



# Best-of Biblio les infections respiratoires

24 mars 2023

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# Infections respiratoires - pubmed

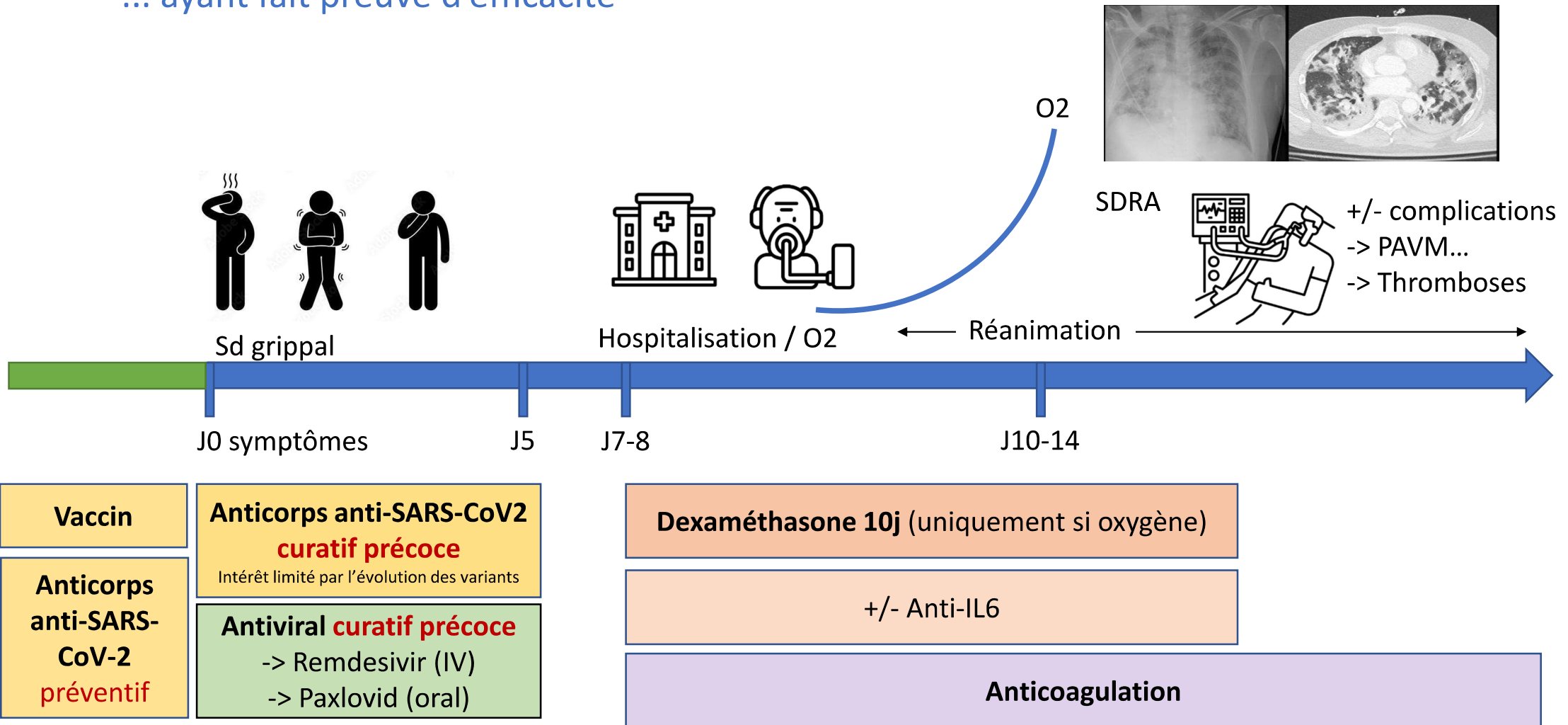


**COVID-19: Retour vers le futur**



# Stratégies thérapeutiques COVID-19

... ayant fait preuve d'efficacité

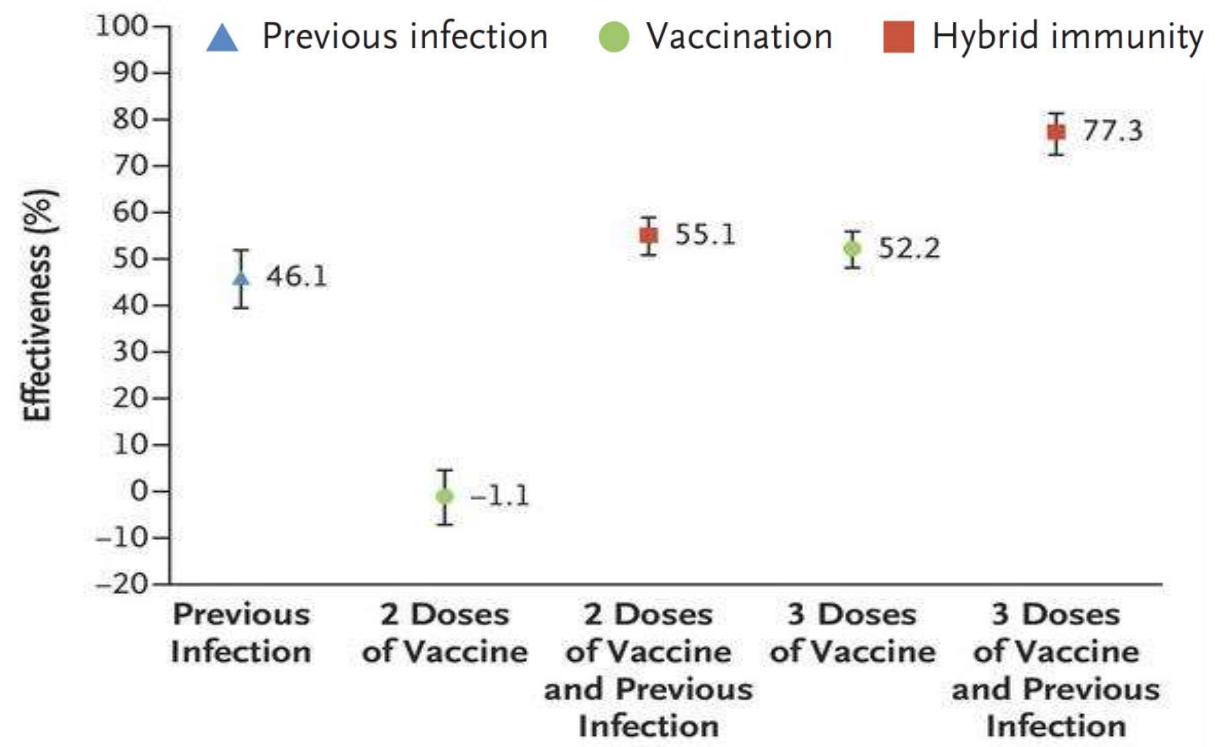


# Effet d'une infection ou de(s) vaccination(s) sur la survenue de COVID symptomatique Omicron

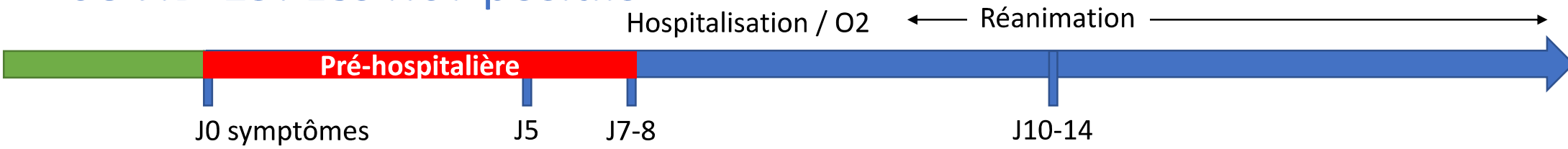
The NEW ENGLAND JOURNAL of MEDICINE

- Etude cas-contrôle 1:1
- Matched-control (PCR-)
- Qatar
- 12/21-> 02/22
  
- Efficacité de
  - La vaccination
  - L'immunité naturelle
  - L'immunité hybride

C Effectiveness of Previous Infection and BNT162b2 against Symptomatic BA.2 Infection



# COVID-19: Les RCT positifs



## TACKLE TIXA-CILGA,

Evusheld vs PCB, n=1014  
 CJP: COVID sévère ou décès  
 Evusheld (4%), PCB (9%)  
 ↘87%; RRR 50% [15-71]

Montgomery Lancet RM

## Plasma Convalescent

Plasma vs Plasma CTR, n=1225  
 CJP: Hospitalisation liée au COVID  
 PlasmaC (2,9%), PlasmaCtr (6,3%)  
 -3.4 % pts [1,0 – 5.8]

Sullivan DJ. NEJM

## PINETREE Early Remdesivir,

Remdesivir vs PCB, n=562  
 CJP: Hospitalisation ou décès à J28  
 Remde (1,6%), PCB (8,3%)  
 ↘87%; HR 0.19 [0.07-0.56]

