



## EDITORIALS

---

- 595 The ever-expanding ERS fellowship programmes: achievements over the past 3 years**  
Maria G. Belvisi, Rory E. Morty, Gernot Rohde, Marc Miravittles, Kathryn A. Forrest, Céline Genton, Nathalie Ritter, Nikoleta Luludi, Albert Jimenez, David Rigau, Thomy Tonia, Valérie Vaccaro, Carine Pannetier, Guy G. Brusselle and Stephen T. Holgate
- 600 Beta-blockers and COPD: the show must go on**  
Jose Luis Lopez-Campos, Eduardo Márquez-Martín and Ciro Casanova
- 604 What is the origin of dyspnoea in smokers without airway disease?**  
Enrico M. Clini, Bianca Beghé and Leonardo M. Fabbri
- 608 New sociology for better understanding severe eosinophilic asthma: introducing the SOCS family**  
Delphine Gras and Pascal Chanez
- 611 Assessing severe asthma**  
Douglas S. Robinson
- 614 Monitoring asthma: no matter how?**  
Lara S. van den Wijngaart, Jolt Roukema and Peter J.F.M. Merkus
- 617 The adrenergic nervous system as a therapeutic target in pulmonary artery hypertension: a cautionary tale**  
Lewis J. Rubin
- 619 Predicting bacteraemia or rapid identification of the causative pathogen in community acquired pneumonia: where should the priority lie?**  
Ricardo J. José and Jeremy S. Brown
- 623 Gastro-oesophageal reflux and idiopathic pulmonary fibrosis: in search of evidence**  
Wim Wuyts and Bruno Crestani
- 626 Multidisciplinary questions in thoracic oncology: the team experience**  
Jean-Paul Sculier
- 628 The thoracic oncology specialist: curriculum recommendations in thoracic oncology training**  
Anne-Pascale Meert, Julie-Lyn Noël and Fernando Gamarra on behalf of the Thoracic Oncology HERMES Task Force

## TASK FORCE REPORTS

---

- Research statement**
- 632 Research priorities in bronchiectasis: a consensus statement from the EMBARC Clinical Research Collaboration**  
Stefano Aliberti, Sarah Masefield, Eva Polverino, Anthony De Soyza, Michael R. Loebinger, Rosario Menendez, Felix C. Ringshausen, Montserrat Vendrell, Pippa Powell and James D. Chalmers on behalf of the EMBARC Study Group
- CME article 648 ERS statement**
- Tele-monitoring of ventilator-dependent patients: a European Respiratory Society Statement**  
Nicolino Ambrosino, Michele Vitacca, Michael Dreher, Valentina Isetta, Josep M. Montserrat, Thomy Tonia, Giuseppe Turchetti, Joao Carlos Winck, Felip Burgos, Michael Kampelmacher and Guido Vagheggnini on behalf of the ERS Tele-Monitoring of Ventilator-Dependent Patients Task Force

## PERSPECTIVE

---

- 664 What is asthma-COPD overlap syndrome? Towards a consensus definition from a round table discussion**  
Don D. Sin, Marc Miravittles, David M. Mannino, Joan B. Soriano, David Price, Bartolome R. Celli, Janice M. Leung, Yasutaka Nakano, Hye Yun Park, Peter A. Wark and Michael E. Wechsler

## ORIGINAL ARTICLES

---

- Epidemiology and environment**
- 674 Exposure to ultrafine particles and respiratory hospitalisations in five European cities**  
Evangelia Samoli, Zorana Jovanovic Andersen, Klea Katsouyanni, Frauke Hennig, Thomas A.J. Kuhlbusch, Tom Bellander, Giorgio Cattani, Josef Cyrys, Francesco Forastiere, Bénédicte Jacquemin, Markku Kulmala, Timo Lanki, Steffen Loft, Andreas Massling, Aurelio Tobias and Massimo Stafoggia on behalf of the UF&HEALTH Study group
- COPD**
- 683 Incident opioid drug use and adverse respiratory outcomes among older adults with COPD**  
Nicholas T. Vozoris, Xuesong Wang, Hadas D. Fischer, Chaim M. Bell, Denis E. O'Donnell, Peter C. Austin, Anne L. Stephenson, Sudeep S. Gill and Paula A. Rochon
- 694 Mechanisms of exertional dyspnoea in symptomatic smokers without COPD**  
Amany F. Elbehairy, Jordan A. Guenette, Azmy Faisal, Casey E. Ciavaglia, Katherine A. Webb, Dennis Jensen, Andrew H. Ramscook, J. Alberto Neder and Denis E. O'Donnell on behalf of the Canadian Respiratory Research Network

