



THE CANADIAN JOURNAL OF

# Neurological Sciences

LE JOURNAL CANADIEN DES

# Sciences Neurologiques

AN INTERNATIONAL JOURNAL / UN JOURNAL INTERNATIONAL

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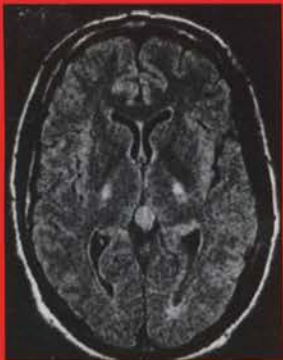
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Neuroimaging Highlight

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IF YOU STARTED PATIENTS ON REQUIP,  
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**REQUIP**<sup>ropinirole</sup>  
Rethinking Parkinson's.

has demonstrated a low propensity to produce dyskinesias.‡††† Maybe it's time to rethink Parkinson's. And start early Parkinson's patients on ReQuip alone.

† Hoehn and Yahr stages III. †† A 6 month interim analysis of a 5-year, double-blinded, randomized, multicenter study of patients with early Parkinson's disease. N = 268. 179 patients received ropinirole and 89 received L-dopa. The mean daily dose was 9.7 mg and 464.0 mg respectively. There was no difference in Clinical Global Improvement scale in patients with Hoehn and Yahr stages III although L-dopa showed improvement in a greater proportion of patients with more severe disease. The proportion of responders was 58% in the L-dopa group and 48% in the ropinirole group; this was not of statistical significance. ††† In early therapy, the respective incidences of dyskinesia in early therapy of patients receiving ropinirole was 1.2%, and of patients receiving L-dopa was 11.2%. Meta analysis, n = 1364, 17 months. Nausea (39.1%), somnolence (12.3%) and insomnia (12.3%) were the most common side effects of ReQuip therapy. Six percent of ropinirole patients and nine percent of L-dopa patients had at least one psychiatric symptom (confusion, hallucinations, or delusions).



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Life is our life's work

# New in Lennox-



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

†With the exception of atypical absence seizures.

‡Statistical significance not reported.

§Rarely, serious skin rashes, including Stevens–Johnson syndrome and toxic epidermal necrolysis (Lyell syndrome), have been reported.

¶Although the majority recover following drug withdrawal, some patients experience irreversible scarring and there have been rare cases of associated death.

‡Frequently reported adverse events were pharyngitis, fever, infection, and rash ( $p =$  not significant).

\*\*For detailed information about dosing in adult and pediatric patients with LGS, please refer to the full prescribing information for LAMICTAL.

Dosage of add-on LAMICTAL in Motte *et al.* and Mullens *et al.* studies ranged from 50 to 400 mg/day, after escalation.

**DO NOT EXCEED** the recommended initial dose and subsequent dose escalations of LAMICTAL. More rapid initial titration has been associated with an increased incidence of serious dermatological reactions.

Product Monograph available to health care professionals upon request.

# Gastaut Syndrome

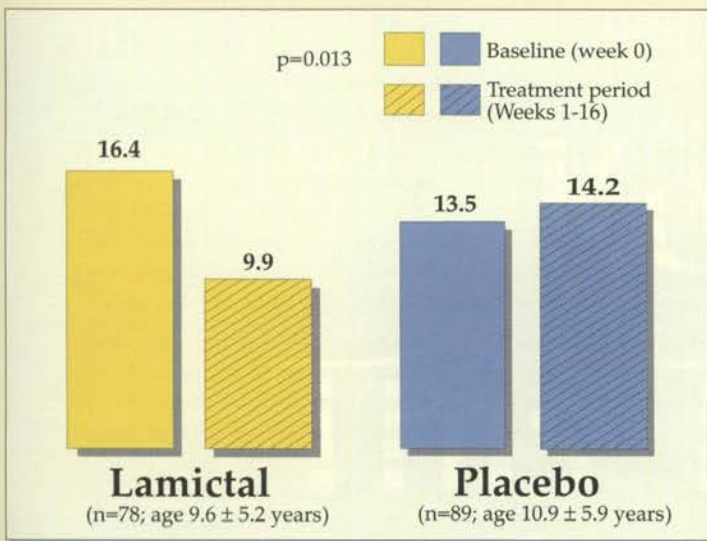
Lamotrigine  
**Lamictal**<sup>®</sup>

LAMICTAL is the first and only of the newer\* antiepileptic drugs (AED) indicated as adjunctive therapy for pediatric and adult patients with Lennox-Gastaut syndrome (LGS).<sup>1</sup> LAMICTAL is also the first and only of the newer\* AEDs indicated for monotherapy after polytherapy in adults.

## Significantly superior control over the wide range of seizure types associated with Lennox-Gastaut syndrome<sup>†</sup>

- Add-on LAMICTAL significantly reduced the number of all major seizures, all drop attacks, and all tonic-clonic seizures in patients with LGS.<sup>1</sup>

MEDIAN NUMBER OF ALL MAJOR SEIZURES/WEEK



A double-blind, randomised, placebo-controlled trial in patients from 3 to 25 years of age

## Low CNS side-effect profile maintained in patients with Lennox-Gastaut syndrome aged 3-25

- Low withdrawal rate compared to placebo:<sup>†1,2</sup> group taking LAMICTAL 3.8% (mostly due to rash<sup>§</sup>) vs. placebo group 7.8% (mostly due to deterioration of seizure control).
- No significant difference in the incidence of adverse events between LAMICTAL and placebo except for cold or viral illness (LAMICTAL 5% vs placebo 0%; p=0.05).<sup>11</sup>

## Improved neurological function and cognitive skills<sup>2,3</sup>

- A greater proportion of LGS patients (age 3 to 25 years) treated with add-on LAMICTAL (n=79) vs add-on placebo (n=90) had a **clinically significant improvement in neurological findings** across the 16 week treatment period for: behaviour (30.4% vs. 14.4%); speech (11.4% vs. 2.2%); and non-verbal communication (11.4% vs. 7.8%).<sup>†3</sup>

LAMICTAL offers superior control over the seizure types associated with LGS and a low CNS side-effect profile. You may also improve the neurological function and cognitive skills of your patients.<sup>2,3</sup> Add LAMICTAL\*\* as soon as the diagnosis of LGS is suspected.<sup>4</sup>

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# Keep This Threat Further Away

