

**Editor**

Josef S Smolen

Associate Editors

Francis Berenbaum
Dimitrios Boumpas
Gerd Burmester
Mary Crow
Kimme Hyrich
Rik Lories
Iain McInnes
Thomas Pap
David Pisetsky
Désirée van der Heijde
Kazuhiko Yamamoto

Editorial office

Annals of the Rheumatic Diseases
BMJ Publishing Group Ltd
BMA House
Tavistock Square
London WC1H 9JR, UK
T: +44 (0)20 3655 5889
E: ard@bmj.com
Twitter: @ARD_BMJ
ISSN: 0003-4967 (print)
ISSN: 1468-2060 (online)

Disclaimer: The Editor of *ARD* has been granted editorial freedom and *ARD* is published in accordance with editorial guidelines issued by the World Association of Medical Editors and the Committee on Publication Ethics. *ARD* is primarily intended for healthcare professionals and its content is for information only. The Journal is published without any guarantee as to its accuracy or completeness and any representations or warranties are expressly excluded to the fullest extent permitted by law. Readers are advised to independently verify any information on which they choose to rely. Acceptance of advertising by *ARD* does not imply endorsement. Neither *EULAR* nor BMJ Publishing Group Limited shall have any liability for any loss, injury or damage howsoever arising from *ARD* (except for liability which cannot be legally excluded).

Copyright: © 2020 BMJ Publishing Group Ltd and European League Against Rheumatism. All rights reserved; no part of this publication may be reproduced in any form without permission.

ARD 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.

Annals of the Rheumatic Diseases, ISSN 0003-4967 (USPS 2152) is published monthly by BMJ Publishing Group Ltd, BMA House, Tavistock Square, WC1H 9JR London. Airfreight and mailing in the USA by agent named WN Shipping USA, 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Periodicals postage paid at Brooklyn, NY 11256. US Postmaster: Send address changes to *Annals of the Rheumatic Diseases*, WN Shipping USA, 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Subscription records are maintained at BMA House, Tavistock Square, WC1H 9JR London. Air Business Ltd is acting as our mailing agent.

Editorial

- 1129** To immunosuppress: whom, when and how? That is the question with COVID-19
K L Winthrop, X Mariette

Review

- 1132** Paradoxical gastrointestinal effects of interleukin-17 blockers
M Fauny, D Moulin, F D'Amico, P Netter, N Petitpain, D Arnone, J-Y Jouzeau, D Loeuille, L Peyrin-Biroulet



EDITOR'S CHOICE

Viewpoint

- 1139** Digital crowdsourcing: unleashing its power in rheumatology
M Krusche, G R Burmester, J Knitza

Heroes and pillars of rheumatology

- 1141** Erik Waaler (1903–1997): one of the founders of rheumatological immunology who discovered rheumatoid factor
R Jonsson

Epidemiology

- 1143** Historically controlled comparison of glucocorticoids with or without tocilizumab versus supportive care only in patients with COVID-19-associated cytokine storm syndrome: results of the CHIC study
S Ramiro, R L M Mostard, C Magro-Checa, C M P van Dongen, T Dormans, J Buijs, M Gronenschild, M D de Kruijff, E H J van Haren, T van Kraaij, M P G Leers, R Peeters, D R Wong, R B M Landewé
- 1152** Lung involvement in macrophage activation syndrome and severe COVID-19: results from a cross-sectional study to assess clinical, laboratory and artificial intelligence–radiological differences
P Ruscitti, F Bruno, O Berardicurti, C Acanfora, V Pavlych, P Palumbo, A Conforti, F Carubbi, I Di Cola, P Di Benedetto, P Cipriani, D Grassi, C Masciocchi, A Iagnocco, A Barile, R Giacomelli
- 1156** Clinical characteristics and outcomes of patients with coronavirus disease 2019 (COVID-19) and rheumatic disease: a comparative cohort study from a US 'hot spot'
K M D'Silva, N Serling-Boyd, R Wallwork, T Hsu, X Fu, E M Gravallese, H K Choi, J A Sparks, Z S Wallace

- 1163** Clinical characteristics of 17 patients with COVID-19 and systemic autoimmune diseases: a retrospective study
Y Huang, Z Chen, Y Wang, L Han, K Qin, W Huang, Y Huang, H Wang, P Shen, X Ba, W Lin, H Dong, M Zhang, S Tu

- 1170** Prevalence of hospital PCR-confirmed COVID-19 cases in patients with chronic inflammatory and autoimmune rheumatic diseases
J L Pablos, L Abasolo, J M Alvaro-Gracia, F J Blanco, R Blanco, I Castrejón, D Fernandez-Fernandez, B Fernandez-Gutierrez, M Galindo-Izquierdo, M A Gonzalez-Gay, S Manrique-Arija, N Mena Vázquez, A Mera Varela, M Retuerto, A Seijas-Lopez, RIER investigators group

