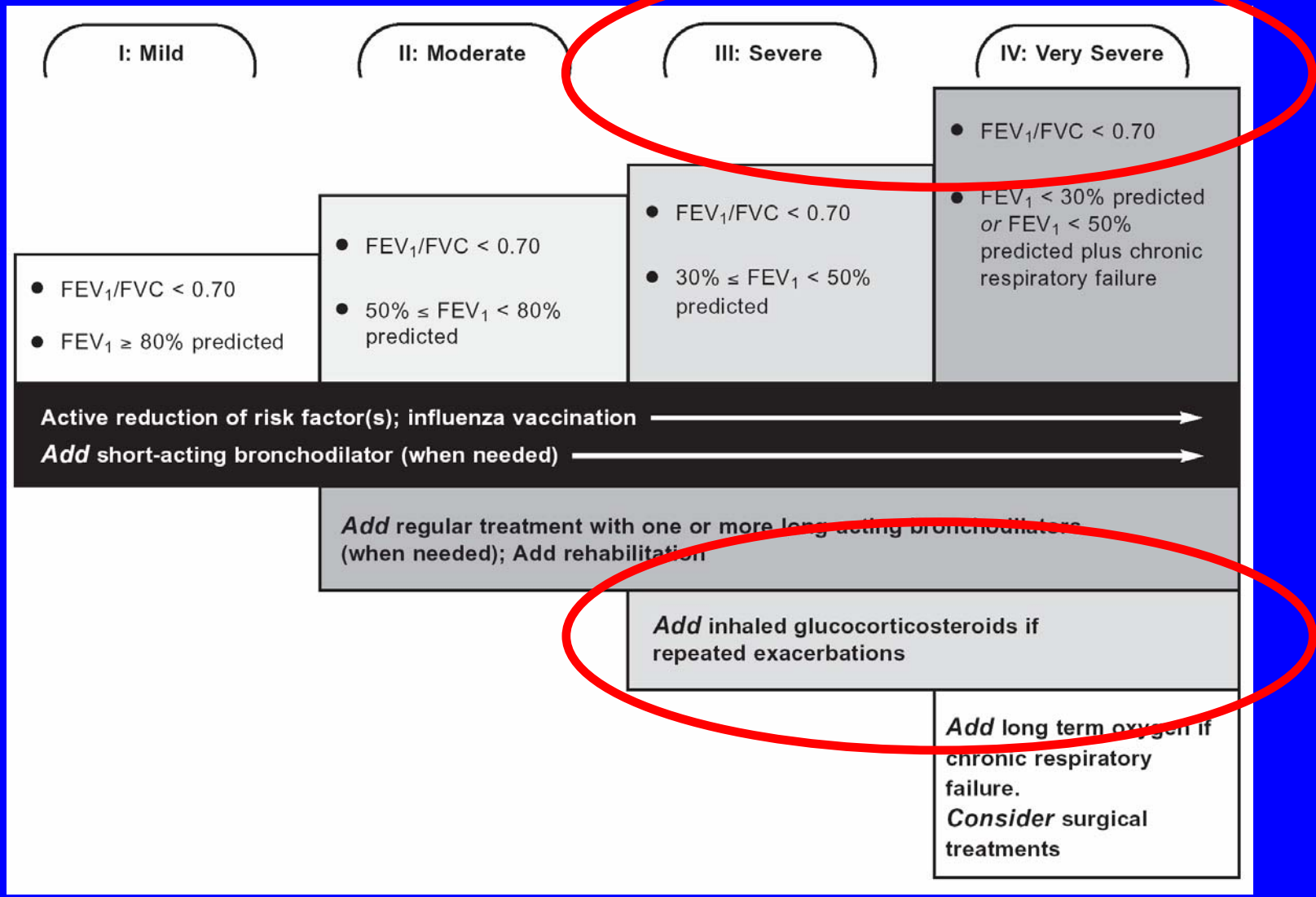
GesEPOC

guía
española
de la EPOC

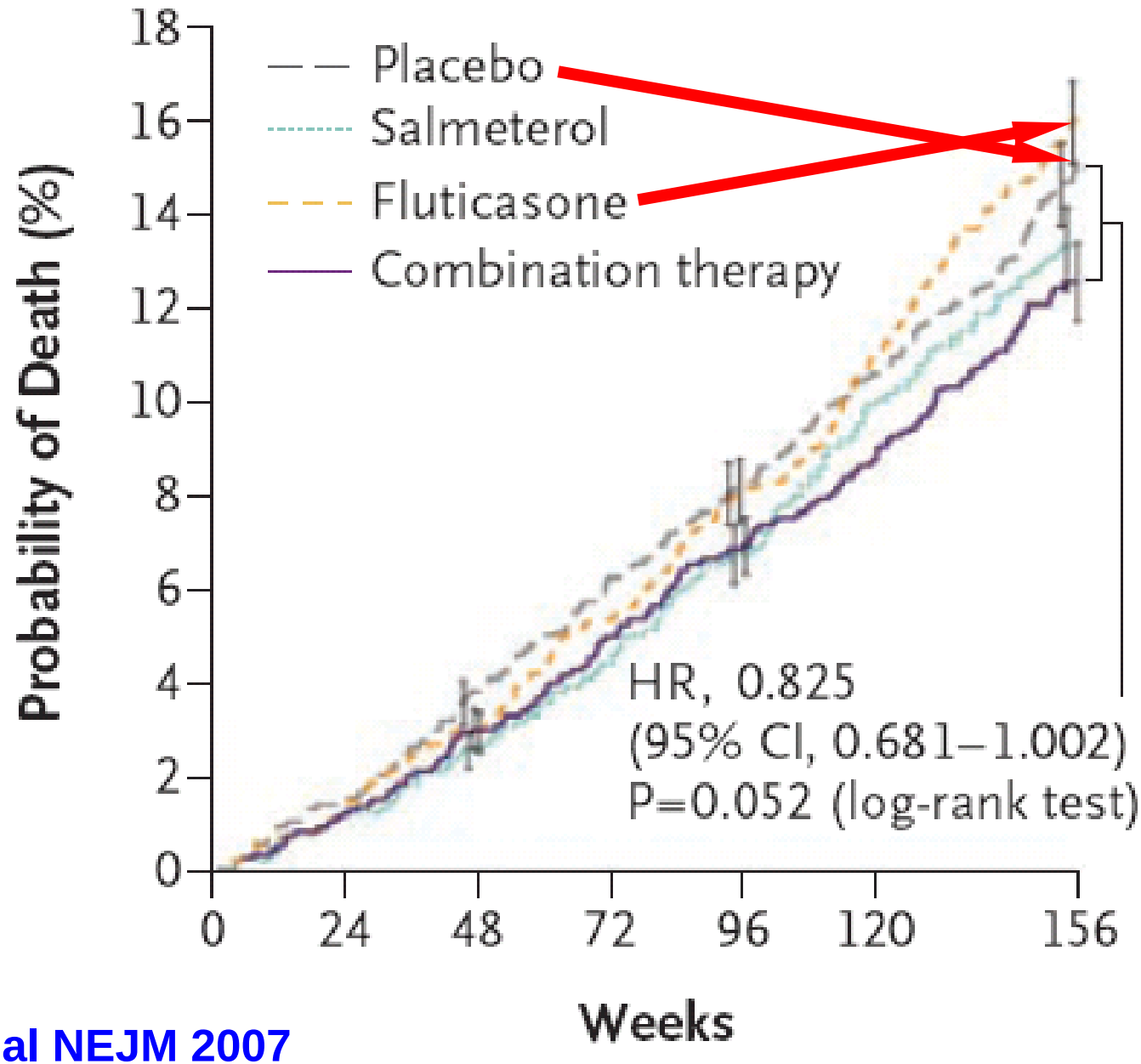
Tratamiento de la EPOC



GOLD: 2006 update (www.goldcopd.org)

Death from Any Cause

TORCH



Calverley et al NEJM 2007

Response to ICs in COPD

On the whole, this study offers two major advances that benefit the patient with COPD. It provides the first possible evidence that lung function decline can be slowed with medications. It also provides further evidence that the use of inhaled corticosteroids, alone or in combination, in COPD is unnecessary and thus inappropriate.

Suissa . AJRCCM 2008; 178: 322

Treatment of COPD

Table 3 Treatment administered for stable COPD

Variable	Global N = 833	Argentina N = 128	Ecuador N = 134	Spain N = 162	Hong Kong N = 153
Inhaled treatment, %					
SABA	74.8	85.6	69.5	75.3	97.4
Ipratropium	48.3	52.5	30.4	21.1	90.1
Tiotropium	35.5	33.9	40.6	73.9	1.9
LABA	9	2.5	13.3	9.1	2.6
ICS	21.8	12.7	31.2	5.6	44.7
LABA/ICS	45.9	72.8	35.9	68.3	12.5
Oral treatment, %					
Teophyllines	25.3	18.6	26.6	7.1	46.6
Mucolytics	10.1	5.9	13.2	20.4	1.3
Oral corticosteroids	4.4	3.4	11.7	3.5	0
Other, %					
LTOT	21.1	14.4	17.9	24.6	17.7
Rehabilitation	15.6	30.5	3.1	4.9	7.9
Antiinfluenza vaccine	58.6	72.0	22.6	80.3	48.7
Antipneumococcal vaccine	32.5	64.4	18.7	43.6	0.7

