

THE CANADIAN JOURNAL OF

# Neurological Sciences

LE JOURNAL CANADIEN DES  
Sciences Neurologiques

AN INTERNATIONAL JOURNAL / UN JOURNAL INTERNATIONAL

## EDITORIAL

- 179 t-PA: A Cause for Tentative Celebration  
*AM Hakim*

## REVIEW ARTICLE

- 181 Neurofibromatosis Type 1: Piecing the Puzzle Together  
*Matthias M. Feldkamp, David H. Gutmann and Abhijit Guha*

## EXPEDITED PUBLICATION

- 192 Identification of six novel SOD1 Gene Mutations in Familial Amyotrophic Lateral Sclerosis  
*Y Boukaftane, J Khoris, B Moulard, F Salachas, V Meininger, A Malafosse, W Camu and GA Rouleau*

## ORIGINAL ARTICLES

- 197 Long-term Glioblastoma Multiforme Survivors: a Population-based Study  
*JN Scott, NB Rewcastle, PMA Brasher, D Fulton, NA Hagen, JA MacKinnon, G Sutherland, JG Cairncross and P Forsyth*

- 202 Unusual Aneurysms of the Distal Internal Carotid Artery  
*Gary J Redkop and Barrie Woodhurst*

- 209 Causes of Morbidity and Mortality Following Intracranial Aneurysm Rupture  
*J Max Findlay and Gail M Deagle*

- 216 Canadian Collaborative Project on Genetic Susceptibility to MS, Phase 2: Rationale and Method  
*AD Sadovnick, NJ Risch, GC Ebers and the Canadian Collaborative Study Group*

- 222 Cost Analysis of Methylprednisolone Treatment of Multiple Sclerosis Patients  
*Lynda S Robson, Charlene Bain, Shann Beck, Suzanne Guthrie, Peter C Coyte and Paul O'Connor*

- 230 Hospital-based Psychiatric Service Utilization and Morbidity in Multiple Sclerosis  
*John D Fisk, Susan A Morehouse, Murray G Brown, Chris Skedgel and T Jock Murray*

- 236 Respiratory Muscle Training in Patients with Moderate to Severe Myasthenia Gravis  
*Paltiel Weiner, Ditz Gross, Zeev Meiner, Rushrash Ganem, Margalit Weiner, Doron Zamir and Marinella Rabner*

- 242 Ethical Guidelines of the Alzheimer Society of Canada  
*John D Fisk, A Dessa Sadovnick, Carole A Cohen, Serge Gauthier, John Dossetor, Astrid Eberhart and Linda LeDuc*

- 249 Platelet Monoamine Oxidase B Activity in "de novo" and L-dopa Treated Parkinsonian Patients and Controls  
*Wilfried Kuhn, Thomas Müller, Anja Gerstner, Regina Winkel and Mario E Goetz*

- 252 Pathological Laughter Following Intravenous Sodium Valproate  
*PC Jacob and R Pratap Chand*

- 254 Seronegative Myasthenia Gravis and Human Immunodeficiency Virus Infection: Response to Intravenous Gamma Globulin and Prednisone  
*James Strong and Douglas W Zochodne*

## NEUROLOGICAL PRACTICE

- 257 Canadian Guidelines for Intravenous Thrombolytic Treatment in Acute Stroke:  
A Consensus Statement of the Canadian Stroke Consortium  
*JW Norris, A Buchan, R Cote, V Hachinski, SJ Phillips, A Shuaib, F Silver, D Simard, P Teal on behalf of the Canadian Stroke Consortium*

## SUPPLEMENT 3

- S1 A New Advance in the Treatment of Epilepsy: A Focus on Topiramate

34th CANADIAN  
CONGRESS OF  
NEUROLOGICAL  
SCIENCES  
June 15 - 19, 1999  
Edmonton, Alberta

With Epival, it can be.

Epival has been proven effective in primary generalized epilepsy,<sup>1,3</sup> as well as in partial seizures that secondarily generalize.<sup>4,5\*</sup> Just as importantly, Epival has been associated with little effect on learning and cognition,<sup>6</sup> and is generally well tolerated in properly screened patients.<sup>7†</sup>

Because as your epilepsy patients can confirm, there's more to anticonvulsant therapy than seizure control.

## THIS SHOULD BE THE ONLY INDICATION THEY HAVE EPILEPSY.

**E<sup>P</sup>pival<sup>®</sup>**  
*(divalproex sodium)*

**HELPS PUT PATIENTS BACK IN CONTROL.**



ABBOTT LABORATORIES, LIMITED  
PHARMACEUTICAL PRODUCTS DIVISION

\* For use as sole or adjunctive therapy in the treatment of simple or complex absence seizures, including petit mal and is useful in primary generalized seizures with tonic-clonic manifestations. Epival may also be used adjunctively in patients with multiple seizure types which include either absence or tonic-clonic seizures.

† Frequent monitoring of hepatic function and blood coagulation is advised. Caution is advised in children < 10 years on multiple AEDs.

© Abbott Laboratories, Limited, Saint-Laurent, Québec H4S 1Z1

Product Monograph available on request.

PRAB

Visit Our Web Site At:  
[www.canjneurosci.org](http://www.canjneurosci.org)

THE CANADIAN JOURNAL OF  
**Neurological Sciences**  
LE JOURNAL CANADIEN DES  
**Sciences Neurologiques**

- EDITORIAL **179** t-PA: A Cause for Tentative Celebration  
*AM Hakim*
- REVIEW ARTICLE **181** Neurofibromatosis Type 1: Piecing the Puzzle Together  
*Matthias M. Feldkamp, David H. Gutmann and Abhijit Guha*
- EXPEDITED PUBLICATION **192** Identification of six novel SOD1 Gene Mutations in Familial Amyotrophic Lateral Sclerosis  
*Y Boukaftane, J Khoris, B Moulard, F Salachas, V Meininguer, A Malafosse, W Camu and GA Rouleau*
- ORIGINAL ARTICLES **197** Long-term Glioblastoma Multiforme Survivors: a Population-based Study  
*JN Scott, NB Rewcastle, PMA Brasher, D Fulton, NA Hagen, JA MacKinnon, G Sutherland, JG Cairncross and P Forsyth*
- 202** Unusual Aneurysms of the Distal Internal Carotid Artery  
*Gary J Redkop and Barrie Woodhurst*
- 209** Causes of Morbidity and Mortality Following Intracranial Aneurysm Rupture  
*J Max Findlay and Gail M Deagle*
- 216** Canadian Collaborative Project on Genetic Susceptibility to MS, Phase 2: Rationale and Method  
*AD Sadovnick, NJ Risch, GC Ebers and the Canadian Collaborative Study Group*
- 222** Cost Analysis of Methylprednisolone Treatment of Multiple Sclerosis Patients  
*Lynda S Robson, Charlene Bain, Shann Beck, Suzanne Guthrie, Peter C Coyte and Paul O'Connor*
- 230** Hospital-based Psychiatric Service Utilization and Morbidity in Multiple Sclerosis  
*John D Fisk, Susan A Morehouse, Murray G Brown, Chris Skedgel and T Jock Murray*
- 236** Respiratory Muscle Training in Patients with Moderate to Severe Myasthenia Gravis  
*Paltiel Weiner, Ditz Gross, Zeev Meiner, Rushrash Ganem, Margalit Weiner, Doron Zamir and Marinella Rabner*
- 242** Ethical Guidelines of the Alzheimer Society of Canada  
*John D Fisk, A Dessa Sadovnick, Carole A Cohen, Serge Gauthier, John Dossetor, Astrid Eberhart and Linda LeDuc*
- 249** Platelet Monoamine Oxidase B Activity in "de novo" and L-dopa Treated Parkinsonian Patients and Controls  
*Wilfried Kuhn, Thomas Müller, Anja Gerstner, Regina Winkel and Mario E Goetz*
- 252** Pathological Laughter Following Intravenous Sodium Valproate  
*PC Jacob and R Pratap Chand*
- 254** Seronegative Myasthenia Gravis and Human Immunodeficiency Virus Infection: Response to Intravenous Gamma Globulin and Prednisone  
*James Strong and Douglas W Zochodne*
- NEUROLOGICAL PRACTICE **257** Canadian Guidelines for Intravenous Thrombolytic Treatment in Acute Stroke: A Consensus Statement of the Canadian Stroke Consortium  
*JW Norris, A Buchan, R Cote, V Hachinski, SJ Phillips, A Shuaib, F Silver, D Simard, P Teal on behalf of the Canadian Stroke Consortium*
- SUPPLEMENT 3 **S1** A New Advance in the Treatment of Epilepsy: A Focus on Topiramate
- Books Received **260**
- Book Reviews **260**
- Notes and Announcements **263, 264**
- Neurosciences Community Unites to Promote Increased Awareness **265**
- Calendar of Events **266**
- 25 Years Ago in the Canadian Journal of Neurological Sciences **A14, A24**
- Information for Authors **A8**
- Advertisers Index **A60**

THE CANADIAN JOURNAL OF  
**Neurological Sciences**  
LE JOURNAL CANADIEN DES  
**Sciences Neurologiques**

***Editor/Rédacteur en chef***

James A. Sharpe TORONTO, ON

***Associate Editors/Rédacteurs associés***

Laurence E. Becker TORONTO, ON  
Andres M. Lozano TORONTO, ON

***Past Editors***

Robert G. Lee CALGARY, AB  
Robert T. Ross WINNIPEG, MB  
(founding editor)

***Editorial Board/Conseil Scientifique***

Harold P. Adams IOWA CITY, IA, USA  
Jack P. Antel MONTREAL, QC  
J. Gregory Cairncross LONDON, ON  
Pierre Duquette MONTRÉAL, QC  
Peter J. Dyck ROCHESTER, MN, USA  
Andrew A. Eisen VANCOUVER, BC  
Max J. Findlay EDMONTON, AB  
Anthony M. Hakim OTTAWA, ON  
Julian T. Hoff ANN ARBOR, MI, USA  
Renn Holness HALIFAX, NS  
John H. Noseworthy ROCHESTER, MN, USA  
C. Warren Olanow NEW YORK, NY, USA  
William Pryse-Phillips ST. JOHNS, NF  
Ali H. Rajput SASKATOON, SK  
James T. Rutka TORONTO, ON  
Shashi S. Seshia WINNIPEG, MB  
Alan M. Smith MONTRÉAL, QC  
Garnette R. Sutherland CALGARY, AB  
Jean-Guy Villemure LAUSANNE, SUISSE  
Douglas W. Zochodne CALGARY, AB

***Book Review Editor / Rédacteur de critiques de livres***

Warren P. Mason TORONTO, ON

***News Editor/Rédacteur (nouvelles)***

John W. Norris TORONTO, ON

***Managing Director/Gérant directrice***

Sally A. Gregg CALGARY, AB

***Publications Committee/Comité de Rédaction***

Charles Bolton LONDON, ON  
Mark Hamilton CALGARY, AB  
Andrew Kertesz LONDON, ON  
Joseph Dooley STE-FOY, QC

**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 permanent secretariat for the four societies and the Canadian Congress of Neurological Sciences is at:  
Le secrétariat des quatre associations et du Congrès Canadien des Sciences Neurologiques est situé en permanence à:  
810, 906 - 12 Avenue S.W., Calgary, AB Canada T2R 1K7

The Canadian Journal of Neurological Sciences is published quarterly. The annual subscription rate is \$70 for members; \$77 for non-members in Canada; \$88 for USA and elsewhere. Residents, Interns, Pre- and Post-Doctoral Students \$35 per annum (members); \$38.50 per annum (non-members). Single copies \$22 each plus postage and handling. All manuscripts and communications should be sent to: Canadian Journal of Neurological Sciences, P.O. Box 4220, Station C, Calgary, AB Canada T2T 5N1. Courier to: 810, 906 - 12th Avenue S.W., Calgary, AB Canada T2R 1K7. Telephone (403) 229-9575; Fax (403) 229-1661. E-mail: cjns@canjneurosci.org; Web Site: www.canjneurosci.org  
COPYRIGHT© 1998 by THE CANADIAN JOURNAL OF NEUROLOGICAL SCIENCES INC. No part of this journal may be reproduced in any form without the prior permission of The Canadian Journal of Neurological Sciences. Mailed under Publications Mail Agreement number 1259563. Postage paid at Calgary, Alberta. This journal is indexed by *Index Medicus*, *EMBASE Excerpta Medica* and *Current Contents — Clinical Practice and Life Sciences*, *Elsevier Biobase/Current Awareness in Biological Sciences*, *Biological Abstracts*, *Chemical Abstracts*, *Current Advances in Ecological Sciences*, *Dent.index*, *Industrial Medicine*, *Industrial Science Reviews*, *INIS Automind*, *Nutrition Abstracts*, *Science Citation Index*, *Weed Abstract*.

