Les nouveautés de l'année

Session JM1 • Communautaire

Olivier Le Rouzic

Praticien Hospitalo-Universitaire
Pneumologie Immunologie et Allergologie
CHRU de Lille – Université Lille 2

Conflits d'intérêts

- Prises en charge (congrès, séminaires…) :
  - Laboratoires pharmaceutiques : ALK, AstraZeneca, Bœhringer Ingelheim, Chiesi, GSK, ICOMED, LEO Pharma, Lilly, MSD, MundiPharma, Novartis, Pfizer, TEVA
  - Prestataires : Orkyn, Santelys, Vitalaire
- Honoraires (présentations) :
  - Laboratoires AstraZeneca, Bœhringer Ingelheim, Chiesi, Lilly, Novartis

Diagnostic

[Original Research]

CHEST

Community-Acquired Pneumonia Visualized on CT Scans but Not Chest Radiographs

Pathogens, Severity, and Clinical Outcomes

Cameron P. Upchurch, MD; Carlos G. Grijalva, MD, MPH; Richard G. Wunderink, MD; Derek J. Williams, MD, MPH; Grant W. Waterer, MBBS, PhD; Evan J. Anderson, MD; Yuwei Zhu, MD; Eric M. Hart, MD; Frank Carroll, MD; Anna M. Bramley, MPH; Seema Jain, MD; Kathryn M. Edwards, MD; and Wesley H. Self, MD, MPH

Upchurch et al. *Chest* 2017 *in press*

GREPI 5es JOURNÉES du GREPI

Diagnostic

Community-Acquired Pneumonia Visualized on CT Scans but Not Chest Radiographs

- 2251 patients dont 66 avec pneumopathie uniquement au scanner
  - 5 centres à Chicago (Illinois) et Nashville (Tenessee)
  - 1er janvier 2010 au 30 juin 2012

Upchurch et al. *Chest* 2017 *in press*

Diagnostic

Community-Acquired Pneumonia Visualized on CT Scans but Not Chest Radiographs

	CT only (n=66)	Rx (n=2185)	p
Age	53 [40-63]	58 [47-71]	< 0.01
Chest pain	66.7 %	48.7 %	< 0.01
Obesity	48.5 %	36.1 %	0.04
PSI risk class			
• I-II (low risk)	62.1 %	44.8 %	0.02
• III (moderate risk)	16.7 %	20.1 %	
• IV-V (high risk)	21.2 %	35.1 %	

Upchurch et al. *Chest* 2017 *in press*

Diagnostic

Community-Acquired Pneumonia Visualized on CT Scans but Not Chest Radiographs

Clinical Outcome	CT-Only Pneumonia (n = 66)	Pneumonia on Chest Radiography (n = 2,185)	*P* Value
In-hospital death, No. (%)	0 (0)	49 (2.2)	.40
Hospital length-of-stay among survivors, median (IQR), d	3.5 (2-5)	3 (2-6)	.90
ICU admission, No. (%)	15 (22.7)	467 (21.4)	.80
Invasive mechanical ventilation, No. (%)	4 (6.1)	113 (5.2)	.76
Vasopressor-dependent septic shock, No. (%)	3 (4.6)	84 (3.8)	.74
Moderate-severe ARDS, No. (%)	1 (1.5)	89 (4.1)	.52

Upchurch et al. *Chest* 2017 *in press*

Diagnostic

[Original Research **Chest Infections**]

CHEST

Invasive Disease vs Urinary Antigen-Confirmed Pneumococcal Community-Acquired Pneumonia

CrossMark

Adrian Ceccato, MD; Antoni Torres, MD, PhD; Catia Cilloniz, PhD; Rosanel Amaro, MD; Albert Gabarrus, MSc; Eva Polverino, MD, PhD; Elena Prina, MD; Carolina Garcia-Vidal, MD, PhD; Eva Muñoz-Conejero, PhD; Cristina Mendez, MD; Isabel Cifuentes, MD; Jorge Puig de la Bella Casa, MD; Rosario Menendez, MD, PhD; and Michael S. Niederman, MD

