

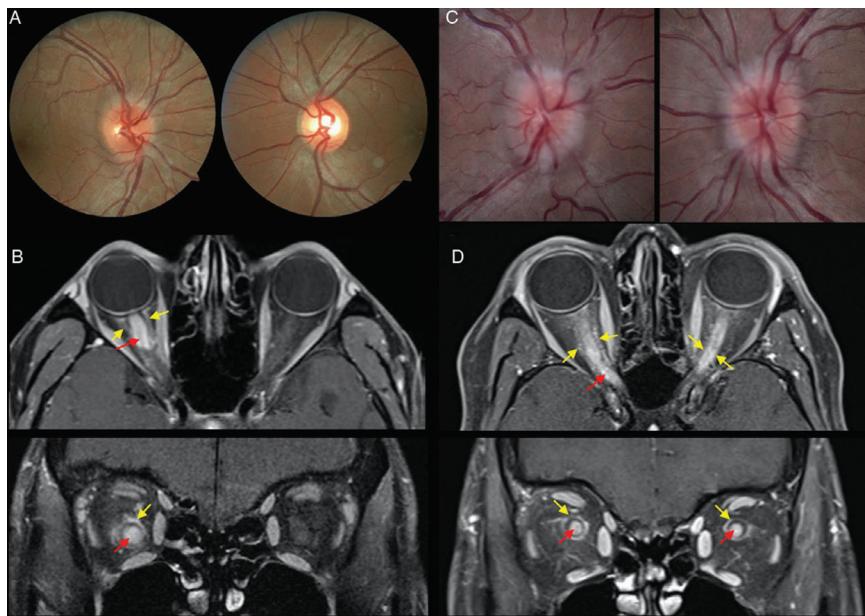


Canadian Journal of Neurological Sciences



Journal Canadien des Sciences Neurologiques

Volume 48 Number 3 May 2021



The official Journal of
The Canadian Neurological Sciences Federation:

Canadian Neurological Society

Canadian Neurosurgical Society

Canadian Society of Clinical Neurophysiologists

Canadian Association of Child Neurology

Canadian Society of Neuroradiology



CAMBRIDGE
UNIVERSITY PRESS

NEW

The only anti-CGRP with both quarterly (every 3 months) and monthly dosing options indicated in migraine prevention*.†

AJOVY™
(fremanezumab)
injection 225 mg/1.5 mL

**AJOVY™
PREVENTED
HER MIGRAINE
TODAY**

Indicated for the prevention of migraine in adults who have at least 4 migraine days per month.¹

Backed by the AJOVY™ Teva Support Solutions®
(AJOVY TSS) Patient Support Program!



1-833-302-0121



TSS@ajovycanada.ca

Available from 8:00 a.m. to 8:00 p.m. ET, Monday to Friday

Clinical use:

AJOVY™ should be initiated by healthcare professionals experienced in the diagnosis and treatment of migraine.

Pediatric patients (< 18 years): Safety and efficacy have not been established.

Geriatric patients (≥ 65 years): Clinical studies of AJOVY™ did not include sufficient numbers of subjects aged 65 and over to determine whether they respond differently than younger subjects.

Warnings and precautions:

- › Hypersensitivity reactions.
- › Patients with hepatic or renal impairment.
- › Patients with cardiovascular diseases.
- › Pregnancy.
- › Breastfeeding.

For more information:

Please consult the Product Monograph at <https://TevaCanada.com/en-Ajovy> for important information relating to adverse reactions, drug interactions, and dosing information that has not been discussed in this piece. The Product Monograph is also available by calling us at 1-855-514-8382.

CGRP: calcitonin gene-related peptide

*Comparative clinical significance unknown.

†Fictional patient. May not represent all patients.

References: 1. AJOVY Product Monograph. Teva Canada Innovation. April 9, 2020.

AJOVY™ is a trademark of Teva Canada Limited. Teva Support Solutions® is a registered trademark of Teva Pharmaceutical Industries Ltd. and is used under licence. TEVA and the design version thereof are registered trademarks of Teva Pharmaceutical Industries Ltd. and are used under licence.

