



JORNADA DE  
ADHERENCIA  
AL TRATAMIENTO

PAÍS VASCO

# Adherencia en EPOC

Dra. Pilar de Lucas Ramos

Vocal del Comité Científico del Grupo OAT

Resultados del Análisis Nacional  
y del País Vasco en  
Adherencia al Tratamiento en Patologías Crónicas

# ¿Qué entendemos por adherencia?

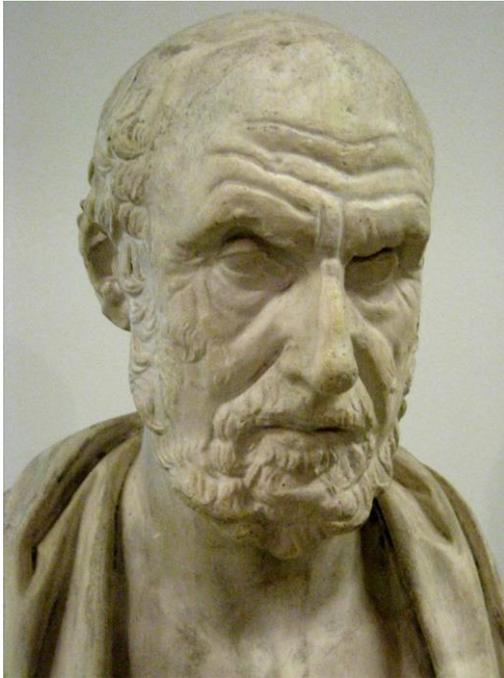


World Health  
Organization

**“Grado en que la conducta de una persona coincide con el plan terapéutico acordado previamente con el médico”**



- Implicación del paciente
- Responsabilidad
- Motivación



**“El médico debe saber que los pacientes a menudo mienten cuando sostienen que están tomando ciertas medicinas”**

Hipócrates

# EPOC, a que nos enfrentamos



**Prevalencia: 10,2%**

- **Mayores de 70 años: 23%**



**Mortalidad anual en España: 18.000**

- **Incremento del 38%**



**Carga sanitaria**

- **40% de las consultas de Neumología**
- **106.729 altas hospitalarias al año**

**Carga económica**

- **3000 millones €**
- **2% gasto en sanidad.**





Artículo especial

## Nuevo estudio sobre la prevalencia de la EPOC en España: resumen del protocolo EPISCAN II, 10 años después de EPISCAN

Inmaculada Alfageme<sup>a</sup>, Pilar de Lucas<sup>b</sup>, Julio Ancochea<sup>a</sup>, Marc Miravittles<sup>d</sup>,  
Juan José Soler-Cataluña<sup>e</sup>, Francisco García-Río<sup>f</sup>, Ciro Casanova<sup>g</sup>,  
José Miguel Rodríguez González-Moro<sup>h</sup>, Borja G. Cosío<sup>i</sup>, Guadalupe Sánchez<sup>j</sup> y Joan B. Soriano<sup>k,c,\*</sup>

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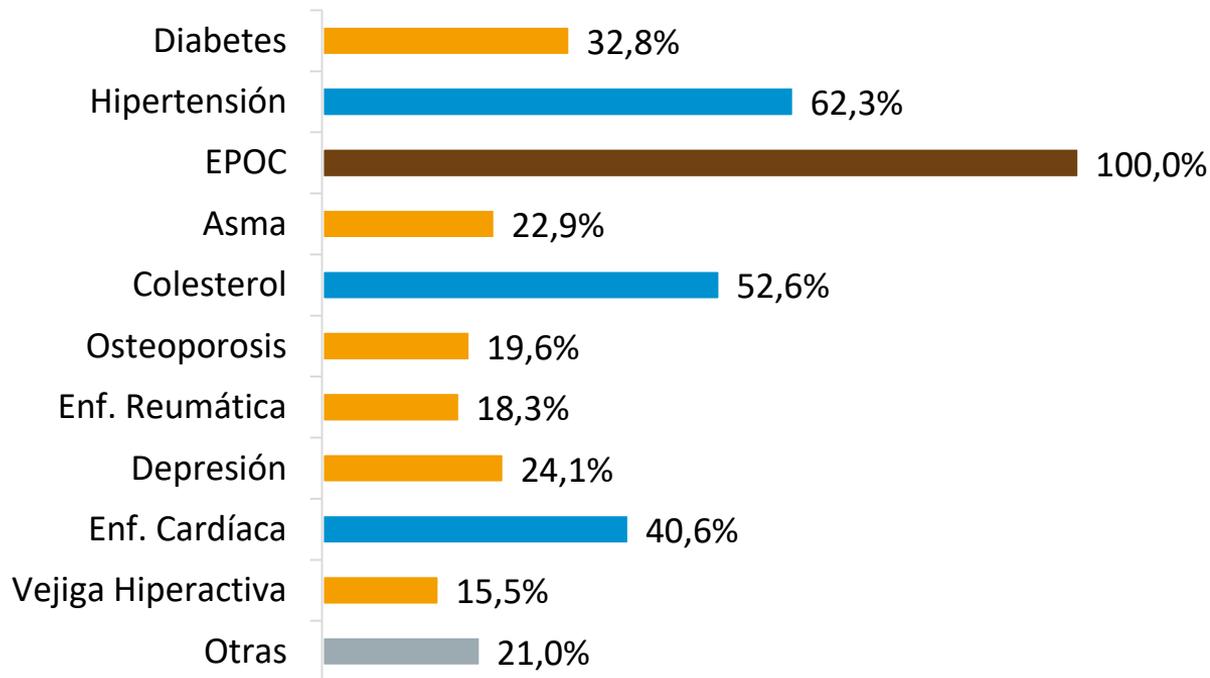
<sup>k</sup> Consultor de Metodología e Investigación de SEPAR, Barcelona, España

**Alfageme I, et al. Arch Bronconeumol 2019.**

# Patologías concomitantes de EPOC



## EPOC- Prevalencia patologías



Chronic obstructive pulmonary disease as a cardiovascular risk factor. Results of a case-control study (CONSISTE study)