Le Journal Canadien des Sciences Neurologiques est publié trimestriellement. L'abonnement annuel est de 70 \$ pour les membres; 77 \$ pour les non-membres au Canada; 88 \$ pour les Etats Unis et ailleurs. Internes, résidents, fellows pré et post doctoral: 35 \$ par année (membres); 38.50 \$ par année (non-membres). Copie simple: 22 \$ plus affranchissement et manutention. Toutes les communications et les manuscrits doivent être adressés à Journal Canadien des Sciences Neurologiques, P.O. Box 4220, Station C, Calgary, AB Canada T2T 5N1. Par courrier: 810, 906 - 12th Avenue S.W., Calgary, AB Canada T2R 1K7. Téléphone (403) 229-9575; Fax (403) 229-1661. E-mail: cjns@canjneurosci.org; Web Site: www.canjneurosci.org

DROITS D'AUTEUR© 1998: THE CANADIAN JOURNAL OF NEUROLOGICAL SCIENCES INC. Aucune partie de ce Journal ne peut être reproduite, sous quelque forme que ce soit, sans la l'autorisation du Journal Canadien des Sciences Neurologiques. Posté sous permis de poste-publications no 1259563. Port payé à Calgary, Alberta. Le Journal est cité et indexé dans *Index Medicus*, *EMBASE Excerpta Medica* et *Current Contents — Clinical Practice et Life Sciences*, *Elsevier Biobase/Current Awareness in Biological Sciences*, *Biological Abstracts*, *Chemical Abstracts*, *Elsevier Biobase/Current Advances in Ecological Sciences*, *Dent.index*, *Industrial Medicine*, *Industrial Science Reviews*, *INIS Automind*, *Nutrition Abstracts*, *Science Citation Index*, *Weed Abstract*.

***Advertising representative/Représentant de publicité:***

Sally Gregg, Canadian Journal of Neurological Sciences  
810, 906 - 12 Ave. S.W., Calgary, AB Canada T2R 1K7  
Tel (403) 229-9575 Fax (403) 229-1661  
E-mail: cjns@canjneurosci.org  
Web Site: www.canjneurosci.org

***Printer/Imprimeur:***

McAra Printing Limited, 105, 2507 - 12th Street N.E.,  
Calgary, Alberta T2E 7L5

ISSN 0317-1671

# L'épilepsie n'effleure même pas ces esprits vifs... Tegretol CR au boulot !



## Maîtrise efficace des crises

- **Bienfait clinique significatif et excellente maîtrise des crises épileptiques<sup>1,2</sup>.**

## Profil d'innocuité éloquent

- **Concentrations plasmatiques stables de carbamazépine pouvant mener à une incidence plus faible d'effets indésirables liés aux concentrations que Tegretol ordinaire<sup>4</sup>.**
- **Niveau élevé de tolérabilité<sup>2\*</sup>.**

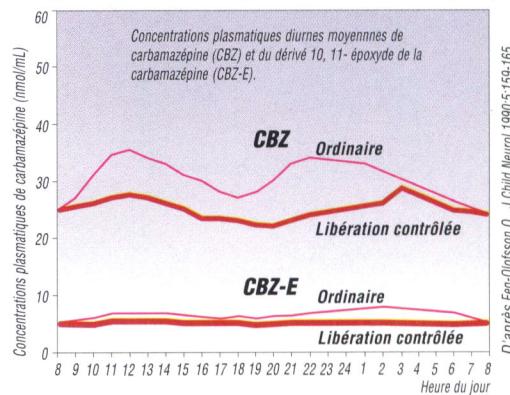
Permet d'atteindre et de maintenir une bonne maîtrise des crises tout en offrant une faible incidence d'effets indésirables liés aux concentrations<sup>4</sup>.

L'un des effets secondaires les plus fréquents de la carbamazépine est la somnolence. Cette réaction ne survient généralement qu'en début de traitement<sup>4</sup> et peut être amenuisée par le recours à la carbamazépine à libération contrôlée (Tegretol® CR)<sup>5</sup>.

La carbamazépine n'est pas efficace pour le traitement des absences, des crises myocloniques ou atoniques et ne prévient pas la généralisation de la décharge épileptique. En outre, une exacerbation des crises peut parfois survenir chez les patients ayant des absences atypiques<sup>4</sup>.

\*Consulter les mises en garde figurant à la monographie avant de prescrire.

Courbes des concentrations plasmatiques diurnes de Tegretol ordinaire et de Tegretol CR chez les enfants (n=25).<sup>3</sup>



### Pr Tegretol® CR vs Pr Tegretol® ordinaire

- Efficacité et tolérabilité équivalentes ou améliorées<sup>6</sup>
- Peut réduire considérablement la fréquence des crises<sup>7</sup>
- Entrave moins la fonction cognitive<sup>5</sup>

**Pr Tegretol® CR**  
(carbamazépine à libération contrôlée)

et la suspension **Pr Tegretol®**  
(carbamazépine)

POUR AIDER LES ÉPILEPTIQUES  
À S'ÉPANOUIR PLEINEMENT

**Geigy**  
Spécialités pharmaceutiques

Dorval (Québec) H9S 1B1 ou  
Mississauga (Ontario) L5N 2W5

PAAB  
CCPP  
PMAC  
ACIM  
G-967070

Pour documentation voir pages A-32, A-33

# The First and Only New\* AED Indicated for Monotherapy After Polytherapy



\*Refers to lamotrigine, gabapentin, vigabatrin, and topiramate, to be distinguished from standard AEDs.

\*\*A successful conversion to lamotrigine monotherapy was achieved in 50 of the 69 patients.

\*\*\*The three phases included add-on, withdrawal, and monotherapy. Should not be taken as an absolute measure of efficacy because patients with less satisfactory responses did not progress into all phases.

<sup>†</sup>The most common adverse experiences associated with discontinuation of LAMICTAL monotherapy were rash (6.1%), asthenia (1.1%), headache (1.1%), nausea (0.7%), and vomiting (0.7%).<sup>3</sup> See Product Monograph for further information.

<sup>††</sup>Please refer to Product Monograph for dose adjustment of LAMICTAL according to the concomitant AED withdrawn.

# For Control Over a Wide Range of Seizure Types, with a Low CNS Side-Effect Profile

Effective monotherapy has been largely accepted as the regimen of choice for achieving seizure control with minimal side effects in the management of patients with epilepsy.<sup>1</sup> Now, extending its proven success as adjunctive therapy,<sup>2</sup> LAMICTAL is indicated for monotherapy in adults following withdrawal of concomitant antiepileptic drugs (AEDs).<sup>3</sup>

## HIGHLY EFFECTIVE MONOTHERAPY

In one add-on/withdrawal to monotherapy open-label trial, LAMICTAL monotherapy following withdrawal of concomitant AEDs kept 30% (n=50) of the successfully treated patients seizure-free.<sup>\*\*4</sup> In a similarly designed trial, ≥ 40% of the patients were maintained with at least 50% reduction of seizure frequency across all phases of the trial.<sup>\*\*5</sup>

## GENERALLY BETTER TOLERATED<sup>†</sup>

Pooled data from three monotherapy trials show that withdrawals due to

CNS-related side effects were 2.5% (n=443) with LAMICTAL monotherapy compared to phenytoin (7.4%; n=95) or carbamazepine (7.7%; n=246).<sup>6</sup>

Incidence of somnolence, asthenia, and ataxia were reported less frequently with LAMICTAL compared to carbamazepine and phenytoin. There was no difference in the rate of withdrawal due to skin rash between LAMICTAL (6.1%) and phenytoin (5.3%) or carbamazepine (8.9%).<sup>6</sup> A higher incidence of skin rash has been associated with more rapid initial titration of LAMICTAL or use of concomitant valproic acid.<sup>3</sup>

## CONTROL OVER A WIDE RANGE OF SEIZURE TYPES

LAMICTAL add-on polytherapy has been successfully used across a wide range of seizure types.<sup>2</sup> Now, opt to switch with confidence from LAMICTAL polytherapy to LAMICTAL monotherapy,<sup>†</sup> particularly when you are concerned with CNS-related side-effects.