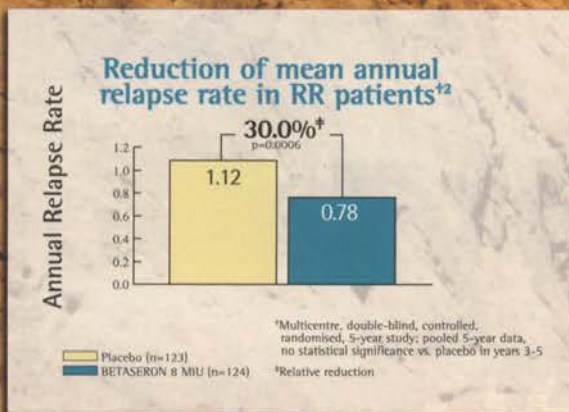


# BETASERON delays disability progression\*<sup>1</sup>

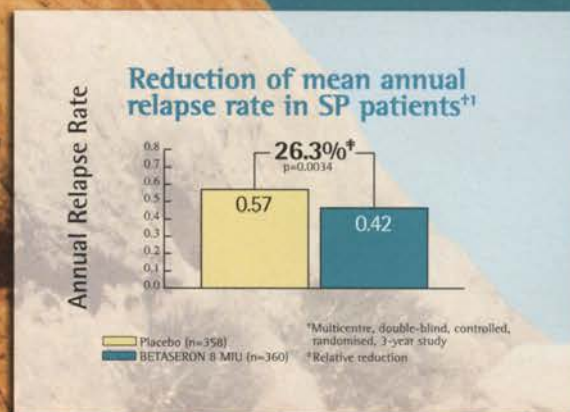


Adapted from BETASERON Product Monograph 1999

## BETASERON reduces relapse rate in both relapsing-remitting<sup>2</sup> and secondary progressive MS<sup>1</sup>



Adapted from the IFNB MS Study Group 1995



Adapted from BETASERON Product Monograph 1999

## BETASERON has a manageable side-effect profile<sup>1</sup>

The most common side effects related to BETASERON in patients with SPMS are: flu-like syndrome (61%); fever (40%); chills (23%); injection-site inflammation (48%); injection-site reactions (46%); myalgia (23%); hypertonia (41%); rash (20%)<sup>1</sup>

Flu-like symptoms and injection-site reactions are manageable and lessen markedly with time<sup>1</sup>

\*BETASERON has been demonstrated to delay the progression of disability in secondary progressive MS patients. The safety and efficacy of BETASERON in primary progressive MS have not been evaluated. Efficacy of treatment for longer than 2 years has not been substantially demonstrated in relapsing-remitting MS. For secondary progressive MS, safety and efficacy data beyond 3 years are not available. FOR COMPLETE WARNINGS AND PRECAUTIONS, PLEASE REFER TO THE PRODUCT MONOGRAPH. PRODUCT MONOGRAPH AVAILABLE TO HEALTH CARE PROFESSIONALS UPON REQUEST.



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# Delays Disability Progression\*

*In RRMS and SPMS*

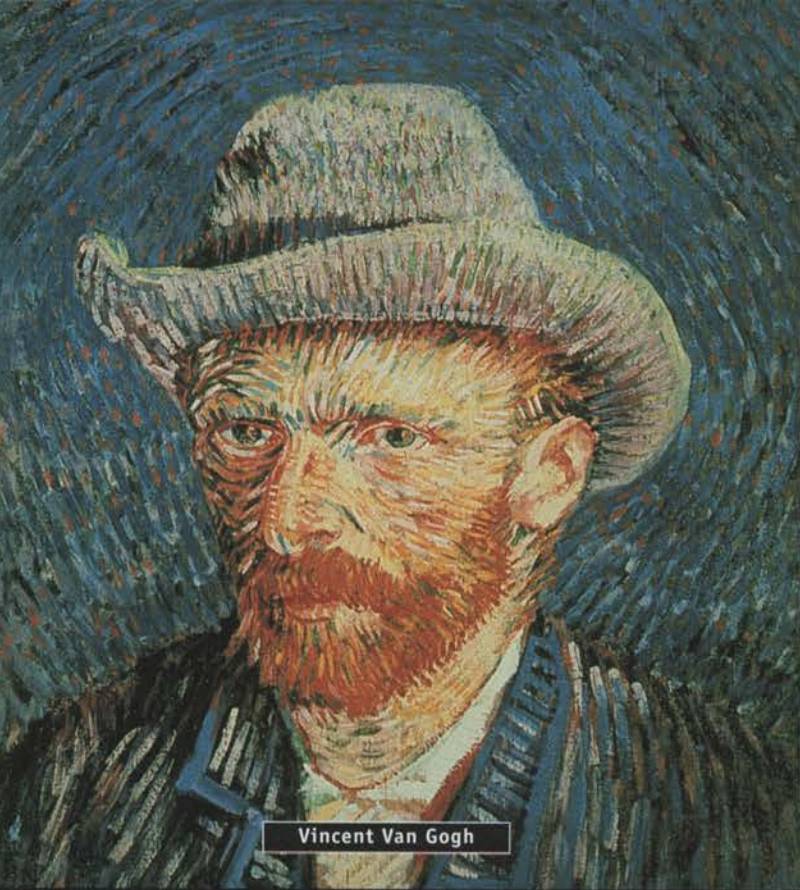


**BETASERON<sup>®</sup>**

*INTERFERON BETA-1b*

*From Onset Onwards*

**INDICATED  
FOR BOTH  
RRMS  
AND SPMS**



Vincent Van Gogh

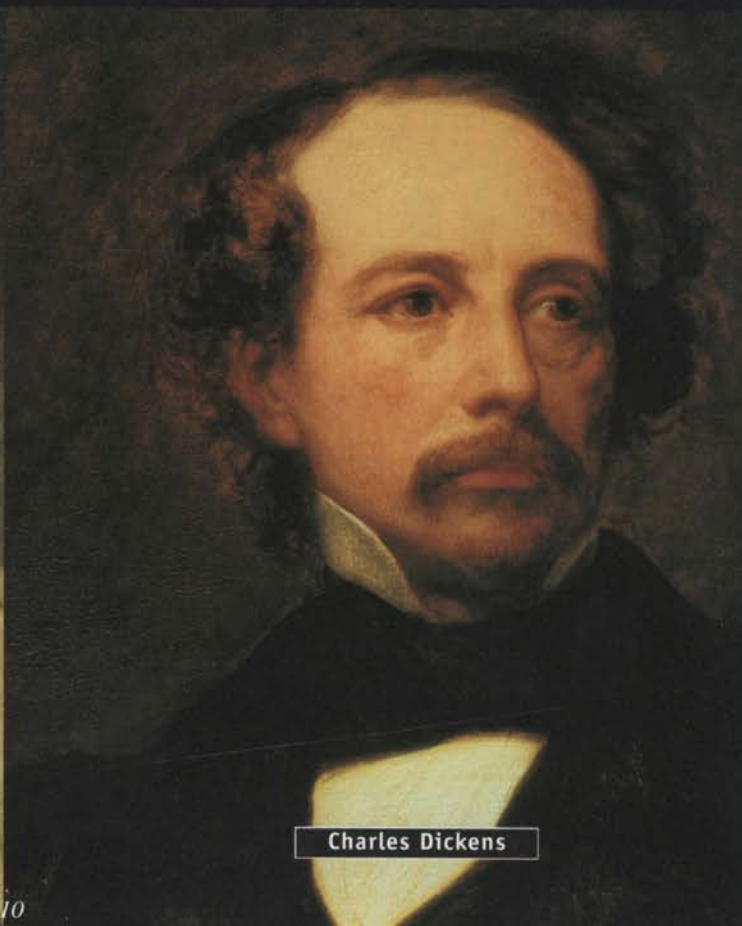


Joan of Arc

**YESTERDAY, PEOPLE WITH EPILEPSY  
HAD TO BE EXTRAORDINARY TO SUCCEED.**



Sir Isaac Newton



Charles Dickens

# EFFICACY ACROSS A BROAD RANGE OF SEIZURES.

- TOPAMAX demonstrates efficacy in Partial Onset, Primary Generalized Tonic-Clonic, and Lennox-Gastaut Seizures<sup>1</sup>
- Desirable seizure-free results were shown in both Adults (19%)<sup>1</sup> and Children (22%)<sup>1</sup> with Partial Onset Seizures<sup>2,3</sup>

