Abstract P180 Table 1 Characteristics of bronchiectasis patients with and without COPD

Patient group	COPD (n=19)	Non-COPD (n=28)	P value
Demographics			
Age	70±13	62±19	0.122
Male gender	8 (42%)	12 (43%)	0.959
Pack year history	45±22 (n=12)	4±9 (n=16)	<0.001
Investigations requested (% patients)			
Immunoglobulins	17 (90%)	26 (93%)	0.683
Total IgE	9 (47%)	16 (57%)	0.510
Plasma electrophoresis	17 (90%)	26 (93%)	0.683
Aspergillus RAST or precipitins	9 (47%)	15 (55%)	0.676
Lung function tests			
FEV ₁ (litres)	1.4±0.7 (n=12)	1.6±0.4 (n=21)	0.396
FVC (litres)	2.6±1.0 (n=12)	2.4±0.6 (n=21)	0.565
FEV ₁ % predicted	58±18 (n=12)	67±20 (n=21)	0.203
FEV ₁ % M	51±16 (n=11)	64±13 (n=19)	0.026
DLCO _c % predicted	50±24 (n=11)	66±10 (n=19)	0.013
KCO _c % predicted	70±29 (n=11)	94±14 (n=19)	0.004
RV % predicted	166±42 (n=11)	144±39 (n=19)	0.170
RV: TLC (%)	59±12 (n=11)	52±8 (n=19)	0.096
Infection and antibiotics			
Pseudomonas/MRSA/Coliforms in sputum	14 (74%)	11 (39%)	0.019
Courses of antibiotics in past year (number)	3.3±3.0 (n=16)	2.7±2.7 (n=23)	0.581
Intravenous antibiotics in past year	5 (28%)	4 (14%)	0.252
Long term antibiotics	5 (26%)	5 (18%)	0.487
Nebulised antibiotics	2 (11%)	2 (7%)	0.683
Medication			
Inhaled corticosteroid	17 (90%)	23 (82%)	0.488
Dose inhaled corticosteroid (mcg)	1420±659	1670±997	0.399
Short acting β agonist	15 (79%)	20 (71%)	0.562
Long acting β agonist	17 (90%)	21 (75%)	0.216
Short acting anti-cholinergic	2 (11%)	5 (18%)	0.488
Long acting anti-cholinergic	11 (58%)	6 (21%)	0.011
Nebulised saline	2 (11%)	2 (7%)	0.683
Carbocysteine	7 (37%)	4 (14%)	0.073

In patients with an identified cause, 12 patients had *H. influenzae*, 5 had enteric gramme negative organisms, 4 had *P. aeruginosa*, 3 had *M. catarrhalis*, 2 had *S. aureus* and 1 patient had *S. pneumoniae*. None of the frequencies of organisms were significantly different between idiopathic and non-idiopathic groups ($p>0.05$ for all comparisons).

Conclusion An underlying cause of bronchiectasis could be identified in 42% of cases of non-CF bronchiectasis using the recommended testing protocol from the British Thoracic Society bronchiectasis guidelines. This emphasises the importance of testing for underlying disorders in bronchiectasis patients attending secondary care.

Clinical interventions in COPD

P183 RECRUITMENT TO COPD CLINICAL TRIALS FROM PRIMARY CARE PATIENTS

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¹SE Brill, ¹E El-Emir, ¹R Singh, ¹ARC Patel, ¹AJ Mackay, ¹GC Donaldson, ²I Nazareth, ¹JA Wedzicha. ¹Centre of Respiratory Medicine, University College London Medical School, London, United Kingdom; ²Department of Primary Care & Population Health, University College London, London, United Kingdom

Introduction Clinical trials in chronic obstructive pulmonary disease (COPD) have spirometric criteria for enrolment, and published screening failure rates against these criteria have been reported as low as 7%¹. Primary care databases provide a source of patients with COPD to recruit into clinical trials. However, UK COPD lists are heterogenous, with only 73% having confirmed COPD when retested². This may result in a higher than expected screening failure rate. We reviewed this using our experience of recruiting to a COPD trial through primary care databases.

Methods Local GP surgeries were requested to contact all patients on their COPD database after applying exclusion criteria for age and co-morbidities. Patients were sent an invitation letter with a reply slip to return directly to the study team and those interested in participating were contacted for screening spirometry and medical history. Surgeries were reimbursed up to £500 administrative costs. Patients fulfilled diagnostic inclusion criteria if the FEV₁/FVC ratio was <0.7 and FEV₁<80% predicted with a smoking history and without other obstructive lung disease.

