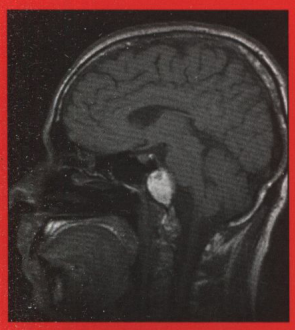
Volume 33 Number 4 November 2006

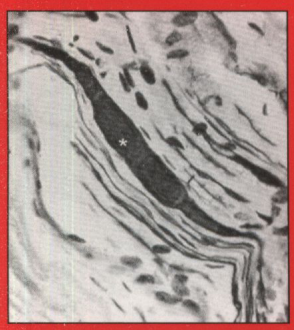
THE CANADIAN JOURNAL OF Neurological Sciences

LE JOURNAL CANADIEN DES Sciences Neurologiques

AN INTERNATIONAL JOURNAL / UN JOURNAL INTERNATIONAL



Cluster-like headache



Neuropathological Conference

The official Journal of: The Canadian Neurological Society, The Canadian Neurosurgical Society, The Canadian Society of Clinical Neurophysiologists, The Canadian Association of Child Neurology

PM 40007777 R 9824

https://doi.org/10.1017/S0317167100049921 Published online by Cambridge University Press

Volume 33 Number 4 November 2006

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

Volume 33 Number 4 November 2006

THE CANADIAN JOURNAL OF Neurological Sciences

LE JOURNAL CANADIEN DES Sciences Neurologiques

We acknowledge the assistance of the Government of Canada through the Publications Assistance Program towards our mailing costs. Canada

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 situe en permanence à:
7015 Macleod Trail SW, Suite 709, Calgary AB, Canada T2H 2K6.

The Canadian Journal of Neurological Sciences is published quarterly. The annual subscription rate for Individuals are: C$85 (Canada), US$85 (USA), and US$90 (elsewhere). Subscription rates for Institutions are: C$95 (Canada), US$95 (USA), and US$100 (elsewhere). Resident, intern and student rates are available. See www.cjns.org for details. Single copies C$24 each plus postage and handling. All manuscripts and communications should be sent to: Canadian Journal of Neurological Sciences, P.O. Box 5456, Station A, Calgary, AB Canada T2H 1X8. Courier to: 709 - 7015 Macleod Trail SW, Calgary, AB Canada T2H 2K6. Telephone (403) 229-9575; Fax (403) 229-1661. E-mail: journal@cjns.org; Website: www.cjns.org

Mailed under Publications Mail Agreement no: 40007777; PAP Registration no: 09824. Postage paid at Calgary, Alberta. This journal is indexed by *Abstracts on Hygiene and Communicable Diseases, Aquatic Sciences and Fisheries Abstracts, ASCA-Automatic Subject Citation Alert, Biological Abstracts, BIOBASE, BIOSIS, Chemical Abstracts Current Awareness in Biological Sciences, Current Contents (Clinical Medicine and Life Sciences), Dental Index, e-psyche, Excerpta Medica, Index Medicus, Index to Scientific Reviews, Journal Watch Neurology, Laboratory Hazards Bullentin, Leisure, Recreation and Tourism Abstracts, MEDLINE, Neurosciences Citation Index, Nutrition Abstracts and Reviews, Nutrition Research Newsletter, Pharmaeconomics and Outcome News, PsycInfo, Psychological Abstracts, Reactions Weekly, Referativnyi Zhurnal, Review of Medical and Veterinary Mycology, Science Citation Index, Weed Abstracts.*

