

# X Reunión EPOC

**Infradiagnóstico de la EPOC  
¿Qué podemos hacer?**

# Recent trends in COPD prevalence in Spain: a repeated cross-sectional survey 1997–2007

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**TABLE 4** Changes in determinants and attitudes towards chronic obstructive pulmonary disease (COPD) and smoking among participants with spirometrically confirmed COPD in 1997 and 2007

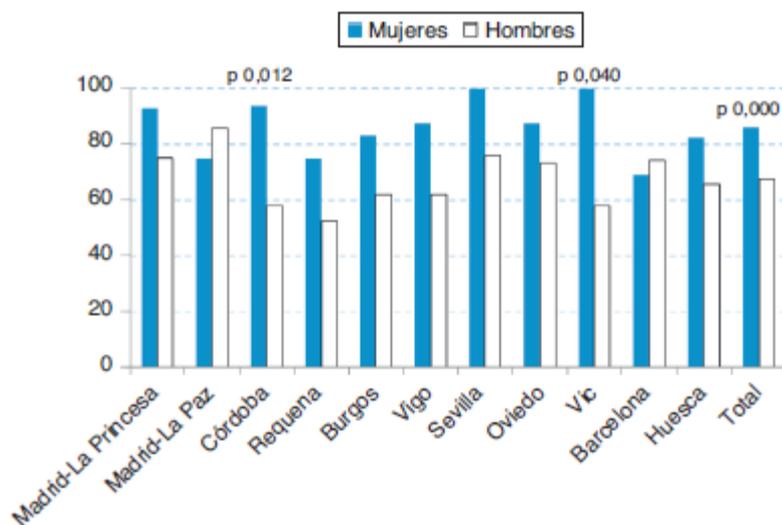
	1997	2007
Underdiagnosis %	78	73
Undertreatment %	81*	54
Undertreatment in severe COPD %	50*	10
Lung function ever measured previously %	16.5*	58.5
Have you ever tried to quit smoking? %		
Never	34.9*	88.7
Yes	65.1	11.3
1–3 times	43.6	
4 times or more	21.5	
No answer	4.0	

\*:  $p < 0.05$ .

Original

## Infradiagnóstico de la enfermedad pulmonar obstructiva crónica en mujeres: cuantificación del problema, determinantes y propuestas de acción

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	Total	Mujeres	Hombres	p
Prevalencia EPOC	10,2%	5,7%	15,1%	0,000
Infradiagnóstico	73%	86%	67,6%	<0,05

Figura 1. Infradiagnóstico de la EPOC en EPI-SCAN, por sexo y área.

Ser mujer es un factor de riesgo independiente de padecer EPOC infradiagnosticada con RR =2,67

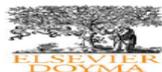
# The relationship between the COPD Assessment Test score and airflow limitation in Japan in patients aged over 40 years with a smoking history

**Table 1** Patient baseline characteristics (total patients screened and by study)

	Total (n=3,062)	Study 1 (n=2,067)	Study 2 (n=995)
Age, years			
Mean (SD)	61.5 (11.6)	59.0 (11.6)	66.6 (10.0)
Sex			
Male	88.8%	85.5%	95.5%
Smoking history			
Current	44.9%	53.4%	27.4%
Ex	55.1%	46.6%	72.6%
Smoking, pack-years			
Mean (SD)	37.3 (23.5)	34.6 (21.6)	43.1 (26.1)
BMI			
Mean (SD)	24.1 (3.4)	23.9 (3.3)	24.6 (3.5)
Diagnosed with COPD			
Yes	1.6%	0	4.8%
Chronic sputum*			
Yes	19.7%	19.4%	20.4%
FEV <sub>1</sub>			
Mean (SD)	2.52 (0.76)	2.63 (0.76)	2.29 (0.70)
FEV <sub>6</sub>			
Mean (SD)	3.21 (0.86)	3.33 (0.88)	2.97 (0.79)
Airflow limitation			
FEV <sub>1</sub> /FEV <sub>6</sub> <0.73	21.8%	19.4%	27.0%
FEV <sub>1</sub> /FEV <sub>6</sub> ≥0.73	78.2%	80.6%	73.0%
CAT score			
Mean (SD)	7.4 (5.9)	7.6 (5.9)	6.9 (5.8)

**Note:** \*Chronic sputum was diagnosed as sputum symptoms observed for at least 3 months of the year for more than 2 consecutive years.

**Abbreviations:** SD, standard deviation; BMI, body mass index; COPD, chronic obstructive pulmonary disease; FEV<sub>1</sub>, forced expiratory volume in 1 second; FEV<sub>6</sub>, forced expiratory volume in 6 seconds; CAT, COPD Assessment Test.