De Lucas et al. Int J COPD, 2012; 7:679-686

**Table 2** Prevalence of comorbidities

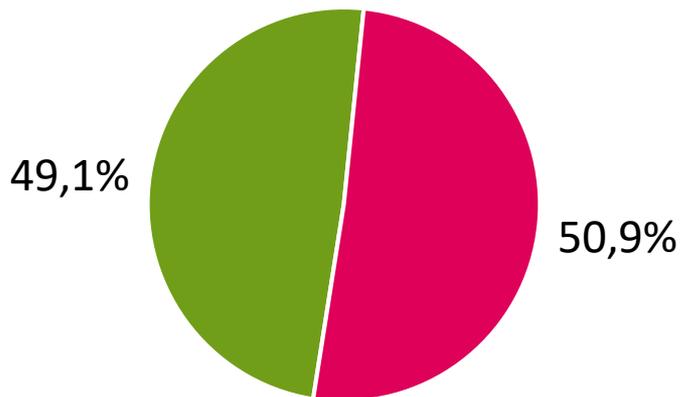
Comorbidities	Cases	Controls	P
AHT	499 (51.8%)	100 (36%)	<0.001
Dyslipidemia	462 (48.3%)	88 (31.7%)	<0.001
Diabetes	377 (39.5%)	27 (9.7%)	<0.001
Obesity	337 (35.2%)	94 (33.8%)	0.666
Anemia	132 (13.6%)	4 (1.4%)	<0.001
Lung cancer	1 (0.1%)	1 (0.4%)	0.346
Malnutrition	33 (3.4%)	0 (0%)	0.002
Osteoporosis	159 (16.6%)	10 (3.6%)	<0.001
Ischemic heart disease	121 (12.5%)	13 (4.7%)	0.000
Arrhythmia	153 (16.1%)	13 (4.7%)	<0.001
Heart failure	238 (24.7%)	4 (1.4%)	<0.001
ACVA	96 (10%)	8 (2.9%)	0.000
Peripheral vascular disease	157 (16.4%)	11 (4.1%)	<0.001