**Asthma**

- 706 Predictive value of exhaled nitric oxide in the management of asthma: a systematic review**  
Lauri Lehtimäki, Péter Csonka, Eeva Mäkinen, Jaana Isojärvi, Sirpa-Liisa Hovi and Anneli Ahovuo-Saloranta
- 715 Reduced epithelial suppressor of cytokine signalling 1 in severe eosinophilic asthma**  
Emma Doran, David F. Choy, Aarti Shikotra, Claire A. Butler, Declan M. O'Rourke, James A. Johnston, Adrien Kissenpfennig, Peter Bradding, Joseph R. Arron and Liam G. Heaney
- 726 A 1-day visit in a severe asthma centre: effect on asthma control, quality of life and healthcare use**  
Akke-Nynke van der Meer, Henk Pasma, Wilma Kempenaar-Okkema, Jo-Anneke Pelinck, Myrte Schutten, Huib Storm and Anneke ten Brinke

**Lung function**

- 734 The relationship between body fat and respiratory function in young adults**  
Tim J.T. Sutherland, Christene R. McLachlan, Malcolm R. Sears, Richie Poulton and Robert J. Hancox

**Paediatric pulmonology**

- 748 Mediating pathways from central obesity to childhood asthma: a population-based longitudinal study**  
An-Hsuan Chih, Yang-Ching Chen, Yu-Kang Tu, Kuo-Chin Huang, Tai-Yuan Chiu and Yungling Leo Lee
- 758 e-Monitoring of Asthma Therapy to Improve Compliance in children (e-MATIC): a randomised controlled trial**  
Erwin C. Vasbinder, Lucas M.A. Goossens, Maureen P.M.H. Rutten-van Mölken, Brenda C.M. de Winter, Liset van Dijk, Arnold G. Vulto, Ellen I.M. Blankman, Nordin Dahhan, Monique T.M. Veenstra-van Schie, Florens G.A. Versteegh, Bart H.M. Wolf, Hettie M. Janssens and Patricia M.L.A. van den Bemt

**Cystic fibrosis**

- 768  $\beta_2$ -Adrenergic receptor agonists activate CFTR in intestinal organoids and subjects with cystic fibrosis**  
Lodewijk A.W. Vijftigschild, Gitte Berkers, Johanna F. Dekkers, Dominique D. Zomer-van Ommen, Elizabeth Matthes, Evelien Kruisselbrink, Annelotte Vonk, Chantal E. Hensen, Sabine Heida-Michel, Margot Geerdink, Hettie M. Janssens, Eduard A. van de Graaf, Inez Bronsveld, Karin M. de Winter-de Groot, Christof J. Majoor, Harry G.M. Heijerman, Hugo R. de Jonge, John W. Hanrahan, Cornelis K. van der Ent and Jeffrey M. Beekman

**Pulmonary vascular diseases**

- 780 Acute pulmonary embolism: mortality prediction by the 2014 European Society of Cardiology risk stratification model**  
Cecilia Becattini, Giancarlo Agnelli, Mareike Lankeit, Luca Masotti, Piotr Pruszczyk, Franco Casazza, Simone Vanni, Cinzia Nitti, Pieter Kamphuisen, Maria Cristina Vedovati, Maria Grazia De Natale and Stavros Konstantinides
- 787 Bisoprolol in idiopathic pulmonary arterial hypertension: an explorative study**  
Jasmijn S.J.A. van Campen, Karin de Boer, Mariëlle C. van de Veerdonk, Cathelijne E.E. van der Bruggen, Cor P. Allaart, Pieter G. Raijmakers, Martijn W. Heymans, J. Tim Marcus, Hendrik J. Harms, M. Louis Handoko, Frances S. de Man, Anton Vonk Noordegraaf and Harm-Jan Bogaard

