



Cover image: Taken from Kitazawa *et al.*  
The existence of dead cells in donor corneal endothelium preserved with storage media.  
See page 1725.

#### Editors-in-Chief

Keith Barton (UK)  
Jost Jonas (Germany)  
James Chodosh (USA)

#### Editorial Office

BMJ Publishing Group Ltd,  
BMA House, Tavistock Square,  
London WC1H 9JR, UK  
T: +44 (0)20 7383 6170  
F: +44 (0)20 7383 6668  
E: [bjoo@bmj.com](mailto:bjoo@bmj.com)  
Twitter: @BJOphthalmology

ISSN: 0007-1161 (print)  
ISSN: 1468-2079 (online)

Impact factor: 3.806

**Disclaimer:** British Journal of Ophthalmology is owned and published by BMJ Publishing Group Ltd, a wholly owned subsidiary of the British Medical Association. The owner grants editorial freedom to the Editor of British Journal of Ophthalmology.

British Journal of Ophthalmology 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.

British Journal of Ophthalmology 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 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 British Journal of Ophthalmology 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:** © 2017 BMJ Publishing Group Ltd. 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 British Journal of Ophthalmology.

British Journal of Ophthalmology is published by BMJ Publishing Group Ltd, typeset by Exeter Premedia Services Private Limited, Chennai, India and printed in the UK on acid-free paper.

British Journal of Ophthalmology (ISSN 0007-1161) is published monthly by BMJ Publishing Group and is distributed in the USA by Air Business Ltd. Periodicals postage paid at Jamaica NY 11431 POSTMASTER: send address changes to British Journal of Ophthalmology, Air Business Ltd, c/o Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA.

## Contents

Volume 101 Issue 12 | BJO December 2017

### Global issues

- 1591** Prevalence and risk factors for diabetic retinopathy in China: a multi-hospital-based cross-sectional study  
*G Zhang, H Chen, W Chen, M Zhang*

### Review

- 1596** Local synthesis of sex hormones: are there consequences for the ocular surface and dry eye?  
*E J Gibson, F Stapleton, J S Wolffsohn, B Golebiowski*

### Clinical science

- 1604** In vivo confocal microscopy and tear cytokine analysis in post-LASIK ectasia  
*N K Pahuja, R Shetty, R Deshmukh, A Sharma, R M M A Nuijs, V Jhanji, S Sethu, A Ghosh*
- 1611** Risk factors for myopia progression in second-grade primary school children in Taipei: a population-based cohort study  
*C-C Hsu, N Huang, P-Y Lin, S-Y Fang, D-C Tsai, S-Y Chen, C-Y Tsai, L-C Woung, S-H Chiou, C Jui-ling Liu*
- 1618** Myopic glaucomatous eyes with or without optic disc shape alteration: a longitudinal study  
*J Kwon, K R Sung, J M Park*
- 1623** Safety and efficacy of a low-cost glaucoma drainage device for refractory childhood glaucoma  
*S Kaushik, P Kataria, S Raj, S S Pandav, J Ram*
- 1628** Phacoemulsification compared with phacotrabeculectomy surgery: a within-person observational cohort study  
*K Dhalla, S Cousens, I E Murdoch*
- 1633** Cardiovascular medication and intraocular pressure: results from the Gutenberg Health Study  
*R Höhn, A Mirshahi, S Nickels, A Schulz, P S Wild, M Bleitner, N Pfeiffer*

