



THE CANADIAN JOURNAL OF

Neurological Sciences

LE JOURNAL CANADIEN DES

Sciences Neurologiques

AN INTERNATIONAL JOURNAL / UN JOURNAL INTERNATIONAL

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- 3 Trust and Reciprocity: Foundational Principles for Human Subjects Imaging Research
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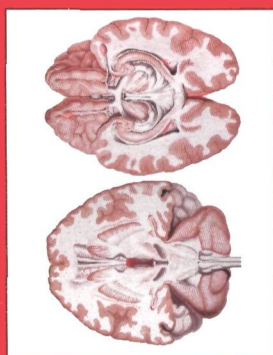
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Félix Vicq d'Azyr:
Anatomy, Medicine
and Revolution



Aneurysms and Coils

42nd
Annual
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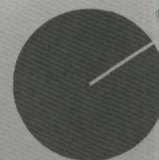
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- Rapid and sustained improvement in pain-related sleep interference observed in patients with PHN^{3,4‡}

LYRICA (pregabalin) is an analgesic indicated for the management of neuropathic pain associated with diabetic peripheral neuropathy (DPN) and postherpetic neuralgia (PHN). 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 LYRICA is primarily eliminated by renal excretion.

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

† A 12-week, multicentre, randomized, 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 ($p < 0.05$, week 2 and $p < 0.01$, weeks 3-12), and the fixed dose of 600 mg/day ($p < 0.05$, week 1 and $p < 0.01$, weeks 2-12).
‡ A 13-week, multicentre, double-blind, placebo-controlled trial in 368 patients with PHN. A significant difference in pain reduction was shown over placebo for all doses: 150 mg/day, 300 mg/day, and 600 mg/day at week 1, $p < 0.001$. Sleep interference was improved at all time points (weeks 1 to 13 and endpoint) for the three doses evaluated ($p < 0.01$ vs. placebo).



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TYSABRI is indicated as monotherapy (i.e., single disease-modifying agent) for the treatment of patients with the relapsing-remitting form of multiple sclerosis (MS) to reduce the frequency of clinical exacerbations, to decrease the number and volume of active brain lesions identified on magnetic resonance imaging (MRI) scans and to delay the progression of physical disability. TYSABRI is generally recommended in MS patients who have had an inadequate response to, or are unable to tolerate, other therapies for multiple sclerosis.¹

Safety and efficacy in patients with chronic progressive multiple sclerosis, and in geriatric and pediatric patients, have not been established.¹

Efficacy and safety of TYSABRI for a treatment duration beyond 2 years has not been determined.¹

TYSABRI should be used by physicians who have sufficient knowledge of multiple sclerosis and who have familiarized themselves with the efficacy/safety profile of TYSABRI.¹

TYSABRI is contraindicated in patients who are hypersensitive to this drug or to any ingredient in the formulation or component of the container; patients who have or have had progressive multifocal leukoencephalopathy (PML); patients who are immunocompromised, including those immunocompromised due to immunosuppressant or antineoplastic therapies, or immunodeficiencies (HIV, leukemias, lymphomas, etc.).¹

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The strength of TYSABRI has demonstrated powerful benefits in clinical trials.

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- **68% reduction in annualized relapse rate ($p < 0.001$) (0.24 vs. 0.73)**
- **42% reduction in the risk of disability progression (EDSS increase sustained for 12 weeks) ($p < 0.001$)[†] (17% vs. 29%)**
- **Significant improvement in all MRI endpoints ($p < 0.001$)[‡]**
- **Significant slowing of brain atrophy in the second year of treatment (BPF) ($p = 0.004$)[§]**
- **Significant improvement in cognitive function (PASAT3) ($p = 0.005$)[¶]**

TYSABRI is a selective adhesion molecule inhibitor.

* Comparative clinical significance has not been established.

† Disability progression defined as a ≥ 1.0 point increase from baseline EDSS of ≥ 1.0 or a ≥ 1.5 point increase from baseline EDSS of 0.

‡ Reduction in mean number of Gd-enhancing lesions vs. placebo (0.1 vs. 1.2), reduction in mean number of new or newly enlarging T2-hyperintense lesions vs. placebo (1.9 vs. 11.0), percentage of patients free of either type of lesion vs. placebo (Gd-enhancing 97% vs. 72%, T2-hyperintense 57% vs. 15%) and median change in volume of T2-hyperintense lesions vs. placebo (-9.4% vs. 8.8%).

§ TYSABRI 0.24% vs. placebo 0.43% reduction in brain volume measured by Brain Parenchymal Function.

¶ Paced Auditory Serial Addition Test 3.