# NO EVIDENCE OF LIFE-THREATENING SIDE EFFECTS.

- Like most antiepileptics, the most common side effects are CNS related, usually mild to moderate and transient<sup>5,1</sup>

# ADULT PATIENTS MAY EXPERIENCE WEIGHT LOSS.

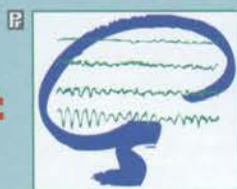
- 73% of patients (n=52) showed a mean weight decrease of 5.97 lb (Interim analysis. Average duration 60 days)<sup>4</sup>
- 96% of children in clinical trials (≥ one year) who lost weight showed resumption of weight gain in test period<sup>1,1</sup>

**TODAY, THERE'S TOPAMAX.**

# B.I.D. DOSING WITH THE PATIENT IN MIND.

- TOPAMAX is initiated and titrated to clinical response regardless of existing anticonvulsant therapy
- Tablets available on formulary<sup>1†</sup>

**NOW AVAILABLE  
IN SPRINKLE  
CAPSULES**



**TOPAMAX**<sup>\*</sup>  
topiramate

**NOW INDICATED  
FOR CHILDREN**

# HELPING PATIENTS MAKE MORE OF THEIR LIVES.

*\*TOPAMAX\* topiramate Tablets and Sprinkle Capsules: indicated as adjunctive therapy for the management of patients (adults and children two years and older) with epilepsy who are not satisfactorily controlled with conventional therapy. There is limited information on the use of topiramate in monotherapy at this time.*

<sup>1</sup> Open label, 20 week trial (n=450 Adults). Optimal dosing was 300-350 mg/day (Average 288 mg/day).

<sup>2</sup> Open label trial for children (n=72) treated for ≥ 3 months. Average dose of 10 mg/kg/day.

<sup>3</sup> CNS adverse events: Somnolence (30.1%), dizziness (28.3%), ataxia (21.2%), speech disorders (16.8%), psychomotor slowing (16.8%), nystagmus (15.0%), paresthesia (15.0%), nervousness (15.9%), difficulty with concentration/attention (8.0%), confusion (9.7%), depression (8.0%), anorexia (5.3%), language problems (6.2%) and mood problems (3.5%). In an audit of 1446 adults and 303 children, there appeared to be a similar pattern of adverse events.

<sup>4</sup> The long-term effects of weight loss in pediatric patients are not known.

<sup>††</sup> Limited use benefit: Ontario, Nova Scotia, New Brunswick, PEI. Full benefit: Quebec, Saskatchewan, British Columbia, Alberta, Manitoba.

Please refer to the TOPAMAX Prescribing Information for complete prescribing details.

REFERENCES: 1. TOPAMAX\* topiramate Tablets and Sprinkle Capsules Product Monograph, May 11, 1999. 2. Kamin M, Kraut L, Olson W. Dose optimization of topiramate as add-on therapy in adults with treatment-resistant partial-onset seizures *Neurology* 1999;52 (Suppl 2):A525-526. 3. Glauser TA, Elterman R, Wyllie E et al. Open label topiramate in paediatric partial epilepsy *Epilepsia* 1997;38 (Suppl 3):94. 4. Rosenfeld WE et al. Topiramate and concomitant weight loss. *Epilepsia* 1997;38 (Suppl 8):98.

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AS IN  
MS,  
SOME  
THINGS  
ARE NOT  
ALWAYS  
OBVIOUS.

*Danger can lurk behind the face of an apparently healthy MS patient.*

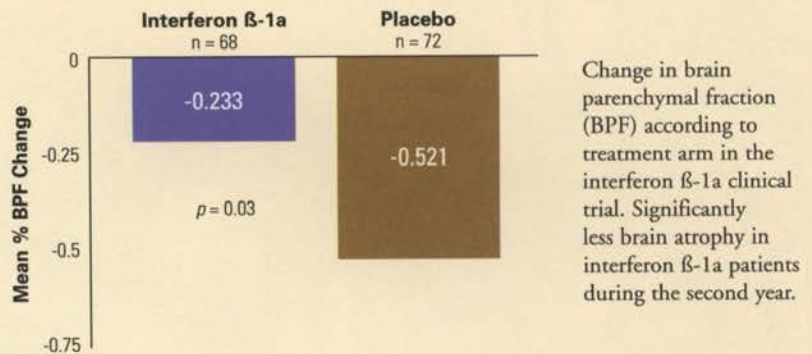
Progressive brain atrophy begins early in the course of MS and is likely irreversible.<sup>1</sup> Cognitive disturbances begin early in the MS process, but are often subtle and easily overlooked by patient and clinician alike.<sup>2-4</sup>

*AVONEX<sup>®</sup> has shown a 55% reduction in brain atrophy progression.<sup>5</sup>*

The use of AVONEX<sup>®</sup> can help patients with relapsing forms of MS maintain both physical AND mental function longer. In a clinical trial, patients treated with AVONEX<sup>®</sup> showed a 55% reduction in brain atrophy progression versus placebo, during the second year of treatment.<sup>5</sup> AVONEX<sup>®</sup> is proven to slow the progression of physical disability - patients treated with AVONEX<sup>®</sup> showed a 37% reduction in the risk of disability progression and a 32% reduction in annual exacerbation rate over two years.<sup>16</sup> AVONEX<sup>®</sup> also demonstrated a significant MRI effect showing an 89% reduction in gadolinium-enhanced lesions in patients with enhancement at baseline.<sup>07</sup>

#### Change in Brain Parenchymal Fraction<sup>5</sup>

(Adapted from Rudick et al.)



*Once-a-Week AVONEX<sup>®</sup> is generally well tolerated.<sup>6</sup>*

The once-a-week intramuscular dosing regimen with AVONEX<sup>®</sup>, means few opportunities for injection-related side effects to disrupt patient's lifestyle.<sup>6</sup> The most common side effects associated with treatment are flu-like symptoms and usually resolve within 24 hours after injection.<sup>6,8</sup> Incidence of side effects decrease over time with continued treatment for most people.<sup>8</sup> Please see product monograph for important patient selection and monitoring information.

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(Interferon beta-1a)  
IM Injection

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

\* It remains to be determined whether brain atrophy during the relapsing-remitting stage of MS will predict long-term disability progression better than clinical features in the majority of patients. Additional prospective studies are needed to determine the biologic factors associated with atrophy progression, the clinical significance of BPF change during the relapsing-remitting disease stage, and the impact and time course of therapeutic intervention.

† Kaplan-Meier estimate of percentage progressing at two years for placebo patients: 34.9% (n=143); AVONEX<sup>®</sup>-treated patients: 21.9% (n=158); (p=0.02). Placebo annual exacerbation rate: 0.90 (n=87); AVONEX<sup>®</sup> annual exacerbation rate: 0.61 (n=85); (p=0.002).

‡ The exact relationship between MRI findings and clinical status is unknown (n=44). AVONEX<sup>®</sup> is indicated for the treatment of relapsing forms of MS.



# Nouveau dans le syndro



Lamotrigine, gabapentine, vigabatrine et topiramate (à distinguer des antiépileptiques standards).

<sup>†</sup>A l'exception des absences épileptiques atypiques.

<sup>‡</sup>Signification statistique non indiquée.