Lamotrigine  
**Lamictal®**  
FROM POLYTHERAPY TO  
MONOTHERAPY

**GlaxoWellcome**  
Glaxo Wellcome Inc.

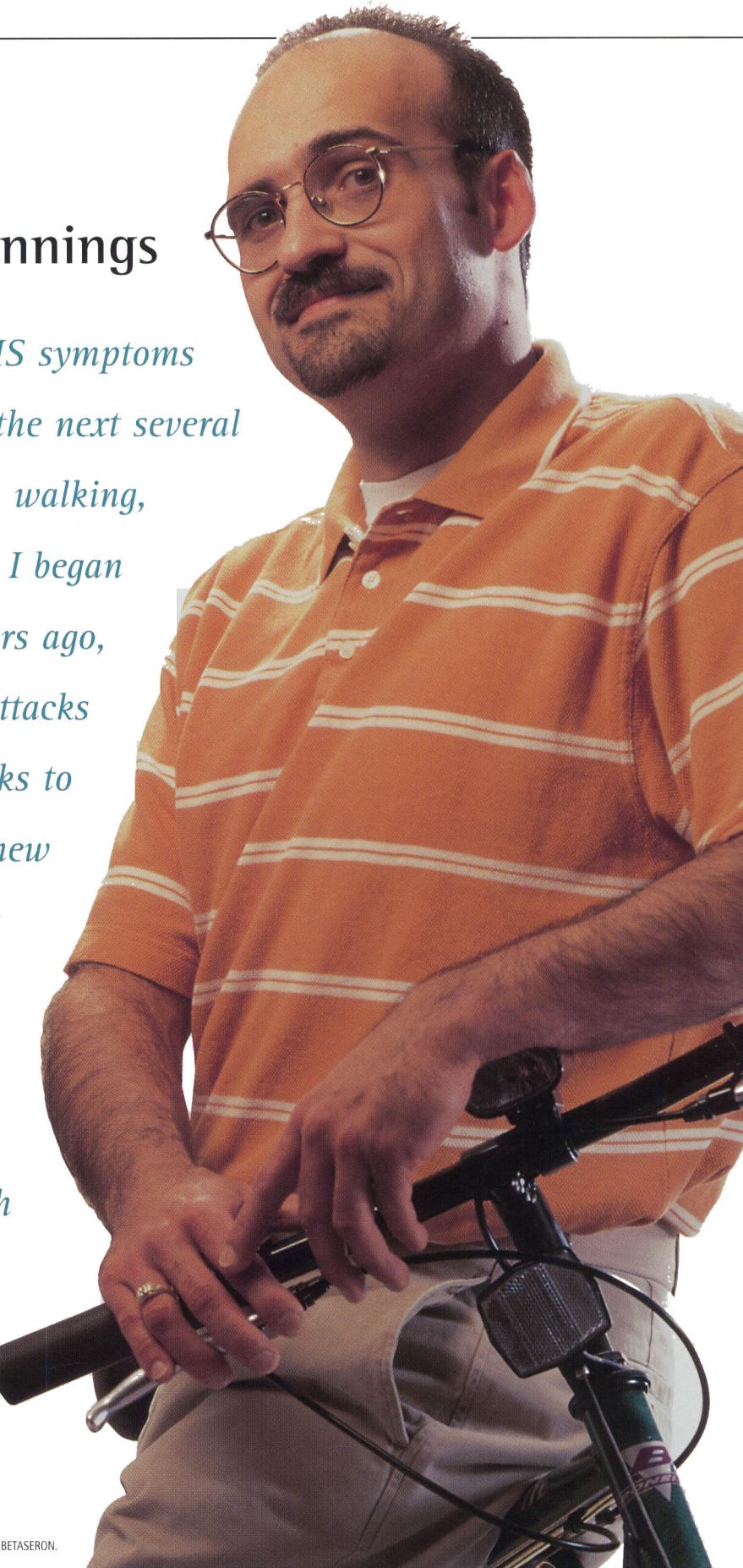


® Registered trademark of The Wellcome Foundation Limited, Glaxo Wellcome Inc. licensed use. Product Monograph available to healthcare professionals on request.

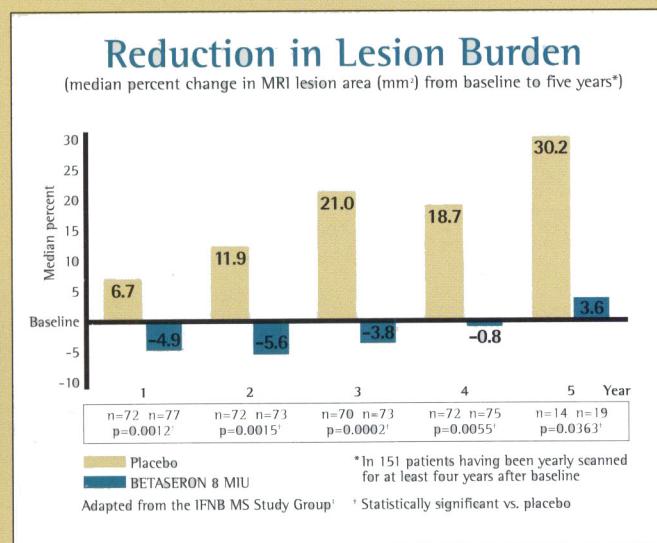
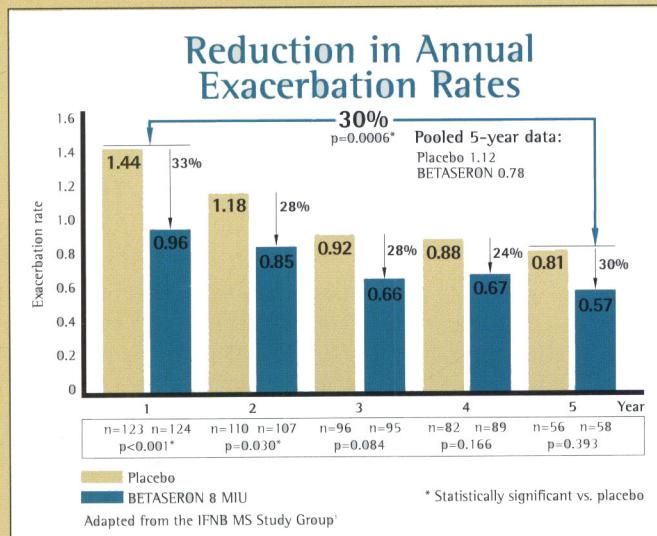
PAAB  
CCPP

## Fred on New Beginnings

*"I first experienced MS symptoms in 1985. Over the next several years, I had difficulties in walking, with speech ... But since I began BETASERON, 11 years ago, I have had no attacks whatsoever. Thanks to BETASERON, I now face new challenges. I can be there for my children; I'm preparing my master's degree; and I'm getting ready for my fifth MS bike-a-thon!"*



This real BETASERON patient testimonial may not be representative of all cases involving the use of BETASERON.



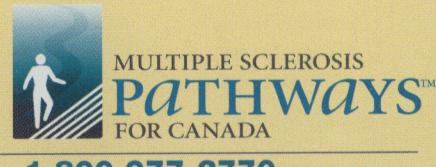
- Proven long-term efficacy as first-line treatment in relapsing-remitting MS
  - Over five years, exacerbation rate reduced by 30% (p=0.0006)<sup>1</sup>
  - At two years, moderate and severe exacerbations reduced by 49% (p=0.002);<sup>2</sup> significant annual reduction maintained over five years<sup>1</sup>
  - Median time to first exacerbation twice as long as in placebo patients (p=0.015)<sup>2</sup>

- The only treatment studied for five years, both clinically and with MRI<sup>1</sup>
  - MRI measured *lesion burden* significantly reduced over five years<sup>1</sup>
  - MRI measured *lesion activity* decreased (a median of 80% fewer active scans compared to placebo; p=0.0062; measured for two years)<sup>3</sup>
- Trend toward slower disability progression demonstrated over a five year period<sup>1</sup>
- Low incidence of serious side effects:<sup>1</sup> injection-site reactions and flu-like symptoms are manageable and lessen markedly with time<sup>4</sup>

More than 60,000 patients treated to date worldwide<sup>5</sup>

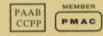


**BETASERON®**  
INTERFERON BETA-1b  
*Proven first-line treatment for MS*



1 800 977-2770 CODE 4000

Provincial reimbursement available in British Columbia, Saskatchewan, Manitoba, Ontario and Quebec





# Tasmar

gets more  
out of  
levodopa  
so patients  
get more  
out of life.

And that means more living for your patients – day in and day out. Just look at the evidence.

Steady and continuous dopaminergic stimulation with Tasmar has shown that Parkinson's patients, in clinical trials, experienced:

- ✓ improved symptom control<sup>6</sup>
- ✓ reduced motor fluctuations<sup>6</sup>

**In fluctuating patients, Tasmar has been shown to:**

- ✓ reduce OFF-time by approximately 30-50%<sup>6</sup>
- ✓ significantly improve L-dopa "wearing off" effects<sup>6</sup>
- ✓ improve the severity of Parkinson's symptoms<sup>12</sup>

**In non-fluctuating patients, Tasmar has demonstrated:**

- ✓ significant improvements in the activities of daily living<sup>10</sup>
- ✓ improved motor performance<sup>10</sup>
- ✓ continued efficacy over time<sup>10</sup>

All these important benefits come with a very reasonable side effect profile. The most common adverse event was diarrhea (only 5-6% patients discontinued treatment as a result),<sup>6</sup> and psychiatric side effects were relatively low.<sup>12</sup>

With onset of action after the first dose, no titration and a simple dosing schedule (**just three times a day, with or without food**), Tasmar delivers even more to your patients.

Tasmar...so your Parkinson's patients can get more out of life.

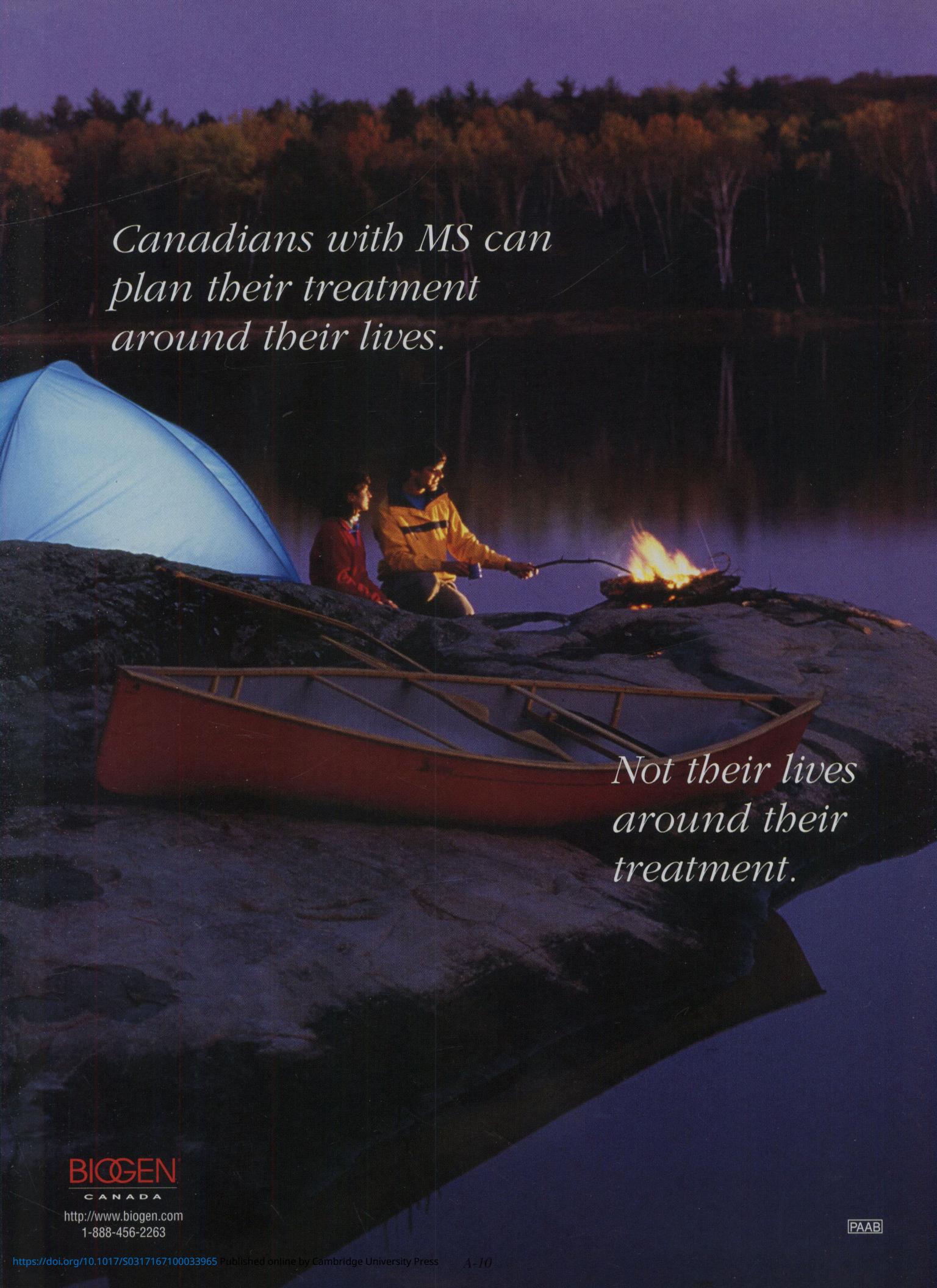
Elevations in liver transaminases have been observed in 3% of patients, during the first six months of treatment with Tasmar. It is recommended that transaminases be monitored before starting Tasmar and approximately every six weeks for the first six months.\*



**COMT inhibition. A new frontier in Parkinson's therapy.**

For brief prescribing information see pages A-55, A-56, A-57



A photograph of a couple camping at night. They are sitting on a rocky outcrop, with a blue tent to their left and a red canoe in the foreground. A campfire is burning to their right, and they are roasting marshmallows. The background shows a dense forest under a dark sky.