Original

## Calidad del diagnóstico de la enfermedad pulmonar obstructiva crónica en el ámbito hospitalario

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Tabla 1

Características basales de los pacientes

	Global	H1	H2	H3	p
Hospitales, n	10	3	4	3	
Pacientes, n (%)	840	105 (12,5)	334 (39,8)	401 (47,7)	
Edad	73 ± 10	72 ± 11	74 ± 10	74 ± 10	NS
Hombres, n (%)	718 (85)	98 (93)	292 (87)	328 (82)	0,002
FEV <sub>1</sub> , ml	1.385 ± 565	1.330 ± 489	1.351 ± 597	1.573 ± 567	NS
Informes de alta realizados por N, n (%)	313 (37,3)	39 (37,1)	117 (35)	157 (39,1)	NS
Informes de alta realizados por otros EM, n (%)	470 (55,9)	48 (45,7)	190 (56,9)	232 (57,8)	NS
Informes de alta realizados por EQ, n (%)	57 (6,8)	18 (17,1)	27 (8,1)	12 (3)	

EM: especialistas en Medicina Interna; EQ: especialistas quirúrgicos; FEV<sub>1</sub>: volumen espiratorio forzado en el primer segundo; H1: hospitales de baja complejidad; H2: hospitales de intermedia complejidad; H3: hospitales de alta complejidad; N: neumólogos; NS: sin significación estadística.

Tabla 3

Diagnóstico correcto y deficiente de enfermedad pulmonar obstructiva crónica en función del nivel asistencial

	Global	H1	H2	H3	p
Hospitales, n	10	3	4	3	
Pacientes, n (%)	840	105 (12,5)	334 (39,8)	401 (47,7)	
DxC de EPOC, n (%)					
N	148 (47,6)	31 (79,5)	51 (44,0)	66 (42,3)	
EM	81 (17,4)	20 (41,7)	44 (23,3)	17 (7,4)	< 0,001
EQ	14 (24,6)	8 (44,4)	5 (18,5)	1 (8,3)	
DxD de EPOC, n (%)					
No espirometría	457 (54,4)	28 (26,7)	178 (53,3)	251 (62,6)	< 0,001
FEV <sub>1</sub> /FVC > 70	81 (9,6)	10 (10)	39 (12)	32 (8)	0,209
No hábito tabaco	278 (33,1)	18 (17,1)	95 (28,4)	165 (41,1)	< 0,001
No fumadores	41 (4,9)	4 (4,7)	12 (3,6)	25 (6,2)	0,036

DxC: diagnóstico correcto; DxD: diagnóstico deficiente; EM: especialistas en Medicina Interna; EPOC: enfermedad pulmonar obstructiva crónica; EQ: especialistas quirúrgicos; FEV<sub>1</sub>/FVC: volumen espiratorio forzado en el primer segundo/capacidad vital forzada; H1: hospitales de baja complejidad; H2: hospitales de intermedia complejidad; H3: hospitales de alta complejidad; N: neumólogos.

RESEARCH ARTICLE

Open Access

# Characterisation and prognosis of undiagnosed chronic obstructive pulmonary disease patients at their first hospitalisation

Eva Balcells<sup>1,2,3,4</sup>, Elena Gimeno-Santos<sup>5,6,7</sup>, Jordi de Batlle<sup>8</sup>, María Antonia Ramon<sup>3,9,10</sup>, Esther Rodríguez<sup>3,9</sup>, Marta Benet<sup>5,6</sup>, Eva Farrero<sup>11,12</sup>, Antoni Ferrer<sup>1,3,4</sup>, Stefano Guerra<sup>2,5,6,13</sup>, Jaume Ferrer<sup>3,9,10</sup>, Jaume Sauleda<sup>3,14,15</sup>, Joan A Barberà<sup>3,16,17</sup>, Alvar Agustí<sup>3,16,17,18,19</sup>, Robert Rodríguez-Roisin<sup>3,16,17,18</sup>, Joaquim Gea<sup>1,2,3,4</sup>, Josep M Antó<sup>2,4,5,6</sup>, Judith Garcia-Aymerich<sup>4,5,6\*</sup> and the PAC-COPD Study Group

**Table 1** Baseline characteristics of 342 COPD patients recruited at their first hospitalisation for a COPD exacerbation

