



EDITORIALS

- 1433** **The European Lung Corner**
Jean-Paul Sculier
- 1435** **Putting noninvasive lung mechanics into context**
Peter M.A. Calverley and Ramon Farre
- 1438** **The CFTR and EGFR relationship in airway vascular growth, and its importance in cystic fibrosis**
Jay A. Nadel
- 1441** **Bronchodilator combinations for COPD: real hopes or a new Pandora's box?**
Nicolas Roche and Pascal Chanez
- 1446** **Clinical trials in idiopathic pulmonary fibrosis: a framework for moving forward**
David J. Lederer
- 1449** **Therapeutic drug management: is it the future of multidrug-resistant tuberculosis treatment?**
Shashikant Srivastava, Charles A. Peloquin, Giovanni Sotgiu and Giovanni Battista Migliori
- 1454** **Legionnaires' disease in Europe: all quiet on the eastern front?**
Julien Beauté, Emmanuel Robesyn and Birgitta de Jong, on behalf of the European Legionnaires' Disease Surveillance Network
- 1459** **Avoiding overdiagnosis in lung cancer screening: the volume doubling time strategy**
Marie-Pierre Revel
- 1464** **Does drug-induced emphysema exist?**
Norbert F. Voelkel, Shiro Mizuno and Masanori Yasuo
- European lung corner**
- 1469** **Canaries in the coal mine**
Maeve Barry

ORIGINAL ARTICLES

COPD



- 1472** **The impact of COPD on health status: findings from the BOLD study**
Christer Janson, Guy Marks, Sonia Buist, Louisa Gnatiuc, Thorarinna Gislason, Mary Ann McBurnie, Rune Nielsen, Michael Studnicka, Brett Toelle, Bryndis Benediktsdottir and Peter Burney
- 1484** **Dual bronchodilation with QVA149 versus single bronchodilator therapy: the SHINE study**
Eric D. Bateman, Gary T. Ferguson, Neil Barnes, Nicola Gallagher, Yulia Green, Michelle Henley and Donald Banerji

Asthma

- 1495** **Metabolic syndrome and incidence of asthma in adults: the HUNT study**
Ben Michael Brumpton, Carlos Arturo Camargo Jr, Pål Richard Romundstad, Arnulf Langhammer, Yue Chen and Xiao-Mei Mai

Lung function

- 1503** **Dose-dependent association of smoking and bronchial hyperresponsiveness**
Maria Juusela, Paula Pallasaho, Eva Rönmark, Seppo Sarna, Anssi Sovijärvi and Bo Lundbäck
- 1513** **Respiratory impedance in healthy subjects: baseline values and bronchodilator response**
Ellie Oostveen, Krisztina Boda, Chris P.M. van der Grinten, Alan L. James, Sally Young, Hans Nieland and Zoltán Hantos

Epidemiology

- 1524** **Periodontitis is related to lung volumes and airflow limitation: a cross-sectional study**
Birte Holtfreter, Stefanie Richter, Thomas Kocher, Marcus Dörr, Henry Völzke, Till Ittermann, Anne Obst, Christoph Schäper, Ulrich John, Peter Meisel, Anne Grotevendt, Stephan B. Felix, Ralf Ewert and Sven Gläser

Paediatric pneumology

- 1536** **Pulmonary gas transfer in children and adolescents born extremely preterm**
Emma Satrell, Ola Røksund, Einar Thorsen and Thomas Halvorsen

ORIGINAL ARTICLES (CONTINUED)

Cystic fibrosis

- 1545** **Association of lung function, chest radiographs and clinical features in infants with cystic fibrosis**
Margaret Rosenfeld, Philip M. Farrell, Margaret Kloster, Jonathan O. Swanson, Thuy Vu, Lyndia Brumback, James D. Acton, Robert G. Castile, Andrew A. Colin, Carol K. Conrad, Meeghan A. Hart, Gwendolyn S. Kerby, Peter W. Hiatt, Peter J. Mogayzel, Robin C. Johnson and Stephanie D. Davis

- 1553** **CFTR dysfunction induces vascular endothelial growth factor synthesis in airway epithelium**
Clémence Martin, Nathalie Coolen, Yongzheng Wu, Guiti Thévenot, Lhoussaine Touqui, Virginie Prulière-Escabasse, Jean-François Papon, André Coste, Estelle Escudier, Daniel J. Dusser, Isabelle Fajac, Pierre-Régis Burgel