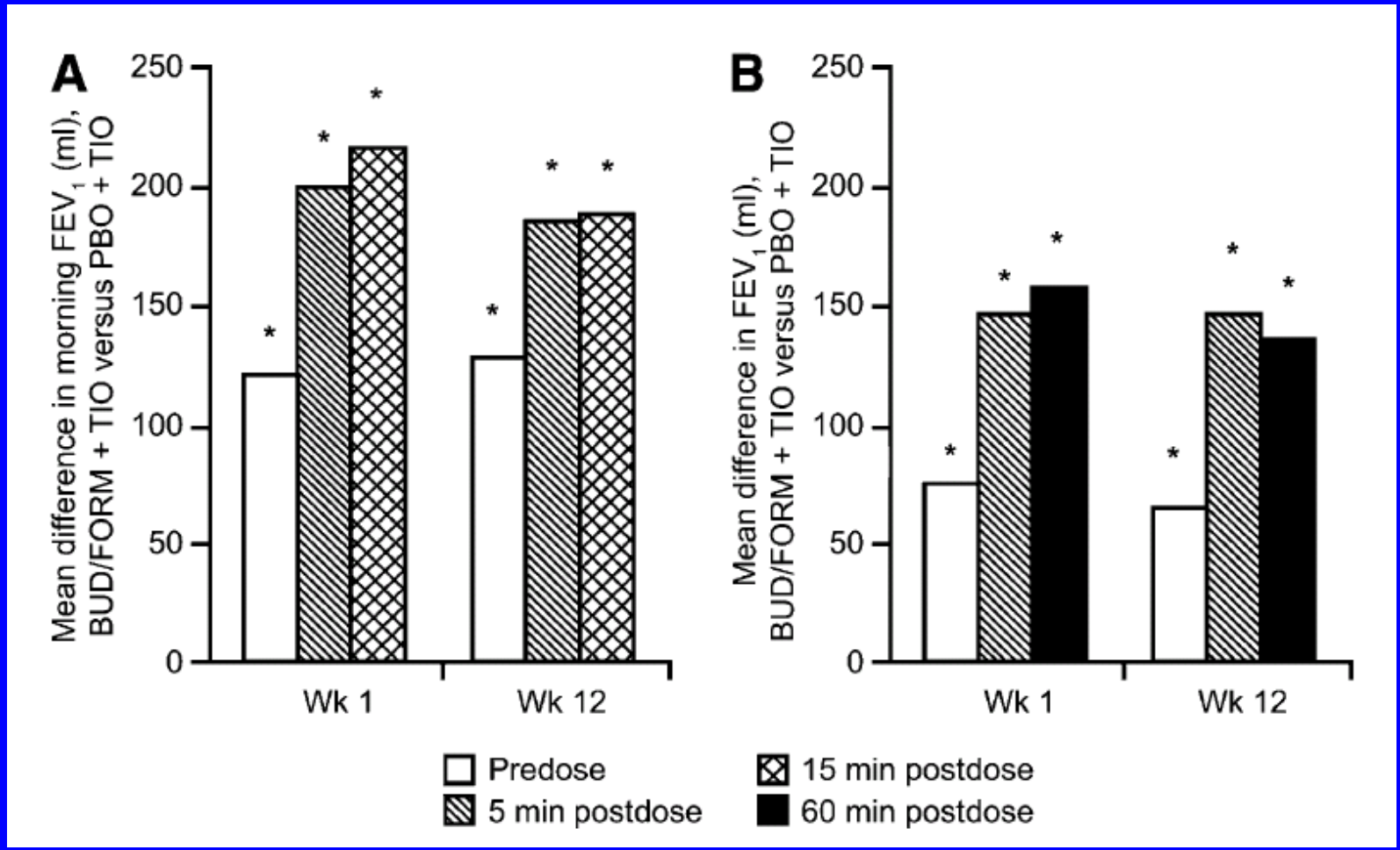
Miravitlles et al. Int J COPD 2008; 3: 803-814

Corticoides inhalados en EPOC

Reasons named by GPs for prescribing ICS to patients who show a normal lung function or a medical history without (severe) complaints	Diagnostic assessment by a pulmonologist based on spirometry, medical history and the reasons named for prescribing ICS				
	Diagnosis = asthma	Diagnosis = unclear	Diagnosis = COPD	No asthma no COPD	Total
Obvious reasons, total	119	18	13	2	152
Previously shown reversible bronchial obstruction	39	6	5	1	51
Peak flow registration test shows asthma	10	4			14
Steroid test shows asthma	6				6
Diagnosis previously assessed by paediatrician/pulmonologist	56	5	8	1	70
Severe asthma in childhood	8	3			11
Unclear reasons, total	13	91	10	16	130
History of complaints from allergy or hyperactivity/smoking habits and dyspnoea	8	24	9	4	39
ICS prescribed by former GP	3	27	1	3	34
Reason unclear to prescribing GP	2	40		9	51
Total	133 (47%)	108 (38%)	23 (8%)	18 (7%)	282 (100%)
Advised to stop ICS	5	108	18	18	149

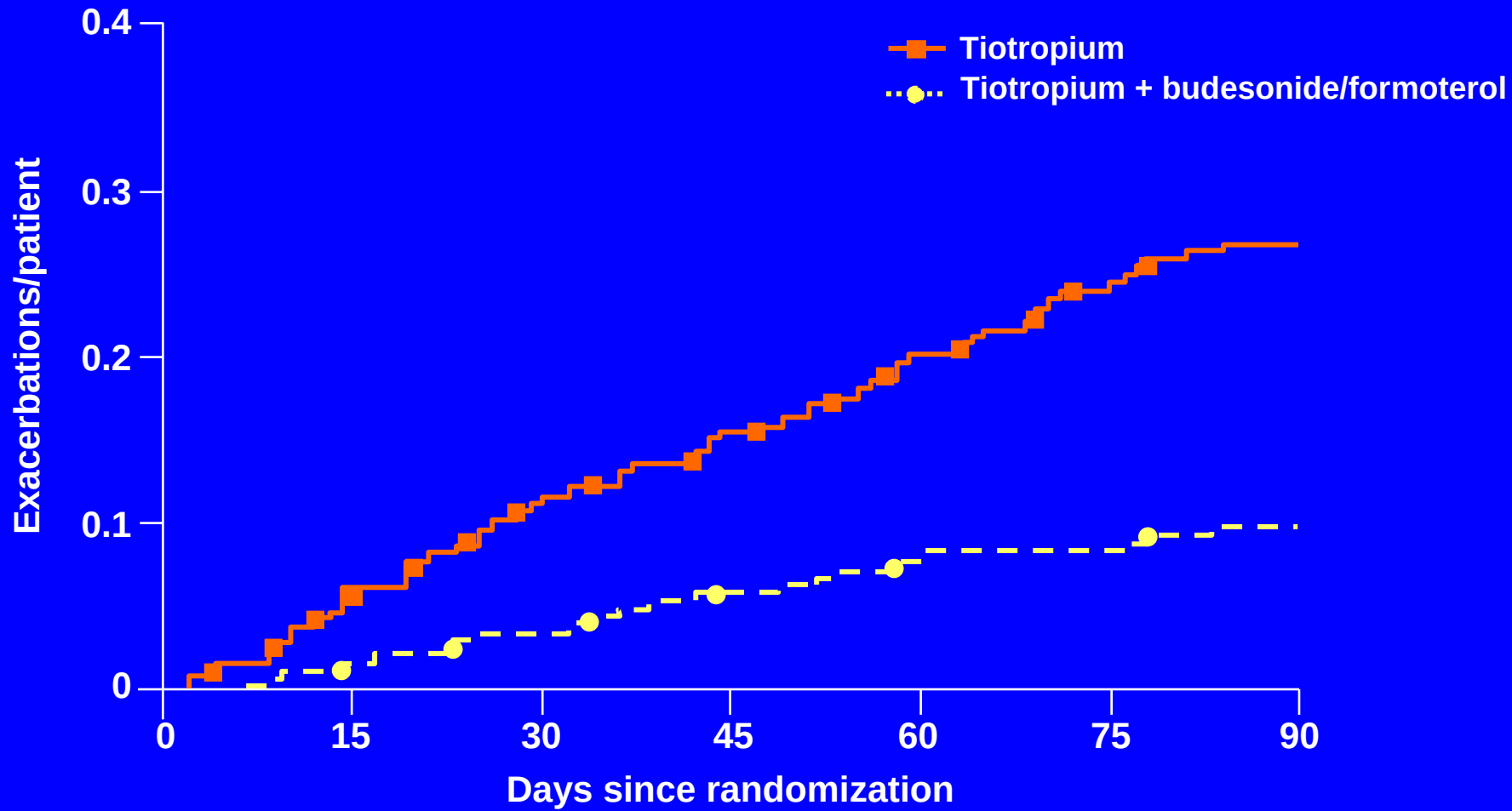
Lucas et al . Family Practice 2008;25:86 9

Tiotropio + Budesonida/formoterol



Welte et al. AJRCCM 2009;180:741-750

Tiotropium + budesonide/formoterol



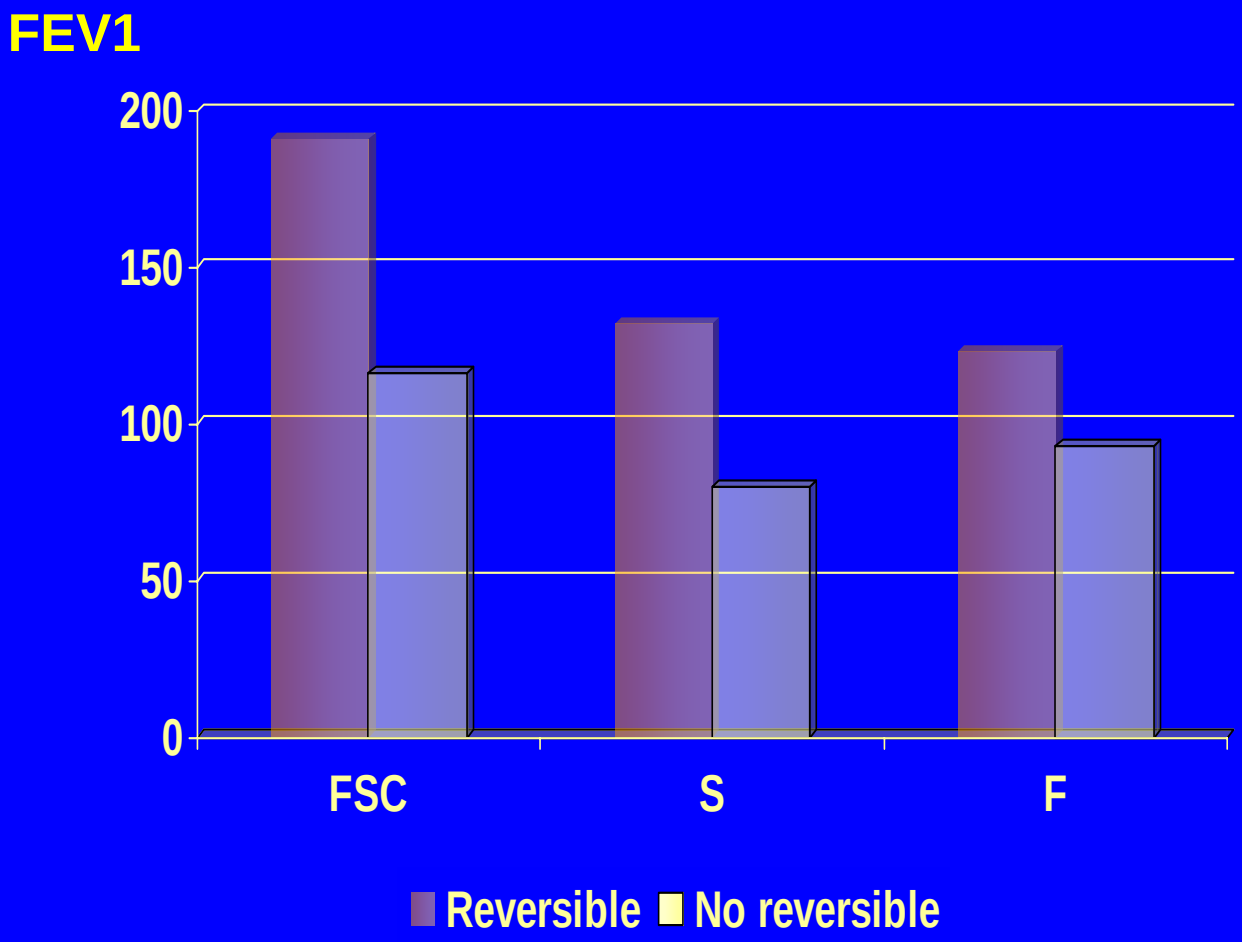
Welte et al. AJRCCM 2009;180:741-750

Tiotropio + Budesonida/formoterol

		Tio	Tio + Bud/For	Total
FEV_1 (L)	Mean Range	1.097 0.29–2.01	1.082 0.40–1.83	1.089 0.29–2.01
FVC (L)	Mean Range	2.407 0.75–5.33	2.355 0.96–5.37	2.381 0.75–5.37
VC (L)	Mean Range	2.572 0.78–5.39	2.542 0.86–5.39	2.557 0.78–5.39
FEV_1 (% PN)	Mean Range	38.1 10–58	37.7 16–51	37.9 10–58
FEV_1 (% VC)	Mean Range	44.1 16–93	44.0 18–69	44.0 16–93
FEV_1 (L) after Bricanyl	Mean Range	1.269 0.45–3.10	1.235 0.42–3.72	1.252 0.42–3.72
Reversibility (%)	Mean Range	16.6 -12–248	14.7 -24–284	15.6 -24–284
Reversibility (% PN)	Mean Range	5.9 -6–60	5.2 -10–89	5.6 -10–89