<sup>§</sup>Dans de rares cas, des éruptions cutanées graves, y compris le syndrome de Stevens-Johnson et l'épidermolyse nécrosante suraiguë (syndrome de Lyell), ont été signalées. Bien que la plupart des patients se soient rétablis après le retrait du médicament, certains patients ont éprouvé des séquelles irréversibles et il y a eu de rares cas de décès associés.

<sup>¶</sup>Les effets indésirables fréquemment signalés sont la pharyngite, la fièvre, les infections et les éruptions cutanées (p = non significatif).

<sup>\*\*</sup>Pour obtenir des précisions sur la posologie de LAMICTAL chez l'adulte ou chez l'enfant atteints du syndrome de Lennox-Gastaut, consulter les renseignements thérapeutiques détaillés sur ce produit. La posologie de LAMICTAL comme traitement d'appoint qui a été utilisée dans les études de Motte et al. et de Mullens et al. était de 50 à 400 mg par jour, après augmentation graduelle de la dose initiale. NE PAS DÉPASSER la dose initiale de LAMICTAL ni l'augmentation posologique graduelle qui sont recommandées. Un ajustement plus rapide de la dose initiale a été associé à une fréquence accrue de réactions dermatologiques graves.

# me de Lennox-Gastaut

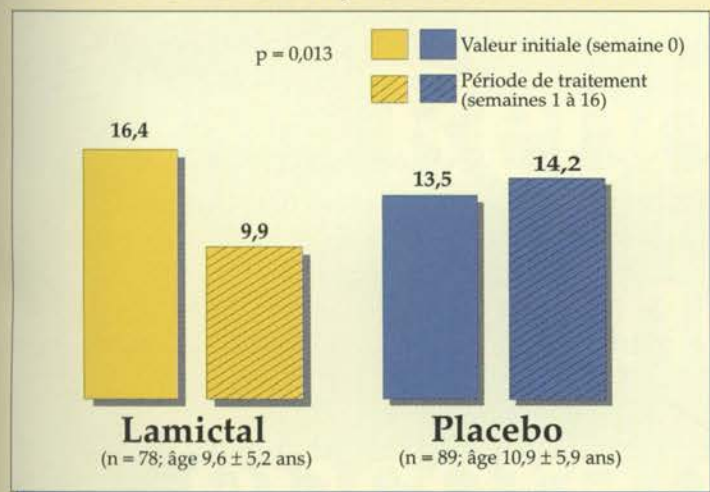
lamotrigine  
**Lamictal**<sup>®</sup>

LAMICTAL est le premier et le seul parmi les nouveaux antiépileptiques\* qui soit indiqué comme traitement d'appoint chez les enfants et les adultes atteints du syndrome de Lennox-Gastaut (SLG)<sup>1</sup>. LAMICTAL est également le premier et le seul parmi les antiépileptiques récents\* qui soit indiqué comme monothérapie après polythérapie chez l'adulte.

## Une supériorité significative pour maîtriser les divers types de crises liées au syndrome de Lennox-Gastaut<sup>†</sup>

- L'adjonction de LAMICTAL réduit, de façon significative, le nombre de crises majeures, les effondrements épileptiques et les crises tonico-cloniques chez les patients atteints de SLG<sup>1</sup>.

### NOMBRE MÉDIAN DES CRISES MAJEURES/SEMAINE



Essai à double insu, à répartition aléatoire et à contrôle placebo chez des patients de 3 à 25 ans

## Maintien d'un faible profil d'effets indésirables touchant le SNC chez les patients de 3 à 25 ans atteints du syndrome de Lennox-Gastaut

- Faible taux d'abandons comparativement au placebo<sup>1,2</sup> : 3,8 % pour le groupe LAMICTAL (principalement reliés aux éruptions cutanées<sup>8</sup>) contre 7,8 % pour le groupe placebo (principalement reliés à une détérioration de la maîtrise des crises).
- Aucune différence significative dans la fréquence des effets indésirables entre LAMICTAL et le placebo, sauf pour le rhume ou des maladies virales (LAMICTAL, 5 % contre placebo, 0 %; p = 0,05)<sup>11</sup>.

## Amélioration de la fonction neurologique et des facultés cognitives<sup>2,3</sup>

- Une plus forte proportion de patients (de 3 à 25 ans) atteints de SLG, traités à l'aide de LAMICTAL comme traitement d'appoint (n = 79) c. un placebo d'appoint (n = 90), ont connu une **amélioration cliniquement significative des symptômes neurologiques** durant la période de traitement de 16 semaines : comportement (30,4 % c. 14,4 %), parole (11,4 % c. 2,2 %) et communication non verbale (11,4 % c. 7,8 %)<sup>3</sup>.

LAMICTAL offre une plus grande maîtrise des divers types de crises liées au SLG, avec faible profil d'effets indésirables touchant le SNC. Vous pouvez aussi améliorer la fonction neurologique et les facultés cognitives de vos patients<sup>2,3</sup>. Ajoutez LAMICTAL\*\* dès que l'on soupçonne un SLG<sup>4</sup>.

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lamotrigine  
**Lamictal**<sup>®</sup>  
L'avenir en tête

ARIM  
CCPP  
PAAB



*If you have an interest in Neurological Sciences –  
you should be a partner ...*



## **CANADIAN CONGRESS OF NEUROLOGICAL SCIENCES PARTNERS PROGRAM**

The CCNS PARTNERS PROGRAM is intended to provide a forum which will bring together all the professional societies, volunteer agencies, and commercial organizations in Canada which show a common interest in disorders affecting the nervous system. These include conditions such as Alzheimer's Disease, Stroke, Multiple Sclerosis, Epilepsy, ALS, Parkinson's Disease, Spinal Cord and Head Injuries.

Through a number of joint programs and initiatives, the goals will be to increase public awareness of neurologic disorders, to improve the well-being of people with these disorders, and to promote and encourage the development of new strategies for treatment and prevention of these conditions.

A website is being developed that will act as the core of communication for the PARTNERS PROGRAM. This site will act as a resource for information for the Partners, CCNS members, and individuals interested in gaining more information about neurological disorders.

A national Angus Reid telephone survey, aimed at the Canadian public to assess their general knowledge of neurological disorders, has recently been completed by the PARTNERS. The results strongly reinforce the need for a coalition of organizations involved in neurosciences. Details of the survey are available to the PARTNERS.

We are actively encouraging all those interested to join the PARTNERS PROGRAM and to develop this initiative.

