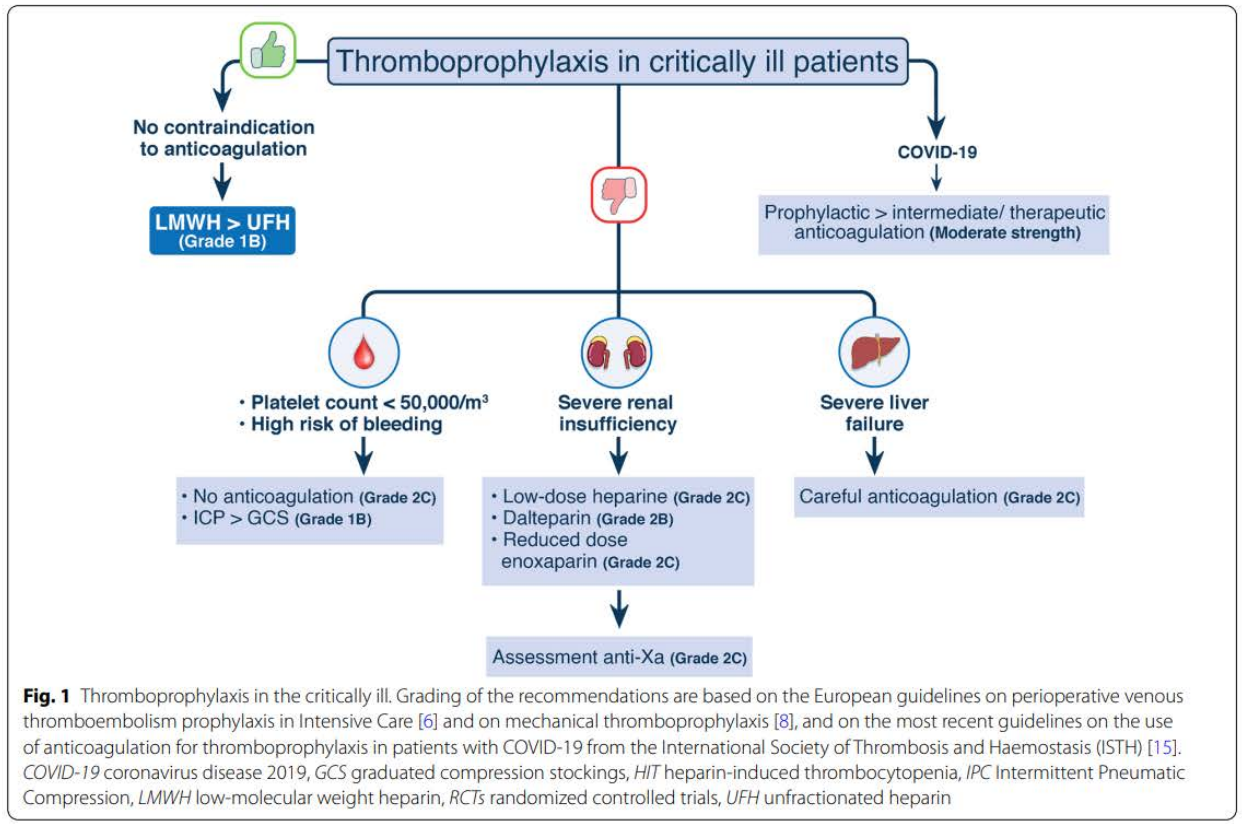
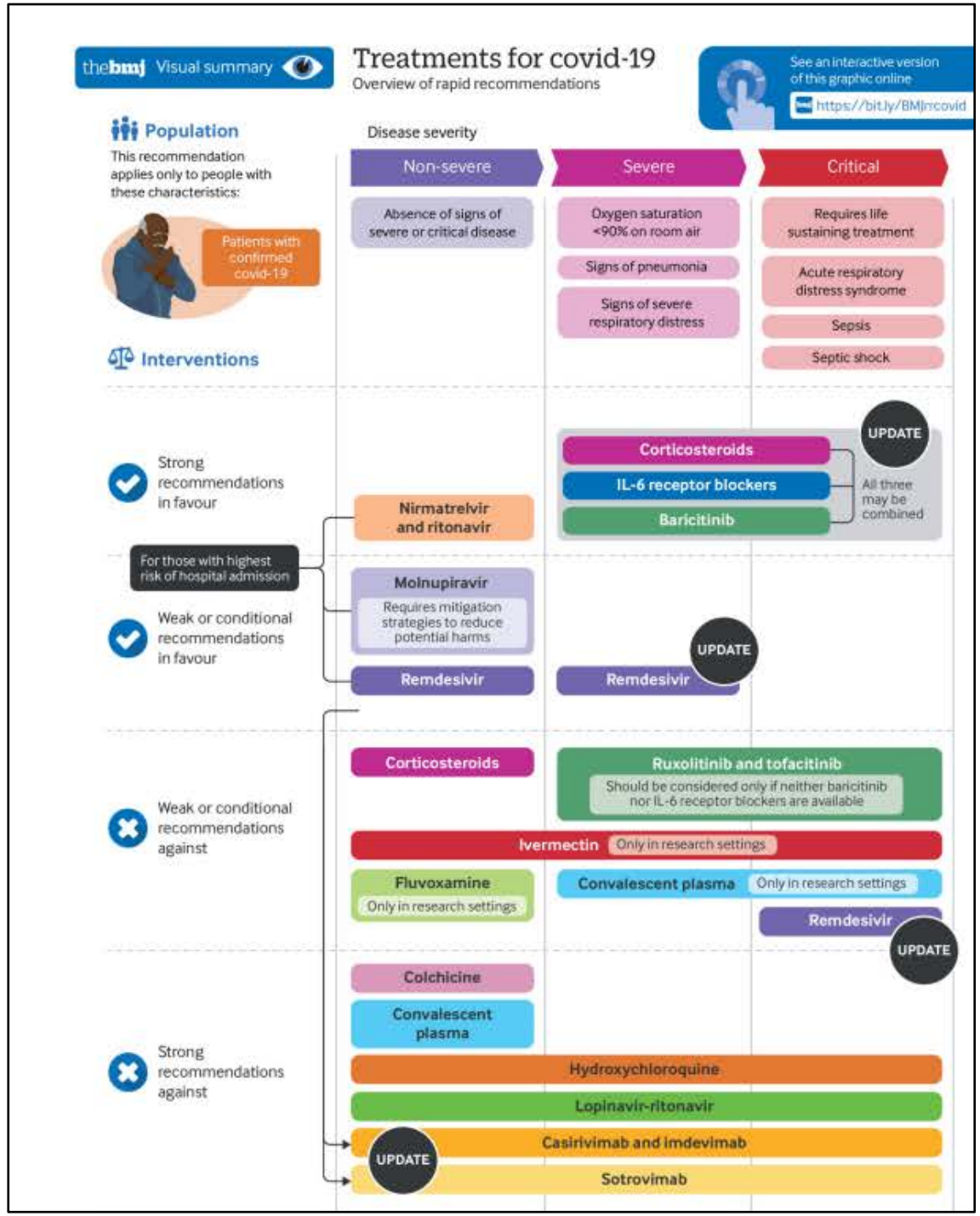


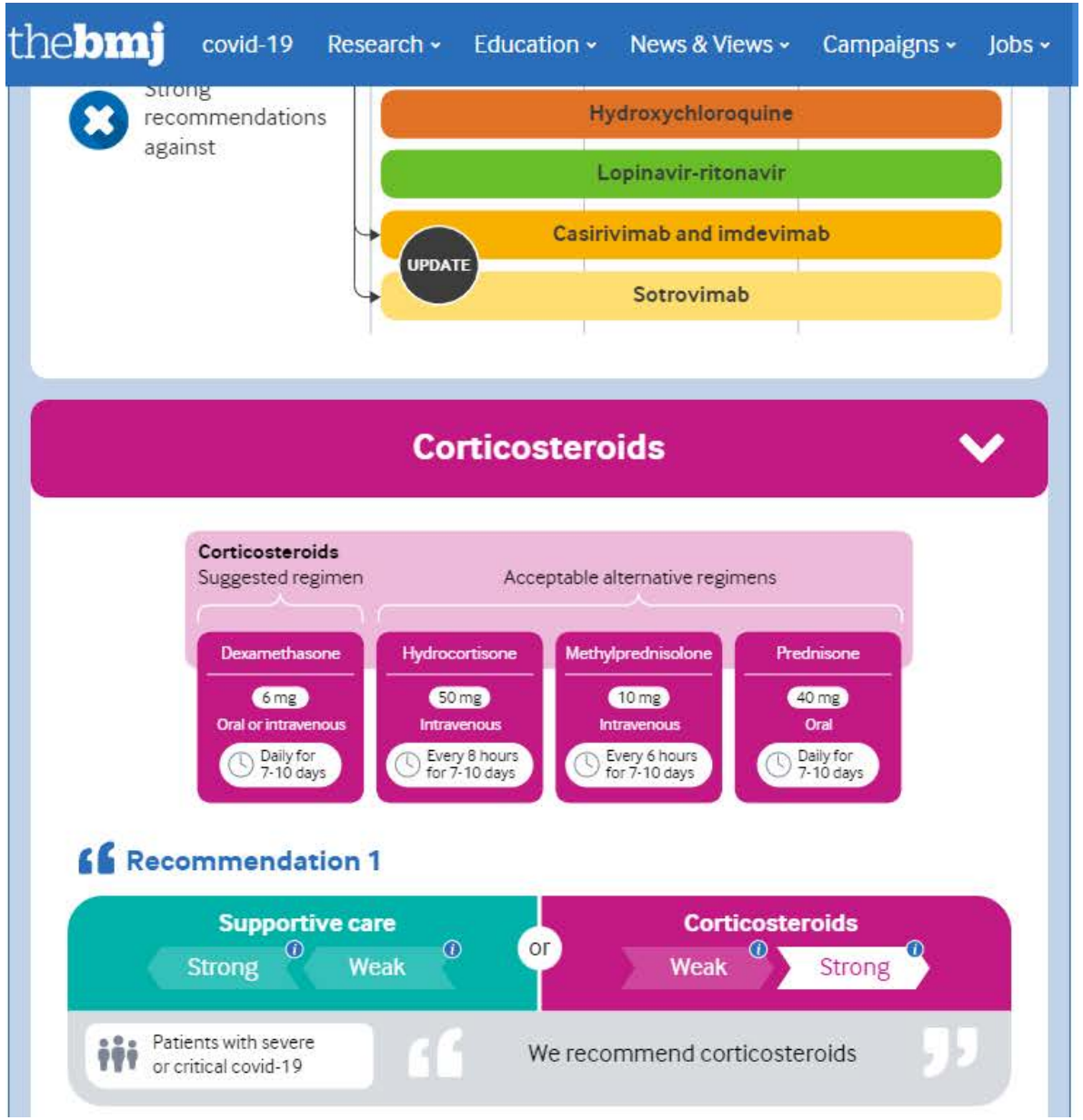
Fig. 1 Thromboprophylaxis in the critically ill. Grading of the recommendations are based on the European guidelines on perioperative venous thromboembolism prophylaxis in Intensive Care [6] and on mechanical thromboprophylaxis [8], and on the most recent guidelines on the use of anticoagulation for thromboprophylaxis in patients with COVID-19 from the International Society of Thrombosis and Haemostasis (ISTH) [15]. *COVID-19* coronavirus disease 2019, *GCS* graduated compression stockings, *HIT* heparin-induced thrombocytopenia, *IPC* Intermittent Pneumatic Compression, *LMWH* low-molecular weight heparin, *RCTs* randomized controlled trials, *UFH* unfractionated heparin