Rheumatoid arthritis

- 1174** Tapering towards DMARD-free remission in established rheumatoid arthritis: 2-year results of the TARA trial
E van Mulligen, A E Weel, J M Hazes, A van der Helm-van Mil, P H P de Jong
- 1182** Impact of rheumatoid arthritis on major cardiovascular events in patients with and without coronary artery disease
B B Løgstrup, K K W Olesen, D Masic, C Gyldenkerne, P G Thrane, T Ellingsen, H E Bøtker, M Maeng
- 1189** Applying cascaded convolutional neural network design further enhances automatic scoring of arthritis disease activity on ultrasound images from rheumatoid arthritis patients
A B H Christensen, S A Just, J K H Andersen, T R Savarimuthu

MORE CONTENTS ►



EDITOR'S CHOICE

This article has been chosen by the Editor 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/>

C O P E

Member since 2008
JM00004

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 please recycle it

- 1194** Bacterial citrullinated epitopes generated by *Porphyromonas gingivalis* infection—a missing link for ACPA production

M Jenning, B Marklein, J Ytterberg, R A Zubarev, V Joshua, D van Schaardenburg, L van de Stadt, A I Catrina, U Nonhoff, T Häupl, Z Konthur, G R Burmester, K Skriner

Spondyloarthritis

- 1203** Effectiveness of secukinumab versus an alternative TNF inhibitor in patients with axial spondyloarthritis previously exposed to TNF inhibitors in the Swiss Clinical Quality Management cohort

R Micheroli, C Tellenbach, A Scherer, K Bürki, K Niederman, M J Nissen, P Zufferey, P Exer, B Möller, D Kyburz, A Ciurea

Systemic sclerosis

- 1210** Quantitative analysis of pulmonary vasculature in systemic sclerosis at spirometry-gated chest CT

M Occhipinti, C Bruni, G Camiciottoli, M Bartolucci, S Bellando-Randone, A Bassetto, G Cuomo, D Giuggioli, G Ciardi, A Fabbrizzi, S Tomassetti, F Lavorini, M Pistolesi, S Colagrande, M Matucci-Cerinic

- 1218** Genome-wide whole blood transcriptome profiling in a large European cohort of systemic sclerosis patients



L Beretta, G Barturen, B Vigone, C Bellocchi, N Hunzelmann, E De Langhe, R Cervera, M Gerosa, L Kovács, R Ortega Castro, I Almeida, D Cornec, C Chizzolini, J-O Pers, Z Makowska, R Lesche, M Kerick, M E Alarcón-Riquelme, J Martín, PRECISEADS SSc substudy group, PRECISEADS Flow Cytometry study group

- 1227** PGC-1 α regulates autophagy to promote fibroblast activation and tissue fibrosis

Y Zhang, L Shen, H Zhu, K Dreissigacker, D Distler, X Zhou, A H Györfi, C Bergmann, X Meng, C Dees, T Trinh-Minh, I Ludolph, R Horch, A Ramming, G Schett, J H W Distler

Myositis

- 1234** Machine learning algorithms reveal unique gene expression profiles in muscle biopsies from patients with different types of myositis



I Pinal-Fernandez, M Casal-Dominguez, A Derfoul, K Pak, F W Miller, J C Milisenda, J M Grau-Junyent, A Selva-O'Callaghan, C Carrion-Ribas, J J Paik, J Albayda, L Christopher-Stine, T E Lloyd, A M Corse, A L Mammen

Vasculitis

- 1243** Rituximab as therapy to induce remission after relapse in ANCA-associated vasculitis



R M Smith, R B Jones, U Specks, S Bond, M Nodale, R Aljayyousi, J Andrews, A Bruchfeld, B Camilleri, S Carette, C K Cheung, V Derehail, T Doulton, L Forbess, S Fujimoto, S Furuta, O Gewurz-Singer, L Harper, T Ito-Ihara, N Khalidi, R Klocke, C Koenig, Y Komagata, C Langford, P Lanyon, R A Luqmani, H Makino, C McAlear, P Monach, L W Moreland, K Mynard, P Nachman, C Pagnoux, F Pearce, C A Peh, C Pusey, D Ranganathan, R L Rhee, R Spiera, A G Sreih, V Tesar, G Walters, M H Weisman, C Wroe, P Merkel, D Jayne, RITAZAREM coinvestigators

Letters

- 1251** Recovery from COVID-19 in a patient with spondyloarthritis treated with TNF-alpha inhibitor etanercept

P-M Duret, E Sebbag, A Mallick, S Gravier, L Spielmann, L Messer

- 1252** Impact of COVID-19 pandemic on patients with large-vessel vasculitis in Italy: a monocentric survey

A Tomelleri, S Sartorelli, C Campochiaro, E M Baldissera, L Dagna

- 1253** Anti-inflammatory therapy may ameliorate the clinical picture of COVID-19