**THE PARTNERS ARE COMPRISED OF THE CCNS SOCIETIES AND AFFILIATE GROUPS,  
FOR-PROFIT AND NON-PROFIT ORGANIZATIONS WITH AN INTEREST IN CANADIAN  
NEUROSCIENCES.**

*Only by uniting Neurological Sciences in Canada will we achieve our goals.*

### **FOR MORE INFORMATION REGARDING THE CCNS PARTNERSHIP PROGRAM**

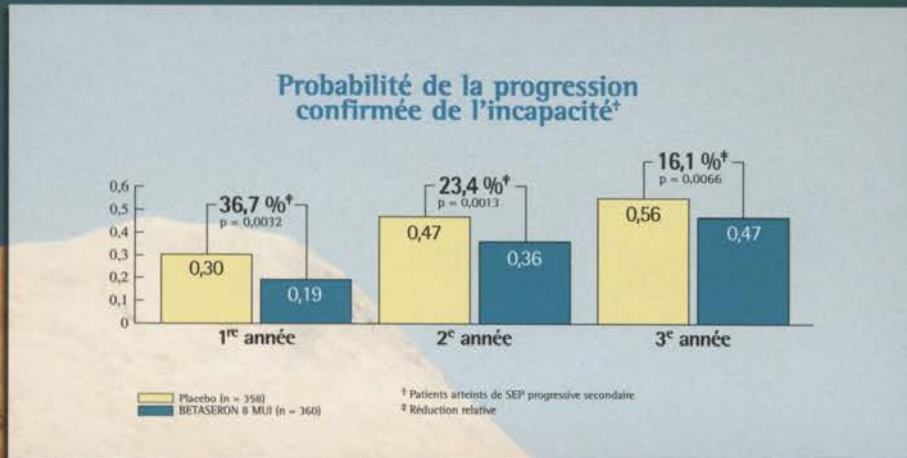
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Postal Address: P.O. Box 5456, Station A, Calgary, AB, T2H 1X8 Canada  
Phone: 403-229-9544  
Fax: 403-229-1661  
Email: [brains@ccns.org](mailto:brains@ccns.org)





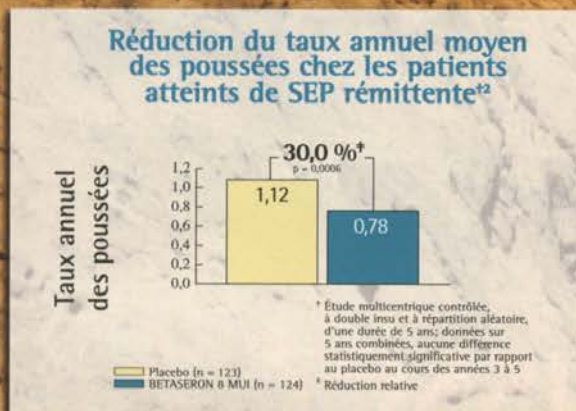
Repoussez  
la menace  
encore plus loin

# BETASERON retarde la progression de l'incapacité\*1

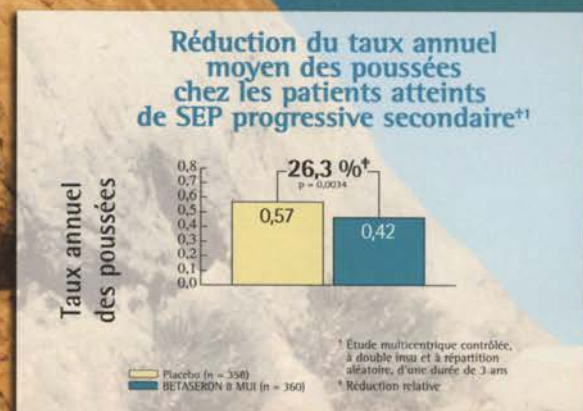


Adapté de la monographie de BETASERON, 1999

## BETASERON réduit le taux de poussées dans la SEP rémittente<sup>2</sup> et dans la SEP progressive secondaire<sup>1</sup>



Adapté des résultats de l'étude menée par le IFNB MS Study Group, 1995



Adapté de la monographie de BETASERON, 1999

## Effets indésirables pouvant être pris en charge<sup>1</sup>

Chez les patients atteints de la SEP progressive secondaire, les effets indésirables les plus fréquents de BETASERON sont : syndrome pseudo-grippal (61 %), fièvre (40 %), frissons (23 %), inflammation au point d'injection (48 %), réactions au point d'injection (46 %), myalgie (23 %), hypertension (41 %) et éruption cutanée (20 %)<sup>1</sup>.

Les symptômes pseudo-grippaux et les réactions au point d'injection peuvent être pris en charge et diminuent de façon marquée avec le temps<sup>1</sup>.

\* Il a été démontré que BETASERON retarde la progression de l'incapacité chez les patients atteints de SEP progressive secondaire<sup>1</sup>.

L'efficacité et l'innocuité de BETASERON dans la SEP progressive primaire n'ont pas été évaluées.

On ne dispose pas de données probantes sur l'efficacité du traitement dans la SEP rémittente au-delà de deux ans, ni de données sur l'efficacité et l'innocuité du traitement dans la SEP progressive secondaire au-delà de trois ans.

VEUILLEZ CONSULTER LA MONOGRAPHIE DE PRODUIT POUR OBTENIR LA LISTE COMPLÈTE DES MISES EN GARDE ET DES PRÉCAUTIONS. MONOGRAPHIE DE PRODUIT OFFERTE SUR DEMANDE AUX PROFESSIONNELS DE LA SANTÉ.



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Membre





# Retarde la progression de l'incapacité\*

*Dans la SEP rémittente et la SEP progressive secondaire*

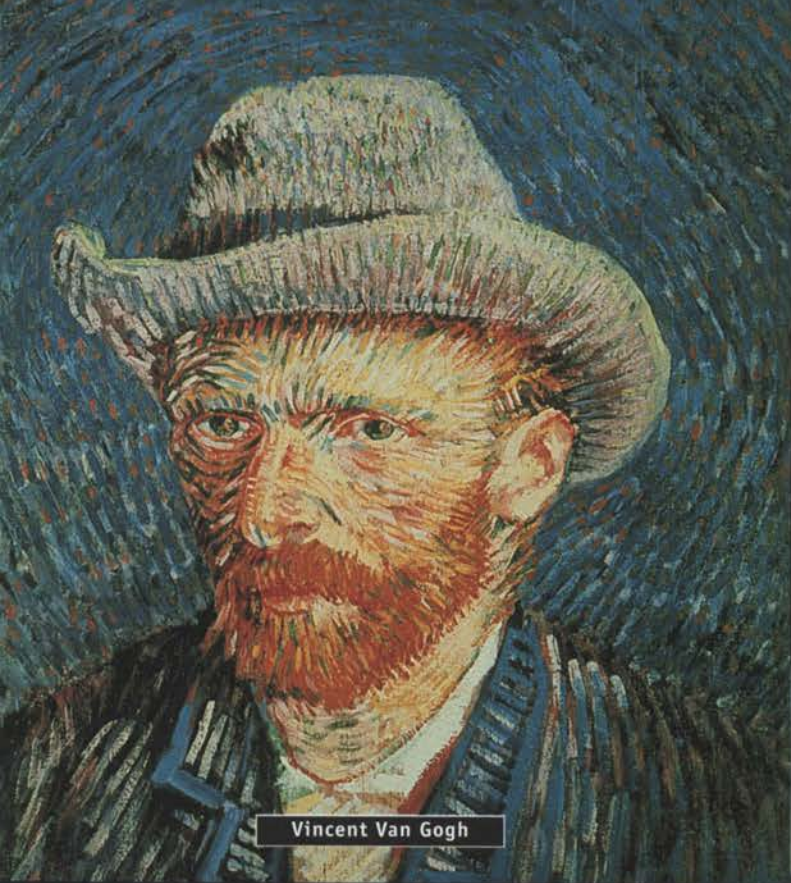


**BETASERON<sup>®</sup>**

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*Dès le tout début*

**INDIQUÉ**  
dans la **SEP**  
**RÉMITTENTE**  
et **PROGRESSIVE**  
**SECONDAIRE**



Vincent Van Gogh



Jeanne d'Arc

**AUPARAVANT, LES PERSONNES ÉPILEPTIQUES DEVAIENT  
SE MONTRER EXCEPTIONNELLES POUR RÉUSSIR.**



Sir Isaac Newton



Charles Dickens

## EFFICACE CONTRE UN GRAND NOMBRE DE TYPES DE CRISES.

- TOPAMAX est efficace contre les crises partielles initiales, les crises tonico-cloniques primaires généralisées et les crises associées au syndrome de Lennox-Gastaut<sup>1</sup>
- Des résultats souhaitables avec absence totale de crises chez 19 % des adultes<sup>1</sup> et 22 % des enfants<sup>1</sup> atteints de crises partielles initiales<sup>2,3</sup>