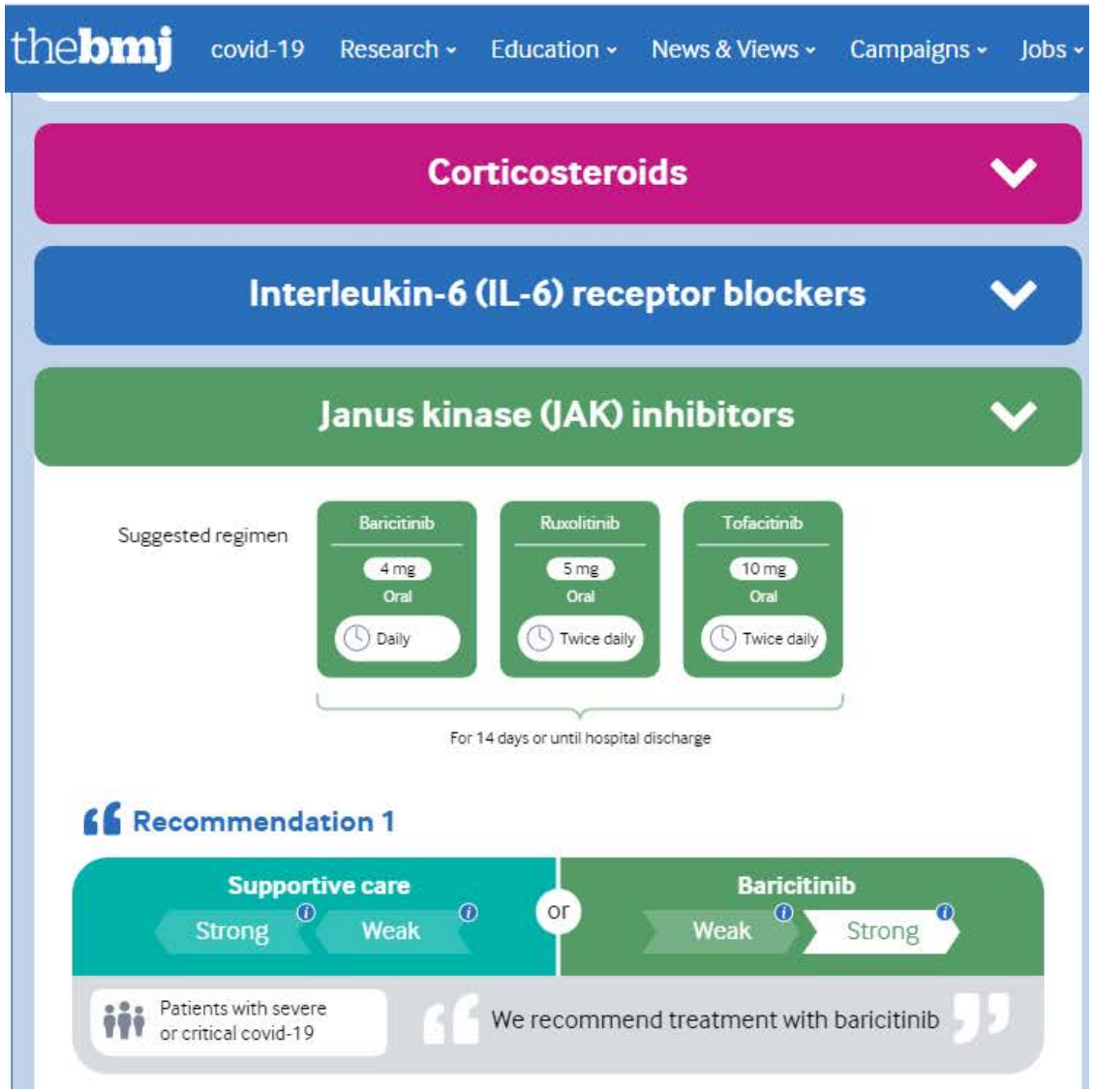
RAPID RECOMMENDATIONS

A living WHO guideline on drugs for covid-19

Arnav Agarwal,[1,2,3,*] Bram Rochwerg,[1,2,*] François Lamontagne,[4,*] Reed AC Siemieniuk,[1,2,*] Thomas Agoritsas,[1,3,5,*] Lisa Askie,[6,*] Lyubov Lytvyn,[1,*] Yee-Sin Leo,[7] Helen Macdonald,[8,*] Linan Zeng,[1,*] Wagdy Amin,[9] André Ricardo Araujo da Silva,[10] Diptesh Aryal,[11] Fabian A Jaimes Barragan,[12] Frederique J Bausch,[13] Erlina Burhan,[14] Carolyn S Calfee,[15] Maurizio Cecconi,[16] Binila Chacko,[17] Duncan Chanda,[18] Vu Quoc Dat,[19] An De Sutter,[20] Bin Du,[21] Stephen Freedman,[22] Heike Geduld,[23] Patrick Gee,[24] Matthias Gotte,[25] Nerina Harley,[26] Madiha Hashmi,[27] Beverley Hunt,[28] Fyezah Jehan,[29] Sushil K Kabra,[30] Seema Kanda,[31] Yae-Jean Kim,[32] Niranjan Kissoon,[33] Sanjeev Krishna,[34] Krutika Kuppalli,[6] Arthur Kwizera,[35] Marta Lado Castro-Rial,[6,*] Thiago Lisboa,[36] Rakesh Lodha,[37] Imelda Mahaka,[38] Hela Manai,[39] Marc Mendelson,[40] Giovanni Battista Migliori,[41] Greta Mino,[42] Emmanuel Nsutebu,[43] Jacobus Preller,[6,*] Natalia Pshenichnaya,[44] Nida Qadir,[45] Pryanka Relan,[6,*] Saniya Sabzwari,[46] Rohit Sarin,[47] Manu Shankar-Hari,[48] Michael Sharland,[49] Yinzhong Shen,[50] Shalini S Ranganathan,[51] Joao P Souza,[52] Miriam Stegemann,[53] Ronald Swanstrom,[54] Sebastian Ugarte,[55] Tim Uyeki,[56] Sridhar Venkatapuram,[57] Dubula Vuyiseka,[58] Ananda Wijewickrama,[59] Lien Tran,[60,*] Dena Zeraatkar,[1,*] Jessica J Bartoszko,[1,*] Long Ge,[1,61,*] Romina Brignardello-Petersen,[1,*] Andrew Owen,[62,*] Gordon Guyatt,[1,2,a,*] Janet Diaz,[6,a,*] Leticia Kawano-Dourado,[63] Michael Jacobs,[64,a] Per Olav Vandvik[3,65,a,*]







https://www.bmj.com/content/370/bmj.m3379

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A living WHO guideline on drugs for covid-19

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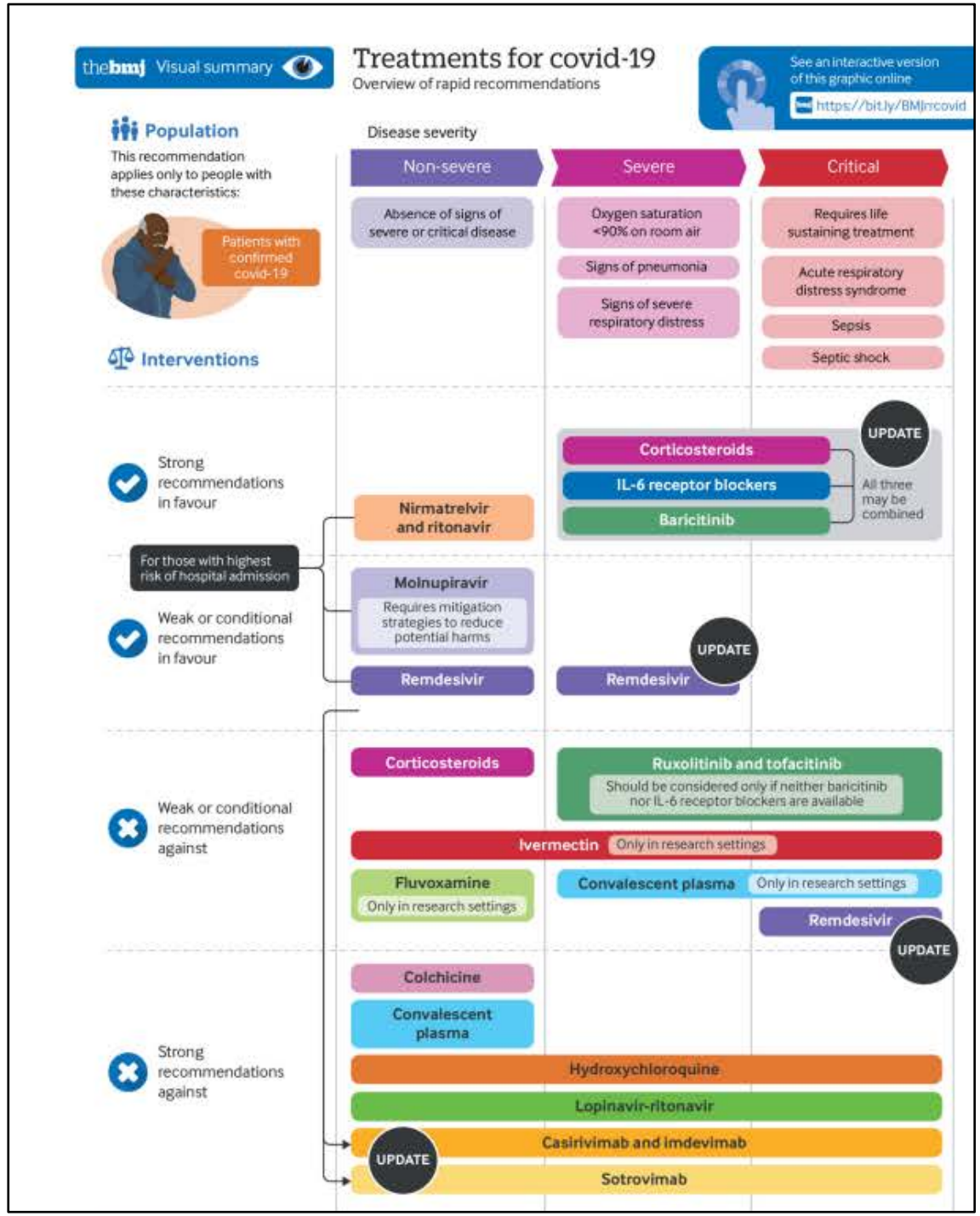
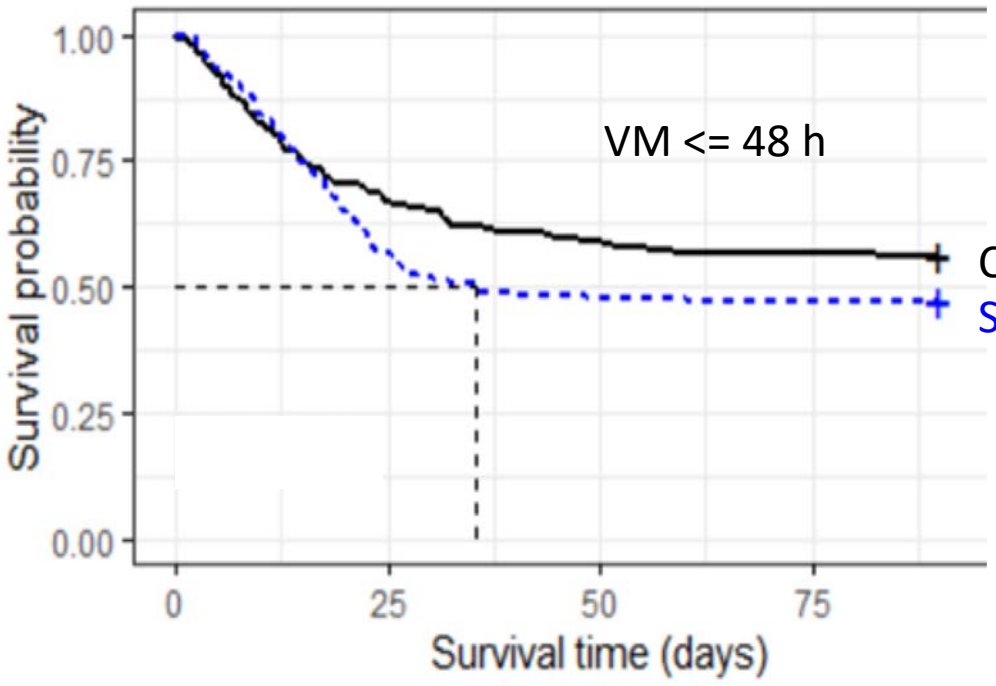