© 2020 Teva Canada Innovation G.P. – S.E.N.C., Montreal, Quebec H2Z 1S8
AJO20-PMH12E



REVIEW ARTICLE

- 299** A Pragmatic Approach to the Perioperative Management of Parkinson's Disease

Abhishek Lenka, Shivam Om Mittal, Guillaume Lamotte, Fernando Luis Pagan

ORIGINAL ARTICLES

- 308** Choosing Wisely Neurology: Recommendations for the Canadian Neurological Society

Catherine Beyak, Fiona Costello, Jodie M. Burton, Philippe Couillard

- 312** Diagnostic Impact of Cerebrospinal Fluid Biomarkers in Atypical Dementias in Canada

Sophie E.M. van den Brink, Laila El Amrani, Joseph Therriault, Serge Gauthier, Pedro Rosa-Neto, Paolo Vitali

- 321** Myelin Oligodendrocyte Glycoprotein Antibody-Associated Optic Neuritis in Canada

Anubhav Garg, Edward Margolin, Jonathan A. Micieli

- 327** Effect of Gene Mutation on Seizures in Surgery for Tuberous Sclerosis Complex

Srinivas Chivukula, Omeed Modiri, Alon Kashanian, Diana Babayan, George M. Ibrahim, Alexander G. Weil, Albert Tu, Joyce Y. Wu, Gary W. Mathern, Aria Fallah

- 335** Reduction in Stroke After Transient Ischemic Attack in a Province-Wide Cohort Between 2003 and 2015

Ryan Wang, Arunima Kapoor, Patrice Lindsay, Cristina Goia, Amy Y. X. Yu, David J. Gladstone, Richard H. Swartz

- 344** Reperfusion Therapy for Acute Stroke in Pregnant and Post-Partum Women: A Canadian Survey

Christopher E. Uy, Stéphanie Gosselin-Lefebvre, Adam M. Book, Thalia S. Field

- 349** Nitroglycerin Is Not Associated with Improved Cerebral Perfusion in Acute Ischemic Stroke

Mahesh Kate, Laura Gioia, Negar Asdaghi, Thomas Jeerakathil, Ashfaq Shuaib, Brian Buck, Derek Emery, Christian Beaulieu, Kenneth Butcher

- 358** Arterial Hypertension and Risk of Recurrent Event in Young Ischemic Stroke Patients

Petra Divišová, Daniel Šaňák, Jan Václavík, Michal Král, Martin Hutyra, Jana Zapletalová, Andrea Báriková, David Franc, Tomáš Dorňák, Tomáš Veverka, Miloš Táborský, Petr Kaňovský

- 365** Bleomycin for Head and Neck Venolymphatic Malformations: A Systematic Review

Stephanos Finitsis, Khunsa Faiz, Janice Linton, Jai Jai Shiva Shankar

- 372** Survival and Health Care Use After Deep Brain Stimulation for Parkinson's Disease

James A.G. Crispo, Melody Lam, Britney Le, Salimah Z. Shariff, Dominique R. Ansell, Melanie Squarzolo, Danielle Ouellette, Dylan P. Thibault, Connie Marras, Allison W. Willis, Dallas Seitz

- 383** Cervicothoracic Mechanical Impairment as Part of Complete Neurological Fall Risk Appraisal

Janine L. Johnston, Graham Featherstone, Shane L. Harms, Glen T. D. Thomson

- 392** Traumatic Brain Injury Incidence in Adults with Intellectual and Developmental Disabilities

Katherine Seto, Meghann Lloyd, Vincy Chan, Hannah Chung, Robert Balogh

- 400** Hospitalizations in School-Aged Children with Cerebral Palsy and Population-Based Controls

Olivier Fortin, Pamela Ng, Marc Dorais, Louise Koclas, Nicole Pigeon, Michael Shevell, Maryam Oskoui

Volume 48 / Number 3 / May 2021

- 408** Complementary and Alternative Therapy Use in Children with Cerebral Palsy

Maryam Oskoui, Pamela Ng, Michele Zaman, David Buckley, Adam Kirton, Esias van Rensburg, Ellen Wood, Michael Shevell, Annette Majnemer

NEUROIMAGING HIGHLIGHTS

- 415** Striatal Encephalitis: Potential Inflammatory Vasculopathy in Systemic Lupus Erythematosus

Adrian Budhram, Ronald R. Butendieck Jr., Ali Duarte-Garcia, Waleed Brinjikji, Nicholas L. Zalewski

- 417** Novel Vascular Anastomoses and Moyamoya Disease in a Woman with Down Syndrome

Miles Timothy Byworth, James Ian Moffatt, Kanjana S Perera

- 419** Tension Pneumoventricle Following Transsphenoidal Surgery

Nicole Pendleton, Amit R. Persad, Kotoo Meguro

BRIEF COMMUNICATIONS

- 421** New View on the Canadian Burden of Stroke: Productivity Loss in Adults Who Return to Work

Theodore Wein, Johanna Mancini, Raina M. Rogoza, Louisa Pericleous

- 425** French Translation and Validation of the Synkinesis Assessment Questionnaire

