Infectio-Gériatrie : du neuf chez les vieux?

Mars 2023

Dr Lanoix Jean-Philippe

GInGer
Groupe Infectio-Gériatrie

Vacciner contre la grippe ne protège pas que de la grippe !

JAMA Network Open

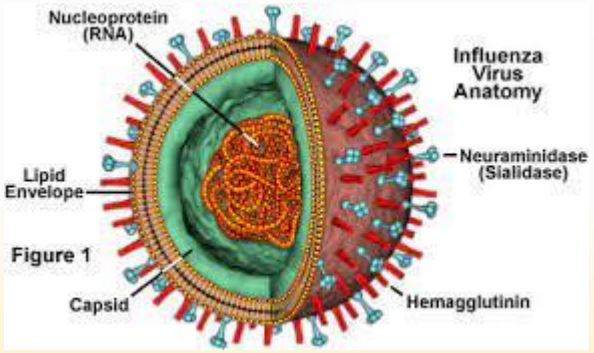
View Article

Association of Influenza Vaccination With Cardiovascular Risk

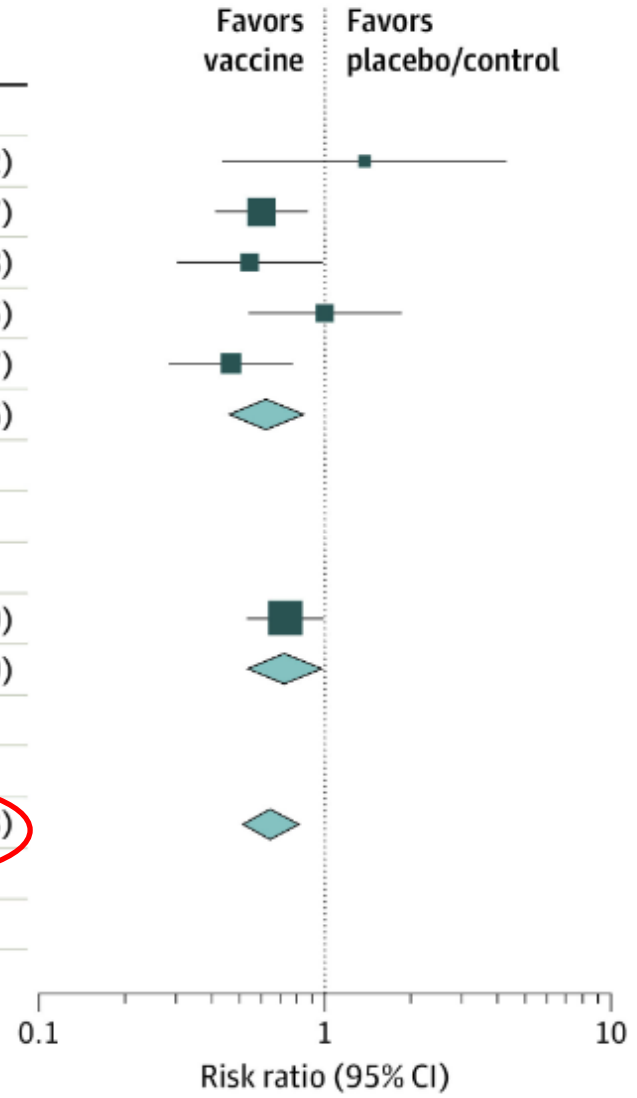
April 2022

A Meta-analysis

Bahar Behrouzi, MSc, [1,2,3] Deepak L. Bhatt, MD, MPH, [4] Christopher P. Cannon, MD, [4] Orly Vardeny, PharmD, MS, [5] Douglas S. Lee, MD, PhD, [1,2,6] Scott D. Solomon, MD, [4] and Jacob A. Udell, MD, MPH [1,2,3,6]