Le Journal Canadien des Sciences Neurologiques est publié trimestriellement. L'abonnement annuel est de 85 $C (non-membres au Canada); 85 $É-U (Etats Unis) et 90 $É-U (ailleurs); l'abonnement annuel for pour les institutions est de 95 $C (non-membres au Canada); 95 $É-U (Etats Unis) et 100 $É-U (ailleurs); Internes, résidents, fellows pré et post doctoral voir www.cjns.org pour détails. Copie simple: 24 $C plus affranchissement et manutention. Toutes les communications et les manuscrits doivent être adressés à Journal Canadien des Sciences Neurologiques, P.O. Box 5456, Station A, Calgary, AB Canada T2H 1X8. Par courrier: 709 - 7015 Macleod Trail SW, Calgary, AB Canada T2H 2K6. Téléphone (403) 229-9575; Fax (403) 229-1661. E-mail journal@cjns.org; Website: www.cjns.org

Posté sous poste-publications: numéro de convention: 40007777; numéro d'enregistrement PAP 09824. Port payé à Calgary, Alberta. Le Journal est cité et indexé dans *Abstracts on Hygiene and Communicable Diseases, Aquatic Sciences and Fisheries Abstracts, ASCA-Automatic Subject Citation Alert, Biological Abstracts, BIOBASE, BIOSIS, Chemical Abstracts Current Awareness in Biological Sciences, Current Contents (Clinical Medicine and Life Sciences), Dental Index, e-psyche, Excerpta Medica, Index Medicus, Index to Scientific Reviews, Journal Watch Neurology, Laboratory Hazards Bullentin, Leisure, Recreation and Tourism Abstracts, MEDLINE, Neurosciences Citation Index, Nutrition Abstracts and Reviews, Nutrition Research Newsletter, Pharmaeconomics and Outcome News, PsycInfo, Psychological Abstracts, Reactions Weekly, Referativnyi Zhurnal, Review of Medical and Veterinary Mycology, Science Citation Index, Weed Abstracts.*

Advertising representative/Représentant de publicité:
Jhoanna Del Rosario, *Corporate Development Coordinator*
Tel (403) 229-9575 Fax (403) 229-1661
E-mail: journal@cjns.org; Web Site: www.cjns.org

Printer/Imprimeur:
Sundog Printing Limited, 1311 Ninth Avenue SW
Calgary, Alberta T3C 0H9

ISSN 0317 - 1671

https://doi.org/10.1017/S0317167100049921 Published online by Cambridge University Press

BERLEX
making medicine work

Betaseron®: Demonstrated long-term efficacy*

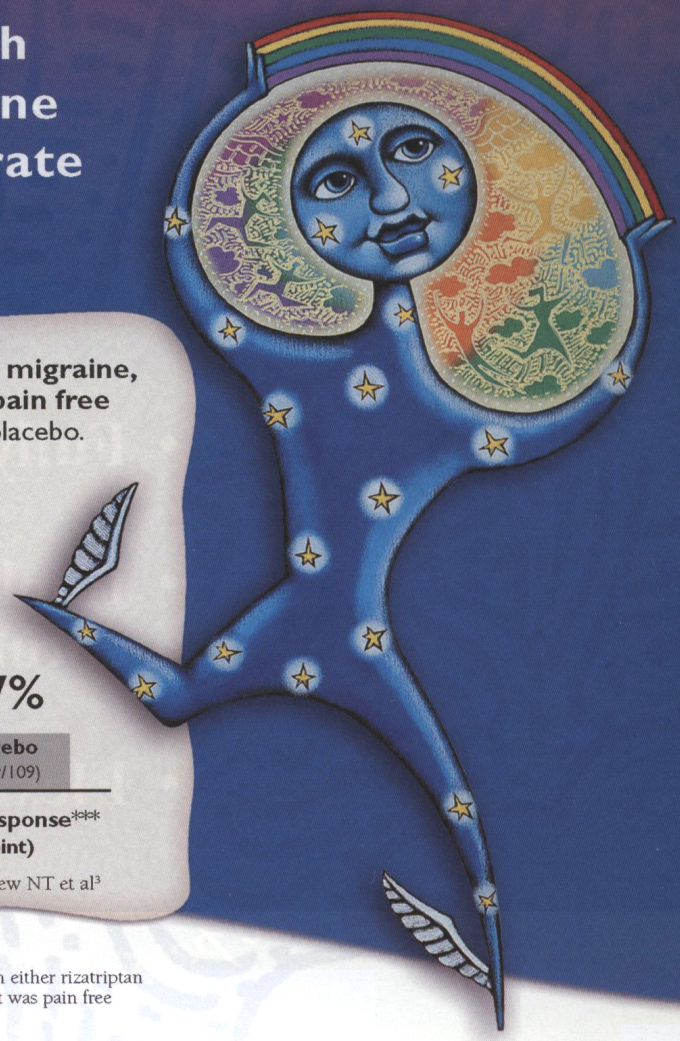
In a major clinical trial, Betaseron® patients† experienced:

