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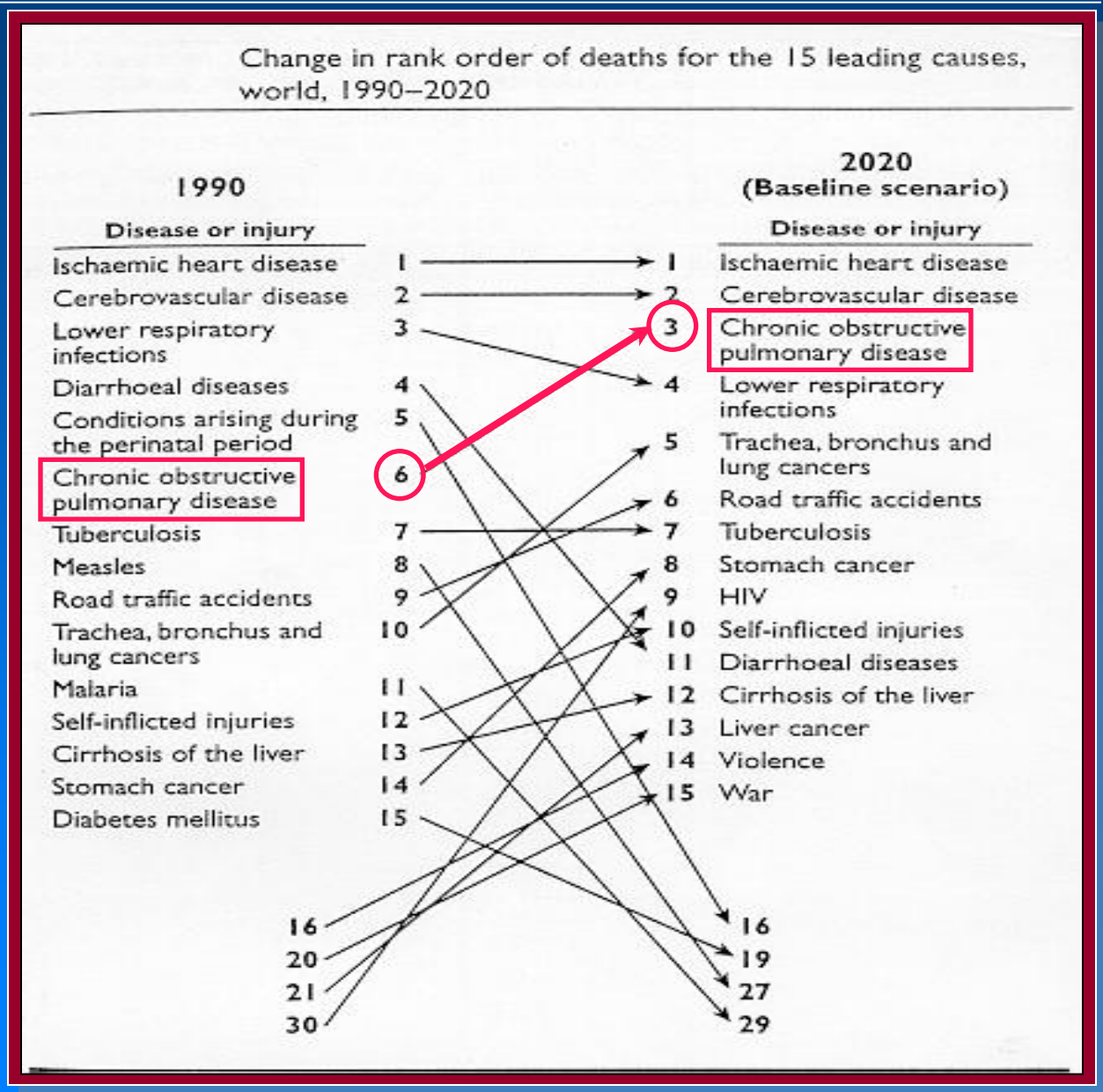
Epidemiologia, fattori di rischio e gestione del paziente

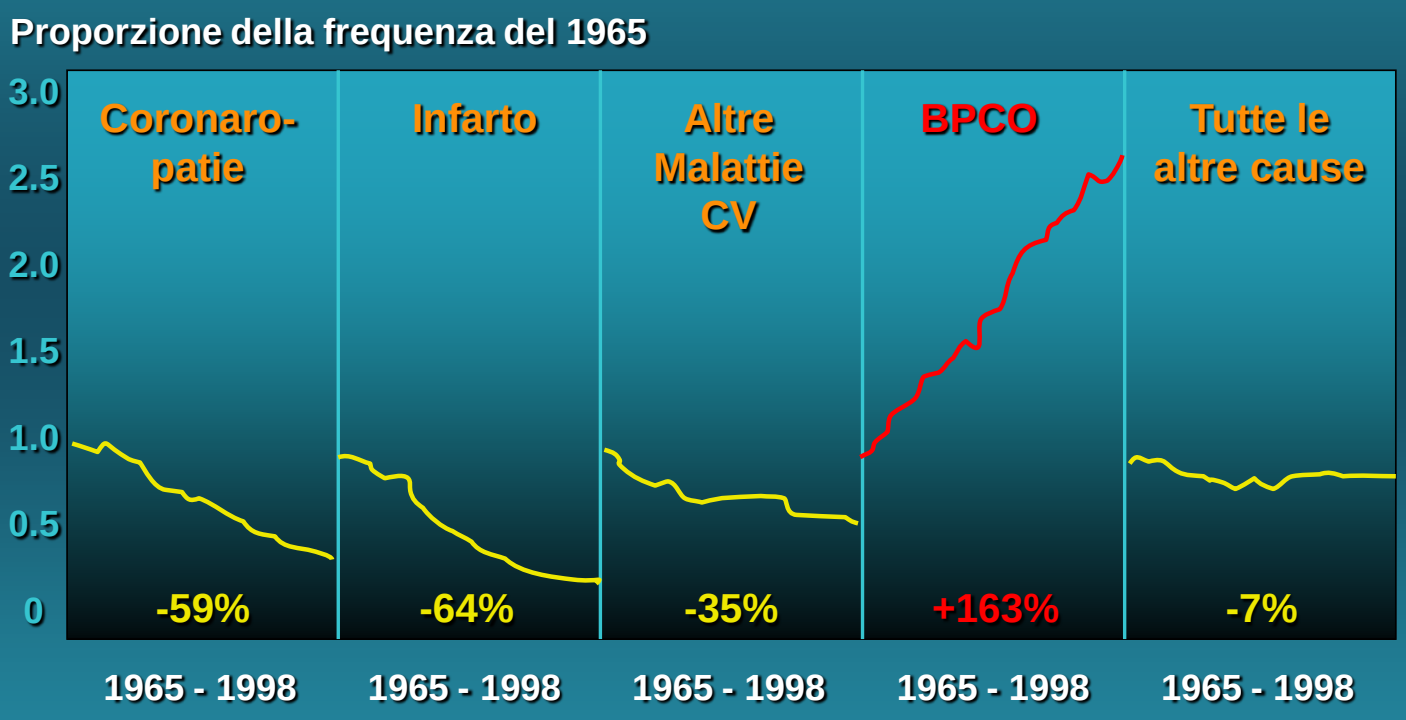
FRANCESCO DE BLASIO, MD, FCCP
U.F. PNEUMOLOGIA E
RIABILITAZIONE RESPIRATORIA
CASA DI CURA CLINIC CENTER S.P.A. - NAPOLI

Disclosures:
Il Dr. De Blasio ha ricevuto un grant educazionale non condizionato da parte di Pfizer



Lopez and Murray, Lancet 1997

VARIAZIONE PERCENTUALE DELLE MORTI PER ETA' IN U.S.A.



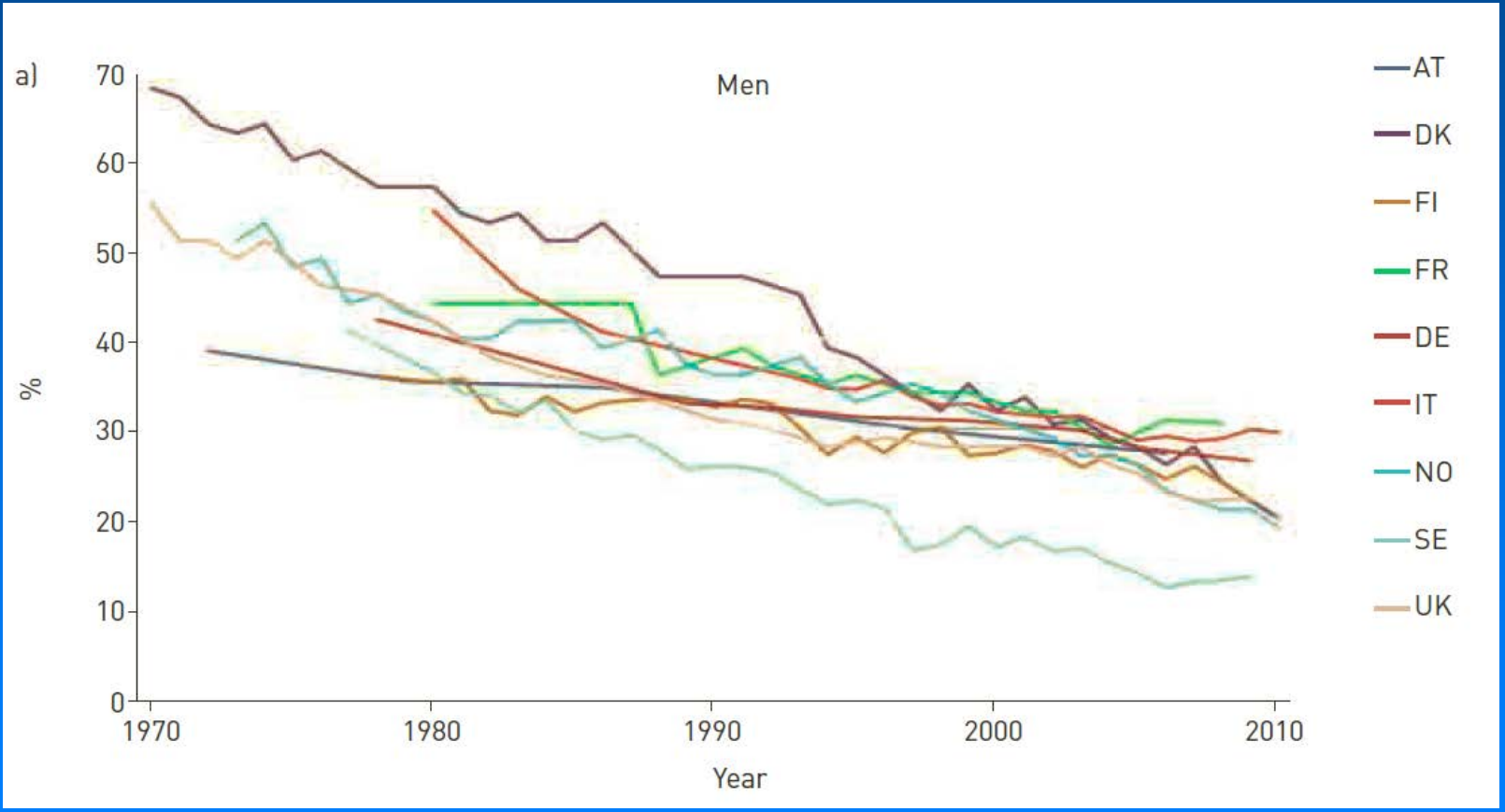

EUROPEAN LUNG
white book
RESPIRATORY HEALTH AND DISEASE IN EUROPE
european respiratory society every breath counts

ERS EUROPEAN RESPIRATORY SOCIETY

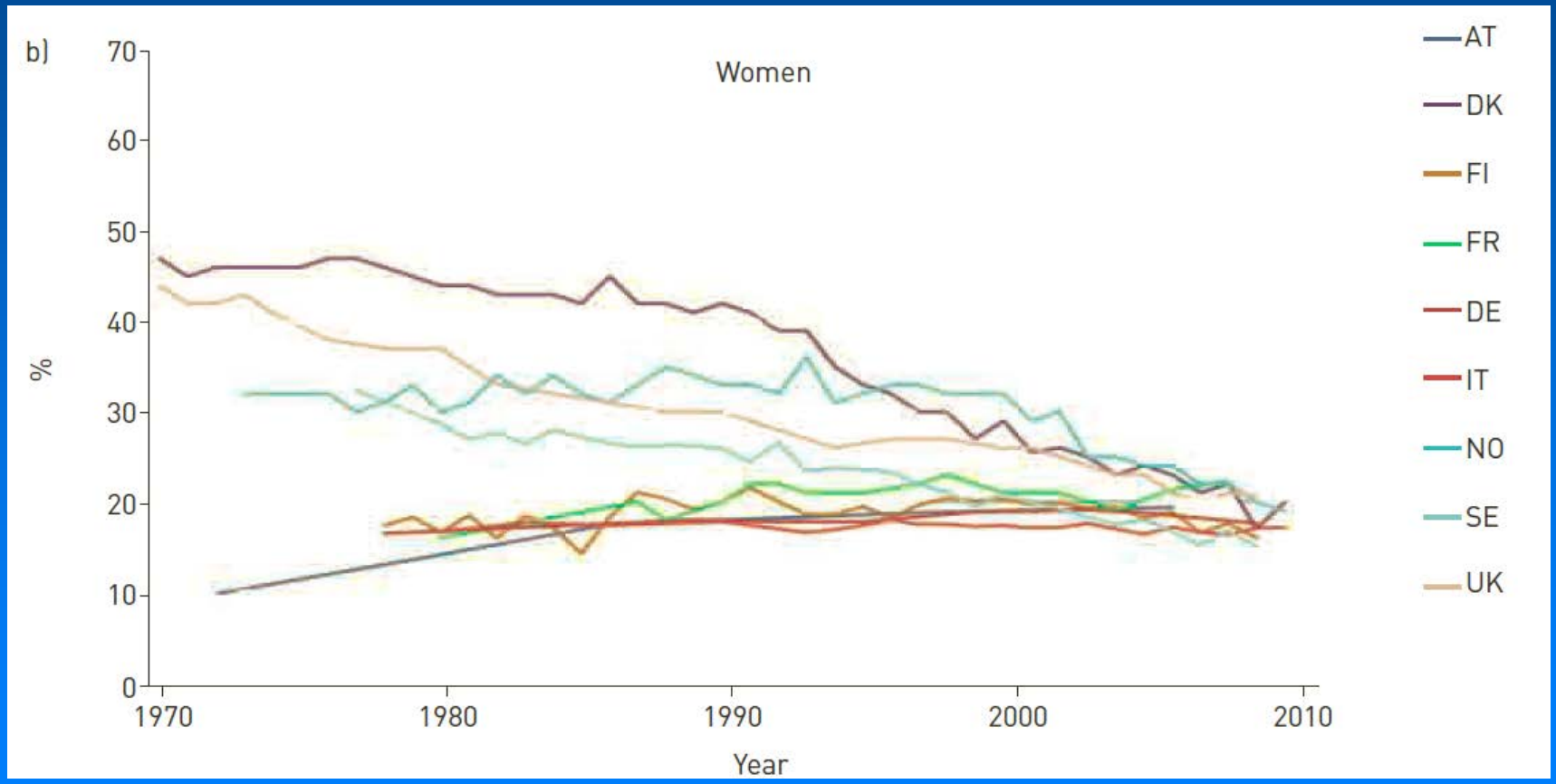
AMERICAN COLLEGE OF CHEST PHYSICIANS

Each year in EU28 countries, lung diseases cause two-thirds of a million deaths, and at least 6 million hospital admissions, accounting for over 43 million in-patient bed-days

ABITUDINE AL FUMO



ABITUDINE AL FUMO



RICOVERI

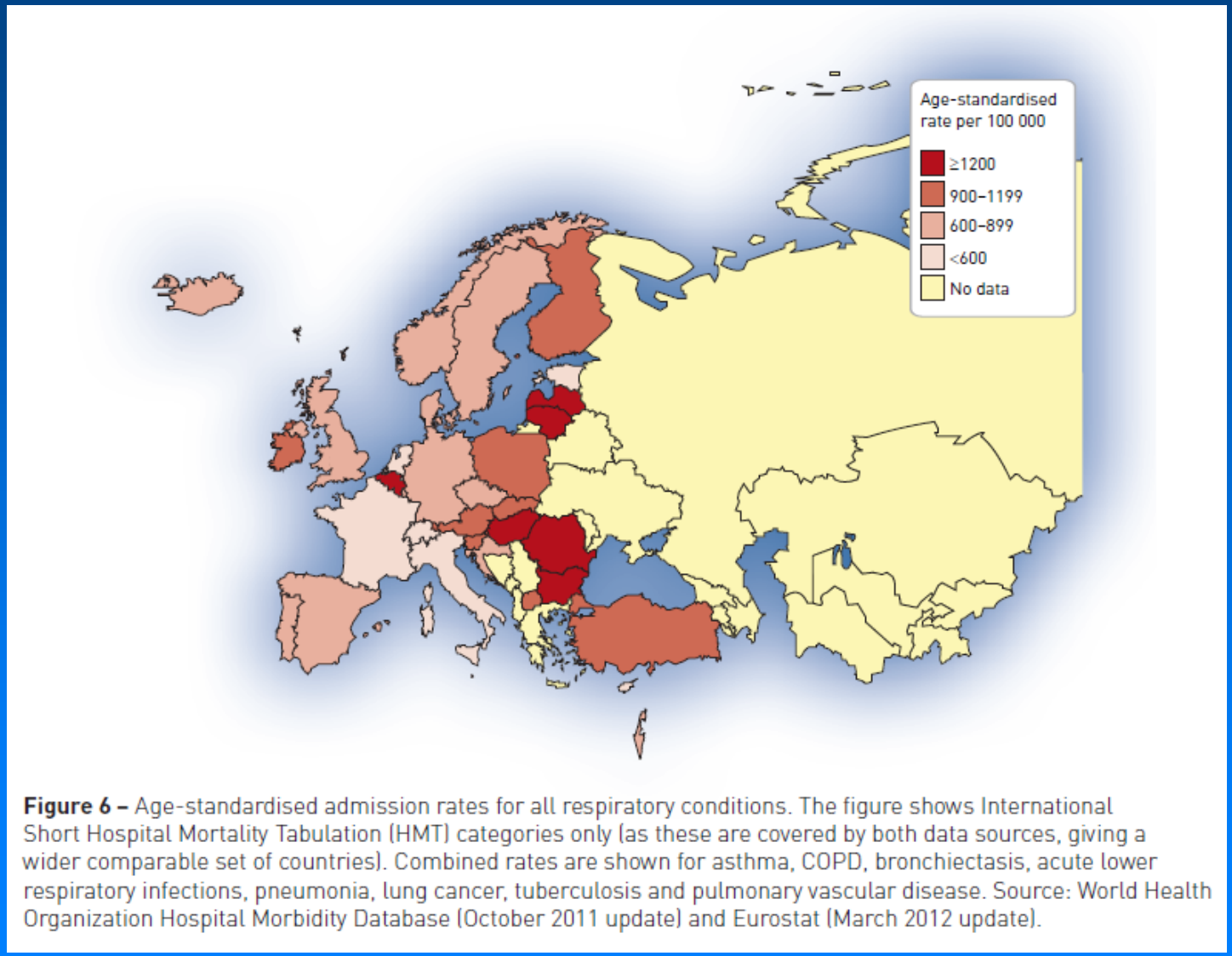


Figure 6 – Age-standardised admission rates for all respiratory conditions. The figure shows International Short Hospital Mortality Tabulation (HMT) categories only (as these are covered by both data sources, giving a wider comparable set of countries). Combined rates are shown for asthma, COPD, bronchiectasis, acute lower respiratory infections, pneumonia, lung cancer, tuberculosis and pulmonary vascular disease. Source: World Health Organization Hospital Morbidity Database (October 2011 update) and Eurostat (March 2012 update).

