Socioeconomic inequalities in lung cancer treatment: systematic review and meta-analysis
Authors: Forrest LF, Adams J, Wareham H, et al.
PLoS Med 2013; DOI: 10.1371/journal.pmed.1001376
Summary: Socioeconomic status affects incidence and outcome of lung cancer; however, it is not known whether there are inequalities in treatment and how these might affect mortality. The aim of this study was to assess these inequalities through systematic review and meta-analysis. 23 cohort studies regarding lung cancer were accessed from Medline, Embase and Scopus, and socioeconomic inequalities were measured. Lower socioeconomic status was associated with a reduced likelihood of receiving any treatment, surgery and chemotherapy, but not radiotherapy. The differences were not due to healthcare system or cancer stage.

Diagnosing pneumonia in patients with acute cough: clinical judgment compared to chest radiography
Authors: Vugt SF, Verheij T, Jong PD, et al.
Eur Respir J 2013; DOI: 10.1183/09031936.00111012
Summary: The accuracy of clinical assessment, in the absence of radiography, on the diagnosis of pneumonia is unknown. In order to assess this, a study was performed on 2,810 patients reporting acute cough to general practitioners in 12 European Countries. General practitioners recorded a “yes” or “no” verdict on whether they considered pneumonia to be present, and patients were followed up with chest radiography within a week. 140 patients had pneumonia, of whom 29% had been recorded as “yes” by the general practitioner, 1% of the total were recorded as “yes” but did not have pneumonia on radiography, and 57% of those recorded as “yes” did have pneumonia. Negative predictive value, sensitivity and specificity were 96%, 29% and 99% respectively, showing that, while diagnosis in general practice alone is valuable, the majority of cases would have been missed.

Asthma and occupation in the 1958 birth cohort
Authors: Ghosh RE, Cullinan P, Fishwick D, et al.
Thorax 2013; DOI: 10.1136/thoraxjnl-2012-202151
Summary: This study aimed to describe the association of adult-onset asthma with occupational exposure in a cohort of 9,488 subjects from 1958 to the age of 42 years. Subjects were assigned to specific classes of jobs and logistic regression modelling, adjusting for smoking status, sex, social class and hay fever, was used to assess job and adult-onset asthma association. Of the 7406 cohort subjects with no childhood asthma, 9% developed asthma by the age of 42 years. This adult-onset asthma was associated with certain occupations known to be risks for asthma, including farming, hairdressing, printing and jobs likely to use cleaning agents. Furthermore, exposure to certain high asthma risk allergens, including flour, metal fumes and textile production products was also associated with adult-onset asthma. In total, around 16% of all adult-onset asthma was associated with occupational exposure.

Differences in fungi present in induced sputum samples from asthma patients and non-atopic controls: a community based case control study
Authors: van Woerden HC, Gregory C, Brown R, et al.
BMC Infect Dis 2013; DOI: 10.1186/1471-2334-13-69
Summary: The existence of extensive lung microbiota has been proposed in the lungs. What is not known, however, is the extent to which these have aetiological relevance. Using sputum samples from asthma patients and controls, 136 fungal species were identified. 90 of these fungal species were more common in the asthma patients, including Malassezia pachydermatis, which is associated with atopic dermatitis, and 46 were more common in the control subjects. The difference between the microbiota in asthma patients and controls was statistically significant.
Prognostic value of bronchiectasis in patients with moderate-to-severe chronic obstructive pulmonary disease
Authors: Martinez-Garcia MA, de la Rosa D, Soler-Cataluña JJ, et al.
Am J Respir Crit Care Med 2013; DOI: 10.1164/rccm.201208-1518OC
Summary: In patients with moderate-to-severe chronic obstructive pulmonary disease, the prevalence of bronchiectasis is high. In order to assess the prognostic value of bronchiectasis in these patients, a multicentre prospective observational study was performed on consecutive COPD patients. High-resolution computed tomography was used to diagnose bronchiectasis and a multivariate Cox analysis was used to determine prognostic value. In total, 99, 85 and 17 patients in GOLD stage II, III and IV, respectively, were included in the study, with bronchiectasis present in 57.2%. Bronchiectasis was found to be associated with an increased risk of mortality in those COPD patients.

Health and the 2008 economic recession: evidence from the United Kingdom
Authors: Astell-Burt T, Feng X.
PLoS ONE 2013; DOI:10.1371/journal.pone.0056674
In 2008, an economic recession hit the UK and other countries, resulting in increased unemployment. Increased unemployment is well known to be associated with poor health status. Using data from the Quarterly Labour Force Survey of the United Kingdom, health, demographic and socio-economic status were assessed. Unemployment rose from 4.3% to 7.1% between January 2008 and September 2009; followed by a rise in poor health from 25.7% to 29.5% between July 2009 and December 2010. Although there was no change in health inequality, there was a concerning rise in poor health status for the unemployed as well as the employed irrespective of health class.

Safety and efficacy of MVA85A, a new tuberculosis vaccine, in infants previously vaccinated with BCG: a randomised, placebo-controlled phase 2b trial
Authors: Tameris MD, Hatherill M, Landry BS, et al.
Lancet 2013; DOI: 10.1016/S0140-6736(13)60177-4
Summary: The BCG vaccination does not give complete protection against tuberculosis in infants, so a new vaccine, MVA85A, was tested for safety, immunogenicity and efficacy. In a double-blind, randomised, placebo-controlled trial, 2,797 infants were enrolled to receive MVA85A, or Candida skin-test antigen as placebo. Local adverse effects were experienced by more in the MVA85A group, but systemic or serious adverse events did not differ. The primary efficacy endpoint was incident tuberculosis and the secondary endpoint was M. tuberculosis infection. Primary endpoint was reached in 2% of the MVA85A group, but systemic or serious adverse events did not differ. The primary efficacy endpoint was incident tuberculosis and the secondary endpoint was M. tuberculosis infection. Primary endpoint was reached in 2% of the MVA85A group, with conversion in 13%. Efficacy against tuberculosis was 17%. MVA85A was well tolerated and induced modest immune responses.

Associated social factors of prevalent asthma in adults and the very old in the UK
Author: Shiue I.
Allergy 2013; DOI: 10.1111/all.12091
In adults and the elderly, social determinants of asthma are not very well studied. In order to improve on the knowledge in this area, data from the UK Longitudinal Household Survey were analysed. Demographics, living and work conditions were assessed and asthma and age of onset were self-reported through interviews. Of the 50,994 people in the cohort, 12% had ever had asthma, with 6% developing in adulthood. Education was borderline associated with asthma in the elderly and birthplace had a significant impact in the young and middle-aged adults, while there was no regional difference across the whole UK.

With many thanks to I. Shiue. If you like to contribute hot topics of interest, please send a brief synopsis along with the article title and name of the journal to breathe@ersj.org.uk