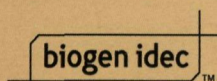
Treatment with TYSABRI has been associated with an increased risk of progressive multifocal leukoencephalopathy (PML). PML can cause disability or death. Healthcare professionals should monitor patients on TYSABRI for any new sign or symptom that may be suggestive of PML. TYSABRI dosing should be withheld immediately at the first sign or symptom suggestive of PML.¹

Patients who are prescribed TYSABRI should enroll in the Tysabri Care Program.^{TM1}

The most common serious adverse drug reactions were infections (3.2% vs. 2.6% placebo), acute hypersensitivity reactions (1.1% vs. 0.3%), depression (1.0% vs. 1.0%) and cholelithiasis (1.0% vs. 0.3%).¹

REFERENCE:

1. TYSABRI Product Monograph, 2006.



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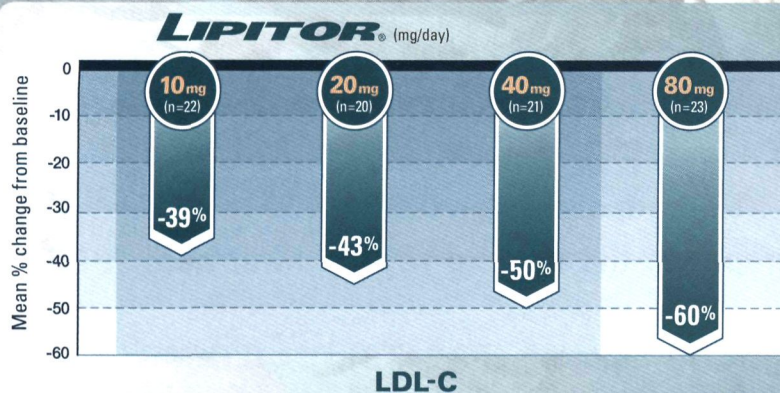
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- **LIPITOR** is indicated to reduce the risk of MI and stroke in patients with type 2 diabetes and hypertension without CHD but with other risk factors²
- **LIPITOR** is supported by 5 million patient-years of therapy in Canada^{3E}

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 is also indicated as an adjunct to diet to reduce total-C, LDL-C and apo B levels in boys and postmenarchal girls, 10 to 17 years of age, with heterozygous familial hypercholesterolemia, if after an adequate trial of diet therapy the following findings are still present: a) LDL-C remains ≥ 4.9 mmol/L, or b) LDL-C remains ≥ 4.1 mmol/L and: (i) there is a positive family history of premature cardiovascular disease, or (ii) two or more other CVD risk factors are present in the pediatric patient.

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

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 $\geq 1\%$ 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 $\geq 1\%$ 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.

Lipid levels should be monitored periodically and, if necessary, the dose of LIPITOR adjusted based on target lipid levels recommended by guidelines. The recommended starting dose of LIPITOR is 10 or 20 mg once daily, depending on patient's LDL-C reduction required. Patients who require a large reduction in LDL-C (more than 45%) may be started at 40 mg once daily. 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. The pediatric dosage is 10 to 20 mg.

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. Special attention should be paid to patients who develop elevated serum transaminase levels, and in these patients, measurements should be repeated promptly and then performed more frequently.

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.

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

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.



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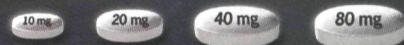
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ARICEPT is indicated for the symptomatic treatment of patients with mild-to-moderate dementia of the Alzheimer's type. ARICEPT does not change the underlying course of the disease.

The most common adverse events with ARICEPT 10 mg/d after proper dose escalation include nausea, diarrhea, insomnia, vomiting, muscle cramps, fatigue and anorexia (occurring in at least 5% of patients). These events are usually mild and transient, resolving with continued ARICEPT treatment without the need for dose modification.

† In a 24-week, randomized, double-blind, placebo-controlled study of ARICEPT in 153 mild AD patients (MMSE 21-26). Patients received either ARICEPT 5 mg/d for the first 6 weeks and 10 mg/d thereafter, (n=96), or placebo (n=57). 37% of ARICEPT-treated patients experienced a 4 point ADAS-cog improvement and 10% experienced a 7 point improvement versus 16% and 7% respectively with placebo.

‡ In a 24-week, multicentre, randomized, double-blind, placebo-controlled trial, 473 patients were randomized to receive ARICEPT 5 mg/d, ARICEPT 10 mg/d or placebo. Following the 24-week, double-blind phase, all patients underwent a 6-week, single-blind placebo washout. Patients treated with either dose of ARICEPT demonstrated significantly less decline on the CIBIC-plus versus placebo (CIBIC-plus value at endpoint for ARICEPT 5 mg/d and 10 mg/d were 4.15 and 4.07 respectively versus 4.51 with placebo, $p=0.0047$ and $p<0.0001$).

Product Monograph available on request.