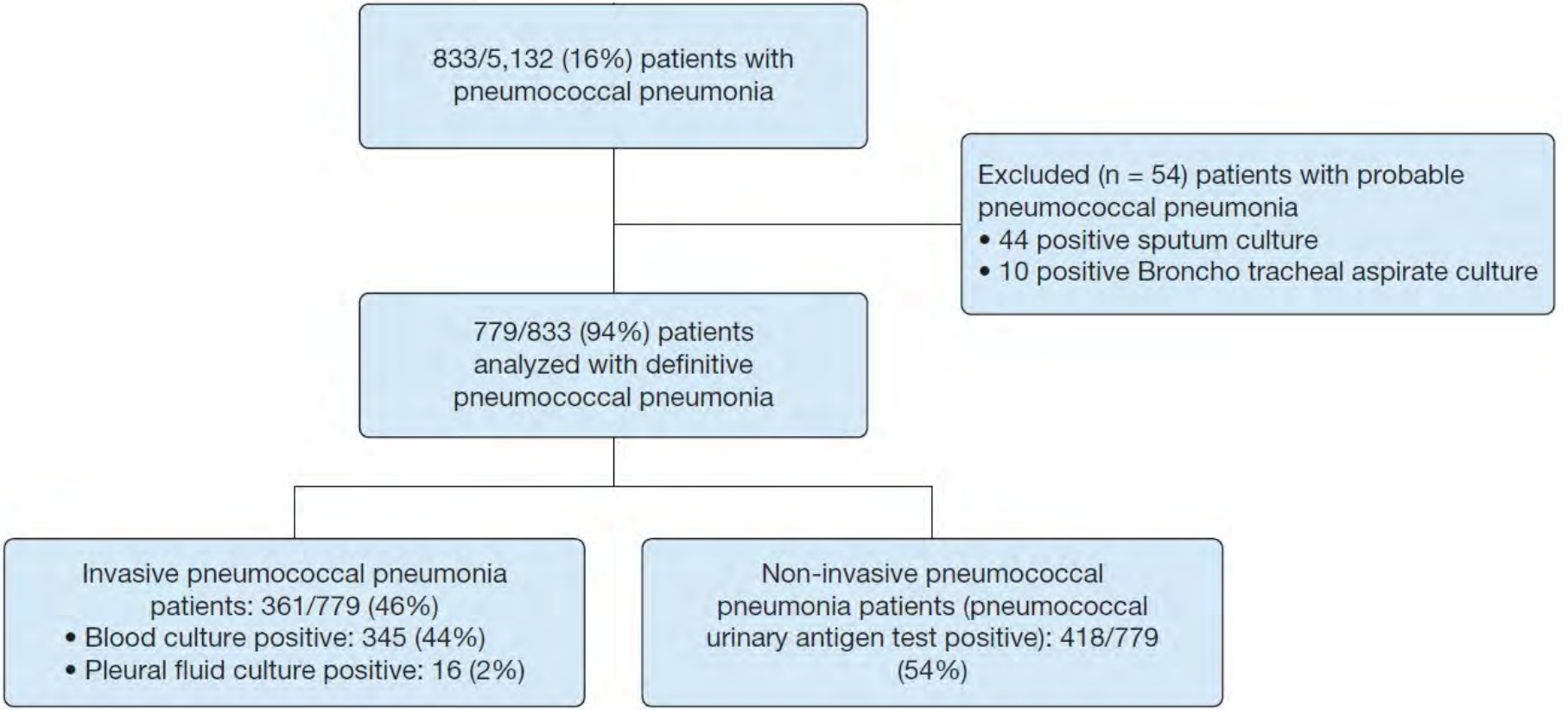
Ceccato et al. *Chest* 2017 ; 151 : 1311

GREPI

5es JOURNÉES du GREPI

Diagnostic

Invasive Disease vs Urinary Antigen-Confirmed Pneumococcal Community-Acquired Pneumonia



Ceccato et al. *Chest* 2017 ; 151 : 1311

Diagnostic

Invasive Disease vs Urinary Antigen-Confirmed Pneumococcal Community-Acquired Pneumonia

	Invasive (n=361)	Noninvasive (n=418)	p
Chronic pulmonary disease	128 (36)	186 (45)	0.016
Previous ATBT (last 2 mo)	39 (11)	71 (17)	0.022
ICU admission	97 (27)	83 (20)	0.021
Multilobar involvement	113 (31)	95 (23)	0.007
Pleural effusion	83 (23)	58 (14)	0.001
Septic shock	38 (11)	27 (7)	0.04
Acute renal failure	125 (35)	114 (28)	0.02
Time to clinical stability	6 [3-9]	5 [3-7]	0.026
Length of hospital stay	9 [5-14]	7 [5-10]	< 0.001
7-d mortality	9 (3)	5 (1)	0.17
30-d mortality	25 (7)	16 (4)	0.052

Ceccato et al. *Chest* 2017 ; 151 : 1311

Antibiothérapie

European Journal of Internal Medicine 43 (2017) 58–61

Contents lists available at ScienceDirect

European Journal of Internal Medicine

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

Original Article

Time to antibiotics administration and outcome in community-acquired pneumonia: Secondary analysis of a randomized controlled trial

Christophe Marti [a], Gregor John [b], Daniel Genné [c], Virginie Prendki [a], Olivier T. Rutschmann [d], Jérôme Stirnemann [a], Nicolas Garin [e,*]

[a] Department of Internal Medicine, Rehabilitation and Geriatrics, Geneva University Hospitals, Switzerland
[b] Department of Internal Medicine, Hôpital Neuchâtelois and Geneva University Hospitals, Switzerland
[c] Division of Internal Medicine, Centre Hospitalier de Bienne, Bienne, Switzerland
[d] Department of Community, Primary Care and Emergency Medicine, Division of Emergency Medicine, Geneva University Hospitals, Switzerland
[e] Department of General Internal Medicine, Riviera Chablais Hospitals and Geneva University Hospitals, Switzerland

Marti et al. *Eur J Int Med* 2017; 43 : 58

Antibiothérapie

Time to antibiotics administration and outcome in community-acquired pneumonia: Secondary analysis of a randomized controlled trial

- Analyse rétrospective des données d'une étude randomisée contrôlée
- 2 centres hospitaliers
- 371 patients (âge moyen 76 ans)
- Pneumopathie aiguë communautaire définie par :
  - au moins 2 symptômes d'infection respiratoire
  - présence de nouveaux infiltrats à la radiographie de thorax
- Exclusion :
  - pneumopathies aiguës communautaires sévères
  - patients immunodéprimés

Marti et al. *Eur J Int Med* 2017; 43 : 58

Antibiothérapie

Time to antibiotics administration and outcome in community-acquired pneumonia: Secondary analysis of a randomized controlled trial

Association between time to antibiotics (TTA), clinical variables and time to clinical stability (TCS).