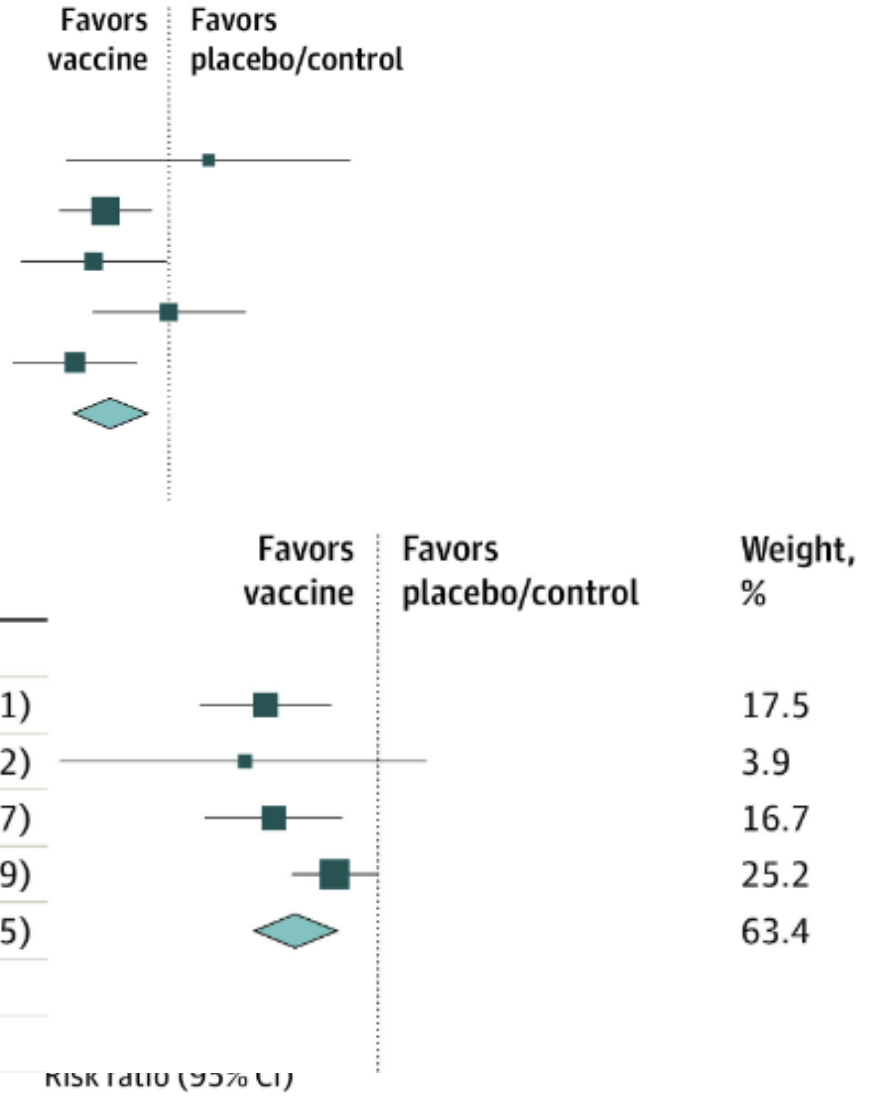


Study or subgroup	Vaccine Events	Vaccine Total	Placebo/control Events	Placebo/control Total	Risk ratio, (95% CI)
Previous trials					
Govaert et al,[22] 1994	7	927	5	911	1.38 (0.44-4.32)
Gurfinkel et al,[19] 2004	32	145	54	147	0.60 (0.41-0.87)
Ciszewski et al,[20] 2008	16	325	30	333	0.55 (0.30-0.98)
De Villiers et al,[23] 2009	20	1620	20	1622	1.00 (0.54-1.85)
Phrommintikul et al,[21] 2011	20	221	42	218	0.47 (0.29-0.77)
Total events	95	3238	151	3231	0.64 (0.48-0.86)
Heterogeneity: $\tau^2 = 0.03$; $\chi^2 = 5.59$, df = 4 ($P = .23$); $I^2 = 28\%$					
Test for overall effect: z = 2.93 ($P = .003$)					
Large cardiovascular outcome trial					
Frøbert et al,[7] 2021	67	1272	91	1260	0.73 (0.54-0.99)
Total events	67	1272	91	1260	0.73 (0.54-0.99)
Heterogeneity: not applicable					
Test for overall effect: z = 2.02 ($P = .04$)					
Total events	162	4510	242	4491	0.66 (0.53-0.83)
Heterogeneity: $\tau^2 = 0.01$; $\chi^2 = 6.19$, df = 5 ($P = .29$); $I^2 = 19\%$					
Test for overall effect: z = 3.66 ($P = .0003$)					
Test for subgroup differences: $\chi^2 = 0.35$; df = 1 ($P = .55$); $I^2 = 0\%$					



3.6% vs 5.4%

Study or subgroup	Vaccine Events	Vaccine Total	Placebo/control Events	Placebo/control Total	Risk ratio, (95% CI)
Previous trials					
Govaert et al,[22] 1994	7	927	5	911	1.38 (0.44-4.32)
Gurfinkel et al,[19] 2004	32	145	54	147	0.60 (0.41-0.87)
Ciszewski et al,[20] 2008	16	325	30	333	0.55 (0.30-0.98)
De Villiers et al,[23] 2009	20	1620	20	1622	1.00 (0.54-1.85)
Phrommintikul et al,[21] 2011	20	221	42	218	0.47 (0.29-0.77)
Total events	95	3238	151	3231	0.64 (0.48-0.86)
Heterogeneity: $\tau^2 = 0.03$; $\chi^2 = 5.59$, df = 4 ($P = .23$); $I^2 = 28\%$					
Recent ACS					
Gurfinkel et al,[19] 2004	18	96	41	97	0.44 (0.28-0.71)
Ciszewski et al,[20] 2008	3	83	7	74	0.38 (0.10-1.42)
Phrommintikul et al,[21] 2011	20	221	42	218	0.47 (0.29-0.77)
Frøbert et al,[7] 2021	67	1266	91	1258	0.73 (0.54-0.99)
Total events	108	1666	181	1647	0.55 (0.41-0.75)
Heterogeneity: $\tau^2 = 0.03$; $\chi^2 = 4.50$, df = 3 ($P = .21$); $I^2 = 33\%$					
Test for overall effect: z = 3.78 ($P < .001$)					



Vacciner contre la grippe ne protège pas que de la grippe !

- Réduction de 1,8% de risque d'événements cardiovasculaires (fatal ou non)
- Nombre de sujet à vacciner = **56 pour éviter 1 événement**

LES VACCINS C'EST BIEN,
ÊTRE VACCINÉ C'EST MIEUX

Collectif VaccinAction HAUTS-DE-FRANCE

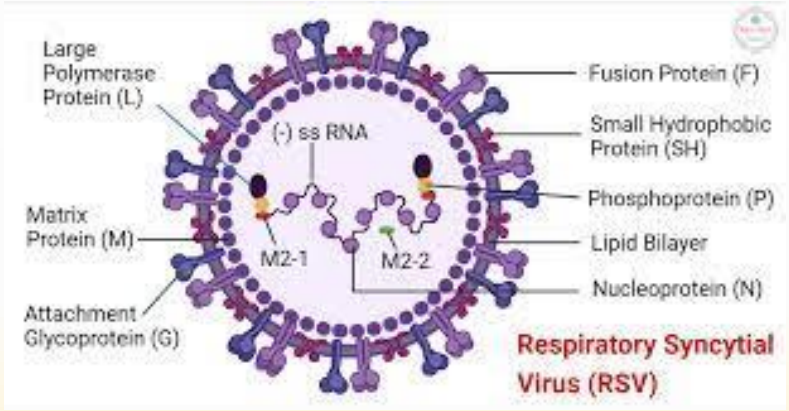
Vacciner contre le VRS c’est bien aussi !