*Canadians with MS can  
plan their treatment  
around their lives.*

*Not their lives  
around their  
treatment.*

**BIOGEN**  
CANADA

<http://www.biogen.com>  
1-888-456-2263

PAAB

# New Once-A-Week AVONEX™ (Interferon beta-1a)

***Helping people with relapsing forms  
of MS get on with their lives.***

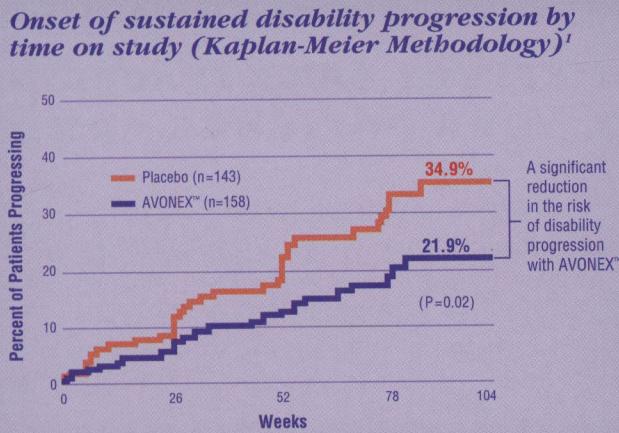
## **The therapy prescribed in 18 countries is now available in Canada**

Treatment with once-a-week AVONEX™ results in minimal disruption of patients' lives and mild side effects that decrease over time for most patients.<sup>1,2</sup>

Our easy to plan, once-a-week IM injections may promote patient compliance.

## **AVONEX™ is proven to slow the progression of disability in relapsing forms of MS<sup>1</sup>**

Prophylactic use of AVONEX™ can help patients maintain function longer. In a clinical trial, patients treated with AVONEX™ showed a significant reduction in risk of disability progression and a 32% reduction in annual exacerbation rate over two years.<sup>3†</sup>



AVONEX™ also demonstrated a significant MRI effect, showing an 89% reduction in gadolinium-enhanced lesions in patients with enhancement at baseline.<sup>2,4</sup>

\*Versus a more frequent dosing regimen.

† P = 0.002; Placebo annual exacerbation rate 0.90, N=87; Avonex annual exacerbation rate 0.61, N=85.

○ P=0.041; Placebo median ratio 0.50, N=44; Avonex median ratio 0.11, N=44. The exact relationship between MRI findings and clinical status is unknown.

## **The Avonex Support Line™: 1-888-456-2263**

Biogen Canada is committed to providing healthcare professionals and their patients with the information and support they require. Our toll-free Avonex Support Line™ provides patients with information on injection training, delivery options and reimbursement counseling. Healthcare professionals are also available to answer your questions about AVONEX™.

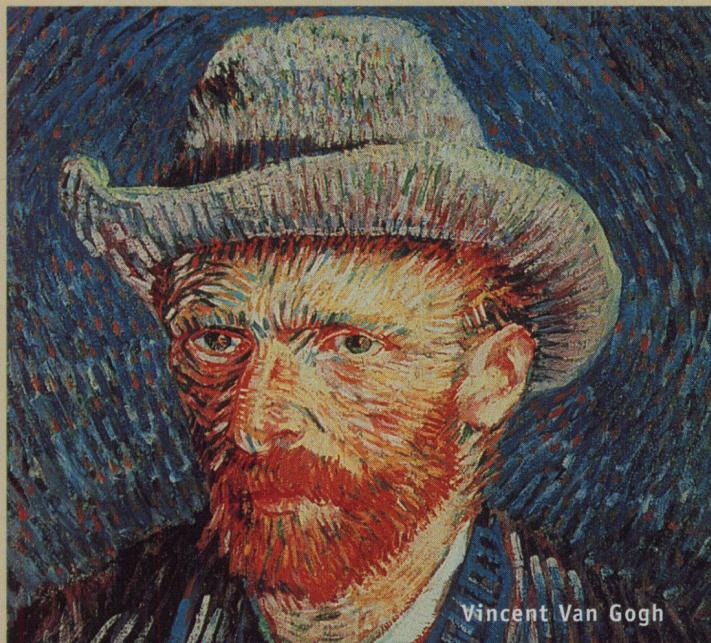
## **Once-a-week AVONEX™ is generally well tolerated<sup>1</sup>**

The unique once-weekly dosing regimen with AVONEX™ means fewer opportunities for injection-related side effects to disrupt patient's lifestyle.<sup>1</sup>

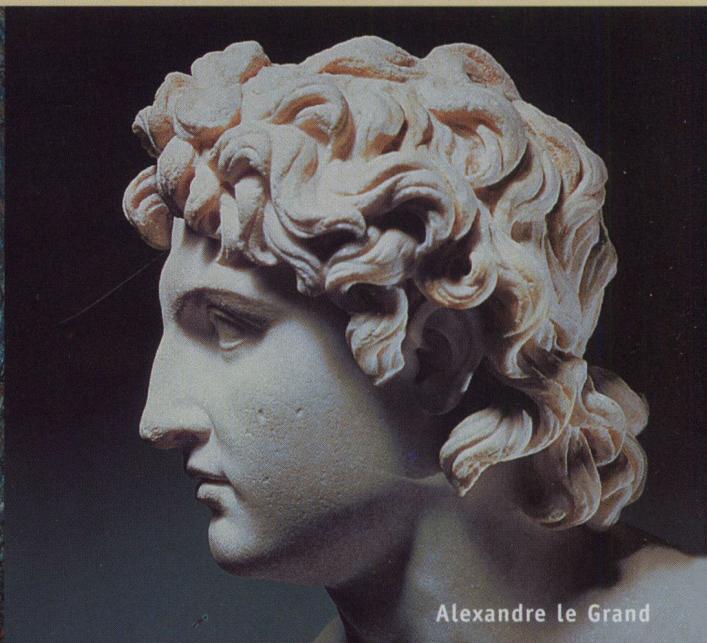
- The most common side effects associated with AVONEX™ treatment are flu-like side effects and usually resolve within 24 hours after injection.<sup>1,2</sup>
- Incidence of side effects decrease over time with continued treatment for most people.<sup>2</sup>
- Compared to subcutaneous injections, intramuscular injections result in far fewer site reactions.<sup>2</sup>
- No cases of injection site necrosis have been reported for patients on AVONEX™ therapy.<sup>4</sup>
- Please see product monograph for important patient selection and monitoring information.

**ONCE-A-WEEK  
AVONEX™  
(Interferon beta-1a)**  
IM Injection

# DU NOUVEAU EN ÉPILEPSIE. MAINTENANT REMBOURSÉ PAR LES FORMULAIRES



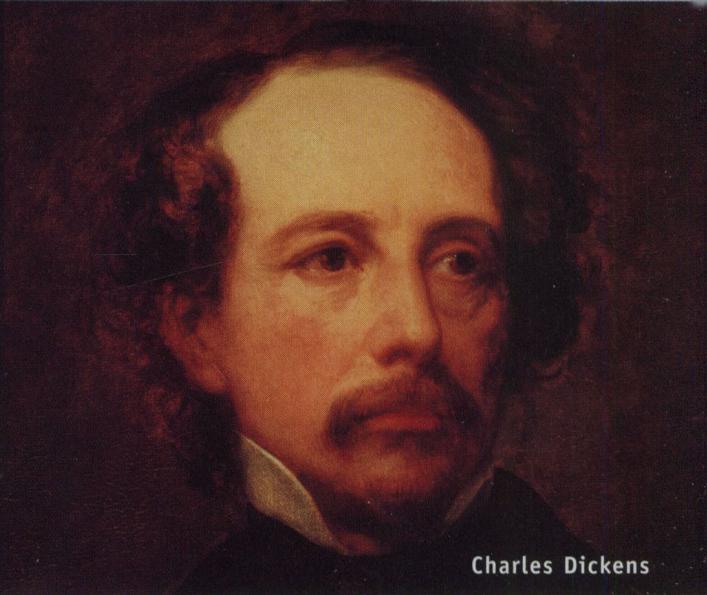
Vincent Van Gogh



Alexandre le Grand

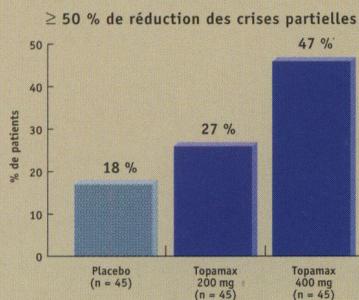


Lord Byron



Charles Dickens

## NAGUÈRE ENCORE, LA RÉUSSITE EXIGEAIT D'UN ÉPILEPTIQUE HEUREUSEMENT POUR VOS PATIENTS, IL EXISTE

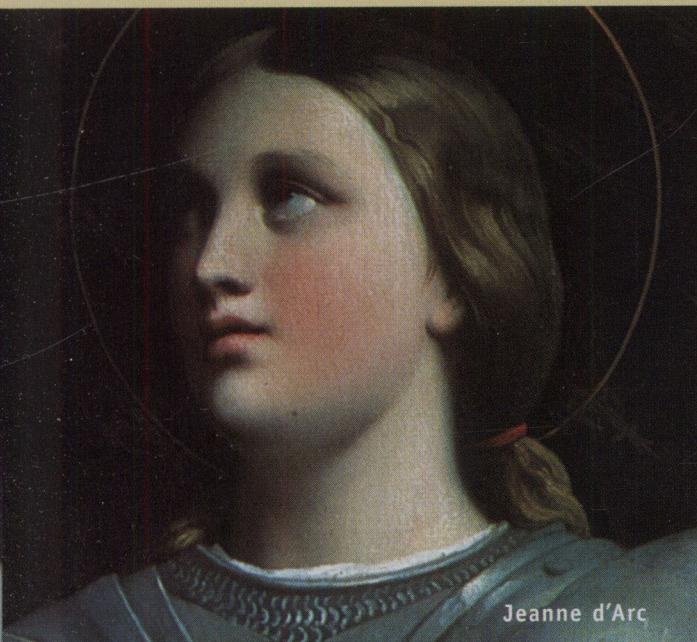


Extrait de référence N° 1. Étude en double aveugle avec placebo contre TOPAMAX b.i.d. comme traitement d'appoint, portant sur 181 patients atteints d'épilepsie partielle réfractaire et recevant une ou deux autres médications antiépileptiques. \*p = 0,013.