Administration of convalescent plasma with high titers of virus neutralization to reduce mortality in patients with COVID-19 associated ARDS: the Belgian randomized CONFIDENT trial.

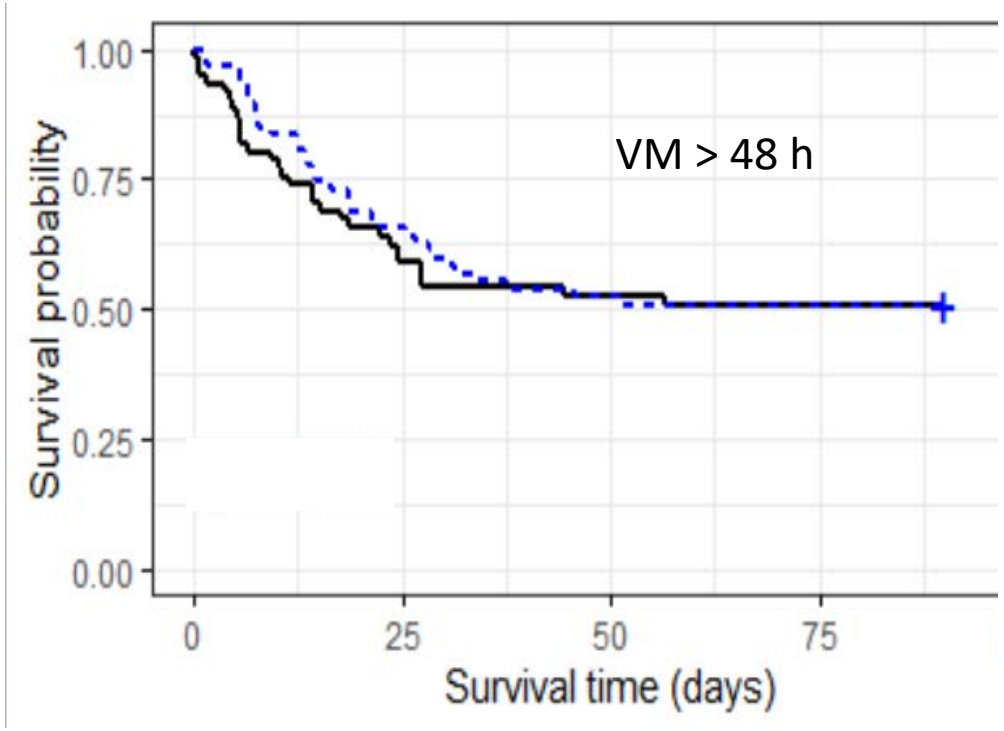
Benoît Misset

Université et CHU de Liège

Les courbes de mortalité se séparent vers 15 jours



Convalescent plasma
Standard of care



Conclusion

L’administration précoce de plasma de convalescent avec un titre élevé de neutralisation du virus à des patients avec un SDRA associé au COVID-19 sous ventilation mécanique, réduit la mortalité à J 28.

Cette réduction de mortalité est seulement observée dans le groupe des patients traités avant 48 heures de ventilation.

COVID-19 de rencontre

Patients < 5 jours après le début des symptômes et au moins un FDR d'évoluer vers une forme grave***

Par ordre de préférence et conte tenue la situation épidémiologique actuelle

1) NIRMATRELVIR + RITONAVIR
ATTENTION INTERACTIONS MÉDICAMENTEUSES

2) REMDESIVIR
Si contre-indication au Paxlovid
Attention : à discuter au cas par cas si risque rénal

3) TIXAGÉVIMAB/CILGAVIMAB
Si CI aux deux précédents
Attention CI si SCA récent

4) Plasma de convalescent

***

1. Les patients de 80 ans et plus
2. Les patients avec comorbidités
   - Obésité (IMC > 30 kg/m^2
   - BPCO et insuffisance respiratoire chronique
   - HTA compliquée
   - Insuffisance cardiaque
   - Diabète type 1 ou 2
   - Insuffisances rénale chronique
3. Les patients avec un déficit immunitaire
   - Chimiothérapie en cours
   - Transplantation d'organe solide
   - Allogreffe de cellules souches hématopoïétiques
   - TTT immunosuppresseur
   - T TT par corticoïdes > 10 mg/j équivalent de prednisone > 2 semaines
4. Les patients de plus de 60 ans si schéma vaccinal incomplet (absence de 2ème rappel notamment)

LIVING
WITH THE VIRUS

BACK TO
BASICS

PICS
PACS

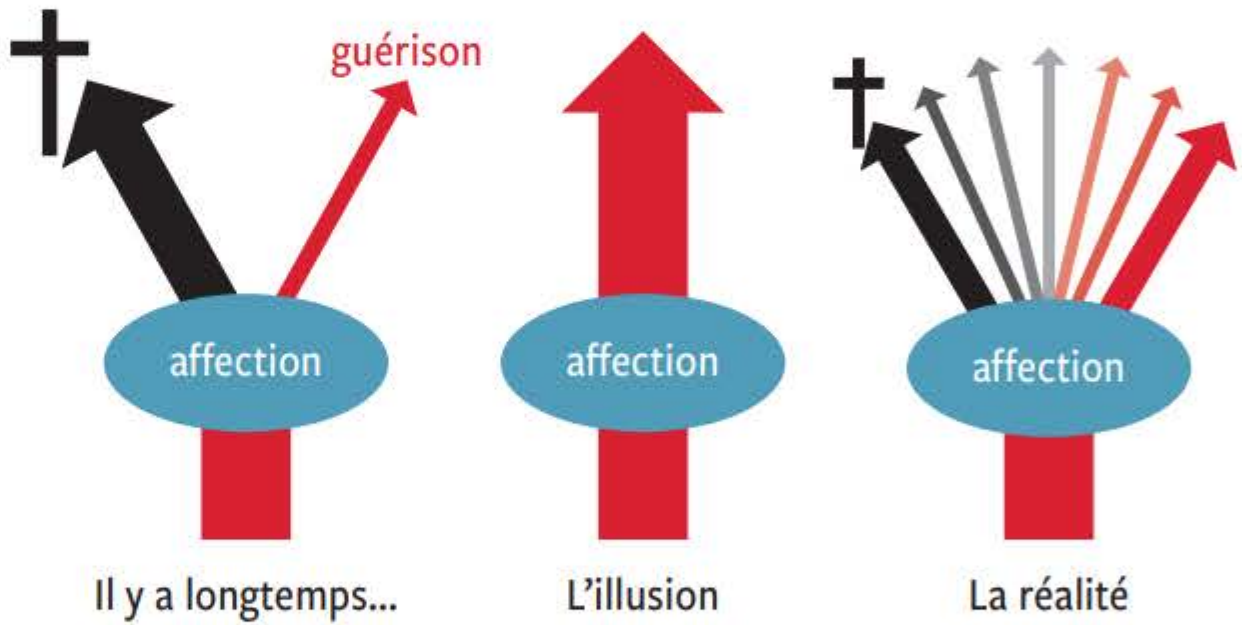
GREAT
RESIGNATION

Pourquoi une consultation post-soins intensifs?

Pr BARA RICOU[a*], MARINE DESARMENIEN[a*] et Pr JÉRÔME PUGIN[a*]

Rev Med Suisse 2018; 14: 1365-9

FIG 1 **Le rêve des intensivistes**



(D'après Ricou B. et Mauron A. (Institut de bioéthique de Genève)).