The NEW ENGLAND JOURNAL of MEDICINE

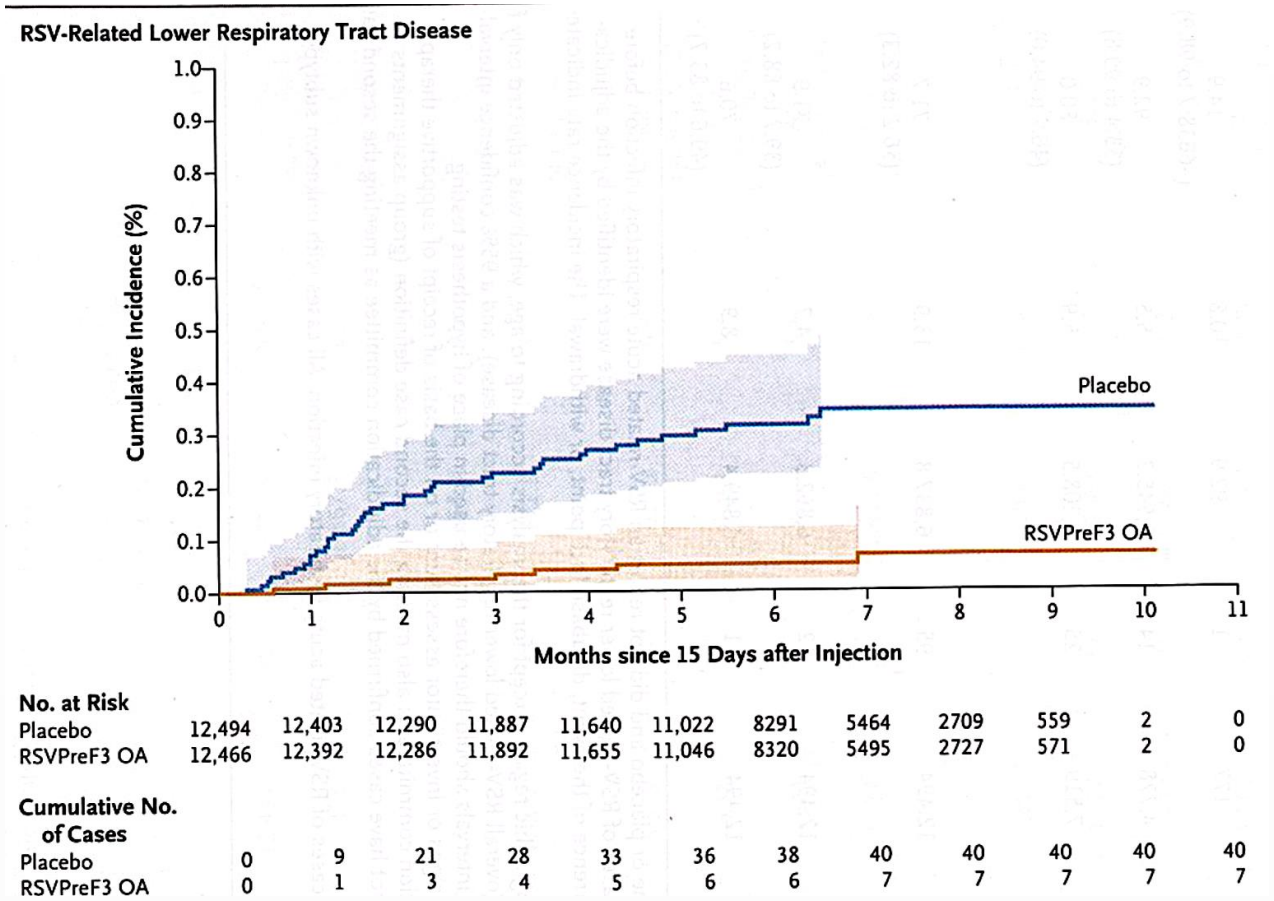
ORIGINAL ARTICLE

Respiratory Syncytial Virus Prefusion F Protein Vaccine in Older Adults

Alberto Papi, M.D., Michael G. Ison, M.D., Joanne M. Langley, M.D., Dong-Gun Lee, M.D., Ph.D., Isabel Leroux-Roels, M.D., Ph.D., Federico Martinon-Torres, M.D., Ph.D., Tino F. Schwarz, M.D., Ph.D., Richard N. van Zyl-Smit, M.D., Ph.D., Laura Campora, M.D., Nancy Dezutter, Ph.D., Nathalie de Schrevel, Ph.D., Laurence Fissette, M.S., et al., for the AReSVi-006 Study Group*