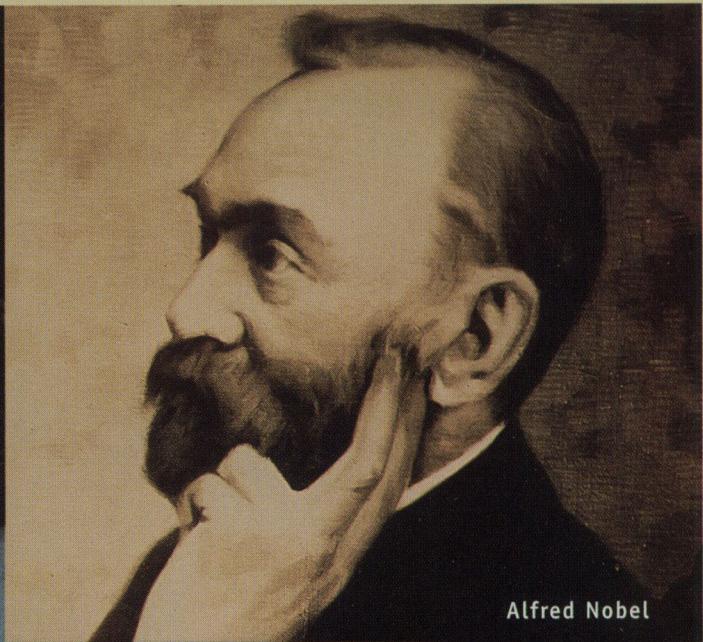
### Contrôle amélioré d'une plus grande variété de types de crises.

- TOPAMAX est indiqué comme traitement d'appoint pour toutes les épilepsies réfractaires aux traitements conventionnels. À l'heure actuelle, les données sur l'utilisation de TOPAMAX comme traitement unique demeurent limitées.
- Taux élevé de répondants : 27 % (200 mg/jour, n = 45) et 47 % (400 mg/jour, n = 45) des patients ont manifesté une réduction des crises d'épilepsie partielle  $\geq 50\%$  (étude d'une durée de 16 semaines)<sup>1</sup>
- Contrôle efficace pour les patients souffrant de cires toniques-cloniques secondaires généralisées : 36 % des patients ont manifesté une réduction de 100 % (200-600 mg, n = 42, étude portant sur 16 semaines)<sup>1</sup>
- Triple mécanisme d'action unique: blocage des canaux sodiques, activation de l'acide gamma-aminobutyrique, antagonisme du glutamate)<sup>2</sup>

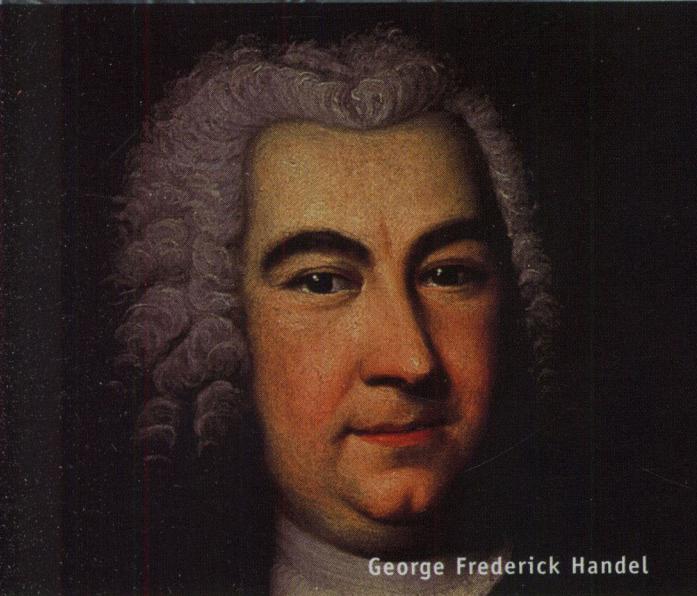
# DE LA C.-B., L'ALBERTA, LA SASKATCHEWAN, LA NOUVELLE-ÉCOSSE ET DU QUÉBEC.



Jeanne d'Arc



Alfred Nobel



George Frederick Handel



Fyodor Dostoyevsky

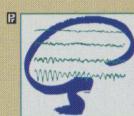
## DES EFFORTS EXCEPTIONNELS OU UN TALENT EXTRAORDINAIRE. MAINTENANT DES SOLUTIONS PLUS ACCESSIBLES.

- Généralement bien toléré : les interruptions entraînées par des réactions adverses étaient de 10,6 % pour les doses journalières de 200 à 400 mg, comparé à 5,8 % pour le groupe placebo (cela semblerait augmenter pour les doses journalières supérieures à 400 mg)<sup>2</sup>
- Aucune preuve d'éruption cutanée sérieuse ni d'anémie aplasique<sup>2</sup>
- Il n'est généralement pas nécessaire de changer le dosage des médications principales; les patients prenant de la phénytoïne et manifestant des signes ou symptômes de toxicité devraient faire contrôler leurs niveaux de phénytoïne<sup>12</sup>
- Dosage commode BID

<sup>†</sup>Comme pour les autres traitements antiépileptiques, veuillez vous reporter aux renseignements thérapeutiques pour plus de détails concernant les interactions médicamenteuses. On a rapporté l'occurrence de 1,5 % (n = 1715) de calculs rénaux\*. Dans une étude (n = 1200), 83 % des patients (15 sur 18) ont choisi de continuer le traitement\*. Assurer un taux d'hydratation adéquat et éviter l'utilisation parallèle d'autres inhibiteurs de l'anhydrase carbonique\*.

Profil favorable des effets secondaires  
(les plus courants affectent le SNC)

	TOPAMAX 200-400 mg (n = 113)	PLACEBO (n = 216)
Somnolence	30,1	9,7
Étourdissements	28,3	15,3
Ataxie	21,2	6,9
Ralentissement psychomoteur	16,8	2,3
Troubles de la parole	16,8	2,3
Nervosité	15,9	7,4
Nystagmus	15,0	9,3
Paresthésie	15,0	4,6



**TOPAMAX**  
topiramate

Aide vos patients à mieux tirer parti de leur vie



IN THE TREATMENT OF ALZHEIMER'S DISEASE

Once-a-day Aricept® improves patient function:

For a more *active* day,  
a *brighter* tomorrow.

The loss of function that comes with Alzheimer's disease has a devastating effect on everyone involved: patient, caregiver and family.<sup>1</sup> Once-a-day Aricept® enhances cognition and improves patient function.<sup>2\*</sup> Once-a-day Aricept® (10 mg o.d.) has been shown to significantly improve complex Activities of Daily Living (ADL).<sup>3</sup> A recent Canadian economic evaluation predicts that improvement in patient outcome will result in an overall healthcare cost saving.<sup>4</sup> And once-a-day Aricept® has proven efficacy, dosing simplicity<sup>5</sup> and tolerability<sup>6</sup> in over 54 million patient days of therapy worldwide.<sup>5</sup>

Once-a-day Aricept®. To help your Alzheimer's patients enjoy more *active* days, and look forward to a *brighter* tomorrow.

Aricept® is indicated for the symptomatic treatment of patients with mild to moderate Alzheimer's disease. Aricept® has not been studied in controlled clinical trials for longer than 6 months.

† Cognition measured by ADAS-cog and MMSE; Function measured by CIBIC plus.

‡ The most common side effects observed with Aricept® include diarrhea, muscle cramps, nausea and insomnia; these effects are usually mild and transient, resolving with continued use.

§ For patients not responding after 4-6 weeks of therapy at 5 mg/d, a 10 mg/d dose may be considered.

5 For brief prescribing information see pages A-35, A-36

Once-a-day  
**Aricept®**  
donepezil HCl 5 & 10 mg tablets

Hope for a brighter tomorrow

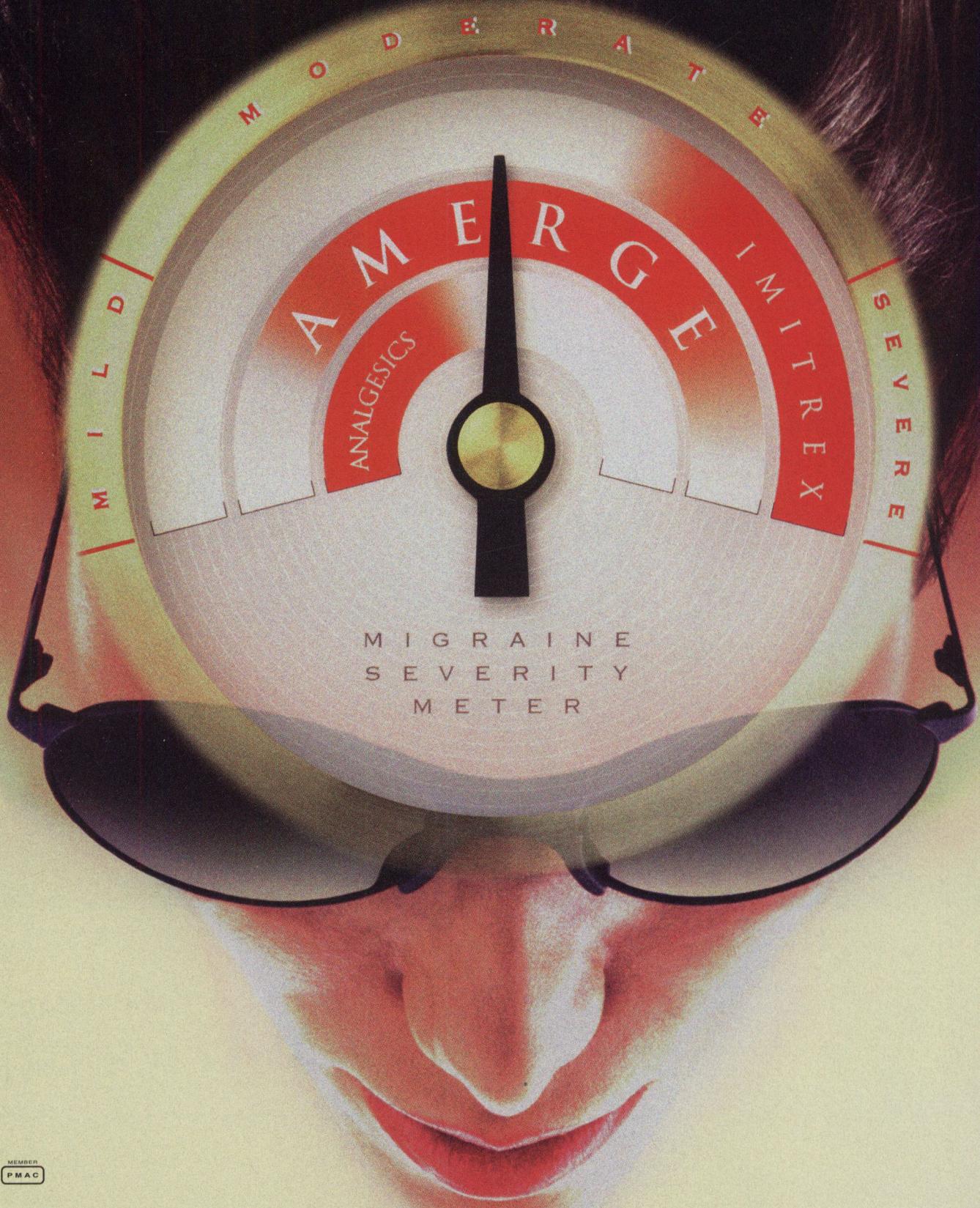


\* TM Eisai Co. Ltd.,  
Tokyo, Japan  
Pfizer Canada Inc., licensee  
© 1998, Pfizer Canada Inc.  
Kirkland, Quebec  
H9J 2MS

PAAB

We're part of the cure

If only the severity of migraines  
could be measured...