MORTALITA'

Deaths attributed to	Worldwide	WHO European Region
Ischaemic heart disease	7.3 million (12.8%)	2.40 million (24.7%)
Cerebrovascular disease	6.2 million (10.8%)	1.40 million (14.0%)
Lower respiratory infections	**3.5 million (6.1%)**	**0.23 million (2.3%)**
COPD	**3.3 million (5.8%)**	**0.25 million (2.5%)**
Diarrhoeal diseases	2.5 million (4.3%)	0.03 million (0.3%)
HIV/AIDS	1.8 million (3.1%)	0.08 million (0.8%)
Trachea/bronchus/lung cancer	**1.4 million (2.4%)**	**0.38 million (3.9%)**
Tuberculosis	**1.3 million (2.4%)**	**0.08 million (0.8%)**
Diabetes mellitus	1.3 million (2.2%)	0.17 million (1.7%)
Road traffic accidents	1.2 million (2.1%)	0.12 million (1.2%)

MORTALITA'

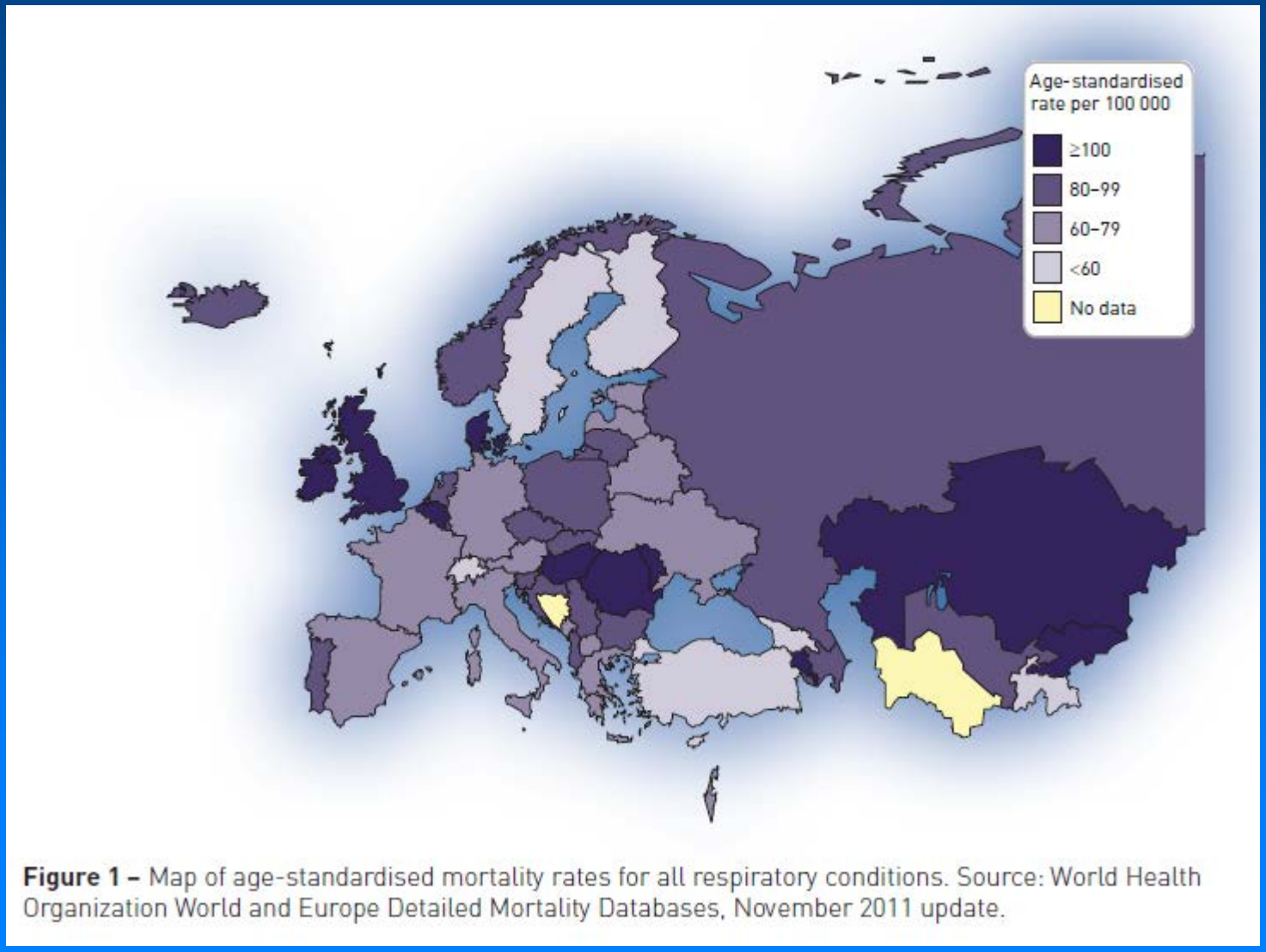
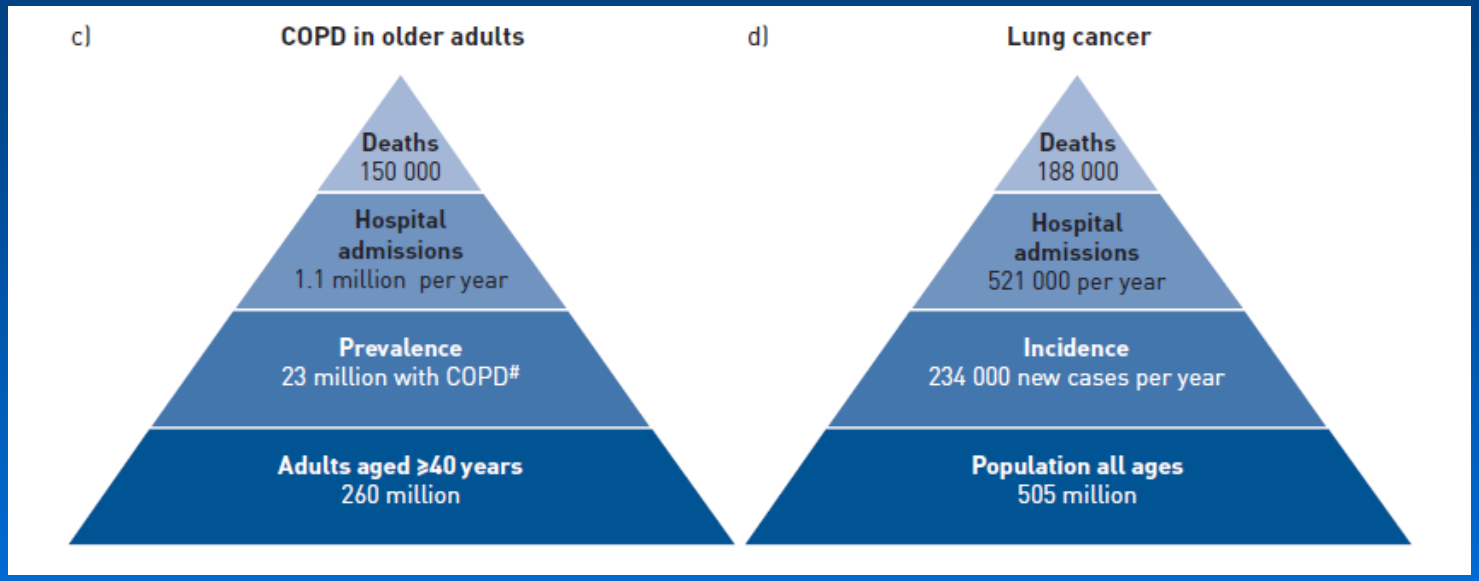
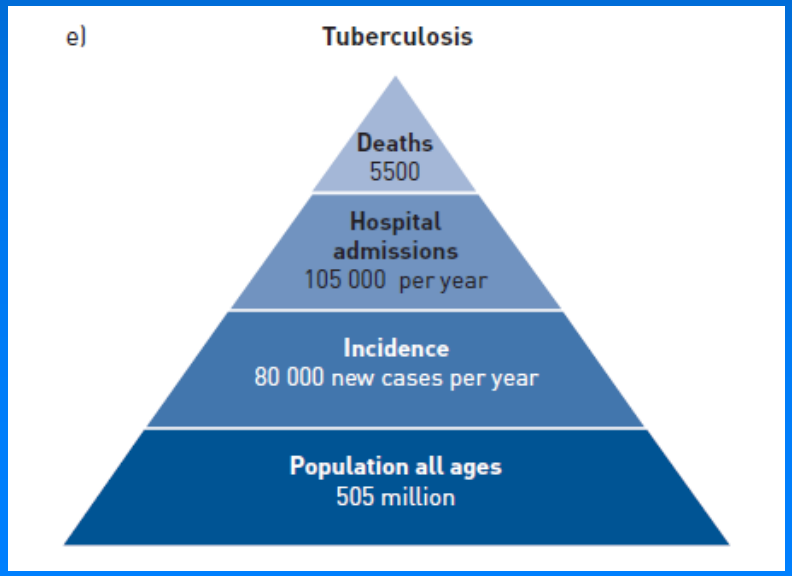


Figure 1 – Map of age-standardised mortality rates for all respiratory conditions. Source: World Health Organization World and Europe Detailed Mortality Databases, November 2011 update.

BPCO - TUMORI - TBC





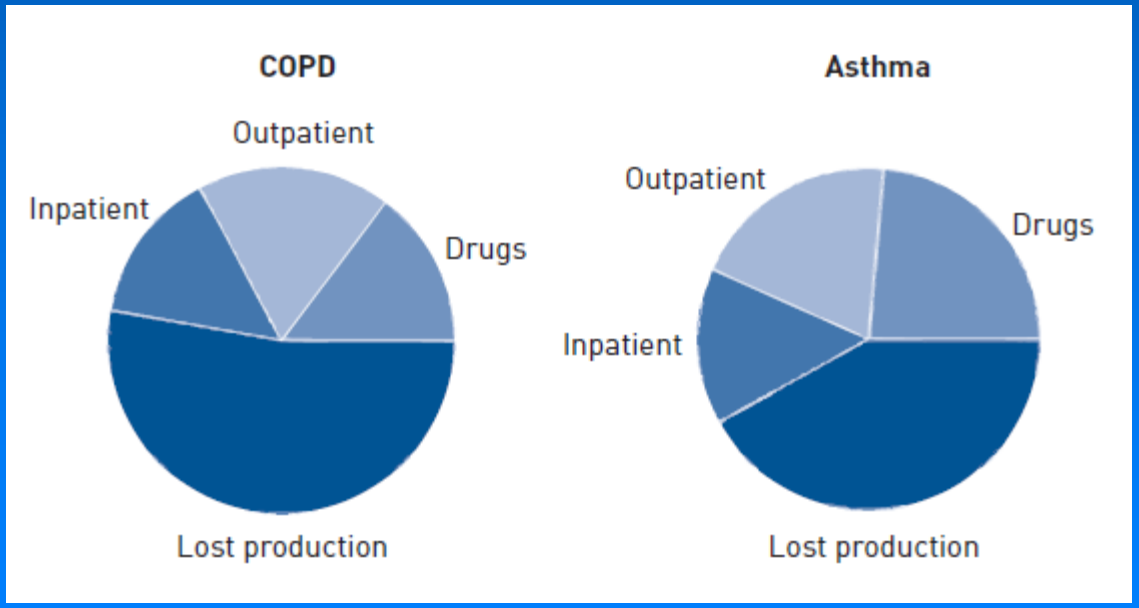
PROSPETTIVE

Percentage of deaths worldwide	2008	2015	2030
Lower respiratory infections	6.1	5.5	4.2
COPD	5.8	6.6	8.6
Trachea/bronchus/lung cancer	2.4	2.8	3.4
Tuberculosis	2.4	1.6	3.4
Percentage of deaths in WHO European region	**2008**	**2015**	**2030**
Lower respiratory infections	2.3	2.2	1.9
COPD	2.5	2.7	3.2
Trachea/bronchus/lung cancer	3.9	3.9	4.1
Tuberculosis	0.8	0.7	0.4

Percentage of DALYs worldwide	2008	2015	2030
Lower respiratory infections	5.4	4.6	3.2
COPD	2.3	2.7	3.8
Trachea/bronchus/lung cancer	0.9	1.0	1.4
Tuberculosis	2.0	1.6	1.1
Percentage of DALYs in WHO European region	**2008**	**2015**	**2030**
Lower respiratory infections	1.5	1.3	1.0
COPD	2.0	2.0	2.2
Trachea/bronchus/lung cancer	2.2	2.2	2.6
Tuberculosis	1.2	1.1	0.6

COSTI

	Drug cost	Outpatient cost	Inpatient cost	Total direct#	Total indirect¶
COPD	7.1	8.9	7.3	23.3	25.1
Asthma	8.0	6.7	4.8	19.5	14.4



COSTI

	Direct costs# € bn	Indirect costs¶ € bn	Monetised value of DALYs lost € bn	Total costs € bn
COPD	23.3	25.1	93.0	141.4
Asthma	19.5	14. 4	38.3	72.2
Lung cancer	3.35	NA	103.0	106.4
TB	0.54#	#	5.37	5.9
OSAS	5.2	1.9	NA	7.1
Cystic fibrosis	0.6	NA	NA	0.6
Pneumonia/ALRI	2.5	NA	43.5	46.0
Total	55.0	41.4	283.2	379.6

Disease	DALYs lost per year (thousands)	Annual monetised value € bn
Lung cancer	1873	103.0
COPD	1691	93.0
TB	103	5.6
Pneumonia/ALRI	790	43.5
Asthma	697	38.3
Total	5154	283.4

BRONCOPATIA CRONICA OSTRUTTIVA

ASMA BRONCHIALE

FIBROSI

TUMORI

INSUFFICIENZA RESPIRATORIA

OSAS

RIABILITAZIONE RESPIRATORIA

B.P.C.O.

TRAPIANTO

ASMA BRONCHIALE

FIBROSI

TUMORI

INSUFFICIENZA RESPIRATORIA

OSAS

RIABILITAZIONE RESPIRATORIA

B.P.C.O.