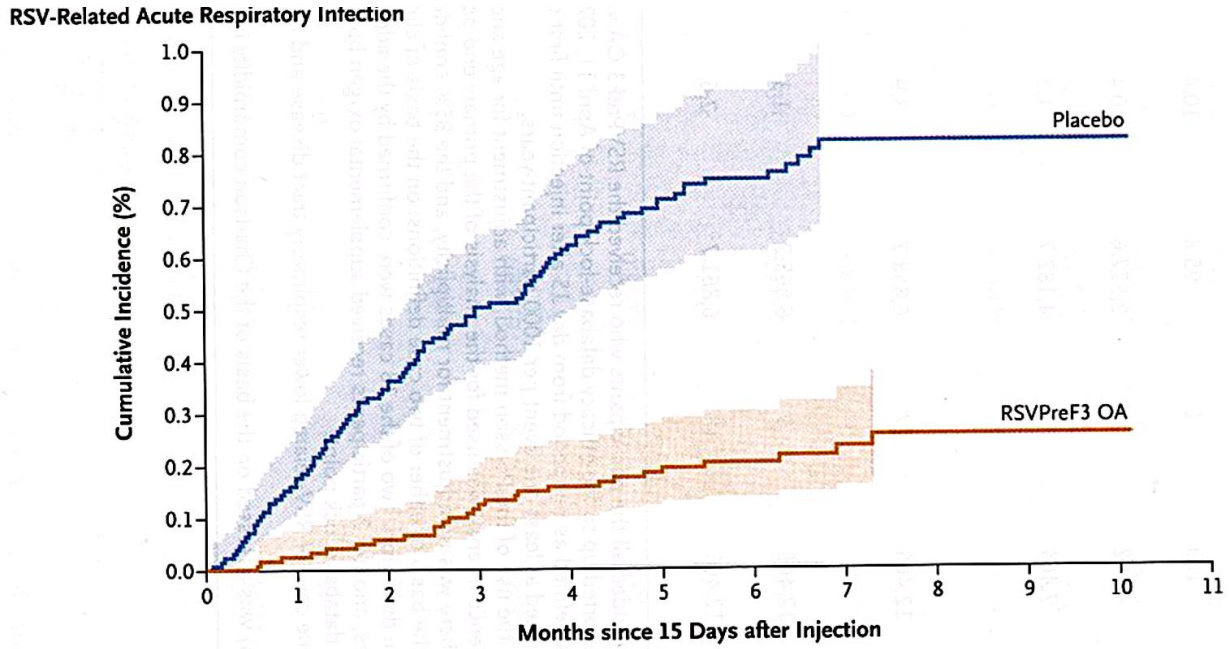


Essai randomisé vs placebo >24 900 sujets de plus de 60 ans



No. at Risk												
Placebo	12,494	12,403	12,290	11,887	11,640	11,022	8291	5464	2709	559	2	0
RSVPreF3 OA	12,466	12,392	12,286	11,892	11,655	11,046	8320	5495	2727	571	2	0

Cumulative No. of Cases												
Placebo	0	9	21	28	33	36	38	40	40	40	40	40
RSVPreF3 OA	0	1	3	4	5	6	6	7	7	7	7	7



No. at Risk												
Placebo	12,494	12,390	12,268	11,853	11,597	10,973	8255	5441	2697	554	2	0
RSVPreF3 OA	12,466	12,390	12,282	11,881	11,641	11,029	8305	5481	2717	570	2	0

Cumulative No. of Cases												
Placebo	0	22	43	62	76	86	90	95	95	95	95	95
RSVPreF3 OA	0	3	7	15	19	23	24	26	27	27	27	27

- 82.6% d’efficacité contre les infections respiratoires basses
- 94.1% contre les infections sévères
- 71.4% contre les infections aiguës

Vacciner contre le VRS c’est bien aussi !

- Bonne efficacité quel que soit le sous-type (A ou B)
- Très bonne tolérance

…quand on l’aura !

LES VACCINS C’EST BIEN,
ÊTRE VACCINÉ
C’EST MIEUX

Collectif VaccinAction HAUTS-DE-FRANCE

Community-acquired bacterial meningitis in patients of 80 years and older

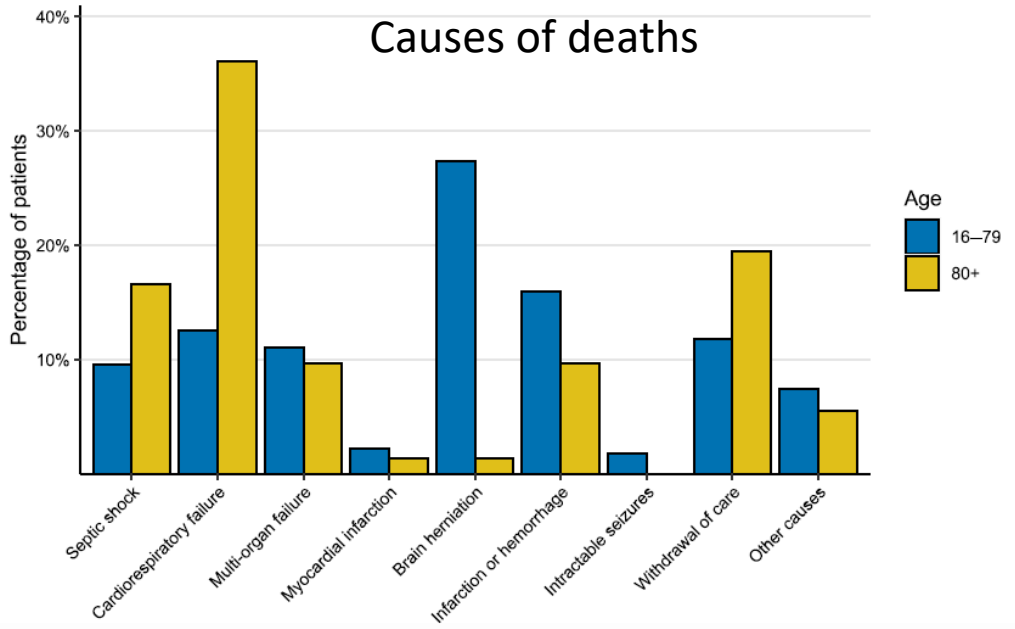
Journal of the American Geriatrics Society

Thijs M. van Soest MSc[1] | Nora Chekrouni MSc[1] | Nina M. van Sorge PhD[2,3] | Matthijs C. Brouwer PhD[1] | Diederik van de Beek PhD[1]

TABLE 1 Clinical characteristics and outcome

Characteristic	16–79 years old	≥ 80 years old	*P*-value
Age[a]	60 (46–68)	84 (81–86)	
Female sex	962/1991 (48)	100/149 (67)	<0.001
Medical history			
Immunocompromised	533/1986 (27)	36/149 (24)	0.50
Diabetes mellitus	248/1958 (13)	25/148 (17)	0.16
Immunosuppressant use	165/1963 (8)	16/147 (11)	0.29
Alcoholism	119/1980 (6)	0/149 (0)	<0.001
Cancer	242/1984 (12)	30/149 (20)	0.007
Extrameningeal infection	856/1961 (44)	51/145 (35)	0.056
Pneumonia	168/1892 (9)	23/141 (16)	0.006
Endocarditis	28/1889 (1)	4/135 (3)	0.16
Otitis or sinusitis	698/1899 (37)	30/136 (22)	<0.001