H M Moutsopoulos

- 1254** Imaging neoangiogenesis in rheumatoid arthritis (INIRA): whole-body synovial uptake of a ^{99m}Tc-labelled RGD peptide is highly correlated with power Doppler ultrasound

L Attipoe, K Chaabo, J Wajed, F-U Hassan, D Shivapatham, M Morrison, J Ballinger, G Cook, A P Cope, T Garrod

- 1255** Efficacy of tofacitinib in synovitis, acne, pustulosis, hyperostosis and osteitis syndrome: a pilot study with clinical and MRI evaluation

Y Li, J Huo, Y Cao, M Yu, Y Zhang, Z Li, C Li, W Zhang

- 1257** Efficacy of a sequential treatment by anti-CD20 monoclonal antibody and belimumab in type II cryoglobulinaemia associated with primary Sjögren syndrome refractory to rituximab alone

K Chevalier, R Belkhir, R Seror, X Mariette, G Nocturne

- 1259** Steroid-resistant sarcoidosis treated with baricitinib

M Scheinberg, F Maluf, J Wagner

Electronic pages

- e104** Influence of changes in cholesterol levels and disease activity on the 10-year cardiovascular risk estimated with different algorithms in rheumatoid arthritis patients
M Fornaro, F Cacciapaglia, V Venerito, G Lopalco, F Iannone
- e105** Response to: "Influence of changes in cholesterol levels and disease activity on the 10-year cardiovascular risk estimated with different algorithms in rheumatoid arthritis patients" by Fornaro *et al*
R Agca, S C Heslinga, S Rollefstad, S Heslinga, A Södergren, AG Semb, G D Kitas, N Sattar, M T Nurmohamed, on behalf of The EULAR task force "EULAR recommendations for cardiovascular disease risk management in patients with rheumatoid arthritis and other forms of inflammatory joint disorders: 2015/2016 update"
- e106** Response to: "Response to: "Influence of changes in cholesterol levels and disease activity on the 10-year cardiovascular risk estimated with different algorithms in rheumatoid arthritis patients" by Fornaro *et al*" by Agca *et al*
M Fornaro, F Cacciapaglia, V Venerito, G Lopalco, F Iannone
- e107** Alcohol is not the missing link between *Porphyromonas gingivalis*-related periodontitis and radiological progression in early rheumatoid arthritis
J Hillion, A Bellier, X Romand, B Fautrel, X Mariette, F Sagéoli, A Baillet, P Gaudin
- e108** Response to: 'Alcohol is not the missing link between *Porphyromonas gingivalis* related periodontitis and radiologic progression in early Rheumatoid arthritis' by Hillion *et al*
H Marotte, S Paul
- e109** Response to: 'Response to: "Alcohol is not the missing link between *Porphyromonas gingivalis* related periodontitis and radiologic progression in early Rheumatoid arthritis' by Hillion *et al*' by Marotte and Paul
A Bellier, X Romand, A Baillet
- e110** Association of proton pump inhibitors with fracture risk in patients with rheumatoid arthritis
T Sugiyama
- e111** Response to: 'Association of proton pump inhibitors with fracture risk in patients with rheumatoid arthritis' by Sugiyama
G Ozen, K Michaud
- e112** Can biomarkers differentiate psoriatic arthritis from osteoarthritis?
J Tian, C Cheng, F Zhang
- e113** Response to: 'Can biomarkers differentiate psoriatic arthritis from osteoarthritis?' by Tian *et al*
V Chandran, RJ Cook, D D Gladman
- e114** 2019 update of the EULAR recommendations for the management of SLE: don't forget chloroquine
G Figueroa-Parra, C M Gamboa-Alonso, A L De-Leon-Ibarra, D A Galarza-Delgado
- e115** Chloroquine as alternative antimalarial in systemic lupus erythematosus. Response to '2019 update of the EULAR recommendations for the management of SLE: don't forget chloroquine' by Figueroa-Parra *et al*
A Fanouriakis, G K Bertias, D T Boumpas
- e116** SLE-DAS: ready for routine use?
A Mathew, K G Chengappa, S Shah, V S Negi
- e117** Response to: 'SLE-DAS: ready for routine use' by Mathew *et al*
D Jesus, A Matos, C Henriques, M Zen, A Doria, L S Inês
- e118** Correction: *Initial combination therapy of ambrisentan and tadalafil in connective tissue disease-associated pulmonary arterial hypertension (CTD-PAH) in the modified intention-to-treat population of the AMBITION study: post hoc analysis*
- e119** Correction: *Metformin limits osteoarthritis development and progression through activation of AMPK signalling*
- e120** Correction: *Maintenance of clinical remission in early axial spondyloarthritis following certolizumab pegol dose reduction*
- e121** Correction: *Dual neutralisation of interleukin-17A and interleukin-17F with bimekizumab in patients with active ankylosing spondylitis: results from a 48-week phase IIb, randomised, double blind, placebo-controlled, dose-ranging study*