Gottlieb NEJM

## EPIC-HR Nirmaltrevir r

RCT, Nirmal r vs PCB, n=2246  
 CJP: Hospitalisation ou décès J28  
 Nirmal (0,8%), PCB (7%)  
 ↘89%; -6,3 % pts [-9 à -3,6]

Hammond NEJM

## MOVE-OUT Molnupiravir

Molnu vs PCB, n=1433  
 CJP: Hospitalisation ou décès  
 Molnu (7%), PCB (14%)  
 ↘50%; -6,8 % pts [-11,3 à -2,4]

Jayk Bernal NEJM

# COVID sévère: Peut on faire mieux que les corticoïdes?

Hospitalisation / O2 ← Réanimation →

J0 symptômes

J5

J7-8

J10-14

**Hospitalisation**

## RECOVERY - Baricitinib

Baricitinib vs SOC, n=8156  
Covid/hospitalisé  
Mortalité J28  
Baricitinib (12%), SOC (14%)  
**aRR 0,87 [0.77-0.99]**

Lancet

## ACTT-4 - Baricitinib

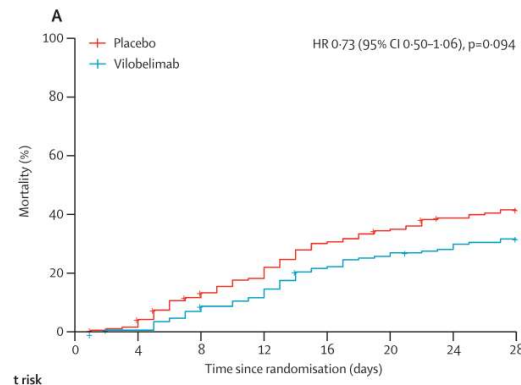
Baricitinib vs Dexa, n=1047  
Survie sans ventilation  
Baricitinib (87%), Dexa (87,6%)  
Dexa: plus d'effets indésirables

Wolfe CR. Lancet Respir Med

## PANAMO – Anti-C5a

Vilobemimab vs PCB, n=368  
Ventilation mécanique  
Mortalité J28  
Vilob (32%), PCB (42%)  
**HR 0,73 [0.50-1,06]**

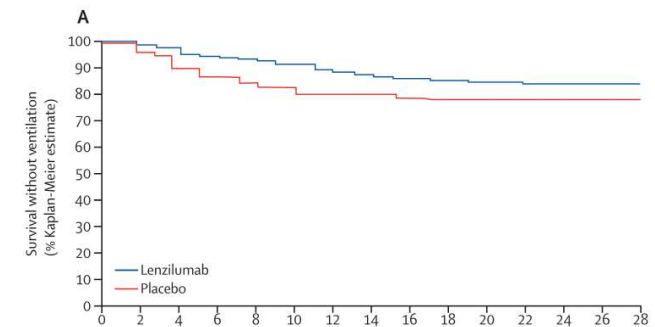
Vlaar. Lancet Respir Med



## LIVE-AIR – anti GM-CSF

Lenzilumab vs PCB  
Covid/hospitalisé  
Survie sans ventilation  
Lenzi (84%), PCB (78%)  
**HR 1,54 [1.02-2.32]**