Sarah Martineau, Laurence Gascon, Mikhail Saltychev, Akram Rahal, Karine Marcotte, Sami P. Mouayed

LETTERS TO THE EDITOR

- 430** Possible Autoimmune Encephalitis with Claustrum Sign in case of Acute SARS-CoV-2 Infection

Parisa Ayatollahi, Apameh Tarazi, Richard Wennberg

- 433** Generalized Dystonia as a Prominent Feature in a Case of NUS1 Gene Mutation

Steven A. Gunzler, Suzanne D. DeBrosse

- 435** Acquired Microcephaly in a Patient with *HECW2* Mutation

Tyler Peikes, Aoife O'Carroll, Patrick Frosk, Michael S. Salman

- 438** Hyperammonemic Encephalopathy Associated with Perampanel: Case Report and Discussion

Paula T. Marques, Quratulain Zulfiqar Ali, Arunan Selvarajah, Hanna Faghfouri, Richard A. Wennberg, Danielle M. Andrade

- 440** Primary Leptomeningeal Lymphoma: A Rare Mimicker of Idiopathic Intracranial Hypertension

Caberry W. Yu, Jason H. Peragallo, Jonathan A. Micieli,

- 443** NF-155 IgG in Acute-onset Inflammatory Neuropathy: Two Cases with Relapses and Recovery

Megan Hansen, Alexander J. Arnold, Christopher Hahn

- 446** Systemic Sclerosis Precedes POEMS Syndrome

Yuri Yamashita, Yoshihiro Takahashi, Taiji Tsunemi, Shuichi Shirane, Tomoko Nakazato-Taniguchi, Daisuke Taniguchi, Masashi Takanashi, Makoto Sasaki, Norio Komatsu, Nobutaka Hattori

COVER IMAGE

Myelin Oligodendrocyte Glycoprotein Antibody-Associated Optic Neuritis in Canada.

*Anubhav Garg, Edward Margolin, Jonathan A. Micieli
See pages 321-326.*



Canadian Journal of Neurological Sciences

Volume 48 / Number 3 / May 2021

Editor-in-Chief/Rédacteur en chef

Robert Chen TORONTO, ON

Associate Editors/Rédacteurs associés

Robert Hammond LONDON, ON

Philippe Hout MONTREAL, QC

Mahendranath Moharir TORONTO, ON

Tejas Sankar EDMONTON, AB

Manas Sharma LONDON, ON

Jeanne Teitelbaum MONTREAL, QC

Richard Wennberg TORONTO, ON

Past Editors/Anciens rédacteurs en chef

G. Bryan Young LONDON, ON

Douglas W. Zochodne CALGARY, AB

James A. Sharpe TORONTO, ON

Robert G. Lee CALGARY, AB

Robert T. Ross WINNIPEG, MB

(Emeritus Editor, Founding Editor)

Editorial Board/Comité éditorial

Jorge Burneo, LONDON, ON

Jodie Burton, CALGARY, AB

Colin Chalk, MONTREAL, QC

K. Ming Chan, EDMONTON, AB

Alan Goodridge, ST. JOHN'S, NL

Mark Hamilton, CALGARY, AB

Michael Hill, CALGARY, AB

Alan C. Jackson, WINNIPEG, MB

Draga Jichici, HAMILTON, ON

Suneil Kalia, TORONTO, ON

Daniel Keene, OTTAWA, ON

Julia Keith, TORONTO, ON

Nir Lipsman, TORONTO, ON

Stephen Lownie, LONDON, ON

Jian-Qiang Lu, HAMILTON, ON

Patrick McDonald, VANCOUVER, BC

Joseph Megyesi, LONDON, ON

Tiago Mestre, OTTAWA, ON

Sarah Morrow, LONDON, ON

Michael Nicolle, LONDON, ON

Ian Parney, ROCHESTER, MN

Narayan Prasad, LONDON, ON

Alex Rajput, SASKATOON, SK

Kesh Reddy, HAMILTON, ON

Larry Robinson, TORONTO, ON

Ramesh Sahpaul, NORTH VANCOUVER, BC

Dipanka Sarma, TORONTO, ON

Madeleine Sharpe, MONTREAL, QC

Sean Symons, TORONTO, ON

Brian Toyota, VANCOUVER, BC

Brian Weinshenker, ROCHESTER, MN

Sam Wiebe, CALGARY, AB

Jefferson Wilson, TORONTO, ON

Eugene Yu, TORONTO, ON

Journal Staff/Effectif du Journal

Dan Morin CALGARY, AB

Chief Executive Officer

Donna Irvin CALGARY, AB

CNSF Membership Services /

Communications Officer

The official journal of: / La Revue officielle de:

