Contents

Volume 73  Issue 1  THORAX January 2018

Editorials
1 Imaging pathophysiological changes in the lungs in IFI with xenon magnetic resonance imaging
J M Wild

2 How do we improve training in pulmonary physiology and the interpretation of lung function tests?
C Phillips

4 Quantification of CT bronchiectasis and its relationship to ventilation in cystic fibrosis
T Rosenow

5 NERO: a pilot study but important step towards comprehensive management of obesity hyperventilation syndrome
J-C Borel, A L Borel, A J Piper

Critical care
7 Perspectives of survivors, families and researchers on key outcomes for research in acute respiratory failure
V D Dinglas, C M Chassere, W E Davis, A Parker, I A Friedman, E Calantowici, C O Bingham, A E Turnbull, D M Needham

Cystic fibrosis
13 Respiratory viruses in healthy infants and infants with cystic fibrosis: a prospective cohort study
I Korten, E Kieninger, S Kleina, J Mack, N Schlafépyr, M T Barthv, N Rganev, C E Kuchni, M Hily, U Frey, M Gorgies, C Casasuch, P Latzin

Interstitial lung disease
21 Using hyperpolarized 129Xe MRI to quantify regional gas transfer in idiopathic pulmonary fibrosis
J M Wang, S H Robertson, Z Wang, M He, R S Virginac, G M Schenaq, R M Smiga, T G O’Riordan, J Sunday, I Elmer, C R Ractley, P PAdams, B Driehuys, for the SCILD and BILD study groups

Rehabilitation
29 Comparison of a structured home-based programme with conventional supervised pulmonary rehabilitation: a randomised non-inferiority trial

Respiratory epidemiology
37 Prevalence of asthma-like symptoms with ageing

Respiratory infection
49 Pseudomonas aeruginosa LasB protease impairs innate immunity in mice and humans by targeting a lung epithelial cystic fibrosis transmembrane regulator–IL-6–antimicrobial–repair pathway

Sleep
62 Nutrition and Exercise Rehabilitation in Obesity hyperventilation syndrome (NERO): a pilot randomised controlled trial
S Mandal, E-S Sub, R Harding, A Vaughan-France, M Ramsay, B Connolly, D E Bear, H MacLaughlin, S A Greenwood, M P Polkey, M Elliott, T Chen, A Douiri, J Moxham, P B Murphy, N Hart

Tuberculosis
70 Comorbidities, mortality and causes of death among patients with tuberculosis in Denmark 1998–2010: a nationwide, register-based case-control study
A Fic, O Hilberg, C Wejse, R Ilven, A Løkke

Interstial lung disease
21 Using hyperpolarized 129Xe MRI to quantify regional gas transfer in idiopathic pulmonary fibrosis
J M Wang, S H Robertson, Z Wang, M He, R S Virginac, G M Schenaq, R M Smiga, T G O’Riordan, J Sunday, I Elmer, C R Ractley, P PAdams, B Driehuys, for the SCILD and BILD study groups

Rehabilitation
29 Comparison of a structured home-based programme with conventional supervised pulmonary rehabilitation: a randomised non-inferiority trial

Respiratory epidemiology
37 Prevalence of asthma-like symptoms with ageing

Respiratory infection
49 Pseudomonas aeruginosa LasB protease impairs innate immunity in mice and humans by targeting a lung epithelial cystic fibrosis transmembrane regulator–IL-6–antimicrobial–repair pathway

Sleep
62 Nutrition and Exercise Rehabilitation in Obesity hyperventilation syndrome (NERO): a pilot randomised controlled trial
S Mandal, E-S Sub, R Harding, A Vaughan-France, M Ramsay, B Connolly, D E Bear, H MacLaughlin, S A Greenwood, M P Polkey, M Elliott, T Chen, A Douiri, J Moxham, P B Murphy, N Hart

Tuberculosis
70 Comorbidities, mortality and causes of death among patients with tuberculosis in Denmark 1998–2010: a nationwide, register-based case-control study
A Fic, O Hilberg, C Wejse, R Ilven, A Løkke

Interstial lung disease
21 Using hyperpolarized 129Xe MRI to quantify regional gas transfer in idiopathic pulmonary fibrosis
J M Wang, S H Robertson, Z Wang, M He, R S Virginac, G M Schenaq, R M Smiga, T G O’Riordan, J Sunday, I Elmer, C R Ractley, P PAdams, B Driehuys, for the SCILD and BILD study groups