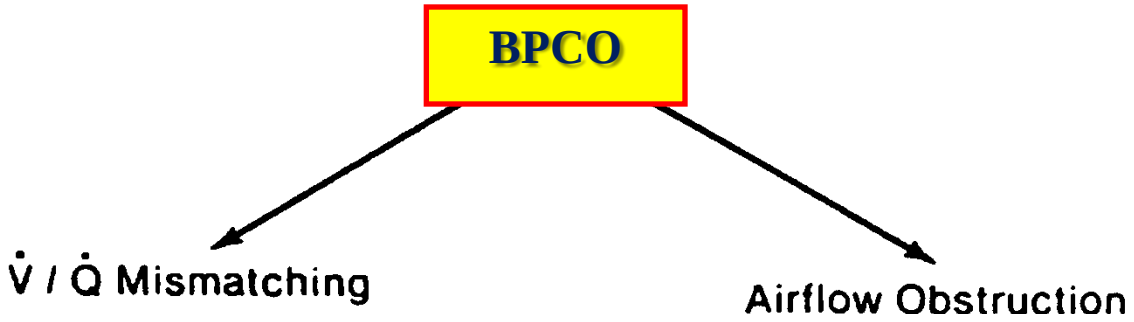
TRAPIANTO

FISIOPATOLOGIA DELLA BPCO

BPCO

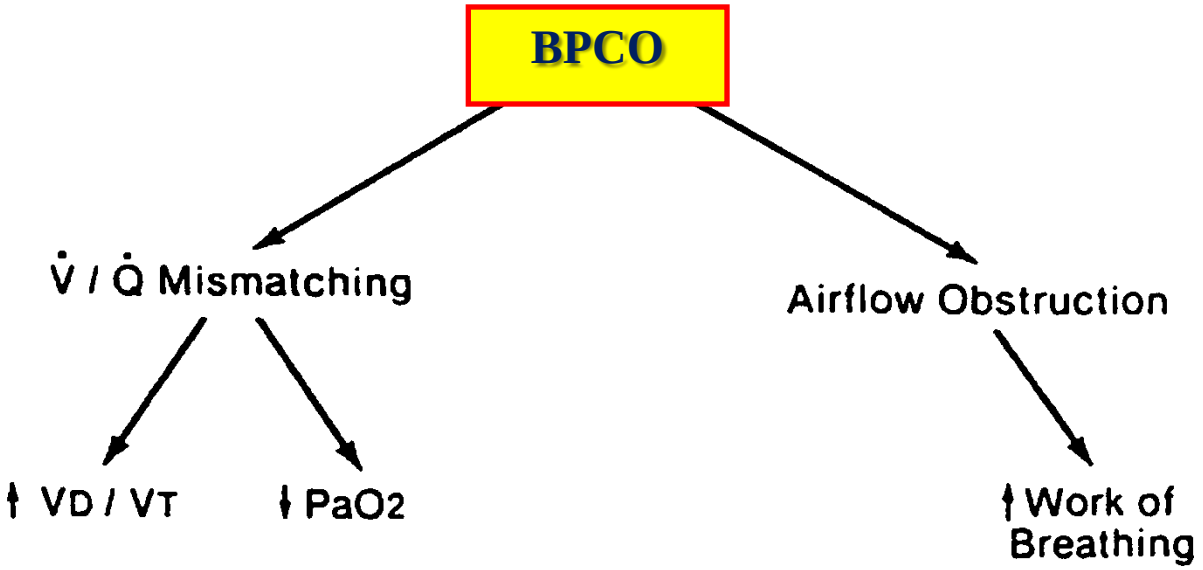
LIMITAZIONE ESERCIZIO FISICO - DISPNEA

FISIOPATOLOGIA DELLA BPCO



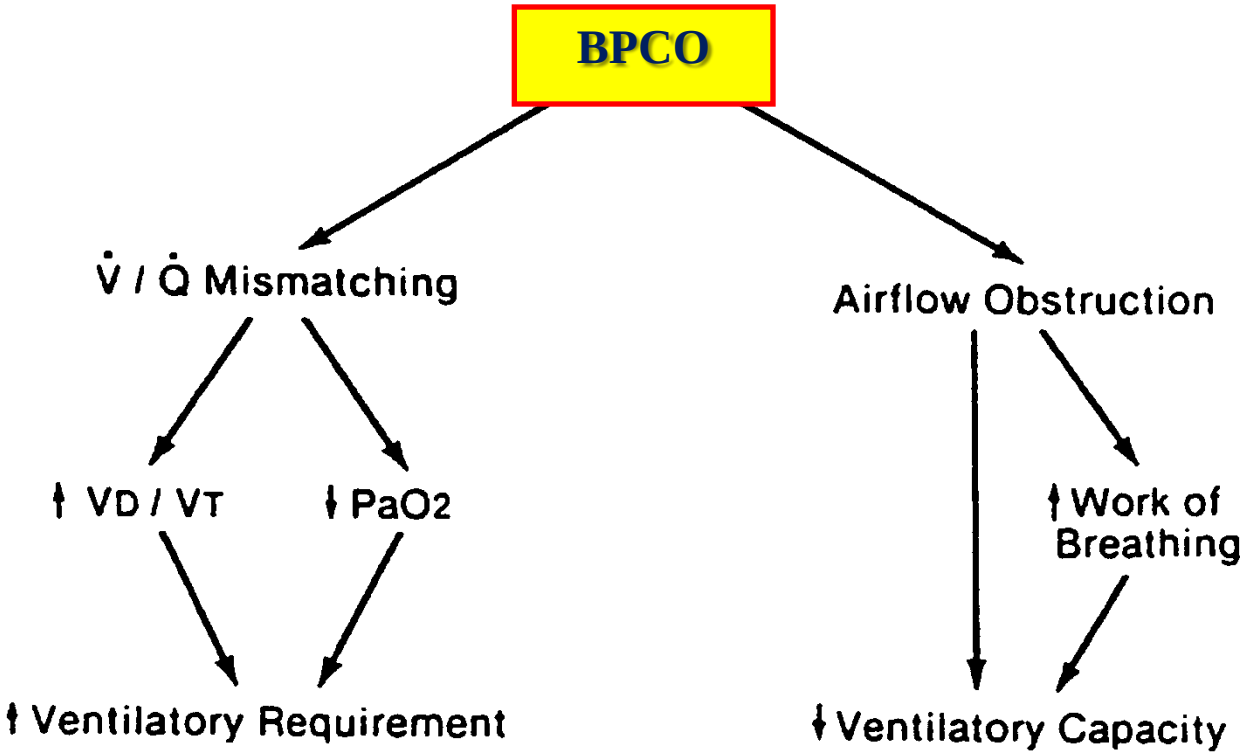
LIMITAZIONE ESERCIZIO FISICO - DISPNEA

FISIOPATOLOGIA DELLA BPCO



LIMITAZIONE ESERCIZIO FISICO - DISPNEA

FISIOPATOLOGIA DELLA BPCO



LIMITAZIONE ESERCIZIO FISICO - DISPNEA

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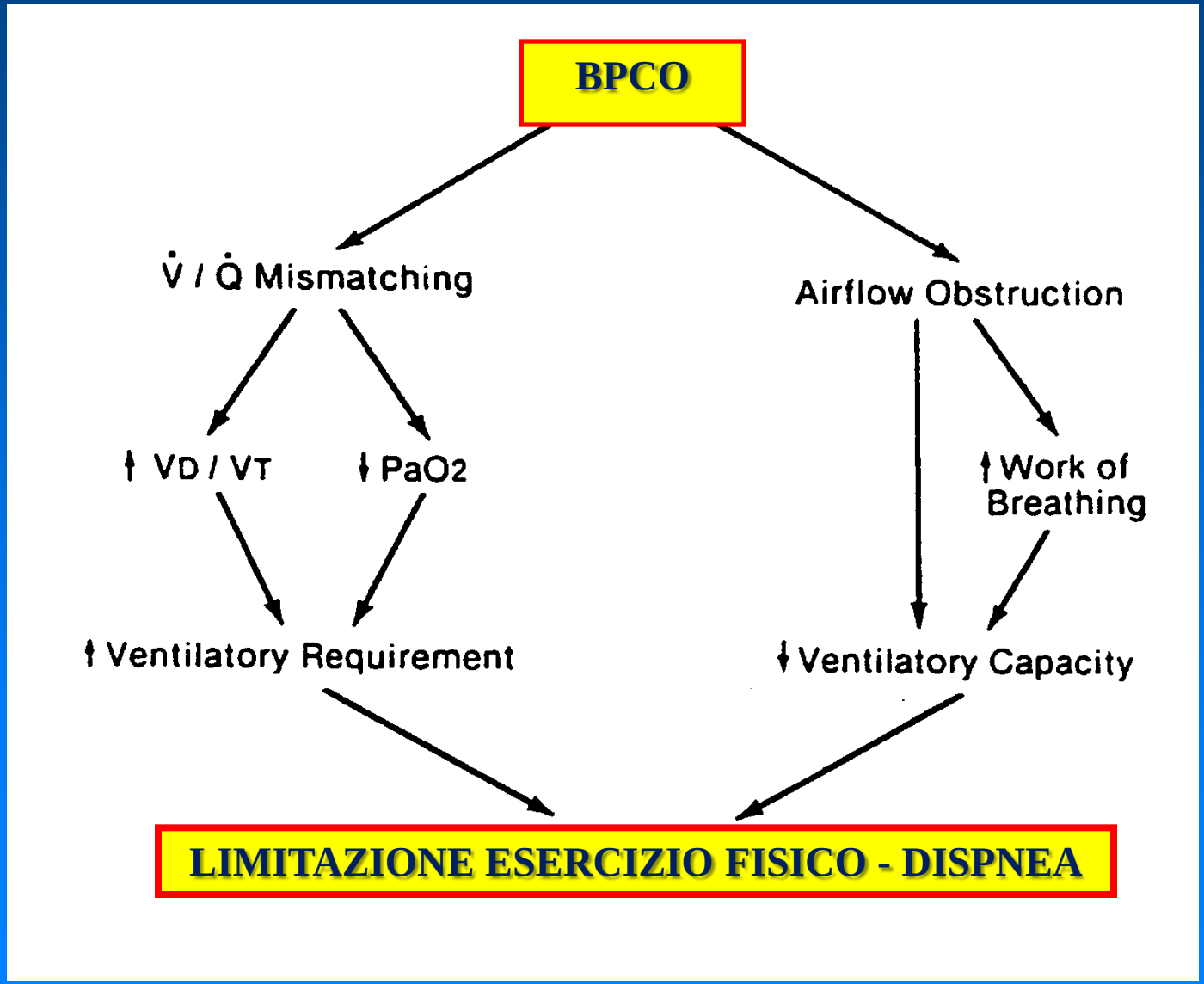


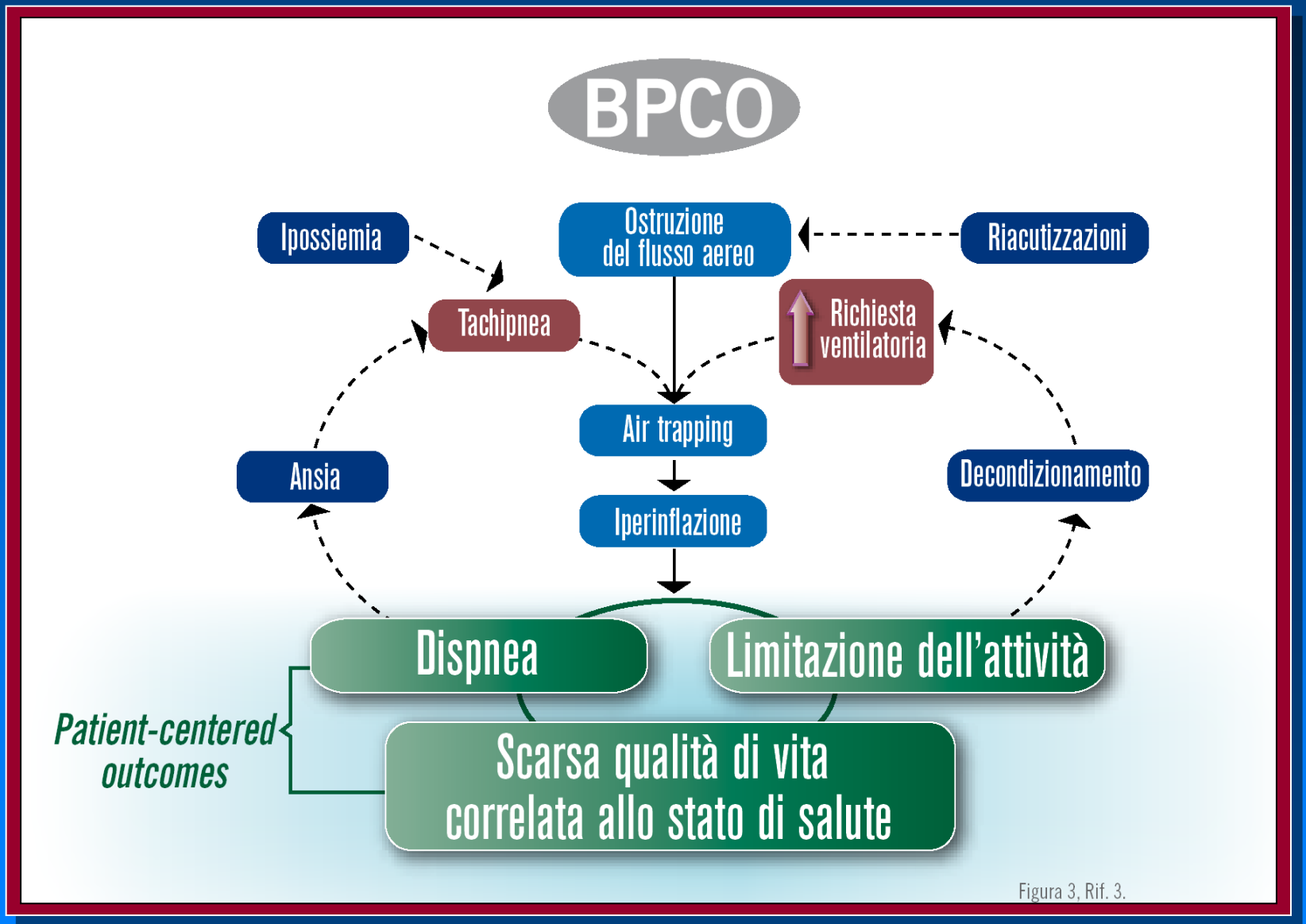
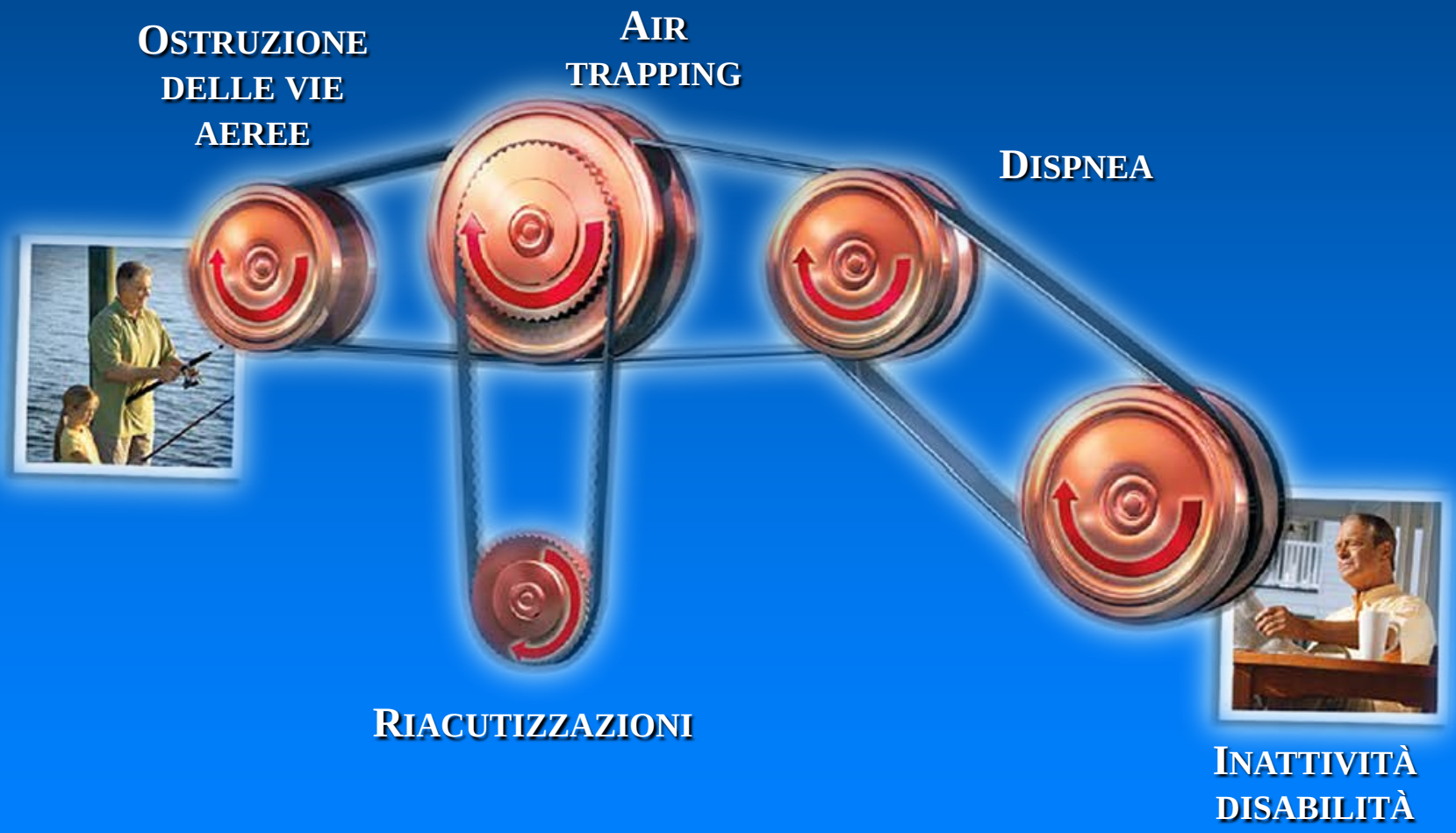