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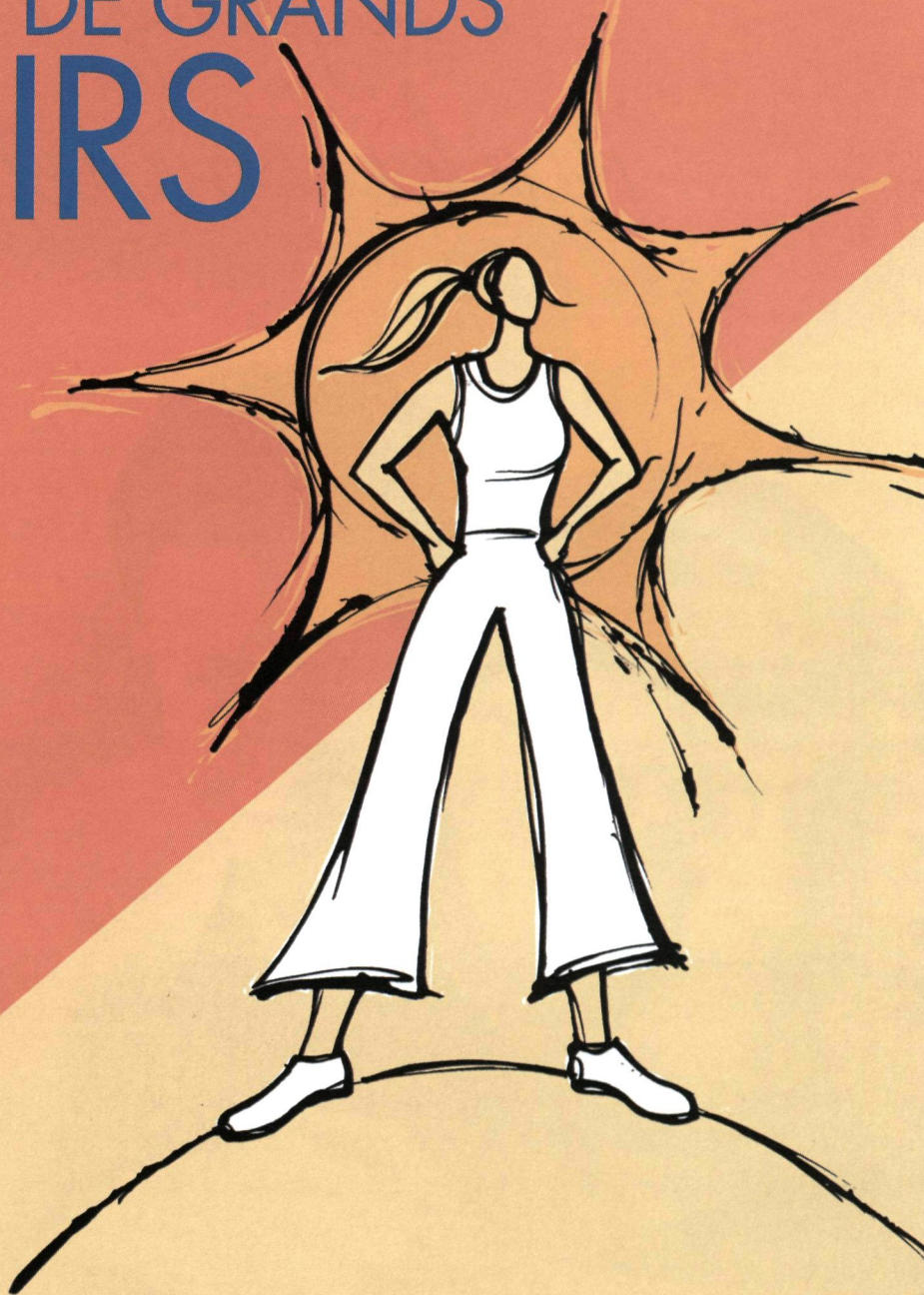


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LES PATIENTS ATTEINTS DE SEP ONT DE GRANDS ESPOIRS



TYSABRI est indiqué en monothérapie (c'est-à-dire comme agent d'un traitement de fond utilisé seul) pour le traitement de la forme rémittente de la sclérose en plaques (SEP) afin de diminuer la fréquence des poussées cliniques, de réduire le nombre et le volume des lésions cérébrales actives décelées aux examens d'imagerie par résonance magnétique (IRM) et de ralentir la progression de l'incapacité. TYSABRI est généralement recommandé chez les patients atteints de SEP qui ne répondent pas bien aux autres traitements de la SEP ou ne peuvent les tolérer¹.

On n'a pas établi l'innocuité ni l'efficacité du produit chez les patients atteints de sclérose en plaques chronique progressive, ni chez les patients en pédiatrie et en gériatrie¹.

On n'a pas déterminé l'innocuité ni l'efficacité de TYSABRI dans un traitement durant plus de deux ans¹.

