



Journal of the British Thoracic Society

Impact Factor: 9.655

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ISSN: 0040-6376 (print)

ISSN: 1468-3296 (online)

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Thorax is published by BMJ Publishing Group Ltd, typeset by Exeter Premedia Services Private Ltd, Chennai, India and printed in the UK on acid-free paper.

Thorax (ISSN No: 0040-6376) is published monthly by BMJ Publishing Group and distributed in the USA by Air Business Ltd. Periodicals postage paid at Jamaica NY 11431. POSTMASTER: send address changes to Thorax, Air Business Ltd, c/o Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA.

**Editorials**

**211** What causes pneumonia in children who have had their jabs?  
*G L Saint, D B Hawcutt, P S McNamara*

**213** Hypocapnia, mitochondria and surfactant secretion  
*B Kosmider, K Bahmed, S Kelsen*

**215** Wandering out of the GWAS wilderness: a new pathway paradigm for complex disease genetics  
*J Sturek, I Noth*

**217** Does auto-PAP work in patients with acute quadriplegia and sleep-disordered breathing?  
*A Sankari, M S Badr*

**Critical care**

**219** Dead space ventilation promotes alveolar hypocapnia reducing surfactant secretion by altering mitochondrial function  
*M Kiefmann, S Tank, M-O Tritt, P Keller, K Heckel, L Schulte-Uentrop, C Olotu, S Schrepfer, A E Goetz, R Kiefmann*

**Cystic fibrosis**

**229** Gaps in the evidence for treatment decisions in cystic fibrosis: a systematic review  
*N J Rowbotham, S Smith, A P Prayle, K A Robinson, A R Smyth*

**237** Secondhand smoke alters arachidonic acid metabolism and inflammation in infants and children with cystic fibrosis  
*B T Kopp, R Thompson, J Kim, R Konstan, A Diaz, B Smith, C Shrestha, L K Rogers, D Hayes, D Tumin, F W Woodley, O Ramilo, D B Sanders, J A Groner, A Mejias*

**Lung cancer**

**247** Persisting new nodules in incidence rounds of the NELSON CT lung cancer screening study  
*J E Walter, M A Heuvelmans, K ten Haaf, R Vliegthart, C M van der Aalst, U Yousaf-Khan, P M A van Ooijen, K Nackaerts, H J M Groen, G H De Bock, H J de Koning, M Oudkerk*

**Respiratory epidemiology**

**254** Interactive effect between ATPase-related genes and early-life tobacco smoke exposure on bronchial hyper-responsiveness detected in asthma-ascertained families  
*M-H Dizier, P Margaritte-Jeannin, L Pain, C Samowski, M Brossard, H Mohamdi, N Lavielle, M-C C Babron, J Just, M Lathrop, C Laprise, E Bouzigon, F Demenais, R Nadif*

**Respiratory infection**

**261** The contribution of viruses and bacteria to community-acquired pneumonia in vaccinated children: a case-control study  
*M U Bhuiyan, T L Snelling, R West, J Lang, T Rahman, C Granland, C de Gier, M L Borland, R B Thornton, L-A S Kirkeham, C Sikazwe, A C Martin, P C Richmond, D W Smith, A Jaffe, C C Blyth*

**Respiratory research**

**270** Holistic services for people with advanced disease and chronic breathlessness: a systematic review and meta-analysis  
*L J Brighton, S Miller, M Farquhar, S Booth, D Yi, W Gao, S Bajwah, W D-C Man, I J Higginson, M Maddocks*

**Sleep**

**282** Positive airway pressure for sleep-disordered breathing in acute quadriplegia: a randomised controlled trial  
*D J Berlowitz, R Schembri, M Graco, J M Ross, N Ayas, I Gordon, B Lee, A Graham, S V Cross, M McClelland, P Kennedy, P Thumbikati, C Bennett, A Townson, T J Geraghty, S Pieri-Davies, R Singhal, K Marshall, D Short, A Nunn, D Mortimer, D Brown, R J Pierce, P A Cistulli, the COSAQ Collaborative*

**Tuberculosis**

**291** Predicting tuberculosis relapse in patients treated with the standard 6-month regimen: an individual patient data meta-analysis  
*K Romanowski, R F Balshaw, A Benedetti, J R Campbell, D Menzies, F Ahmad Khan, J C Johnston*

**MORE CONTENTS ►**

**Cover caption:** Images of a single intact alveolus on the surface of isolated rat lungs show the pseudocolour-coded fluorescence intensity of rhod-2-loaded AECs (arrow heads) under normocapnic and hypocapnic conditions. (see Kiefmann M et al., page 222)



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**Brief communications**

- 298** Automated O<sub>2</sub> titration improves exercise capacity in patients with hypercapnic chronic obstructive pulmonary disease: a randomised controlled cross-over trial  
*I Vivodtzev, E L'Her, G Vottero, C Yankoff, R Tamisier, F Maltais, F Lellouche, J-L Pépin*
- 302** Alleviating mechanical constraints to ventilation with heliox improves exercise endurance in adult survivors of very preterm birth  
*J W Duke, A M Zidron, I M Gladstone, A T Lovering*
- 305** Progranulin aggravates pulmonary immunopathology during influenza virus infection  
*Q Luo, X Yan, H Tu, Y Yin, J Cao*

**309**

- Sputum exosomes: promising biomarkers for idiopathic pulmonary fibrosis  
*M-S Njock, J Guiot, M A Henket, O Nivelles, M Thiry, F Dequiedt, J-L Corhay, R E Louis, I Struman*

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**Chest clinic****Images in Thorax**

- 313** Pulmonary inflammatory myofibroblastic tumour and IgG<sub>4</sub>-related disease presenting with lower limb paralysis  
*S Zhang, S Zhang, W Zhang, J He, J Shi, X Zeng*

**Journal club summaries**

- 315** What's hot that the other lot got  
*V Connor*