	All COPD patients n = 342*	Undiagnosed COPD n = 117 (34%)	Diagnosed COPD n = 225 (66%)	p-value <sup>†</sup>
Age (years), m (SD)	67 (9)	66 (9)	68 (8)	0.03
Males, n (%)	318 (93)	107 (92)	211 (94)	0.43
Married, n (%)	274 (80)	90 (77)	184 (82)	0.29
Less than primary education, n (%)	142 (42)	46 (39)	96 (43)	0.55
Low socioeconomic status (I-V), n (%)	259 (82)	90 (81)	169 (82)	0.83
Current workers, n (%)	61 (18)	30 (26)	31 (14)	<0.01
Smoking status: current, n (%)	150 (44)	69 (59)	81 (36)	<0.01
Pack-years, m (SD)	69 (40)	67 (38)	70 (41)	0.55
Physical activity (hours/week), m (SD)	33.5 (23.8)	39.5 (23.4)	30.4 (23.5)	0.01
≥2 comorbidities (Charlson index), n (%)	172 (50)	47 (40)	125 (56)	<0.01
Severity of COPD (ERS/ATS), n (%)				
Mild (FEV <sub>1</sub> ≥ 80%)	19 (5)	14 (12)	5 (2)	<0.01
Moderate (FEV <sub>1</sub> ≥ 50%, <80%)	164 (48)	65 (56)	99 (44)	
Severe (FEV <sub>1</sub> ≥ 30%, <50%)	132 (39)	33 (28)	99 (44)	
Very severe (FEV <sub>1</sub> < 30%)	27 (8)	5 (4)	22 (10)	

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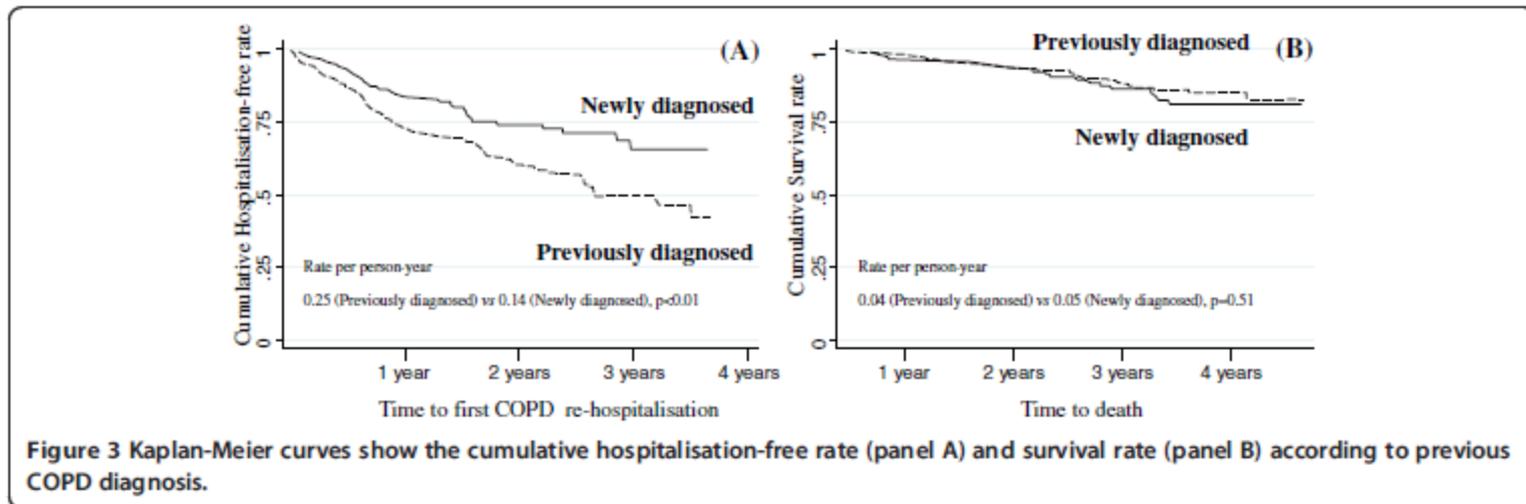


Figure 3 Kaplan-Meier curves show the cumulative hospitalisation-free rate (panel A) and survival rate (panel B) according to previous COPD diagnosis.

# COPD is frequent in conditions of comorbidity in patients treated with various diseases in a university hospital

This article was published in the following Dove Press journal:  
International Journal of Chronic Obstructive Pulmonary Disease  
28 September 2010  
Number of times this article has been viewed

**Table 1** Patient characteristics

	All	Patients with airflow limitation (%FEV <sub>1</sub> < 70%)	Patients without airflow limitation (%FEV <sub>1</sub> ≥ 70%)
Number of patients (%)	3855	608 (15.8%)	3247 (84.2%)
Age (years)	65.7 ± 12.0	72.3 ± 8.61	63.4 ± 12.0*
Gender (%)	Male	462 (76.0%)	1506 (46.4%)**
	Female	146 (24.0%)	1742 (53.6%)
Smoking status (%)	Current smoker	357 (58.7%)	1214 (37.4%)***
	Ex smoker	114 (18.8%)	107 (3.3%)***
	Nonsmoker	2063 (53.5%)	1926 (59.3%)

**Notes:** \* = significantly different to the age of the patients with airflow limitation ( $P < 0.001$ ); \*\* = significantly different compared to the percentage of males among patients with airflow limitation ( $P < 0.01$ ); \*\*\* = significantly different compared to the percentages of current and past smokers among patients with airflow limitation ( $P < 0.01$ ).  
**Abbreviation:** %FEV<sub>1</sub>, ratio of forced expiratory volume in one second to forced vital capacity.