- 31% reduction in annual exacerbation rate vs. the placebo group (p=0.0001)[1,‡]
- Significant reduction in moderate or severe attacks per year vs. the placebo group (p=0.001)[1,§]
- Significantly fewer lesions on MRI (p=0.0001)[1,**]

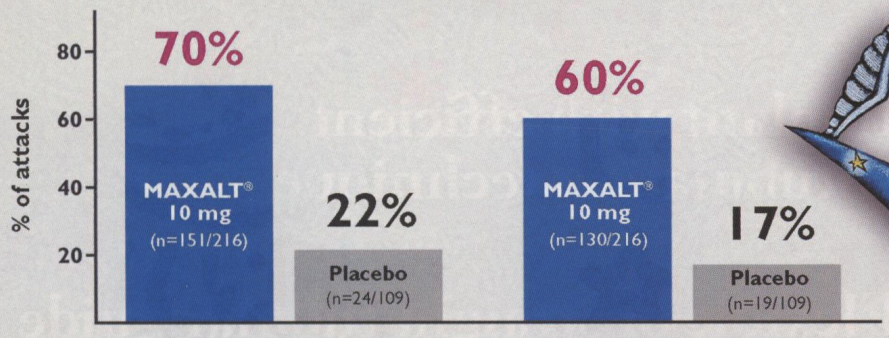
16-year study ongoing[2]

https://doi.org/10.1017/S0317167100049921

Early treatment of migraine with MAXALT®: a successful FIRST line therapy for patients with moderate to severe migraines.[1,2]



In a study, **when MAXALT® 10 mg was taken early in the migraine,** while pain was mild, significantly* more attacks demonstrated **pain free** response **at 2 hours, and sustained pain free** response vs placebo.



Adapted from Mathew NT et al[3]

One hundred and twelve rizatriptan-naïve patients with a history of migraine treated three attacks with either rizatriptan 10 mg (n=74) or placebo (n=38) as early as possible during each attack. The primary efficacy endpoint was pain free response at 2 hours after study drug administration.[3]

* p<0.01 pain free response, p<0.001 sustained pain free response

** Pain free response=absence of headache at a specified time after drug administration, up to which no recurrence or need for rescue medication was documented.

*** Sustained pain free response=pain free response lasting between 2-24 hours after drug administration.

MAXALT® (rizatriptan benzoate) is indicated for the acute treatment of migraine attacks with or without aura in adults. MAXALT® is not intended for the prophylactic therapy of migraine or for use in the management of hemiplegic, ophthalmoplegic or basilar migraine. Safety and effectiveness of MAXALT® have not been established for cluster headache, which is present in an older, predominantly male population.

MAXALT® 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 diseases should not receive MAXALT®. MAXALT® is also contraindicated in patients with uncontrolled or severe hypertension. MAXALT® is contraindicated in co-administration with monoamine oxidase (MAO) inhibitors within 2 weeks after discontinuation of treatment, and within 24 hours of administration of 5-HT_1 agonists and ergot-type medications. For a complete list of contraindications, please consult the Product Monograph.

The recommended single adult dose is 5 mg. The maximum recommended single dose is 10 mg.

The most common adverse events during treatment with MAXALT® (rizatriptan benzoate) Tablets 10 mg were dizziness (8.9%), somnolence (8.4%), asthenia/fatigue (6.9%), nausea (5.7%) and pain/pressure sensation (1.8-3.1%).