VIEWPOINT Open Access

CRITICAL CARE

Long-term outcomes after critical illness: recent insights

Anne-Françoise Rousseau[1], Hallie C. Prescott[2], Stephen J. Brett[3,4], Björn Weiss[5,6], Elie Azoulay[7], Jacques Creteur[8], Nicola Latronico[9,10], Catherine L. Hough[11], Steffen Weber-Carstens[5,6], Jean-Louis Vincent[8] and Jean-Charles Preiser[8,12*]

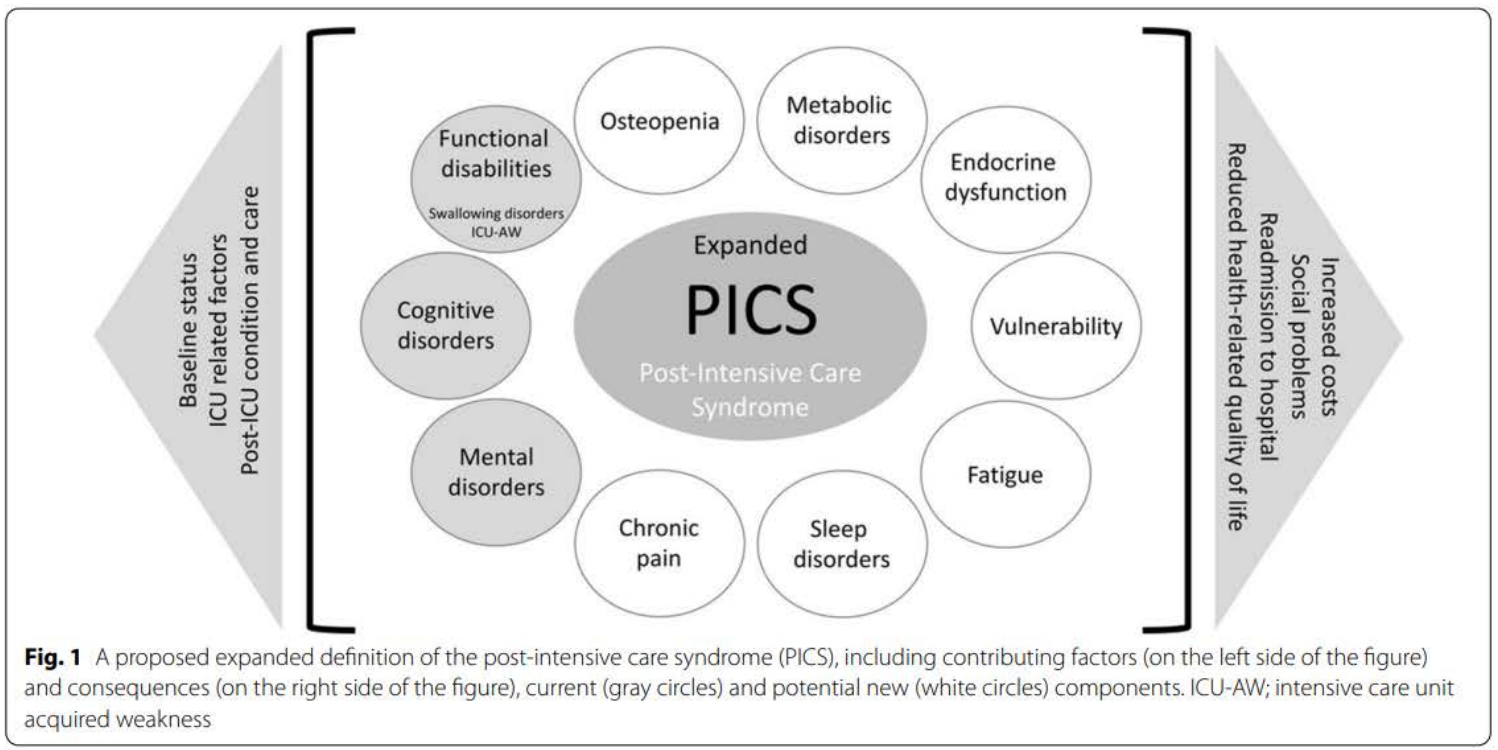


Fig. 1 A proposed expanded definition of the post-intensive care syndrome (PICS), including contributing factors (on the left side of the figure) and consequences (on the right side of the figure), current (gray circles) and potential new (white circles) components. ICU-AW; intensive care unit acquired weakness

Postintensive care syndrome (PICS) defined as:
a new or worsening impairments in mental cognitive or physical health following critical illness.

Long-term Cognitive Impairment and Functional Disability Among Survivors of Severe Sepsis

Theodore J. Iwashyna, MD, PhD
E. Wesley Ely, MD, MPH
Dylan M. Smith, PhD
Kenneth M. Langa, MD, PhD

Context Cognitive impairment and functional disability are major determinants of caregiving needs and societal health care costs. Although the incidence of severe sepsis is high and increasing, the magnitude of patients' long-term cognitive and functional limitations after sepsis is unknown.

Objective To determine the change in cognitive impairment and physical functioning

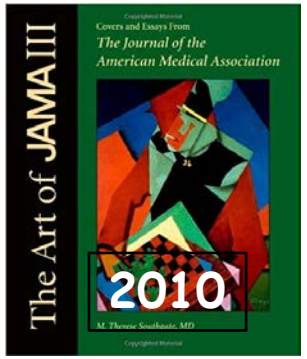
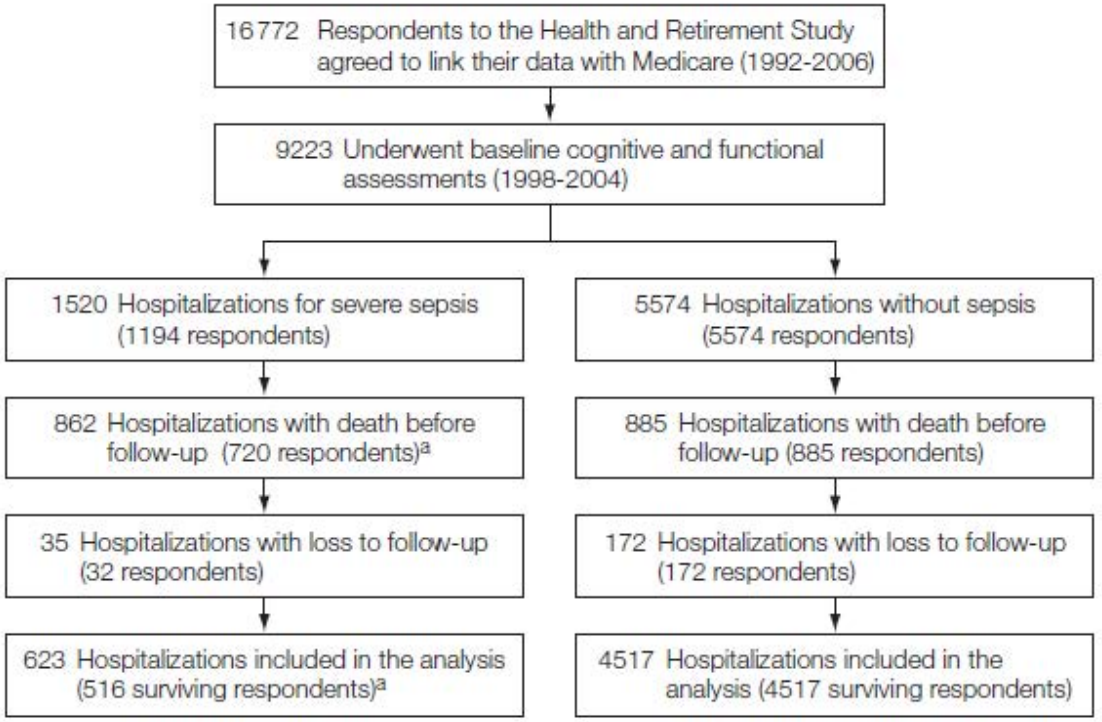
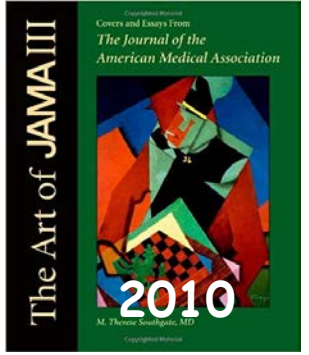


Figure 1. Patient Cohorts





Long-term Cognitive Impairment and Functional Disability Among Survivors of Severe Sepsis

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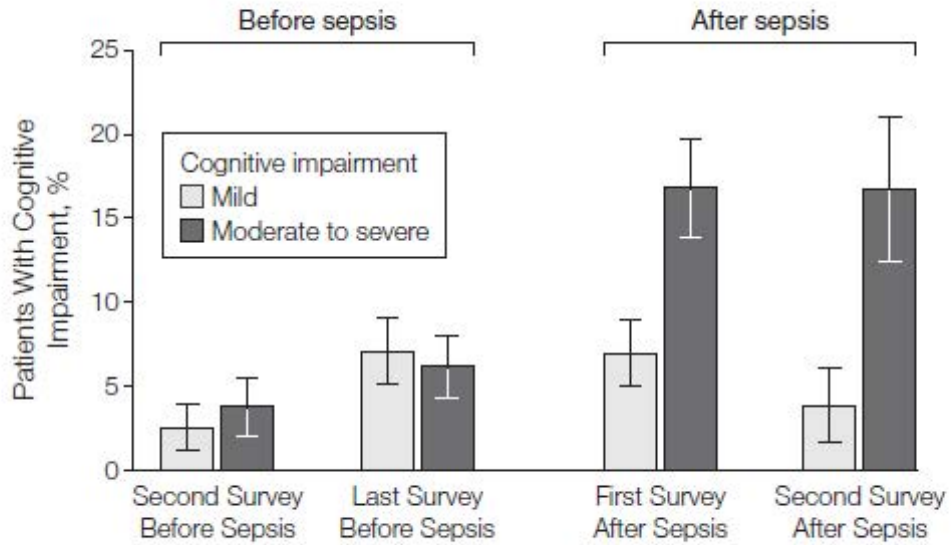
Figure 2. Cognitive Impairment Among Survivors of Severe Sepsis at Each Survey Time Point



	Second Survey Before Sepsis	Last Survey Before Sepsis	First Survey After Sepsis	Second Survey After Sepsis
Time to sepsis admission, median (IQR), y	−3.1 (−3.7 to −2.7)	−1.1 (−1.7 to −0.7)	0.9 (0.4 to 1.4)	2.8 (2.3 to 3.4)
No. of patients	484	623	623	288

Error bars indicate 95% confidence intervals (CIs); IQR, interquartile range.
Interpretive Example: Compared with stable rates before severe sepsis, the prevalence of moderate to severe cognitive impairment increased from 6.1% (95% CI, 4.2%-8.0%) before severe sepsis to 16.7% (95% CI, 13.8%-19.7%) at the first survey after severe sepsis ($P < .001$ by χ^2 test; Table 2).