**Table 3** Symptoms of patients with airflow limitation

No respiratory symptoms	351 (57.7%)
Some respiratory symptoms	257 (42.3%)
Dyspnea on exertion	88 (14.3%)
Cough	144 (23.5%)
Sputum	155 (25.3%)

# COPD is frequent in conditions of comorbidity in patients treated with various diseases in a university hospital

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**Table 4** Comorbidity in patients with airflow limitation (benign disease)

Cardiovascular diseases (thoracic and abdominal aortic aneurysm, ischemic heart diseases, arteriosclerosis, etc)	72 (22.6%)
Orthopedic diseases (fractures, osteoarthritis, spondylosis, etc)	66 (20.1%)
Otolaryngeal diseases (chronic sinusitis, timpanitis, cyst of upper and lower jaw, etc)	60 (18.8%)
Neurological diseases (brain infarction, Parkinson's disease, depression, etc)	26 (8.9%)
Urologic diseases (benign prostatic hypertrophy, urinary stones, etc)	20 (6.3%)
Gynecological diseases	15 (4.7%)
Dermatological diseases	13 (4.1%)
Inguinal and ventral hernia	11 (3.4%)
Liver and gall bladder diseases	9 (2.8%)
Ophthalmologic diseases	9 (2.8%)
Lung and mediastinal diseases	8 (2.5%)
Collagen vascular diseases	7 (2.2%)
Gastrointestinal diseases	3 (0.9%)
Total	319 (100%)

**Table 5** Comorbidity in patients with airflow limitation (malignant disease)

Gastrointestinal diseases (gastric cancer, esophageal cancer, colon cancer, etc)	71 (24.6%)
Otolaryngeal, head and neck diseases (laryngeal or pharyngeal cancer, thyroid cancer)	64 (22.1%)
Lung and mediastinal diseases (lung cancer, thymoma, etc)	53 (18.3%)
Urological diseases (bladder cancer, renal pelvic cancer, etc)	42 (14.5%)
Dermatologic diseases (basal cell carcinoma, malignant melanoma, etc)	17 (5.9%)
Hepatocellular and cholangiocellular carcinoma	14 (4.8%)
Breast cancer	11 (3.8%)
Hematological malignancy	8 (2.8%)
Gynecological malignancy	6 (2.1%)
Pancreas cancer	3 (1.0%)
Total	289 (100%)

## PROTOCOLOS

MANEJO DIAGNÓSTICO  
Y TERAPÉUTICO DE LAS  
COMORBILIDADES  
EN LA EPOCCoordinadores  
Jesús Díez Manglano  
Francisco López García

Comorbilidades en los pacientes EPOC		
	ECCO %	ESMI %
HTA	55	65,6
Anemia	33	27,1
Diabetes Mellitus	29,5	37,1
Insuficiencia cardiaca	27	35,5
Arritmia	27	25,8
Obesidad	22	29,4
Cardiopatía isquémica	17	22
Enfermedad arterial periférica	13	17,4
Úlcus péptico	12	9,5
Neoplasia	9,8	13,1
Enfermedad cerebrovascular	10	12,2
Osteoporosis	9,7	16,1
Hepatopatía crónica	9,6	6,6
Insuficiencia renal	6,5	16,8

RESEARCH

Open Access

## Serial pulmonary function tests to diagnose COPD in chronic heart failure

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	COPD (+)	COPD (-)	Total
History of OLD (+)	34 (18.2)	16 (8.6)	50 (26.7)
History of OLD (-)	26 (13.9)	111 (59.4)	137 (73.3)
<b>Total</b>	<b>60 (32.1)</b>	<b>127 (67.9)</b>	<b>187 (100)</b>



Original

## Enfermedad pulmonar obstructiva crónica en pacientes ingresados por insuficiencia cardiaca. Resultados del Grupo para el Estudio y Significado de la Anemia en la Insuficiencia Cardiaca (GESAIC)

Jesús Recio-Iglesias <sup>a,\*</sup>, Jordi Grau-Amorós <sup>b</sup>, Francesc Formiga <sup>c</sup>, Miquel Camafort-Babkowski <sup>d</sup>, Joan Carles Trullàs-Vila <sup>e</sup>, Avelino Rodríguez <sup>f</sup>, en nombre de los investigadores del Grupo para el Estudio y Significado de la Anemia en la Insuficiencia Cardiaca (GESAIC)

