



Journal of the British Thoracic Society

Impact Factor: 8.272

Editors-in-Chief

N Hart (UK)
G Jenkins (UK)
AR Smyth (UK)

Deputy Editors

N Kaminski (USA)
M Rosenfeld (USA)

Associate Editors

D Baldwin (UK)	J-L Pepin (France)
R Chambers (UK)	M Polkey (UK)
T Coleman (UK)	J Quint (UK)
GJ Criner (USA)	N Rahman (UK)
J Davies (UK)	K Robinson (USA)
A Floto (UK)	S Shaheen (UK)
M Griffiths (UK)	R Stevens (USA)
L Heaney (UK)	A Vonk Noordegraaf
N Hopkinson (UK)	(The Netherlands)
S Janes (UK)	C Wainwright (Australia)
B Kampman (UK)	T Wilkinson (UK)
B Mohlekesi (USA)	P Wolters (USA)

Statistical Editors

A Douiri (UK)
C Flach (UK)
C Jackson (UK)
S Stanojevic (USA)
R Szczesniak (USA)
B Wagner (USA)
Y Wang (UK)

Journal Club Editor

P Murphy (UK)

President, British Thoracic Society

Professor M Woodhead

Editorial Office

Thorax, BMA House, Tavistock Square,
London WC1H 9JR, UK
T: +44 (0)20 7383 6373
E: thorax@bmj.com

Twitter: @ThoraxBMJ

ISSN: 0040-6376 (print)

ISSN: 1468-3296 (online)

Disclaimer: Thorax is owned and published by the British Thoracic Society and BMJ Publishing Group Ltd, a wholly owned subsidiary of the British Medical Association. The owners grant editorial freedom to the Editor of Thorax.

Thorax follows guidelines on editorial independence produced by the World Association of Medical Editors and the code on good publication practice of the Committee on Publication Ethics.

Thorax is intended for medical professionals and is provided without warranty, express or implied. Statements in the Journal are the responsibility of their authors and advertisers and not authors' institutions, the BMJ Publishing Group Ltd, the British Thoracic Society or the BMA unless otherwise specified or determined by law. Acceptance of advertising does not imply endorsement.

To the fullest extent permitted by law, the BMJ Publishing Group Ltd shall not be liable for any loss, injury or damage resulting from the use of Thorax or any information in it whether based on contract, tort or otherwise. Readers are advised to verify any information they choose to rely on.

Copyright: © 2018 BMJ Publishing Group Ltd and the British Thoracic Society. All rights reserved; no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of Thorax.

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

405 Guiding policy to reduce the burden of COPD: the role of epidemiological research
G B Marks

407 Clinically detected non-aggressive lung cancers: implications for overdiagnosis and overtreatment in lung cancer screening
K ten Haaf, C M van der Aalst, H J de Koning

409 Incorporating polysomnography into obstructive sleep apnoea phenotyping: moving towards personalised medicine for OSA
J L Pépin, S Bailly, R Tamisier

412 Thrombolysis for PE: less is more?
L S Howard

Chronic obstructive pulmonary disease

414 Smoking duration alone provides stronger risk estimates of chronic obstructive pulmonary disease than pack-years

S P Bhatt, Y-il Kim, K F Harrington, J E Hokanson, S M Lutz, M H Cho, D L DeMeo, J M Wells, B J Make, S I Rennard, G R Washko, M G Foreman, D P Tashkin, R A Wise, M T Dransfield, W C Bailey, On behalf of the COPD Gene Investigators

422 Longitudinal profiling of the lung microbiome in the AERIS study demonstrates repeatability of bacterial and eosinophilic COPD exacerbations

D Mayhew, N Devos, C Lambert, J R Brown, S C Clarke, V L Kim, M Magid-Slav, B E Miller, K K Osnidge, R Patel, G Sathe, D F Simola, K J Staples, R Sung, R Tal-Singer, A C Tuck, S Van Horn, V Weynants, N P Williams, J-M Devaster, T M A Wilkinson, On behalf of the AERIS Study Group

431 Airflow limitation in people living with HIV and matched uninfected controls

A Ronit, J Lundgren, S Afzal, T Benfield, A Roen, A Mocroft, J Gerstoft, B G Nordestgaard, J Vestbo, S D Nielsen, on behalf of the Copenhagen Co-morbidity in HIV infection (COCOMO) study group