# Cual es la adherencia en la EPOC?

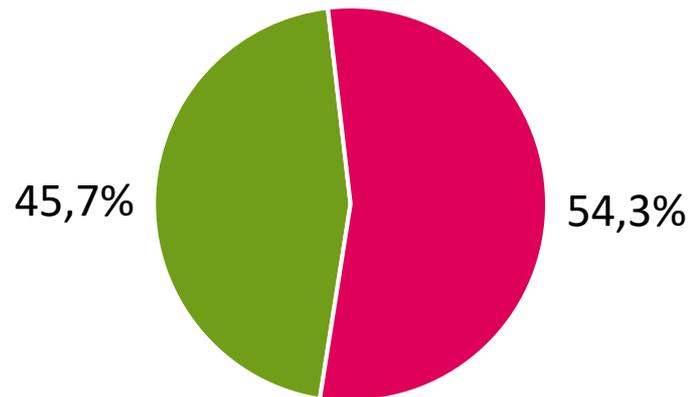


## EPOC Nacional



■ Adherente ■ No adherente

## EPOC Euskadi

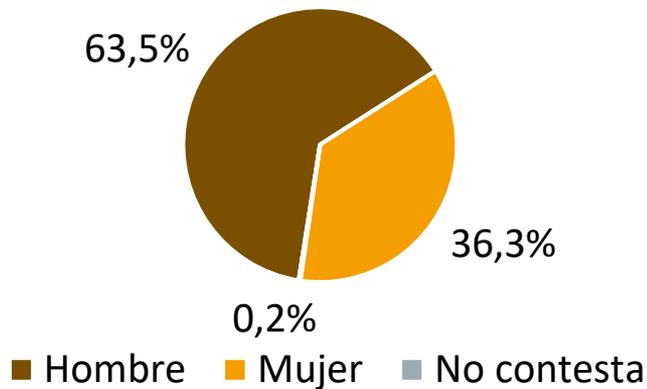


■ Adherente ■ No adherente

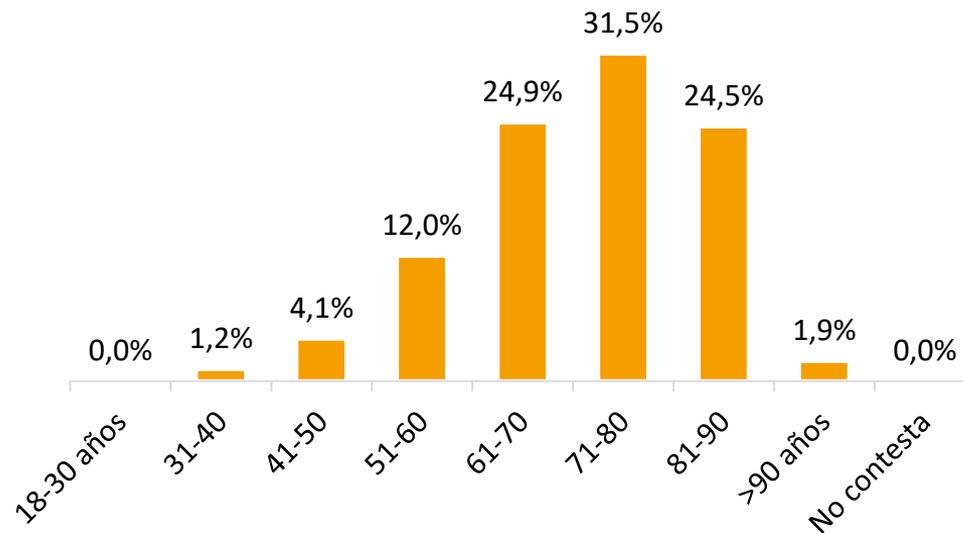
# Perfil nacional en EPOC



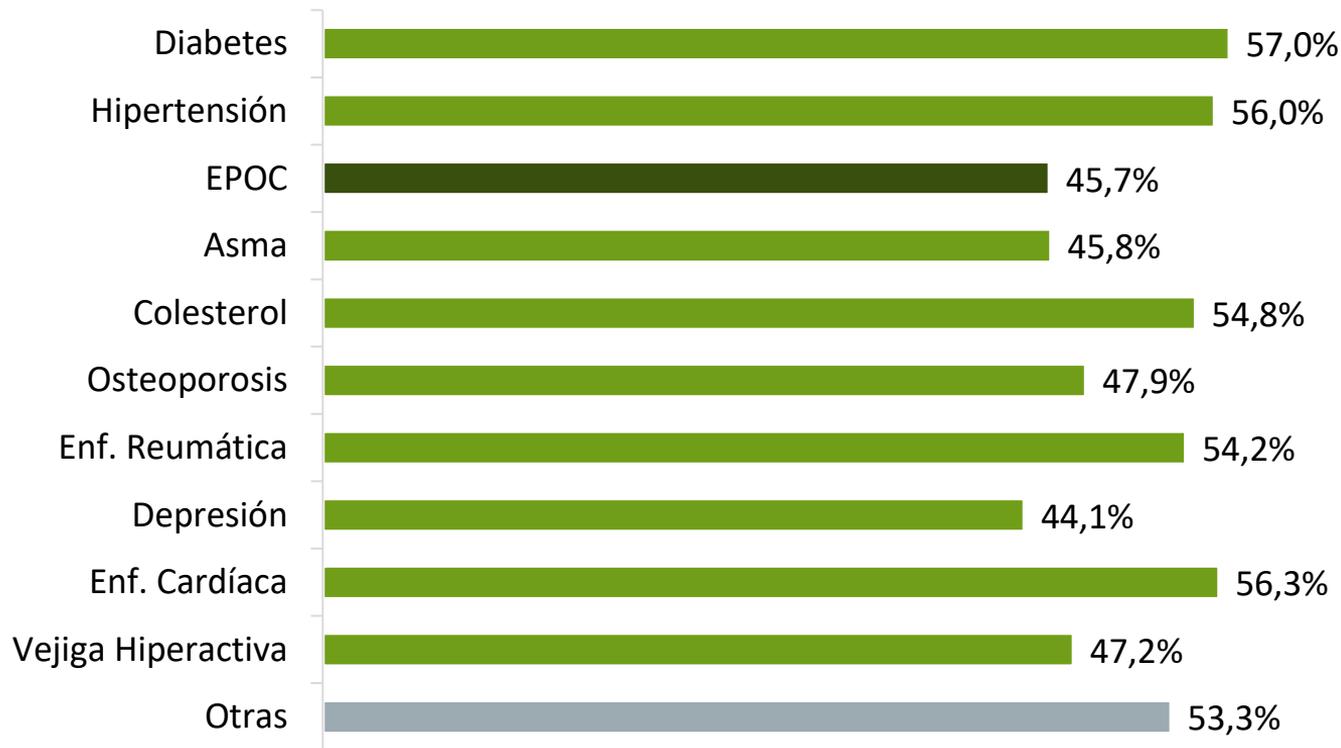
## Sexo



## Edad



# Adherencia Euskadi por patologías



# Adherencia en EPOC

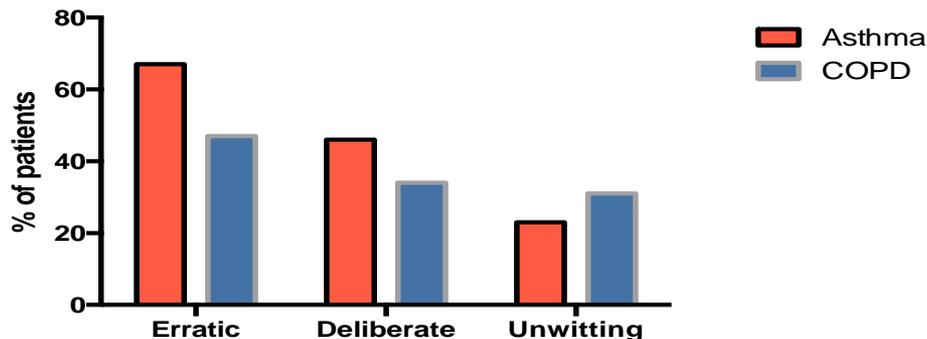
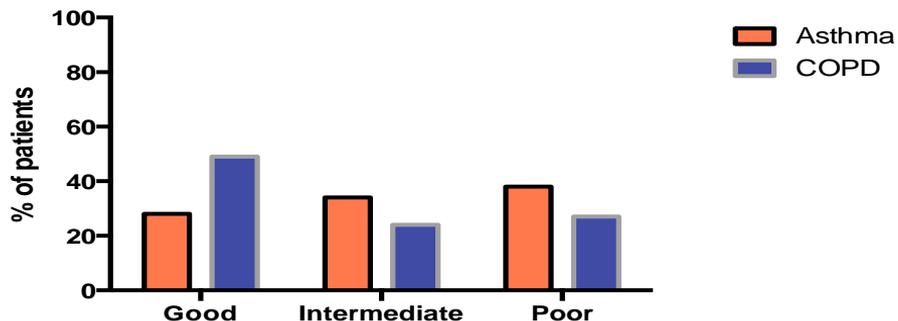


“Un 50% de los pacientes con EPOC no son buenos cumplidores, muchos de ellos de forma involuntaria”

COPD: Journal of Chronic Obstructive Pulmonary Disease Taylor & Francis

Differences in Adherence and Non-Adherence Behaviour Patterns to Inhaler Devices Between COPD and Asthma Patients

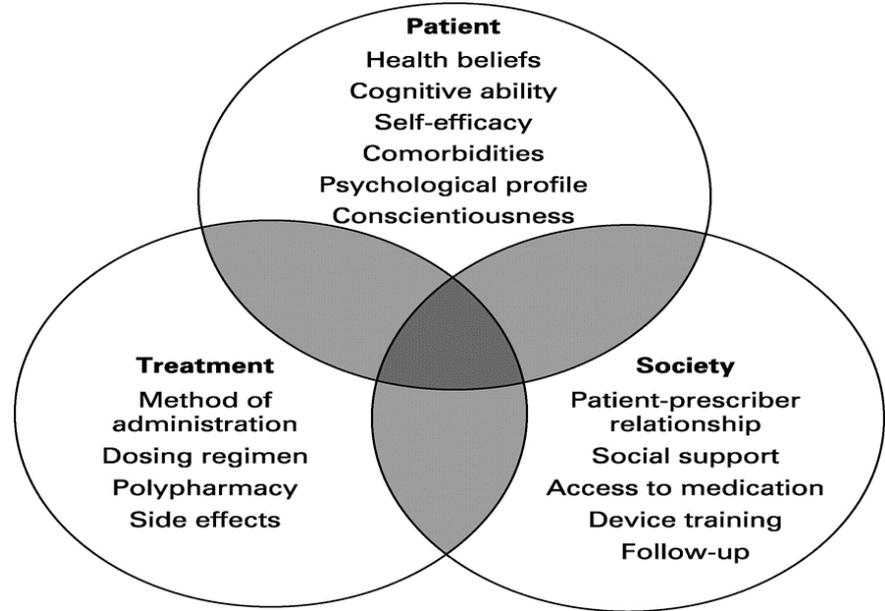
Vicente Plaza, Antolín López-Viña, Luis Manuel Entrenas, Concepción Fernández-Rodríguez, Carlos Meleró, Luis Pérez-Llano, Fernando Gutiérrez-Pereyra, Eduard Tarragona, Rosa Palomino & Borja G. Cosío