New **Amerge**<sup>®</sup> from Glaxo Wellcome

*A highly selective 5-HT<sub>1</sub> receptor agonist  
for moderate to severe migraines\**

## Highly Tolerable

- Overall incidence of adverse events in controlled clinical trials after treatment with AMERGE was similar to placebo<sup>1-3</sup>  
(31% AMERGE 2.5 mg vs. 32% placebo)<sup>2</sup>
- Chest and neck sensations characteristic of the 5-HT<sub>1</sub> agonist class reported in 1.2 - 2.1% of patients<sup>1†‡</sup>
- Tolerability maintained regardless of number of attacks treated<sup>4</sup>

## 5-HT<sub>1</sub> Efficacy with Long-lasting Migraine Relief

- Significant relief was sustained over 24 hours<sup>2||</sup>
- 93% of attacks per patient did not require a second dose for recurrence<sup>4#</sup>
- Efficacy of AMERGE is unaffected by use with beta-blockers, calcium channel blockers, or tricyclic antidepressants<sup>1§</sup>

\*AMERGE is indicated for the acute treatment of migraine attacks with or without aura. AMERGE is contraindicated in patients with hemiplegic, basilar, or ophthalmoplegic migraine. Safety and efficacy have not been established for cluster headache which is present in an older predominantly male population.<sup>1</sup>

<sup>1</sup>AMERGE is contraindicated in patients with history, symptoms, or signs of ischemic cardiac, cerebrovascular or peripheral vascular syndromes, valvular heart disease or cardiac arrhythmias (especially tachycardias). In addition, patients with other significant underlying cardiovascular disease (e.g., atherosclerotic disease, congenital heart disease) should not receive AMERGE. AMERGE is also contraindicated in patients with uncontrolled or severe hypertension.

<sup>2</sup>With 2.5 mg naratriptan.

<sup>3</sup>Headache relief = reduction of moderate or severe pain to mild or no pain.

<sup>4</sup>Percentage does not represent recurrence rate. Headache recurrence equals a return of moderate or severe pain in 4 to 24 hours post dose following initial relief.

<sup>†</sup>Appropriate observation of the patient for acute and long term adverse events is advised.

<sup>‡</sup>AMERGE<sup>®</sup> is a registered trademark of Glaxo Group Ltd., Glaxo Wellcome Inc. licensed use.

**Consult Product Monograph for complete prescribing information, patient selection, screening and monitoring criteria.**

Product monograph available to health care professionals upon request.

New



*Highly tolerable, long-lasting migraine relief*

Also available in 1 mg tablets

**GlaxoWellcome**

# Le premier et le seul parmi les nouveaux antiépileptiques\* indiqué en monothérapie après une polythérapie



\*C'est-à-dire la lamotrigine, la gabapentine, la vigabatrine et le topiramate, qui se distinguent des antiépileptiques traditionnels.

\*\*Un passage réussi à la lamotrigine en monothérapie a été obtenu chez 50 patients sur 69.

\*\*\*L'essai comprenait trois phases : traitement d'appoint, retrait des autres antiépileptiques et monothérapie. Ne doit pas être considéré comme une mesure absolue de l'efficacité parce que les patients n'ont pas terminé toutes les phases de l'essai lorsque leur réponse n'était pas satisfaisante.

+Les effets indésirables le plus fréquemment associés à un arrêt de la monothérapie à LAMICTAL ont été les éruptions cutanées (6,1 %), l'asthénie (1,1 %), la céphalée (1,1 %), la nausée (0,7 %) et les vomissements (0,7 %)<sup>3</sup>. Pour de plus amples renseignements, consulter la monographie de LAMICTAL.

†Veuillez consulter la monographie pour ce qui est de l'ajustement posologique de LAMICTAL lors du retrait des antiépileptiques administrés en concomitance.

# Pour la maîtrise d'un vaste éventail de crises, associée à un profil discret d'effets indésirables liés au SNC

D'une manière générale, une monothérapie efficace a été reconnue comme le traitement de choix pour obtenir la maîtrise des crises avec le minimum d'effets indésirables chez les patients souffrant d'épilepsie<sup>1</sup>.

Maintenant, renforçant son succès éprouvé comme traitement d'appoint<sup>2</sup>, LAMICTAL est indiqué comme monothérapie chez l'adulte après le retrait d'antiépileptiques administrés en concomitance<sup>3</sup>.

## MONOTHÉRAPIE HAUTEMENT EFFICACE

Dans le cadre d'un essai ouvert sur le passage d'un traitement d'appoint à la monothérapie incluant le retrait des antiépileptiques administrés en concomitance, la monothérapie à LAMICTAL a permis à 30 % (n = 50) des patients traités avec succès de rester exempts de crises<sup>\*4</sup>. Dans un autre essai du même type, ≥ 40 % des patients ont obtenu une réduction de la fréquence de leurs crises d'au moins 50 % pendant toutes les étapes successives de l'essai<sup>\*\*5</sup>.

## GÉNÉRALEMENT MIEUX TOLÉRÉ<sup>†</sup>

Selon les données regroupées de trois essais sur la monothérapie, la fréquence des retraits

dus aux effets indésirables sur le SNC était de 2,5 % (n = 443) avec la monothérapie à LAMICTAL, par rapport à 7,4 % pour la phénytoïne (n = 95) ou à 7,7 % pour la carbamazépine (n = 246)<sup>6</sup>. La fréquence de somnolence, d'asthénie et d'ataxie a été moins élevée pour LAMICTAL que pour la carbamazépine et la phénytoïne. On n'a noté aucune différence quant à la fréquence des retraits dus aux éruptions cutanées entre LAMICTAL (6,1 %) et la phénytoïne (5,3 %) ou la carbamazépine (8,9 %)<sup>6</sup>. Une fréquence plus élevée d'éruptions cutanées a été associée à une augmentation posologique plus rapide de la dose initiale de LAMICTAL ou à l'utilisation concomitante d'acide valproïque<sup>3</sup>.

## MAÎTRISE SUR UN VASTE ÉVENTAIL DE CRISES

LAMICTAL a été utilisé avec succès pour un vaste éventail de crises comme traitement d'appoint dans une polythérapie<sup>2</sup>. Vous pouvez passer avec confiance de LAMICTAL comme traitement d'appoint en polythérapie à LAMICTAL en monothérapie<sup>††</sup>, en particulier lorsque les effets indésirables liés au SNC sont une considération importante.



**GlaxoWellcome**  
Glaxo Wellcome Inc.  
Bureau d'affaires du Québec



# NEW

Pr



# FROM EARLY THERAPY

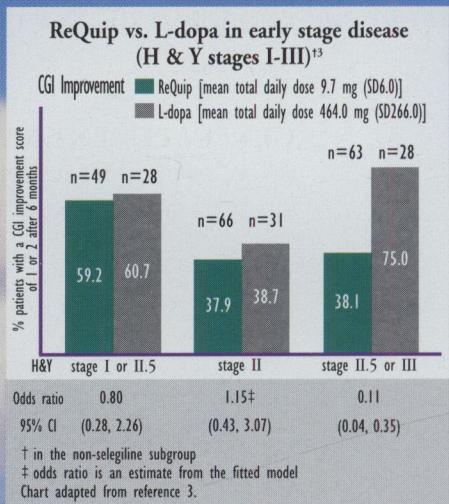
ReQuip is a new dopamine agonist you can use continuously right from the start of Parkinson's therapy. It is indicated for early therapy without concomitant levodopa, and subsequent adjunct therapy with levodopa. And, as a result, ReQuip brings specific benefits to both early and late Parkinson's therapy.

## THE FIRST SELECTIVE, NON-ERGOLINE DOPAMINE AGONIST.

ReQuip has high affinity for dopamine receptors and binds selectively to dopamine D<sub>2</sub>-type receptors<sup>1</sup> - the key receptors for antiparkinsonian activity.

## EFFECTIVE THERAPY IN EARLY DISEASE.

ReQuip therapy is highly effective in early Parkinson's disease.<sup>1,2,3</sup> In fact, ReQuip and levodopa showed no difference in Clinical Global Improvement (CGI) in patients at Hoehn and Yahr stages I-II; however levodopa showed greater improvement in patients with more severe disease.<sup>1,3</sup>



As is expected of peripheral dopaminergic drugs, in early therapy, nausea (59.9%), dizziness (40.1%), and somnolence (40.1%) were the most common side effects of ReQuip. All dopamine agonists appear to impair the systemic regulation of blood pressure with resulting orthostatic symptoms of dizziness or lightheadedness. Patients should be monitored and informed of this risk. ReQuip should be titrated to optimal effect.<sup>1</sup>



**SmithKline Beecham**  
Pharma

# QUIP™

THE NEW  
DOPAMINE AGONIST  
YOU CAN START WITH  
AND STAY WITH.

►►►►►►► TO ADJUNCT THERAPY

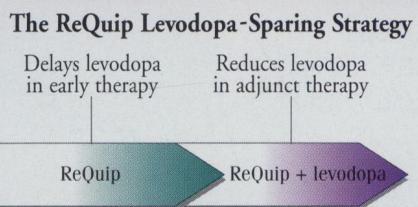
## CAN DELAY THE INTRODUCTION OF LEVODOPA

ReQuip has also shown that it can successfully maintain its efficacy in early therapy. In clinical trials, it has sustained symptom control and thereby delayed the need to initiate levodopa therapy.<sup>3,4</sup>

## OFFERS BENEFITS IN ADJUNCT THERAPY.

When it is necessary to add levodopa, ReQuip continues to offer important clinical benefits. In combination with levodopa, ReQuip was shown to allow a 20% reduction in levodopa dose<sup>1</sup> and increase patients' 'on' time by 20% after 6 months.\*

\*Achieved by 28% of ropinirole (n=94) and 11% of placebo (n=54) treated patients. 95% CI of 1.533, 12.658<sup>1</sup>



## MINIMIZES LEVODOPA LOAD TO HELP DELAY COMPLICATIONS.

Because ReQuip spares levodopa in early and adjunct therapy, it can substantially reduce the patient's overall levodopa load. Using ReQuip in early therapy can help delay the onset and reduce the risk of long-term levodopa complications such as dyskinesias, 'on-off' effect and 'wearing off' effect.<sup>3</sup>

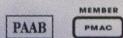
In adjunct therapy with levodopa, dyskinesias (33.7%) and nausea (29.8%) were the most common side effects of ReQuip.<sup>1</sup> And unlike other dopamine agonists, no ergot-related adverse experiences have been reported with ReQuip.<sup>1</sup>

## HELPS EXTEND THERAPY AND PROLONG FUNCTION.

By sparing levodopa right from the start, ReQuip can extend and enhance the response to levodopa therapy. And that can help patients function better longer. So consider ReQuip for your Parkinson's patients. Because starting ReQuip today can mean a brighter outlook for tomorrow.