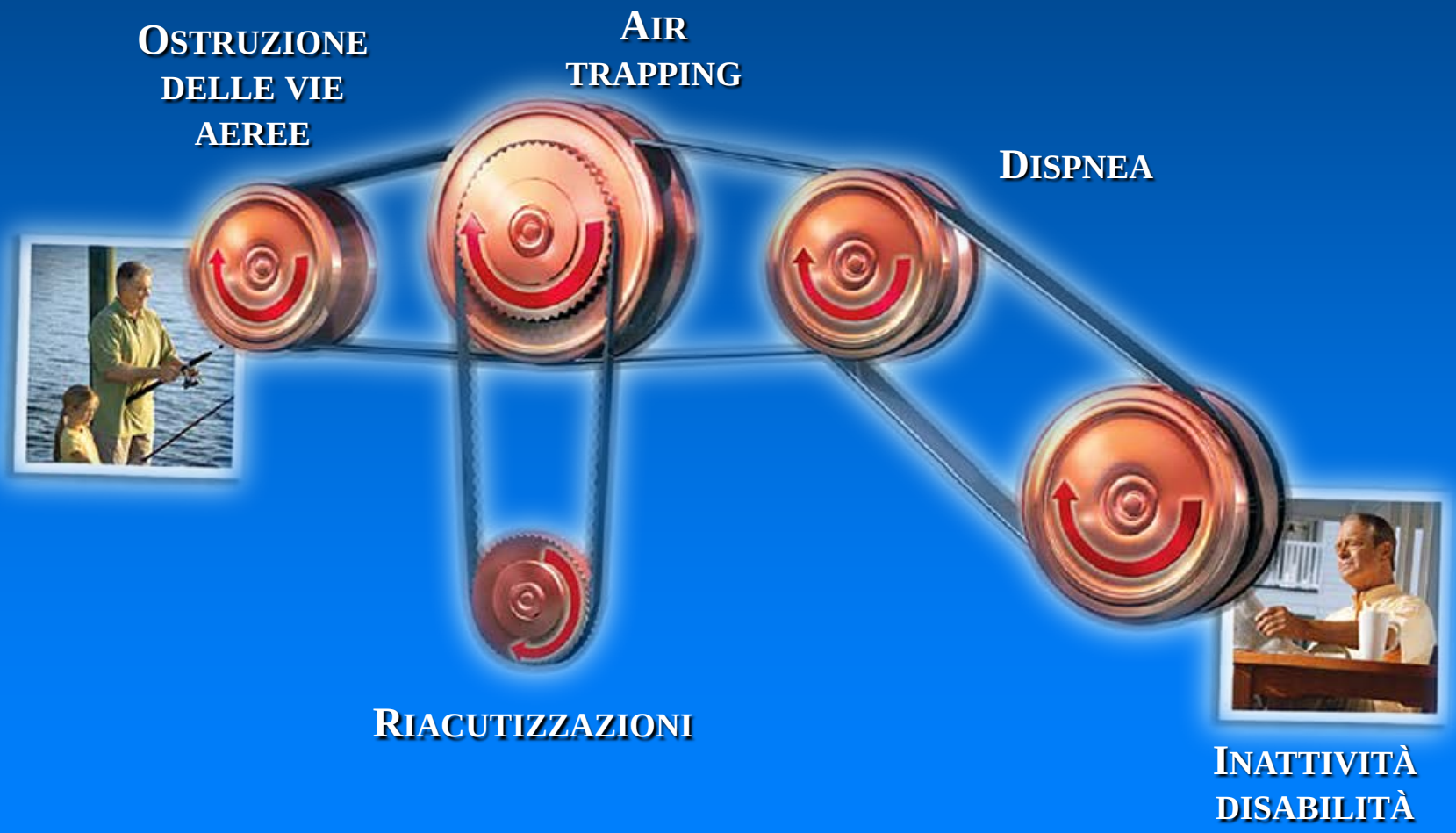
Figura 3, Rif. 3.

Tashkin AJM 2006

MODIFICAZIONI DEL DECORSO CLINICO



MODIFICAZIONI DEL DECORSO CLINICO



GIU 2010

REVIEW

Prevention of exacerbations of COPD with pharmacotherapy

M. Miravitlles

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TABLE 2 Reduction in exacerbations with pharmacotherapy in selected clinical trials

First author [Ref.]	Drug	Dose	Trial duration	Reduction in exacerbations %
SEEMUNGAL [28]	Erythromycin	250 mg every 12 h	1 yr	35
SETHI [32]	Moxifloxacin	400 mg·day^{-1} for 5 days every 2 months	1 yr	25 (46#)
CALVERLEY [40]	Fluticasone	500 µg every 12 h	3 yrs	18
KARDOS [60]	Fluticasone	500 µg every 12 h	1 yr	35¶
SZAFRANSKI [38]	Budesonide	320 µg every 12 h	1 yr	15
CALVERLEY [40]	Salmeterol	50 µg every 12 h	3 yr	15
STOCKLEY [76]	Salmeterol	50 µg every 12 h	1 yr	30
DUSSER [45]	Tiotropium	18 µg·day^{-1}	1 yr	27
BARR [46]	Tiotropium	18 µg·day^{-1}	4 yrs	14+
HUBBARD [59]	BFC	320 µg every 12 h	1 yr	25
CALVERLEY [40]	FSC	500/50 µg every 12 h	3 yrs	25
FERGUSON [63]	FSC	250/50 µg every 12 h	1 yr	30.5
ZHENG [69]	Carbocysteine	1500 mg·day^{-1}	1 yr	25%
DECRAMER [68]	NAC	600 mg·day^{-1}	3 yrs	1 (21§)

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TABLE 1 Strategies aimed at preventing exacerbations

Proven efficacy

- Smoking cessation
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- Combination therapy: LABA/ICS
- Anti-influenza vaccine
- Antipneumococcal vaccine#
- Rehabilitation
- Physical exercise
- Self-management plans
- LVRS in selected patients

Questioned efficacy

- Theophyllines
- Prophylactic antibiotic in selected patients
- Immunomodulators
- Mucolytic agents
- Antioxidants

REVIEW

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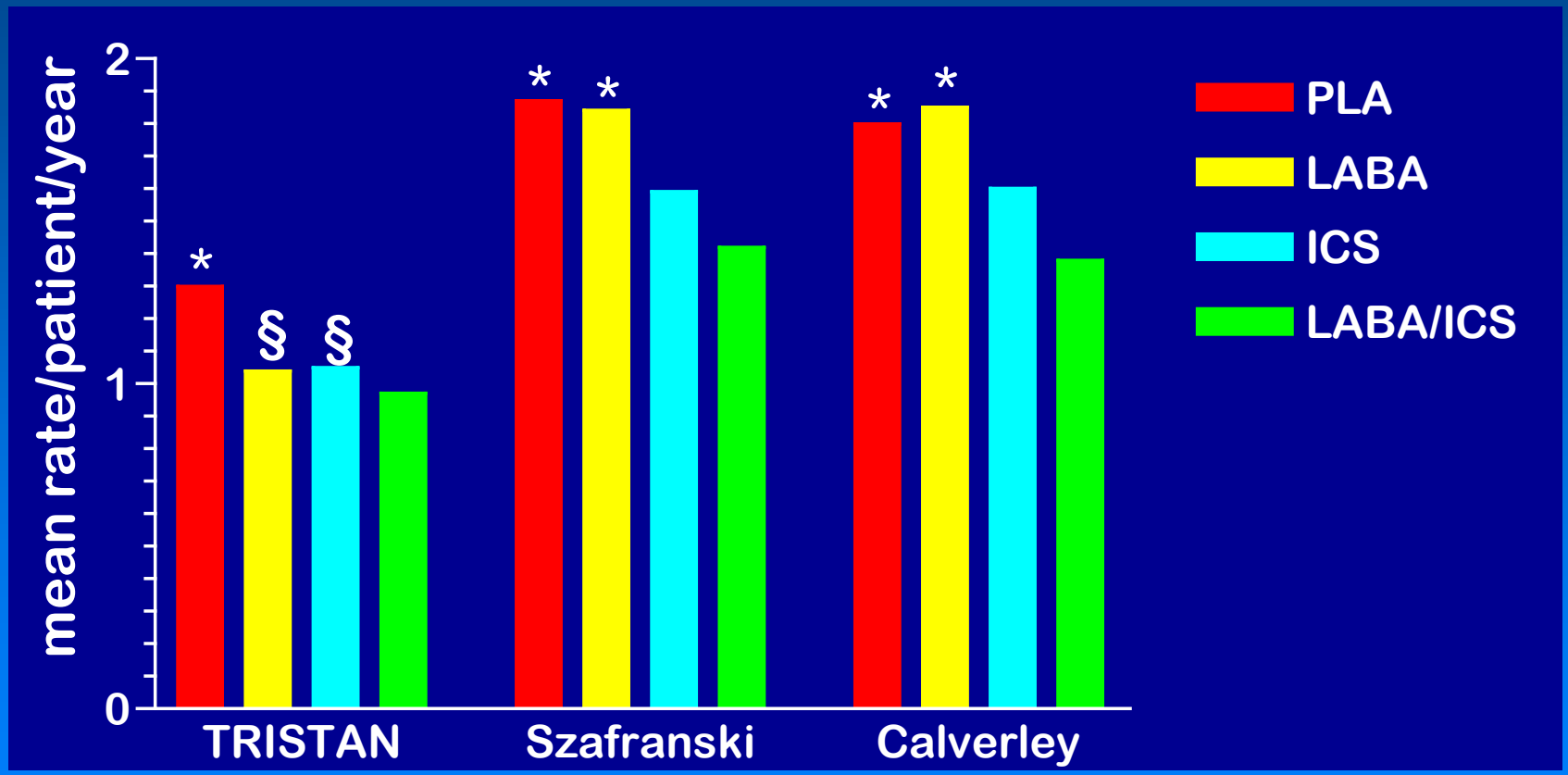
BRONCODILATATORI
STEROIDI

Riacutizzazioni gravi e terapia con ICS/LABA



*p<0.05 vs combinazione; § p<0.05 vs placebo

Cazzola e Hanania, *Inter J COPD* 2006

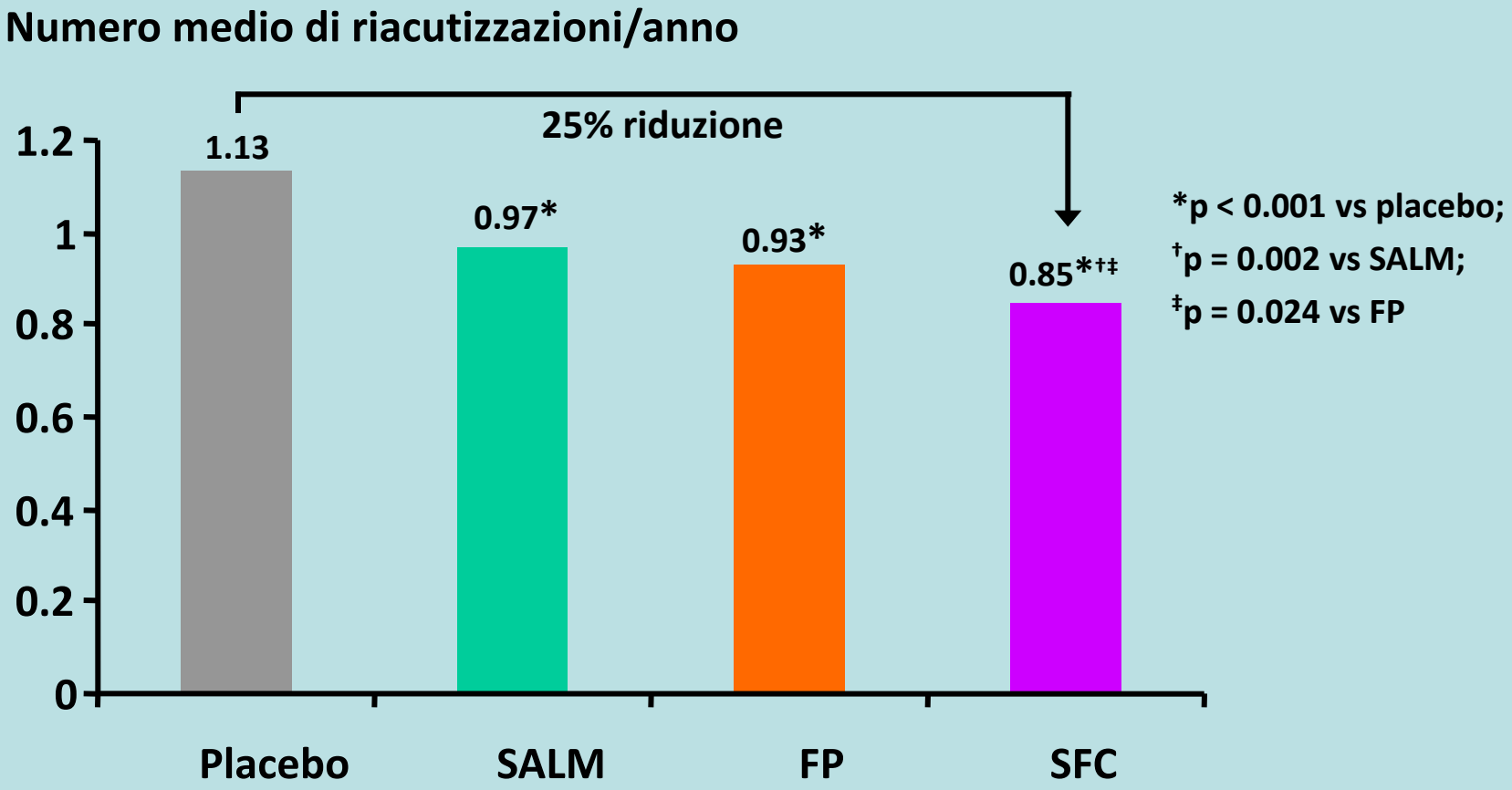
The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 FEBRUARY 22, 2007 VOL. 356 NO. 8

Salmeterol and Fluticasone Propionate and Survival in Chronic Obstructive Pulmonary Disease

Peter M.A. Calverley, M.D., Julie A. Anderson, M.A., Bartolome Celli, M.D., Gary T. Ferguson, M.D., Christine Jenkins, M.D., Paul W. Jones, M.D., Julie C. Yates, B.S., and Jørgen Vestbo, M.D., for the TORCH investigators*

Riacutizzazioni moderate e gravi
Studio TORCH



Calverley et al, *NEJM* 2007

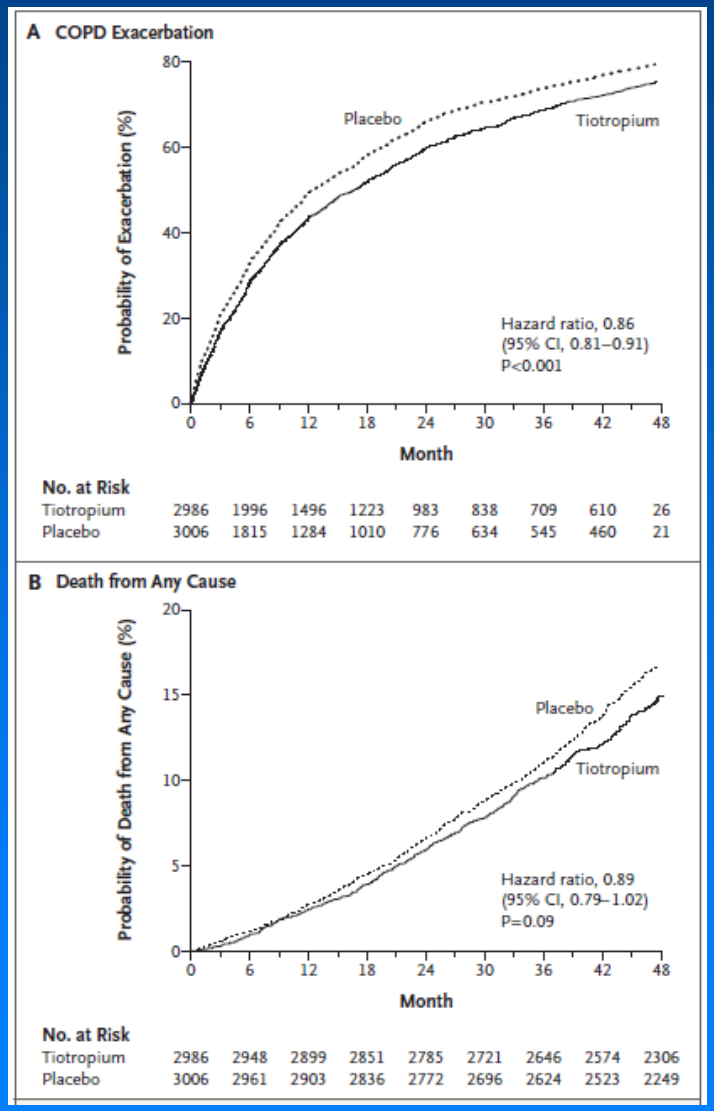
The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 OCTOBER 9, 2008 VOL. 359 NO. 15

A 4-Year Trial of Tiotropium in Chronic Obstructive Pulmonary Disease

Donald P. Tashkin, M.D., Bartolome Celli, M.D., Stephen Senn, Ph.D., Deborah Burkhart, B.S.N., Steven Kesten, M.D., Shailendra Menjoge, Ph.D., and Marc Decramer, M.D., Ph.D., for the UPLIFT Study Investigators*

Riacutizzazioni e Mortalità
Studio UPLIFT



The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 MARCH 24, 2011 VOL. 364 NO. 12

Tiotropium versus Salmeterol for the Prevention of Exacerbations of COPD

Claus Vogelmeier, M.D., Bettina Hederer, M.D., Thomas Glaab, M.D., Hendrik Schmidt, Ph.D., Maureen P.M.H. Rutten-van Mölken, Ph.D., Kai M. Beeh, M.D., Klaus F. Rabe, M.D., and Leonardo M. Fabbri, M.D., for the POET-COPD Investigators*

The NEW ENGLAND JOURNAL of MEDICINE
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AMERICAN COLLEGE OF CHEST PHYSICIANS