Temesgen. Lancet Respir Med





**Retour en arrière**



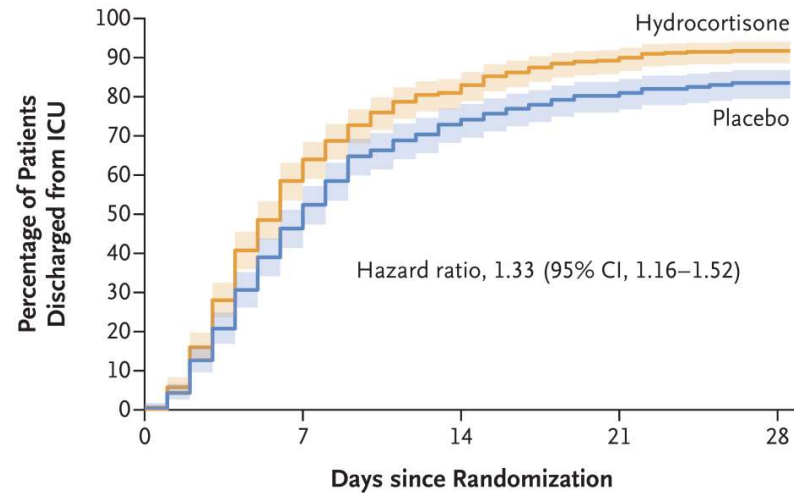




ORIGINAL ARTICLE

# Hydrocortisone in Severe Community-Acquired Pneumonia

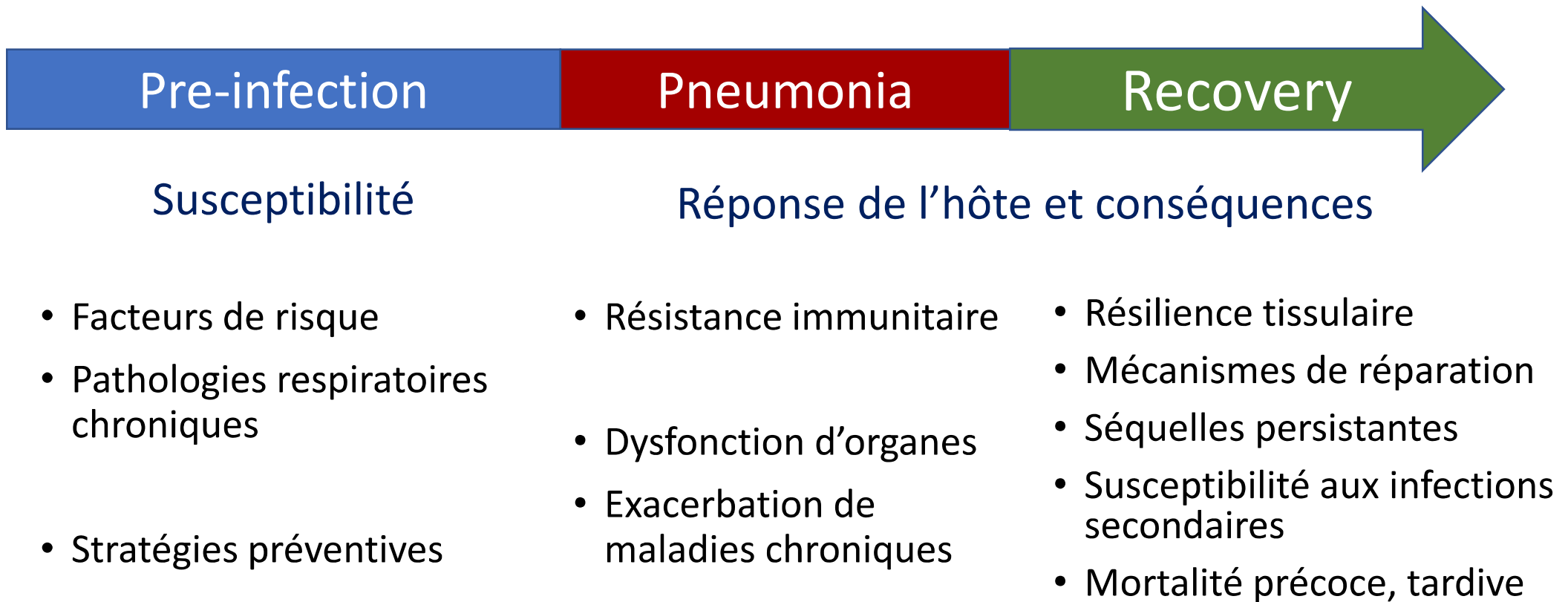
P.-F. Dequin, F. Meziani, J.-P. Quenot, T. Kamel, J.-D. Ricard, J. Badie, J. Reignier,



**No. at Risk**

Hydrocortisone	400	160	67	31	17
Placebo	395	198	85	48	27

## Et les autres infections respiratoires?



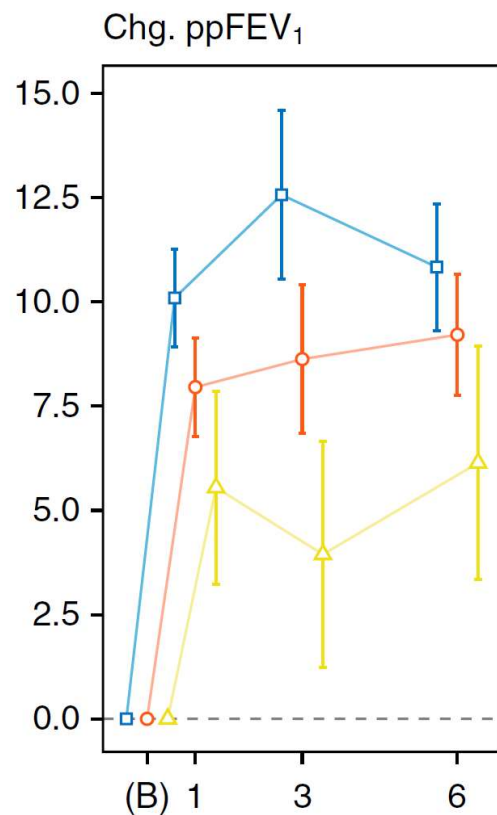
# Clinical Effectiveness of Elexacaftor/Tezacaftor/Ivacaftor in People with Cystic Fibrosis