Welte, et al. AJRCCM 2009;180:741-750

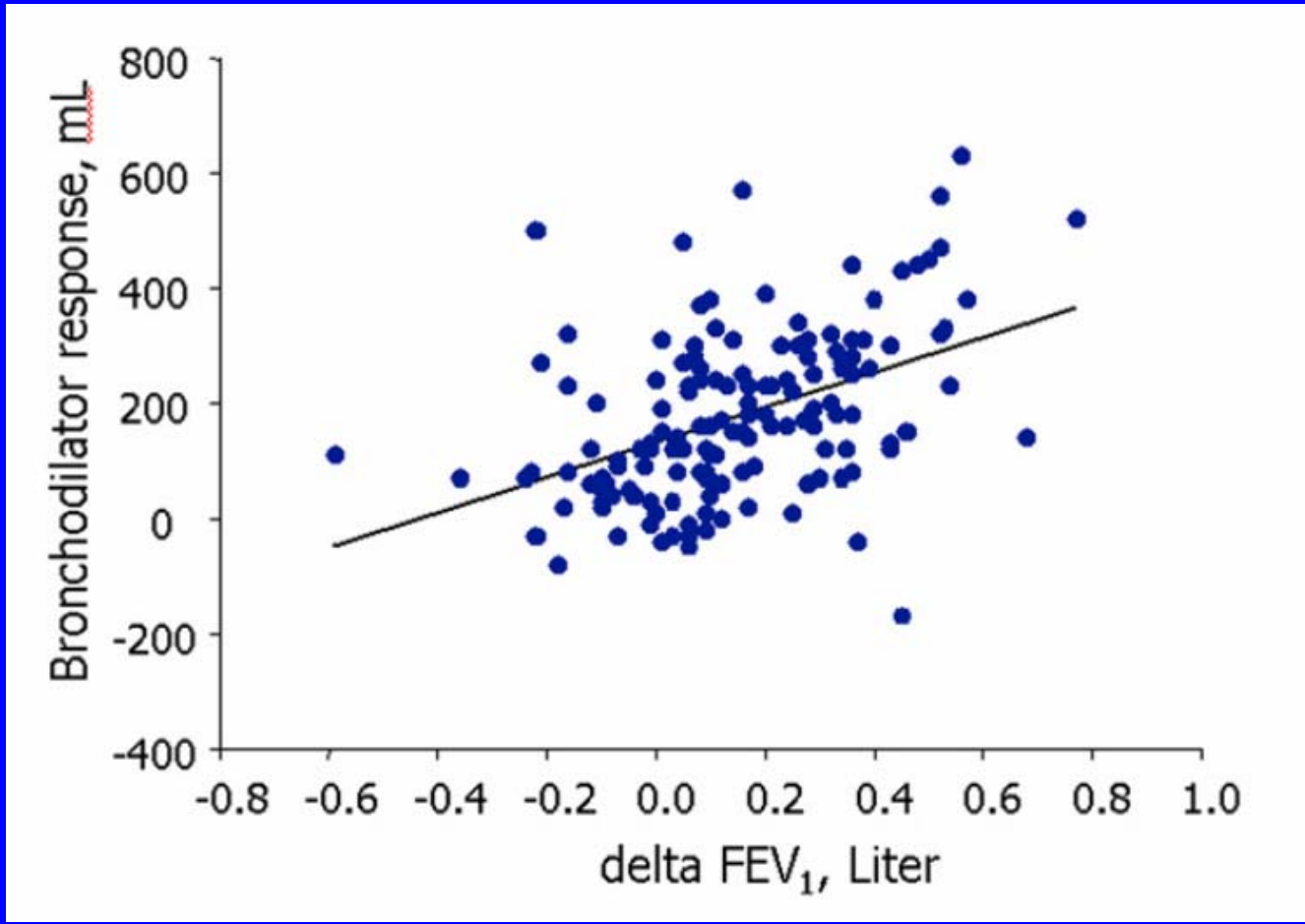
Tratamiento combinado en la EPOC



Respuesta del FEV1 valle según reversibilidad al albuterol.