References:
1. Data on file, Merck Frosst Canada Ltd.: Product Monograph–MAXALT®, 2001.
2. Silberstein, S. Practice parameter: Evidence-based guidelines for migraine headache (an evidence based review). Neurology 2000;55:538-47.
3. Mathew NT et al. Early treatment of migraine with rizatriptan: A placebo-controlled study. Headache 2004;44:669-73.

BEFORE PRESCRIBING MAXALT®, PLEASE CONSULT THE ENCLOSED PRESCRIBING INFORMATION FOR WARNINGS, PRECAUTIONS, ADVERSE EVENTS AND IMPORTANT PATIENT SELECTION CRITERIA.

Pr Maxalt® (rizatriptan benzoate)

Fast. Effective...and Convenient!

MERCK FROSST
Discovering today for a better tomorrow.
Merck Frosst Canada Ltd., Kirkland, Quebec

www.migraineinfo.ca

PAAB

MXT-05-CDN-34380368-JA

https://doi.org/10.1017/S0317167100049921 Published online by Cambridge University Press

For brief prescribing information see page A-20, A-21, A-22

https://doi.org/10.1017/S0317167100049921 Published online by Cambridge University Press

Neuropathic Pain
Scalded From Within

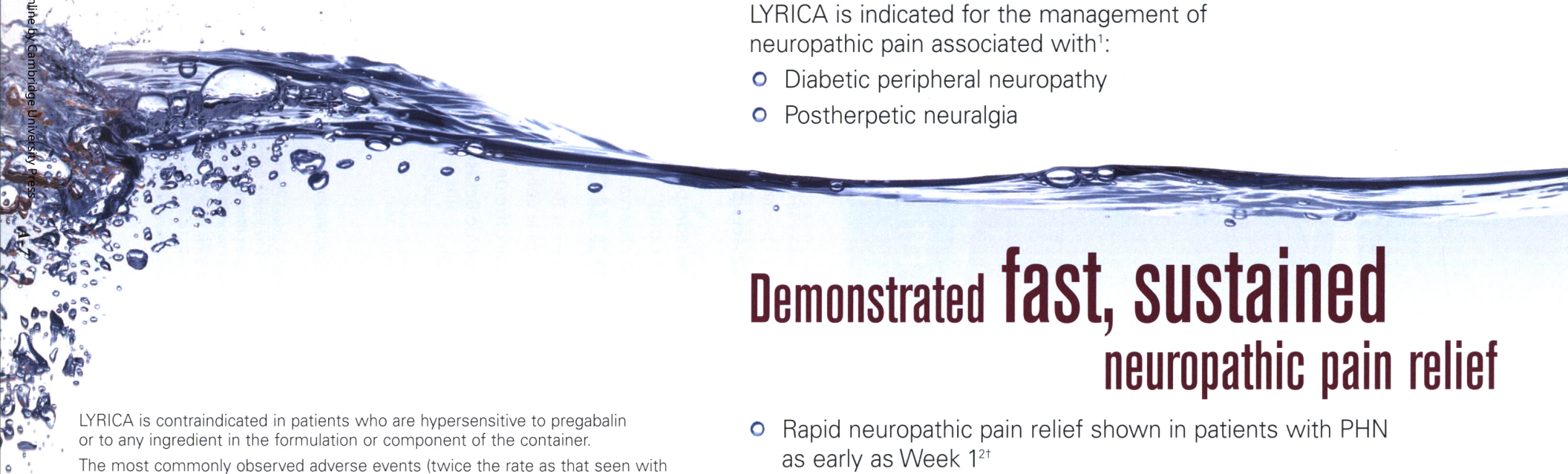
NOW AVAILABLE on the Quebec formulary

New

Pr LYRICA* PREGABALIN

LYRICA is indicated for the management of neuropathic pain associated with[1]:

- Diabetic peripheral neuropathy
- Postherpetic neuralgia



Demonstrated fast, sustained neuropathic pain relief

- Rapid neuropathic pain relief shown in patients with PHN as early as Week 1[2†]
- Sustained neuropathic pain relief demonstrated over 3 months[3‡]
- Rapid improvement in pain-related sleep interference observed in patients with PHN as of Week 1[2†]
- No clinically significant pharmacokinetic drug interactions reported[1¥]
- Simple dosing regimen[1]

LYRICA is contraindicated in patients who are hypersensitive to pregabalin or to any ingredient in the formulation or component of the container.

