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**Title:** Global burden of non-cystic fibrosis bronchiectasis: A simple epidemiological analysis

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**Body:** Introduction Non-cystic fibrosis bronchiectasis (NCFB) is a relatively rare condition in which potential respiratory pathogens frequently colonize the lungs, often leading to exacerbations. Although classified as an orphan disease in the US, limited data are available to quantify the burden of NCFB worldwide. Methods A systematic search was performed in MEDLINE and PubMed for original articles containing epidemiological information on: the rate of NCFB in the general population; the age and sex distribution of the patients; the proportion of those with culture-positive sputum; and the frequency of exacerbations. The search yielded 97 publications: 33 gave meaningful data for this study. Information was aggregated using a weighted average across multiple published studies to derive factors that were applied to all countries in the analysis. Results The prevalence rate of NCFB in the general population was calculated to be 39.9 cases per 100,000. In total, 75.8% of patients have culture-positive sputum and 48% experience  $\geq 2$  exacerbations per year. Table 1 shows single country data.

Table 1: Estimates on NCFB patients in 2012

	Total number of patients (N)	Culture-positive sputum (N)	$\geq 2$ exacerbations / year (N)
Global	2443518	1852703	1178806
U.S.	130676	99080	63041
France	26099	19788	12591
Germany	35759	27113	17251
Italy	24664	18701	11898
Spain	18738	14207	9040
UK	25453	19298	12279

**Conclusions** This epidemiology calculation demonstrates that there are marked global numbers of NCFB patients suffering from frequent exacerbations who may need therapies that could potentially reduce exacerbations. More data from individual regions and countries are needed to better estimate global epidemiology of NCFB.