Rehabilitation
29 Comparison of a structured home-based programme with conventional supervised pulmonary rehabilitation: a randomised non-inferiority trial

Respiratory epidemiology
37 Prevalence of asthma-like symptoms with ageing

Respiratory infection
49 Pseudomonas aeruginosa LasB protease impairs innate immunity in mice and humans by targeting a lung epithelial cystic fibrosis transmembrane regulator–IL-6–antimicrobial–repair pathway

Sleep
62 Nutrition and Exercise Rehabilitation in Obesity hyperventilation syndrome (NERO): a pilot randomised controlled trial
S Mandal, E-S Sub, R Harding, A Vaughan-France, M Ramsay, B Connolly, D E Bear, H MacLaughlin, S A Greenwood, M P Polkey, M Elliott, T Chen, A Douiri, J Moxham, P B Murphy, N Hart

Tuberculosis
70 Comorbidities, mortality and causes of death among patients with tuberculosis in Denmark 1998–2010: a nationwide, register-based case-control study
A Fic, O Hilberg, C Wejse, R Ilven, A Løkke

Interstial lung disease
21 Using hyperpolarized 129Xe MRI to quantify regional gas transfer in idiopathic pulmonary fibrosis
J M Wang, S H Robertson, Z Wang, M He, R S Virginac, G M Schenaq, R M Smiga, T G O’Riordan, J Sunday, I Elmer, C R Ractley, P PAdams, B Driehuys, for the SCILD and BILD study groups

Rehabilitation
29 Comparison of a structured home-based programme with conventional supervised pulmonary rehabilitation: a randomised non-inferiority trial

Respiratory epidemiology
37 Prevalence of asthma-like symptoms with ageing

Respiratory infection
49 Pseudomonas aeruginosa LasB protease impairs innate immunity in mice and humans by targeting a lung epithelial cystic fibrosis transmembrane regulator–IL-6–antimicrobial–repair pathway

Sleep
62 Nutrition and Exercise Rehabilitation in Obesity hyperventilation syndrome (NERO): a pilot randomised controlled trial
S Mandal, E-S Sub, R Harding, A Vaughan-France, M Ramsay, B Connolly, D E Bear, H MacLaughlin, S A Greenwood, M P Polkey, M Elliott, T Chen, A Douiri, J Moxham, P B Murphy, N Hart

Tuberculosis
70 Comorbidities, mortality and causes of death among patients with tuberculosis in Denmark 1998–2010: a nationwide, register-based case-control study
A Fic, O Hilberg, C Wejse, R Ilven, A Løkke
**Contents**

**Research letters**

78  Does training respiratory physicians in clinical respiratory physiology and interpretation of pulmonary function tests improve core knowledge?
    M Patout, L Sesé, T Gille, B Coiffard, S Korzeniewski, E Lhuillier, A Pradel, C Tardif, A Chambellan, C Straus, S Matecki, T Perez, L Thiberville, A Didier

82  The quantitative link of lung clearance index to bronchial segments affected by bronchiectasis
    S Verbanck, G G King, W Zhou, A Miller, C Thamrin, D Schuermans, B Ilsen, C W Ernst, J de Mey, W Vincken, E Vanderhelst

85  Novel imaging detailing the origins of a pneumothorax
    K Nakanishi, H Goto, T Ito, Y Nagata, S Hayashi, T Ishihara

88  One evidence base; three stories: do opioids relieve chronic breathlessness?
    M Ekström, S Bajwah, J M Bland, D C Currow, J Hussain, M J Johnson

**Chest clinic**

**Case based discussions**

91  Empyema necessitans and a persistent air leak associated with rupture of an anaerobic lung abscess due to bacteroides
    V Sharma, K G Blyth

**Images in Thorax**

94  Herpes simplex lesion mimicking left upper lobe bronchial tumour
    G C Dantas, H Shoji, C Hoelz, M Buarque d G Funari, G Szarf

96  Extrathoracic hyperinflation
    M Bruyneel, V Ninane

97  Vocal fold paralysis on positron emission tomography-CT
    C Ma, Z A K Frosch, B Overmoyer, A Z. Cooper

**Journal club summaries**

100  What’s hot that the other lot got
    N M Shah