



## EDITORIALS

- 1** **Ensuring that the diagnosis of tuberculosis accelerates progress towards the Millennium Development Goals**  
Christy Hanson, Giovanni Sotgiu and Robert Loddenkemper
- 5** **Good news about a bad subject: scientific evidence to help defeat multidrug/extensively drug-resistant tuberculosis**  
Giovanni Sotgiu and Mark Woodhead
- 8** **COPD in nonsmokers: the biomass hypothesis – to be or not to be?**  
Louisa Gnatiuc and Gaetano Caramori
- 11** **Viral, bacterial or both? Regardless, we need to treat infection in COPD**  
Tobias Welte and Marc Miravittles
- 14** **Airway and systemic eosinophilia in asthma: does site matter?**  
Konstantinos Kostikas, Eleftherios Zervas and Mina Gaga
- 17** **Oxidative stress in cystic fibrosis lung disease: an early event, but worth targeting?**  
Andreas Hector, Matthias Griese and Dominik Hartl
- European lung corner**
- 20** **www.smokehaz.eu – a review of the evidence on smoking and lung health**  
Brian Ward

## CONSENSUS STATEMENT



- 23** **Management of patients with multidrug-resistant/extensively drug-resistant tuberculosis in Europe: a TBNET consensus statement**  
Christoph Lange, Ibrahim Abubakar, Jan-Willem C. Alffenaar, Graham Bothamley, Jose A. Caminero, Anna Cristina C. Carvalho, Kwok-Chiu Chang, Luigi Codecasa, Ana Correia, Valeriu Crudu, Peter Davies, Martin Dedicoat, Francis Drobniowski, Raquel Duarte, Cordula Ehlers, Connie Erkens, Delia Goletti, Gunar Günther, Elmira Ibrahim, Beate Kampmann, Liga Kuksa, Wiel de Lange, Frank van Leth, Jan van Lunzen, Alberto Matteelli, Dick Menzies, Ignacio Monedero, Elvira Richter, Sabine Rüsck-Gerdes, Andreas Sandgren, Anna Scardigli, Alena Skrahina, Enrico Tortoli, Grigory Volchenkov, Dirk Wagner, Marieke J. van der Werf, Bhanu Williams, Wing-Wai Yew, Jean-Pierre Zellweger and Daniela Maria Cirillo for the TBNET

## FROM THE MUSEUM

- 64** **From the Museum: the Art of Thinking. Part 5: Seeing**  
Tom Kotsimbos

## ORIGINAL ARTICLES



- 66** **Epidemiology**  
**Prevalence and correlates of airflow obstruction in ~317 000 never-smokers in China**  
Margaret Smith, Liming Li, Mareli Augustyn, Om Kurmi, Junshi Chen, Rory Collins, Yu Guo, Yabin Han, Jingxin Qin, Guanqun Xu, Jian Wang, Zheng Bian, Gang Zhou, Richard Peto and Zhengming Chen on behalf of the China Kadoorie Biobank collaborative group
- 78** **COPD**  
**Performance of the BODE index in patients with  $\alpha_1$ -antitrypsin deficiency-related COPD**  
Gabriel Thabut, Jean-François Mornex, Christophe Pison, Antoine Cuvelier, Malika Balduyck, Marie-Christine Pujazon, Michel Fournier, Brahim Aitlallne and Raphaël Porcher
- 87** **COPD and respiratory infections**  
**Human rhinovirus infection during naturally occurring COPD exacerbations**  
Siobhán N. George, Davinder S. Garcha, Alexander J. Mackay, Anant R.C. Patel, Richa Singh, Raymond J. Sapsford, Gavin C. Donaldson and Jadwiga A. Wedzicha
- 97** **Asthma**  
**Importance of concomitant local and systemic eosinophilia in uncontrolled asthma**  
Florence Nicole Schleich, Anne Chevremont, Virginie Paulus, Monique Henket, Maité Manise, Laurence Seidel and Renaud Louis

## ORIGINAL ARTICLES (CONTINUED)

---

### Paediatric pulmonology

- 109** **Transglutaminase 2: a new player in bronchopulmonary dysplasia?**  
Thilo J. Witsch, Gero Niess, Elpidoforos Sakkas, Tatyana Likhoshvay, Simone Becker, Susanne Herold, Konstantin Mayer, István Vadász, Jesse D. Roberts Jr, Werner Seeger and Rory E. Morty

