

CHIEF EDITORS

Anh Tuan Dinh-Xuan
Dept of Cardiorespiratory
Medicine,
Cochin Hospital,
University Paris Descartes,
27, rue du faubourg
Saint-Jacques,
75014 Paris,
France
Tel: 33 158412341
Fax: 33 158412345
E-mail: erj.chief-editors@ersnet.org

Vito Brusasco
Dept of Internal Medicine,
Medical School,
University of Genoa,
viale Benedetto XV, 6,
16132 Genoa,
Italy
Tel: 39 0103537690
Fax: 39 0103537690
E-mail: erj.chief-editors@ersnet.org

ASSISTANT TO THE CHIEF EDITORS

Nhat-Nam Le-Dong
Tel: 33 611392146 Fax: 33 158412345
E-mail: erj.chief-editors@cch.aphp.fr

PUBLICATIONS OFFICE

Managing Editors: **Elin Reeves** and **Rachel White**
442 Glossop Road, Sheffield,
S10 2PX, UK
Tel: +44 114 267 2860 Fax: +44 114 266 5064
E-mail: elin.reeves@ersj.org.uk/rachel.white@ersj.org.uk

ASSOCIATE EDITORS

N. Ambrosino

Pisa, Italy

I. Annesi-Maesano

Paris, France

J.L. Black

Sydney, Australia

P. Chanez

Marseille, France

V. Cottin

Lyon, France

L.M. Fabbri

Modena, Italy

R. Farré

Barcelona, Spain

U. Frey

Basel, Switzerland

J. Gerritsen

Groningen, the Netherlands

P. Hiemstra

Leiden, the Netherlands

M.M. Hoepfer

Hanover, Germany

M. Humbert

Clamart, France

S. Kawut

Philadelphia, USA

P. Lévy

Grenoble, France

G.B. Migliori

Tradate, Italy

J. Müller-Quernheim

Freiburg, Germany

R. Naeije

Brussels, Belgium

M.I. Polkey

London, UK

G. Raghu

Seattle, USA

M. Saetta

Padova, Italy

J-P. Sculier

Brussels, Belgium

F. Sériès

Quebec City, Canada

P.D. Sly

West Perth, Australia

J.B. Soriano

Bunyola, Spain

A. Torres

Barcelona, Spain

P.E. Van Schil

Edegem, Belgium

T. Welte

Hanover, Germany

M.A. Woodhead

Manchester, UK

S.G. Zakythinios

Athens, Greece

ADVISORS

P-Y. Brillet
Bobigny, France
Radiology

A. Kettaneh
Paris, France
Statistics

S. Suissa
Montreal, Canada
Methodology

INTERNATIONAL ADVISORY BOARD

M.G. Belvisi

London, UK

E. Berglund

Gothenburg, Sweden

C. Brambilla

Grenoble, France

P.M.A. Calverley

Liverpool, UK

E. Canalis

Barcelona, Spain

U. Costabel

Essen, Germany

M. Decramer

Leuven, Belgium

R. Djukanovic

Southampton, UK

S. Ewig

Bochum, Germany

G.J. Laurent

London, UK

P.N. Le Souëf

Perth, Australia

C.E. Mapp

Ferrara, Italy

E. Michelakis

Edmonton, Canada

B. Nemery

Leuven, Belgium

P. Palange

Rome, Italy

K.F. Rabe

Leiden, the Netherlands

R. Rodriguez-Roisin

Barcelona, Spain

A.M.W.J. Schols

Maastricht, the Netherlands

N. Siafakas

Heraklion, Greece

A.K. Simonds

London, UK

P.J. Sterk

Amsterdam, the Netherlands

N.S. Zhong

Guangzhou, China



CONTENTS

VOLUME 37 / NUMBER 1 / JANUARY 2011

EDITORIAL: THE YEAR OF THE LUNG

- 1 2010: the Year of the Lung**
N.M. Siafakas, M. Decramer and K.F. Rabe

PRO AND CON EDITORIALS

- 3 Rhinovirus vaccination: the case in favour**
G.G.U. Rohde
- 5 Rhinovirus vaccination: the case against**
A. Papi and M. Contoli

EDITORIALS

- 8 The journey of a thousand miles**
A. Bush and J. Davies
- 10 Azithromycin and bronchiolitis obliterans syndrome after lung transplantation: is prevention better than cure?**
A.J. Fisher

ORIGINAL ARTICLES

Clinical practice

- 13 Needlescopy-assisted resection of pulmonary nodule after dual localisation**
D-Y. Kang, H.K. Kim, Y.K. Kim, H.S. Yong, E-Y. Kang and Y.H. Choi

Genetics of COPD and asthma

- 18 EPHX1 polymorphisms, COPD and asthma in 47,000 individuals and in meta-analysis**
J. Lee, B.G. Nordestgaard and M. Dahl