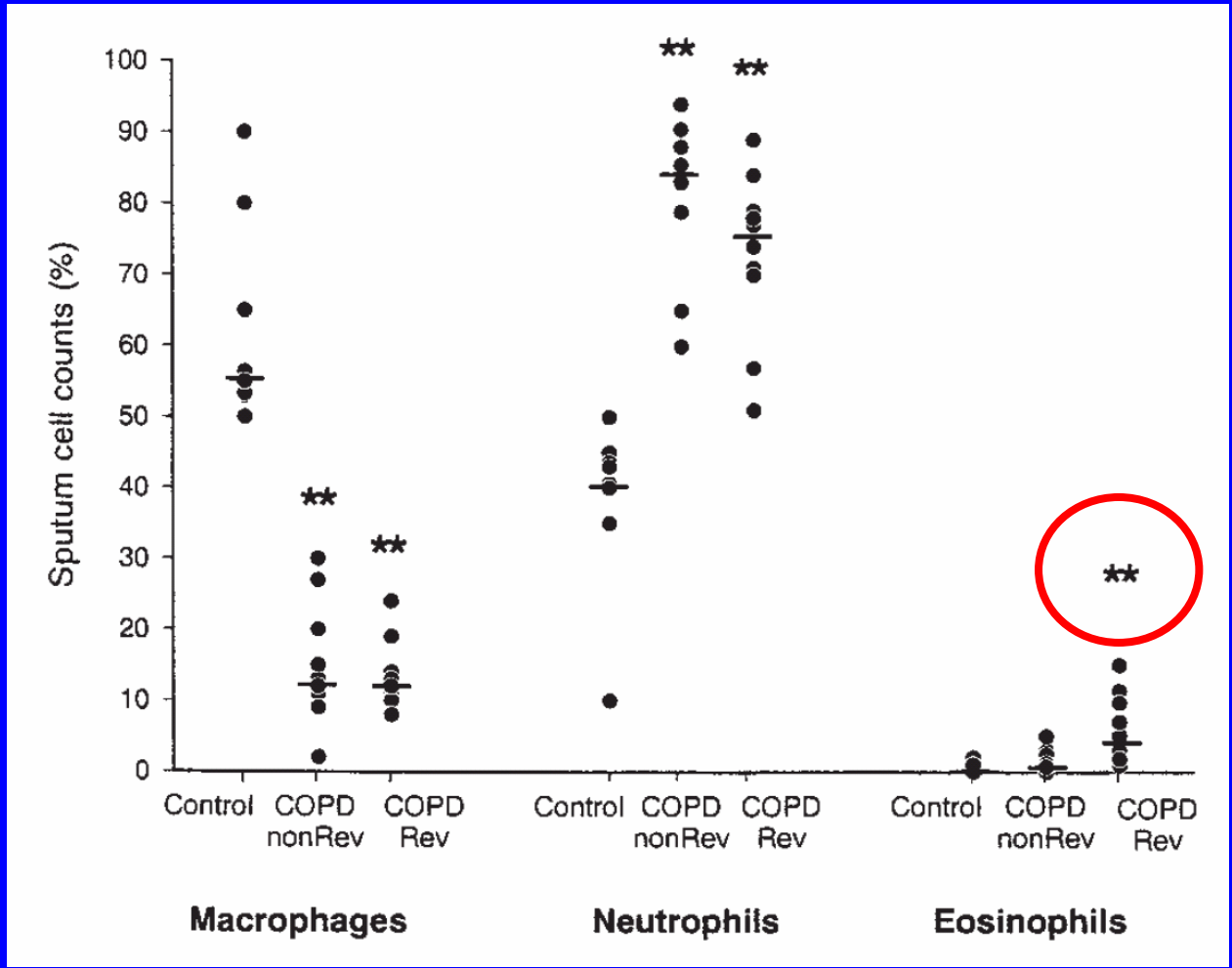
Mahler et al. AJRCCM 2002;166:1084-1091

Tipos de EPOC



Lee *et al*. Respir Med 2010; 104: 542-549

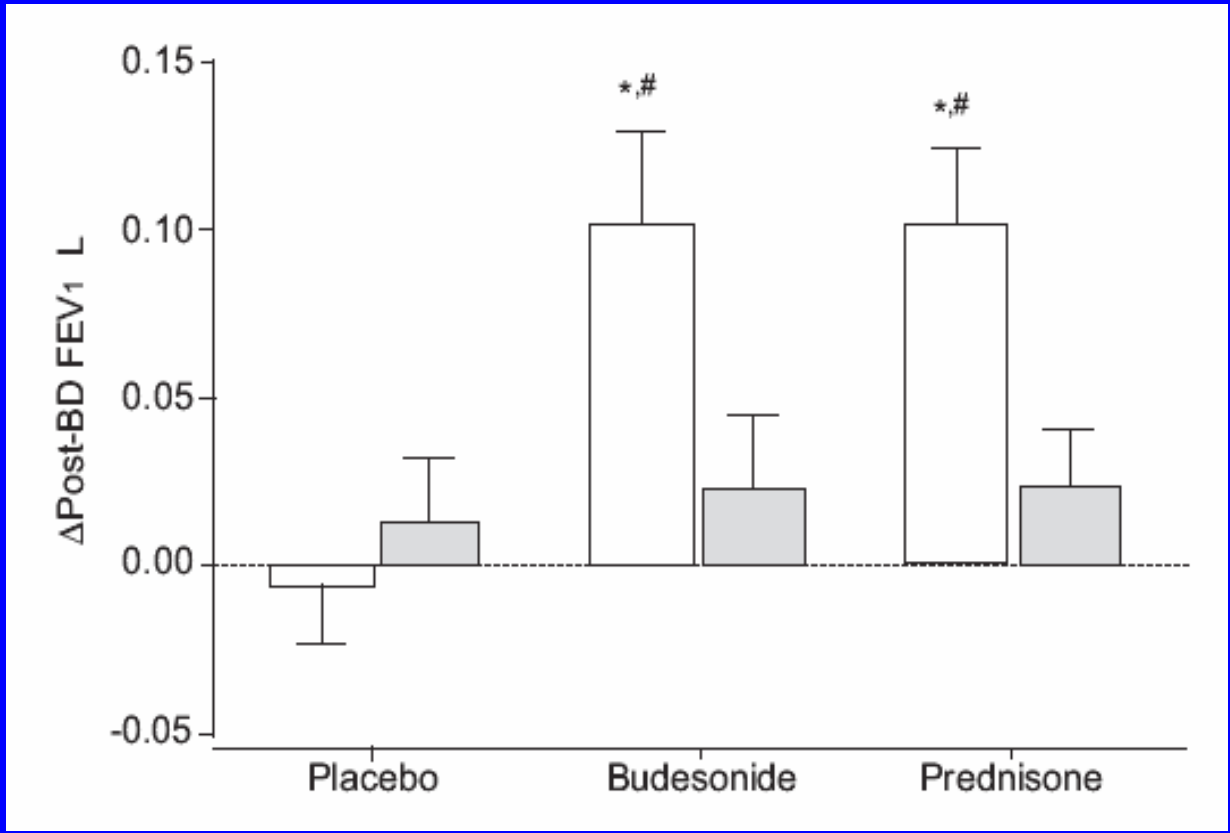
Tipos de EPOC



Papi et al. AJRCCM 2000;162:1773–1777

Corticoides inhalados en la EPOC

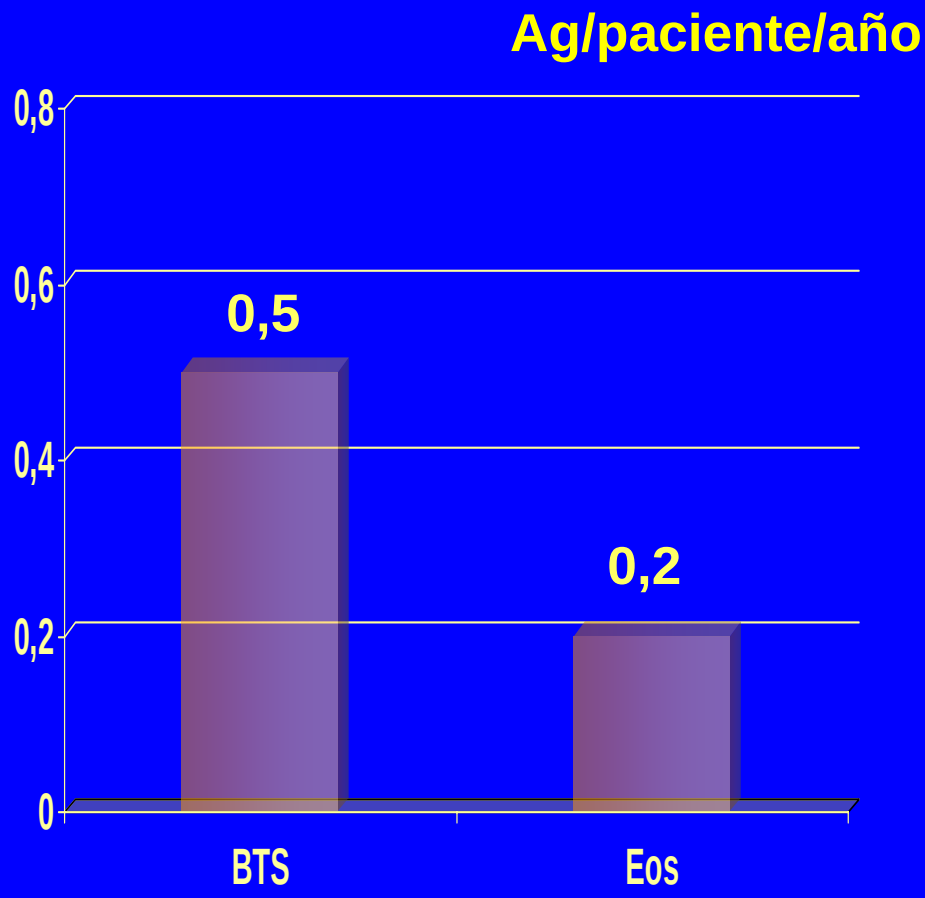
Cambio en FEV1 post-BD en pacientes con o sin eosinofilia en esputo ($p<0,05$)



Leigh et al. Eur Respir J 2006;27:964-971

Tratamiento dirigido de la EPOC

Pacientes aleatorizados a Tto. según BTS o según eosinofilia en esputo inducido. Objetivo mantener eosinofilia <3% Reducción de agudizaciones del 62% (5-72%); p=0,037



Siva et al. Eur Respir J 2007;29:906-913

Tipos de EPOC

Diagnóstico de asma	Casos	HRB	Sensibilización IgE	IgE Total	Sibilantes	Rinitis alérgica
Basal	19	71%	69%	1.83	63%	68%
Durante seguimiento	22	40%	61%	1.84	46%	50%
Nunca	123	19%	21%	1.38	29%	23%

Diferencias en las características basales de los casos incidentes de obstrucción crónica al flujo aéreo según la presencia de asma. Estudio ECRHS en 5.002 personas de 20-44 años seguidas 10 años.

De Marco et al. AJRCCM 2007; 175: 32-39

El síndrome overlap

Review

The overlap syndrome of asthma and COPD: what are its features and how important is it?

P G Gibson,[1,2] J L Simpson[1]

Thorax 2009; 64: 728–735

Normativa Canadiense

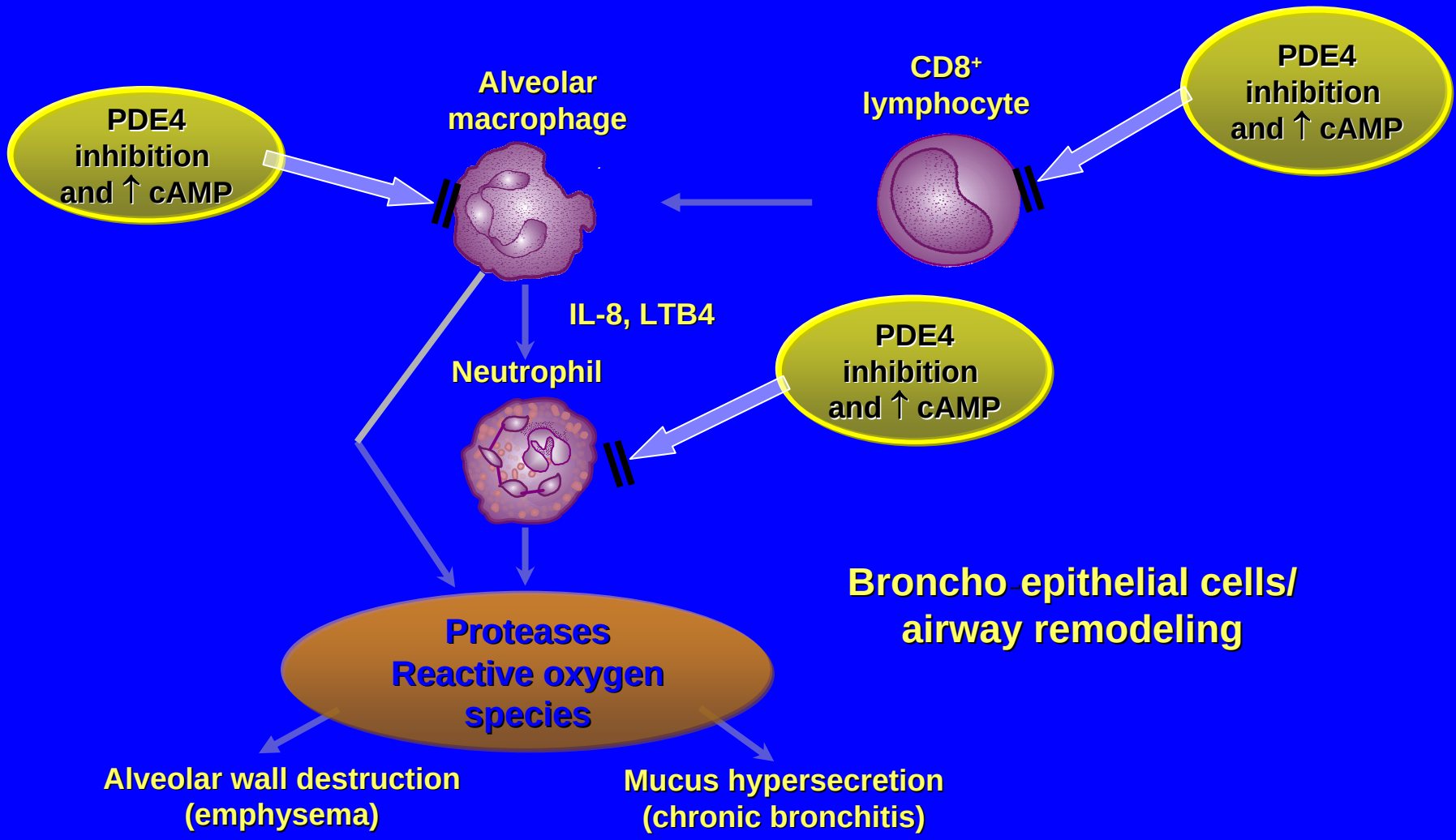
- In patients in whom the asthma component is prominent, early introduction of ICS may be justified
- ICS should not be used as monotherapy in COPD and when used should be combined with a LABA

O'Donnell et al. Can Respir J 2007; 14 (Suppl B): 5-32

Cambio de paradigma

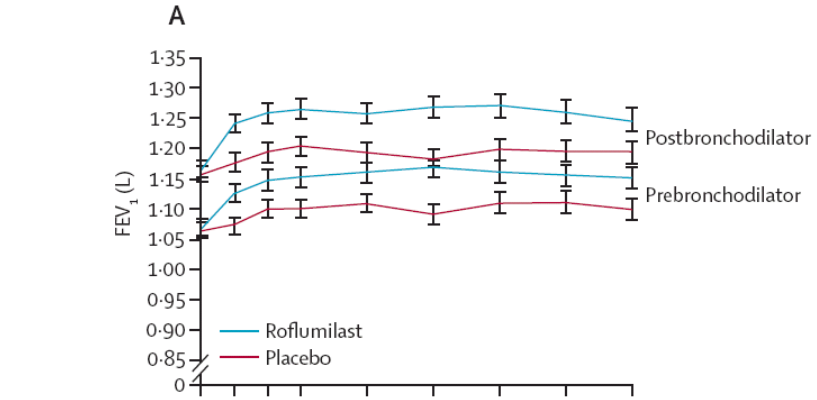
- Paradigma actual: CIs a dosis altas para todos los pacientes con EPOC, FEV1<50% (o 60%) y más de una agudización.
- Paradigma futuro: CIs a la mínima dosis eficaz para todos los pacientes con fenotipo *overlap* sea cual sea su FEV1

PDE4 Inhibitors

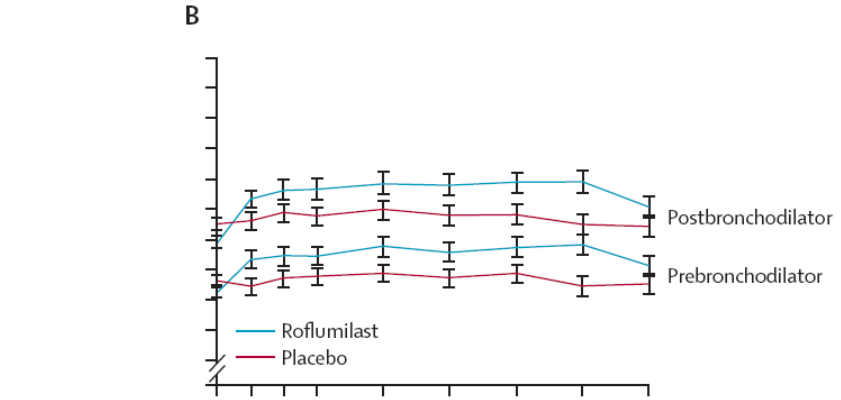


Adapted from Hatzelmann A, et al. *J Pharmacol Exp Ther*. 2001;297:267-279.
Adapted from Billah MM, et al. *J Pharmacol Exp Ther*. 2002;302:127-137.