Characteristic	16–79 years old	≥80 years old	*P*-value
Clinical course			
Admitted to the ICU	1025/1696 (52)	52/147 (35)	<0.001
Systemic complications	633/1940 (33)	74/145 (51)	<0.001
Respiratory failure	469/1899 (25)	56/140 (40)	<0.001
Pneumonia	277/1844 (15)	34/124 (27)	0.001
Circulatory shock	186/1818 (10)	24/136 (18)	0.009
Neurological complications	638/1930 (33)	47/141 (33)	0.93
Seizures	251/1879 (13)	32/139 (23)	0.003
Cerebrovascular accidents	202/1838 (11)	12/126 (10)	0.76
Focal neurological deficits	426/1818 (23)	20/126 (16)	0.062
Score on Glasgow Outcome Scale			
1 (death)	286/1968 (15)	75/149 (50)	<0.001
2 (vegetative state)	6/1968 (0.3)	0/149 (0)	>0.99
3 (severe disability)	94/1968 (5)	6/149 (4)	0.84
4 (moderate disability)	316/1968 (16)	23/149 (15)	0.82
5 (mild or no disability)	1266/1968 (64)	45/149 (30)	<0.001
Discharge location			
Home	1269/1583 (80)	25/74 (34)	<0.001
Rehabilitation center	231/1583 (15)	31/74 (42)	<0.001
Nursing home	83/1583 (5)	18/74 (24)	<0.001
Focal neurologic deficits at discharge[a]	279/1411 (20)	12/62 (19)	>0.99



Endocardites

Journal of the American Heart Association

ORIGINAL RESEARCH

Surgery Is Underused in Elderly Patients With Left-Sided Infective Endocarditis: A Nationwide Registry Study

Sigurdur Ragnarsson, MD, PhD; Sonsoles Salto-Alejandre, MD; Axel Ström, MSc; Lars Olaison, MD, PhD; Magnus Rasmussen, MD, PhD

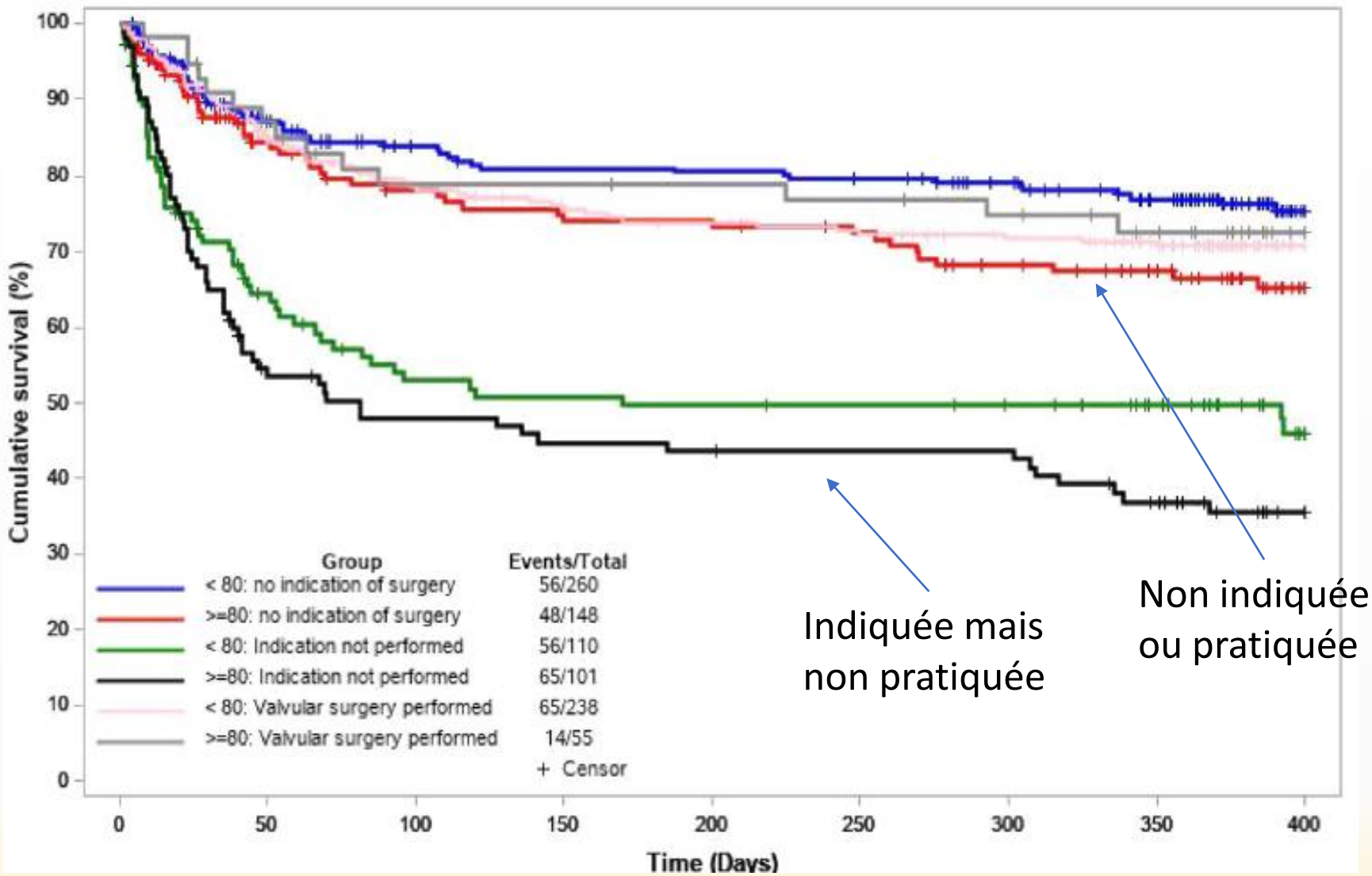
Infection
https://doi.org/10.1007/s15010-022-01792-0