# Factores asociados a la baja adherencia en EPOC



- Edad
- Estado de salud o calidad de vida
- Fumador activo
- Número de medicaciones diarias
- Coste mensual del tratamiento



Agh et al. Respiration 2010

Bourbeau J. Thorax 2008

# Consecuencias de la no adherencia

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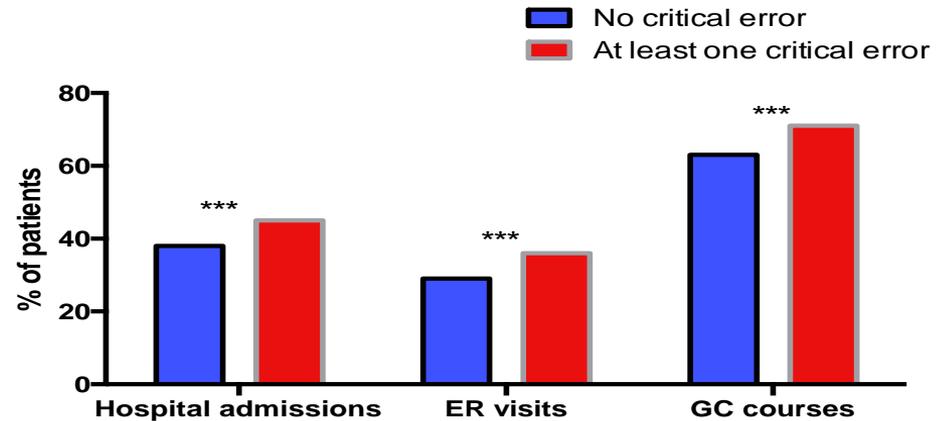
- Mal control de la enfermedad
- Aumento de agudizaciones
- Aumento de ingresos hospitalarios
- Aumento de costes



## “El uso incorrecto del inhalador se asocia a más exacerbaciones”



Melani et al. Resp Med 2011





**“Los pacientes ingresados por agudización de EPOC tienen elevada prevalencia de factores modificables”**

28% no vacuna antigripal  
86% no RHB  
28% no uso de OCD  
43% mala técnica inhalatoria  
26% fumadores activos  
21% fumadores pasivos

Estudio EFRAM  
Garcia-Aymerich et al. ERJ 2003, AJRCCM 2003)

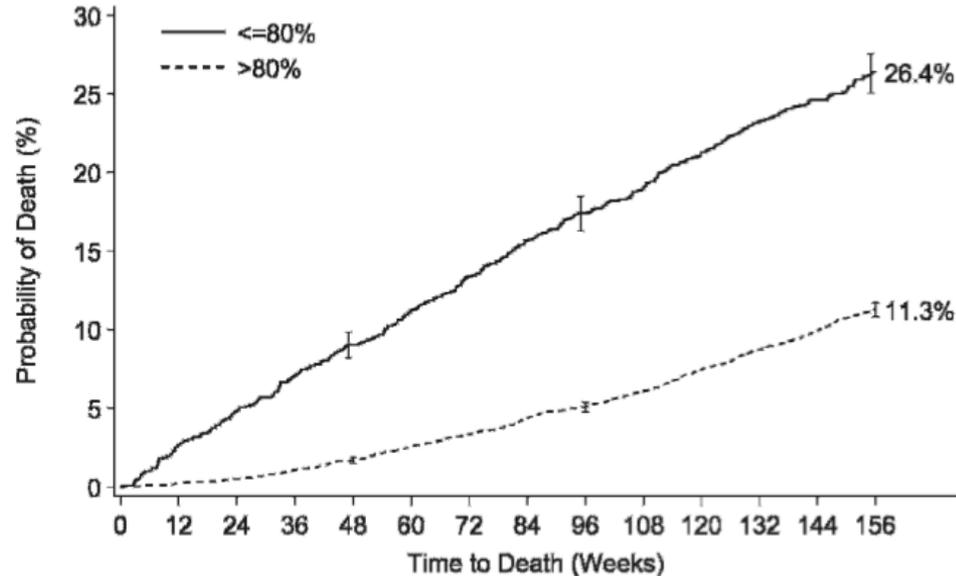


Table 2 Outcomes associated with adherence to COPD therapy.

Study	Outcome specification	Absolute outcomes		Relative outcomes	Significance
		Non-adherent	Adherent		p-value
<b>Mortality</b>					
Turner [23]	Percentage died	22.6%	23.7%	NR	n.s.
Vestbo [22]	Percentage died	26.4%	11.3%	Hazard rate 0.40 (0.35–0.46)	<0.001
<b>Economic outcomes</b>					
Halpern [20]	Healthcare costs	NR		Cost ratio 1.469 (1.13–1.91)	<0.01
	Medical costs	NR		0.629 (0.43–0.91)	<0.05
	Inpatient costs	NR		0.466 (0.30–0.72)	<0.01
Toy [19]	ED costs	\$412.658	\$405.248	Difference (%) −\$7.410 (−1.8%)	NR
	Hospital costs	\$11.635.099	\$11.338.501	−\$296.598 (−2.6%)	NR
	Outpatient costs	\$1.867.863	\$1.871.082	\$3.219 (+0.2%)	NR
Simoni-Wastila [17]	Inpatient costs	\$19.594	\$14.061	Marginal effects −\$4.609	<0.001
	Outpatient costs	\$12.664	\$11.450	−\$606	<0.001
	Drug costs	\$7.546	\$9.190	\$1.654	<0.001