Sleep medicine

- 1563** **A urine biomarker for severe obstructive sleep apnoea patients: lipocalin-type prostaglandin D synthase**
Yuichi Chihara, Kazuo Chin, Kosuke Aritake, Yuka Harada, Yoshiro Toyama, Kimihiko Murase, Chikara Yoshimura, Takefumi Hitomi, Toru Oga, Michiaki Mishima and Yoshihiro Urade

Pulmonary vascular diseases

- CME article 1575** **Severely reduced diffusion capacity in idiopathic pulmonary arterial hypertension: patient characteristics and treatment responses**
Pia Trip, Esther J. Nossent, Frances S. de Man, Inge A.H. van den Berk, Anco Boonstra, Herman Groepenhoff, Edward M. Leter, Nico Westerhof, Katrien Grünberg, Harm-Jan Bogaard and Anton Vonk-Noordegraaf

- 1586** **Zero reference level for right heart catheterisation**
Gabor Kovacs, Alexander Avian, Andrea Olschewski and Horst Olschewski

Respiratory infections



- 1595** **Aetiology of paediatric pneumonia after the introduction of pneumococcal conjugate vaccine**
Mohamed A. Elemaid, Andrew D. Sails, Gary J.A. Eltringham, John D. Perry, Stephen P. Rushton, David A. Spencer, Matthew F. Thomas, Katherine M. Eastham, Fiona Hampton, Andrew R. Gennery and Julia E. Clark on behalf of the North East England Paediatric Respiratory Infection Study Group

- 1604** **The geographic diversity of nontuberculous mycobacteria isolated from pulmonary samples: an NTM-NET collaborative study**
Wouter Hoefsloot, Jakko van Ingen, Claire Andrejak, Kristian Ängeby, Rosine Bauriaud, Pascale Bemer, Natalie Beylis, Martin J. Boeree, Juana Cacho, Violet Chihota, Erica Chimara, Gavin Churchyard, Raquel Cias, Rosa Daza, Charles L. Daley, P.N. Richard Dekhuijzen, Diego Domingo, Francis Drobniowski, Jaime Esteban, Maryse Fauville-Dufaux, Dorte Bek Folkvardsen, Noel Gibbons, Enrique Gómez-Mampaso, Rosa Gonzalez, Harald Hoffmann, Po-Ren Hsueh, Alexander Indra, Tomasz Jagielski, Frances Jamieson, Mateja Jankovic, Eefje Jong, Joseph Keane, Wo-Jung Koh, Berit Lange, Sylvia Leao, Rita Macedo, Turid Mansåker, Theodore K. Marras, Jeannette Maugein, Heather J. Milburn, Tamas Mlinkó, Nora Morcillo, Kozo Morimoto, Dimitrios Papaventzis, Elia Palenque, Mar Paez-Peña, Claudio Piersimoni, Monika Polanová, Nalin Rastogi, Elvira Richter, Maria Jesus Ruiz-Serrano, Anabela Silva, M. Pedro da Silva, Hulya Simsek, Dick van Soolingen, Nora Szabó, Rachel Thomson, Teresa Tórtola Fernandez, Enrico Tortoli, Sarah E. Totten, Greg Tyrrell, Tuula Vasankari, Miguel Villar, Renata Walkiewicz, Kevin L. Winthrop and Dirk Wagner, for the Nontuberculous Mycobacteria Network European Trials Group (NTM-NET)

Tuberculosis

- 1614** **Clarithromycin increases linezolid exposure in multidrug-resistant tuberculosis patients**
Mathieu S. Bolhuis, Richard van Altena, Dick van Soolingen, Wiel C.M. de Lange, Donald R.A. Uges, Tjip S. van der Werf, Jos G.W. Kosterink and Jan-Willem C. Alffenaar

Interstitial lung diseases

- 1622** **Macitentan for the treatment of idiopathic pulmonary fibrosis: the randomised controlled MUSIC trial**
Ganesh Raghu, Rachel Million-Rousseau, Adele Morganti, Loïc Perchenet, Juergen Behr and the MUSIC Study Group

- 1633** **Ex vivo micro-computed tomography analysis of bleomycin-induced lung fibrosis for preclinical drug evaluation**
Chris J. Scotton, Brian Hayes, Robert Alexander, Arnab Datta, Ellen J. Forty, Paul F. Mercer, Andy Blanchard and Rachel C. Chambers

- 1644** **In vivo probe-based confocal laser endomicroscopy in amiodarone-related pneumonia**
Mathieu Salaün, Francis Roussel, Geneviève Bourg-Heckly, Christine Vever-Bizet, Stéphane Dominique, Anne Genevois, Vincent Jounieaux, Gérard Zalcman, Emmanuel Bergot, Jean-Michel Vergnon and Luc Thiberville