ORIGINAL ARTICLE

Risk of Cardiovascular Events in Survivors of Severe Sepsis

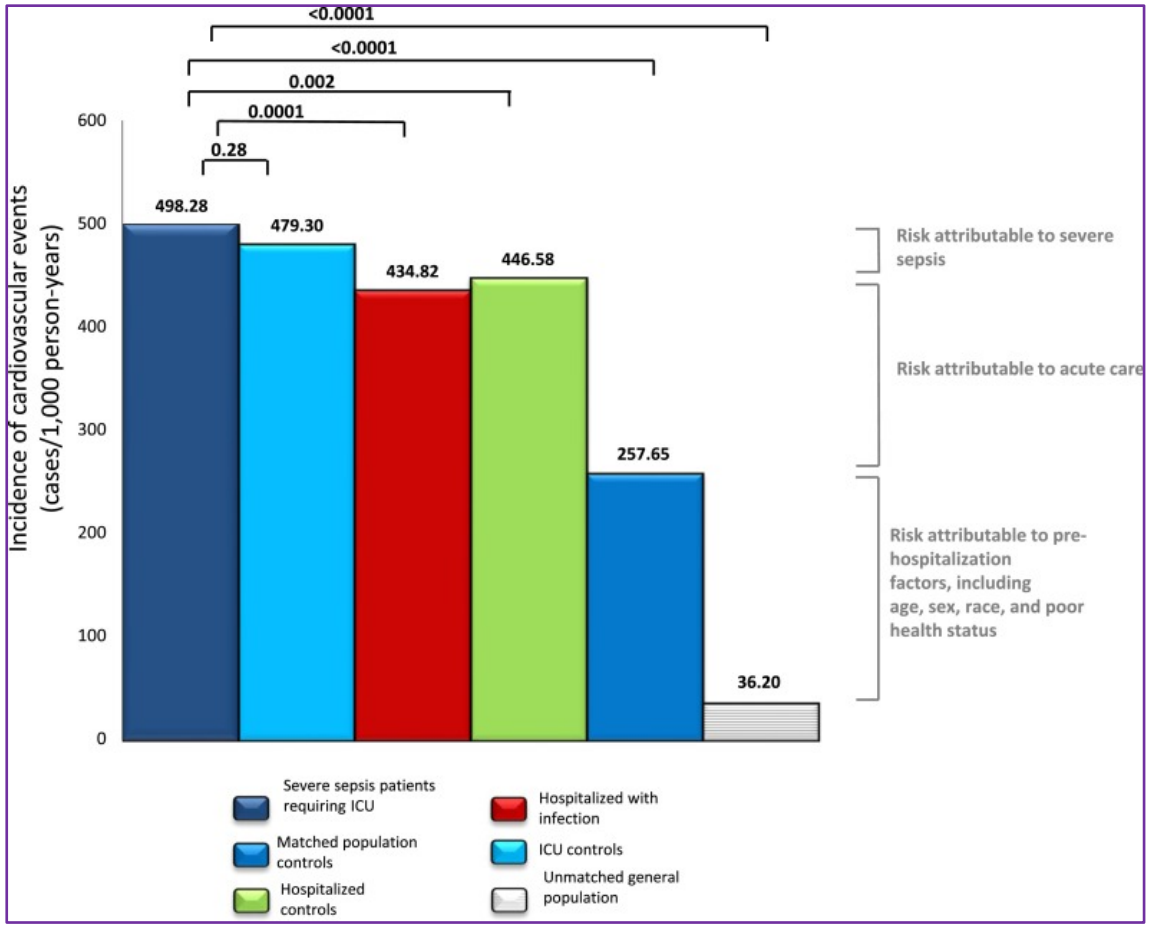
Sachin Yende[1,2], Walter Linde-Zwirble[3], Florian Mayr[4], Lisa A. Weissfeld[5], Steven Reis[6], and Derek C. Angus[1,2]

[1]The Clinical Research, Investigation, and Systems Modeling of Acute Illness Laboratory, and [2]Department of Critical Care Medicine, University of Pittsburgh, Pittsburgh, Pennsylvania; [3]ZD Associates, Perkasie, Pennsylvania; and [4]Department of General Internal Medicine, [5]Department of Biostatistics, and [6]Department of Medicine and Division of Cardiology, University of Pittsburgh, Pittsburgh, Pennsylvania

5% Medicare beneficiaries in 2003 (n=1,638,566)

Unmatched Analysis
Severe sepsis ICU patients who were alive at hospital discharge (n=4,179) vs.
Unmatched population controls (n=819,283)

Matched Analysis (4,179 pentads)
Severe sepsis ICU patients who were alive at hospital discharge vs.
Controls:
- Without severe sepsis but required ICU
- Hospitalized with infection
- Hospitalized without infection
- General population



life

MDPI

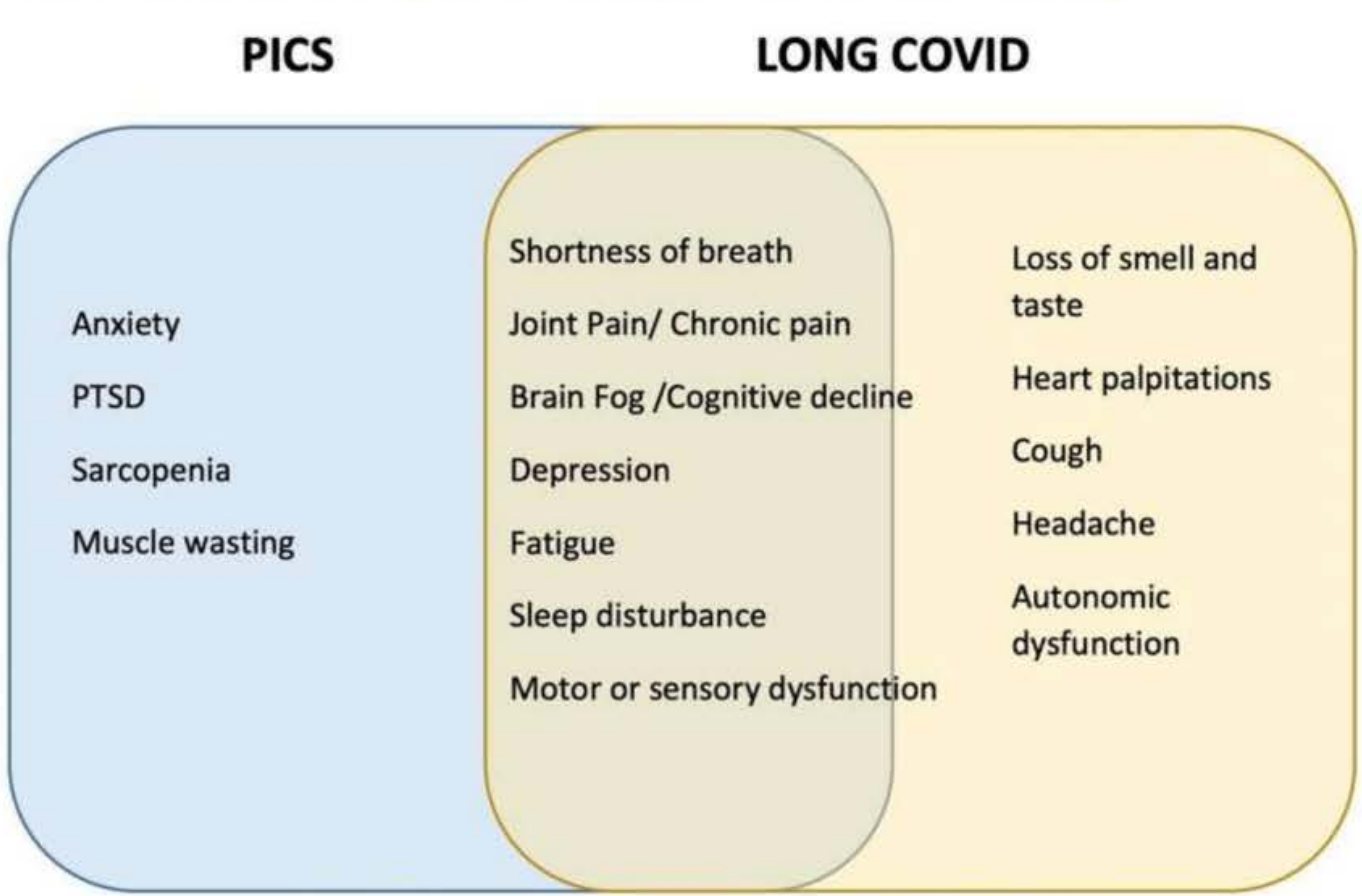
MDPI

2022

Review

Post-Intensive Care Syndrome in Survivors from Critical Illness including COVID-19 Patients: A Narrative Review

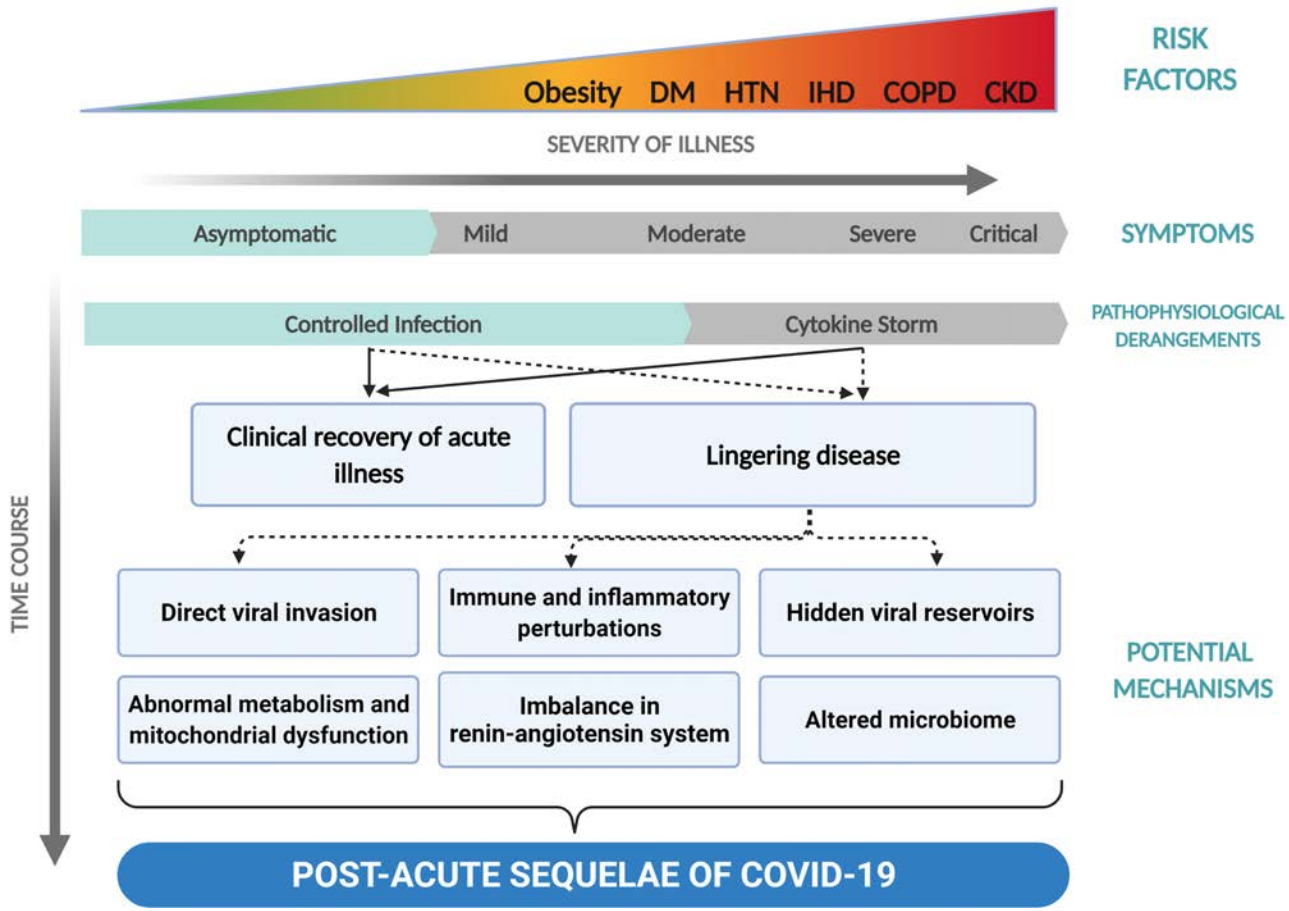
Charikleia S. Vrettou *, Vassiliki and Ioanna Dimopoulou *