# Adherence to inhaled therapy, mortality and hospital admission in COPD

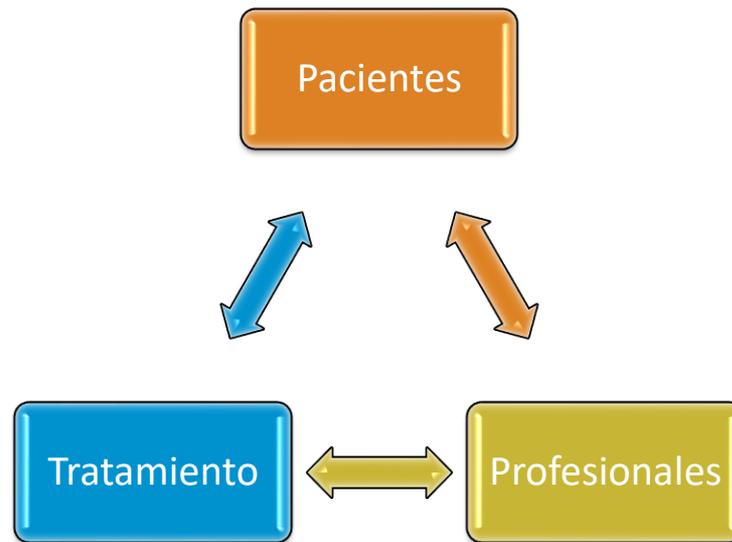
*Thorax* 2009;**64**:939–943



HR mortalidad: 0,40  
(95%CI 0,35-0,46), p,0,001)

HR hospitalización: 0,58  
(95%CI 0,44-0,73), p,0,001)

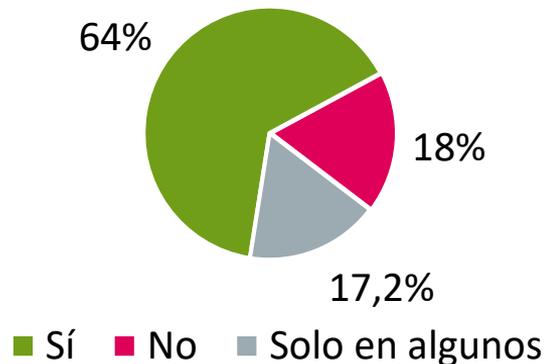
# Como mejorar la adherencia



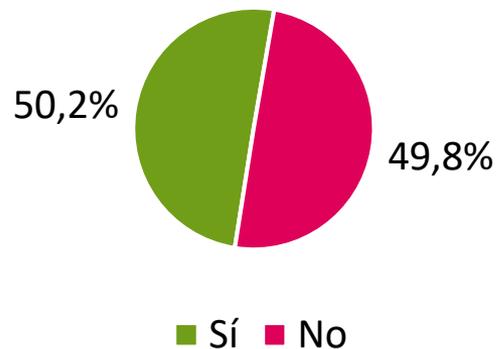
# ¿Evaluamos la adherencia?



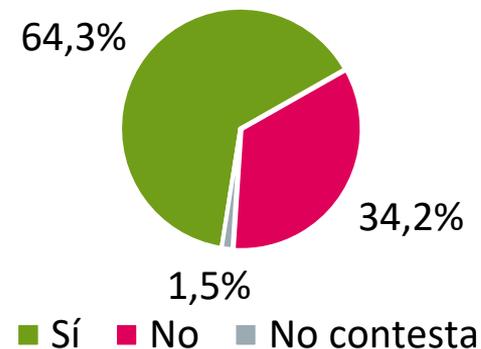
## Medicina- Seguimiento adherencia



## Farmacias- Seguimiento adherencia



## Enfermería- Seguimiento adherencia



# ¿Evaluamos la adherencia?



International Journal of COPD

Dovepress  
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ORIGINAL RESEARCH

Clinical audit of COPD in outpatient respiratory clinics in Spain: the EPOCONSUL study