The most commonly observed adverse events (twice the rate as that seen with placebo) were dose related for PHN and DPN patients in the recommended dose range of 150 mg/day to 600 mg/day: dizziness (9-37%), somnolence (6.1-24.7%), peripheral edema (6.1-16.2%) and dry mouth (1.9-14.9%).

Dosage reduction is required in patients with renal impairment as pregabalin is primarily eliminated by renal excretion.

¥ Pharmacodynamic interactions were reported with oxycodone, lorazepam, ethanol and thiazolidinedione antidiabetic agents. Please consult Prescribing Information for complete interaction information.

Please see Prescribing Information for complete Warnings and Precautions, Dosage and Administration, and patient selection criteria.

† A 13-week, multicentre, double-blind, placebo-controlled trial in 368 patients with PHN. A significant difference was shown over placebo for all doses: 150 mg/day, 300 mg/day, and 600 mg/day at week 1, $p<0.001$ for pain and $p<0.01$ for sleep.

‡ A 12-week, multicentre, randomised, double-blind, placebo-controlled study in 338 patients with neuropathic pain (DPN [n=249] or PHN [n=89]), resulting in a significant difference from placebo in the flexible dose range 150-600 mg/day ($p\leq0.05$, week 2 and $p\leq0.01$, weeks 3-12), and the fixed dose of 600 mg/day ($p\leq0.05$, week 1 and $p\leq0.01$, weeks 2-12).

For brief prescribing information see pages A-24, A-25, A-26, A-27

Pfizer
Life is our life's work

PAAB Member R&D

New

Pr LYRICA* PREGABALIN

Fast onset. Sustained relief.

BERLEX
et la médecine avance

Betaseron®
Efficacité à long terme éprouvée*

Durant une étude clinique d'importance, les patients† prenant Betaseron ont présenté :

- une réduction de 31 % de leur taux annuel de poussées par rapport aux patients du groupe placebo (p = 0,0001)[1,‡]
- une diminution significative du nombre annuel de leurs poussées modérées ou graves par rapport aux patients du groupe placebo (p = 0,0001)[1,§]
- un nombre significativement moindre de lésions observables à l'IRM (p = 0,0001)[1,**]

Étude en cours depuis 16 ans[2]

SEP LeParcours offre aux patients atteints de SEP prenant Betaseron un programme de soutien à visage humain et une démarche thérapeutique pratique – dès le début

- Ligne d'aide où du personnel infirmier multilingue offre un service personnalisé
- Programme de formation à domicile sur l'injection de Betaseron
- Assistance médicale en voyage et services associés

* Étude clinique multicentrique (11 centres) parallèle, randomisée, à double insu et contrôlée par placebo, d'une durée de deux ans, menée auprès de patients recevant 1,6 MUI de Betaseron (n = 125), 8 MUI de Betaseron (n = 124) ou un placebo (n = 123).
† Traités par 8 MUI de Betaseron auto-administrés tous les deux jours
‡ 0,9 vs 1,31
§ Moyenne de 19,5 jours de poussées modérées ou graves par patient vs 41,1 jours
** Diminution de 0,9 % de l'étendue des lésions observables à l'IRM vs une augmentation de 21,4 % dans le groupe placebo

BETASERON®
INTERFÉRON BÊTA-1b

Agir tôt. Agir en force.