Predictor variable	Univariate			Multivariate		
	Hazard Ratio of TCS	95% CI	*P* value	Hazard Ratio of TCS	95% CI	*P* value
TTA (hours)	1.015	0.985–1.046	0.339	1.009	0.977–1.042	0.574
CURB-65[a]	0.839	0.730–0.963	0.013	0.999	0.828–1.204	0.990
Number of co-morbidities	0.894	0.796–1.005	0.060	0.924	0.820–1.042	0.198
Number of symptoms and signs[b]	0.881	0.797–0.975	0.014	0.876	0.784–0.979	0.020
Age (year)	0.989	0.981–0.997	0.005	0.986	0.975–0.996	0.007
Heart rate	0.994	0.987–1.000	0.052	0.992	0.986–0.999	0.023
Respiratory rate	0.965	0.942–0.987	0.003	0.979	0.953–1.005	0.110
Hypoxemia[c]	0.674	0.524–0.868	0.002	0.771	0.590–1.007	0.056
Platelets (G/L)	0.998	0.997–1.000	0.011	0.998	0.996–0.999	0.004

Marti et al. *Eur J Int Med* 2017; 43 : 58

Antibiothérapie

Time to antibiotics administration and outcome in community-acquired pneumonia: Secondary analysis of a randomized controlled trial

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Marti et al. *Eur J Int Med* 2017; 43 : 58

Antibiothérapie

Time to antibiotics administration and outcome in community-acquired pneumonia: Secondary analysis of a randomized controlled trial

Association between early antibiotic administration and severe clinical events.

	TTA[a] < 4 h N. = 217 N. (%)	TTA > = 4 h N. = 154 N. (%)	*P* value
ICU[b] admission	15 (6.9)	5 (3.2)	0.162
In hospital death	4 (1.8)	5 (3.2)	0.498
30-day death	8 (3.7)	7 (4.5)	0.679
90-day death	14 (6.5)	13 (8.4)	0.467
30-day readmission	14 (6.5)	14 (9.1)	0.343
90-day readmission	27 (12.4)	32 (20.8)	0.030

Marti et al. *Eur J Int Med* 2017; 43 : 58

Antibiothérapie

Eur J Clin Microbiol Infect Dis (2017) 36:123–130
DOI 10.1007/s10096-016-2779-5

ORIGINAL ARTICLE

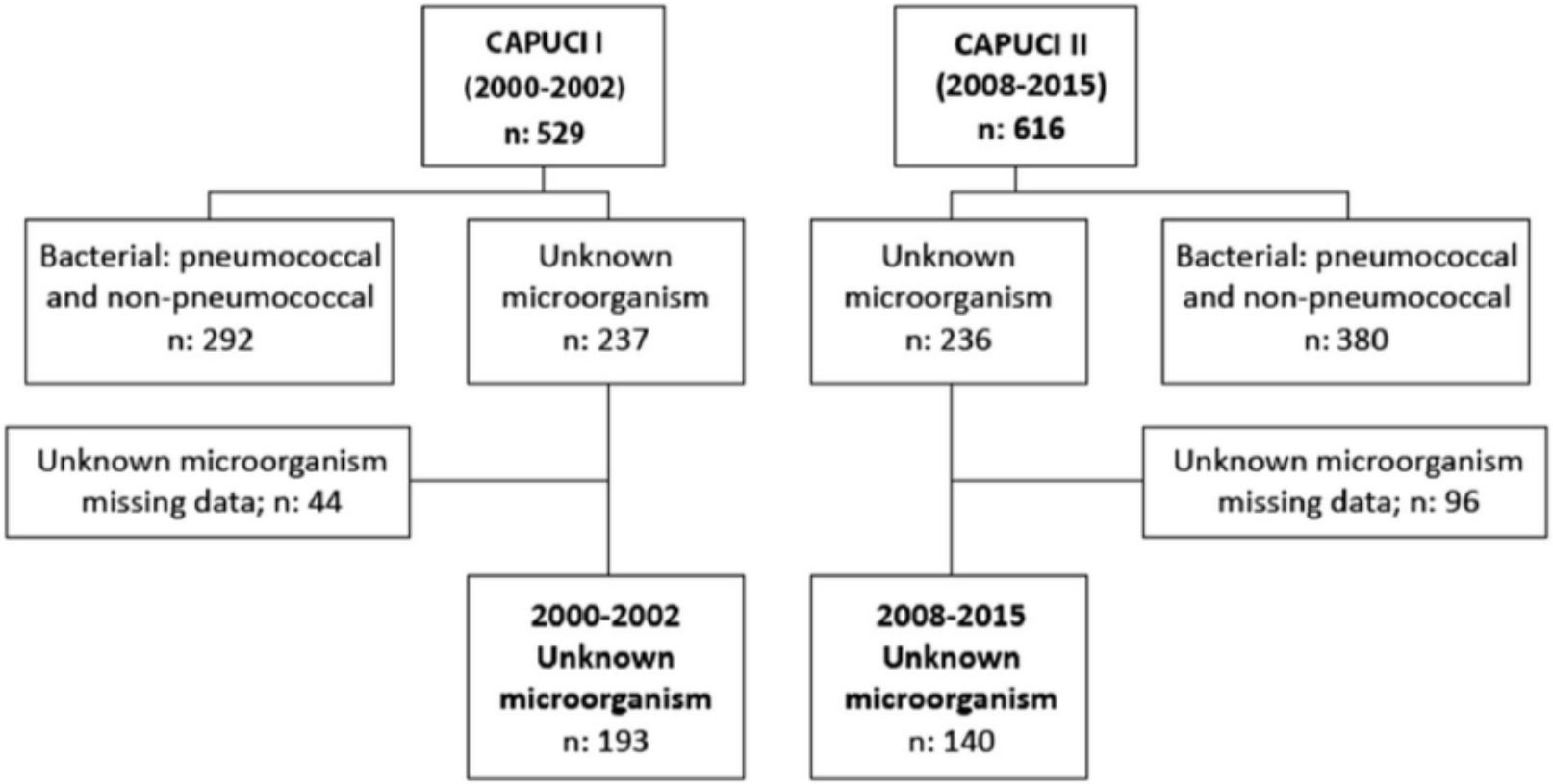
Improved survival among ICU-hospitalized patients with community-acquired pneumonia by unidentified organisms: a multicenter case–control study