Unraveling the Mystery Surrounding Post-Acute Sequelae of COVID-19

frontiers in Immunology
2021

Rakhee K. Ramakrishnan[1,2], *Tarek Kashour*[3], *Qutayba Hamid*[1,4], *Rabih Halwani*[1,2,5*†] and *Imad M. Tleyjeh*[6,7,8,9*†]



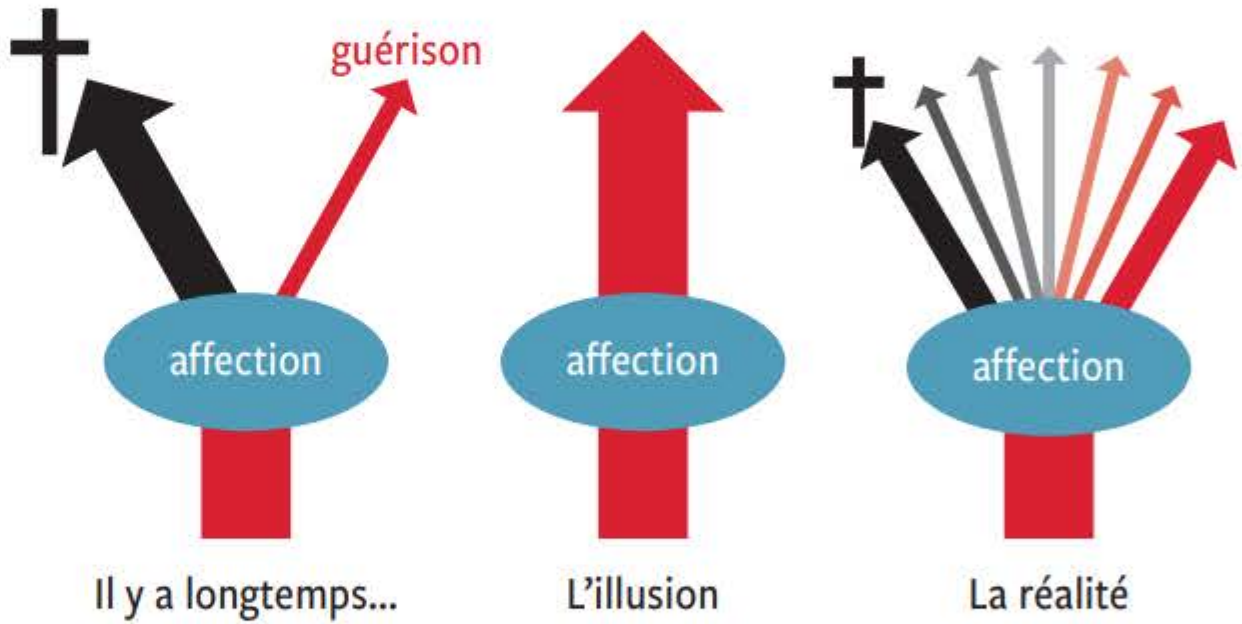
Pourquoi une consultation post-soins intensifs?

Pr BARA RICOU[a*], MARINE DESARMENIEN[a*] et Pr JÉRÔME PUGIN[a*]

Rev Med Suisse 2018; 14: 1365-9

REVUE médicale SUISSE

FIG 1 **Le rêve des intensivistes**

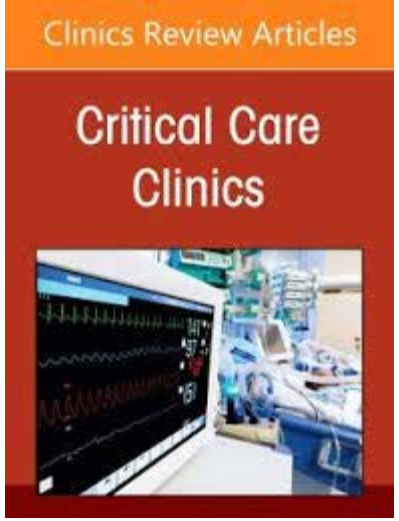


(D'après Ricou B. et Mauron A. (Institut de bioéthique de Genève)).

Postacute Sequelae of COVID-19 Critical Illness

2022

Kristin Schwab, MD*, Emily Schwitzer, MD, Nida Qadir, MD



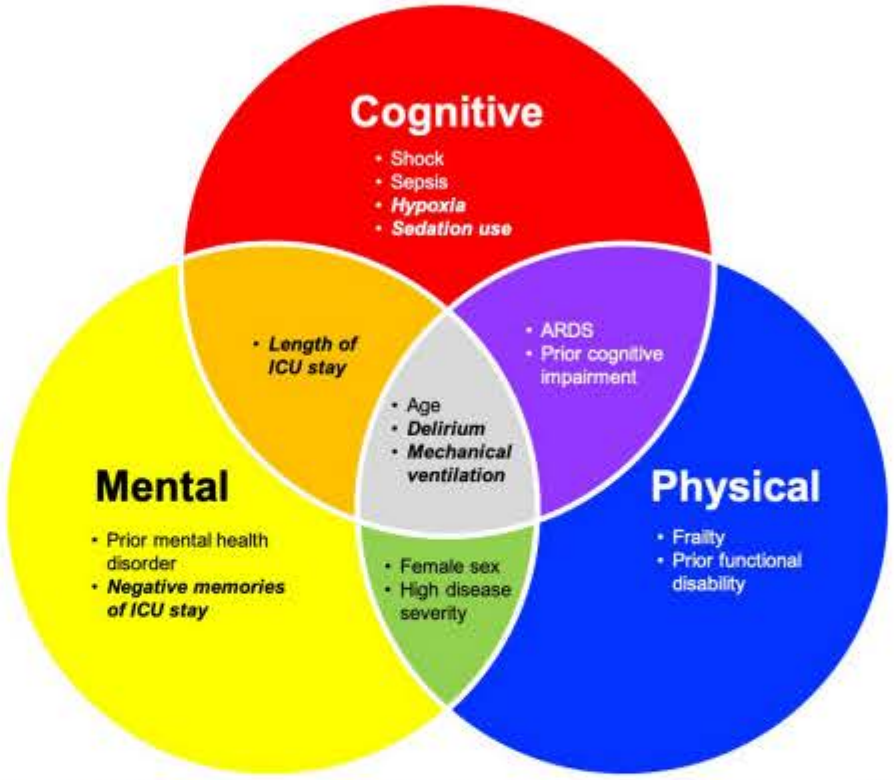


Fig. 2. Risk factors associated with PICS. Each circle represents the PICS domain associated with each risk factor. Those in *italics* represent potentially modifiable risk factors; others are pre-existing.

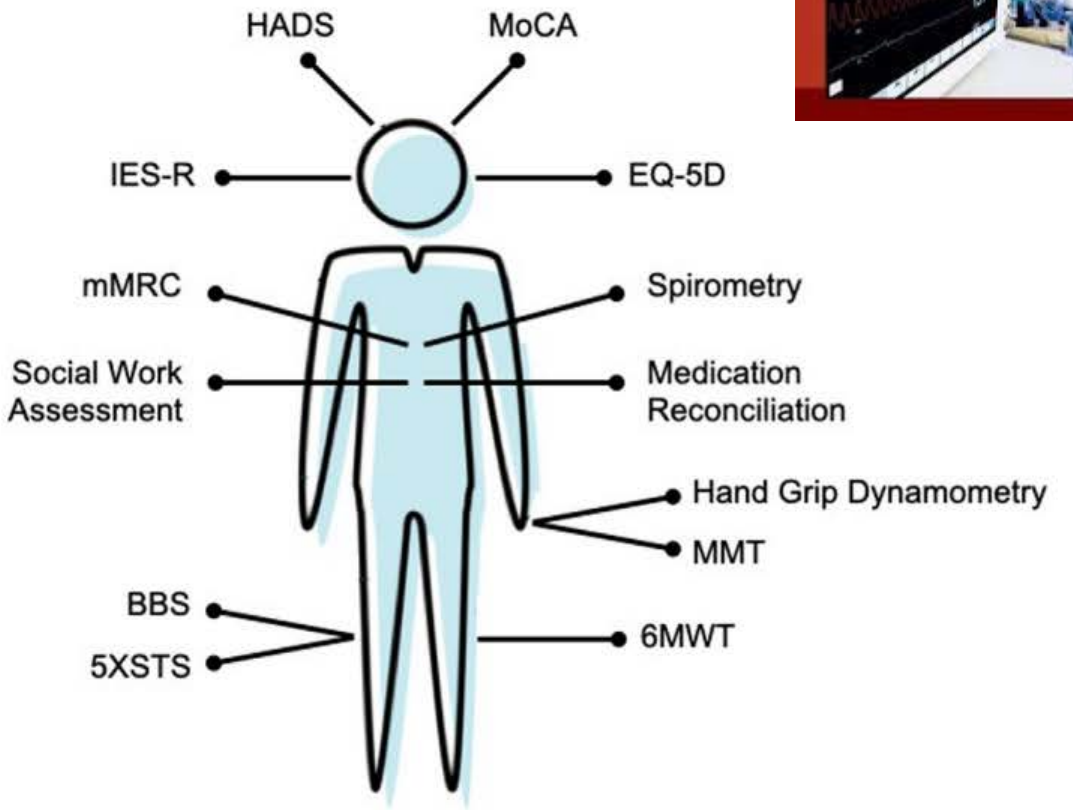


Fig. 3. Outpatient evaluation of PASC in survivors of critical illness. HADS, Hospital Anxiety and Depression Scale; MoCA, Montreal Cognitive Assessment; IESR, Impact of Event Scale-Revised; EQ-5D, EuroQol-5D; mMRC, Modified Medical Research Council; BBS, Borg Balance Scale; 5XSTS, Five Times Sit-to-Stand; MMT, Manual Muscle Testing; 6MWT, Six-Minute Walk Test