**Respiratory infections**

- 797 Predictive and prognostic factors in patients with blood-culture-positive community-acquired pneumococcal pneumonia**  
Rosanel Amaro, Adamantia Liapikou, Catia Cilloniz, Albert Gabarrus, Francesc Marco, Jacobo Sellares, Eva Polverino, Javier Garau, Miquel Ferrer, Daniel M. Musher and Antoni Torres

**Tuberculosis**

- 808 Tuberculosis care among refugees arriving in Europe: a ERS/WHO Europe Region survey of current practices**  
Masoud Dara, Ivan Solovic, Giovanni Sotgiu, Lia D'Ambrosio, Rosella Centis, Richard Tran, Delia Goletti, Raquel Duarte, Stefano Aliberti, Fernando Maria de Benedictis, Graham Bothamley, Tom Schaberg, Ibrahim Abubakar, Vitor Teixeira, Brian Ward, Christina Gratziau and Giovanni Battista Migliori

**Interstitial lung diseases**

- 818 Risk of hypersensitivity pneumonitis and interstitial lung diseases among pigeon breeders**  
Christine Cramer, Vivi Schlünssen, Elisabeth Bendstrup, Zara Ann Stokholm, Jesper Medom Vestergaard, Morten Frydenberg and Henrik Albert Kolstad
- 826 Laparoscopic anti-reflux surgery for idiopathic pulmonary fibrosis at a single centre**  
Ganesh Raghu, Ellen Morrow, Bridget F. Collins, Lawrence A.T. Ho, Marcelo W. Hinojosa, Jennifer M. Hayes, Carolyn A. Spada, Brant Oelschlager, Chenxiang Li, Eric Yow, Kevin J. Anstrom, Dylan Mart, Keliang Xiao and Carlos A. Pellegrini
- 833 Hiatal hernia on thoracic computed tomography in pulmonary fibrosis**  
Céline Tossier, Clairelyne Dupin, Laurent Plantier, Julie Leger, Thomas Flament, Olivier Favelle, Thierry Lecomte, Patrice Diot and Sylvain Marchand-Adam
- 843 Efficacy of pirfenidone in patients with idiopathic pulmonary fibrosis with more preserved lung function**  
Carlo Albera, Ulrich Costabel, Elizabeth A. Fagan, Marilyn K. Glassberg, Eduard Gorina, Lisa Lancaster, David J. Lederer, Steven D. Nathan, Dominique Spirig and Jeff J. Swigris

**Lung cancer**

- CME article 852 Defining a standard set of patient-centred outcomes for lung cancer**  
Kimberley S. Mak, Annelotte C.M. van Bommel, Caleb Stowell, Janet L. Abraham, Matthew Baker, Clarissa S. Baldotto, David R. Baldwin, Diana Borthwick, David P. Carbone, Aileen B. Chen, Jesme Fox, Tom Haswell, Marianna Koczywas, Benjamin D. Kozower, Reza J. Mehran, Franz M. Schramel, Suresh Senan, Robert G. Stirling, Jan P. van Meerbeek, Michel W.J.M. Wouters and Michael D. Peake on behalf of the Lung Cancer Working Group of ICHOM

## ORIGINAL ARTICLES (CONTINUED)

---

- 861 Health-related quality of life in elderly patients with advanced non-small cell lung cancer comparing carboplatin and weekly paclitaxel doublet chemotherapy with monotherapy**  
Frédéric Fiteni, Amélie Anota, Franck Bonnetain, Jean-Philippe Oster, Eric Pichon, Marie Wislez, Jérôme Dauba, Didier Debieuvre, Pierre-Jean Souquet, Laurence Bigay-Game, Olivier Molinier, Eric Dansin, Michel Poudenx, Bernard Milleron, Franck Morin, Gérard Zalcman, Elisabeth Quiox and Virginie Westeel
- Mesothelioma**
- 873 Incidence and familial risk of pleural mesothelioma in Sweden: a national cohort study**  
Jianguang Ji, Jan Sundquist and Kristina Sundquist

## REVIEW

---

- 880 Beta-blockers in COPD: time for reappraisal**  
Brian Lipworth, Jadwiga Wedzicha, Graham Devereux, Jørgen Vestbo and Mark T. Dransfield

## SERIES

---

- Number 1 in the series "Multidisciplinary questions in thoracic oncology"**  
Edited by J-P. Sculier
- CME article 889 Risk factors for lung cancer worldwide**  
Jyoti Malhotra, Matteo Malvezzi, Eva Negri, Carlo La Vecchia and Paolo Boffetta