Tabla 1

Características basales de los enfermos con insuficiencia cardiaca

	Global (n = 391)	EPOC (n = 98)	Sin EPOC (n = 293)	p
Varones/mujeres	152/239	69/29	83/210	< 0,05
Edad (años), media (DE)	77,9 (9,4)	78,0 (9,5)	77,9 (9,4)	0,95
Tabaquismo, n (%)	120 (30,7)	57 (58,2)	63 (21,5)	< 0,001
Índice de Charlson, media (DE)	2,9 (1,9)	3,7 (1,9)	2,7 (1,9)	0,04
Hipertensión arterial, n (%)	311 (79,5)	76 (77,5)	237 (80,8)	0,46
Diabetes, n (%)	193 (49,4)	43 (43,9)	150 (51,2)	0,24
Cardiopatía isquémica, n (%)	139 (35,5)	36 (36,7)	103 (35,1)	0,87
Fibrilación auricular, n (%)	181 (46,3)	47 (47,9)	134 (45,7)	0,73
Filtrado glomerular < 60 ml, n (%)	177 (45,3)	53 (54,1)	124 (42,3)	0,02
Inicio de IC, n (%)	127 (32,5)	23 (23,5)	104 (35,5)	0,03
FEVI (%), media (DE)	50,6 (16,8)	48,5 (17,8)	51,3 (16,5)	0,18
NYHA, media (DE)	2,6 (0,8)	2,67 (0,8)	2,6 (0,8)	0,89
Hemoglobina (g/l), media (DE)	11,9 (2,1)	12,3 (1,9)	11,9 (2,1)	0,12
Sodio (mEq/l), media (DE)	138,6 (4,3)	138,6 (4,8)	138,5 (4,1)	0,87
Potasio (mEq/l), media (DE)	4,4 (0,6)	4,4 (0,7)	4,3 (0,6)	0,51
IMC, media (DE)	28,4 (5,9)	26,9 (5,2)	28,8 (6,1)	0,028

DE: desviación estándar; EPOC: enfermedad pulmonar obstructiva crónica; FEVI: fracción de eyección del ventrículo izquierdo; IC: insuficiencia cardiaca; IMC: índice de masa corporal; NYHA: New York Heart Association.

# Clinical characteristics and outcomes of hospitalized heart failure patients with systolic dysfunction and chronic obstructive pulmonary disease: findings from OPTIMIZE-HF

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**Table 3** Mortality for heart failure patients with systolic dysfunction with and without COPD

	No COPD (n = 15 061)	COPD (n = 5057)	Unadjusted		Adjusted	
			OR (95% CI)	P-value	OR (95% CI)	P-value
In-hospital mortality <sup>†</sup>						
All-cause mortality	556 (3.7)	226 (4.5)	1.22 (1.04–1.43)	0.01*	1.14 (0.96–1.36)	0.15
Cardiovascular mortality	462 (3.1)	176 (3.5)	1.14 (0.96–1.36)	0.15	1.04 (0.85–1.27)	0.70
Non-cardiovascular mortality	94 (0.6)	50 (1.0)	1.59 (1.13–2.24)	0.01*	1.65 (1.12–2.41)	0.01*
Post-discharge 60-day mortality <sup>‡</sup>						
	(n = 1957)	(n = 725)	HR (95% CI)		HR (95% CI)	
All-cause mortality	110 (6.0)	43 (6.2)	1.18 (0.88–1.59)	0.28	0.97 (0.68–1.38)	0.84
Cardiovascular mortality	72 (3.9)	33 (4.8)	1.34 (0.93–1.93)	0.11	1.02 (0.66–1.57)	0.93
Non-cardiovascular mortality	38 (2.1)	10 (1.5)	0.92 (0.54–1.55)	0.75	0.87 (0.47–1.62)	0.66

\*Statistically significant at an  $\alpha$  level of 0.05.

<sup>†</sup>Expressed as n (%).

<sup>‡</sup>Expressed as number of events at 60 days and Kaplan–Meier estimates.

CI, confidence interval; COPD, chronic obstructive pulmonary disease; HR, hazard ratio; OR, odds ratio.

**Los pacientes con EPOC identifican un subgrupo de pacientes con IC que tienen un aumento del 65% de riesgo de mortalidad intrahospitalaria de causa no cardiaca**

**Impact of COPD on the Mortality and Treatment of Patients Hospitalized With Acute Decompensated Heart Failure:  
The Worcester Heart Failure Study**

Kimberly A. Fisher, MD; Mihaela S. Stefan, MD; Chad Darling, MD; Darleen Lessard, MS; Robert J. Goldberg, PhD  
*Chest*. 2015;147(3):637-645. doi:10.1378/chest.14-0607



- 9748 pacientes ingresados por descompensación aguda de IC
- Historia de EPOC 35,9%
- Mortalidad intrahospitalaria igual
- Los pacientes EPOC tenían mayor riesgo de muerte a 1 y 5 años después del alta hospitalaria.