COPD and smoking-related disorders

- 26 Smoking strongly predicts disability retirement due to COPD: the Finnish Twin Cohort Study**
K. Koskenvuo, U. Broms, T. Korhonen, L.A. Laitinen, A. Huunan-Seppälä, T. Keistinen, I. Autti-Rämö, J. Kaprio and M. Koskenvuo

- 32 Smoke exposure as a determinant of autoantibody titre in α_1 -antitrypsin deficiency and COPD**
A.M. Wood, P. de Pablo, C.D. Buckley, A. Ahmad and R.A. Stockley

- 39 Association of COPD candidate genes with computed tomography emphysema and airway phenotypes in severe COPD**
W.J. Kim, E. Hoffman, J. Reilly, C. Hersh, D. DeMeo, G. Washko and E.K. Silverman

Asthma and viral infection

- 44 Antibodies induced with recombinant VP1 from human rhinovirus exhibit cross-neutralisation**
J. Edlmayr, K. Niespodziana, T. Popow-Kraupp, V. Krzyzanek, M. Focke-Tejkl, D. Blaas, M. Grote and R. Valenta

Asthma and allergy

- 53 Streptococcus pneumoniae infection suppresses allergic airways disease by inducing regulatory T-cells**
J.A. Preston, A.N. Thorburn, M.R. Starkey, E.L. Beckett, J.C. Horvat, M.A. Wade, B.J. O'Sullivan, R. Thomas, K.W. Beagley, P.G. Gibson, P.S. Foster and P.M. Hansbro

ORIGINAL ARTICLES (CONT.)

- 65 Lean mass predicts asthma better than fat mass among females**
A. Sood, C. Qualls, R. Li, M. Schuyler, W.S. Beckett, L.J. Smith, B. Thyagarajan, C.E. Lewis and D.R. Jacobs Jr for the CARDIA Investigators
- Cystic fibrosis**
- 72 Inhaled phosphodiesterase type 5 inhibitors restore chloride transport in cystic fibrosis mice**
B. Lubamba, J. Lebacqz, G. Reyckler, E. Marbaix, P. Wallemacq, P. Lebecque and T. Leal
- Idiopathic pulmonary fibrosis**
- 79 Dickkopf proteins influence lung epithelial cell proliferation in idiopathic pulmonary fibrosis**
E.-M. Pfaff, S. Becker, A. Günther and M. Königshoff
- Tuberculosis**
- 88 Interferon- γ release assays for the diagnosis of latent *Mycobacterium tuberculosis* infection: a systemic review and meta-analysis**
R. Diel, D. Goletti, G. Ferrara, G. Bothamley, D. Cirillo, B. Kampmann, C. Lange, M. Losi, R. Markova, G.B. Migliori, A. Nienhaus, M. Ruhwald, D. Wagner, J.P. Zellweger, E. Huitric, A. Sandgren and D. Manissero
- 100 Interferon- γ release assays for the diagnosis of active tuberculosis: a systematic review and meta-analysis**
M. Sester, G. Sotgiu, C. Lange, C. Giehl, E. Girardi, G.B. Migliori, A. Bossink, K. Dheda, R. Diel, J. Dominguez, M. Lipman, J. Nemeth, P. Ravn, S. Winkler, E. Huitric, A. Sandgren and D. Manissero
- Respiratory infections**
- 112 Right and left heart failure in severe H1N1 influenza A infection**
S.M. Brown, J. Pittman, R.R. Miller III, K.D. Horton, B. Markewitz, E. Hirshberg, J. Jones and C.K. Grissom
- Sleep-related disorders**
- 119 14 nights of intermittent hypoxia elevate daytime blood pressure and sympathetic activity in healthy humans**
R. Tamisier, J.L. Pépin, J. Rémy, J.P. Baguet, J.A. Taylor, J.W. Weiss and P. Lévy
- Thoracic oncology**
- 129 Valproate–doxorubicin: promising therapy for progressing mesothelioma. A phase II study**
A. Scherpereel, T. Berghmans, J.J. Lafitte, B. Colinet, M. Richez, Y. Bonduelle, A.P. Meert, X. Dhalluin, N. Leclercq, M. Paesmans, L. Willems and J.P. Sculier for the European Lung Cancer Working Party (ELCWP)
- 136 Composite anatomical–clinical–molecular prognostic model in nonsmall cell lung cancer**
A. López-Encuentra, F. López-Ríos, E. Conde, R. García-Luján, A. Suárez-Gauthier, N. Mañes, G. Renedo, J.L. Duque-Medina, E. García-Lagarto, R. Rami-Porta, G. González-Pont, J. Astudillo-Pombo, J.L. Maté-Sanz, J. Freixinet, T. Romero-Saavedra, M. Sánchez-Céspedes and A. Gómez de la Cámara on behalf of the Bronchogenic Carcinoma Cooperative Group of the Spanish Society of Pneumology and Thoracic Surgery (GCCB-S)
- Paediatric respiratory disease**
- 143 Diaphragm electromyogram in infants with abdominal wall defects and congenital diaphragmatic hernia**
Z. Kassim, C. Jolley, J. Moxham, A. Greenough and G.F. Rafferty