Clinical interventions at the time of the last follow-up visit a

Treatment adherence evaluated

Inhalation technique evaluated

Grade of satisfaction with inhalation device evaluated

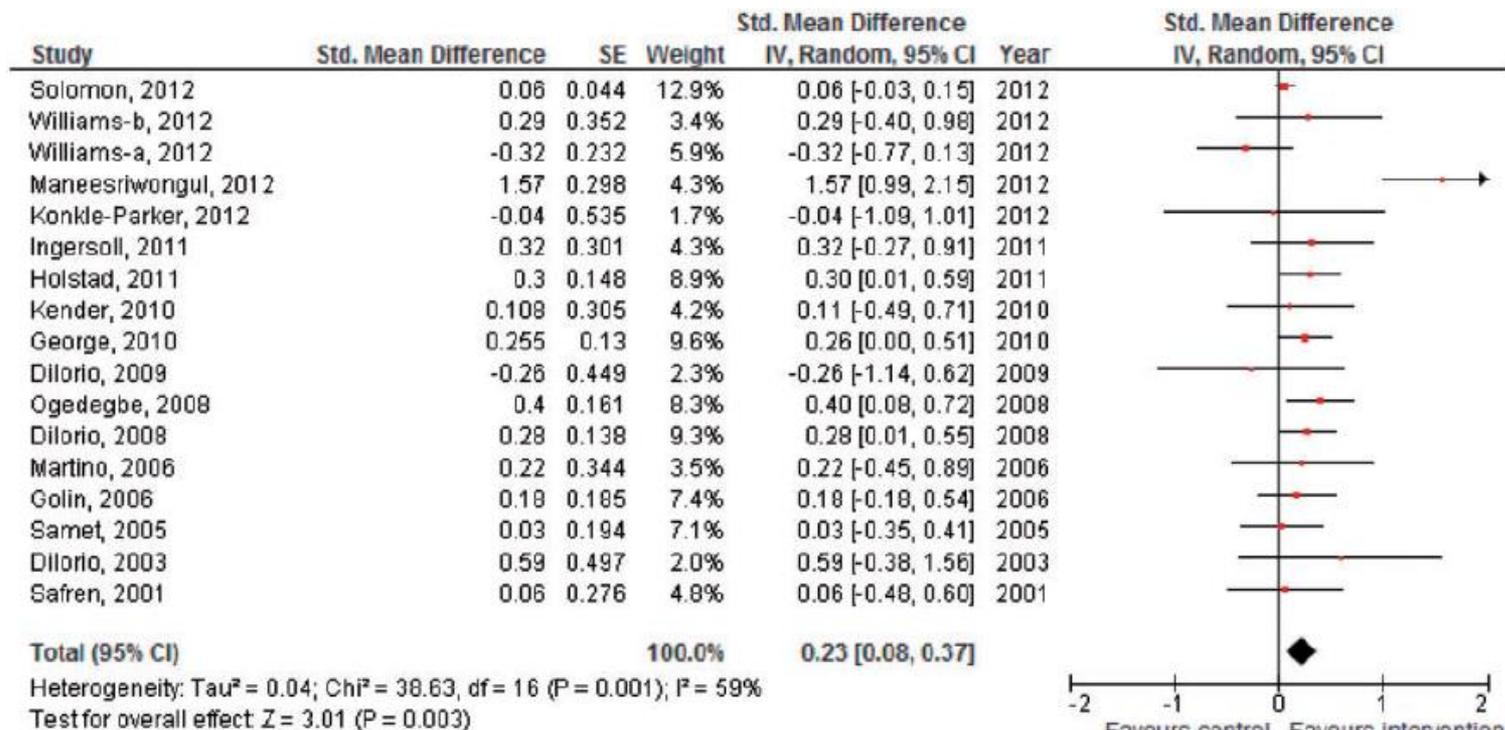
Adverse effects of medication collected

Patients (N=4,508)

N	Percent or median (IQR)
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31.7	17.9–61.7
44.5	40–56.6
7.6	1.7–23.2
12.4	5–27.5

# Effectiveness of motivational interviewing interventions on medication adherence in adults with chronic diseases: a systematic review and meta-analysis





ELSEVIER

Contents lists available at ScienceDirect

## Respiratory Medicine

journal homepage: [www.elsevier.com/locate/rmed](http://www.elsevier.com/locate/rmed)



Review article

### Impact of community pharmacists in COPD management: Inhalation technique and medication adherence



Iman Hesso\*, Shereen Nabhani Gebara, Reem Kayyali

*Kingston University London, School of Life Sciences, Pharmacy and Chemistry, Penrhyn Road, Kingston upon Thames, KT1 2EE, United Kingdom*

**Results:** Ten studies are included in the review. The studies show that community pharmacists' interventions had a positive impact on improving patients' inhalation technique and adherence to inhaled medications. This was shown in some studies to be cost-effective in terms of reducing hospitalisation and severe exacerbation rate. Scarcity of studies in this domain is noted through this review.

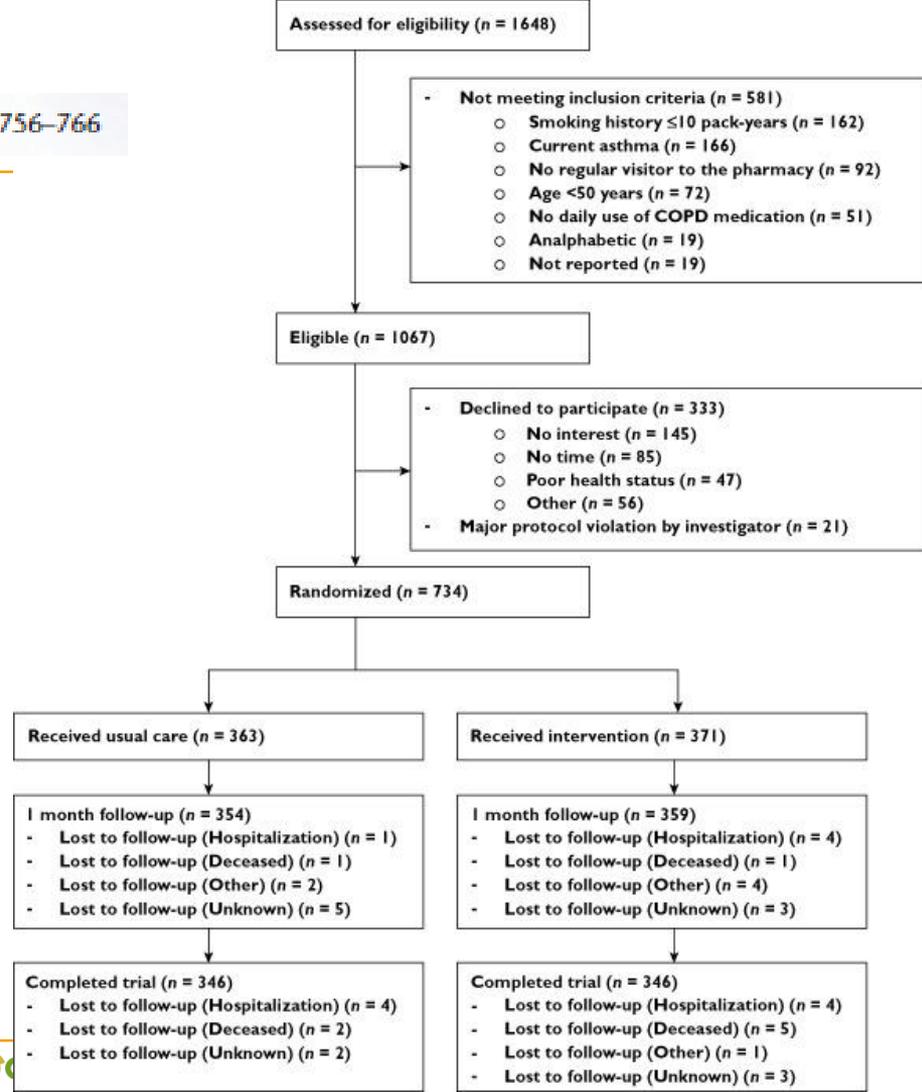
# Effectiveness of pharmaceutical care for patients with chronic obstructive pulmonary disease (PHARMACOP): a randomized controlled trial