Roflumilast in COPD



Number at risk*									
Prebronchodilator									
Roflumilast	764	743	667	625	604	571	542	517	499
Placebo	758	744	694	667	633	600	566	537	521
Postbronchodilator									
Roflumilast	757	728	661	622	598	569	540	510	497
Placebo	753	733	691	662	626	597	562	532	513



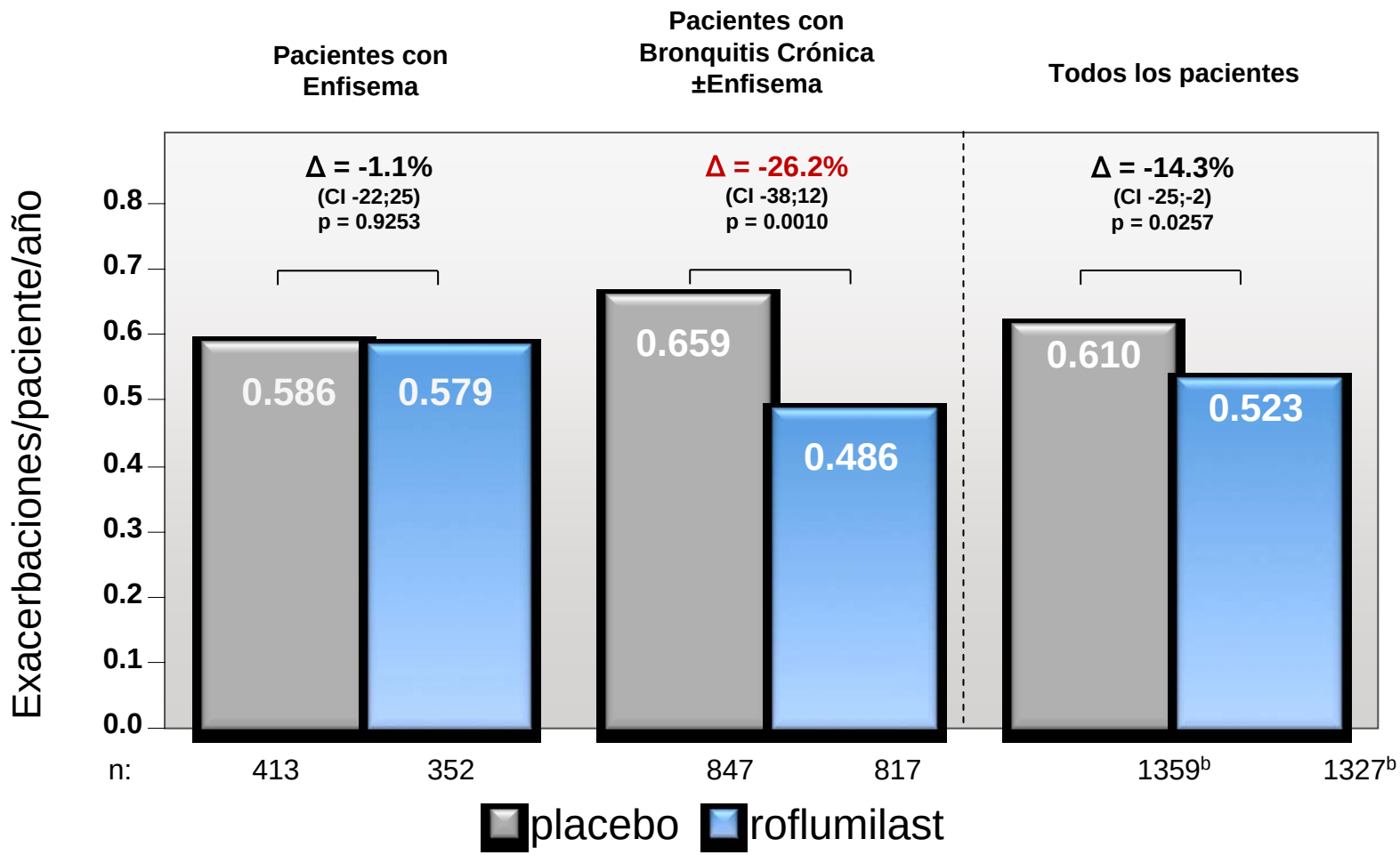
Number at risk*									
Prebronchodilator									
Roflumilast	772	730	669	637	606	581	558	544	525
Placebo	796	762	725	708	673	641	601	565	551
Postbronchodilator									
Roflumilast	769	725	666	635	604	577	554	543	525
Placebo	794	761	723	706	670	638	599	562	546

Patients with COPD; FEV1<50% predicted, chronic cough and sputum and at least one severe exacerbation previous year

Calverley et al. Lancet 2009;374:685-694

TASAS DE EXACERBACIONES MODERADAS O GRAVES* - POR FENOTIPO

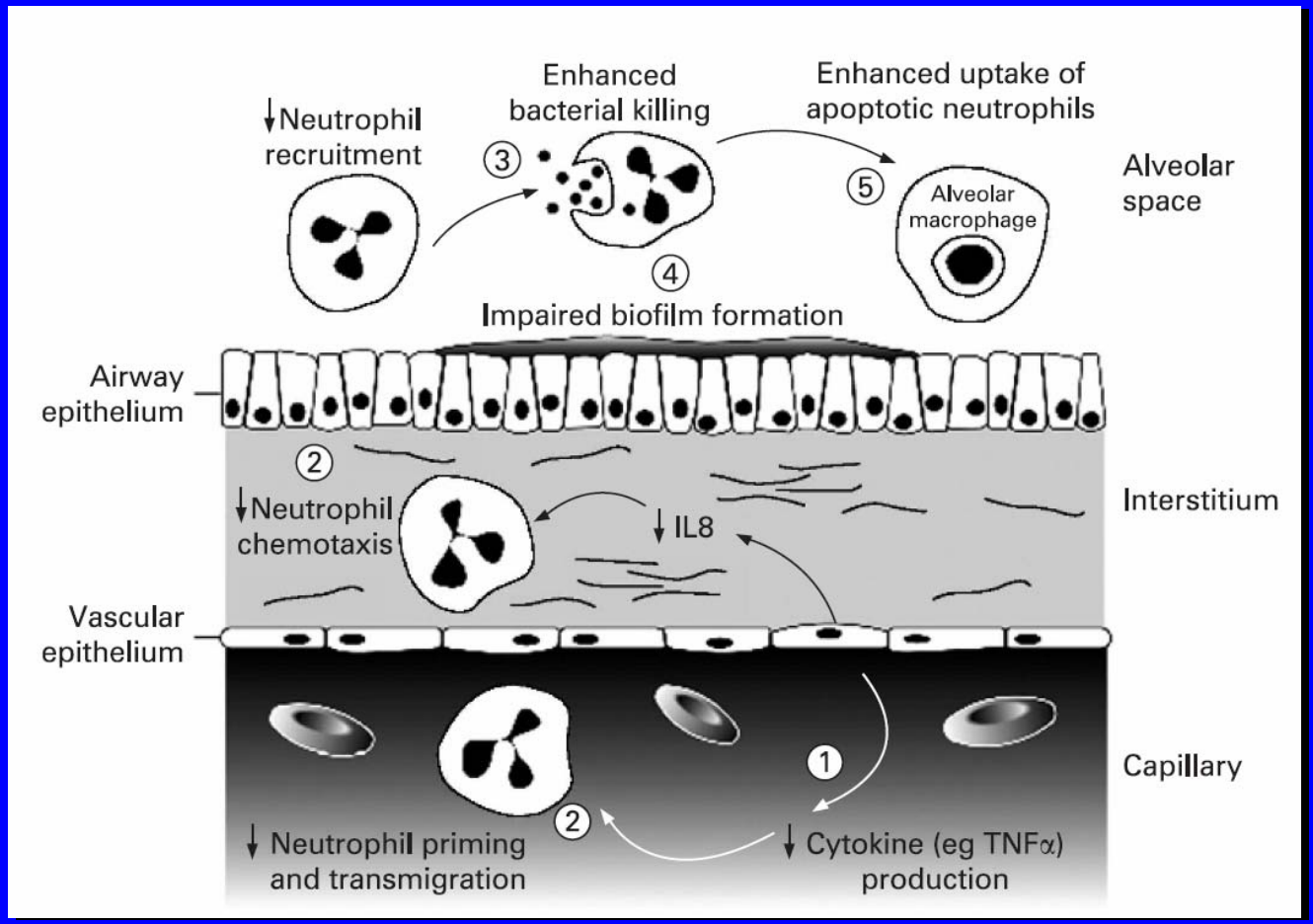
M2-111 & M2-112 – análisis conjunto



*exacerbaciones tratadas con esteroides sistémicos o que lleven a hospitalización o muerte

[b] incluye también a pacientes en los que no está disponible las características de su enfermedad