EUROPEAN RESPIRATORY journal

AIMS & SCOPE

The European Respiratory Journal (ERJ), the official Journal of the European Respiratory Society, publishes, in the English language, clinical and experimental work dealing with all aspects of respiratory medicine. In addition to original material, the *ERJ* prints Editorials and Reviews, as well as Technical notes, Letters and Correspondence.

This Journal is abstracted/indexed in: Ad Referendum, ADONIS, Biological Abstracts/BIOSIS, Chemical Abstracts, Current Contents: Life Sciences, Current Contents: Clinical Medicine, Elsevier BIOBASE/Current Awareness in Biological Sciences, EMBASE/Excerpta Medica, Index Medicus/MEDLINE, Medical Documentation Service, Research Alert, Science Citation Index, SciSearch, SIIIC Data Base and CABI Global Health.

SUBSCRIPTIONS

ERJ is published monthly by the European Respiratory Society (ERS). Twelve issues are published annually in two volumes of six issues each. The volumes for 2011 are Volumes 37 and 38.

Subscription rates for institutions (Volumes 37 & 38, 2010): £660.00 online only, £756.00 print and online; US\$1,254.00 online only, US\$1,454.00 print and online in North America. Subscription rates include air economy postage. Subscriptions are payable in advance.

Subscribers within the European Union must provide their VAT (Value Added Tax) number or add VAT to the subscription rate at the rate prevailing in their own country.

Subscriptions are managed on behalf of the ERS by: *Maney Publishing, Suite 1C, Joseph's Well, Hanover Walk, Leeds LS3 1AB, UK (fax: +44 (0)113 386 8178; E-mail: subscriptions@maney.co.uk) or: Maney Publishing North America, 875 Massachusetts Avenue, 7th Floor, Cambridge, MA 02139, USA (tel: (toll-free) +1 (0)866 297 5154; fax: +1 (0)617 354 6875; E-mail: maney@maneyusa.com)*. All orders, payments, and claims for missing issues should be sent to Maney Publishing or to any subscription agent.

ONLINE ACCESS

All subscribers have online access to the full text of each issue as part of their subscription. The online version is available to members via www.ersnet.org. Institutional subscribers can access online through HighWire at www.erj.ersjournals.com

Members of the ERS receive the Journal as part of their membership.

INSTRUCTIONS TO AUTHORS

Before submitting an article to the *ERJ*, please read and carefully follow the instructions to authors, which are available at www.erj.ersjournals.com

If you do not have access to the internet please contact the editorial office.

All manuscripts must be submitted electronically using the online submission system at <http://mc.manuscriptcentral.com/erj>

If you experience problems, please contact the **Submission Helpline** direct on +44 (0) 114 2672864 or contact Gill Archer (gill.archer@ersj.org.uk) the manuscript central coordinator.

All *ERJ* business matters should be addressed to: Kay Sharpe, European Respiratory Society Publications Office, 442 Glossop Road, Sheffield, S10 2PX, UK. Fax: +44 (0) 114 266 5064. E-mail: admin@ersj.org.uk

EUROPEAN RESPIRATORY *journal*

REVIEWERS

A full list of reviewers is available online at www.erj.ersjournals.com

EDITORIAL TEAM

Fiona Shepherd
Fiona Marks
Elin Reeves
Alyson Adam
Veronica Pock
Rachel White
Matt Broadhead
Neil Bullen

David Sadler
Catherine Pumphrey
Jonathan Hansen
Victoria Morton
Claire Turner
Lee Dodd
Sarah Hill

Past Chief Editors: J-C. Yernault†; E. Berglund, Gothenburg, Sweden; P. Vermeire†; U. Costabel, Essen, Germany; M. Decramer, Leuven, Belgium; P.J. Sterk and K.F. Rabe, Amsterdam and Leiden, the Netherlands.

ENVIRONMENTAL STATEMENT

The publisher ensures that the text paper and cover board used have met acceptable environmental accreditation standards.

For all enquiries concerning advertising or marketing please e-mail marketing@ersj.org.uk

All permission requests should be sent via the ERS website at www.ersnet.org/permissions-form

Reprint and translation enquiries should be sent to admin@ersj.org.uk

© 2011 ERS. Authorisation to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted for libraries and other users registered with the Copyright Clearance Center (CCC). Please go to www.copyright.com or phone USA (978) 750 8400. UK customers should go to www.cla.co.uk. All other rights, including microfilm, electronic and/or copying reserved.

