VOLUME 3 • ISSUE 1 • 2024 EDITOR-IN-CHIEF: PETER TAYLOR

The Role of Non-pharmacological Management in Systemic Lupus Erythematosus and Systemic Sclerosis: A Summary of the EULAR Recommendations

Ioannis Parodis and Carina Boström

Lane–Hamilton Syndrome: A Vasculitis Mimic Presenting with Diffuse Alveolar Haemorrhage and Positive ANCA Testing

Gatr-Alnada Gheriani, Rebecca Tuetken and Petar S Lenert

Multiomics Studies in Rheumatoid Arthritis: The Search for the Holy Grail of Predicting Treatment Response

Stephanie F Ling and Darren Plant

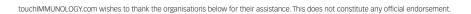
CART Cell Therapy: A New Hope for Refractory Lupus? Michael Alsharkawy, Alice Mason, May Lwin and Christopher J Edwards

www.touchIMMUNOLOGY.com

Volume 3 • Issue 1 • 2024

touchREVIEWS in RMD is an international, peer-reviewed, free-to-access journal developed for touchIMMUNOLOGY.com

Cover image: Human backache and back pain with an upper torso body skeleton showing the spine and vertebral column | by icetray © adobestock.com





All information obtained by Touch Medical Media and each of the contributors from various sources is as current and accurate as possible. However, due to human or mechanical errors, Touch Medical Media and the contributors cannot guarantee the accuracy, adequacy or completeness of any information, and cannot be held responsible for any errors or omissions, or for the results obtained from the use thereof. Where opinion is expressed, it is that of the authors and does not necessarily coincide with the editorial views of Touch Medical Media. Statistical and financial data in this publication have been compiled on the basis of factual information and do not constitute any investment advertisement or investment advice. For the avoidance of doubt, the information contained in this publication is intended for use by licensed medical professionals. The content should not be considered medical advice, diagnosis or treatment recommendations.

© 2024 Touch Medical Media Group Holdings Ltd is a private limited company registered in England and Wales at Lancashire Gate, 21 Tiviot Dale, Stockport, Cheshire, SK1 1TD, UK, with registered number 08197142. All rights reserved. eISSN 2635-1420



Editorial Directors Katey Gabrysch Carla Junkier Sophie Nickelson

Editorial Workflow Heather Hall

Group Head Medical & Editorial Nicola Cartridge E: nicola.cartridge@touchmedicalmedia.com T: +44 (0)20 7193 3186

CEO & Managing Director Barney Kent E: barney.kent@touchmedicalmedia.com T: +44 (0)20 7193 3009

Head of Strategic Partnerships

Caroline Markham E: caroline.markham@touchmedicalmedia.com T: +44 (0)20 7193 3704



www.touchmedicalmedia.com

Editor-in-Chief

Peter C Taylor University of Oxford, Oxford, UK

Editorial Board

Alessia Alunno

The University of L'Aquila, L'Aquila, Italy

Jérôme Avouac Université de Paris, Hôpital Cochin, Service de Rhumatologie, Paris, France

Lisa A Christ Department of Rheumatology and Immunology Inselspital, Bern University Hospital, University of Bern, Switzerland

Raj Chovatiya Northwestern University Feinberg School of Medicine, Chicago, IL, USA

Alessio Corellini Fondazione Policlinico Universitario Campus Bio-Medico, Rome, Italy

Eva Monoz Couselo Vall d'Hebron Hospital, Barcelona, Spain

Maria-Antonietta D'Agostino Versailles-Saint-Quentin University and University Hospital Ambroise Paré, Boulogne-Billancourt, France

William Damsky Yale School of Medicine, New Haven, CT, USA

Debashish Danda Christian Medical College & Hospital, Vellore, India

Patrick Durez Department of Rheumatology, UCL Cliniques Universitaires Saint-Luc, Brussels, Belgium

Luis FC Ensina Division of Allergy, Immunology and Rheumatology, Department of Pediatrics, Federal University of São Paulo, Brazil

Rebecca Fischer-Betz Heinrich-Heine University, Düsseldorf, Germany

Nicholas Fuggle MRC Lifecourse Epidemiology Centre, Southampton, UK

Richard Furie Division of Rheumatology, Northwell Health and Zucker School of Medicine at Hofstra/Northwell, Hempstead, NY, USA

Christopher Griffiths Dermatology Centre, Barnes Building, Salford Royal NHS Foundation Trust, Manchester, UK