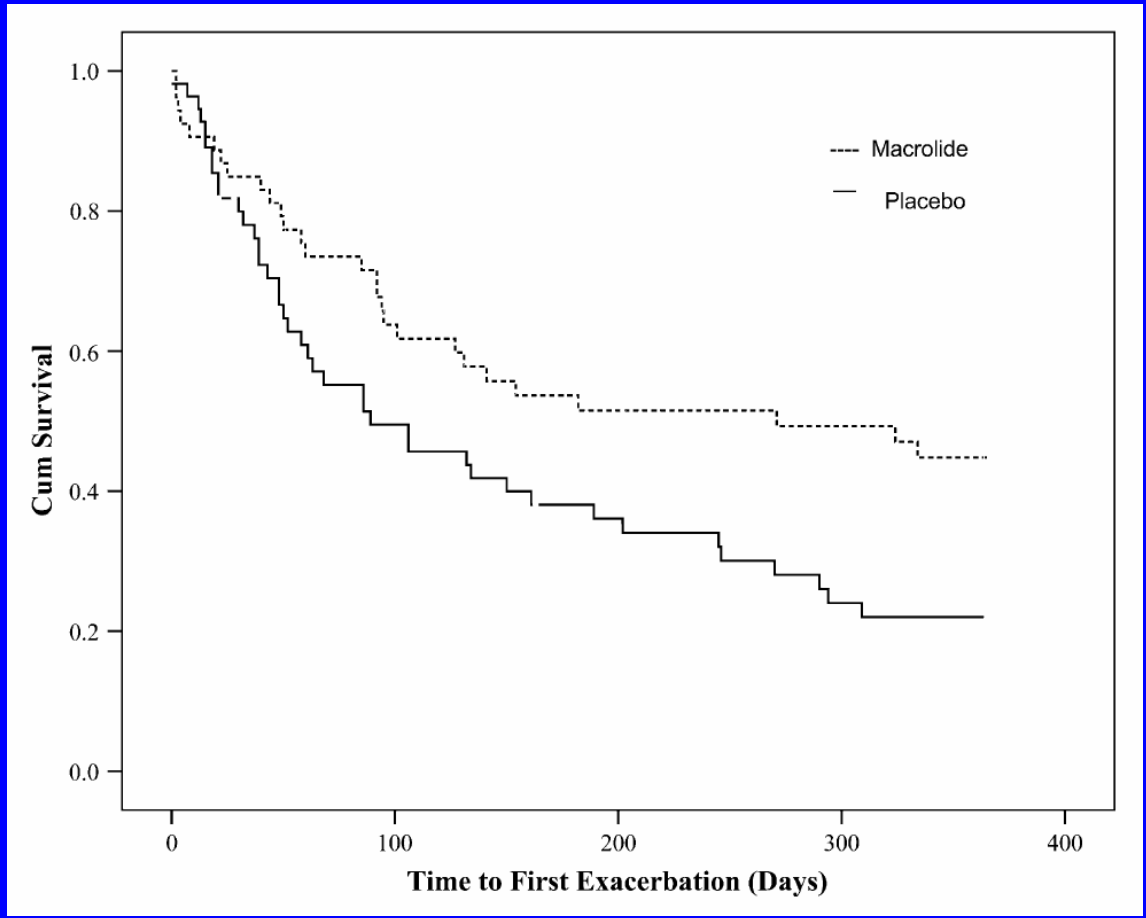
Azithromycin and COPD



Idris et al. Thorax 2009; 64: 186–189

Prevention of exacerbations with macrolides

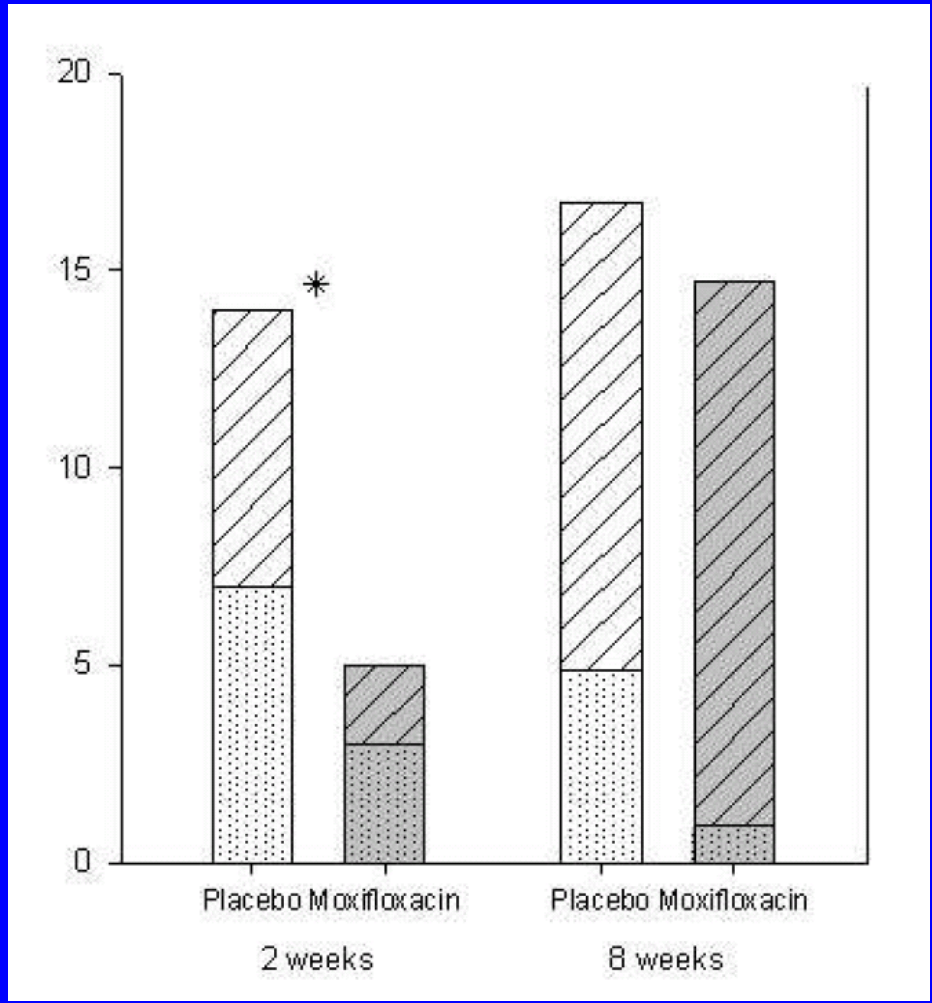
Proportion of patients without an exacerbation vs time to the first exacerbation in placebo and macrolide arms (p=0.02)



Seemungal et al. AJRCCM 2008;178:1139–1147

Treatment of colonisation

Colonisation at 2 and 8 weeks.
Bottom: persistence
Upper: acquired
*p<0.01



Miravitlles *et al*. ERJ 2009; 34: 1066-1071

Sethi *et al. Respiratory Research* 2010, **11**:10
http://respiratory-research.com/content/11/1/10