## A Clinical Trial

Mucoviscidose  
Modulateurs CFTR

AJRCCM 2022

David P. Nichols<sup>1,2</sup>, Alex C. Paynter<sup>2</sup>, Sonya L. Heltshe<sup>1,2</sup>, Scott H. Donaldson<sup>3</sup>, Carla A. Frederick<sup>4</sup>,



### PROMISE study

Etude prospective observationnelle

N=487 patients, Mucoviscidose

Initiation ETI (Elexacaftor/Tezacaftor/Ivacaftor)

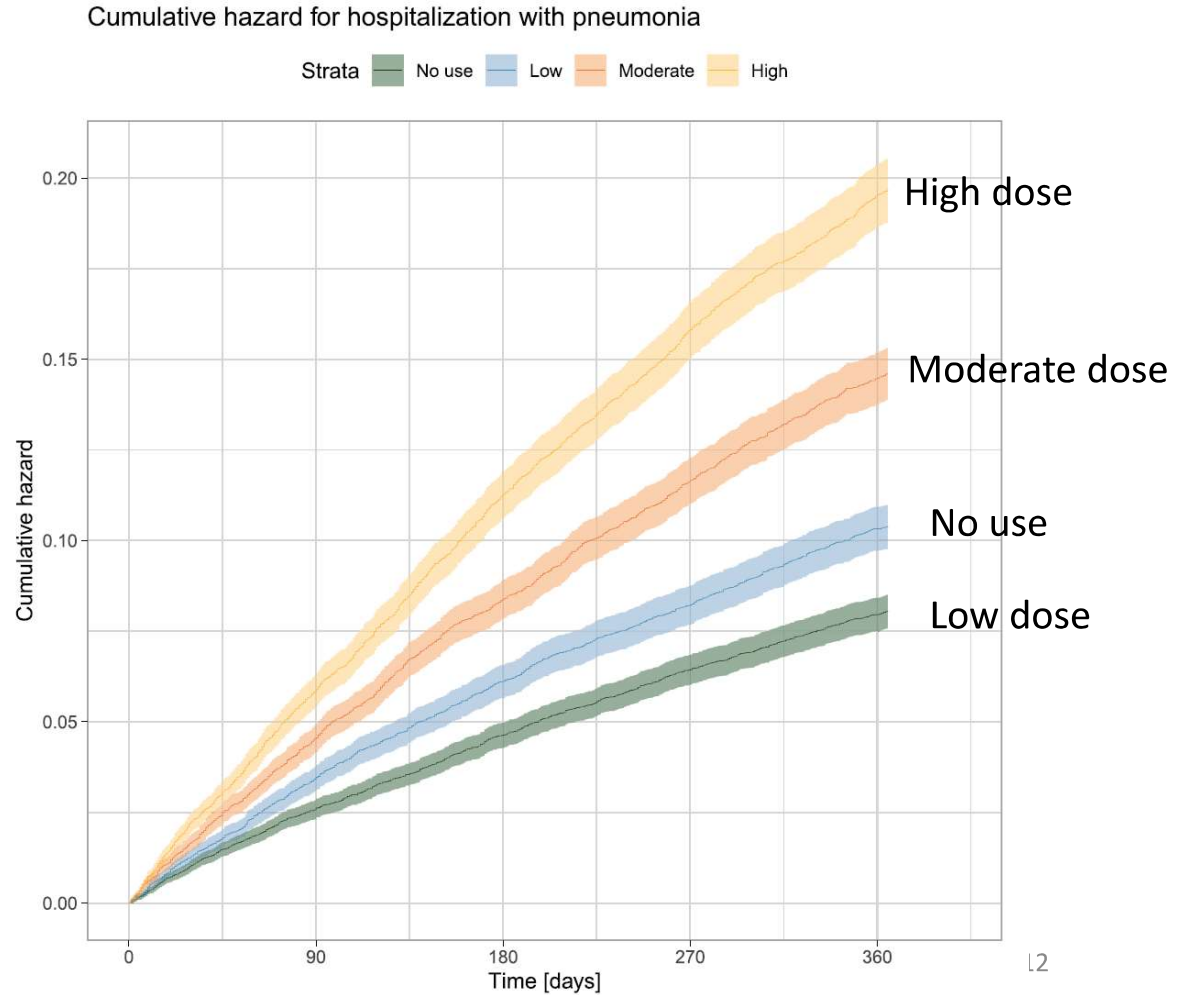
Suivi 6 mois

Outcome	Visit	Using/Observed (%)	P Value
Inhaled antibiotics	Baseline	248/486 (51.0)	—
	1 mo	186/417 (44.6)	—
	3 mo	97/195 (49.7)	—
	6 mo	145/429 (33.8)	<0.005
	6 mo	191/429 (44.5%)	0.01
Azithromycin	Baseline	238/486 (49.0)	—
	1 mo	206/417 (49.4)	—
	3 mo	94/195 (48.2%)	—
	6 mo	191/429 (44.5%)	0.01

Baseline Modulator: □ None ○ Tez/Iva or Lum/Iva △ Iva

# Hospitalization for chronic obstructive pulmonary disease and pneumonia: association with the dose of inhaled corticosteroids. A nation-wide cohort study of 52 100 outpatients

- Cohorte rétrospective Danoise