Critical care

439 Stability of ARDS subphenotypes over time in two randomised controlled trials
K Delucchi, K R Famous, L B Ware, P E Parsons, B T Thompson, C S Calfee, for the ARDS Network

Cystic fibrosis

446 Reference percentiles of FEV1 for the Canadian cystic fibrosis population: comparisons across time and countries
S-O Kim, M Corey, A L Stephenson, L J Strug

451 Lung clearance index to monitor treatment response in pulmonary exacerbations in preschool children with cystic fibrosis
J H Rayment, S Stanojevic, S D Davis, G Retsch-Bogart, F Ratjen

Lung cancer

459 Assessing the extent of non-aggressive cancer in clinically detected stage I non-small cell lung cancer
M S Kale, K Sigel, G Mhango, J P Wisnivesky

Pulmonary vasculature

464 Efficacy and safety outcomes of recanalisation procedures in patients with acute symptomatic pulmonary embolism: systematic review and network meta-analysis
D Jimenez, C Martin-Saborido, A Muriel, J Zamora, R Morillo, D Barnios, F A Klok, M V Huisman, V Tapson, R D Yusen

MORE CONTENTS ►

Cover caption: Global (land and ocean) surface temperature anomaly time series with new analysis, old analysis, and with and without time-dependent bias corrections. Reproduced with permission from Karl TR, Arguez A, Huang B, et al. Possible artifacts of data biases in the recent global surface warming hiatus. *Science* 2015;348:1469-72.



EDITOR'S CHOICE

This article has been chosen by the Editors to be of special interest or importance and is freely available online.



OPEN ACCESS

This article has been made freely available online under the BMJ Journals Open Access scheme.

See <http://authors.bmj.com/open-access/>



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

<http://publicationethics.org/>



When you have finished with this magazine please recycle it.

Sleep

- 472** Polysomnographic phenotypes and their cardiovascular implications in obstructive sleep apnoea

A V Zinchuk, S Jeon, B B Koo, X Yan, D M Bravata, L Qin, B J Selim, K P Strohl, N S Redeker, J Concato, H K Yaggi

Research letters

- 481** Microbiome in lung explants of idiopathic pulmonary fibrosis: a case-control study in patients with end-stage fibrosis

G D Kitsios, M Rojas, D J Kass, A Fitch, J C Sembrat, S Qin, K L Veraldi, K F Gibson, K Lindell, J M Pilewski, B Methe, K Li, J McDyer, B J McVerry, A Morris

- 485** A big beautiful wall against infection

G Jenkins

- 486** Associations between emphysema-like lung on CT and incident airflow limitation: a general population-based cohort study

E C Oelsner, B M Smith, E A Hoffman, A R Folsom, S M Kawut, J D Kaufman, A Manichaikul, D J Lederer, J E Schwartz, K E Watson, P L Enright, J H M Austin, J A C Lima, S J Shea, R G Barr

Chest clinic**Case based discussions**

- 489** Acute graft-versus-host disease following lung transplantation in a patient with a novel *TERT* mutation

J R Brestoff, A T Vessoni, K A Brenner, G L Uy, J F DiPersio, M Blinder, C A Witt, D E Byers, R R Hachem, E P Trudock, D S Early, M J Anadkat, A Musiek, C Javidan-Nejad, D M Balfé, I S Rosman, C Liu, L Zhang, G J Despotis, M B Ruzinova, J K Sehn, I Amarillo, J W Heusel, W Swat, B S Kim, L D Wartman, R D Yusen, L F Z Batista

Images in Thorax

- 493** Bilious pleuritis following transpulmonary radiofrequency ablation of liver metastases

A Kalin, M Hassan, M Anderson, N Rahman

- 495** Higher altitude, bigger bulla

X-N Wu, D Su, X-F Zhu, M-Q Xu

- 497** Benign pleural schwannoma presenting with a large, blood-stained pleural effusion

A C Bibby, R Daly, E Internullo, A J Edey, N A Maskell

Journal club summaries

- 500** What's hot that the other lot got

M Ruparel