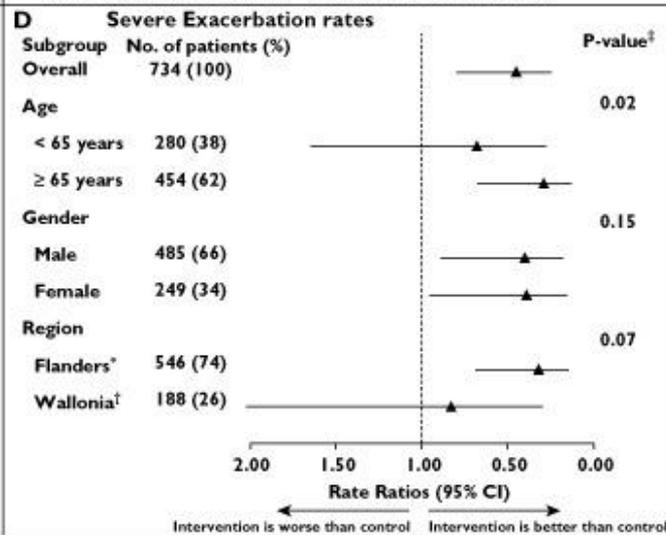
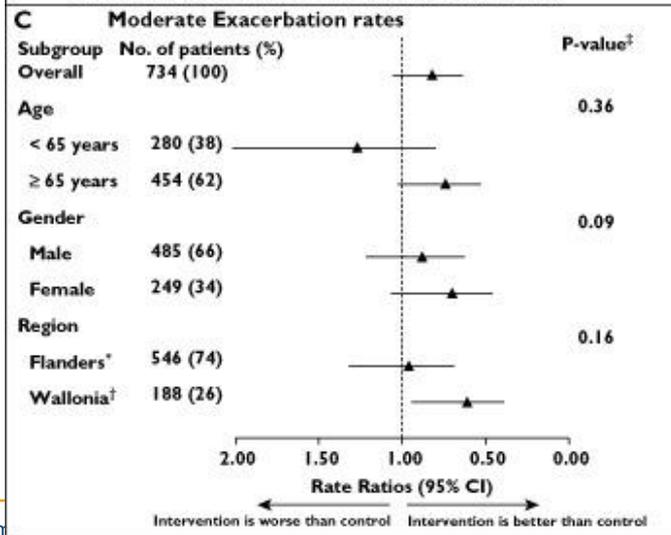
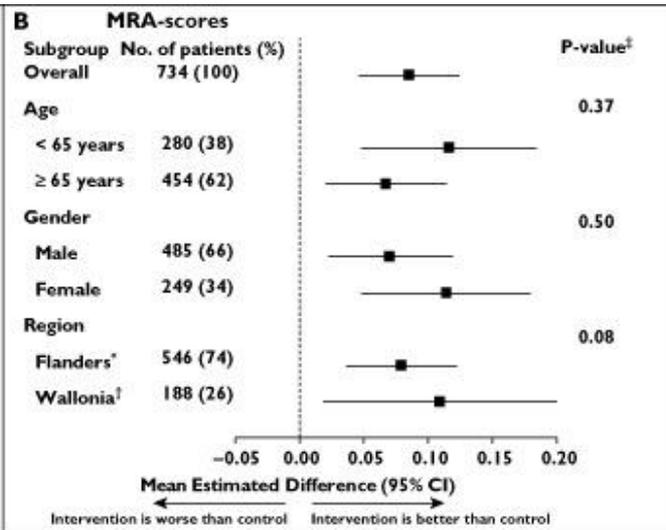
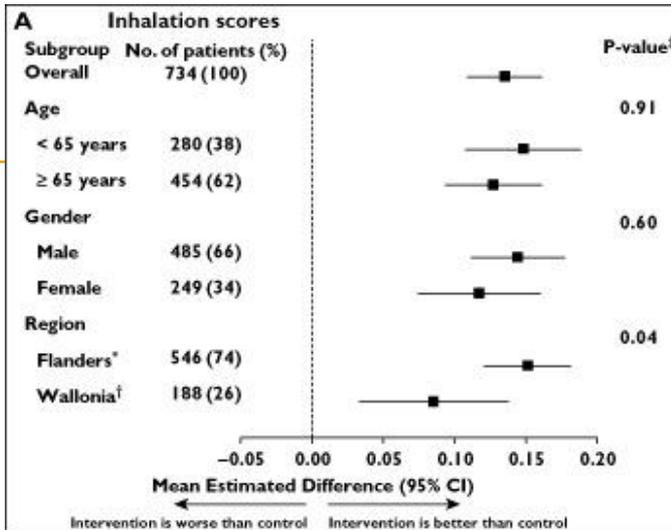
Eline Tommelein,<sup>1</sup> Els Mehuys,<sup>1</sup> Thierry Van Hees,<sup>2</sup> Els Adriaens,<sup>1</sup> Luc Van Bortel,<sup>3</sup> Thierry Christiaens,<sup>4</sup> Inge Van Tongelen,<sup>1</sup> Jean-Paul Remon,<sup>1</sup> Koen Boussey<sup>1</sup> & Guy Brusselle<sup>5,6</sup>

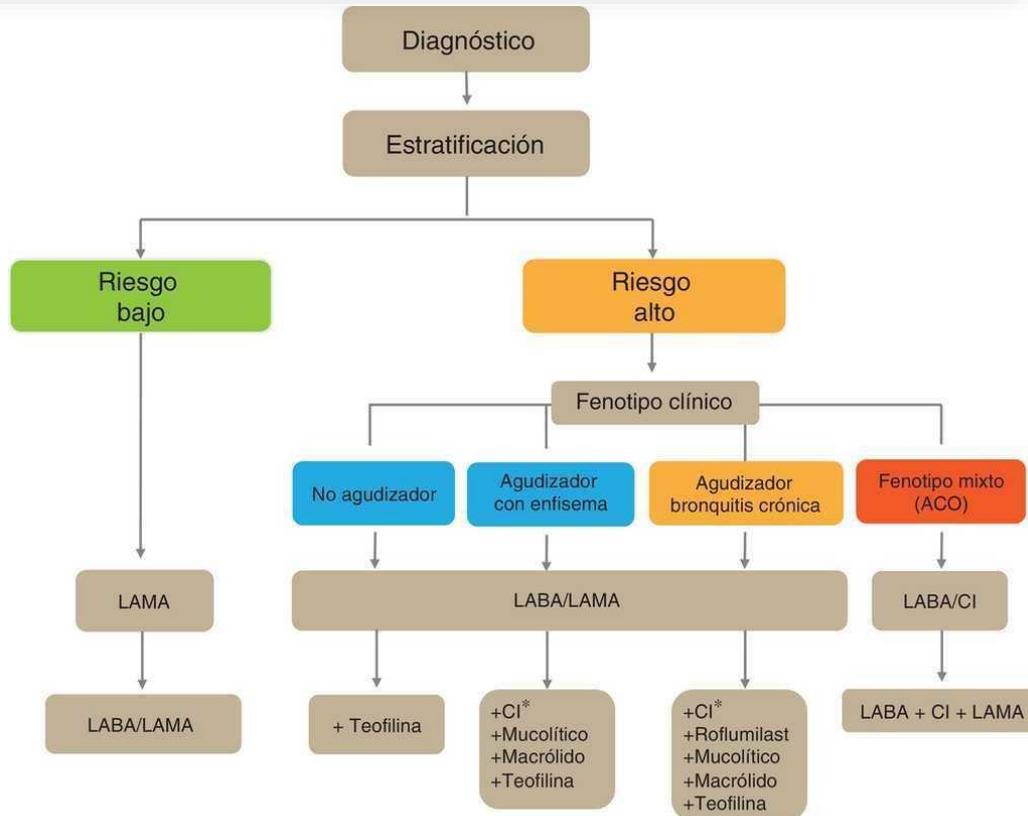
<sup>1</sup>Pharmaceutical Care Unit, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium,