## AUCUN SIGNE D'EFFETS SECONDAIRES CAPABLES DE MENACER LE PRONOSTIC VITAL.

- Comme pour la plupart des antiépileptiques, les effets secondaires le plus fréquemment signalés relèvent du SNC et sont généralement légers à modérés et de nature passagère<sup>5,1</sup>

## IL EST POSSIBLE QUE LES PATIENTS ADULTES SUBISSENT UNE PERTE DE POIDS.

- 73 % (n = 52) des patients ont subi une perte de poids de 5,97 lb en moyenne (Analyse provisoire. Durée moyenne de 60 jours)<sup>4</sup>
- 96 % des enfants traités dans le cadre des essais cliniques pendant au moins un an et ayant subi une perte de poids ont repris du poids au cours de la période d'exécution des essais<sup>5,1</sup>

## AUJOURD'HUI, IL Y A TOPAMAX.

## UNE POSOLOGIE BIQUOTIDIENNE POUR TENIR COMPTE DU PATIENT.

- Le traitement par TOPAMAX peut être commencé et ajusté selon la réponse clinique quel que soit le traitement anticonvulsivant en cours
- Les comprimés sont inscrits au formulaire<sup>††</sup>

**MAINTENANT  
OFFERT EN CAPSULES  
À SAUPOUDRER**



**TOPAMAX**<sup>\*</sup>  
topiramate

**MAINTENANT  
INDIQUÉ  
CHEZ L'ENFANT**

## POUR AIDER LES PATIENTS À MIEUX PROFITER DE LA VIE

Comprimés et capsules à saupoudrer **TOPAMAX**<sup>\*</sup> (topiramate) : indiqués comme traitement adjuvant chez les patients (adultes et enfants âgés de deux ans ou plus) atteints d'épilepsie dont l'état n'est pas maîtrisé de façon satisfaisante avec le traitement traditionnel. Les renseignements sur l'emploi du topiramate en monothérapie sont encore limités<sup>1</sup>.

<sup>1</sup>Une étude ouverte d'une durée de 20 semaines (n = 450 adultes). Posologie optimale : 300 à 350 mg/jour (moyenne : 288 mg/jour).

<sup>2</sup>Étude ouverte portant sur des enfants (n = 72) traités pendant au moins 3 mois. Posologie moyenne : 10 mg/kg/jour.

<sup>3</sup>Manifestations indésirables liées au SNC : Somnolence (30,1 %), étourdissements (28,3 %), ataxie (21,2 %), troubles de la parole (16,8 %), ralentissement psychomoteur (16,8 %), nystagmus (15 %), paresthésie (15 %), nervosité (15,9 %), difficulté à se concentrer/troubles de l'attention (8 %), confusion (9,7 %), dépression (8 %), anorexie (5,3 %), problèmes de langage (6,2 %) et troubles de l'humeur (3,5 %). Une évaluation de 1 446 adultes et 303 enfants a indiqué que ces deux groupes semblent présenter des profils de manifestations indésirables similaires.

<sup>4</sup>Les effets à long terme d'une perte de poids chez les enfants ne sont pas connus.

<sup>††</sup>Médicament à usage limité : Ontario, Nouvelle-Écosse, Nouveau-Brunswick, I.-P.-É. Remboursement intégral : Québec, Saskatchewan, Colombie-Britannique, Alberta, Manitoba.

Veuillez vous reporter aux Renseignements thérapeutiques sur TOPAMAX pour les détails thérapeutiques complets.

RÉFÉRENCES : 1. Monographie des comprimés et capsules à saupoudrer TOPAMAX<sup>\*</sup> (topiramate), 11 mai 1999. 2. Kamin M, Kraut L, Olson W. Dose optimization of topiramate as add-on therapy in adults with treatment-resistant partial-onset seizures *Neurology* 1999;52 (Suppl 2):A525-526. 3. Glauser TA, Elterman R, Wyllie E et al. Open label topiramate in paediatric partial epilepsy *Epilepsia* 1997;38 (Suppl. 3):94. 4. Rosenfeld WE et al. Topiramate and concomitant weight loss. *Epilepsia* 1997;38 (Suppl 8):98.

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# 35th Meeting of the Canadian Congress of Neurological Sciences

Ottawa, June 13-17, 2000



## PRELIMINARY PROGRAM

See [www.ccns.org](http://www.ccns.org) for full program details

Mark your calendar for Ottawa in June!

### Tuesday, June 13

- Neurobiology Review Course 2000
- ALS Symposium
- Clinical Epilepsy Video Session (evening)
- Vascular Dementia (evening)

### Wednesday, June 14

- Courses
  1. Evidence-based Neurology (am)
  2. Management of Disorders of the Craniocervical Junction (full day)
  3. Current Educational Issues in the Clinical Neurosciences (am)
  4. Medical Legal Issues in Child Neurology (am)
  5. Molecular Mechanisms of Epileptic Syndromes (am)
  6. Medical Ethics in Neurology (pm)
  7. Molecular Mechanisms of Neuromuscular Disease (pm)
  8. Case Studies in Neurocritical Care (Neurocritical Care Group) (pm)
  9. Epilepsy (pm)
- Welcome Reception

### Thursday, June 15

- Meet the Expert Breakfast - Neurosurgery
- Breakfast/posters/exhibits
- Plenary Session I:  
The Millenium and the Future of  
Clinical Neuroscience
- Oral Platform Sessions
- Lunch/posters/exhibits
- Plenary Session II:  
Endovascular Horizons in  
Cerebrovascular Disease
- Social evening

### Friday, June 16

- Meet the Expert Breakfast - Neurology
- Breakfast/posters/exhibits
- Plenary Session III: Molecular Genetics and Clinical Neuroscience
- Oral Platform Sessions
- Lunch/posters/exhibits
- Debates: Neurosurgery; Neurology
- Child Neurology Dinner

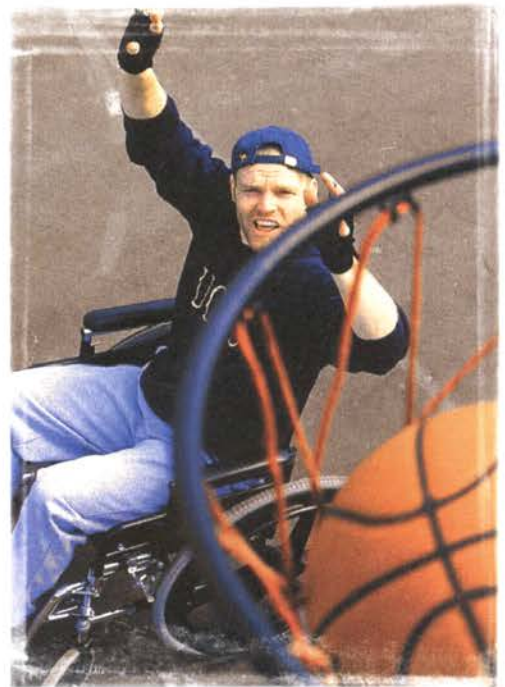
### Saturday, June 17

- Courses
  1. Emergent Therapies in Acute Stroke (full day)
  2. Multiple Sclerosis (am)
  3. Migraine 2000: A New Era in Migraine Therapy (pm)
- Child Neurology Day: Neurobehavioural Disorders