J. Rello[1,2] · E. Diaz[2,3] · R. Mañez[4] · J. Sole-Violan[2,5] · J. Valles[2,6] · L. Vidaur[2,7] · R. Zaragoza[8] · S. Gattarello[9] · CAPUCI II Consortium

Marti et al. *Eur J Int Med* 2017; 43 : 58

Antibiothérapie

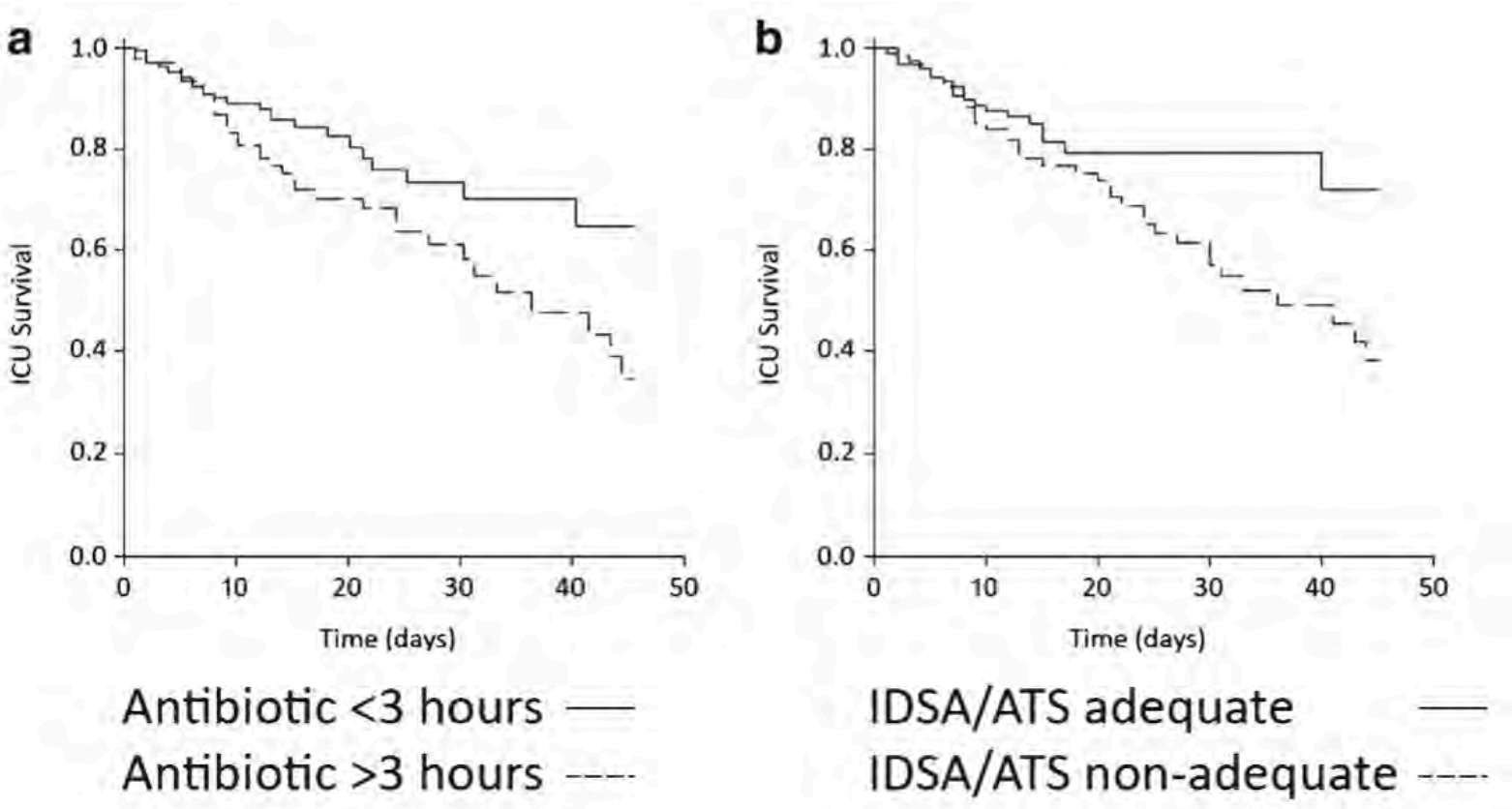
Improved survival among ICU-hospitalized patients with community-acquired pneumonia by unidentified organisms: a multicenter case–control study



Marti et al. *Eur J Int Med* 2017; 43 : 58

Antibiothérapie

Improved survival among ICU-hospitalized patients with community-acquired pneumonia by unidentified organisms: a multicenter case–control study



Rello et al. *Eur J Clin Microbiol Infect Dis* 2017 ; 36 : 123

Antibiothérapie

J Antimicrob Chemother 2017; **72**: 547–553
doi:10.1093/jac/dkw441 Advance Access publication 20 October 2016

Journal of Antimicrobial Chemotherapy

Impact of antibiotic de-escalation on clinical outcomes in community-acquired pneumococcal pneumonia

Diego Viasus[1]*, Antonella F. Simonetti[2], Carolina Garcia-Vidal[2,3], Jordi Niubó[4,5], Jordi Dorca[5,6] and Jordi Carratalà[2,3,5]