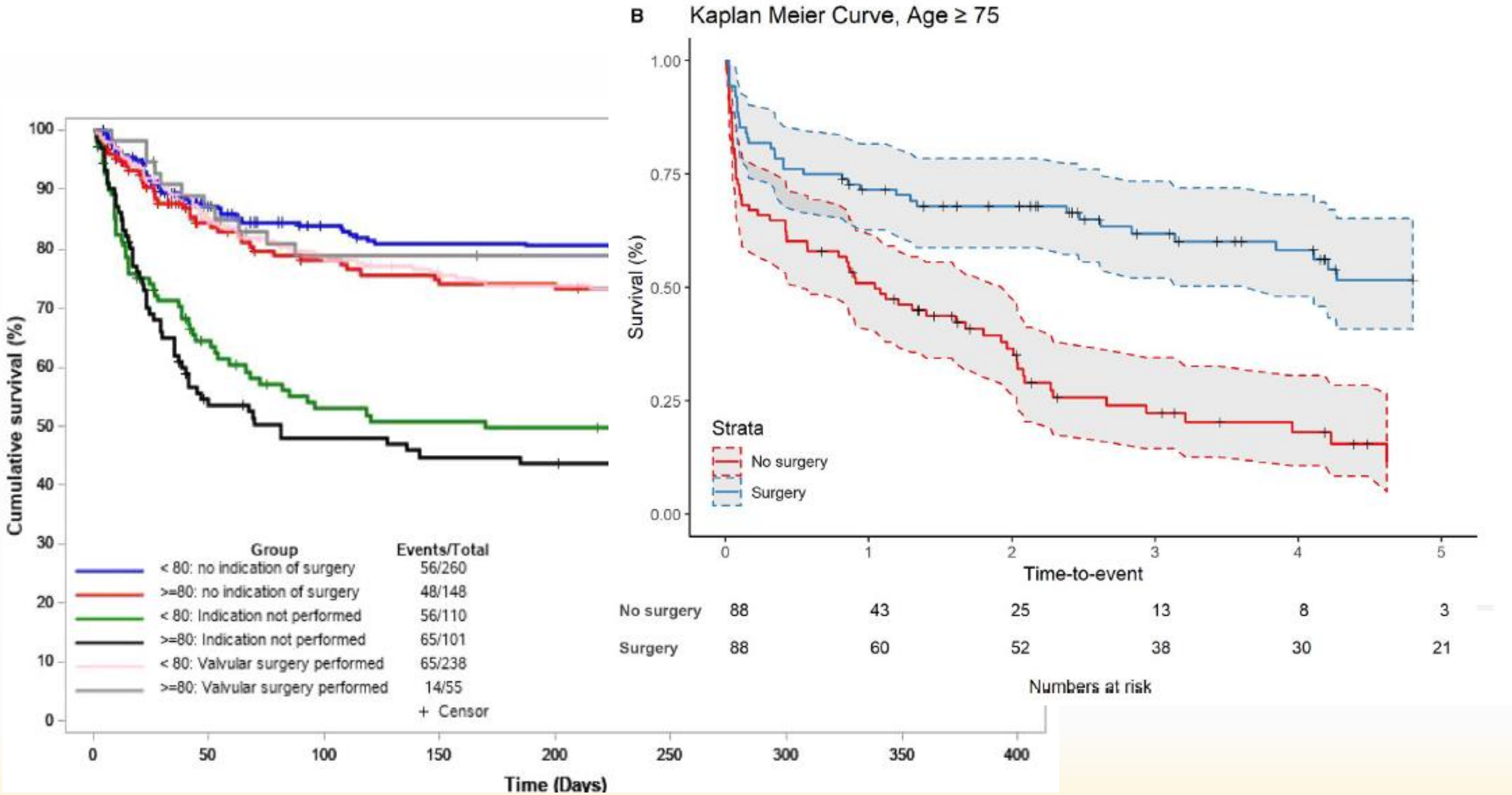
ORIGINAL PAPER

Check for updates

Surgery and outcome of infective endocarditis in octogenarians: prospective data from the ESC EORP EURO-ENDO registry

Michal Pazdernik[1,2] · Bernard Iung[3] · Bulent Mutlu[4] · François Alla[5] · Robert Riezebos[6] · William Kong[7] · Maria Carmo Pereira Nunes[8] · Luc Pierard[9] · Ilija Srdanovic[10] · Hirotsugu Yamada[11] · Andrea De Martino[12] · Marcelo Haertel Miglioranza[13] · Julien Magne[14] · Cornelia Piper[15] · Cécile Laroche[16] · Aldo P. Maggioni[16,17] · Patrizio Lancellotti[18] · Gilbert Habib[19,20] · Christine Selton-Suty[21,22] on behalf of the EURO-ENDO Investigators group


Cumulative survival (%)
100
90
80
70
60
50
40
30
20
10
0
0
50
100
150
200
250
300
350
400
Time (Days)
Group
Events/Total
< 80: no indication of surgery
56/260
>=80: no indication of surgery
48/148
< 80: Indication not performed
56/110
>=80: Indication not performed
65/101
< 80: Valvular surgery performed
65/238
>=80: Valvular surgery performed
14/55
+ Censor
Indiquée mais non pratiquée
Non indiquée ou pratiquée


B
Kaplan Meier Curve, Age ≥ 75
Survival (%)
1.00
0.75
0.50
0.25
0.00
Strata
No surgery
Surgery
0
1
2
3
4
5
Time-to-event
No surgery 88 43 25 13 8 3
Surgery 88 60 52 38 30 21
Numbers at risk
Cumulative survival (%)
100
90
80
70
60
50
40
30
20
10
0
Group
Events/Total
< 80: no indication of surgery 56/260
>=80: no indication of surgery 48/148
< 80: Indication not performed 56/110
>=80: Indication not performed 65/101
< 80: Valvular surgery performed 65/238
>=80: Valvular surgery performed 14/55
+ Censor
0
50
100
150
200
250
300
350
400
Time (Days)