## Pacientes con IC:

- Un 20-30% de los pacientes con IC son EPOC
- EPOC identifican un subgrupo de pacientes que tienen un aumento de riesgo de mortalidad intrahospitalaria de causa no cardiaca
- Diagnostico precoz de EPOC mediante espirometría
- Plantear la EPOC como otro factor de riesgo cardiovascular
- Planificar el tratamiento de ambas comorbilidades

# Patients Diagnosed With Diabetes Are at Increased Risk for Asthma, Chronic Obstructive Pulmonary Disease, Pulmonary Fibrosis, and Pneumonia but Not Lung Cancer

Table 2—Age- and sex-adjusted incidence rate (per 1,000 person-years) of each pulmonary outcome in all KPNC members aged  $\geq 18$  years, by diabetes status

	Full cohort	Survey responder
Pneumonia*		
No diabetes	2.27 (2.24–2.29)	1.96 (1.85–2.08)
Diabetes	5.88 (5.56–6.21)	5.76 (5.40–6.11)
Asthma*		
No diabetes	0.22 (0.21–0.23)	0.16 (0.12–0.21)
Diabetes	0.48 (0.36–0.61)	0.41 (0.31–0.53)
COPD*		
No diabetes	0.60 (0.59–0.62)	0.52 (0.47–0.58)
Diabetes	0.91 (0.80–1.04)	0.87 (0.75–0.98)
Fibrosis*		
No diabetes	0.09 (0.09–0.10)	0.10 (0.07–0.13)
Diabetes	0.14 (0.12–0.16)	0.13 (0.11–0.16)
Lung cancer†		
No diabetes	0.51 (0.50–0.52)	0.66 (0.60–0.73)
Diabetes	0.47 (0.44–0.50)	0.66 (0.62–0.71)

Data are age- and sex-adjusted rates (95% CI). \*Listed as the primary discharge diagnosis or underlying cause of death in the Kaiser Permanente databases. †Identified through the KPNC Cancer Registry.

Table 3—HRs and 95% CI for the association between each pulmonary condition and diabetes status among KPNC survey responders

	Model 1*	Model 2†
Asthma‡	2.21 (1.72–2.85)	1.08 (1.03–1.12)
COPD‡	1.57 (1.40–1.77)	1.22 (1.15–1.28)
Fibrosis‡	1.64 (1.23–2.18)	1.54 (1.31–1.81)
Pneumonia‡	2.47 (2.32–2.62)	1.92 (1.84–1.99)
Lung cancer§	1.05 (0.94–1.17)	1.10 (0.96–1.26)

\*Adjusted for age, sex, and race/ethnicity. †Adjusted for age, sex, race/ethnicity, smoking, BMI, education, alcohol consumption, and number of outpatient visits. ‡Primary discharge diagnosis or underlying cause of death in the Kaiser Permanente databases. §Identified through the KPNC Cancer Registry.



## **The Impact of COPD on Management and Outcomes of Patients Hospitalized With Acute Myocardial Infarction**

### **A 10-Year Retrospective Observational Study**

*Mihaela S. Stefan, MD; Raveendhara R. Bannuru, MD; Darleen Lessard, MS; Joel M. Gore, MD; Peter K. Lindenauer, MD; and Robert J. Goldberg, PhD*

Pacientes ingresados por IAM. 17% EPOC

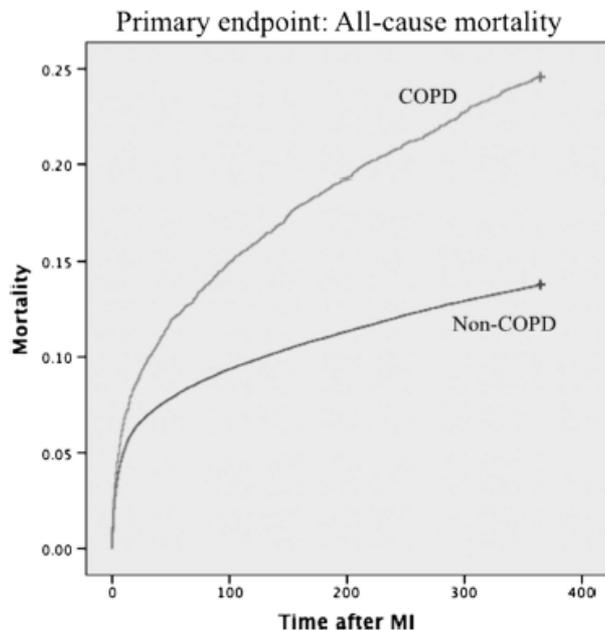
Estos pacientes tienen

- Menor tratamiento con Betabloqueantes e hipolipemiantes
- Menos procedimientos intervencionistas
- Mayor mortalidad durante la hospitalización (13.5% vs 10.1%) y a los 30 días del alta (18.7% vs 13.2%)

# Impact of chronic obstructive pulmonary disease on morbidity and mortality after myocardial infarction

Pontus Andell,<sup>1</sup> Sasha Koul,<sup>1</sup> Andreas Martinsson,<sup>1</sup> Johan Sundström,<sup>2</sup> Tomas Jernberg,<sup>3</sup> J Gustav Smith,<sup>1</sup> Stefan James,<sup>2</sup> Bertil Lindahl,<sup>2</sup> David Erlinge<sup>1</sup>

*Open Heart* 2014;1:e000002. doi:10.1136/openhrt-2013-000002



**Figure 1** A Kaplan-Meier plot showing the crude 1-year mortality for patients with chronic obstructive pulmonary disease (COPD) versus patients without COPD.