For additional information contact:  
**The Canadian Congress of Neurological Sciences**  
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Calgary, AB Canada T2H 1X8  
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A new option in the treatment of spasticity

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Reduces muscle tone. Preserves muscle strength.<sup>1</sup>



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In multiple-dose, placebo-controlled studies, the most frequently reported adverse events included dry mouth (49%), sedation/somnolence (48%), asthenia (weakness, fatigue and/or tiredness) (41%) and dizziness (16%).<sup>4</sup> The most common adverse events leading to discontinuation of therapy were asthenia (3%), somnolence (3%) and dry mouth (3%).<sup>3</sup> Sedation may be additive when Zanaflex is taken in conjunction with drugs or substances that act as CNS depressants. Caution is advised when treatment is used in patients who have a history of orthostatic hypotension or are receiving concurrent antihypertensive therapy. Monitoring of aminotransferase levels is recommended during the first six months of treatment, and periodically thereafter, based on clinical status.

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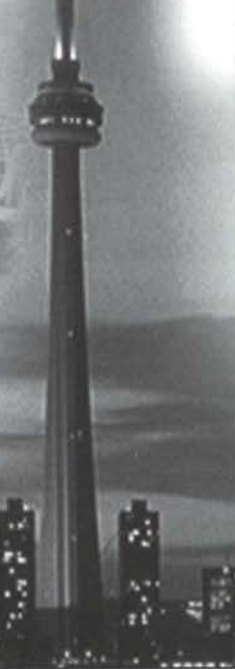


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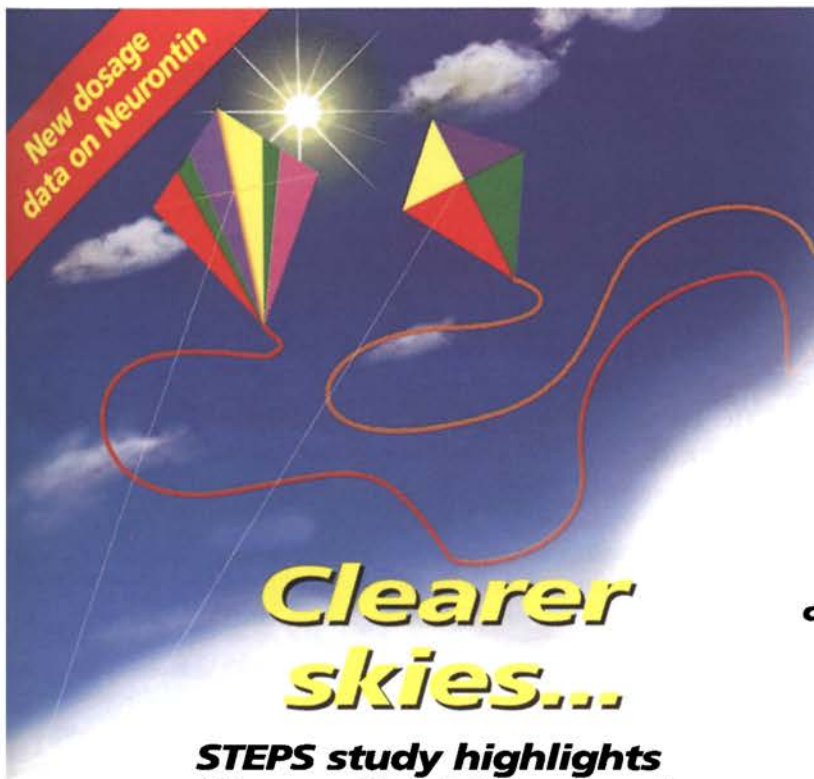
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The Rocky Mountain Satellite Meeting will take  
place from September 15-17, 2000 in Banff,  
Alberta, Canada. This Meeting is available to  
registrants of INOS 2000. Space is limited  
and on a first come-first serve basis.



New dosage  
data on Neurontin

# Clearer skies...

**STEPS study highlights  
Neurontin's\* improved  
efficacy as add-on therapy  
at higher doses.**

**The dose of Neurontin\* should  
be determined on an individual  
basis to optimize response<sup>††</sup>**

Tolerability Analysis Results (n=281)

Adverse Event	≤1800 mg/day	>1800 mg/day	P Values
Asthenia	9 (3.3%)	1 (0.4%)	0.01
Dizziness	17 (6.2%)	0 (0.0%)	<0.001
Headache	6 (2.2%)	0 (0.0%)	0.014
Somnolence	15 (5.4%)	10 (3.6%)	0.317

Adapted from STEPS

Study examined patients with partial seizures with or without secondary generalizations.

STEPS was a prospective, open-label, 16-week, multicentre study.

Doses higher than 1200 mg/day may increase the efficacy in some patients;  
however, higher dose may also increase the incidence of adverse events<sup>†</sup>.

**Gabapentin was generally well tolerated at dosages >1800 mg/day  
(up to 3600 mg/day). Patients who tolerated gabapentin at dosages  
≤1800 mg/day were able to tolerate increased dosages.  
The maximum recommended dosage is 2400 mg/day.<sup>†</sup>**

**To help them through the storm –  
consider moving patients to a higher  
dosage of Neurontin\***

**NEURONTIN**  
(gabapentin capsules)  
USER FRIENDLY EFFICACY



PARKE-DAVIS

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<sup>†</sup>In previous fixed dosage studies somnolence and ataxia appeared to exhibit a positive dose-response relationship. Patients treated with 1800 mg/day (n=54) experienced approximately a two-fold increase as compared to patients on lower doses of 600 to 1200 mg/day in the incidence of nystagmus (20.4%), tremor (14.8%), rhinitis (13%), peripheral edema (7.4%), abnormal coordination, depression and myalgia (all at 5.6%). Neurontin is indicated as adjunctive therapy for the management of patients with epilepsy who are not satisfactorily controlled by conventional therapy.<sup>†</sup>

# 25 Years Ago in the Canadian Journal of Neurological Sciences

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## KINDLING: SECONDARY ELIPTOGENESIS, SLEEP AND CATECHOLAMINES

Mitsumoto Sato and Toyoji Nakashima

Summary: Seizure development and transference phenomenon were investigated in hippocampal and amygdaloid kindled cats. The behavioral and electrographic findings during the kindling procedures showed that motor seizure development in hippocampal seizures occurred with the emergence of independent discharging in the amygdala, globus pallidus and contralateral hippocampus. Furthermore, secondary site convulsions developed upon the first stimulation of these structures in the hippocampal group but only after over a month of hippocampal stimulation in the amygdaloid group. It was, therefore, concluded that role of the amygdala and globus pallidus in hippocampal seizure development was more essential than that of hippocampal stimulation in amygdaloid seizure development. The common findings between the hippocampal and amygdaloid kindled animals were the systematic progression to seizures, the all-or-nothing nature of the electrical response and the relative permanency of the seizure susceptibility. Seizure susceptibility increased during slow wave sleep and decreased during REM sleep. These latter findings were examined with preliminary data of brain bioassays of catecholamines.