Lung cancer

- 1659** **Volumetric computed tomography screening for lung cancer: three rounds of the NELSON trial**
Nanda Horeweg, Carlijn M. van der Aalst, Rozemarijn Vliegenthart, Yingru Zhao, Xueqian Xie, Ernst Th. Scholten, Willem Mali, Erik Thunnissen, Carla Weenink, Harry J.M. Groen, Jan-Willem J. Lammers, Kristiaan Nackaerts, Joost van Rosmalen, Matthijs Oudkerk and Harry J. de Koning

ORIGINAL ARTICLES (CONTINUED)

- 1668** **Characteristics and outcome of patients with second primary lung cancer**
Niels Reimuth, Andreas Stumpf, Patrick Stumpf, Thomas Muley, Sonja Kobinger, Hans Hoffmann, Felix J.F. Herth, Philipp A. Schnabel, Arne Warth, Helge Bischoff and Michael Thomas

Lung biology

- 1677** **Muscarinic receptor subtype-specific effects on cigarette smoke-induced inflammation in mice**
Loes E.M. Kistemaker, I. Sophie T. Bos, Machteld N. Hylkema, Martijn C. Nawijn, Pieter S. Hiemstra, Jürgen Wess, Herman Meurs, Huib A.M. Kerstjens and Reinoud Gosens

PERSPECTIVE

- 1689** **The danger signal plus DNA damage two-hit hypothesis for chronic inflammation in COPD**
Kazutetsu Aoshiba, Takao Tsuji, Kazuhiro Yamaguchi, Masayuki Itoh and Hiroyuki Nakamura

SERIES

SERIES "PHYSIOLOGY IN RESPIRATORY MEDICINE"
Edited by R. Naeije, D. Chemla, A. Vonk-Noordegraaf and A.T. Dinh-Xuan
Number 4 in this Series

- 1696** **Pulsus paradoxus**
Olfa Hamzaoui, Xavier Monnet and Jean-Louis Teboul

REVIEWS

- 1706** **Slow-growing lung cancer as an emerging entity: from screening to clinical management**
Maurizio Infante, Thierry Berghmans, Marjolein A. Heuvelmans, Gunnar Hillerdal and Matthijs Oudkerk
- 1723** **Targeting iron uptake to control *Pseudomonas aeruginosa* infections in cystic fibrosis**
Daniel J. Smith, Iain L. Lamont, Greg J. Anderson and David W. Reid

LETTERS

- 1737** **Obesity in COPD: the effect of water-based exercise**
Renae J. McNamara, Zoe J. McKeough, David K. McKenzie and Jennifer A. Alison
- 1739** **Burden of community-acquired pneumonia in Italian general practice**
Carmelo Sterrantino, Gianluca Trifirò, Francesco Lapi, Alessandro Pasqua, Giampiero Mazzaglia, Carlo Piccinni, Claudio Cricelli, Alessandro Rossi and Francesco Blasi
- 1743** **How can we achieve better prevention of progression to tuberculosis among contacts?**
Steffen Geis, Gudrun Bettge-Weller, Udo Goetsch, Oswald Bellinger, Gisela Ballmann and Anja M. Hauri
- 1747** **Predictors of treatment outcome in multidrug-resistant tuberculosis in Portugal**
Olena Oliveira, Rita Gaio, Miguel Villar and Raquel Duarte
- 1750** **Drug concentration in lung tissue in multidrug-resistant-tuberculosis**
Onno W. Akkerman, Richard van Altena, Theo Klinkenberg, Adrienne H. Brouwers, Alphons H.H. Bongaerts, Tjip S. van der Werf and Jan-Willem Alffenaar
- 1752** **Neutrophilia independently predicts death in tuberculosis**
David M. Lowe, Asela K. Bandara, Geoffrey E. Packe, Richard D. Barker, Robert J. Wilkinson, Christopher J. Griffiths and Adrian R. Martineau
- 1757** **Pulmonary fibrosis in dyskeratosis congenita with *TINF2* gene mutation**
Atsuro Fukuhara, Yoshinori Tanino, Taeko Ishii, Yayoi Inokoshi, Kazue Saito, Naoko Fukuhara, Suguru Sato, Junpei Saito, Takashi Ishida, Hiroki Yamaguchi and Mitsuru Munakata
- 1760** **Pneumomediastinum and hyponatraemic dehydration as presenting features of cystic fibrosis**
Francis J. Gilchrist, Martin Samuels, Gillian Klafkowski, Nick A. Watson and Warren Lenney

- f,h,j** **MEETING CALENDAR**

CME Credit Application Form can be found at the back of this issue