ORIGINAL RESEARCH ARTICLE

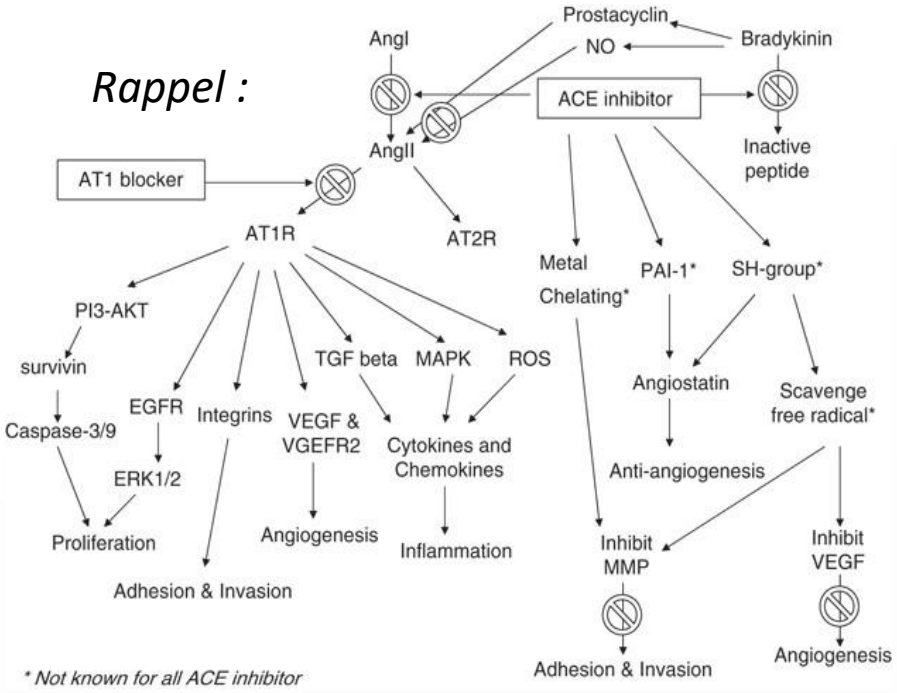
PHARMACOTHERAPY accp

Angiotensin-converting enzyme inhibitors reduce community-acquired pneumonia hospitalization and mortality

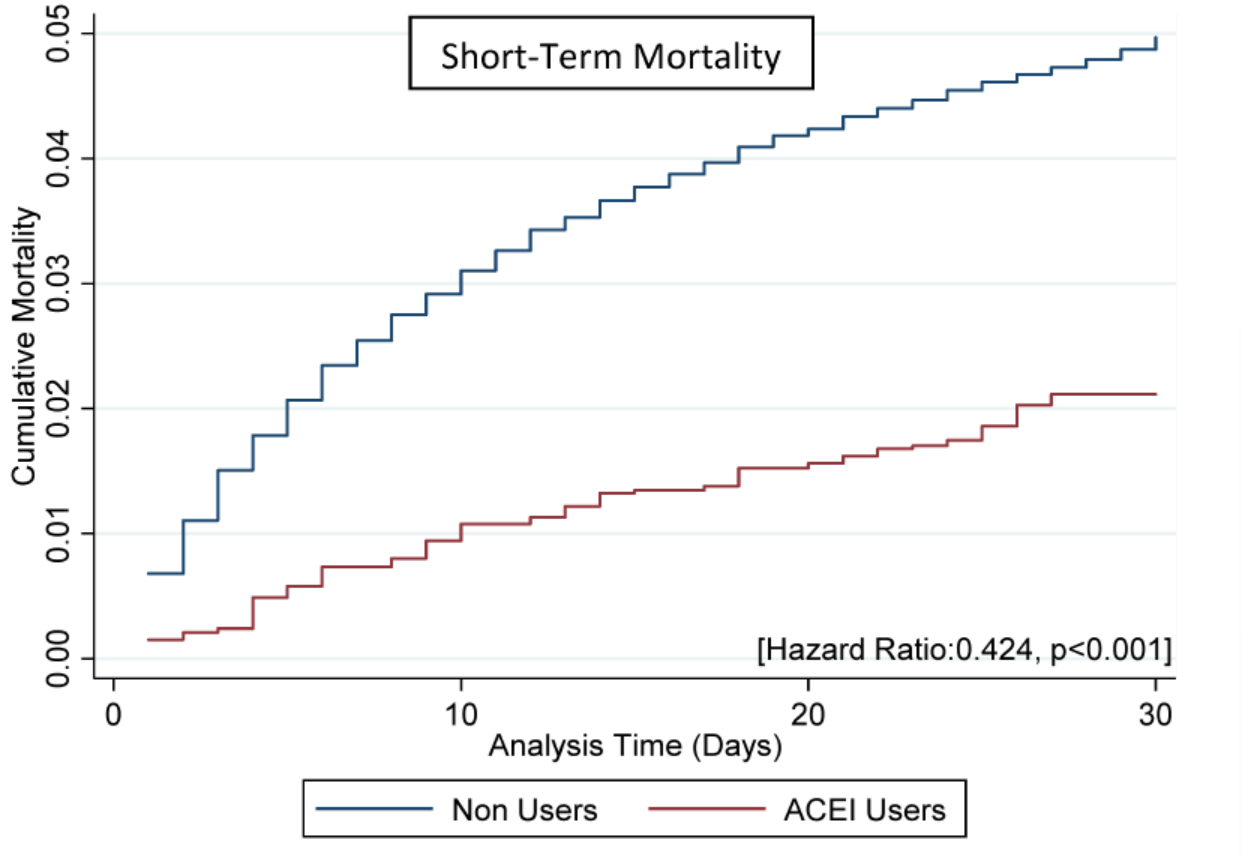
Donald P. Alexander[1] | Nancy A. Nickman[1] | Anindit Chhibber[1] | Gregory J. Stoddard[2] | Joseph E. Biskupiak[1] | Mark A. Munger[1,2]