Kevan Herold Yale School of Medicine, New Haven, CT, USA Sarosh Irani

Su Lwin

Oxford Autoimmune Neurology Group, Nuffield Department of Clinical Neurosciences, University of Oxford, Oxford, UK

Arthur Kavanaugh Center for Innovative Therapy, University of California, San Diego, CA, USA

Emek Kocatürk Koç University School of Medicine, Istanbul, Turkey

Petar Lenert The University of Iowa, Iowa City, IA, USA

Genetic Skin Disease Group, St John's Institute of Dermatology, King's College London, London, UK Marcus Maurer

Department of Dermatology and Allergy and Allergie-Centrum-Charité, Charité – Universitätsmedizin Berlin, Berlin, Germany

David A McLain McLain Medical Associates, Birmingham, AL, USA

Gil Y Melmed Center for Inflammatory Bowel Diseases, Cedars-Sinai Medical Center, Los Angeles, CA, USA

Elena Myasoedova Division of Rheumatology, Mayo Clinic, Rochester, MN, USA

Elena Nikiphorou Centre for Rheumatic Diseases, School of Immunology and Microbial Sciences, King's College London, London, UK

Maria Oliva-Hemker Johns Hopkins University School of Medicine, Baltimore, MD, USA

Michael Pillinger NYU Grossman School of Medicine, New York, NY, USA

Adam Reich University of Rzeszow, Rzeszów, Poland

Raj Sengupta The Royal National Hospital for Rheumatic Diseases, Bath, UK

Tiago Torres Centro Hospitalar, Universitário do Porto, Porto, Portugal

Established: January 2021 Frequency: Bi-annual Current edition: Volume 3 Issue 1, 2024

Aims and scope

- touchREVIEWS in RMD enables time-pressured physicians to stay abreast of major advances and opinion in international rheumatology practice.
- touchREVIEWS in RMD comprises balanced and comprehensive articles, addressing the most important and salient developments in the field of rheumatology.
- touchREVIEWS in RMD endeavours to support physicians, clinicians and related healthcare professionals in continuously developing their knowledge, effectiveness and productivity. The editorial policy has been designed to encourage discussion among this peer group.
- Comprehensive bibliographies for each article mean that touchREVIEWS in RMD is an informative and valuable reference tool for use throughout the year.
- All articles are subject to peer review, and must adhere to the ICMJE, GPP 2022 and COPE guidelines.

Structure and format

- touchREVIEWS in RMD is a peer-reviewed, free-to-access, bi-annual journal comprising review articles, original research, case reports, editorials, expert interviews and practice pearls.
- The structure of each edition of the publication comprises section categories determined by the Editor. The degree of coverage assigned to each category is the decision of the Managing Editor, and in part reflects the views of the Editorial Board.
- All articles disclose any author financial and non-financial relationships and activities, along with any funding, financial support and medical writing assistance.
- Each edition of *touchREVIEWS in RMD* is published in full online at www.touchIMMUNOLOGY.com

Editorial expertise

touchREVIEWS in RMD is supported by various levels of expertise:

- Guidance from an Editorial Board consisting of leading
- authorities from a variety of disciplines in immunology.
- Invited contributors who are recognized authorities from their respective fields.
- Peer review: conducted by experts appointed for their experience and knowledge of a specific topic.
- An experienced team of Editors and Technical Editors.

Peer review

- On submission, all articles are assessed by the Editor to determine their suitability for inclusion and appropriateness for peer review.
- The Editor identifies at least two appropriate reviewers, who are selected on the basis of their specialist knowledge in the relevant area, following consultation with a member of the Editorial Board where necessary.
- We aim to have the final peer review decision within 4 weeks.Following review, papers are either accepted without
- modification, returned to the author(s) to incorporate required changes or not accepted for publication.

 The Editor reserves the right to accept or reject any proposed amendments on the advice of the Editorial Board and reviewers.

Submissions and instructions for authors

- The Editor commissions articles with guidance from the Editorial Board, and unsolicited articles are welcomed.
- The Editor is always keen to hear from authors wishing to discuss potential submissions and will give due consideration to any proposals. Please contact the Editor for further details: editorialmanager@touchmedicalmedia.com.
- Instructions for authors are available from the website: www.touchIMMUNOLOGY.com

Distribution and readership

touchREVIEWS in RMD is distributed globally, on a bi-annual basis, through controlled circulation to healthcare and pharmaceutical professionals in the field internationally.