<sup>2</sup>Department of Clinical Pharmacy, University of Liège, Liège, Belgium, <sup>3</sup>Heymans Institute of Pharmacology, Faculty of Medicine and Health Sciences, Ghent University, Ghent, Belgium,

<sup>4</sup>Department of Family Medicine and Primary Health Care, Faculty of Medicine and Health Sciences, Ghent University Hospital, Ghent, Belgium, <sup>5</sup>Department of Respiratory Medicine, Ghent University Hospital, Ghent, Belgium and <sup>6</sup>Departments of Epidemiology and Respiratory Medicine, Erasmus MC, Rotterdam, The Netherlands







# Treatment of COPD: Relationships between daily dosing frequency, adherence, resource use, and costs



**N = 55.076**  
pacientes

	1/día	2/día	3/día	4/día
% Días C	43,5	37	30	23

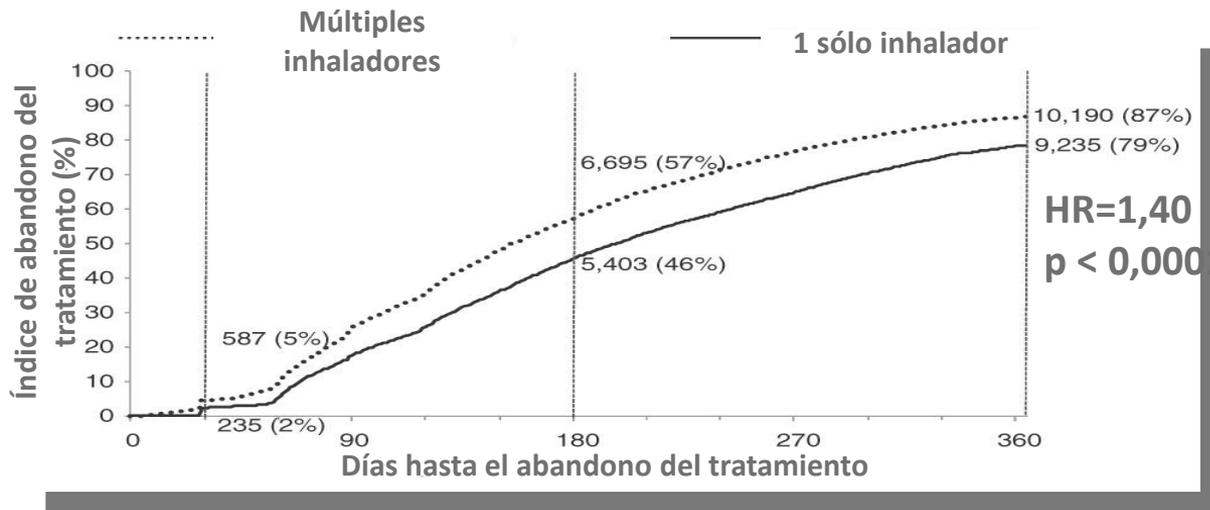
	Ingresos	Urgencias	Costes
Δ 5% Días C	2,5%	1,8%	300.000

Respir Med 2011; 105:435-441

# La importancia de 1 versus 2 o más dispositivos en EPOC



Índice anual de **abandono del tratamiento** entre 1 inhalador vs. varios inhaladores, tras controlar factores de confusión

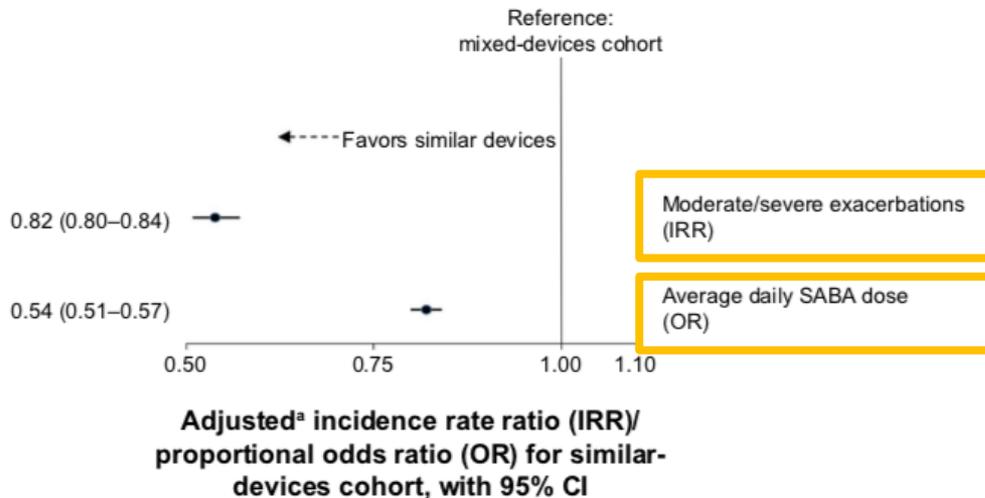
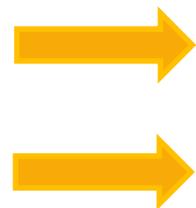


Yu AP et al. J Med Econ (2011) ;14 (4):486-496

# Similaridad inhaladores



The use of multiple respiratory inhalers requiring different inhalation techniques has an adverse effect on COPD outcomes



International Journal of COPD 2017;12:59–71



- Falta de adherencia en EPOC: problema de salud.
- Información y formación
- Estrategias para el cumplimiento
- Tratamiento participativo
- Equipos multidisciplinares
- Simplificar tratamientos



GRUPO OAT

**Gracias**

Un compromiso de todos, un objetivo común