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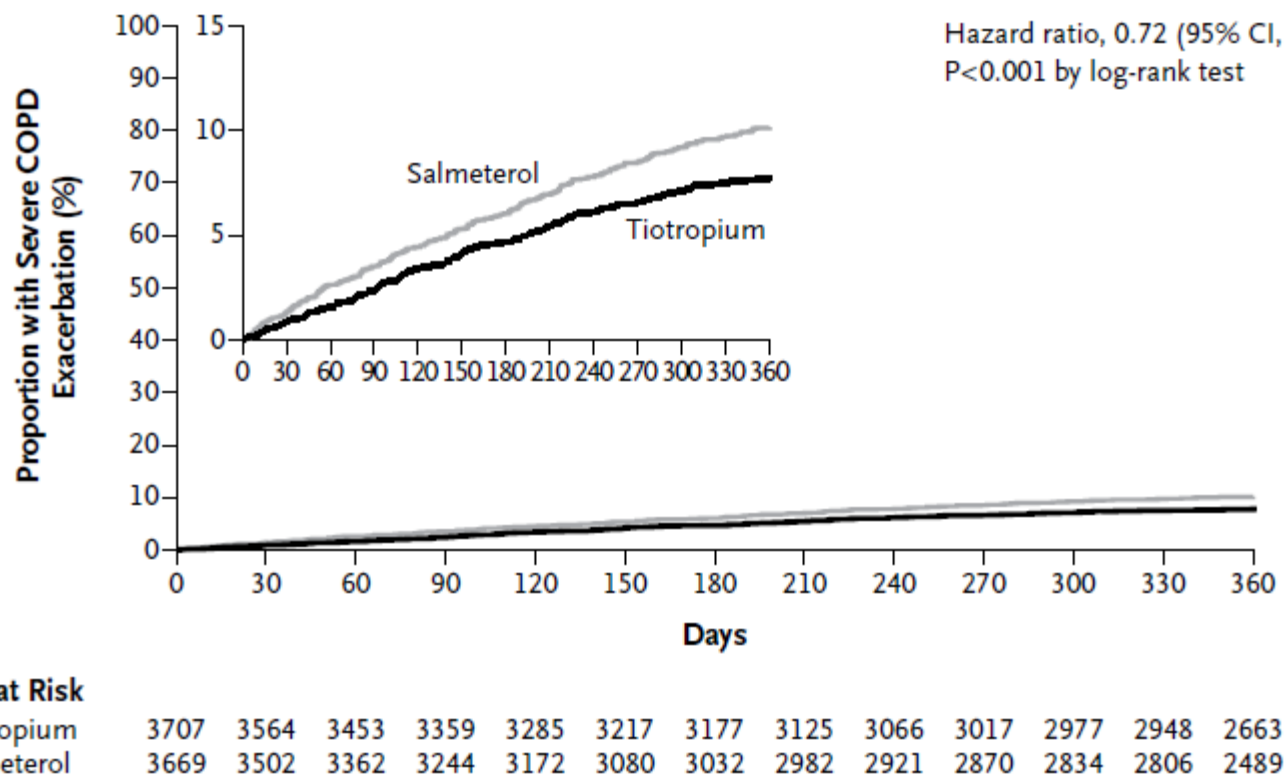

REVIEW

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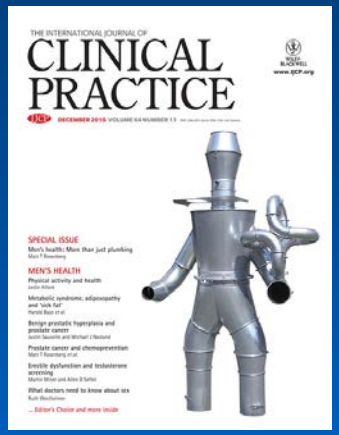
MUCOLITICI

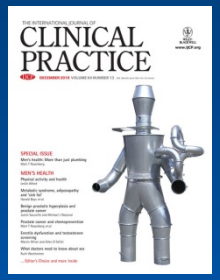


APR 2008

ORIGINAL PAPER

Exacerbations worsen the quality of life of chronic obstructive pulmonary disease patients in primary healthcare

C. Llor,[1] J. Molina,[2] K. Naberan,[3] J. M. Cots,[4] F. Ros,[5] M. Miravitlles,[6] on behalf of the EVOCA study group



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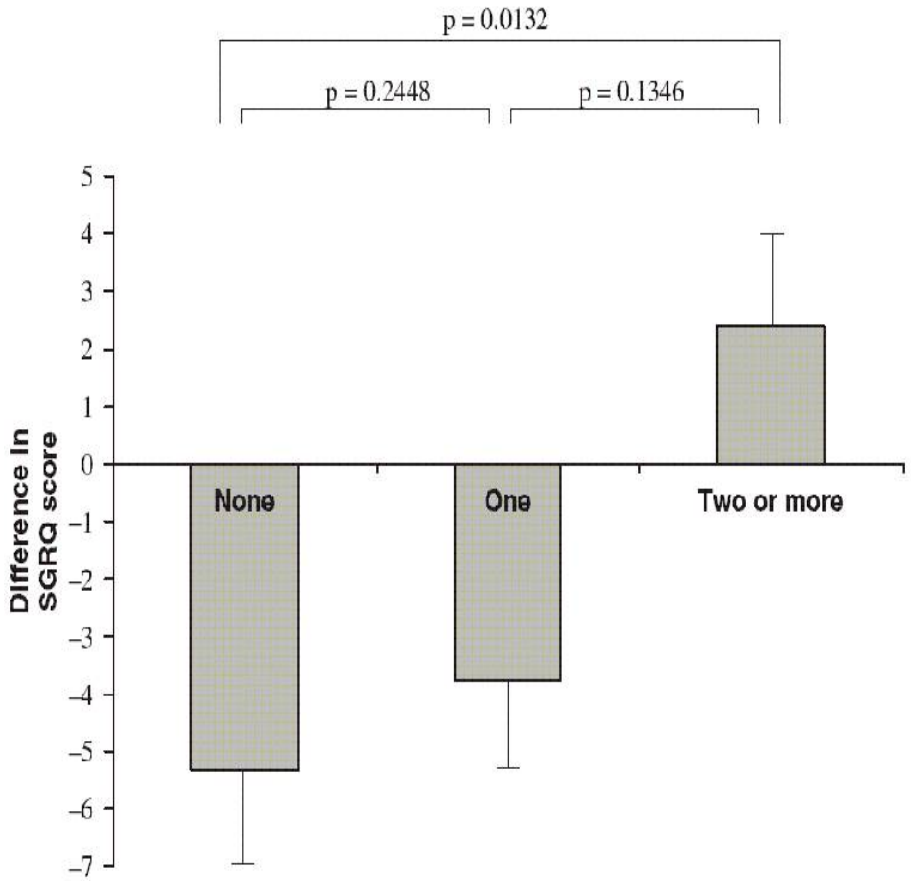
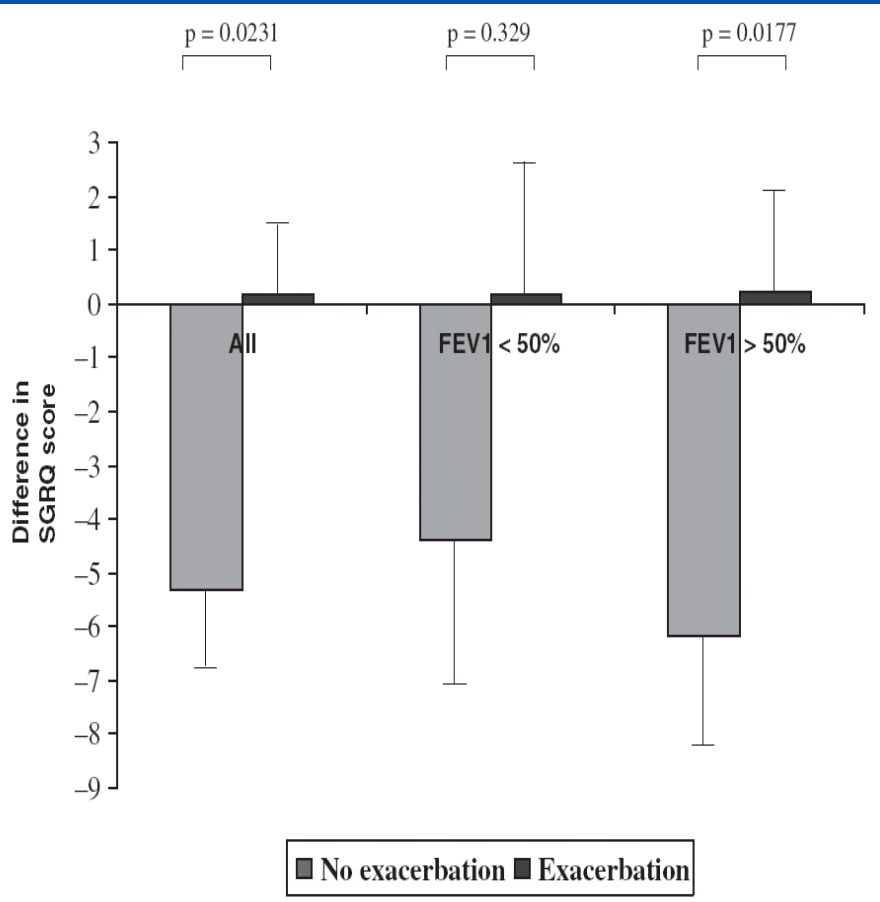
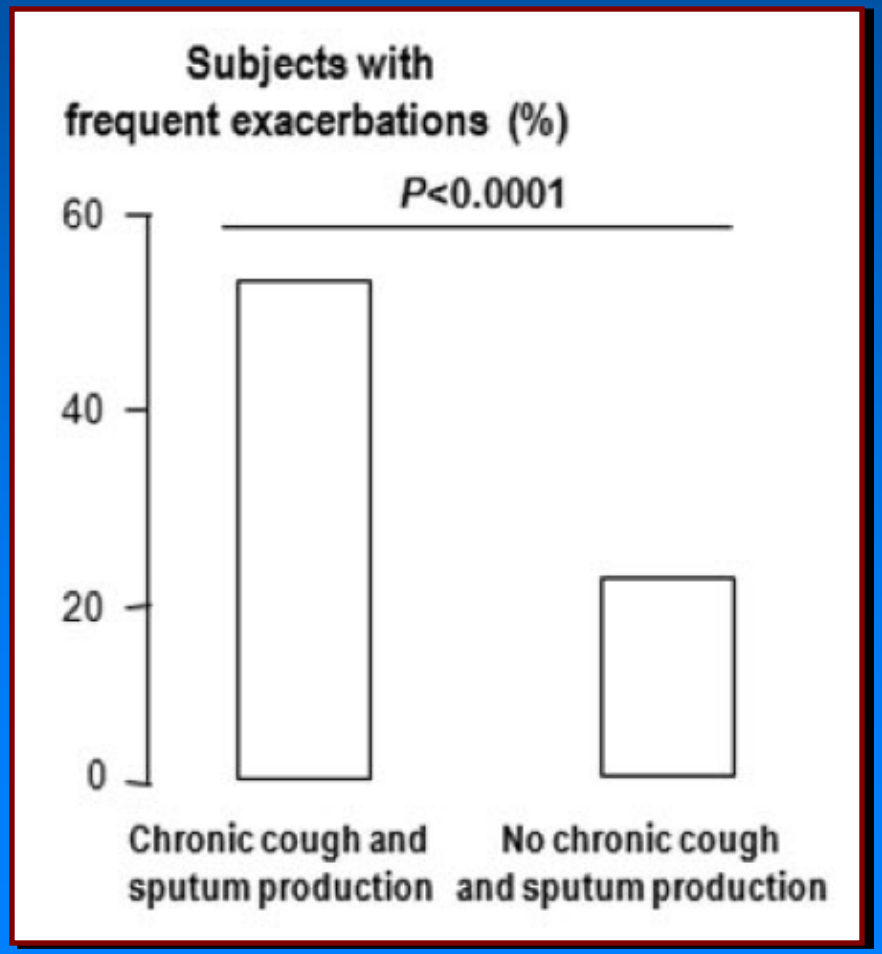




Cough and Sputum Production Are Associated With Frequent Exacerbations and Hospitalizations in COPD Subjects*

Pierre-Régis Burgel, MD, PhD; Pascale Nesme-Meyer, MD; Pascal Chanez, MD, PhD; Denis Caillaud, MD; Philippe Carré, MD; Thierry Perez, MD; and Nicolas Roche, MD, PhD; on behalf of the Initiatives Bronchopneumopathie Chronique Obstructive (BPCO) Scientific Committee†

APR 2009



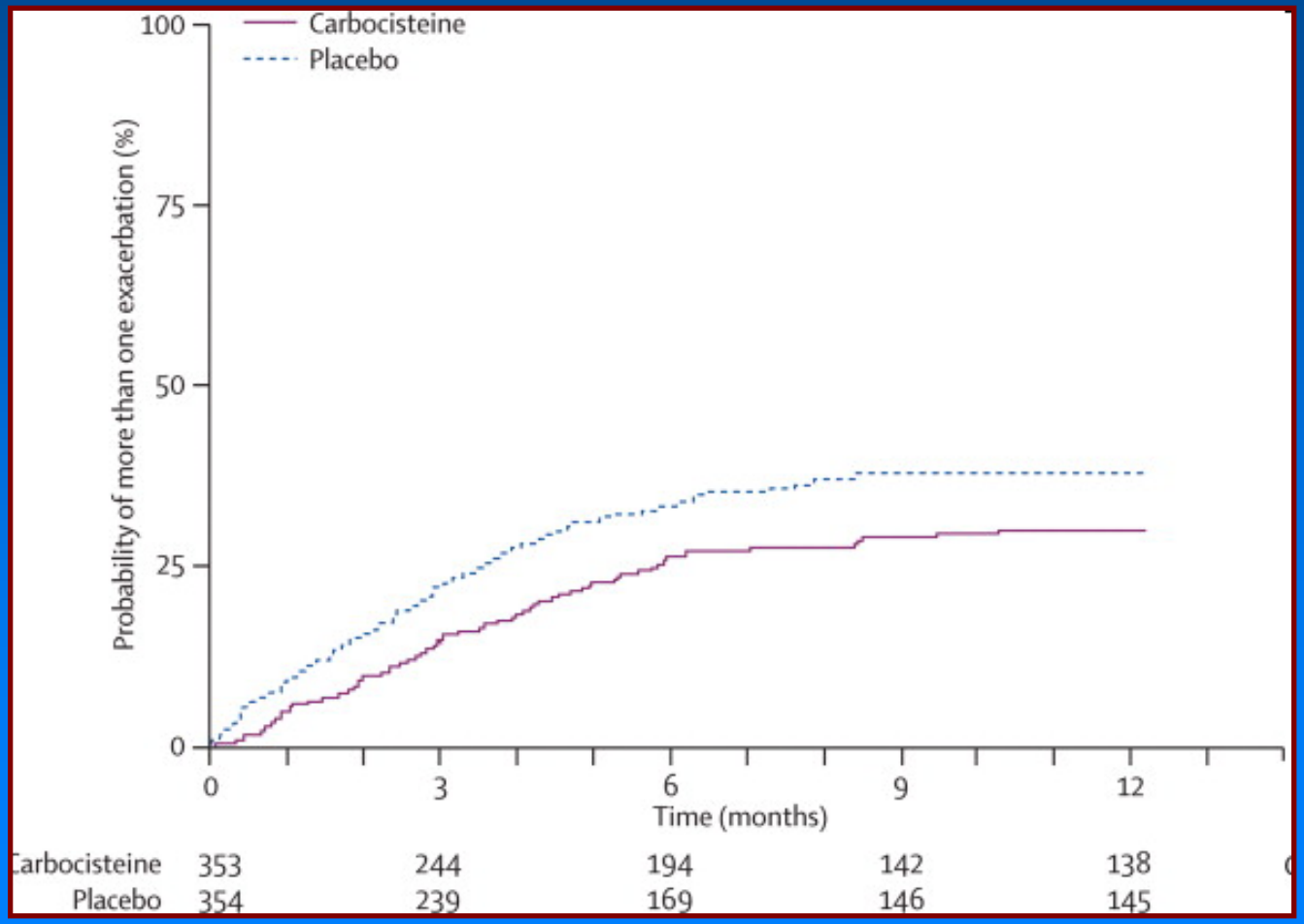
GIU 2008

Effect of carbocisteine on acute exacerbation of chronic obstructive pulmonary disease (PEACE Study): a randomised placebo-controlled study

Jin-Ping Zheng, Jian Kang, Shao-Guang Huang, Ping Chen, Wan-Zen Yao, Lan Yang, Chun-Xue Bai, Chang-Zheng Wang, Chen Wang, Bao-Yuan Chen, Yi Shi, Chun-Tao Liu, Ping Chen, Qiang Li, Zhen-Shan Wang, Yi-Jiang Huang, Zhi-Yang Luo, Fei-Peng Chen, Jian-Zhang Yuan, Ben-Tong Yuan, Hui-Ping Qian, Rong-Chang Zhi, Nan-Shan Zhong*


THE LANCET
"Chronically mentally ill people, and the neglect and abuse they experience, have become increasingly invisible."