BETASERON (interféron bêta-1b) est indiqué pour réduire la fréquence des poussées cliniques chez les patients ambulatoires atteints de sclérose en plaques rémittente (SEP) et pour ralentir la progression de l'incapacité et réduire la fréquence des poussées cliniques chez les patients atteints de SEP progressive-secondaire. 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 de la SEP rémittente au-delà de deux ans. Chez les patients atteints de SEP rémittente, les effets indésirables les plus courants liés à l'utilisation de BETASERON sont : syndrome pseudo-grippal (76 %) ; fièvre (59 %) ; frissons (46 %) ; réactions au point d'injection (85 %) ; myalgie (44 %) ; asthénie (49 %) et malaise (15 %).

Pour plus de renseignments sur les mises en garde et les précautions, veuillez consulter la monographie du produit fournie sur demande aux professionnels de la santé.
Références : 1. Monographie de Betaseron, juin 2004. 2. Données internes. Berlex Canada inc.

Berlex Canada inc.
Pointe-Claire (Québec) H9R 5W5

BERLEX
et la médecine avance

Membre R&D CCPP

1913F00/02.2006

SEP LEPARCOURS

https://doi.org/10.1017/S0317167100049921 Published online by Cambridge University Press

For brief prescribing information see page A-23

https://doi.org/10.1017/S0317167100049921 Published online by Cambridge University Press

NAME CHANGE

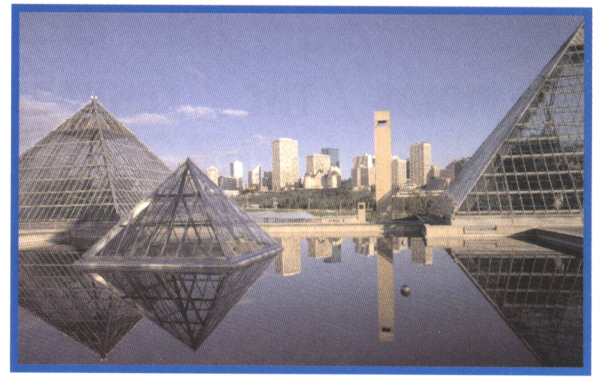
Canadian Congress of Neurological Sciences

to

Canadian Neurological Sciences Federation

Recently our name was officially changed to the Canadian Neurological Sciences Federation to better reflect the fact that we represent a federation of four professional societies. Our official announcement and changes to our logo, website, etc. are coming shortly.

Edmonton
alberta



Join us
in Edmonton, Alberta
for the

42nd Annual Congress

presented by the

Canadian Neurological Sciences Federation

(CNSF)

June 19-22, 2007

https://doi.org/10.1017/S0317167100049921 Published online by Cambridge University Press

New indication based on the CARDS§ Trial Results†

Trusted Power for You and Your Patients

LIPITOR® offers up to 50% LDL-C reduction at starting doses of 10, 20 and 40 mg[1¥]

¥ When a >45% LDL-C reduction is required, patients may be started at 40 mg o.d.

Power

AND is indicated to reduce the risk of MI and stroke in patients with type 2 diabetes and hypertension without CHD but with other risk factors[1]

Evidence

ONLY LIPITOR® is supported by 5 million patient-years of therapy in Canada[2£]

Trust

®LIPITOR
atorvastatin calcium
tablets

power you can **trust**™

10 mg 20 mg 40 mg 80 mg

LIPITOR is an HMG-CoA reductase inhibitor (statin). LIPITOR is indicated as an adjunct to lifestyle changes, including diet, for the reduction of elevated total cholesterol (total-C), LDL-C, TG and apolipoprotein B (apo B) in hyperlipidemic and dyslipidemic conditions (including primary hypercholesterolemia, combined [mixed] hyperlipidemia, dysbetalipoproteinemia, hypertriglyceridemia and familial hypercholesterolemia) when response to diet and other non-pharmacological measures alone has been inadequate.

LIPITOR also raises HDL-cholesterol and therefore lowers the LDL-C/HDL-C and total-C/HDL-C ratios (Fredrickson Type IIa and IIb dyslipidemia).