## BACK TO BASICS

---

- 903 The emerging role of epigenetics in pulmonary hypertension**  
Elisabetta Gamen, Werner Seeger and Soni Savai Pullamsetti

## AGORA

---

### Research letters

- 918 Outdoor second-hand cigarette smoke significantly affects air quality**  
Ario Alberto Ruprecht, Cinzia De Marco, Paolo Pozzi, Roberto Mazza, Elena Munarini, Adriano Di Paco, Paolo Paredi, Giovanni Invernizzi and Roberto Boffi
- 921 Particulate matter exposures and adult-onset asthma and COPD in the Nurses' Health Study**  
Jared A. Fisher, Robin C. Puett, Jaime E. Hart, Carlos A. Camargo Jr, Raphaëlle Varraso, Jeff D. Yanosky and Francine Laden
- 925 Predictive value of exhaled nitric oxide in healthy infants for asthma at school age**  
Jakob Usemann, Oliver Fuchs, Pinelopi Anagnostopoulou, Insa Korten, Olga Gortanova, Martin Röösl, Philipp Latzin and Urs Frey
- 928 Risk of nontuberculous mycobacterial pulmonary disease with obstructive lung disease**  
Theodore K. Marras, Michael A. Campitelli, Jeffrey C. Kwong, Hong Lu, Sarah K. Brode, Alex Marchand-Austin, Andrea S. Gershon and Frances B. Jamieson
- 932 Dried blood spots can help decrease the burden on patients dually infected with multidrug-resistant tuberculosis and HIV**  
Marlanka A. Zuur, Onno W. Akkerman, Daan J. Touw, Tjip S. van der Werf, Frank Cobelens, David M. Burger, Martin P. Grobusch and Jan-Willem C. Alffenaar
-  **935 First case of extensively drug-resistant tuberculosis treated with both delamanid and bedaquiline**  
Marina Tadolini, Rangjung Dolma Lingsang, Simon Tiberi, Martin Enwerem, Lia D'Ambrosio, Tsetan Dorji Sadutshang, Rosella Centis and Giovanni Battista Migliori
-  **938 Compassionate use of new drugs in children and adolescents with multidrug-resistant and extensively drug-resistant tuberculosis: early experiences and challenges**  
Marina Tadolini, Anthony J. Garcia-Prats, Lia D'Ambrosio, Catherine Hewison, Rosella Centis, H. Simon Schaaf, Ben J. Marais, Hanneljie Ferreira, Jose A. Caminero, Sylvie Jonckheere, Animesh Sinha, Krzysztof Herboczek, Zarema Khaidarkhanova, Armen Hayrapetyan, Naira Khachatryan, Ia Urtkmelidze, Carolina Loreti, Susanna Esposito, Alberto Matteelli, Jennifer Furin, Francis Varaine and Giovanni Battista Migliori
-  **943 Variation in policy and practice of adolescent tuberculosis management in the WHO European Region**  
Nick Blok, Martin van den Boom, Connie Erkens, Masoud Dara and Susan van den Hof
- 946 Efficacy and tolerability of ethionamide versus prothionamide: a systematic review**  
Anna Scardigli, Jose A. Caminero, Giovanni Sotgiu, Rosella Centis, Lia D'Ambrosio and Giovanni Battista Migliori

### Correspondence

- 953 Preliminary data on precision of QuantiFERON-TB Plus performance**  
David Gallagher, Davide Manissero, Christopher Stocking and Chris Pyne; Daniela Maria Cirillo, Lucia Barcellini and Delia Goletti
- 956 Paediatric study of bedaquiline remains an "open issue"**  
Lindsay McKenna and Laia Ruiz Mingote
- 957 New anti-tuberculosis drugs for special populations: a difficult-to-address issue**  
Giovanni Sotgiu, Emanuele Pontali, Rosella Centis, Lia D'Ambrosio and Giovanni Battista Migliori
- 959 Diagnostic testing in primary ciliary dyskinesia**  
Israel Amirav and Patrick M. Boussey; Jane S. Lucas, Borislav D. Dimitrov, Laura Behan and Claudia E. Kuehni

## AUTHOR CORRECTIONS