GIU 2008


Carbocisteine
Placebo
Probability of more than one exacerbation (%)
100
75
50
25
0
0
3
6
9
12
Time (months)
Carbocisteine 353 244 194 142 138
Placebo 354 239 169 146 145

REVIEW

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ANTIBIOTICI

RESPIRATORY RESEARCH

GEN 2010

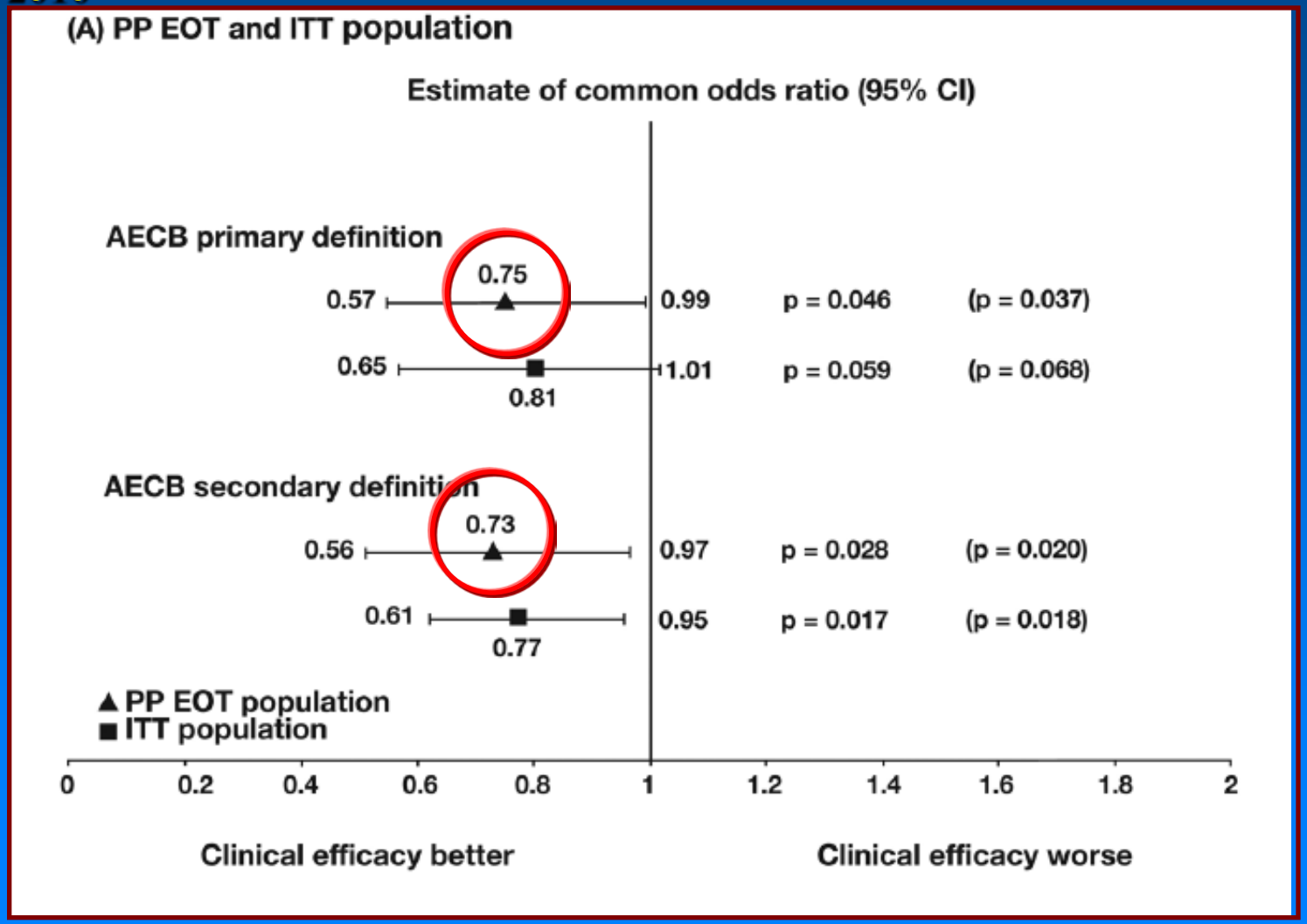
Pulsed moxifloxacin for the prevention of exacerbations of chronic obstructive pulmonary disease: a randomized controlled trial

Sanjay Sethi[1*], Paul W Jones[2], Marlize Schmitt Theron[3], Marc Miravitlles[4], Ethan Rubinstein[5], Jadwiga A Wedzicha[6], Robert Wilson[7], the PULSE Study group

RESPIRATORY RESEARCH

AMERICAN COLLEGE OF CHEST PHYSICIANS

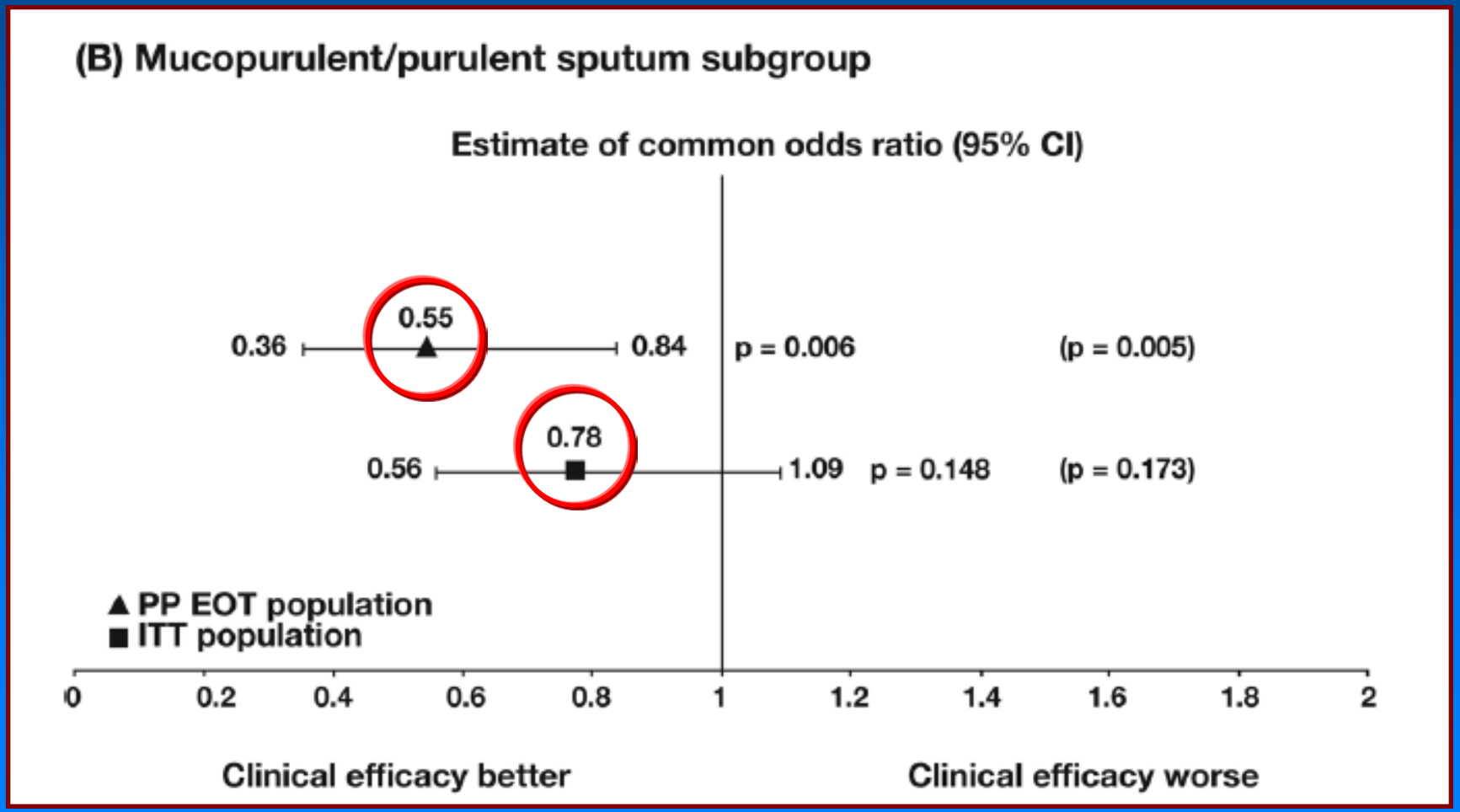
GEN 2010



RESPIRATORY RESEARCH

AMERICAN COLLEGE OF CHEST PHYSICIANS

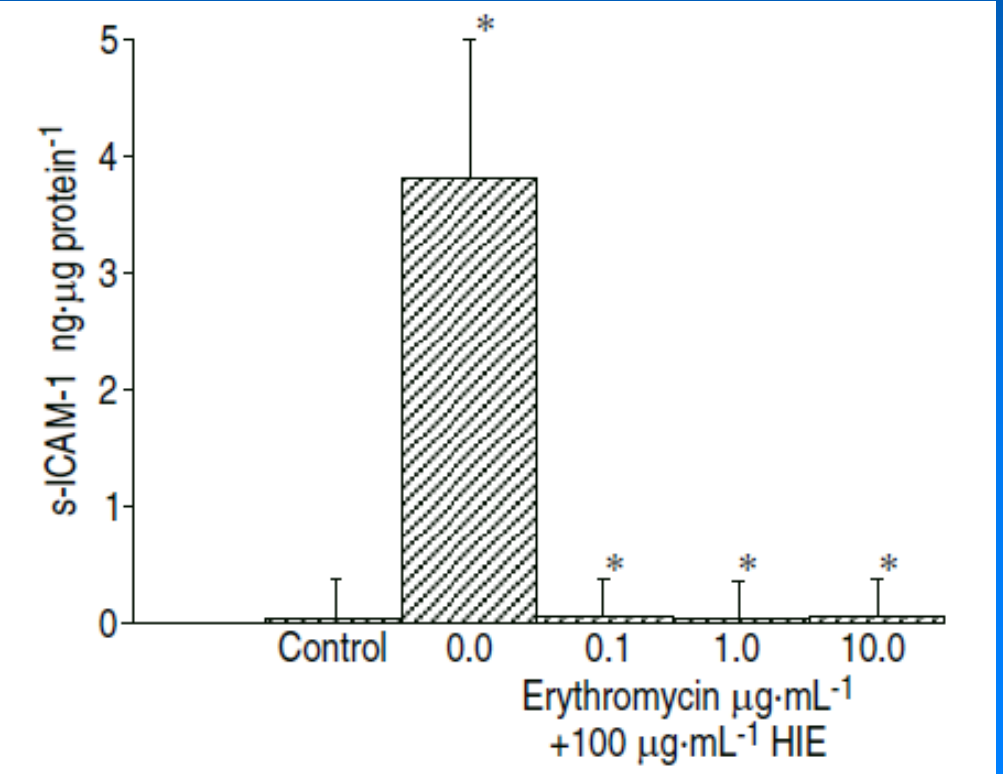
GEN 2010

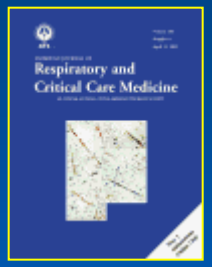


Effect of erythromycin on *Haemophilus influenzae* endotoxin-induced release of IL-6, IL-8 and sICAM-1 by cultured human bronchial epithelial cells

O.A. Khair, J.L. Devalia, M.M. Abdelaziz, R.J. Sapsford, R.J. Davies

1995

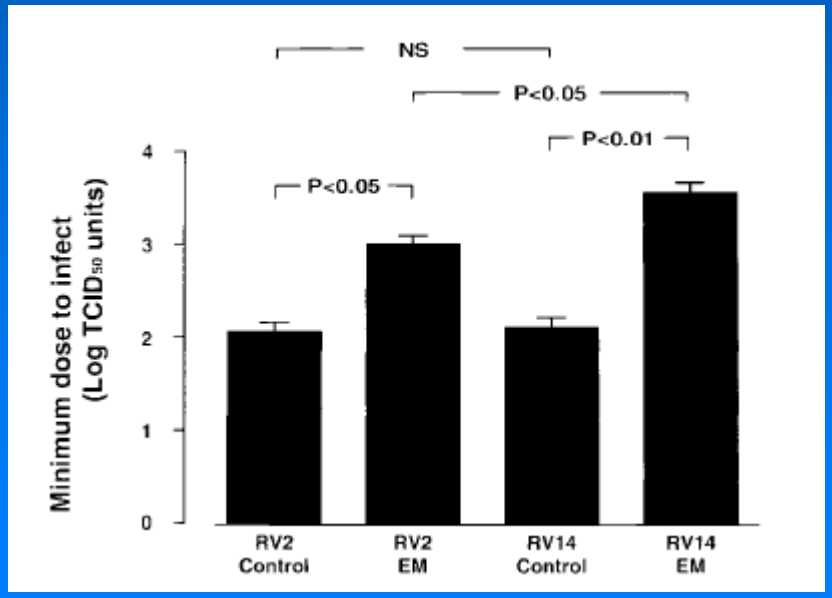


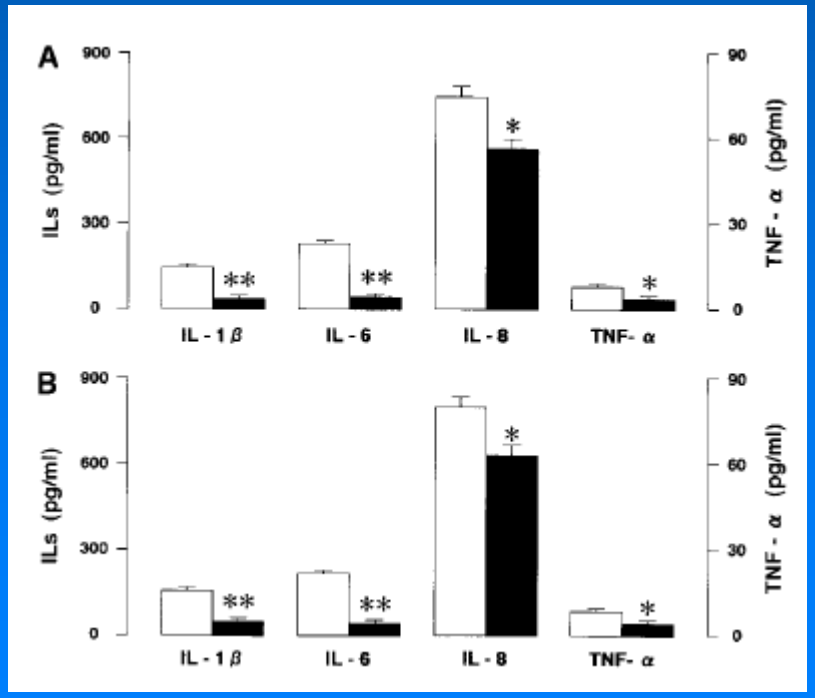


Erythromycin Inhibits Rhinovirus Infection in Cultured Human Tracheal Epithelial Cells

Tomoko Suzuki, Mutsuo Yamaya, Kiyohisa Sekizawa, Masayoshi Hosoda, Norihiro Yamada, Satoshi Ishizuka, Akiko Yoshino, Hiroyasu Yasuda, Hidenori Takahashi, Hidekazu Nishimura, and Hidetada Sasaki

2002

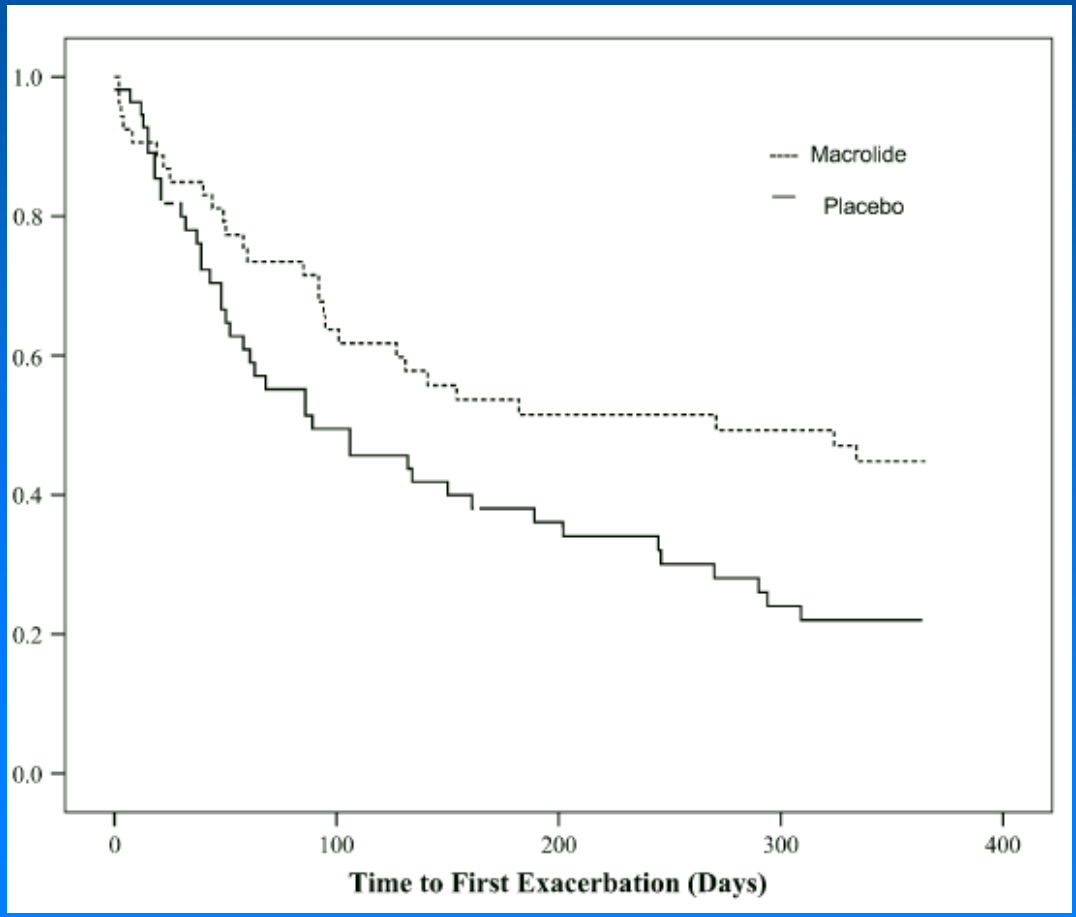




Long-term Erythromycin Therapy Is Associated with Decreased Chronic Obstructive Pulmonary Disease Exacerbations

Terence A. R. Seemungal[1,2*], Tom M. A. Wilkinson[2*], John R. Hurst[2], Wayomi R. Perera[2], Ray J. Sapsford[2], and Jadwiga A. Wedzicha[2]

DIC 2008



Pharmacol Res. 2011 May;63(5):389-97. doi: 10.1016/j.phrs.2011.02.001. Epub 2011 Feb 17.