European Respiratory Journal USPS#023-615 is published monthly for \$268.00 periodicals postage paid at Folcroft, PA. POSTMASTER: Please send address changes to La Poste, P.O. Box 202, Folcroft, PA, 19032. Typesetting by H. Charlesworth & Co. Ltd. Printed in UK by Latimer Trend & Co. Ltd.

ORIGINAL ARTICLES (CONT.)

Lung function

- 150 The 6-min walk distance in healthy subjects: reference standards from seven countries**
C. Casanova, B.R. Celli, P. Barria, A. Casas, C. Cote, J.P. de Torres, J. Jardim, M.V. Lopez, J.M. Marin, M. Montes de Oca, V. Pinto-Plata and A. Aguirre-Jaime on behalf of the Six Minute Walk Distance Project (ALAT)
- 157 Reconsidering the arm span–height relationship in patients referred for spirometry**
A. Capderou, M. Berkani, M-H. Becquemin and M. Zelter

Lung transplantation

- 164 A randomised controlled trial of azithromycin to prevent chronic rejection after lung transplantation**
R. Vos, B.M. Vanaudenaerde, S.E. Verleden, S.I. De Vleeschauwer, A. Willems-Widyastuti, D.E. Van Raemdonck, A. Schoonis, T.S. Nawrot, L.J. Dupont and G.M. Verleden

Mechanisms of lung disease

- 173 Collagen remodelling by airway smooth muscle is resistant to steroids and β_2 -agonists**
J.E. Bourke, X. Li, S.R. Foster, E. Wee, H. Dagher, J. Ziogas, T. Harris, J.V. Bonacci and A.G. Stewart

REVIEWS

- 183 Genetic profiling and epidermal growth factor receptor-directed therapy in nonsmall cell lung cancer**
J. Cadranet, G. Zalcmán and L. Sequist
- 194 Vocal cord dysfunction: what do we know?**
K. Kenn and R. Balkissoon

LETTERS

- 201 Hereditary pulmonary alveolar proteinosis caused by recessive *CSF2RB* mutations**
T. Suzuki, B. Maranda, T. Sakagami, P. Catellier, C-Y. Couture, B.C. Carey, C. Chalk and B.C. Trapnell
- 204 The CIBERES Pulmonary Biobank Consortium: an opportunity for cooperative international respiratory research**
C. Villena, F. Pozo, J.A. Barberà, P. Vaquer and A. Agusti on behalf of the CIBERES Pulmonary Biobank Consortium (PBC)
- 206 Dose–response for inhaled fluticasone on airway and systemic inflammation in COPD**
P.A. Williamson, D. Menzies, K.L. Clearie, S. Vaidyanathan and B.J. Lipworth
- 209 Dose-dependent effects of mandibular protrusion on genioglossus activity in sleep apnoea**
F.R. Almeida, S. Tsuiki, Y. Hattori, Y. Takei, Y. Inoue and A.A. Lowe
- 212 Detection of right ventricular dysfunction by tissue Doppler imaging in asymptomatic patients with pulmonary sarcoidosis**
E. Gialafos, A. Rapti, V. Kouranos, K. Aggeli, T.G. Papaioannou, A. Kallianos, G. Siasos, C. Kostopoulos and C. Stefanadis
- 215 Interferon- γ release assays in tuberculosis contacts: is there a window period?**
L. Anibarro, M. Trigo, C. Villaverde, A. Pena, S. Cortizo, D. Sande, R.A. Pazos and A. González-Fernández

CORRESPONDENCE

- 218 Cough in patients after stroke**
J.G. Widdicombe and W.R. Addington; K. Ward
- 219 Adequate use of pulmonary embolism clinical prediction rule in COPD patients**
L. Bertolotti and M. Righini; H. Gunen, G. Gulbas, E. In, O. Yetkin and S.S. Hacievliyagil
- 221 Confirmation of asthma diagnosis in the community**
A. D'Urzo; S.K. Chhabra and M. Gupta; S. Aaron and V. Luks

i,j,l,q,r MEETING CALENDAR

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

EUROPEAN RESPIRATORY *journal*

"The advertiser shall be liable for the content of any of its advertisements published according to its instructions. The advertiser shall indemnify and hold harmless the European Respiratory Society against and from any and all claims, damages, liabilities, costs and expenses whatsoever, including reasonable counsel fees, arising from the content of any of its advertisements."

*ERJ online at www.ersnet.org or
www.erj.ersjournals.com*



This journal is a member of and subscribes to the principles of the Committee on Publication Ethics