- BPCO prise en charge en ambulatoire
- Corticostéroïdes inhalés
- N= 52 100
  - No use n=15 755
  - Low-dose n= 12 050
  - Moderate dose n = 12 488
  - High dose n= 11 807
- Effet dose : ↗ risque d'hospitalisation avec pneumonie

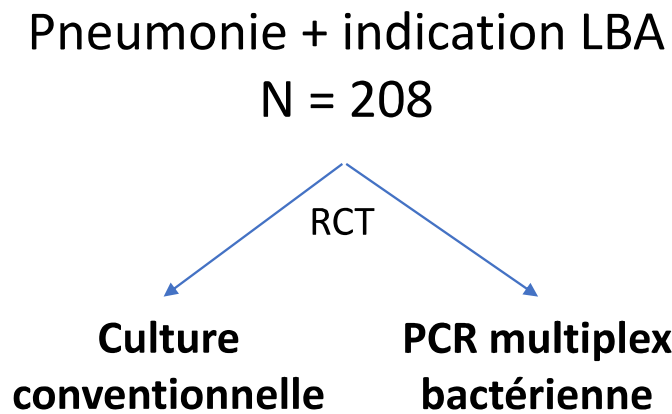


# Fast multiplex bacterial PCR of bronchoalveolar lavage for antibiotic stewardship in hospitalised patients with pneumonia at risk of Gram-negative bacterial infection (Flagship II): a multicentre, randomised controlled trial

Andrei M Darie, Nina Khanna, Kathleen Jahn, Michael Osthoff, Stefano Bassetti, Mirjam Osthoff, Desiree M Schumann, Werner C Albrich, Hans Hirsch, Martin Brutsche, Leticia Grize, Michael Tamm, Daiana Stolz

Pneumonie  
Approche microbiologique

Lancet Respir Med 2022



Stratégie PCR:  $\searrow$  durée vers une prescription d'une antibiothérapie adaptée de 38,6 heures