[1]Health Sciences Division, Faculty of Medicine, Hospital Universidad del Norte and Universidad del Norte, Barranquilla, Colombia; [2]Infectious Disease Department, Hospital Universitari de Bellvitge – IDIBELL, Barcelona, Spain; [3]Spanish Network for Research in Infectious Diseases (REIPI), Sevilla, Spain; [4]Microbiology Department, Hospital Universitari de Bellvitge – IDIBELL, Barcelona, Spain; [5]Clinical Science Department, Faculty of Medicine, University of Barcelona, Barcelona, Spain; [6]Respiratory Medicine Department, Hospital Universitari de Bellvitge – IDIBELL, Barcelona, Spain

Viasus et al. *J Antimicrob Chemother* 2017 ; 72 : 547

5es JOURNÉES du GREPI

Antibiothérapie

Impact of antibiotic de-escalation on clinical outcomes in community-acquired pneumococcal pneumonia

- Analyse rétrospective de données prospectives
- 1er février 1995 au 31 décembre 2014
- Pas de consigne particulière de désescalade
- 1283 épisodes de PAC à *S. pneumoniae*
  - 166 décrémentations thérapeutiques dans les premières 72 heures
  - 62 incrémentations inappropriées
  - 1055 décrémentations partielles ou maintiens des thérapeutiques

Viasus et al. *J Antimicrob Chemother* 2017 ; 72 : 547

Antibiothérapie

Impact of antibiotic de-escalation on clinical outcomes in community-acquired pneumococcal pneumonia

	De-escalation group (n=166)	Non-de-escalation group (n=1117)	*p*
Tachycardia (≥100)	78 (47.3)	609 (57.8)	0.01
Septic shock	11 (6.6)	154 (13.8)	0.01
Empyema	3 (1.8)	76 (6.8)	0.01
Multilobar pneumonia	32 (19.8)	401 (36.1)	< 0.001
High-risk PSI classes	96 (57.8)	739 (66.2)	0.03
ICU admission	2 (1.2)	167 (14.9)	< 0.001

Viasus et al. *J Antimicrob Chemother* 2017 ; 72 : 547

Antibiothérapie

Impact of antibiotic de-escalation on clinical outcomes in community-acquired pneumococcal pneumonia

Table 3. Factors associated with 30 day mortality in hospitalized patients with CAPP: multivariate analysis

	OR	95% CI	*P*
Age (>65 years old)	2.02	0.90–4.52	0.08
Comorbid condition	1.86	0.68–5.12	0.22
Pneumococcal vaccine, 5 years	0.38	0.13–1.13	0.08
Tachycardia (≥100 beats/min)	1.04	0.52–2.10	0.89
Septic shock	2.63	1.20–5.75	0.01
Multilobar pneumonia	2.13	1.06–4.26	0.03
Bacteraemia	2.19	1.05–4.56	0.03
Antibiotic de-escalation[a]	0.43	0.10–1.83	0.25

Viasus et al. *J Antimicrob Chemother* 2017 ; 72 : 547

Antibiothérapie

Contents lists available at ScienceDirect

Pulmonary Pharmacology & Therapeutics

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

Individualizing duration of antibiotic therapy in community-acquired pneumonia

Stefano Aliberti [a, *], Julio Ramirez [b], Fabio Giuliani [a], Timothy Wiemken [b], Giovanni Sotgiu [c], Sara Tedeschi [d], Manuela Carugati [e], Vincenzo Valenti [f], Marco Marchioni [g], Marco Camera [h], Roberto Piro [i], Manuela Del Forno [j], Giuseppe Milani [k], Paola Faverio [l], Luca Richeldi [m], Martina Deotto [n], Massimiliano Villani [o], Antonio Voza [p], Eleonora Tobaldini [q, r], Mauro Bernardi [s], Andrea Bellone [t], Matteo Bassetti [u], Francesco Blasi [a]

[a] *Department of Pathophysiology and Transplantation, University of Milan, Internal Medicine Department, Respiratory Unit and Cystic Fibrosis Adult Center, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy*