Macrolide antibiotics broadly and distinctively inhibit cytokine and chemokine production by COPD sputum cells in vitro.

Marjanović N[1], Bosnar M, Michielin F, Willé DR, Anić-Milić T, Culić O, Popović-Grle S, Bogdan M, Parnham MJ, Eraković Haber V.

Azithromycin Improves Macrophage Phagocytic Function and Expression of Mannose Receptor in Chronic Obstructive Pulmonary Disease

Sandra Hodge[1,2], Greg Hodge[1,2], Hubertus Jersmann[1,2], Geoffrey Matthews[1], Jessica Ahern[1], Mark Holmes[1,2], and Paul N. Reynolds[1,2]

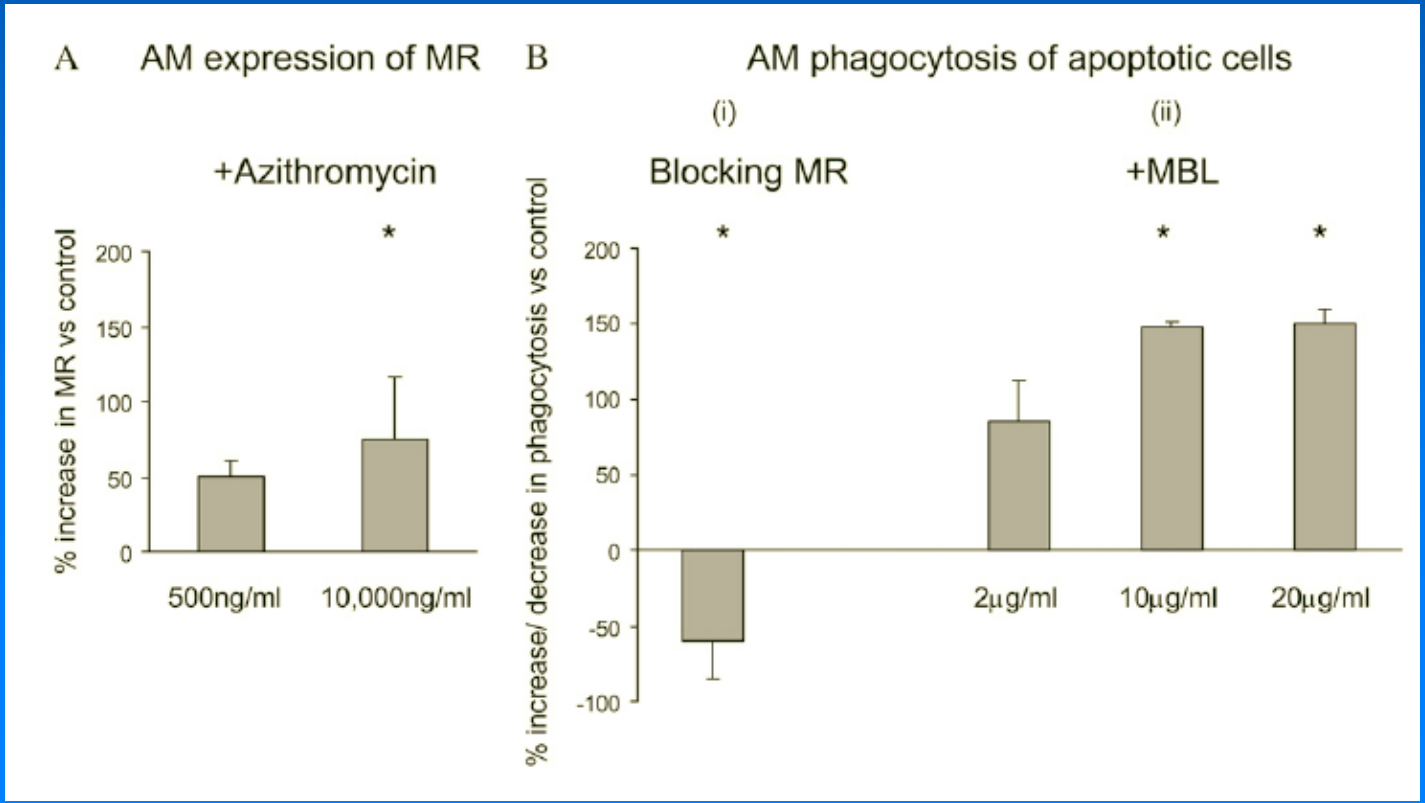
Azithromycin Maintains Airway Epithelial Integrity during *Pseudomonas aeruginosa* Infection

Skarphedinn Halldorsson[1,2], Thorarinn Gudjonsson[2,3,4], Magnus Gottfredsson[5,6], Pradeep K. Singh[7], Gudmundur Hrafn Gudmundsson[1,2], and Olafur Baldursson[2,8,9]

Azithromycin Improves Macrophage Phagocytic Function and Expression of Mannose Receptor in Chronic Obstructive Pulmonary Disease

Sandra Hodge[1,2], Greg Hodge[1,2], Hubertus Jersmann[1,2], Geoffrey Matthews[1], Jessica Ahern[1], Mark Holmes[1,2], and Paul N. Reynolds[1,2]

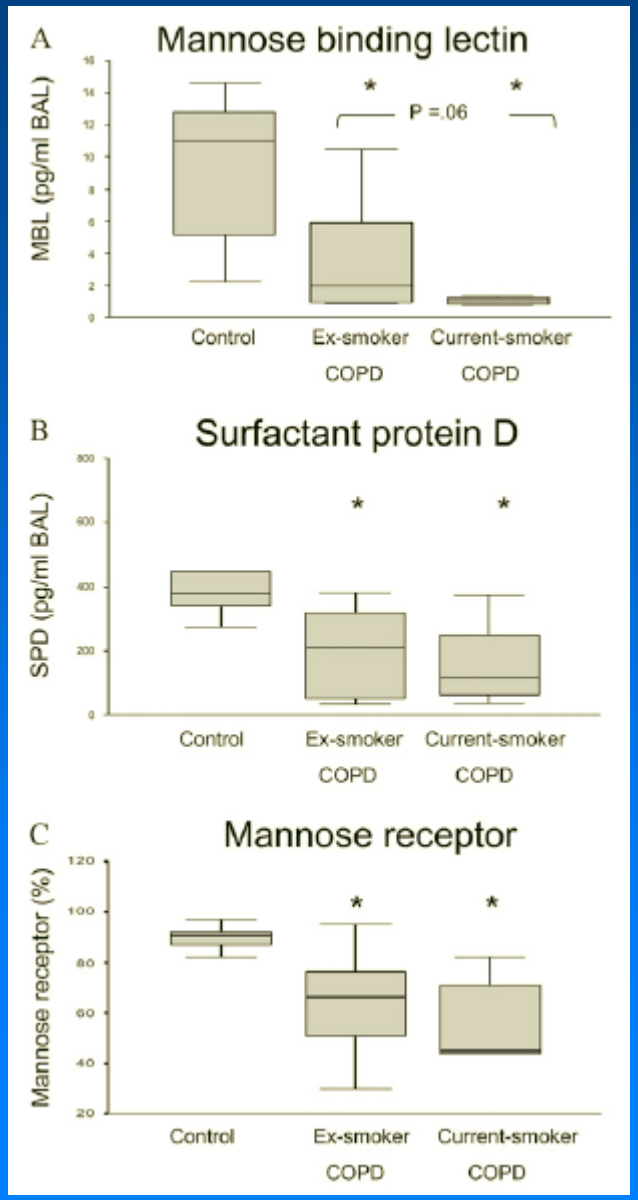
LUG 2008



Azithromycin Improves Macrophage Phagocytic Function and Expression of Mannose Receptor in Chronic Obstructive Pulmonary Disease

Sandra Hodge[1,2], Greg Hodge[1,2], Hubertus Jersmann[1,2], Geoffrey Matthews[1], Jessica Ahern[1], Mark Holmes[1,2], and Paul N. Reynolds[1,2]

LUG 2008



Azithromycin Improves Macrophage Phagocytic Function and Expression of Mannose Receptor in Chronic Obstructive Pulmonary Disease

Sandra Hodge[1,2], Greg Hodge[1,2], Hubertus Jersmann[1,2], Geoffrey Matthews[1], Jessica Ahern[1], Mark Holmes[1,2], and Paul N. Reynolds[1,2]

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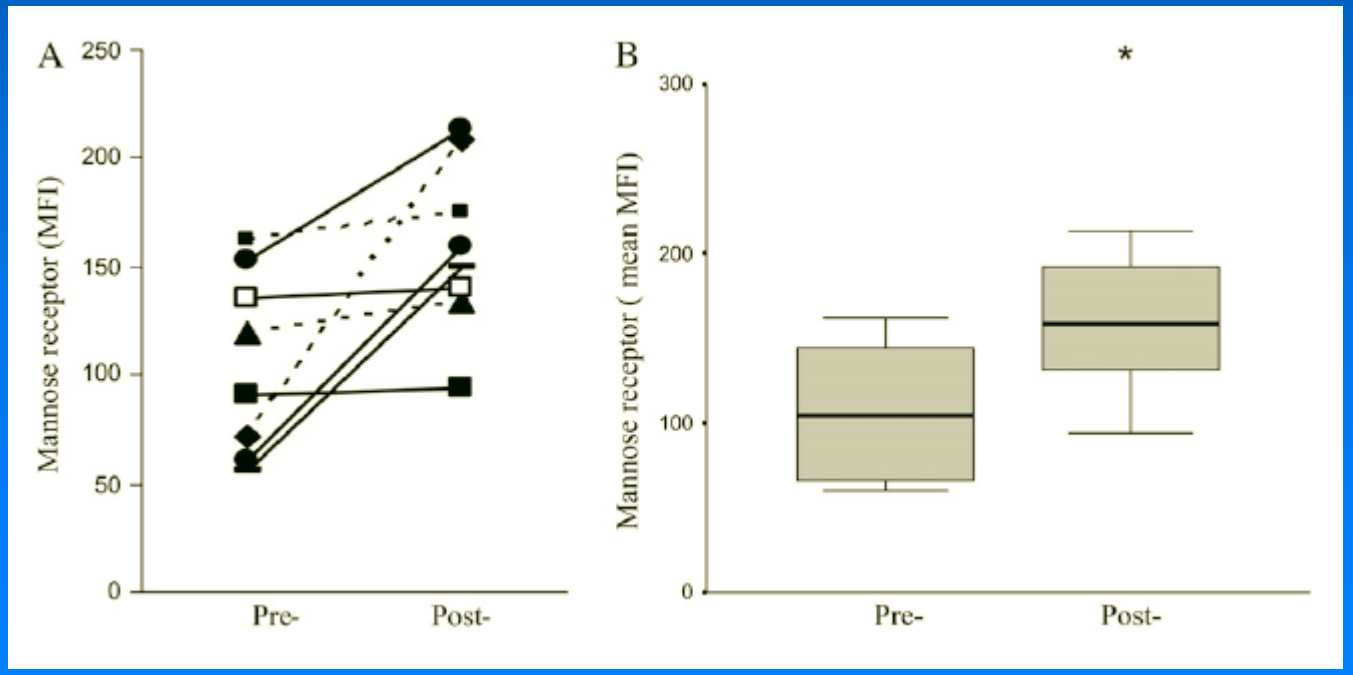

Azithromycin Improves Macrophage Phagocytic Function and Expression of Mannose Receptor in Chronic Obstructive Pulmonary Disease

Sandra Hodge[1,2], Greg Hodge[1,2], Hubertus Jersmann[1,2], Geoffrey Matthews[1], Jessica Ahern[1], Mark Holmes[1,2], and Paul N. Reynolds[1,2]

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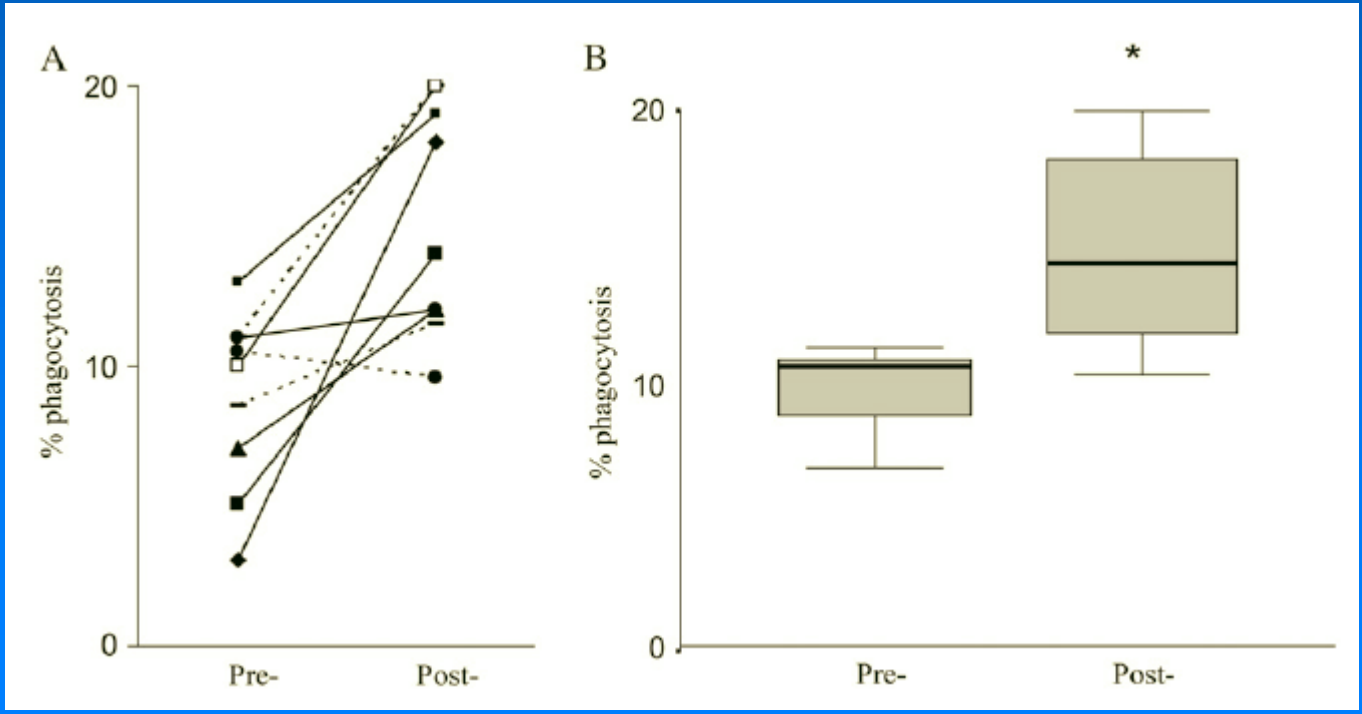
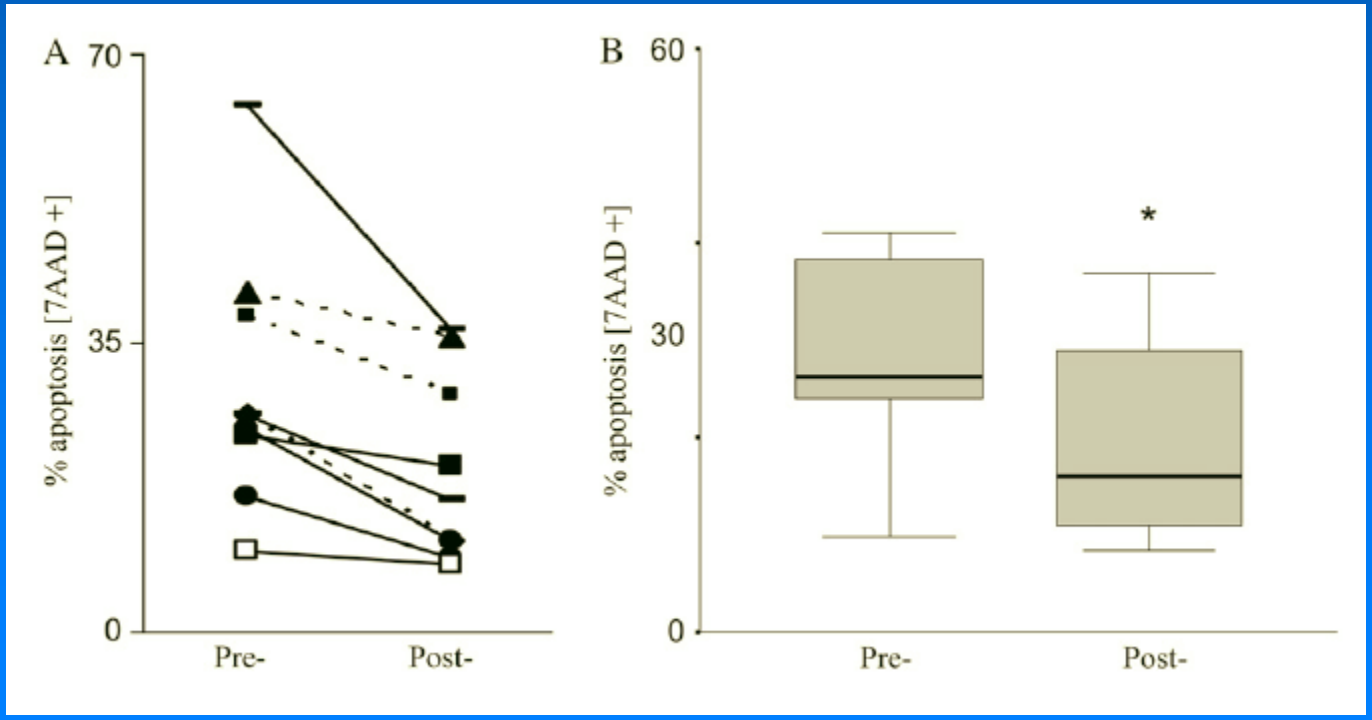