LIPITOR is indicated to reduce the risk of myocardial infarction in adult hypertensive patients without clinically evident coronary heart disease, but with at least three additional risk factors for coronary heart disease such as age ≥55 years, male sex, smoking, type 2 diabetes, left ventricular hypertrophy, other specified abnormalities on ECG, microalbuminuria or proteinuria, ratio of plasma total cholesterol to HDL-cholesterol ≥6 or premature family history of coronary heart disease.

† LIPITOR is also indicated to reduce the risk of myocardial infarction and stroke in adult patients with type 2 diabetes mellitus and hypertension without clinically evident coronary heart disease, but with other risk factors such as age ≥55 years, retinopathy, albuminuria or smoking.

Very rare cases of rhabdomyolysis with acute renal failure secondary to myoglobinuria have been reported with LIPITOR and with other HMG-CoA reductase inhibitors.

Patients who develop any signs or symptoms suggestive of myopathy should have their CK levels measured. LIPITOR therapy should be discontinued if markedly elevated CK levels are measured or myopathy is diagnosed or suspected.

See Prescribing Information for complete warnings, precautions, dosing and administration.

Less than 2% of patients discontinued therapy due to adverse experiences. Most common adverse effects vs. placebo occurring in patients at an incidence ≥1% were constipation (1% vs. 1%), diarrhea (1% vs. 1%), dyspepsia (1% vs. 2%), flatulence (1% vs. 2%), nausea (1% vs. 0%), headache (1% vs. 2%), pain (1% vs. <1%), myalgia (1% vs. 1%) and asthenia (1% vs. <1%). The adverse events reported in ≥1% of boys and postmenarchal girls (10-17 years of age) were abdominal pain, depression and headache.

LIPITOR is contraindicated: During pregnancy and lactation; active liver disease or unexplained persistent elevations of serum transaminases exceeding 3 times the upper limit of normal; hypersensitivity to any component of this medication.

The dosage of LIPITOR should be individualized according to the baseline LDL-C, total-C/HDL-C ratio and/or TG levels to achieve the recommended target lipid values at the lowest dose needed to achieve LDL-C target.

PAAB Member R&D

Caution should be exercised in severely hypercholesterolemic patients who are also renally impaired, elderly or are concomitantly being administered digoxin or CYP 3A4 inhibitors.

Liver function tests should be performed before the initiation of treatment, and periodically thereafter.

If increases in alanine aminotransferase (ALT) or aspartate aminotransferase (AST) show evidence of progression, particularly if they rise to greater than 3 times the upper limit of normal and are persistent, the dosage should be reduced or the drug discontinued.

LIPITOR, as well as other HMG-CoA reductase inhibitors, should be used with caution in patients who consume substantial quantities of alcohol and/or have a past history of liver disease.

§ CARDS = Collaborative Atorvastatin Diabetes Study.

£ A patient-year represents the total time of exposure to LIPITOR as defined by the sum of each patient's time on LIPITOR.[3]

Pfizer
Life is our life's work

References: 1. LIPITOR (atorvastatin calcium) Product Monograph, Pfizer Canada Inc., November 2005. **2.** IMS Health, IMS MIDAS™ (Standard Units: Year 1997 through to April 2005). **3.** Simon Day. *Dictionary for Clinical Trials*, 1999, John Wiley & Sons Ltd. 137-38.

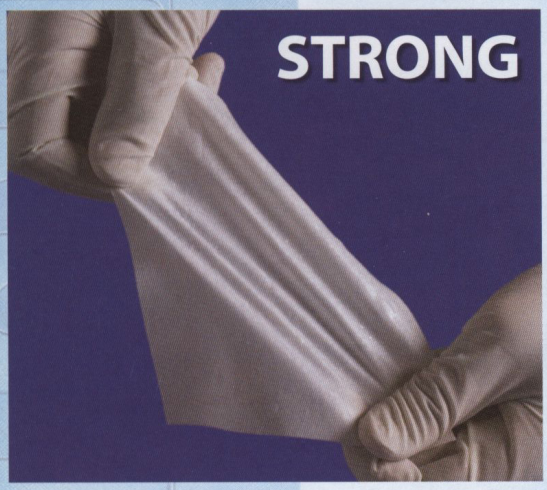
https://doi.org/10.1017/S0317167100049921 Published online by Cambridge University Press