Aliberti et al. *Pulm Pharmacol Ther* 2017; 45 : 191

Antibiothérapie

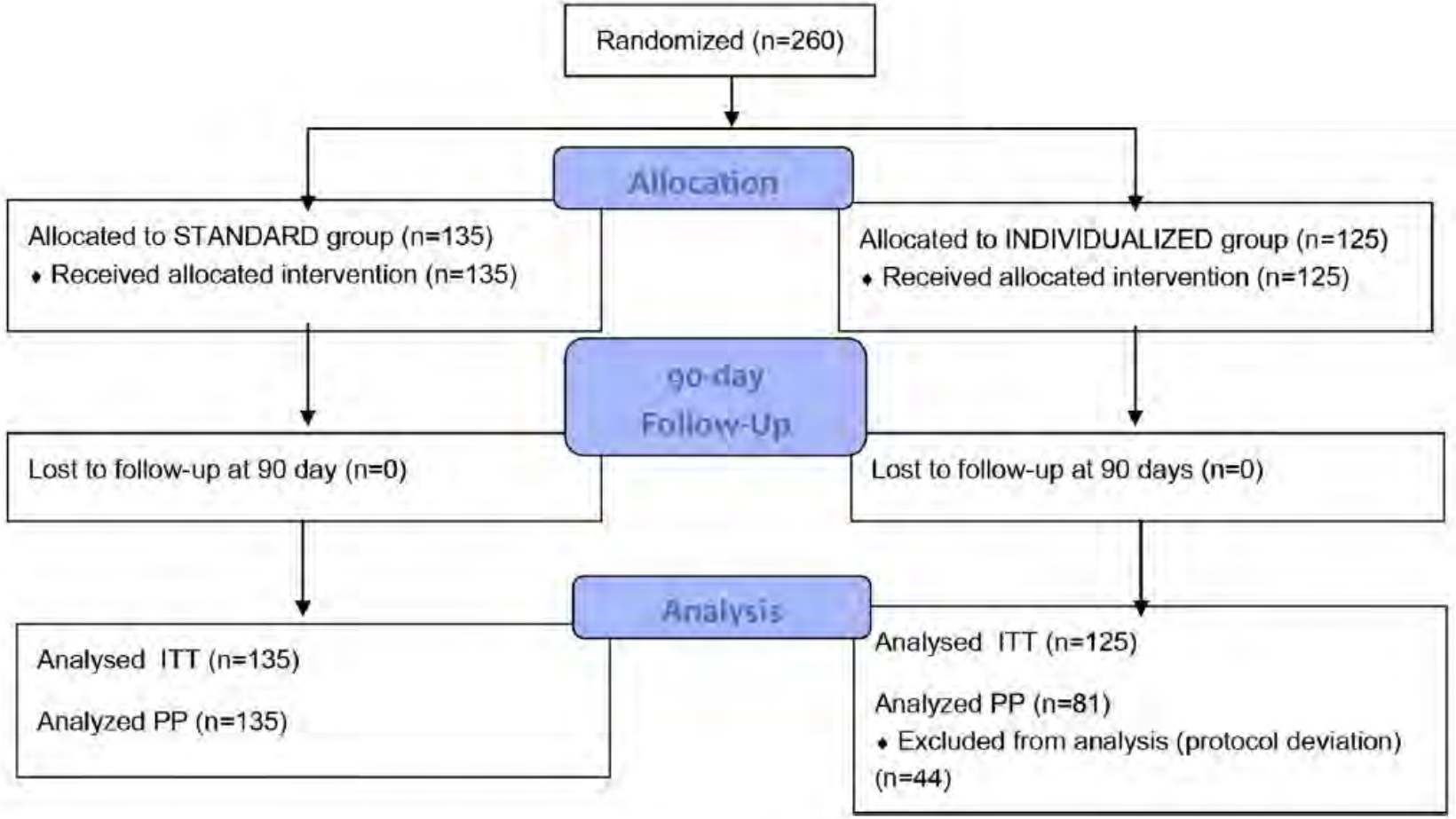
Individualizing duration of antibiotic therapy in community-acquired pneumonia

- Etude multicentrique (18 centres), randomisée, contrôlée, de non infériorité (NCT01492387)
- 1er janvier 2012 au 27 décembre 2014
- PAC de l'adulte répondant aux critères suivants :
  - ATBT probabiliste adaptée débutée dans les 24h de l'admission
  - stabilité clinique atteinte dans les 5er jours
- 2 bras :
  - Traitement standard
  - Traitement individualisé
    - arrêt des ATB 48h après obtention de la stabilité clinique
    - minimum de 5 jours de traitement

Aliberti et al. *Pulm Pharmacol Ther* 2017; 45 : 191

Antibiothérapie

Individualizing duration of antibiotic therapy in community-acquired pneumonia



Aliberti et al. *Pulm Pharmacol Ther* 2017; 45 : 191

Antibiothérapie

Individualizing duration of antibiotic therapy in community-acquired pneumonia

	Standard group n = 135	Individualized group n = 125	P
Early failure, n (%)	10 (7.4)	14 (11.2)	0.200
Single components of early failure			
Pneumonia-related complications, n (%)	1 (0.7)	2 (1.6)	0.471
Clinical failure during hospitalization, n (%)	1 (0.7)	5 (4.0)	0.090
A new course of antibiotics given for the pneumonia, n (%)	5 (3.7)	8 (6.4)	0.238
Re-hospitalization, n (%)	7 (5.2)	6 (4.8)	0.558
Mortality, n (%)	1 (0.7)	4 (3.2)	0.162

Aliberti et al. *Pulm Pharmacol Ther* 2017; 45 : 191

Epidémiologie

Three Decades of Follow-up of Adults After Recovery From Invasive Pneumococcal Pneumonia

Oluwadamilare O. Ajayi, BS, Nancy B. Norton, MD, Todd W. Gress, MD, MPH, Ronald J. Stanek, MS and Maurice A. Mufson, MD

Alayi et al. *Am J Med Sci* 2017 ; 353 : 445

Epidémiologie

Three Decades of Follow-up of Adults After Recovery From Invasive Pneumococcal Pneumonia

- 155 patients inclus entre 1983 et 2003 dans les suites d'une pneumopathie invasive à pneumocoque
- 3 hôpitaux à Huntington, West Virginia, USA
- évaluation des patients encore en vie le 30 juin 2014