Azithromycin Improves Macrophage Phagocytic Function and Expression of Mannose Receptor in Chronic Obstructive Pulmonary Disease

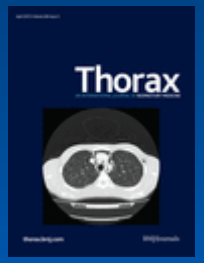
Sandra Hodge[1,2], Greg Hodge[1,2], Hubertus Jersmann[1,2], Geoffrey Matthews[1], Jessica Ahern[1], Mark Holmes[1,2], and Paul N. Reynolds[1,2]

LUG 2008

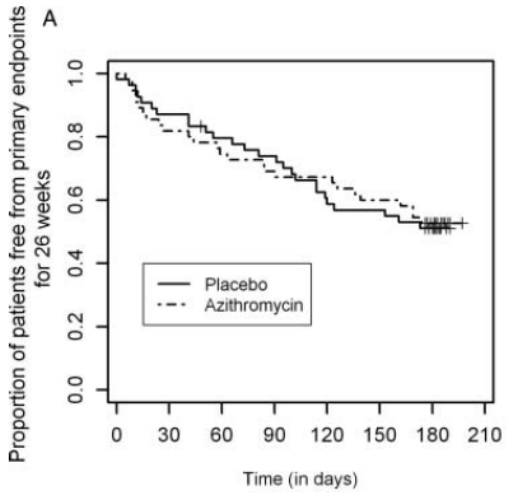


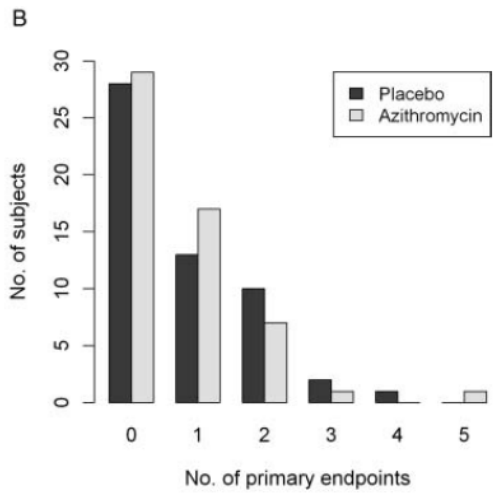
Azithromycin for prevention of exacerbations in severe asthma (AZISAST): a multicentre randomised double-blind placebo-controlled trial

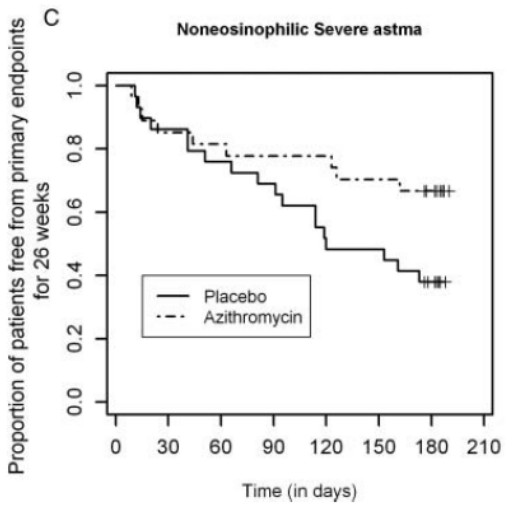
Guy G Brusselle,[1] Christine VanderStichele,[1] Paul Jordens,[2] René Deman,[3] Hans Slabbynck,[4] Veerle Ringoet,[5] Geert Verleden,[6] Ingel K Demedts,[7] Katia Verhamme,[8] Anja Delporte,[1] Bénédicte Demeyere,[1] Geert Claeys,[9] Jerina Boelens,[9] Elizaveta Padalko,[9] Johny Verschakelen,[10] Georges Van Maele,[11] Ellen Deschepper,[11] Guy F P Joos[1]



GEN 2013





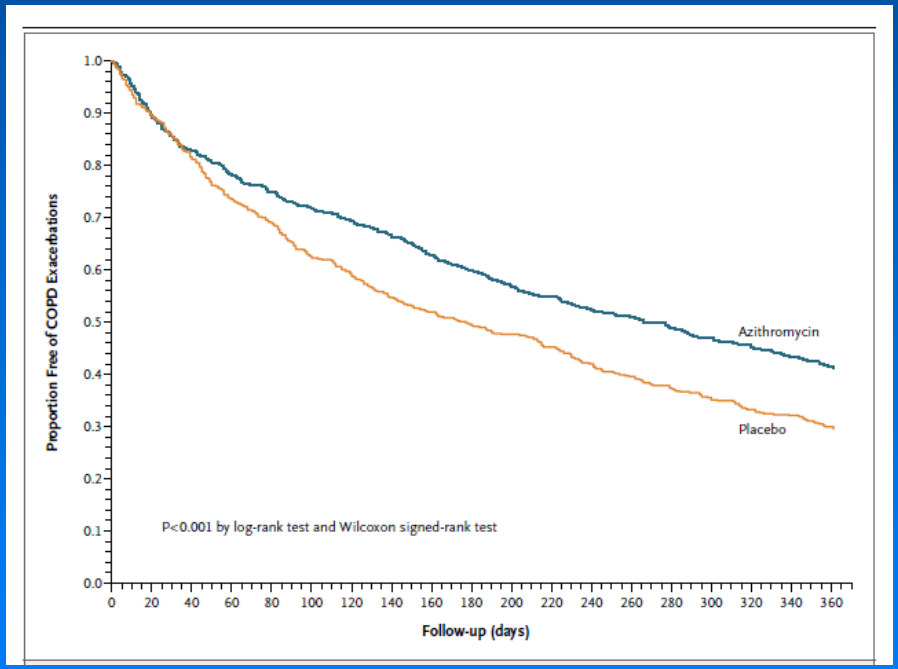


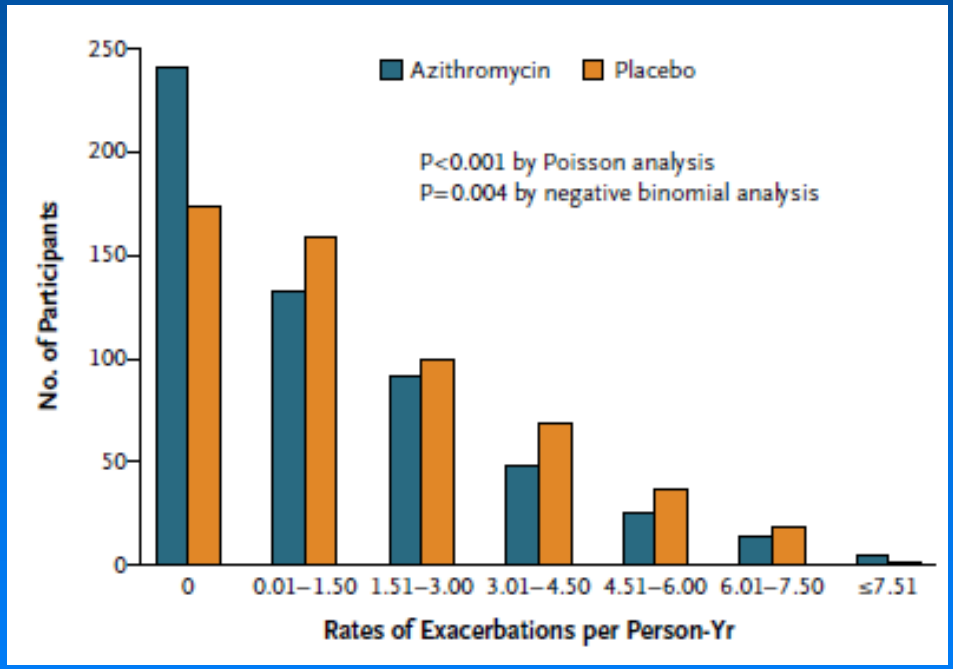
The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 AUGUST 25, 2011 VOL. 365 NO. 8

Azithromycin for Prevention of Exacerbations of COPD

Richard K. Albert, M.D., John Connett, Ph.D., William C. Bailey, M.D., Richard Casaburi, M.D., Ph.D., J. Allen D. Cooper, Jr., M.D., Gerard J. Criner, M.D., Jeffrey L. Curtis, M.D., Mark T. Dransfield, M.D., MeiLan K. Han, M.D., Stephen C. Lazarus, M.D., Barry Make, M.D., Nathaniel Marchetti, M.D., Fernando J. Martinez, M.D., Nancy E. Madinger, M.D., Charlene McEvoy, M.D., M.P.H., Dennis E. Niewoehner, M.D., Janos Porsasz, M.D., Ph.D., Connie S. Price, M.D., John Reilly, M.D., Paul D. Scanlon, M.D., Frank C. Sciurba, M.D., Steven M. Scharf, M.D., Ph.D., George R. Washko, M.D., Prescott G. Woodruff, M.D., M.P.H., and Nicholas R. Anthonisen, M.D., for the COPD Clinical Research Network


Proportion Free of COPD Exacerbations
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
300
320
340
360
Follow-up (days)
Azithromycin
Placebo
P<0.001 by log-rank test and Wilcoxon signed-rank test


No. of Participants
250
200
150
100
50
0
Azithromycin
Placebo
P<0.001 by Poisson analysis
P=0.004 by negative binomial analysis
0
0.01–1.50
1.51–3.00
3.01–4.50
4.51–6.00
6.01–7.50
≤7.51
Rates of Exacerbations per Person-Yr

APRILE 2014

THE LANCET Respiratory Medicine

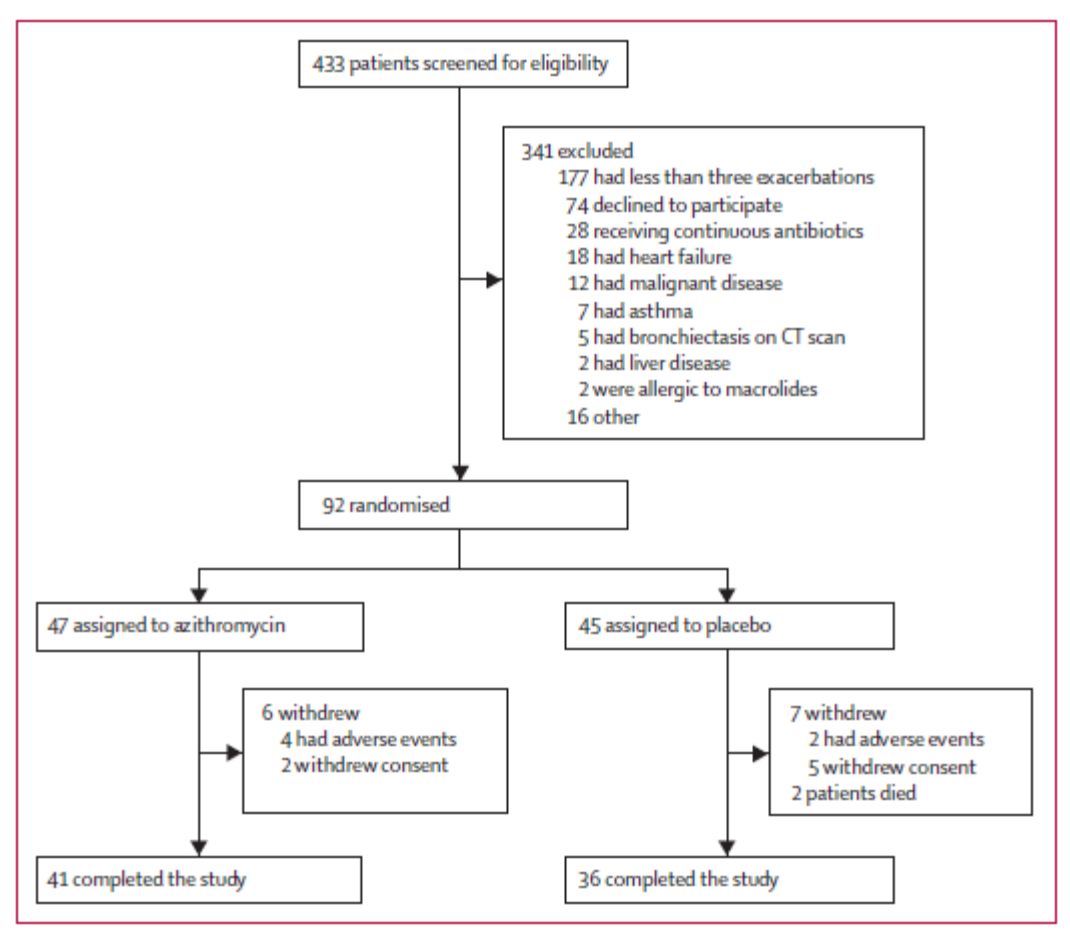
Azithromycin maintenance treatment in patients with frequent exacerbations of chronic obstructive pulmonary disease (COLUMBUS): a randomised, double-blind, placebo-controlled trial

Sevim Uzun, Remco S Djamin, Jan A J W Kluytmans, Paul G H Mulder, Nils E van't Veer, Anton A M Ermens, Aline J Pelle, Henk C Hoogsteden, Joachim G J V Aerts, Menno M van der Eerden**

THE LANCET Respiratory Medicine

AMERICAN COLLEGE OF CHEST PHYSICIANS

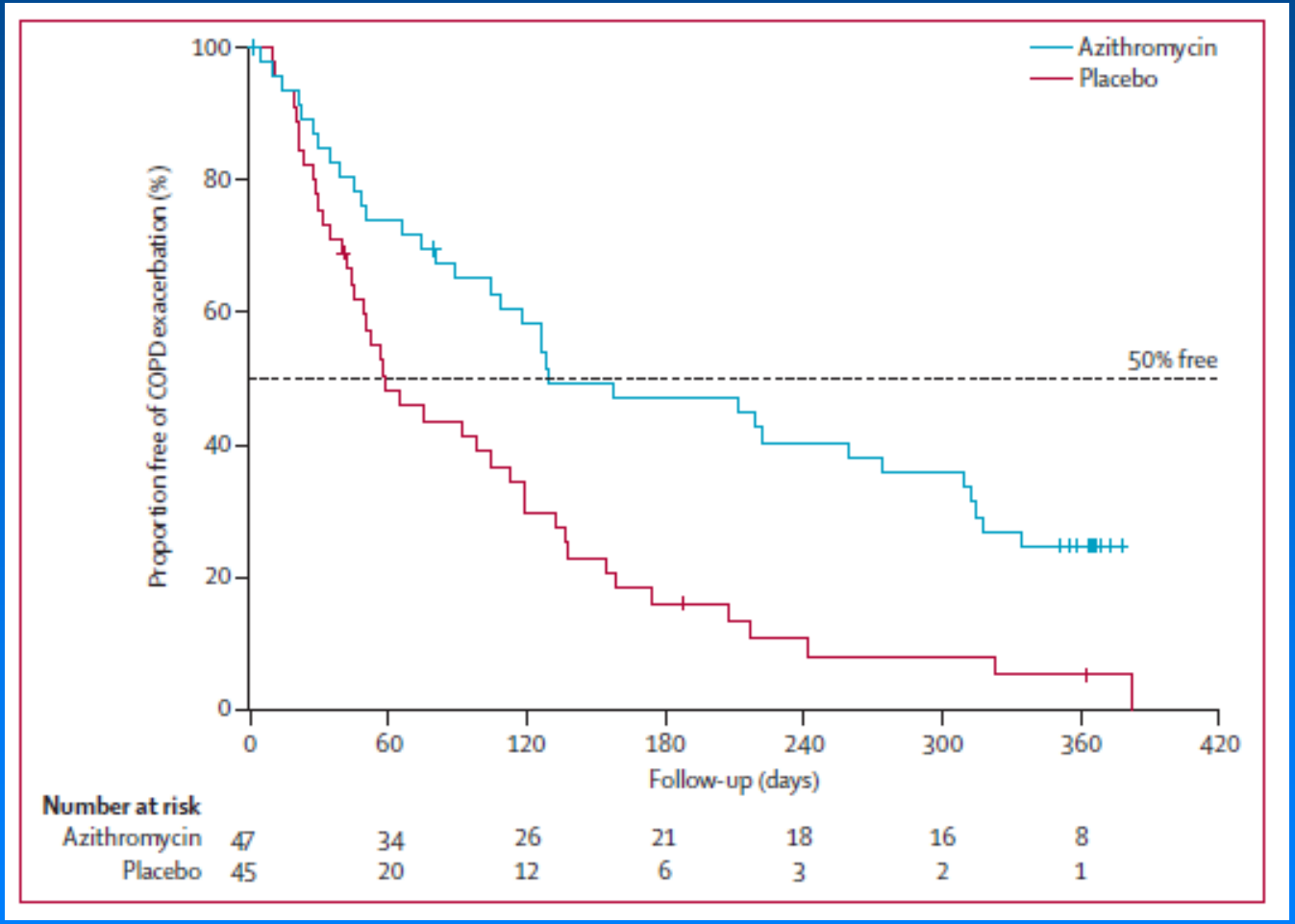
Aprile 2014



THE LANCET Respiratory Medicine

AMERICAN COLLEGE OF CHEST PHYSICIANS

Aprile 2014

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CONDOR
ROBERT REDFORD
FAYE DUNAWAY
MAX VON SYDOW
DVD


stevemartin
jackblack owenwilson
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un Anno da Leoni

70° Congresso Nazionale

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competenza organizzazione

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Epidemiologia, fattori di rischio e gestione del paziente

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U.F. PNEUMOLOGIA E
RIABILITAZIONE RESPIRATORIA
CASA DI CURA CLINIC CENTER S.P.A. - NAPOLI