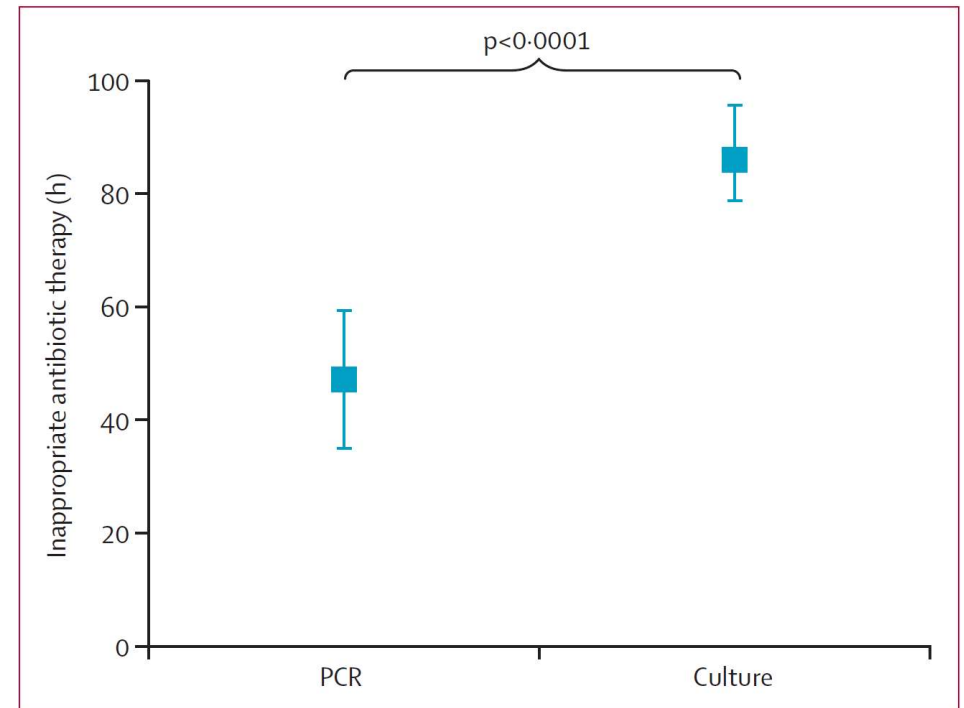
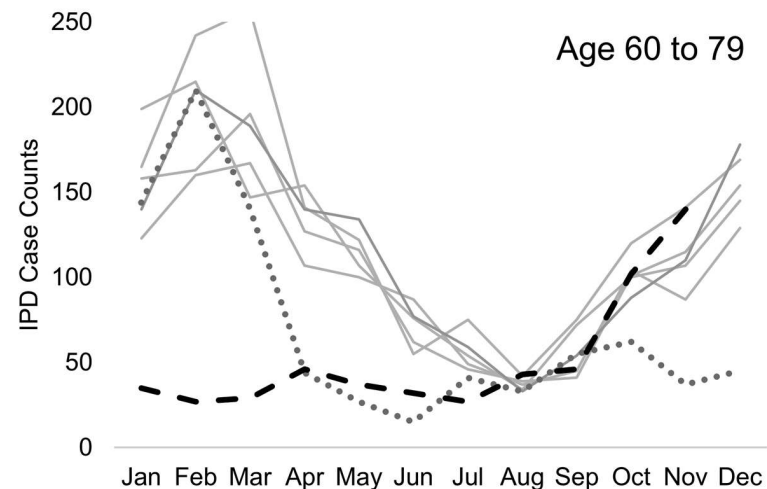
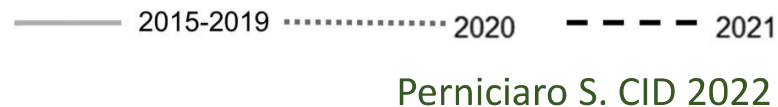


Figure 2: Duration of inappropriate antibiotic therapy

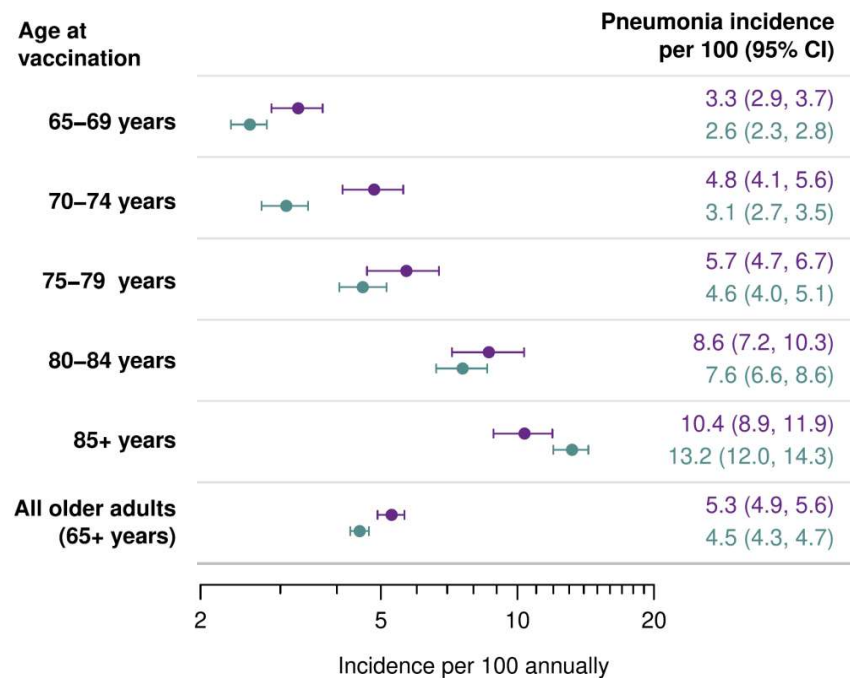
# Reemergence of Invasive Pneumococcal Disease in Germany During the Spring and Summer of 2021



# Effectiveness of 13-Valent Pneumococcal Conjugate Vaccine Against Medically Attended Lower Respiratory Tract Infection and Pneumonia Among Older Adults

Lewnard JA. CID 2022

42 700 adultes > 65 ans  
Cohorte , Californie, 2016-19  
Mesure de l'efficacité vaccinale