- 1638** Posner-Schlossman syndrome in Wenzhou, China: a retrospective review study  
*J H Jiang, S D Zhang, M L Dai, J Y Yang, Y Q Xie, C Hu, G Y Mao, F Lu, Y B Liang*
- 1643** Nasalised distribution of peripapillary retinal nerve fibre layers in large discs  
*E J Lee, J C Han, C Kee*
- 1649** Long-term clinical course of normotensive preperimetric glaucoma  
*A Sawada, Y Manabe, T Yamamoto, C Nagata*
- 1654** Epiblepharon in congenital glaucoma: case-control study  
*N Kim, Y J Yoo, H-K Choung, S I Khwarg*
- 1658** Investigating the usefulness of a cluster-based trend analysis to detect visual field progression in patients with open-angle glaucoma  
*S Aoki, H Murata, Y Fujino, M Matsuura, A Miki, M Tanito, S Mizoue, K Mori, K Suzuki, T Yamashita, K Kashiwagi, K Hirasawa, N Shoji, R Asaoka*
- 1666** Regional vascular density-visual field sensitivity relationship in glaucoma according to disease severity  
*J W Shin, J Lee, J Kwon, J Choi, M S Kook*
- 1673** The UK Diabetic Retinopathy Electronic Medical Record (UK DR EMR) Users Group, Report 2: real-world data for the impact of cataract surgery on diabetic macular oedema  
*A K Denniston, U Chakravarthy, H Zhu, A Y Lee, D P Crabb, A Tufail, C Bailey, T Akerele, S Al-Husainy, C Brand, L Downey, A Fitt, R Khan, V Kumar, A Lobo, S Mahmood, K Mandal, M McKibbin, G Menon, S Natha, J M Ong, M D Tsaloumas, A Varma, E Wilkinson, R L Johnston, C A Egan, on behalf of the UK DR EMR Users Group*

**MORE CONTENTS ►**



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>



This journal is a member of and subscribes to the principles of the Committee on Publication Ethics  
[www.publicationethics.org.uk](http://www.publicationethics.org.uk)



- 1679** Retinal detachment surgery in Western Australia (2000–2013): a whole-population study  
*S Manners, J Q Ng, A Kemp-Casey, K Chow, C-Y Kang, D B Preen*
- 1683** UK AMD/DR EMR REPORT IX: comparative effectiveness of predominantly as needed (PRN) ranibizumab versus continuous aflibercept in UK clinical practice  
*A Y Lee, C S Lee, C A Egan, C Bailey, R L Johnston, S Natha, R Hamilton, R Khan, S Al-Husainy, C Brand, T Akerele, M McKibbin, L Downey, A Tufail*
- 1689** Early response to ranibizumab predictive of functional outcome after dexamethasone for unresponsive diabetic macular oedema  
*M V Cicinelli, M Cavalleri, L Querques, A Rabiolo, F Bandello, G Querques*
- 1694** Intravitreal triamcinolone acetate for radiation maculopathy recalcitrant to high-dose intravitreal bevacizumab  
*R I Kaplan, S S Chaugule, P T Finger*
- 1699** Intravitreal dexamethasone implant in radiation-induced macular oedema  
*L Frizziero, R Parrozzani, S Trainiti, E Pilotto, G Miglionico, S Pulze, E Midea*
- 1704** Reduction of severe visual loss and complications following intra-arterial chemotherapy (IAC) for refractory retinoblastoma  
*M A Reddy, Z Naeem, C Duncan, F Robertson, J Herod, A Rennie, A Liasis, D A Thompson, M Sagoo*
- 1709** Retinopathy of prematurity: screening and treatment in Costa Rica  
*A C Tabarez-Carvajal, M Montes-Cantillo, K H Unkrich, R H Trivedi, M M W Peterseim*
- 1714** Anterior but not posterior choroid changed before and during Valsalva manoeuvre in healthy Chinese: a UBM and SS-OCT study  
*F Li, K Gao, X Li, S Chen, W Huang, X Zhang*
- 1720** Distinct clinical characteristics of atypical optic neuritis with seronegative aquaporin-4 antibody among Chinese patients  
*H Zhou, Q Xu, S Zhao, W Wang, J Wang, Z Chen, D Lin, X Li, C Peng, N Ai, S Wei*

### Laboratory science

- 1725** The existence of dead cells in donor corneal endothelium preserved with storage media  
*K Kitazawa, T Inatomi, H Tanioka, S Kawasaki, H Nakagawa, O Hieda, H Fukuoka, N Okumura, N Koizumi, B Iliakis, C Sotozono, S Kinoshita*
- 1731** Treatment of experimental autoimmune uveoretinitis with intravitreal injection of infliximab encapsulated in liposomes  
*R Zhang, J Qian, X Li, Y Yuan*