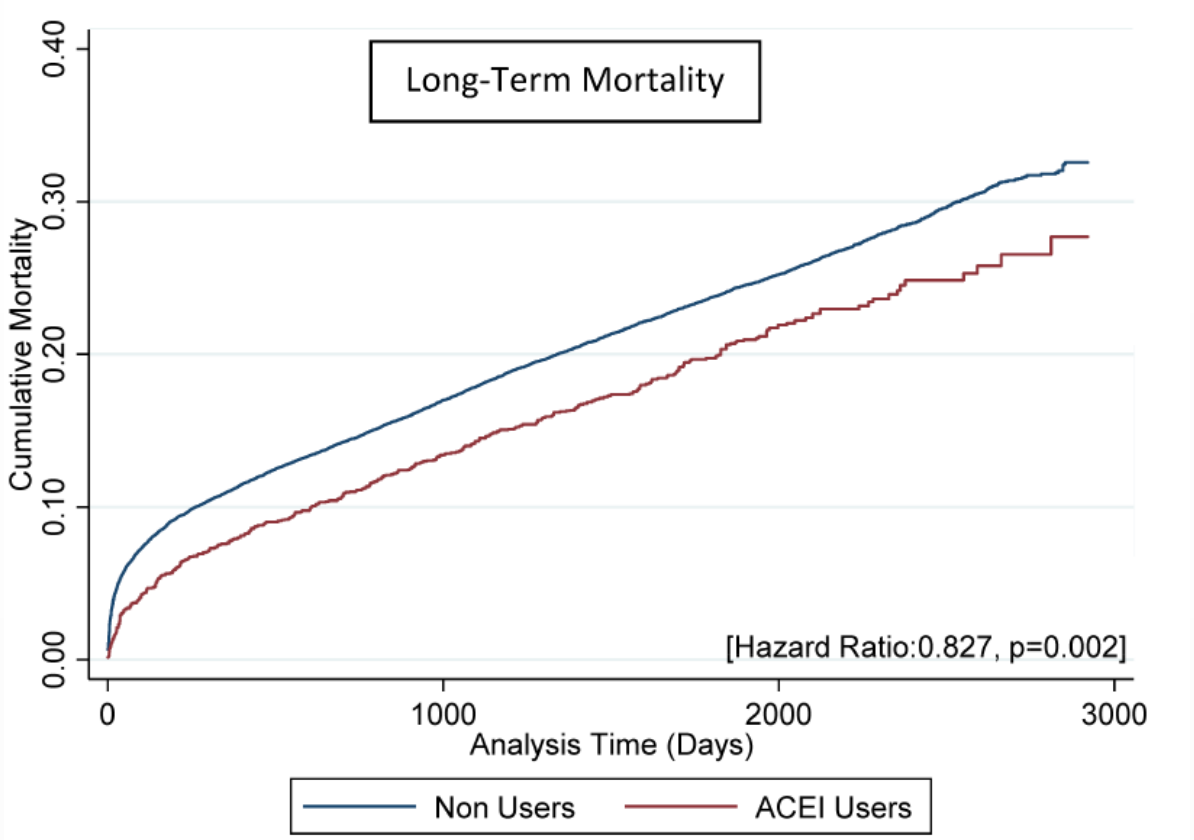
- Etude cas-témoins sur une base de donnée (1,8 M d'hab)
- Population > 65 ans : 29 011 patients
- Initiation d'IEC vs pas d'initiation
- Co-médications ++

Rappel :



Medication use (%)	
Antihyperlipidemics	58.19
Beta blockers	74.38
Calcium channel blockers	35.85
Diuretics	52.09
Analgesics—anti inflammatory	45.26
Analgesics—non-narcotics	94.74
Analgesics—opioids	89.55





Réduction du risque de pneumonie : **28%** (OR 0.72, 95% CI 0.51–0.99; *p* = 0.048)

JAMA

View Article

JAMA. 2021 Jul 27; 326(4): 324–331.
Published online 2021 Jul 27. doi: 10.1001/jama.2021.9899: 10.1001/jama.2021.9899

PMCID: PMC8317010
PMID: 34313686

Effect of 7 vs 14 Days of Antibiotic Therapy on Resolution of Symptoms Among Afebrile Men With Urinary Tract Infection

Characteristic	No./total No. (%)		Absolute difference, % (1-sided 97.5% CI)[a]
Resolution of UTI symptoms 14 days after stopping active antimicrobials	**7-Day antimicrobial + 7-day placebo group**	**14-Day antimicrobial group**	
As-treated population (primary analysis)	122/131 (93.1)	111/123 (90.2)	2.9 (–5.2 to ∞)
As-randomized population	125/136 (91.9)	123/136 (90.4)	1.5 (–5.8 to ∞)

Recurrence of UTI symptoms within 28 days of stopping study medication (secondary outcome)	7-Day antimicrobial + 7-day placebo group	14-Day antimicrobial group	Absolute difference, % (2-sided 95% CI)[b]
As-treated population	13/131 (9.9)	15/123 (12.9)	–3.0 (–10.8 to 6.2)
As-randomized population	14/136 (10.3)	23/136 (16.9)	–6.6 (–15.5 to 2.2)

Mrziglod *et al. BMC Infectious Diseases* (2023) 23:94
https://doi.org/10.1186/s12879-023-08064-8

BMC Infectious Diseases

RESEARCH Open Access

Reducing urinary catheter use in geriatric patients - results of a single-center champion-led intervention

L Mrziglod[1,2], S Saydan[3,4], F Schwab[3,4], D Zohlnhöfer-Momm[2], P Gastmeier[3,4] and S Hansen[3,4*]

Contents lists available at ScienceDirect

Diagnostic Microbiology and Infectious Disease

journal homepage: www.elsevier.com/locate/diagmicrobio

Antimicrobial Susceptibility Studies

Elderly versus nonelderly patients with invasive fungal infections: species distribution and antifungal resistance, SENTRY antifungal surveillance program 2017-2019

Michael A. Pfaller[a,b], Cecilia G. Carvalhaes[a], Sean DeVries[a], Michael D. Huband[a], Mariana Castanheira[a,*]

Table 1
Species distribution of opportunistic fungal pathogens by age group collected during 2017, 2018, 2019 in a global surveillance.

Organism	No. (%) of isolates/total by category			
	Total	Between 18-64 years	≥ 65 years	*P* value
Overall	4,496 (100.0%)	2,327/4,497 (51.7%)	2,170/4,497 (48.3%)	NA
Candida spp.	3,643/4,496 (81.0%)	1,847/2,327 (79.4)	1,796/2,170 (82.8%)	*0.0042*
Aspergillus spp.	593/4,497 (13.2%)	326/2,327 (14.0%)	267/2,170 (12.3%)	*0.1*
Mucorales group	38/4,497 (0.8%)	20/2,327 (0.9%)	18/2,170 (0.8%)	*1*
Scedosporium spp.	29/4,497 (0.6%)	14/2,327 (0.6%)	15/2,170 (0.7%)	*1*

Merci pour votre attention !

GInGer
Groupe Infectio-Gériatrie