# Rifapentine access in Europe: growing concerns over key tuberculosis treatment component

Lorenzo Guglielmetti<sup>1,2,3</sup>, Gunar Günther<sup>4,5</sup>, Claude Leu<sup>4</sup>, Daniela Cirillo<sup>6</sup>, Raquel Duarte<sup>7,8,9,10</sup>, Alberto L. Garcia-Basteiro<sup>11,12</sup>, Delia Goletti<sup>13</sup>, Mateja Jankovic<sup>14</sup>, Liga Kuksa<sup>15,16</sup>, Florian P. Maurer<sup>17,18,19</sup>, Frédéric Méchai<sup>20</sup>, Simon Tiberi<sup>21,22</sup>, Frank van Leth<sup>23,24</sup>, Nicolas Veziris<sup>2,25,26</sup> and Christoph Lange<sup>19,27,28,29</sup> on behalf of the Study Group on Mycobacteria of the European Society of Microbiology and Infectious Diseases (ESGMYC), European Society of Mycobacteriology (ESM), European Respiratory Society (ERS) and the Tuberculosis Network European Trials group (TBnet)

- Rifapentine (1965)
- Longue demi vie
- Peu d'interactions médicamenteuses
- **Réduction des durées de traitements** avec un backbone comprenant la Rifapentine
  - Tuberculose infection: 1 mois (Swindells S. NEJM 2019)
  - Tuberculose maladie: 4 mois (Dorman SE. NEJM 2021)
- Va révolutionner la prise en charge des tuberculoses dès que nous y auront accès!!

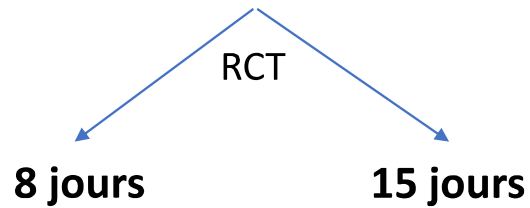


# Comparison of 8 versus 15 days of antibiotic therapy for *Pseudomonas aeruginosa* ventilator-associated pneumonia in adults: a randomized, controlled, open-label trial

PAVM *Pseudomonas*

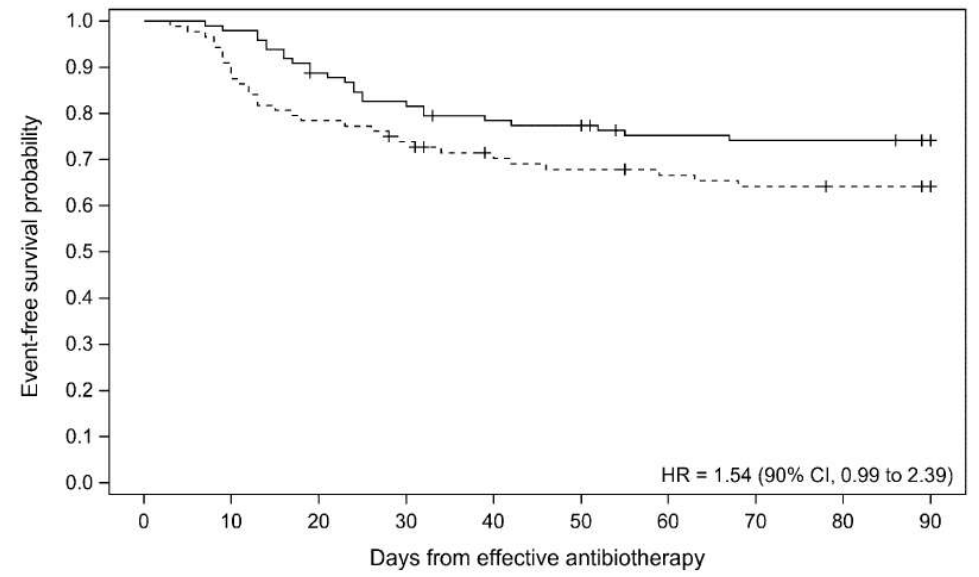
iDIAPASON trial

PAVM à *Pseudomonas*



Pas de non infériorité démontrée du traitement court

Events-free days probability



15 j  
8 j

		Antibiotic therapy duration									
		15 days					8 days				
No at risk		98	96	86	80	75	74	69	68	68	60
15 days		98	96	86	80	75	74	69	68	68	60
8 days		88	80	69	64	59	56	54	52	51	48

## Conclusion

- Beaucoup d'optimisme dans la prise en charge des infections respiratoires!!!

Je vous remercie