### Cystic fibrosis

- 122** **Oxidation contributes to low glutathione in the airways of children with cystic fibrosis**  
Anthony J. Kettle, Rufus Turner, Catherine L. Gangell, D. Timothy Harwood, Irada S. Khalilova, Anna L. Chapman, Christine C. Winterbourn and Peter D. Sly on behalf of AREST CF

### Sleep

- Press release** **130** **Sleep apnoea severity independently predicts glycaemic health in nondiabetic subjects: the ESADA study**  
Brian D. Kent, Ludger Grote, Maria R. Bonsignore, Tarja Saaresranta, Johan Verbraecken, Patrick Lévy, Pawel Stiwinski, Ruzena Tkacova, John-Arthur Kvamme, Ingo Fietze, Jan Hedner and Walter T. McNicholas on behalf of the European Sleep Apnoea Database collaborators
- 140** **Zonisamide reduces obstructive sleep apnoea: a randomised placebo-controlled study**  
Davoud Eskandari, Ding Zou, Mahssa Karimi, Kaj Stenlöf, Ludger Grote and Jan Hedner

### Pulmonary vascular diseases

- 150** **Predicting the size of pulmonary arteriovenous malformations on chest computed tomography: a role for transthoracic contrast echocardiography**  
Sebastiaan Velthuis, Elisabetta Buscarini, Johannes J. Mager, Veronique M.M. Vorselaars, Marco W.F. van Gent, Pietro Gazzaniga, Guido Manfredi, Cesare Danesino, Arjen L. Diederik, Jan A. Vos, Silvia Gandolfi, Repke J. Snijder, Cornelis J.J. Westermann and Martijn C. Post
- 160** **SuHx rat model: partly reversible pulmonary hypertension and progressive intima obstruction**  
Michiel Alexander de Raaf, Ingrid Schalij, Jose Gomez-Arroyo, Nina Rol, Chris Happé, Frances S. de Man, Anton Vonk-Noordegraaf, Nico Westerhof, Norbert F. Voelkel and Harm Jan Bogaard

### Respiratory infections

- 169** **Prolonged shedding of rhinovirus and re-infection in adults with respiratory tract illness**  
Kalina T. Zlateva, Jutte J.C. de Vries, Frank E.J. Coenjaerts, Anton M. van Loon, Theo Verheij, Paul Little, Christopher C. Butler, Herman Goossens, Magareta Ieven and Eric C.J. Claas on behalf of the GRACE Study Group

### Interstitial lung diseases



- 178** **Lung transplantation in telomerase mutation carriers with pulmonary fibrosis**  
Leann L. Silhan, Pali D. Shah, Daniel C. Chambers, Laurie D. Snyder, Gerdt C. Riise, Christa L. Wagner, Eva Hellström-Lindberg, Jonathan B. Orens, Juliette F. Mewton, Sonye K. Danoff, Murat O. Arcasoy and Mary Armanios

### Acute lung injury and critical care

- 188** **Exhaled breath metabolomics as a noninvasive diagnostic tool for acute respiratory distress syndrome**  
Lieuwe D.J. Bos, Hans Weda, Yuanyue Wang, Hugo H. Knobel, Tamara M.E. Nijsen, Teunis J. Vink, Aeilko H. Zwinderman, Peter J. Sterk and Marcus J. Schultz

## SCIENTIFIC ASSEMBLY UPDATE

---

- 198** **Clinical highlights from the 2013 ERS Congress in Barcelona**  
Martijn A. Spruit, Maurizio Marvisi, Johan Coolen, Venerino Poletti, Stefano Gasparini, Björn Ställberg, Felix J.F. Herth and Enrico M. Clini

## REVIEW

---

- 207** **Microparticles and vascular dysfunction in obstructive sleep apnoea**  
Wojciech Trzepizur, Maria Carmen Martinez, Pascaline Priou, Ramaroson Andriantsitohaina and Frédéric Gagnadoux