Alayi et al. *Am J Med Sci* 2017 ; 353 : 445

Epidémiologie

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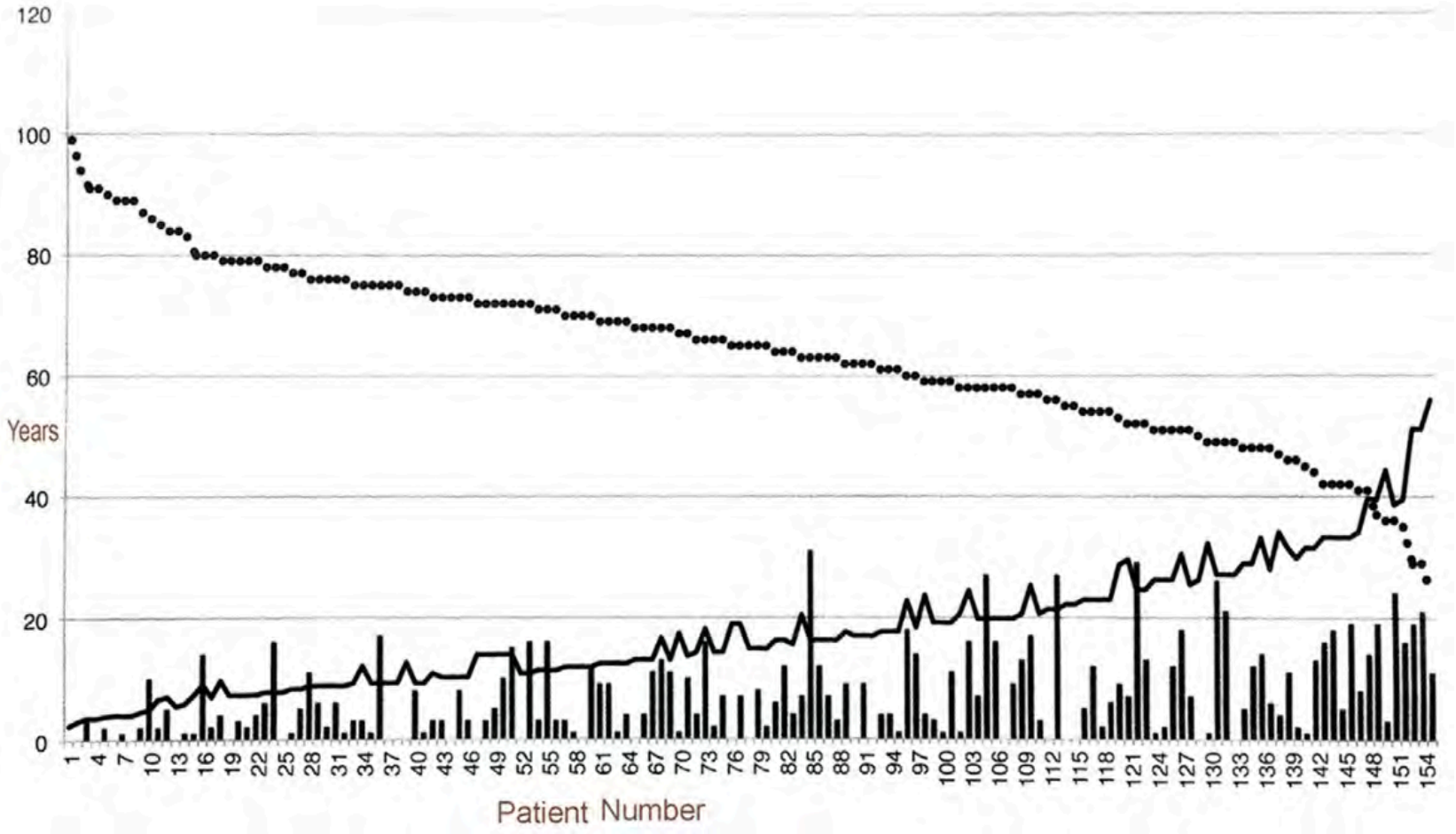
- 155 patients inclus entre 1983 et 2003 dans les suites d'une pneumopathie invasive à pneumocoque
- 3 hôpitaux à Hutington, West Virginia, USA
- évaluation des patients encore en vie le 30 juin 2014

- âge moyen 64,6 ans ± 14,2
- survie moyenne après épisode 7,1 années ± 7,1

Alayi et al. *Am J Med Sci* 2017 ; 353 : 445

Epidémiologie

Three Decades of Follow-up of Adults After Recovery From Invasive Pneumococcal Pneumonia