The Canadian Neurological Society

La Société Canadienne de Neurologie

The Canadian Neurosurgical Society

La Société Canadienne de Neurochirurgie

The Canadian Society of Clinical Neurophysiologists

La Société Canadienne de Neurophysiologie Clinique

The Canadian Association of Child Neurology

L'Association Canadienne de Neurologie Pédiatrique

The Canadian Society of Neuroradiology

La Société Canadienne de Neuroradiologie

The permanent secretariat for the five societies and the Canadian Neurological Sciences Federation is at:

Le secrétariat des cinq associations et de la Fédération des sciences neurologiques du Canada est situé en permanence à :

143N – 8500 Macleod Trail SE

Calgary, Alberta T2H 2N1 Canada

CNSF (403) 229-9544

Fax (403) 229-1661

The Canadian Journal of Neurological Sciences is published bi-monthly. The annual subscription rate for Individuals (electronic) is £157/US\$258. The annual subscription rate for Institutions (electronic) is £207/US\$344. See <cambridge.org/cjn> for full details including taxes; e-mail: subscriptions_newyork@cambridge.org. Send address changes to Journals Fulfillment Department, Cambridge University Press, One Liberty Plaza, New York, NY 10006 USA; usmemberservices@cambridge.org. The Canadian Journal of Neurological Sciences is included in the Cambridge Core service, which can be accessed at cambridge.org/cjn. For information on other Cambridge titles, visit www.cambridge.org. For advertising rates contact M. J. Mrvica Associates, 2 West Taunton Avenue, Berlin, NJ 08009; Phone: 856-768-9360; Fax: 856-753-0064; Email: mjmrvica@mrvica.com.

Le Journal Canadien des Sciences Neurologiques est publié tous les deux mois. Le prix d'abonnement annuel pour les individus (électronique) est 157£/258US\$. Le prix d'abonnement annuel pour les établissements (électronique) est 207£/344US\$. Veuillez consulter <cambridge.org/cjn> pour tous les détails, y compris les taxes; email: subscriptions_newyork@cambridge.org. Envoyer les changements d'adresses aux Journals Fulfillment Department, Cambridge University Press, One Liberty Plaza, New York, NY 10006 USA; usmemberservices@cambridge.org. Le Journal canadien des sciences neurologiques est inclus dans le service Cambridge Journals Online, accessible à cambridge.org/cjn. Pour plus d'informations sur les titres disponibles chez Cambridge, veuillez consulter www.cambridge.org. Pour les tarifs de publication, contacter M. J. Mrvica Associates, 2 West Taunton Avenue, Berlin, NJ 08009; Téléphone: (1)856-768-9360; Email: mjmrvica@mrvica.com.

This journal is indexed by / Cette revue est indexée par:
Adis International, ArticleFirst, BIOBASE, Biolab, BiolSci, BIOSIS Prev, Centre National de la Recherche Scientifique, CSA, Curab, CurCont, De Gruyter Saur, E-psyche, EBSCO, Elsevier, EMBASE, FRANCIS, IBZ, Internationale Bibliographie der Rezensionen Geistes- und Sozialwissenschaftlicher Literatur, MEDLINE, MetaPress, National Library of Medicine, OCLC, PE&ON, Personal Alert, PsycFIRST, PsycINFO, PubMed, Reac, RefZb, SCI, SCOPUS, Thomson Reuters, TOCPrem, VINITI RAN, Web of Science.

ISSN: 0317-1671

EISSN: 2057-0155

COPYRIGHT © 2021 by THE CANADIAN JOURNAL OF NEUROLOGICAL SCIENCES INC. All rights reserved. No part of this publication may be reproduced, in any form or by any means, electronic, photocopying, or otherwise, without permission in writing from Cambridge University Press. Policies, request forms and contacts are available at: <http://www.cambridge.org/about-us/rights-permissions>. Permission to copy (for users in the U.S.A.) is available from Copyright Clearance Center: <http://www.copyright.com>, email: info@copyright.com.

COPYRIGHT © 2021 du THE CANADIAN JOURNAL OF NEUROLOGICAL SCIENCES I INC. Tous droits réservés.
Aucune partie de cette publication ne peut être reproduite, sous quelque forme ou par quelque procédé que ce soit, électronique ou autre, y compris la photocopie, sans l'accord écrit de Cambridge University Press. Les politiques, les formulaires de demande et les contacts sont disponibles à: <http://www.cambridge.org/about-us/rights-permissions>. La permission de copier (pour les utilisateurs aux États-Unis) est disponible auprès Copyright Clearance Center: <http://www.copyright.com>, email: info@copyright.com.