**Table 4** Clinical endpoints for patients with COPD as compared to patients without COPD at 1 year

	Crude HR (95% CI)	Adjusted† HR (95% CI)	Adjusted‡ HR (95% CI)
All-cause mortality	1.86 (1.76 to 1.98)***	1.32 (1.24 to 1.40)***	1.14 (1.07 to 1.21)***
Reinfarction	1.17 (1.09 to 1.26)***	1.00 (0.93 to 1.08)	0.99 (0.92 to 1.06)
New-onset stroke	1.14 (0.93 to 1.40)	0.90 (0.73 to 1.12)	0.89 (0.72 to 1.11)
New-onset bleeding	1.45 (1.25 to 1.69)***	1.13 (0.96 to 1.32)	1.12 (0.96 to 1.31)
New-onset heart failure	1.84 (1.70 to 1.99)***	1.46 (1.34 to 1.58)***	1.35 (1.24 to 1.47)***

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001.

†Adjustment for age, gender, smoking and comorbidity.

‡Adjustment for age, gender, smoking, comorbidity, treatment during hospitalisation and discharge medications.  
COPD, chronic obstructive pulmonary disease.

# The Prevalence of COPD in Individuals with Acute Coronary Syndrome: A Spirometry-Based Screening Study.

Moore T, Stenfors N. COPD 2014 Nov 21

Pacientes ingresados por Síndrome Coronario Agudo

- 5% EPOC según registro médico
- 11% criterios espirométricos de EPOC ( $FEV_1 / FVC < 0,7$ )

## Cardiopatía isquémica:

- La prevalencia de EPOC: 7 al 15%
- Los pacientes con EPOC con un IAM son un grupo con riesgo mas elevado de mortalidad
- El exceso de mortalidad podría reducirse con tratamientos más agresivos, tanto para el IAM, así como para la EPOC

## Prognostic value of chronic obstructive pulmonary disease in 2994 cases of lung cancer

Angel López-Encuentra\*, Julio Astudillo, Jorge Cerezal, Federico Gonzalez-Aragoneses, Nuria Novoa, Abel Sánchez-Palencia, and Bronchogenic Carcinoma Cooperative Group of the Spanish Society of Pneumology and Thoracic Surgery (GCCB-S)<sup>1</sup>

*Pneumology Service, Hospital Universitario 12 de Octubre, Crrta. Andalucía 5.4, 28041 Madrid, Spain*

Prognostic value of functional severity (FEV1%) of COPD in NSCLC Overall and in stage pI

	FEV1% $\geq$ 0.81			FEV1% $\leq$ 0.60			Log-rank
	<i>n</i>	Survival 5 years	Median	<i>n</i>	Survival 5 years	Median	
Overall	250	0.45	52	230	0.38	37	0.03
Stage pI	154	0.58	+ 60	115	0.46	52	0.002

This analysis includes cases with COPD only, and FEV1% in extreme percentiles. Analyses conducted on a selected population: NSCLC, complete resection, COPD, excluding operative mortality and cases with induction therapy.

- Peor pronóstico después de 2 años
- Pronóstico relacionado con el grado de severidad funcional (FEV1)

## Cáncer de Pulmón:

- prevalencia de EPOC entre el 50 y el 64%
- es un factor pronóstico negativo en estos pacientes

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## Rivaroxaban versus Warfarin in Nonvalvular Atrial Fibrillation

**Table 1. Characteristics of the Intention-to-Treat Population at Baseline.**

Characteristic	Rivaroxaban (N = 7131)	Warfarin (N = 7133)
Age — yr		
Median	73	73
Interquartile range	65–78	65–78
Female sex — no. (%)	2831 (39.7)	2832 (39.7)
Body-mass index*		
Median	28.3	28.1
Interquartile range	25.2–32.1	25.1–31.8
Blood pressure — mm Hg		
Systolic		
Median	130	130
Interquartile range	120–140	120–140
Diastolic		
Median	80	80
Interquartile range	70–85	70–85
Type of atrial fibrillation — no. (%)		
Persistent	5786 (81.1)	5762 (80.8)
Paroxysmal	1245 (17.5)	1269 (17.8)
Newly diagnosed or new onset	100 (1.4)	102 (1.4)
Previous medication use — no. (%)		
Aspirin	2586 (36.3)	2619 (36.7)
Vitamin K antagonist	4443 (62.3)	4461 (62.5)
CHADS <sub>2</sub> risk of stroke†		
Mean score (±SD)	3.48±0.94	3.46±0.95
Score — no. (%)		
2	925 (13.0)	934 (13.1)
3	3058 (42.9)	3158 (44.3)
4	2092 (29.3)	1999 (28.0)
5	932 (13.1)	881 (12.4)
6‡	123 (1.7)	159 (2.2)
Coexisting condition — no. (%)		
Previous stroke, systemic embolism, or transient ischemic attack	3916 (54.9)	3895 (54.6)
Congestive heart failure	4467 (62.6)	4441 (62.3)
Hypertension	6436 (90.3)	6474 (90.8)
Diabetes mellitus	2878 (40.4)	2817 (39.5)
Previous myocardial infarction‡	1182 (16.6)	1286 (18.0)
Peripheral vascular disease	401 (5.6)	438 (6.1)
Chronic obstructive pulmonary disease	754 (10.6)	743 (10.4)
Creatinine clearance — ml/min§		
Median	67	67
Interquartile range	52–88	52–86