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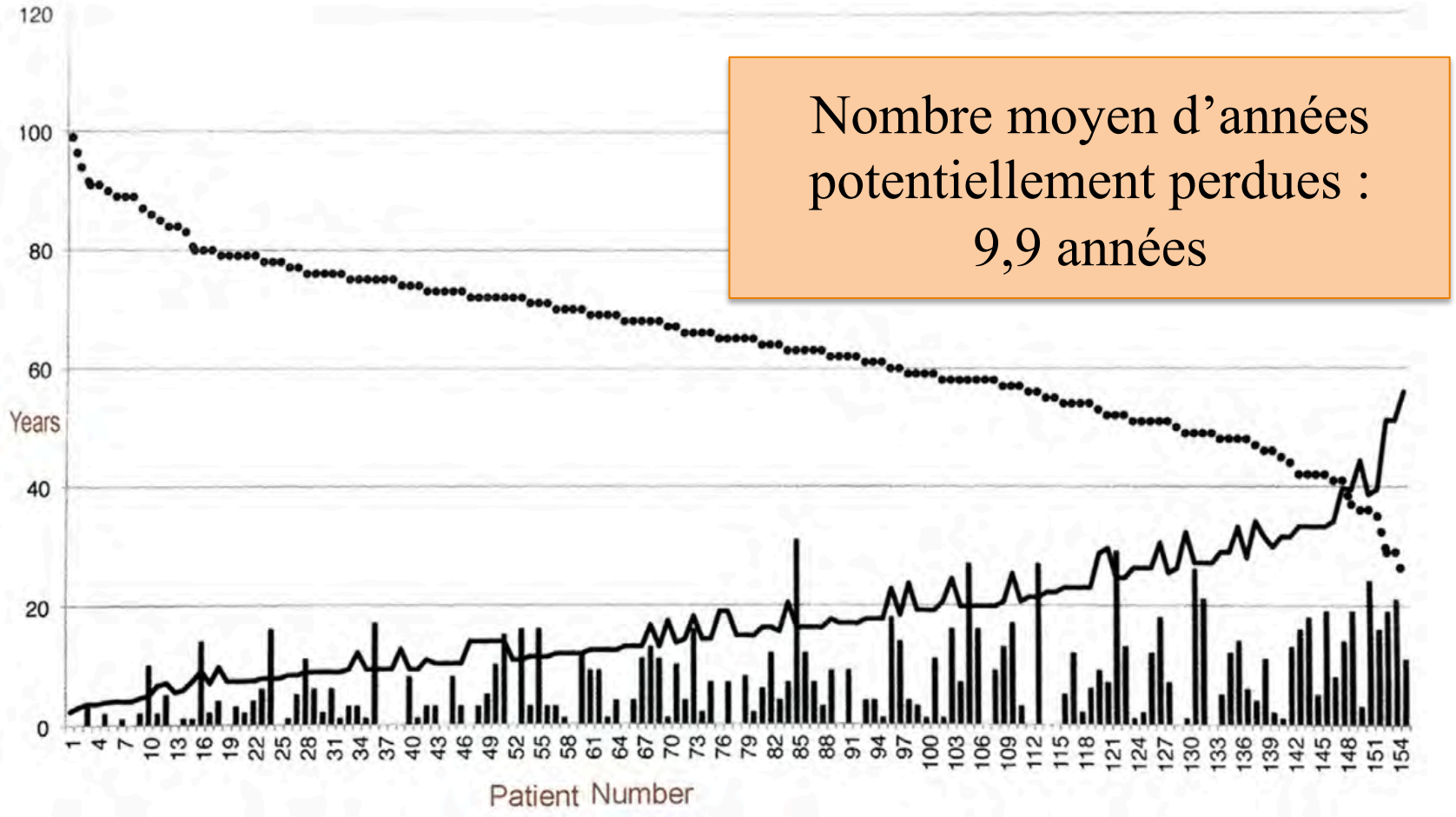


Nombre moyen d'années potentiellement perdues : 9,9 années

Alayi et al. *Am J Med Sci* 2017 ; 353 : 445

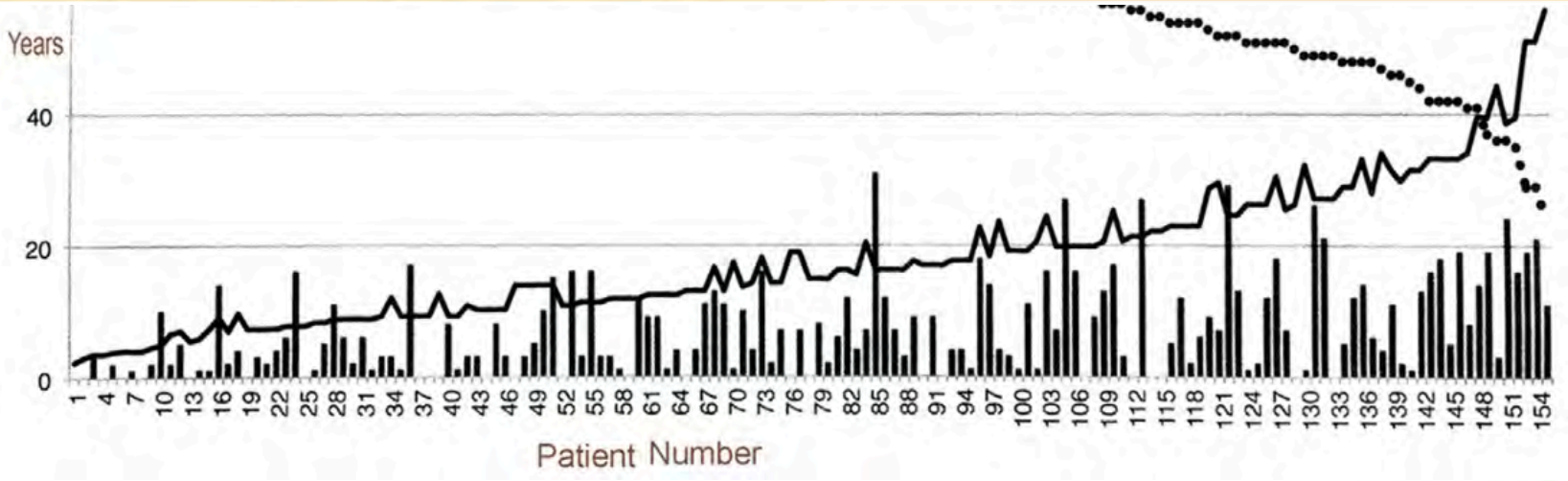
Epidémiologie

Three Decades of Follow-up of Adults After Recovery From Invasive Pneumococcal Pneumonia

120

Characteristic	Unadjusted hazard ratio (95% CI)	*P* Value	Adjusted hazard ratio (95% CI)[a]	*P* Value
Cancer	1.84 (1.26-2.68)	0.002	1.57 (1.07-2.30)	0.02
CNS	1.72 (1.16-2.55)	0.007	1.70 (1.14-2.53)	0.009
Number of chronic diseases[b]	1.31 (1.15-1.49)	<0.001	1.21 (1.06-1.38)	0.005

CI, confidence interval; CNS, central nervous system.
[a] Adjusted for age and sex.
[b] Hazard ratio for each 1-unit increase in the number of chronic diseases.



Alayi et al. *Am J Med Sci* 2017 ; 353 : 445

MERCI DE VOTRE ATTENTION