RESEARCH Open Access

Post-intensive care syndrome after a critical COVID-19: cohort study from a Belgian follow-up clinic

Anne-Françoise Rousseau[1*], Pauline Minguet[1], Camille Colson[1], Isabelle Kellens[1], Sourour Chaabane[1], Pierre Delanaye[2,4], Etienne Cavalier[3], J. Geoffrey Chase[5], Bernard Lambermont[1] and Benoit Misset[1]

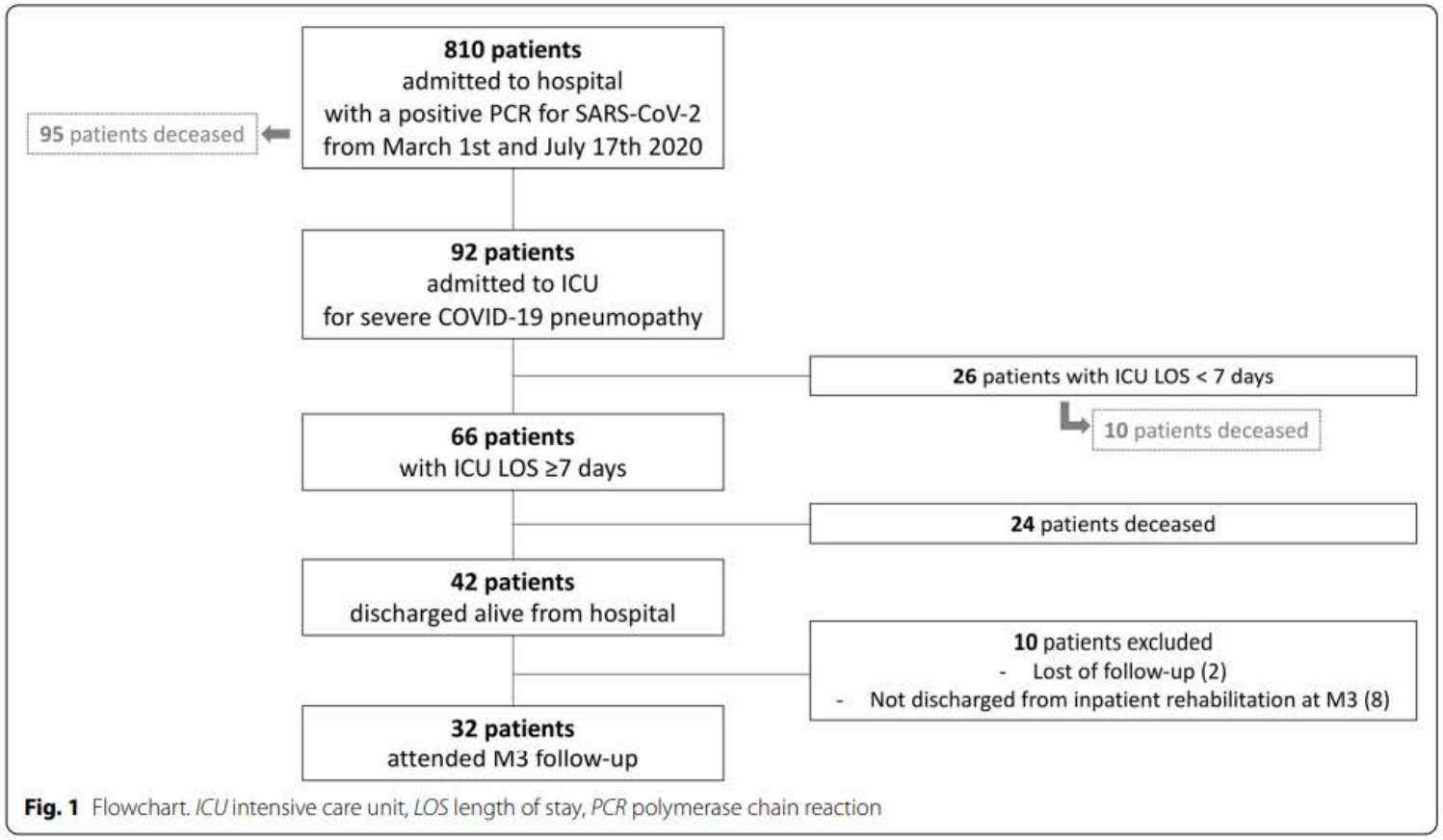


Fig. 1 Flowchart. *ICU* intensive care unit, *LOS* length of stay, *PCR* polymerase chain reaction

Annals of Intensive Care 2021

Table 2 M3 assessment

Data	*n* = 32
MoCA	27 [24–28]
HADS-A	4 [1–6]
HADS-D	1 [0–3]
IES-R	11 [4–24]
PSQI	6 [4–11]
EQ-5D score	6 [6–8]
EQ-5D visual analogic scale	71 [61–80]
Barthel Index	100 [100–100]
Handgrip strength (kg)	28 [21–37]
Quadriceps strength (N)	261 [191–338]
Quadriceps strength (N/kg)	2.9 [2.3–3.5]
C-reactive protein (mg/L)	2.6 [1.7–6.2]
Serum creatinine (mg/dL)	0.96 [0.75–1.23]

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Annals of Intensive Care 2021

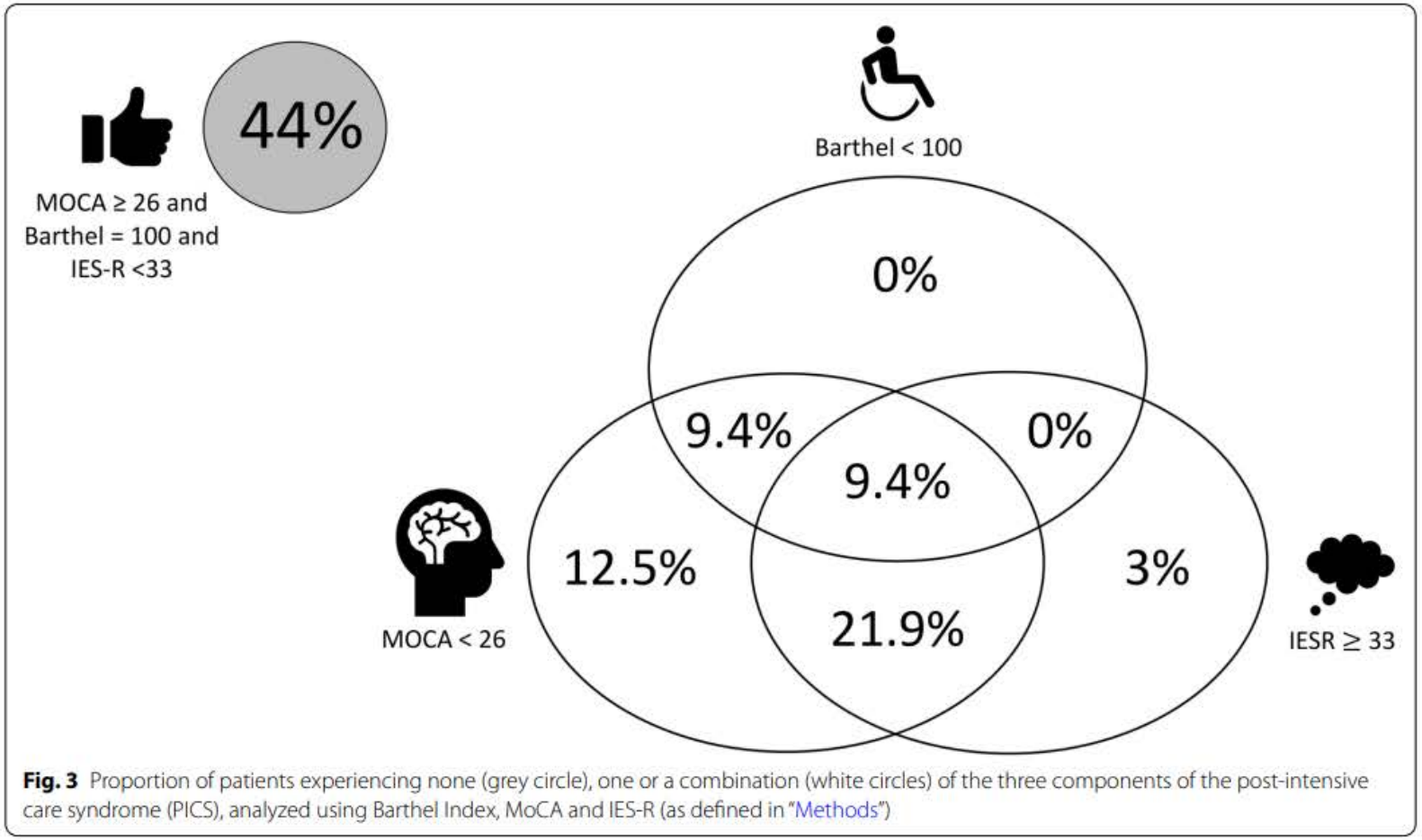


Fig. 3 Proportion of patients experiencing none (grey circle), one or a combination (white circles) of the three components of the post-intensive care syndrome (PICS), analyzed using Barthel Index, MoCA and IES-R (as defined in "Methods")

