

**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](mailto: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 stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying recording, or otherwise without prior 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 No: 0003-4967) is distributed in the USA by Air Business Ltd. Periodicals postage paid at Jamaica NY 11431. POSTMASTER: send address changes to *Annals of the Rheumatic Diseases*, Air Business Ltd, c/o WN Shipping USA, 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA.

**Editorial**

- 309** Chronic inflammatory arthritis following checkpoint inhibitor therapy for cancer: game changing implications  
*L Calabrese, X Mariette*

**Viewpoint**

- 312** The earlier, the better or the worse? Towards accurate management of patients with arthralgia at risk for RA  
*A van der Helm-van Mil, R B M Landewé*

**Rheumatoid arthritis**

- 316** Efficacy and safety of NI-0101, an anti-toll-like receptor 4 monoclonal antibody, in patients with rheumatoid arthritis after inadequate response to methotrexate: a phase II study  
*E Monnet, E H Choy, I McInnes, T Kobakhidze, K de Graaf, P Jacqmin, G Lapeyre, C de Min*

**Spondyloarthritis**

- 324** What is axial spondyloarthritis? A latent class and transition analysis in the SPACE and DESIR cohorts  
*A Sepriano, S Ramiro, D van der Heijde, F van Gaalen, P Hoonhout, A Molto, A Saraua, R Ramonda, M Dougados, R Landewé*

**Inflammatory arthritis**

- 332** Immune checkpoint inhibitor-induced inflammatory arthritis persists after immunotherapy cessation  
*T J Braaten, J R Brahmer, P M Forde, D Le, E J Lipson, J Naidoo, M Schollenberger, L Zheng, C O Bingham 3rd, A A Shah, L C Cappelli*

**Systemic lupus erythematosus**

- 339** Withdrawal of low-dose prednisone in SLE patients with a clinically quiescent disease for more than 1 year: a randomised clinical trial  
*A Mathian, M Pha, J Haroche, F Cohen-Aubart, M Hié, M Pineton de Chambrun, T H D Boutin, M Miyara, G Gorochov, H Yssel, P Cherin, H Devilliers, Z Amoura*
- 347** IFN- $\alpha$  kinoid in systemic lupus erythematosus: results from a phase IIb, randomised, placebo-controlled study  
*F A Houssiau, A Thanou, M Mazur, E Ramitterre, D A Gomez Mora, M Mistowska-Skora, R A Perich-Campos, S A Smakotina, S Cerpa Cruz, B Louzir, T Croughs, M L Tee*

- 356** Neuropsychiatric events in systemic lupus erythematosus: a longitudinal analysis of outcomes in an international inception cohort using a multistate model approach  
*J G Hanly, M B Urowitz, C Gordon, S-C Bae, J Romero-Diaz, J Sanchez-Guerrero, S Bernatsky, A E Clarke, D J Wallace, D A Isenberg, A Rahman, J T Merrill, P R Fortin, D D Gladman, I N Bruce, M Petri, E M Ginzler, M A Dooley, R Ramsey-Goldman, S Manzi, A Jönsen, G S Alarcón, R F van Vollenhoven, C Aranow, M Mackay, G Ruiz-Irastorza, S Lim, M Inanc, K C Kalunian, S Jacobsen, C A Peschken, D L Kamen, A Askanase, V Farewell*

- 363** High genetic risk score is associated with early disease onset, damage accrual and decreased survival in systemic lupus erythematosus  
*S Reid, A Alexsson, M Frodlund, D Morris, J K Sandling, K Bolin, E Svenungsson, A Jönsen, C Bengtsson, I Gunnarsson, V Illescas Rodriguez, A Bengtsson, S Arve, S Rantapää-Dahlqvist, M-L Eloranta, A-C Syvänen, C Sjöwall, T J Vyse, L Rönnblom, D Leonard*

**Systemic sclerosis**

- 370** Haemodynamic phenotypes and survival in patients with systemic sclerosis: the impact of the new definition of pulmonary arterial hypertension  
*P Xanthouli, S Jordan, N Milde, A Marra, N Blank, B Egenlauf, M Gorenflo, S Harutyunova, H-M Lorenz, C Nagel, V Theobald, M Lichtblau, C Berlier, S Ulrich, E Grünig, N Benjamin, O Distler*
- 379** Global skin gene expression analysis of early diffuse cutaneous systemic sclerosis shows a prominent innate and adaptive inflammatory profile  
*B Skaug, D Khanna, W R Swindell, M E Hinchcliff, T M Frech, V D Steen, F N Hant, J K Gordon, A A Shah, L Zhu, W J Zheng, J L Browning, A M S Barron, M Wu, S Visvanathan, P Baum, J M Franks, M L Whitfield, V K Shanmugam, R T Domstic, F V Castelino, E J Bernstein, N Wareing, M A Lyons, J Ying, J Charles, M D Mayes, S Assassi*

MORE CONTENTS ►



C O P E

Member since 2008

J.M00004

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

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

This article has been made freely available online under the BMJ Journals open access scheme. See <http://authors.bmj.com/open-access/>