Can. J. Neurol. Sci. 1975;2:(Suppl 2):439

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## SLEEP, SUBCORTICAL STIMULATION AND KINDLING IN THE CAT

T. Tanaka, H. Lange and R. Naquet

Summary: A longitudinal study of the effects of sleep on amygdaloid kindling showed that kindling disrupted normal sleep patterns by reducing REM sleep and increasing awake time. Few interictal spike discharges were observed during the awake stage, while a marked increase in discharge was observed during the light and deep sleep stages. No discharges were observed during REM sleep. During the immediate post-stimulation period the nonstimulated amygdala showed a much higher rate of spike discharge. On the other hand, there was an increase in spike discharge in the stimulated amygdala during natural sleep without preceding amygdaloid stimulation. Amygdaloid stimulation at the generalized seizure threshold during each sleep stage resulted in a generalized convulsion.

The influence of subcortical electrical stimulation on kindled amygdaloid convulsions was investigated in a second experiment. Stimulation of the centre median and the caudate nucleus was without effect on kindled convulsions, while stimulation of the mesencephalic reticular formation at high frequency (300Hz) reduced the latency of onset of kindled generalized convulsions. Stimulation of the nucleus ventralis lateralis of the thalamus at low frequency (10Hz) prolonged the convulsion latency, and at high current levels blocked the induced convulsion. Stimulation in the central gray matter at low frequency (10Hz) also blocked kindled amygdaloid convulsions.

Can. J. Neurol. Sci. 1975;2:(Suppl 2):447

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## BEHAVIORAL AND EPILEPTIC DETERMINANTS OF PREDATORY ATTACK BEHAVIOR IN THE CAT

R. Adamec

Summary: This report presents studies which relate epileptic excitability to behavioral measures of defensive suppression of predatory attack in cats. Correlated with heightened defensiveness to environmental stimuli among non-killer cats is a heightened amygdaloid epileptic excitability, as well as a heightened conduction of amygdaloid epileptic activity to thalamic and hypothalamic substrates of predatory response in the amygdala to the complex visual stimuli presented by rat prey. These neurosensory responses correlate well with measures of epileptic excitability. Brain and behavior measures appear related since enhancement of excitability in the amygdala and of projection of epileptic activity by repeated electrical stimulation of predatory attack. Furthermore, the ventral hippocampus seems capable of antagonizing the behaviorally suppressive effects of heightened amygdaloid excitability perhaps at points of convergence of amygdaloid and hippocampal output.

Can. J. Neurol. Sci. 1975;2:(Suppl 2):457

# 25 Years Ago in the Canadian Journal of Neurological Sciences

## GENERALITY OF THE KINDLING PHENOMENON: SOME CLINICAL IMPLICATIONS

J.P.J. Pinel and P.H. van Oot

**Summary:** The purpose of the present investigations was to explore the generality of the kindling phenomenon and its applicability to clinical situations. Whether local brain stimulation, electroconvulsive shock (ECS), or metrazol the consequence of periodic administration of convulsive agents was found to be the same; in each case repeated application of the agent resulted in the gradual development and intensification of convulsive symptoms (kindling). Moreover, in each case the resulting intensification was not specific to the agent being used and seemed to increase the responsiveness to convulsive agents in general. In the present studies this interaction was seen in the form of an intensified alcohol withdrawal syndrome observed 18 days after cessation of a series of metrazol injections, amygdaloid stimulations, or ECS. Thus, it appears that one of the hazards of the convulsive therapies is that they may induce enduring changes in brain function which leave the patient in a state of increased susceptibility to a variety of potentially convulsive agents.

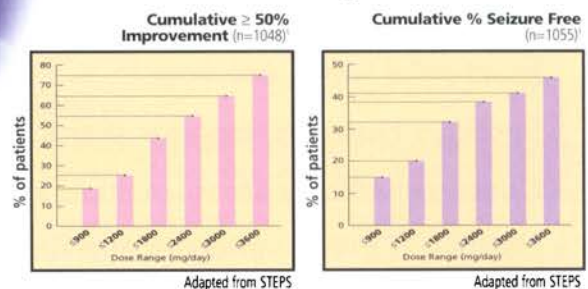
Can. J. Neurol. Sci. 1975;2:(Suppl 2):467

**NEW RESEARCH: STEPS STUDY**  
(Study of Titration to Effect Profile of Safety)

**Clearing the storm of epilepsy**

**STEPS study highlights Neurontin's\* improved efficacy as add-on therapy at higher doses.**

**To help them through the storm – consider moving patients to a higher dosage of Neurontin\***



Study examined patients with partial seizures with or without secondary generalizations. STEPS was a prospective, open-label, 16-week, multicentre study.

**Doses higher than 1200 mg/day may increase the efficacy in some patients\*; however, higher doses may also increase the incidence of adverse events.<sup>†</sup> The maximum recommended dose is 2400 mg/day.<sup>‡</sup>**

**NEURONTIN**  
(gabapentin capsules)  
**USER FRIENDLY EFFICACY**

PARKE-DAVIS

\* TM Warner-Lambert Company, Parke-Davis Div.  
Warner-Lambert Canada Inc., lic. use Scarborough, ONT M1L 2N3



<sup>†</sup>In previous fixed dosage studies somnolence and ataxia appeared to exhibit a positive dose-response relationship. Patients treated with 1800 mg/day (n=54) experienced approximately a two-fold increase as compared to patients on lower doses of 600 to 1200 mg/day in the incidence of nystagmus (20.4%), tremor (14.8%), rhinitis (13%), peripheral edema (7.4%), abnormal coordination, depression and myalgia (all at 5.6%). Neurontin is indicated as adjunctive therapy for the management of patients with epilepsy who are not satisfactorily controlled by conventional therapy.<sup>‡</sup>



# Turn the agony of migraine into the beauty of relief.

## Zomig® provides consistent relief.

- Rapid relief within one hour.<sup>1</sup>
- Significant headache response\* after a single 2.5 mg dose.<sup>1</sup>
- Consistent efficacy across multiple attacks.<sup>2-4</sup>
- Effective in a wide variety of migraine subtypes.<sup>1†</sup>
- Effective when taken at any time during a migraine attack.<sup>2</sup>
- Treats associated symptoms of photophobia, phonophobia and nausea.<sup>1</sup>
- Proven safety profile in over 5,500 patients treating more than 89,000 attacks.<sup>5,6††</sup>



\*Improvement from severe or moderate headache to mild or no pain at two hours.

† Zomig® is indicated for the acute treatment of migraine with or without aura.

Zomig® is not intended for use prophylactically or in hemiplegic, basilar, or ophthalmoplegic migraine. Safety and efficacy have not been established for cluster headache, which is present in an older, predominantly male population.

†† The most common side effects reported with Zomig® compared to placebo were nausea (9% vs. 3.7%), head/face sensations (8.6% vs. 1.7%), dizziness (8.4% vs. 4%) and neck/throat/jaw sensations (7% vs. 3%).

Zomig® 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 should not receive Zomig®. Zomig® is also contraindicated in patients with uncontrolled or severe hypertension.

Please see Product Monograph.

For more information about Zomig® please contact AstraZeneca Customer Relations by phone at 1-800-668-6000 or fax at (905) 896-4745.

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**Zomig®**  
zolmitriptan tablets 2.5 mg

Consistent migraine relief.

AstraZeneca 