Results Approximately 1400 letters were sent from 29 GP surgeries between February and July 2012; 283 replies were received by the study team (20%). Of these, 180 were not screened (125 [69%] declined to participate, 9 [5%] had diseases other than COPD, 9

Table 1: Patient characteristics of 95 screened patients

	Eligible by enrolment criteria (FEV ₁ /FVC>0.7, FEV ₁ >80% predicted, without asthma)			
	Eligible patients (n=55)	Not eligible (n=40)		
		Non-obstructive ratio (n=27)	Obstructive ratio & FEV ₁ >80% (n=10)	History of asthma (n=3)
Age, years (mean[SD])	69 (10)	68 (10)	72 (14)	68 (1)
Gender, Male (patients [%])	42 (76)	16 (59)	5 (50)	2 (67)
History of smoking (patients [%])	55 (100)	27 (100)	10 (100)	2 (67)
Pack-year history (mean[SD])	45 (37)	31 (25)	36 (16)	2 (3)
Exacerbation frequency (mean[SD])	1.8 (2.3)	1.8 (2.4)	1 (1.1)	1.7 (1.5)
Spirometry (mean[SD])				
FEV ₁	1.41 (0.46)	2.30 (0.52)	2.28 (0.55)	1.73 (0.72)
FVC	2.70 (0.84)	3.06 (0.70)	3.68 (0.78)	2.86 (0.82)
FEV ₁ (% predicted)	54 (13)	86 (19)	89 (4)	60 (13)
FEV ₁ /FVC ratio	0.52 (0.09)	0.75 (0.05)	0.62 (0.06)	0.60 (0.10)

[5%] were enrolled in other research, and 37 [21%] were unsuitable for other reasons). 8 appointments were pending with screening data available for 95 patients (Table 1). 40 patients (42%) did not satisfy the spirometric inclusion criteria; 27 did not show airflow obstruction, 10 had mild COPD, and 3 had asthma. Approximately 25 contact letters and up to £260 were therefore required per eligible patient identified.

Conclusion A high proportion of patients on primary care databases fail to meet spirometric criteria for COPD trials and the screening failure rate via this recruitment pathway is much higher than previously reported. A large number of initial contacts are required for each patient identified. COPD patients are increasingly managed in primary care and these findings therefore have implications for planning future studies.

1. Albert, NEJM, 2011; 365(8):p689–98.
2. Jones, Respir Res, 2008; 9:p62.

P184 APPLYING THE GOLD 2011 CLASSIFICATION TO A REAL-WORLD COPD POPULATION IN GERMANY

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¹C Vogelmeier, ²M Small, ²S Broomfield, ³J Vestbo. ¹Marburg University Hospital, Marburg, Germany; ²Adelphi Real World, Macclesfield, UK; ³Respiratory Research Group, Manchester, UK

Objectives The GOLD 2011 Strategy now recommends assessment based on exacerbation history and symptoms in addition to airflow limitation. Our goal was to better understand this classification system by analysing the distribution of patients across the 4 groups, their treatment and comorbidities in a real-world population.

Methods GOLD 2011 criteria were applied to a German COPD population sampled from the Adelphi Respiratory Disease Specific Programme undertaken in 2011. Patients were recruited from consulting primary and specialist physicians. Chi-squared tests were performed.

Results 507 patients had a FEV₁ value and/or exacerbation history and COPD Assessment Test (CAT) score. 10.5% of patients scored 0–9 using CAT, resulting in an uneven distribution of patients in

groups A-D, 7.7, 49.9, 2.8 and 39.6% respectively. Using mMRC the distribution of patients in groups A-D was 35.1, 20.9, 19.1, and 24.9%. Inhaled corticosteroid (ICS) therapy was prescribed to 51.3, 57.9 and 42.7% of group A, B and D patients, respectively. Cardiovascular disease (51.3, 68.0, 75.2% [p=0.02]), diabetes (6.5, 17.8, 18.9% [p=0.20]) and obesity (0, 12.6, 16.8% [p=0.04]) increased across groups A, B and D respectively. Due to low numbers, group C was excluded from the comparison analysis.

Conclusion 2.8% of patients qualified as high risk/low symptoms suggesting this patient type is rare based on a CAT evaluation, using mMRC this proportion was 19.1%. An education gap exists regarding the appropriate use of ICS given the high proportion of treated low risk patients. CV and metabolic comorbidities are more prevalent with increasing risk/symptoms so a holistic approach may be necessary, especially for group D patients.

P185 QUANTIFICATION AND TREATMENT PATTERNS OF REAL-WORLD PATIENTS CLASSIFIED BY THE GOLD 2011 STRATEGY

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M Small, S Broomfield, V Higgins. Adelphi Real World, Macclesfield, UK

Objectives The Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2011 Strategy classifies COPD patients into 4 categories (A: low risk, less symptoms; B: low risk, more symptoms; C: high risk, less symptoms; D: high risk, more symptoms) based on risk (FEV₁ ≥ or <50% predicted and/or exacerbation history < or ≥2 per year) and symptoms (COPD Assessment test [CAT] score < or ≥10 or modified Medical Research Council [mMRC] dyspnoea scale < or ≥2). We examined the proportion of patients in each category when evaluated by CAT or mMRC, and corresponding pharmacological treatment (CAT classification).

Methods GOLD 2011 criteria were applied to a real-world international COPD population sampled from the Adelphi Respiratory Disease Specific Programme undertaken between June 2011 and September 2011. Physicians and patients completed matched questionnaires.

Results 2392 patients completed a questionnaire, of which 1508 with all 4 GOLD classification parameters were analyzed. The