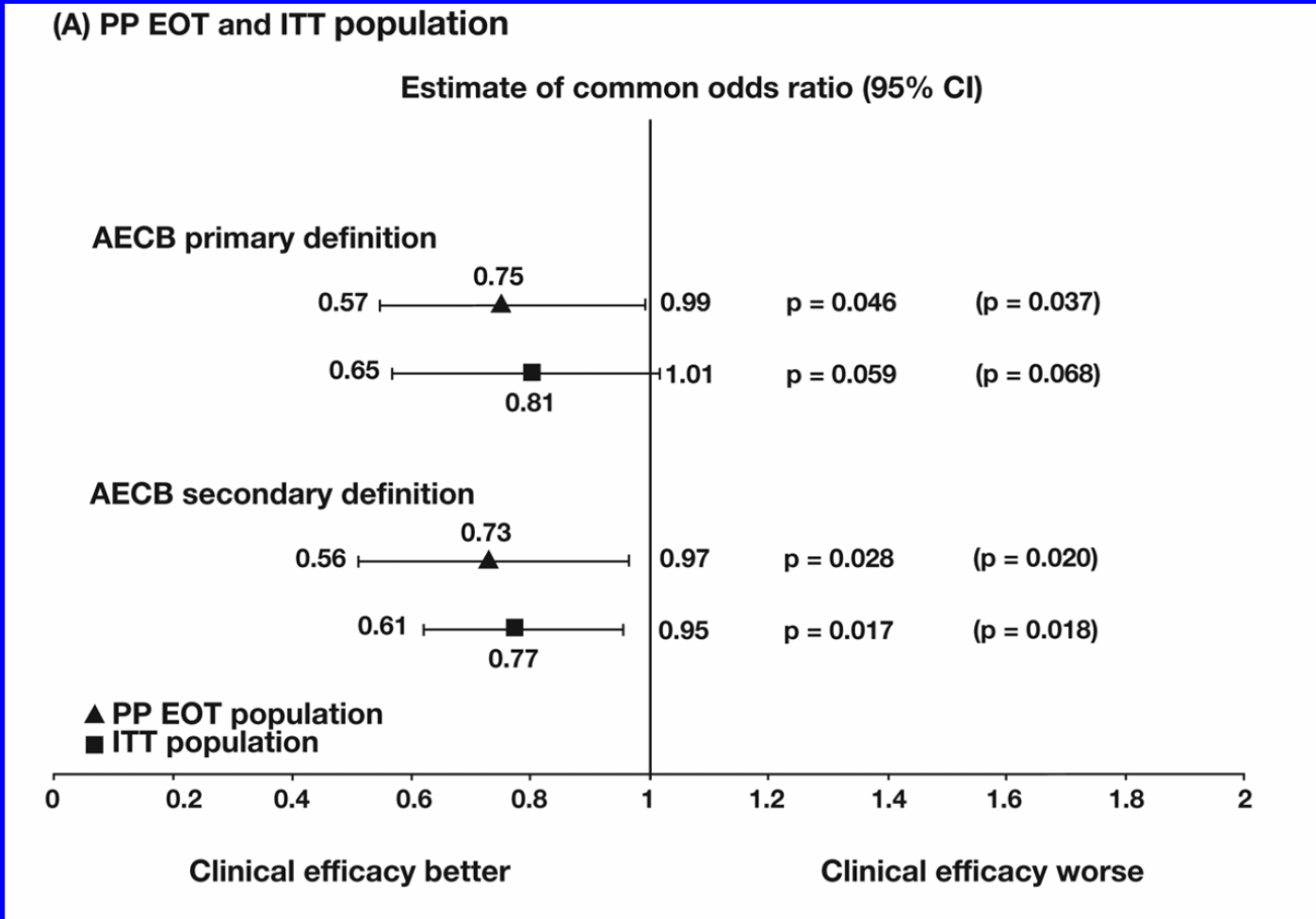
RESPIRATORY RESEARCH

RESEARCH Open Access

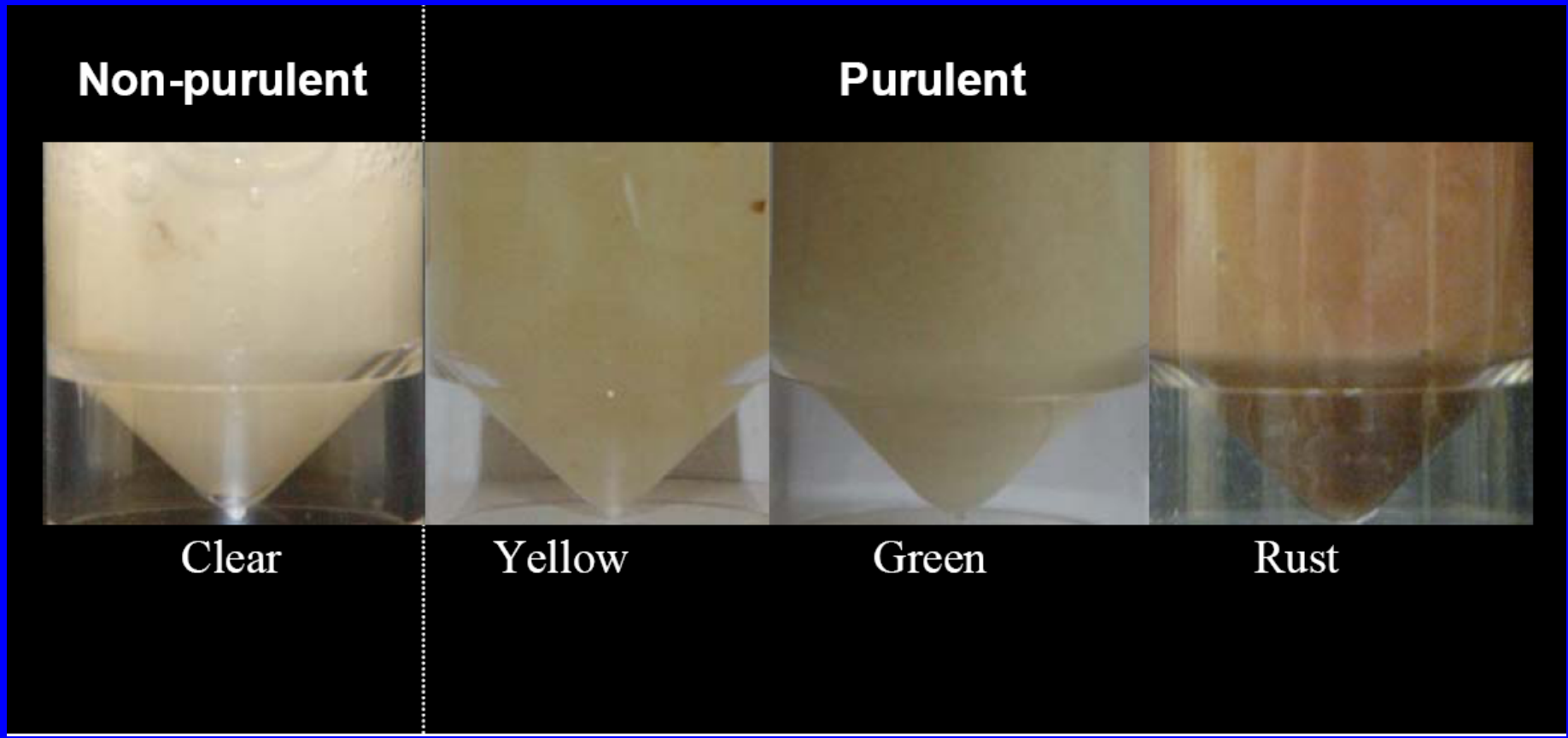
Pulsed moxifloxacin for the prevention of exacerbations of chronic obstructive pulmonary disease: a randomized controlled trial

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

Clinical efficacy - Per protocol

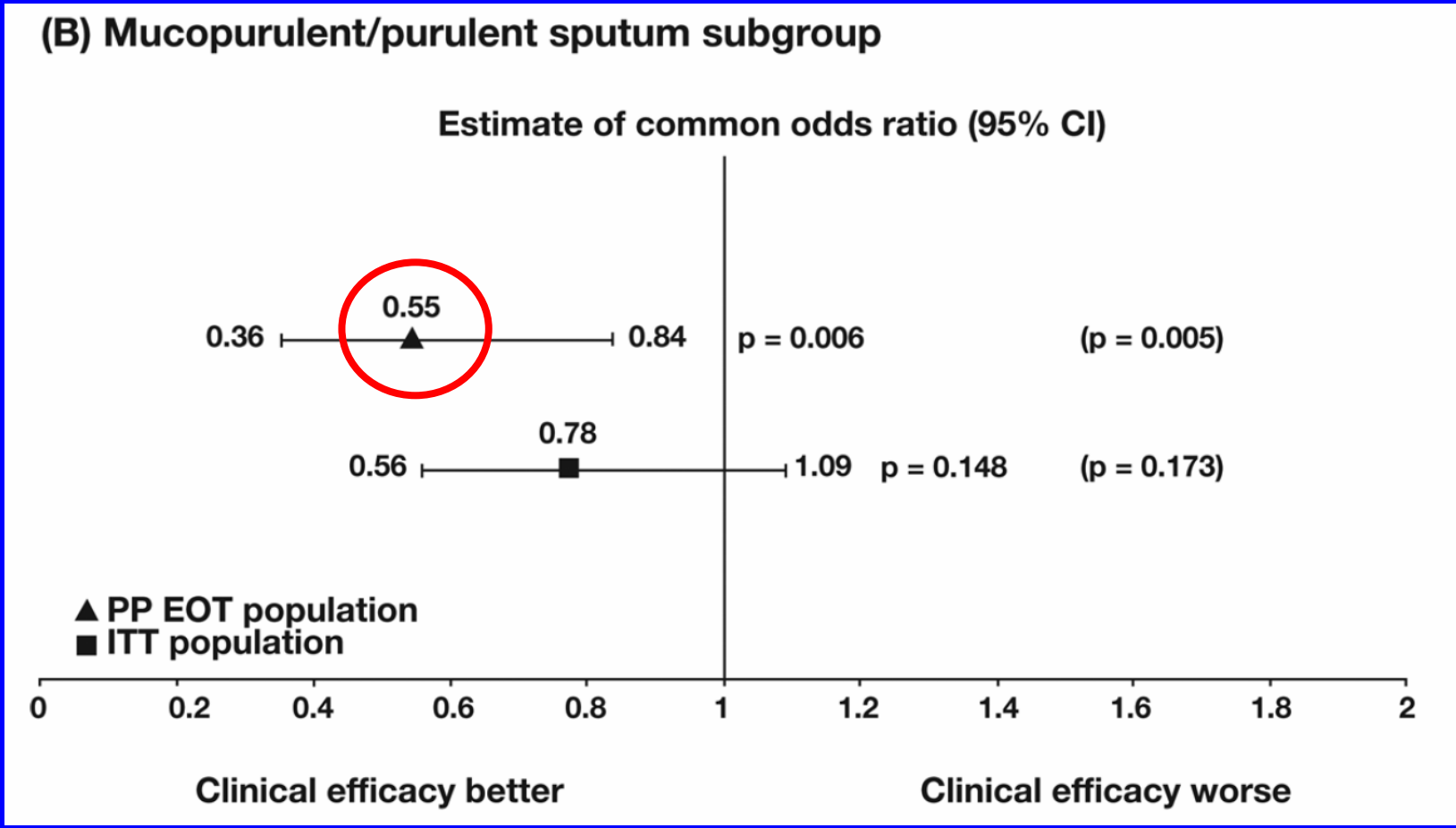


Sethi et al. Respir Res 2010; 11:10



Courtesy of R. Wilson. Host Defence Unit. Royal Brompton Hospital London, UK

Clinical efficacy
Purulent/muco-purulent sputum



Sethi et al. Respir Res 2010; 11:10

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Susceptibility to Exacerbation in Chronic Obstructive Pulmonary Disease

John R. Hurst, M.B., Ch.B., Ph.D., Jørgen Vestbo, M.D., Antonio Anzueto, M.D., Nicholas Locantore, Ph.D., Hana Müllerova, Ph.D., Ruth Tal-Singer, Ph.D., Bruce Miller, Ph.D., David A. Lomas, Ph.D., Alvar Agusti, M.D., Ph.D., William MacNee, M.B., Ch.B., M.D., Peter Calverley, M.D., Stephen Rennard, M.D., Emiel F.M. Wouters, M.D., Ph.D., and Jadwiga A. Wedzicha, M.D., for the Evaluation of COPD Longitudinally to Identify Predictive Surrogate Endpoints (ECLIPSE) Investigators*

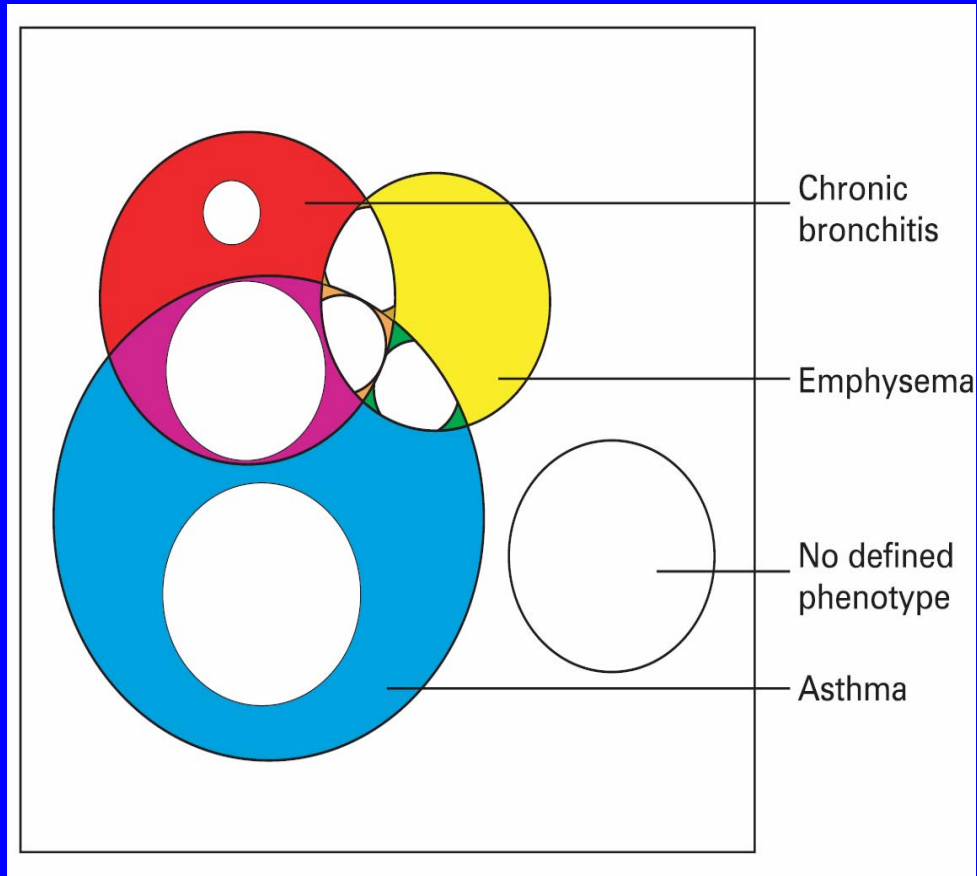
Frequent Exacerbations of Chronic Obstructive Pulmonary Disease — A Distinct Phenotype?

Donald P. Tashkin, M.D.

Diagrama de Venn de la EPOC

Los círculos representan la proporción de individuos con EPOC (FEV1/FVC < 70%).

Adultos mayores de 50 años en Nueva Zelanda (n= 469)



Marsh et al. Thorax 2008; 63: 761-767

Tipos de EPOC

CHEST

The Many "Small COPDs"*

COPD Should Be an Orphan Disease

Stephen I. Rennard, MD, FCCP; and Jørgen Vestbo, DrMedSci

Chest 2008; 134: 623-627

Types of COPD: Cluster analysis

	Cluster				
	1	2	3	4	5
Pre-BD FEV_1/FVC %	-	-	+/-	+/-	+/-
Pre-BD FEV_1 % pred	--	--	+/-	+/-	+/-
Reversibility %	++	--	+	--	+
*D*L,CO/*V*A¶ % pred	--	--	+/-	+/-	+/-
FRC % pred	++	+	+/-	+/-	+/-
Log IgE $g \cdot L^{-1}$	++	--	++	+/-	+/-
Fe_{NO} ppb	+/-	--	++	--	+/-
Sputum production %	100	0	0	0	100
Smoking history pack-yrs	++	++	--	--	--

BD: bronchodilator; FEV_1: forced expiratory volume in 1 s; FVC: forced vital capacity; % pred: % predicted; *D*L,CO: diffusing capacity of the lung for carbon monoxide; *V*A: alveolar volume; FRC: functional residual capacity; Ig: immunoglobulin; Fe_{NO}: exhaled nitric oxide fraction, --: ≥20% below mean; -: ≥10% and <20% below mean; +/-: within 10% of mean; +: ≥10% and <20% above mean; ++: ≥20% above mean, #: n=175; ¶: adjusted for haemoglobin concentration

Weatherall et al. Thorax 2009;34:812 818

El síndrome overlap

Review

The overlap syndrome of asthma and COPD: what are its features and how important is it?