RIGHT FROM THE START.

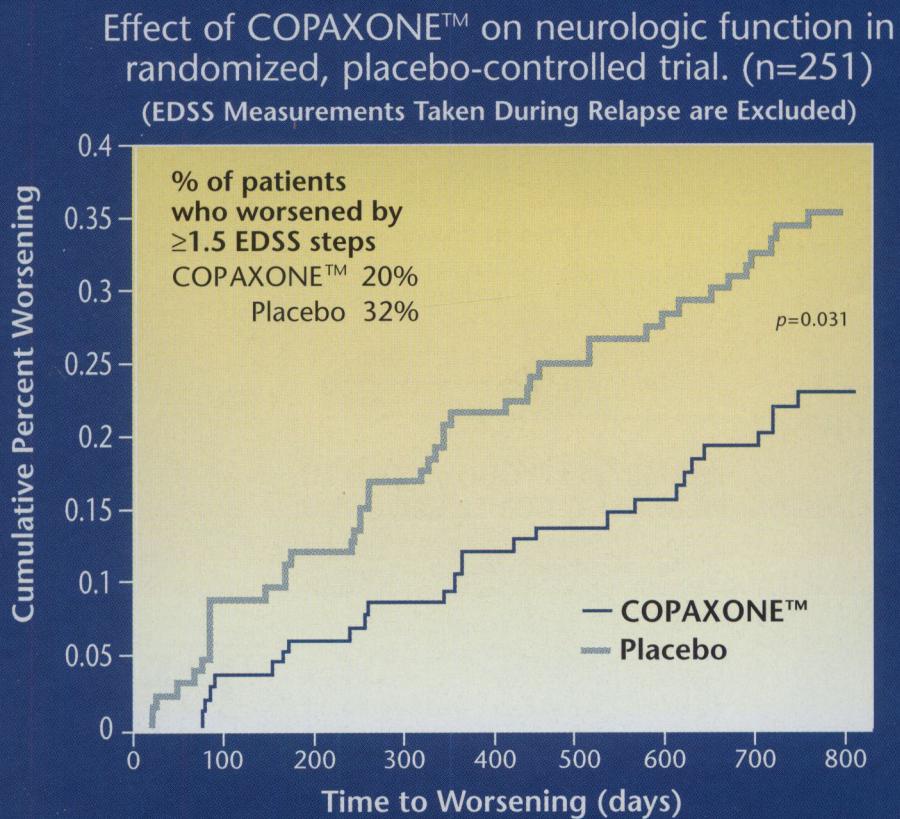


For brief prescribing information see pages A-36, A-37

*In relapsing-remitting multiple sclerosis:*

# Why are neurologists choosing COPAXONE™?

(glatiramer acetate for injection)



Adapted from Johnson, KP et al.<sup>1,2</sup>

## SUSTAINED EFFICACY

Kate's physician chose COPAXONE™ because it keeps working.<sup>†1,2</sup> Kate isn't giving in to MS.\*

**Kate H.**  
Burlington, Ontario



## PROVEN COMPLIANCE

Claire's physician chose COPAXONE™ because it's generally well-tolerated.<sup>1,2,3</sup> It's one she could start on and stay with.\*

**Claire S.**  
La Salle, Québec



For information on **Shared Solutions™**, a free patient support program for healthcare professionals and their patients:

**1-800-283-0034**

**info@tevamarion.com**



1-800-283-0034

**TEVA MARION**  
PARTNERS  
[www.tevamarion.com](http://www.tevamarion.com)

 **COPAXONE™**  
(glatiramer acetate for injection)

† mean number relapses (24 mos) COPAXONE™ 1.19: Placebo 1.68 (p=0.007)<sup>2</sup>

\*Not actual patient case study.

COPAXONE™ (immunomodulator) is indicated for reduction of the frequency of relapses in ambulatory patients with relapsing-remitting multiple sclerosis. A correlation between reduction in attack frequency alone and decreased risk of future disabilities remains to be established. Safety and efficacy beyond 2 years have not been adequately studied in placebo-controlled trials. Safety and efficacy in chronic progressive MS have not been evaluated. The most commonly observed adverse events (>20%) include (not all adverse events were related to treatment): injection site reactions (2.4%-66.4% depending on reaction), vasodilation (27.2%), chest pain (26.4%), hypertonia (35.2%), asthenia (64.8%), flu syndrome (30.4%), back pain (26.4%), nausea (23.2%), arthralgia (24.8%), rhinitis (23.2%).

COPAXONE™ is a trademark of Teva Pharmaceutical Industries Ltd. and is used under licence.

Shared Solutions™ is a trademark of Teva Marion Partners Canada.™

TEVA and the design version thereof are trademarks of Teva Pharmaceutical Industries Ltd. and are used under licence. MARION and the design version thereof are trademarks of Hoechst Marion Roussel and are used under licence.

©1998 Teva Marion Partners Canada.

# A Renewed Opportunity



## PARKINSON'S DISEASE

A world in which the therapeutic options are limited<sup>1</sup>

For those who have it, treat it, live with it; managing their Parkinson's disease can be quite frustrating. Yet there are moments that can be most rewarding. Motor function improves, the number of "off" hours decreases, rigidity subsides, gait improves. Their levodopa seems to be working... at least for today! Then there are times when nothing seems to help. Even their medication seems to be causing problems. It seems hopeless...

Today, however, there is another way to renew their hope. Even after its discovery more than fifteen years ago, Permax (pergolide mesylate) is still considered the most potent dopamine agonist available for the treatment of Parkinson's disease.<sup>1-3</sup> With its unique mode of action, i.e. stimulating both D<sub>1</sub> and D<sub>2</sub> dopamine receptors, Permax has demonstrated (n=376) statistically significant improvement in virtually all those numerous parameters of parkinsonian function, including bradykinesia, rigidity, gait, dexterity, etc. Equally important, these benefits were achieved with significantly less levodopa... 24.7% (p <.001), and by starting Permax at low doses "Adverse reactions were, for the most part, mild, reversible, and not of major clinical significance."<sup>3\*</sup>

Successful treatment with Permax can last for up to 3-5 years<sup>4,5</sup> and renewed improvement has been demonstrated when Permax was given to patients (n=10) in whom the beneficial effect of bromocriptine had waned,<sup>4</sup> whereas the reverse was not true in a separate, non-comparable study (n=11) when bromocriptine was given to Parkinson's patients in whom Permax had waned.<sup>6</sup>

*So, when given an opportunity to manage Parkinson's disease, there may be a way of renewing hope.*



**PERMAX®**  
pergolide mesylate

**DRAXIS**

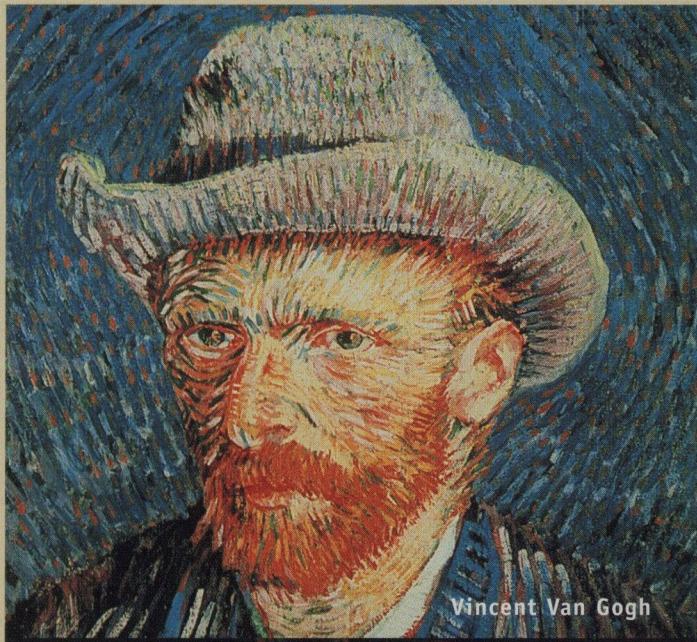


Draxis Health Inc.  
Mississauga, Ontario

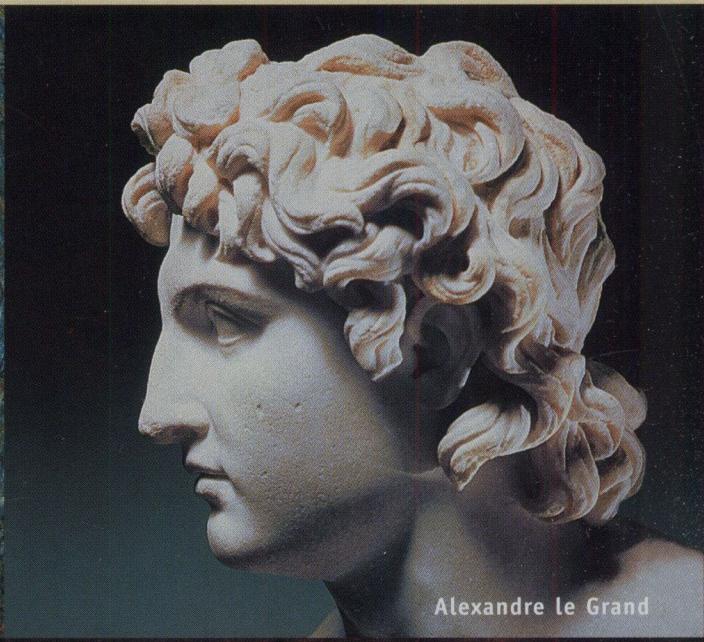
PAAB

\* Rapid escalation of pergolide dosage may cause severe adverse reactions. Therefore a slow increase combined with a concomitant gradual and limited reduction of levodopa is recommended. See ADVERSE REACTIONS section in Prescribing Information

# DU NOUVEAU EN ÉPILEPSIE. MAINTENANT REMBOURSÉ PAR LES FORMULAIRES



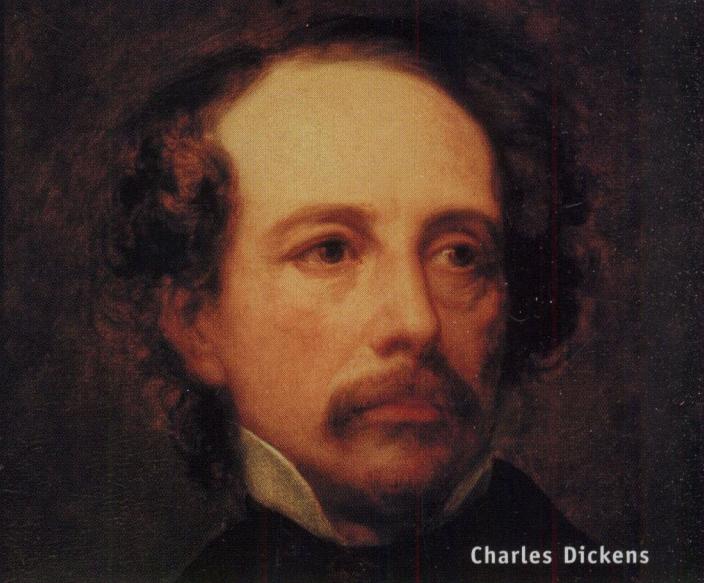
Vincent Van Gogh



Alexandre le Grand

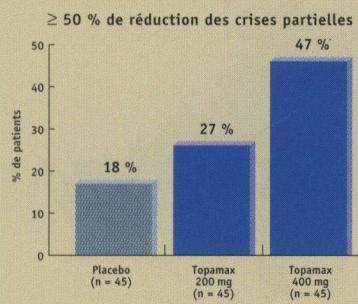


Lord Byron



Charles Dickens

## NAGUÈRE ENCORE, LA RÉUSSITE EXIGEAIT D'UN ÉPILEPTIQUE HEUREUSEMENT POUR VOS PATIENTS, IL EXISTE



Extrait de référence N° 1. Étude en double aveugle avec placebo contre TOPAMAX b.i.d. comme traitement d'appoint, portant sur 181 patients atteints d'épilepsie partielle réfractaire et recevant une ou deux autres médications antiépileptiques. \*p = 0,013.