Copyright

Authors transfer copyright of their article to Touch Medical Media, who publish the article as free-to-access to registered users.

Free-to-access

All articles are free-to-access, which allows anyone in the rheumatology field to download published aticles free of charge.

Online

www.touchmedicalmedia.com provides clinicians and other industry professionals with free resources spanning nine therapy areas including cardiology, endocrinology, haematology, immunology, infectious diseases, neurology, oncology, ophthalmology and respiratory and pulmonary diseases.

Society partners

touchIMUNOLOGY.com has developed very valuable society partnerships with the most respected not-for-profit medical societies internationally.

These partnerships are key as touchIMMUNOLOGY.com helps to promote awareness of these medical societies while also providing free-to-access.

peer-reviewed articles and multimedia content to the society members, which ensures that the community is kept up-to-date with the latest cutting-edge content and opinion from world-renowned doctors.

About Touch Medical Media

Touch Medical Media publishes a rich and diverse portfolio of free-to-access, peer-reviewed journals across the clinical and pharmaceutical arenas. Touch Medical Media aims to assist in the education and practice of healthcare and pharmaceutical professionals.



Contents



Foreword

1

Foreword

Peter C Taylor – Editor-in-Chief University of Oxford, Oxford, UK

Editorials

Rheumatic Diseases

2 Clinical Approach to Periodic Inflammation of Unknown Origin in Adults, with a Focus on the Diagnosis of Systemic Autoinflammatory Diseases Hugh C Caterson¹ and Helen J Lachmann^{1,2}

1. National Amyloidosis Centre, Royal Free Hospital, London, UK; 2. University College London, London, UK

8 The Role of Non-pharmacological Management in Systemic Lupus Erythematosus and Systemic Sclerosis: A Summary of the EULAR Recommendations

Ioannis Parodis^{1,2,3} and Carina Boström^{4,5}

1. Division of Rheumatology, Department of Medicine Solna, Karolinska Institutet, Stockholm, Sweden; 2. Department of Gastroenterology, Dermatology and Rheumatology, Karolinska University Hospital, Stockholm, Sweden; 3. Department of Rheumatology, Faculty of Medicine and Health, Örebro University, Örebro, Sweden; 4. Division of Physiotherapy, Department of Neurobiology, Care Sciences and Society, Karolinska Institutet, Stockholm, Sweden; 5. Department of Occupational Therapy and Physiotherapy, Karolinska University Hospital, Stockholm, Sweden

Rheumatoid Arthritis

10 Multiomics Studies in Rheumatoid Arthritis: The Search for the Holy Grail of Predicting Treatment Response

Stephanie F Ling^{1,2} and Darren Plant^{1,2}

1. Centre for Musculoskeletal Research, The University of Manchester, Manchester, UK; 2. NIHR Manchester Biomedical Research Centre, Manchester, UK

Reviews

Systemic Lupus Erythematosus

13 CAR T Cell Therapy: A New Hope for Refractory Lupus?

Michael Alsharkawy,¹ **Alice Mason**,¹ **May Lwin**² **and Christopher J Edwards**^{1,2} 1. Department of Rheumatology, University Hospital Southampton, Southampton, UK; 2. NIHR Southampton Clinical Research Facility, University Hospital Southampton, Southampton, UK

Rheumatic Diseases

21 Navigating Comorbidities in Chronic Inflammatory

Rheumatic Diseases: Insight and Strategies

Ihsane Hmamouchi,¹ Sarah Bou Jaoude² and Nelly Ziade²

1. Faculty of Medicine, Health Sciences Research Center (CReSS), International University of Rabat (UIR), Rabat, Morocco; 2. Hotel-Dieu de France Hospital, Saint-Joseph University, Beirut, Lebanon



Contents



Paediatric Rheumatology

31 A Viewpoint on Therapeutic Approaches and Unmet Needs in the Management of Young People with Sjogren Disease Coziana Ciurtin¹ and Elizabeth Price²

1. Centre for Adolescent Rheumatology, Division of Medicine, University College London, London, UK; 2. Department of Rheumatology, Great Western Hospitals NHS Foundation Trust, Swindon, UK

Case Report

Vasculitis

37 Lane–Hamilton Syndrome: A Vasculitis Mimic Presenting with Diffuse Alveolar Haemorrhage and Positive ANCA Testing Gatr-Alnada Gheriani, Rebecca Tuetken and Petar Lenert

Department of Internal Medicine, Carver College of Medicine, The University of Iowa, Iowa City, IA, USA