P G Gibson,[1,2] J L Simpson[1]

Thorax 2009; 64: 728–735

Inspiratory-to-Total Lung Capacity Ratio Predicts Mortality in Patients with Chronic Obstructive Pulmonary Disease

Ciro Casanova, Claudia Cote, Juan P. de Torres, Armando Aguirre-Jaime, Jose M. Marin, Victor Pinto-Plata, and Bartolome R. Celli

Respiratory Research Institute, Hospital Universitario Nuestra Señora de Candelaria, Tenerife; and Pulmonary Department, Hospital Miguel Servet, Zaragoza, Spain; Pulmonary Department, Bay Pines Veterans Affairs Medical Center, St. Petersburg, Florida; and Pulmonary and Critical Care Department, Caritas-St. Elizabeth's Medical Center, Boston, Massachusetts

Daily Physical Activity in Patients with Chronic Obstructive Pulmonary Disease Is Mainly Associated with Dynamic Hyperinflation

Francisco Garcia-Rio[1], Vanesa Lores[1], Olga Mediano[2], Blas Rojo[2], Angel Hernanz[3], Eduardo López-Collazo[4], and Rodolfo Alvarez-Sala[1]

[1]Servicio de Neumología, Hospital Universitario La Paz, Madrid; [2]Sección de Neumología, Hospital Infanta Sofía, Madrid; [3]Servicio de Bioquímica, Hospital Universitario La Paz, Madrid; and [4]Investigation Unit, Hospital Universitario La Paz, Madrid, Spain

Responses to LABA + ICS

Table 2 Responses in lung function and dyspnea score following 3 months of treatment with combined long-acting beta-agonist and inhaled corticosteroid.

Subtype	Mild-mixed	Emphysema-dominant	Obstruction-dominant	Severe-mixed
ΔFEV_1, liters	0.169 ± 0.218	0.032 ± 0.263*	0.207 ± 0.223§	0.155 ± 0.166¶
(% predicted)	(5.1 ± 6.4)	$(0.9 \pm 9.3$*$)$	$(6.7 \pm 7.3$§$)$	$(5.1 \pm 5.5$¶$)$
ΔTLC, liters	-0.09 ± 0.52	0.09 ± 0.57	-0.41 ± 1.11	-0.16 ± 0.56
ΔIC, liters	0.07 ± 0.47	0.22 ± 0.48	0.11 ± 0.30	0.11 ± 0.33
ΔRV, liters	-0.20 ± 0.64	-0.11 ± 0.85	-0.63 ± 1.26†§	-0.31 ± 0.77
ΔMMRC score	-0.39 ± 1.02	-0.16 ± 0.55	-0.68 ± 1.03§	-0.26 ± 0.74

Lee *et al*. Respir Med 2010; 104: 542-549

INT J TUBERC LUNG DIS 14(11):1481–1488

Three phenotypes of obstructive lung disease in the elderly

K-W. Jo,* S. W. Ra,† E. J. Chae,‡ J. B. Seo,‡ N. K. Kim,‡ J-H. Lee,§ E-K. Kim,§ Y. K. Lee,¶ T-H. Kim,# J. W. Huh,* W. J. Kim,** J. H. Lee,†† S-M. Lee,‡‡ S. Y. Lim,§§ T. R. Shin,¶¶ H. I. Yoon,## S. S. Sheen,*** J. S. Lee,* S-D. Lee,* Y-M. Oh*

SETTING: Eleven referring hospitals in South Korea.

OBJECTIVE: To classify the phenotypes in elderly subjects with obstructive lung disease (OLD).

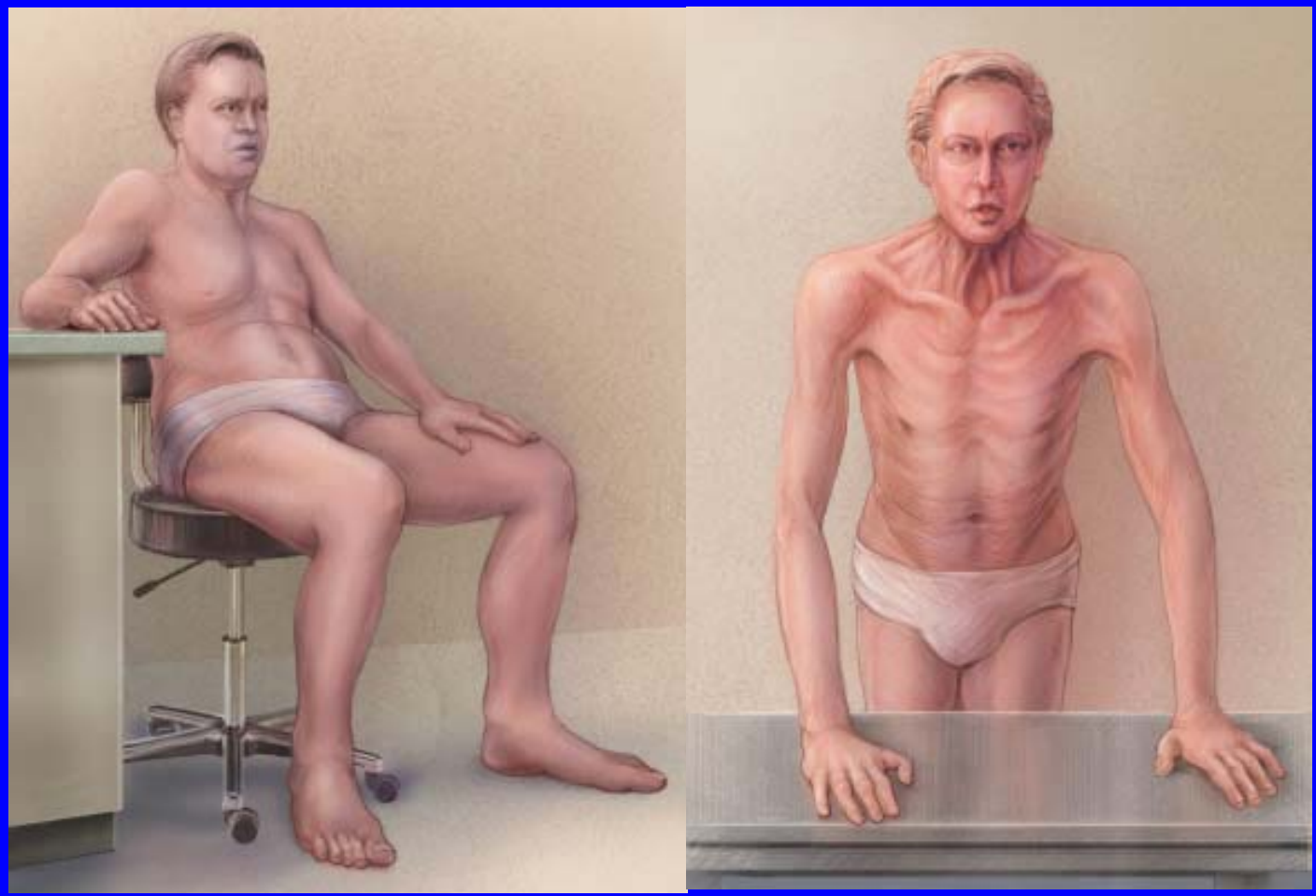
METHODS: We analysed 191 subjects aged ⩾60 years with chronic respiratory symptoms and either obstructive spirometry or bronchial hyperresponsiveness. Factor analysis was performed using commonly measured variables and revealed four significant variables: 1) the ratio of inspiratory capacity to total lung capacity, 2) the total score on the St George's Respiratory Questionnaire, 3) the volume fraction of the lung less than 950 Hounsfield Unit at full inspiration on volumetric computed tomography and 4) post-bronchodilator forced expiratory volume in 1 second (FEV_1) changes. We performed a cluster analysis on these four variables.

RESULTS: The mean age was 68.5 (±5.2 SD) years and the mean post-bronchodilator FEV_1 was 52.4% (±16.5) predicted. Three clusters with the following phenotypes were identified: Cluster 1 included subjects with moderate to severe airflow obstruction and bronchodilator reversibility; Cluster 2 subjects had moderate airflow obstruction without bronchodilator reversibility, and Cluster 3 subjects had severe airflow obstruction without bronchodilator reversibility.

CONCLUSIONS: We identified three phenotypes in elderly subjects with OLD. Follow-up studies are needed to explore the clinical significance of each phenotype.

KEY WORDS: chronic bronchitis; emphysema; asthma; obstructive lung disease; elderly

Looking at the patient



Rennard. NEJM 2004; 350: 965 - 66

GesEPOC

guía española de la EPOC

Sociedad Española de **Neumología y Cirugía Torácica** SEPAR

SEMG Sociedad Española de Médicos Generales y de Familia

SERMEF

semFYC Sociedad Española de Medicina de Familia y Comunitaria

SEMI Sociedad Española de Medicina Interna

LA VISIÓN GLOBAL DE LA PERSONA ENFERMA

Comité Nacional para la Prevención del Tabaquismo CNPT

SEMERGEN Sociedad Española de Médicos de Atención Primaria AP

Sociedad Española de Medicina de Urgencias y Emergencias

foro español de **pacientes**

¿Qué es GesEPOC?

GesEPOC
guía española de la EPOC

- Significa Guía Española de la EPOC.

- Es una plataforma innovadora de conocimiento sobre la EPOC.

¿Quién hace GesEPOC?

GesEPOC
guía española de la EPOC

- SEPAR (Sociedad Española de Neumología y Cirugía Torácica)
- SemFYC (Sociedad Española de Medicina de Familia y Comunitaria)
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Sociedad Española de Neumología y Cirugía Torácica SEPAR

semFYC Sociedad Española de Medicina

SEMERGEN Sociedad Española de Médicos de Atención Primaria AP

SEMG Sociedad Española de Médicos Generales y de Familia

SEMI Sociedad Española de Medicina Interna
LA VISIÓN GLOBAL DE LA PERSONA ENFERMA

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Sociedad Española de Medicina de Urgencias y Emergencias

¿Cómo se hará GesEPOC?

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- A partir de 3 áreas de actuación:

1. Científico-médica
2. Pacientes
3. Difusión (comunicación)

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- Consejero Delegado:

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- Consejo GesEPOC
- Comité Ejecutivo
- Comité de Área:

  Dra. Myriam Calle

  Dra. Mª Dolors Navarro

  Sra. Montse Llamas

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