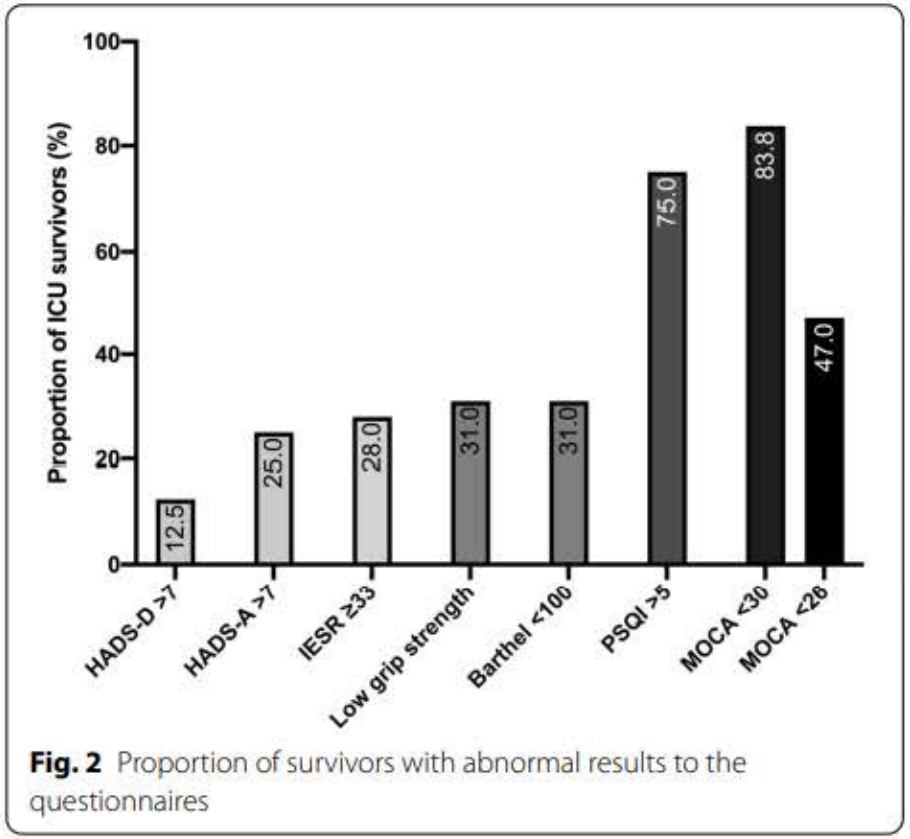


Fig. 2 Proportion of survivors with abnormal results to the questionnaires

LIVING
WITH THE VIRUS

BACK TO
BASICS

PICS
PACS

GREAT
RESIGNATION

INTERNATIONAL COUNCIL OF NURSES POLICY BRIEF

The Global Nursing shortage and Nurse Retention

Image credit: Nazila Ghomian, Tehran Heart Center, Iran

KEY MESSAGES

- **90%** of NNAs are somewhat or extremely concerned that heavy workloads, and insufficient resourcing, burnout and stress related to the pandemic response are the drivers resulting in increased numbers of nurses who have left the profession, and increased reported rates of intention to leave this year and when the pandemic is over.
- **20%** of ICN's National Nurses Associations (NNAs) reported an increased rate of nurses leaving the profession in 2020 and studies from associations around the world have consistently highlighted increased intention to leave rates.
- **More than 70%** of NNAs report that their countries are committed to increase the number of nursing students, but highlight that when this happens there will still be a three-to-four-year gap before new graduate nurses are ready to enter the workforce. During that time, they fear an exodus of experienced nurses.
- Due to existing nursing shortages, the ageing of the nursing workforce and the growing COVID-19 effect, ICN estimates up to **13 million** of nurses will be needed to fill the global nurse shortage gap in the future.
- It is imperative that governments act now to mitigate the risk of increased turnover among nurses and improve nurse retention.

PERSPECTIVE Open Access

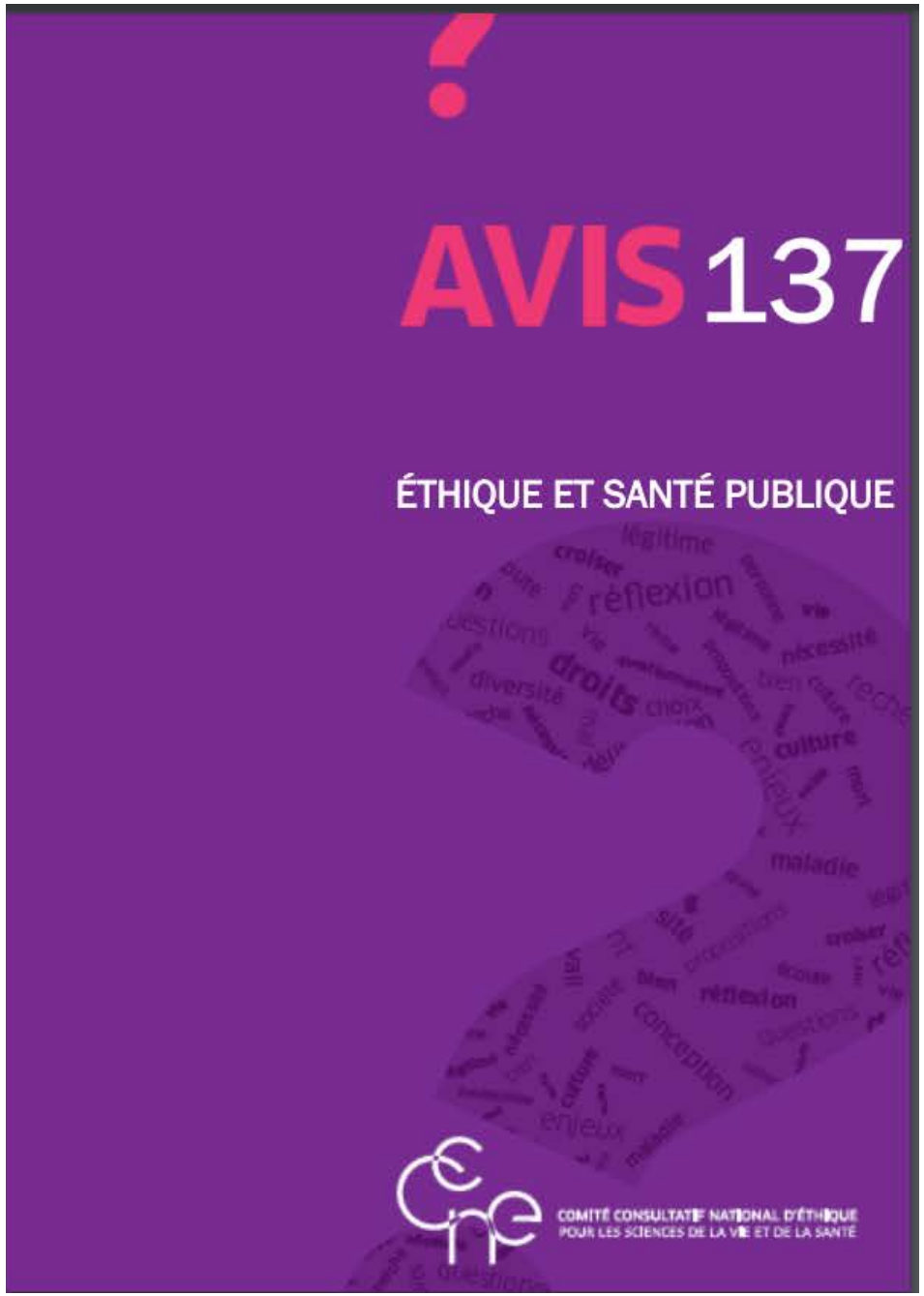
Ten areas for ICU clinicians to be aware of to help retain nurses in the ICU

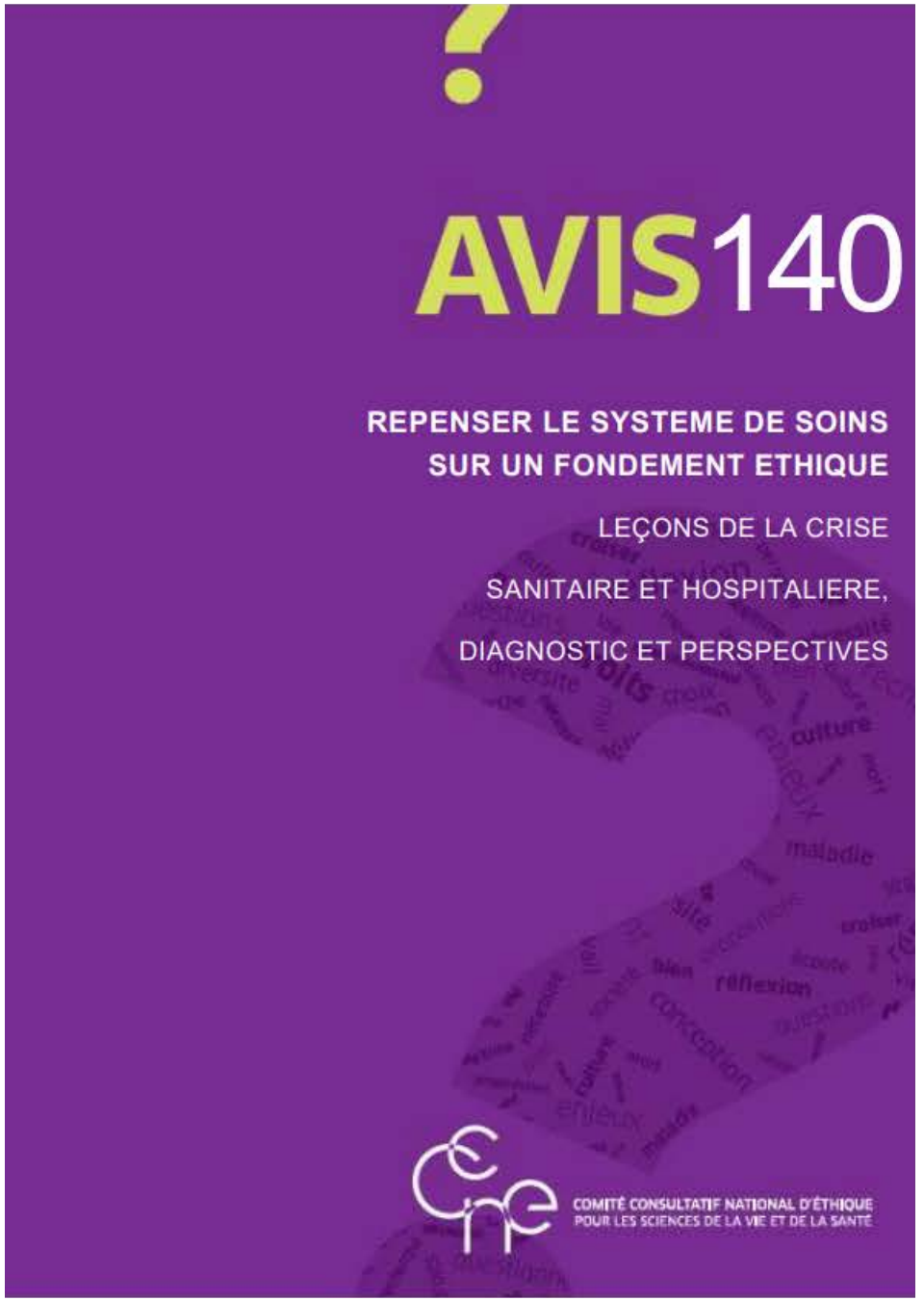
Jean-Louis Vincent[1*], Carole Boulanger[2], Margo M. C. van Mol[3], Laura Hawryluck[4] and Elie Azoulay[5]

CRITICAL CARE

2022

Some key areas for clinicians to consider to help keep nurses on the ICU
Recognition, respect, and value
Role and responsibility
Intellectual stimulation and professional development
Teaching opportunities
Good leadership and management
Team work/collaborative practice
Clinical discussion and exchange
Good work-life balance/wellness/rehumanizing the workplace
Psychological support
Humane care


AVIS 137
ÉTHIQUE ET SANTÉ PUBLIQUE
COMITÉ CONSULTATIF NATIONAL D'ÉTHIQUE
POUR LES SCIENCES DE LA VIE ET DE LA SANTÉ


AVIS 140
REPENSER LE SYSTEME DE SOINS
SUR UN FONDEMENT ETHIQUE
LEÇONS DE LA CRISE
SANITAIRE ET HOSPITALIERE,
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