### Contrôle amélioré d'une plus grande variété de types de crises.

- TOPAMAX est indiqué comme traitement d'appoint pour toutes les épilepsies réfractaires aux traitements conventionnels. À l'heure actuelle, les données sur l'utilisation de TOPAMAX comme traitement unique demeurent limitées.
- Taux élevé de répondants : 27 % (200 mg/jour, n = 45) et 47 % (400 mg/jour, n = 45) des patients ont manifesté une réduction des crises d'épilepsie partielle ≥ 50 % (étude d'une durée de 16 semaines)<sup>1</sup>
- Contrôle efficace pour les patients souffrant de cirsos toniques-cloniques secondaires généralisées : 36 % des patients ont manifesté une réduction de 100 % (200-600 mg, n = 42, étude portant sur 16 semaines)<sup>1</sup>
- Triple mécanisme d'action unique : blocage des canaux sodiques, activation de l'acide gamma-aminobutyrique, antagonisme du glutamate)<sup>2</sup>

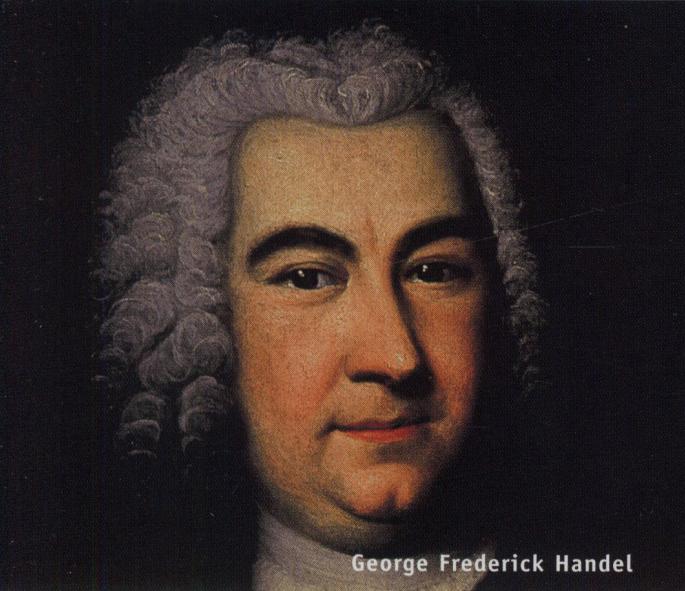
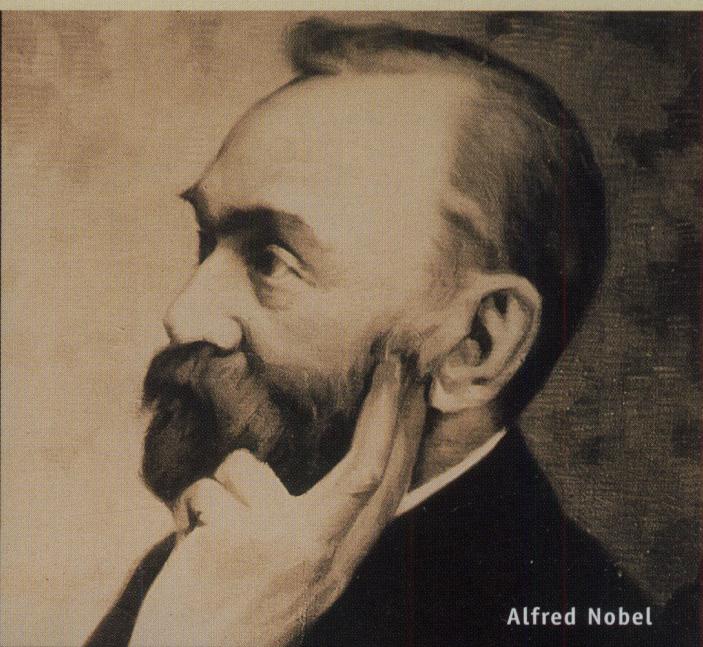
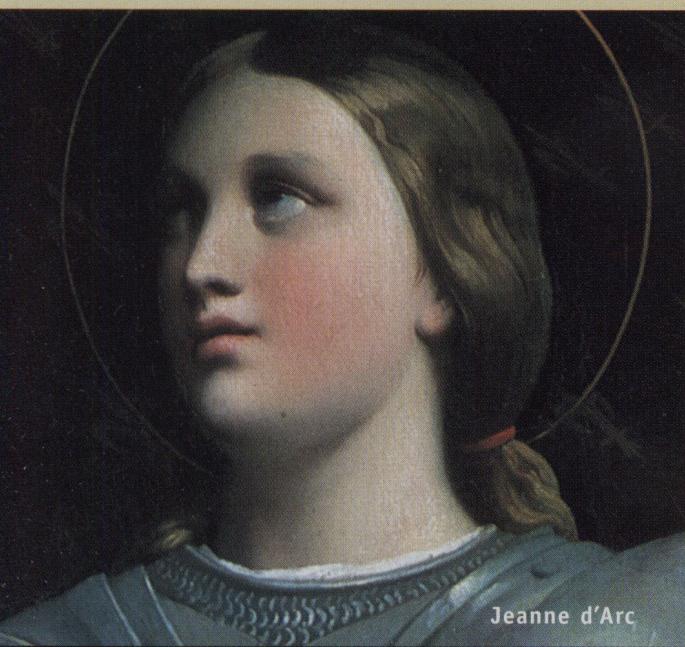


JANSSEN-ORTHO Inc. 19 Green Belt Drive, North York, Ontario M3C 1L9

\*Marque déposée © Janssen-Ortho Inc. 1997



# DE LA C.-B., L'ALBERTA, LA SASKATCHEWAN, LA NOUVELLE-ÉCOSSE ET DU QUÉBEC.



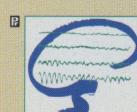
## DES EFFORTS EXCEPTIONNELS OU UN TALENT EXTRAORDINAIRE. MAINTENANT DES SOLUTIONS PLUS ACCESSIBLES.

- Généralement bien toléré: les interruptions entraînées par des réactions adverses étaient de 10,6 % pour les doses journalières de 200 à 400 mg, comparé à 5,8 % pour le groupe placebo (cela semblerait augmenter pour les doses journalières supérieures à 400 mg)<sup>2</sup>
- Aucune preuve d'éruption cutanée sérieuse ni d'anémie aplasique<sup>2</sup>
- Il n'est généralement pas nécessaire de changer le dosage des médications principales; les patients prenant de la phénytoïne et manifestant des signes ou symptômes de toxicité devraient faire contrôler leurs niveaux de phénytoïne<sup>12</sup>
- Dosage commode BID

<sup>†</sup>Comme pour les autres traitements antiépileptiques, veuillez vous reporter aux renseignements thérapeutiques pour plus de détails concernant les interactions médicamenteuses. On a rapporté l'occurrence de 1,5 % ( $n = 1715$ ) de calculs rénaux<sup>1</sup>. Dans une étude ( $n = 1200$ ), 83 % des patients (15 sur 18) ont choisi de continuer le traitement<sup>2</sup>. Assurer un taux d'hydratation adéquat et éviter l'utilisation parallèle d'autres inhibiteurs de l'anhydrase carbonique<sup>2</sup>.

Profil favorable des effets secondaires  
(les plus courants affectent le SNC)

	TOPAMAX 200-400 mg (n = 113)	PLACEBO (n = 216)
Somnolence	30,1	9,7
Étourdissements	28,3	15,3
Ataxie	21,2	6,9
Ralentissement psychomoteur	16,8	2,3
Troubles de la parole	16,8	2,3
Nervosité	15,9	7,4
Nystagmus	15,0	9,3
Paresthésie	15,0	4,6



**TOPAMAX\***  
topiramate

Aide vos patients à mieux tirer parti de leur vie

Pour documentation voir pages A-53, A-54, A-55

# Introducing Rebif®. The 1<sup>st</sup> Relapsing & Remitting MS Treatment to Significantly Improve All 3 Major Outcomes

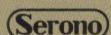


The largest and most comprehensive RRMS clinical study ever undertaken, PRISMS<sup>†</sup>, confirms  
Rebif<sup>®</sup> (Interferon Beta-1a for injection) ...

The most commonly reported adverse events are injection-site reactions and flu-like symptoms - e.g., asthenia, pyrexia, chills, myalgia, headache and arthralgia. These tend to decrease in frequency and severity with continued treatment. Please see Product Monograph for further information on patient selection.

<sup>†</sup>2-year clinical trial involving 560 patients given 44 mcg and 22 mcg doses of Rebif three times per week.

<sup>‡</sup>Evidence of efficacy is derived from 2-year trials only.



For more information contact our website at <http://www.ms-network.com>



## Reduces progression of disability

The time to confirmed progression was significantly increased by 78% and 54% at both the 44 mcg and 22 mcg doses respectively versus placebo.<sup>‡</sup>

## Reduces the number and severity of relapses

The likelihood of remaining relapse-free at 2 years increased by 75% with the 22 mcg dose and by 119% with the 44 mcg dose.<sup>‡</sup>

## Reduces MRI disease activity and burden

Compared to placebo, Rebif<sup>®</sup> significantly reduced the number of active lesions per patient per MRI scan by 78% and 67% (at the 44 and 22 mcg doses respectively) in 560 patients. This reduction was seen early and persisted throughout the 2 year study period.<sup>‡</sup>

## Flexible dosing for optimal response

Available in ready-to-use liquid pre-filled syringes for subcutaneous injection.

Recombinant human interferon beta-1a



MULTIPLE EFFICACY.  
MULTIPLE SUPPORT.