## Factors Associated With Major Bleeding Events:

Insights From the ROCKET AF Trial (Rivaroxaban Once-daily Oral Direct Factor Xa Inhibition Compared with Vitamin K Antagonism for Prevention of Stroke and Embolism Trial in Atrial Fibrillation)

Multivariable Model Predicting Major Bleeding in the ROCKET AF Cohort

Independent Predictor	HR	95% CIs	Chi-Square	p Value
Age (per 5-yr increase)	1.17	1.12–1.23	53.0	<0.0001
Sex (female vs. male)	0.82	0.70–0.95	6.7	0.009
DBP <90 mm Hg (per 5-mm Hg increase)	0.92	0.89–0.96	17.7	<0.0001
DBP ≥90 mm Hg (per 5-mm Hg increase)	1.28	1.11–1.47	12.0	0.0005
History of COPD	1.29	1.05–1.58	5.8	0.016
History of GI bleeding	1.88	1.44–2.45	21.9	<0.0001
Prior use of aspirin	1.42	1.23–1.64	22.8	<0.0001
Anemia at baseline	1.88	1.59–2.22	53.8	<0.0001

# **Prevalence and difficulties in chronic obstructive pulmonary disease diagnosis in patients suffering from severe peripheral arterial disease**

Sleszycka J, Wozniak K, Banaszek M, Wiechno W, Domagala-Kulawik J Pol Merkur Lekarski 2009 Aug;27(158):92-6

64 pacientes:

- Estaban diagnosticados de EPOC 9 pacientes.
- Diagnostican otros 16 (infradiagnostico 64%).
- Total EPOC 39%
- No pudieron hacer la escala de disnea MRC el 44% de los pacientes que referían disnea

## Enfermedad arterial periférica

- Prevalencia de EPOC del 39-46%
- Dificultad en diagnóstico de EPOC por:
  - no valen las escalas MRC
  - frecuentes enfermedades cardiacas a las que se atribuye la disnea
  
- El cribado de EPOC en estos pacientes se debe hacer con espirometría



## **Increased COPD Among HIV-Positive Compared to HIV-Negative Veterans\***

*Kristina Crothers, MD; Adeel A. Butt, MD, MS; Cynthia L. Gibert, MD; Maria C. Rodriguez-Barradas, MD; Stephen Crystal, PhD; and Amy C. Justice, MD, PhD; for the Veterans Aging Cohort 5 Project Team*

- El 16% de los VIH positivos son diagnosticados de EPOC
- Los sujetos infectados por VIH tenían un 50 a 60% más probabilidades de tener EPOC que los sujetos VIH-negativos
- La infección por VIH debe considerarse un factor de riesgo independiente para desarrollar EPOC

**Prevalence of obstructive lung disease in HIV population: A cross sectional study**  
Respiratory Medicine (0954-6111), 2011, Volumen 105, Número 11, pp. 1655 - 1661

98 pacientes HIV

- Espirometria normal en 69%
- Espirometría obstructivo en 16.3%
- Prevalencia obstrucción
  - entre fumadores 18,5%
  - entre no fumadores 13,6%

La alta prevalencia de enfermedad pulmonar obstructiva entre no fumadores sugiere una posible asociación con la infección por VIH

Pacientes con comorbilidad

➤ hacer cribado de la EPOC

➤ con espirometría postbroncodilatación



Iniciar tratamiento



Disminuir la morbimortalidad



## Guía de Práctica Clínica para el Diagnóstico y Tratamiento de Pacientes con Enfermedad Pulmonar Obstructiva Crónica (EPOC) - Guía Española de la EPOC (GesEPOC)

Clinical Practice Guideline for the Diagnosis and Treatment of Patients with Chronic Obstructive Pulmonary Disease (COPD) – Spanish Guideline for COPD (GesEPOC)

Grupo de Trabajo de GesEPOC  
Task Force of GesEPOC

Guía Española de la EPOC (GesEPOC) / Arch Bronconeumol. 2012;48(Supl 1):2-58