Seuls les médecins qui connaissent suffisamment la sclérose en plaques et qui se sont familiarisés avec l'efficacité et l'innocuité du médicament peuvent utiliser TYSABRI¹.

TYSABRI est contre-indiqué chez les patients qui présentent une hypersensibilité à ce médicament, à l'un des composants du produit ou du contenant; chez les patients qui sont, ou ont déjà été, atteints de leucoencéphalopathie multifocale progressive (LMP); chez les patients immunodéprimés, y compris ceux qui le sont par suite de l'administration d'immunosuppresseurs ou d'agents antinéoplasiques et ceux qui sont atteints d'immunodéficience (infection par le VIH, leucémies, lymphomes, etc.)¹.

DONNEZ-LEUR DE LA PUISSANCE POUR LES AIDER À LES ATTEINDRE

La puissance de TYSABRI a permis de montrer de grands bienfaits dans les essais cliniques.

Deux ans avec TYSABRI vs placebo (n = 627 vs n = 315)[†]:

- Réduction de 68 % du nombre de poussées par année ($p < 0,001$) (0,24 vs 0,73)
- Réduction de 42 % du risque de progression de l'incapacité (augmentation de la cote EDSS soutenue pendant 12 semaines) ($p < 0,001$)[†] (17 % vs 29 %)
- Amélioration significative de tous les paramètres de l'IRM ($p < 0,001$)[†]
- Ralentissement significatif de l'atrophie cérébrale durant la deuxième année de traitement (FPC) ($p = 0,004$)[§]
- Amélioration significative de la fonction cognitive (PASAT3) ($p = 0,005$)[¶]

TYSABRI est un inhibiteur sélectif de la molécule d'adhésion.

* La portée clinique comparative n'a pas été établie.

† La progression de l'incapacité se définit par l'augmentation de $\geq 1,0$ point de la cote EDSS par rapport à des valeurs de départ de $\geq 1,0$ ou par l'augmentation de $\geq 1,5$ point par rapport à une valeur de départ de 0.

‡ Réduction du nombre moyen de lésions qui prennent le gadolinium vs placebo (0,1 vs 1,2), réduction du nombre moyen de lésions hyperintenses en T2, nouvelles ou nouvellement en progression, vs placebo (1,9 vs 11,0), pourcentage de patients ne présentant pas ces types de lésions vs placebo (prenant le gadolinium 97 % vs 72 %, hyperintenses en T2 57 % vs 15 %) et changement médian du volume des lésions hyperintenses en T2 vs placebo (-9,4 % vs 8,8 %).

§ Réduction de 0,24 % avec TYSABRI vs de 0,43 % avec le placebo du volume du cerveau mesuré d'après la fonction parenchymateuse du cerveau.

¶ Test d'additions en série en réponse à des directives vocales (Paced Auditory Serial Addition Test 3).

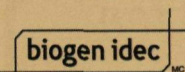
On a associé le traitement par TYSABRI à une augmentation du risque de leucoencéphalopathie multifocale progressive (LMP). La LMP peut entraîner une incapacité ou le décès. Les professionnels de la santé doivent surveiller les patients qui prennent TYSABRI au cas où de nouveaux signes ou symptômes signaleraient l'apparition de la LMP. Il faut interrompre l'administration de TYSABRI dès l'apparition du premier signe ou symptôme qui laisse croire à une LMP¹.

Les patients à qui on a prescrit TYSABRI doivent adhérer au Programme de soins Tysabri^{MC1}.

Les effets indésirables graves le plus souvent signalés étaient les suivants : infections (3,2 % vs 2,6 % placebo), réactions aiguës d'hypersensibilité (1,1 % vs 0,3 %), dépression (1,0 % vs 1,0 %) et cholélithiase (1,0 % vs 0,3 %)¹.

RÉFÉRENCE :

1. Monographie de TYSABRI, 2006.



TYSABRI, Programme de soins Tysabri et Elan sont des marques de commerce d'Elan Pharma International Ltd.

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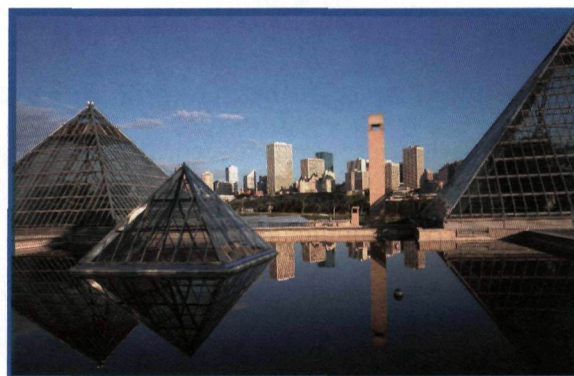
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