## Myositis

- 387** First external validation of sensitivity and specificity of the European League Against Rheumatism (EULAR)/American College of Rheumatology (ACR) classification criteria for idiopathic inflammatory myopathies with a Japanese cohort  
*M Jinnin, A Ohta, S Ishihara, H Amano, T Atsumi, M Fujimoto, T Kanda, Y Kawaguchi, A Kawakami, A Mimori, T Mimori, T Mimura, Y Muro, H Sano, J Shimizu, T Takeuchi, Y Tanaka, K Yamamoto, T Sumida, H Kohsaka, The Research Team for Autoimmune Diseases, The Research Program for Intractable Disease of the Ministry of Health, Labor and Welfare*

## Imaging

- 393** Novel ultrasonographic Halo Score for giant cell arteritis: assessment of diagnostic accuracy and association with ocular ischaemia  
*K S M van der Geest, F Borg, A Kayani, D Paap, P Gondo, W Schmidt, R A Luqmani, B Dasgupta*

## Osteoarthritis

- 400** Interleukin 1 receptor antagonist (*IL1RN*) gene variants predict radiographic severity of knee osteoarthritis and risk of incident disease  
*M Attur, H Zhou, J Samuels, S Krasnokutsky, M Yau, J U Scher, M Doherty, A G Wilson, J Bencardino, M Hochberg, J M Jordan, B Mitchell, V B Kraus, S B Abramson*
- 408** Single-cell RNA-seq analysis identifies meniscus progenitors and reveals the progression of meniscus degeneration  
*H Sun, X Wen, H Li, P Wu, M Gu, X Zhao, Z Zhang, S Hu, G Mao, R Ma, W Liao, Z Zhang*

## Crystal arthropathies

- 418** Development of a prediction model for inpatient gout flares in people with comorbid gout  
*K Jatuworapruk, R Grainger, N Dalbeth, W J Taylor*

## Letters

- 425** *LACC1* gene mutation in three sisters with polyarthritis without systemic features  
*A Singh, D Suri, P Vignesh, G Anjani, P Jacob, K M Girisha*
- 427** LRBA deficiency: a new genetic cause of monogenic lupus  
*B L Liphhaus, I Caramalho, A Rangel-Santos, C A Silva, J Demengeot, M M S Carneiro-Sampaio*

- 428** Rapamycin prevents the impairments of social recognition induced by anti-P antibody in a murine model  
*X Wang, P Yang, L Qin*
- 429** Type I interferon signature predicts response to JAK inhibition in haploinsufficiency of A20  
*D M Schwartz, S A Blackstone, N Sampaio-Moura, S Rosenzweig, A M Burma, D Stone, P Hoffmann, A Jones, T Romeo, K S Barron, M A Waldman, I Aksentijevich, D L Kastner, J D Milner, A K Ombrello*
- 431** Risk of malignancy in patients treated for systemic necrotising vasculitis  
*A Lafarge, A Joseph, C Pagnoux, X Puechal, P Cohen, M Samson, M Hamidou, A Karras, M Groh, T Quemeneur, C Ribi, L Mouthon, L Guillevin, B Terrier, on behalf of the French Vasculitis Study Group (FVSG)*
- 433** Rituximab for chronic periaortitis without evidence of IgG4-related disease: a long-term follow-up study of 20 patients  
*M L Urban, F Maritati, A Palmisano, P Fenaroli, F Peyronel, G Trivioli, S Ferretti, C De Biase, P C Grayson, F Pegoraro, D Prisco, P Romagnani, G Emmi, A Vaglio*

## Electronic pages

- e26** Catching the falling star: points to consider when using propensity scores  
*F Ouyang*
- e27** Response to: 'Catching the falling star: points to consider when using propensity scores' by Ouyang *et al*  
*S A Bergstra, C F Allaart, R B M Landewé*
- e28** Role of linoleic acid in autoimmune disorders: a Mendelian randomisation study  
*Y H Lee*
- e29** Response to: 'Role of linoleic acid in autoimmune disorders: a Mendelian randomisation study' by Lee *et al*  
*J V Zhao, C M Schooling*
- e30** Ultrasound findings in palindromic rheumatism  
*R Sanmarti, J Ramirez, R Castellanos-Moreira, S R Cabrera-Villalba, V Ruiz-Esquide, G Salvador*
- e31** Response to: 'Ultrasound findings in palindromic rheumatism' by Sanmarti *et al*  
*K Mankia, M-A D'Agostino, P Emery*
- e32** Can solid-phase assays replace immunofluorescence for ANA screening?  
*N Bizzaro*

- e33** Response to: 'Can solid-phase assays replace immunofluorescence for ANA screening?' by Bizzaro  
*D S Pisetsky, D M Spencer, P E Lipsky, B H Rovin*
- e34** Is it time to redefine the role of low-dose radiotherapy for benign disease?  
*A Montero, S Sabater, F Rödel, U S Gaipl, O J Ott, M H Seegenschmiedt, M Arenas*
- e35** Response to: 'Is it time to redefine the role of low-dose radiotherapy for benign disease?' by Montero *et al*  
*E A M Mahler, M J M Minten, M M Leseman-Hoogenboom, P M P Poortmans, J W Leer, S S Boks, F H J van den Hoogen, A A den Broeder, C H van den Ende*