Reason For Antibiotic according to	Guideline populations for antibiotic treatment
ERS-ESCMID guideline	
recommendation	
. Commendation	Data available in case report form (CRF) or diary in the GRACE study
	Must have <b>Acute Cough</b> and one of:
Suspected or definite pneumonia	Cough – present on the day of inclusion
	1.New Focal Chest Sign
	Diminshed Vesicular Breathing - present on the day of inclusion
	Crackles - present on the day of inclusion
	Rhonchi – present on the day of inclusion
	2. Dyspnoea
	Shortness of breath - present on the day of inclusion
	3. Tachypnoea
	Respiratory rate (breaths per minute) – more than 20 per minute
	4. Fever Lasting 4 days
	How many days were you unwell before you saw your GP or nurse for this
	cough? - minimum 4 days
	Temperature recorded using a disposable thermometer – more than 37.8°c
	Must have Chronic Obstructive Pulmonary Disease (COPD) and all of:
	COPD - present on the day of inclusion
	1. Increased dyspnoea
Selected exacerbations of COPD	Shortness of breath - present on the day of inclusion
	2. Increased sputum volume
	Phlegm production - present on the day of inclusion
	3. Increased sputum purulence
	If producing phlegm, what colour? - Colour is yellow, green or bloodstained
	Or Severe COPD
	Pulse Oximitery (% saturation) – less than 90%
	Must have Aged over 75 years
Agod 75 yms and ferror	
Aged 75 yrs and fever	Age – over 75 years
	and Fever
	Temperature recorded using a disposable thermometer – more than 37.8°c
Cardiac Failure	Cardiac Failure

	Heart Failure - present on the day of inclusion
	Insulin-dependent diabetes mellitus
Insulin-dependent diabetes mellitus	Diabetes - present on the day of inclusion
	Insulin - present on the day of inclusion
Serious Neurological Disorder	Serious Neurological Disorder
	n/a

Table 1 online – Comparison of the ERS-ESCMID guideline recommendations for antibiotic prescription for lower respiratory tract infections (LRTI) and corresponding information collected in the GRACE\* study

<sup>\*</sup> Genomics to combat Resistance against Antibiotics in Community-acquired LRTI in Europe (www.grace-lrti.org)