For brief prescribing information see pages A-16, A-17

DuraMatrix™

Collagen Dura Substitute Membrane

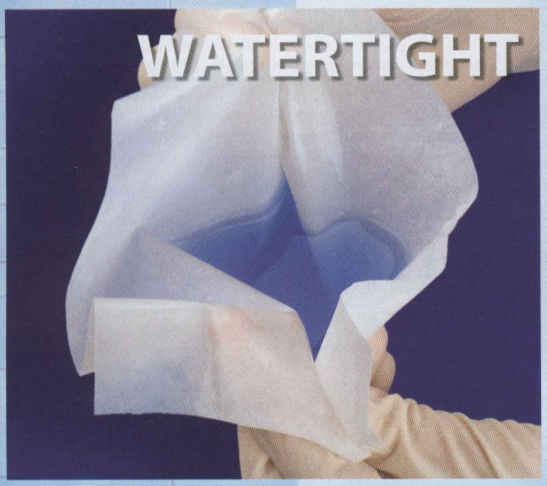
DURAL REPAIR INNOVATION

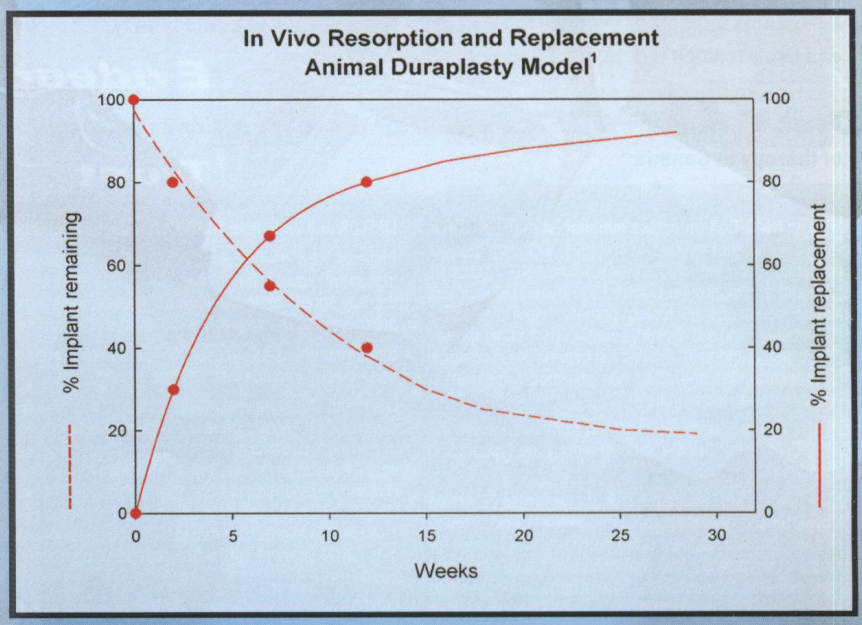


- Onlay or sutures — the choice is yours
- Excellent handling characteristics: strong, conformable and watertight
- Controlled resorption for effective dural repair

Some collagen sponges last only a few weeks when implanted.

DuraMatrix is designed to provide a scaffold for repair and to resorb as the dura heals.





[1]Ulreich JB, Hansen P, White MJN, Way D, French MH, Ho WY, Fryburg K, Hamilton AJ, Yuen D, and Li ST, 7th World Biomaterials Congress, 2004, p. 1008.

stryker®

DuraMatrix™ is distributed by Stryker and manufactured by Collagen Matrix, Inc., Franklin Lakes, New Jersey USA.

https://doi.org/10.1017/S0317167100049921 Published online by Cambridge University Press

https://doi.org/10.1017/S0317167100049921 Published online by Cambridge University Press

https://doi.org/10.1017/S0317167100049921 Published online by Cambridge University Press