## SERIES

---

- SERIES "CHALLENGES AND CONTROVERSIES IN THORACIC ONCOLOGY"**  
Edited by J-P. Sculier, B. Besse and P. Van Schil  
Number 2 in this Series
- 217** **Screening for lung cancer: time for large-scale screening by chest computed tomography**  
Dekel Shlomi, Ronny Ben-Avi, Gingy Ronen Balmor, Amir Önn and Nir Peled

### Research letters

- 239**    **The role of mepolizumab in atopic or nonatopic severe asthma with persistent eosinophilia**  
Hector Ortega, Geoffrey Chupp, Philip Bardin, Arnaud Bourdin, Gilles Garcia, Benjamin Hartley, Steve Yancey and Marc Humbert
- 242**    **Between-visit variability of small airway obstruction markers in patients with asthma**  
Sherif Gonem, Steven Corkill, Amisha Singapuri, Per Gustafsson, Rino Costanza, Christopher E. Brightling and Salman Siddiqui
- 244**    **Bronchial obstruction and reversibility in children: inspiratory or expiratory resistance?**  
Iulia Ioan, Laurianne Coutier, Claude Bonabel, Bruno Demoulin, François Marchal, Cyril Schweitzer and Silvia Varechova
-  **247**    **Job strain and COPD exacerbations: an individual-participant meta-analysis**  
Katriina Heikkilä, Ida E.H. Madsen, Solja T. Nyberg, Eleonar I. Fransson, Kirsi Ahola, Lars Alfredsson, Jakob B. Bjorner, Marianne Borritz, Hermann Burr, Anders Knutsson, Markku Koskenvuo, Aki Koskinen, Martin L. Nielsen, Maria Nordin, Krista Pahkin, Jaana Pentti, Reiner Rugulies, Paula Salo, Martin J. Shipley, Sakari B. Suominen, Töres Theorell, Ari Väänänen, Jussi Vahtera, Marianna Virtanen, Peter J.M. Westerholm, G. David Batty, Archana Singh-Manoux and Mika Kivimäki for the IPD-Work Consortium
- 251**    **HIV and multidrug-resistant tuberculosis: overlapping epidemics**  
Anna S. Dean, Matteo Zignol, Dennis Falzon, Haileyesus Getahun and Katherine Floyd
- 254**    **Rapid diagnosis of tuberculosis using ex vivo host biomarkers in sputum**  
Martin O.C. Ota, Joseph F. Mendy, Simon Donkor, Toyin Togun, Mohammed Daramy, Marie P. Gomez, Novel N. Chegou, Abdou K. Sillah, Olumuyiwa Owolabi, Beate Kampmann, Gerhard Walzl and Jayne S. Sutherland
- 257**    **Serial testing using interferon-γ release assays in nursing students in India**  
Alice Zwerling, Madhukar Pai, Joy Sarojini Michael and Devasahayam J. Christopher

### Correspondence

- 261**    **Wood smoke COPD: a new description of a COPD phenotype?**  
Mauricio González-García and Carlos Torres-Duque; Alejandra Ramirez-Venegas, Raul H. Sansores, Pat G. Camp, Peter D. Paré and Harvey O. Coxson
- 263**    **Exercise and cardiovascular benefit in subjects with COPD: the need for randomised trials**  
Charlotte E. Bolton, Nichola S. Gale and John R. Cockcroft; Lowie. E.G.W. Vanfleteren, Martijn A. Spruit, Emiel F.M. Wouters and Frits M.E. Franssen
- 266**    **Comment on: International ERS/ATS guidelines on definition, evaluation and treatment of severe asthma**  
David L. Hahn; Michael E. Wechsler and Gerard P. Cox; Kian Fan Chung, Sally E. Wenzel and Jan L. Brozek for the ERS/ATS Task Force on Definition, Evaluation and Treatment of Severe Asthma
- 269**    **Pulmonary fibrosis associated with *TINF2* gene mutation: is somatic reversion required?**  
Caroline Kannengiesser, Raphael Borie and Patrick Revy; Yoshinori Tanino, Hiroki Yamaguchi, Atsuro Fukuhara and Mitsuru Munakata
- 272**    **AUTHOR CORRECTION**
- f,h,j**    **MEETING CALENDAR**