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Please see brief summary of prescribing  
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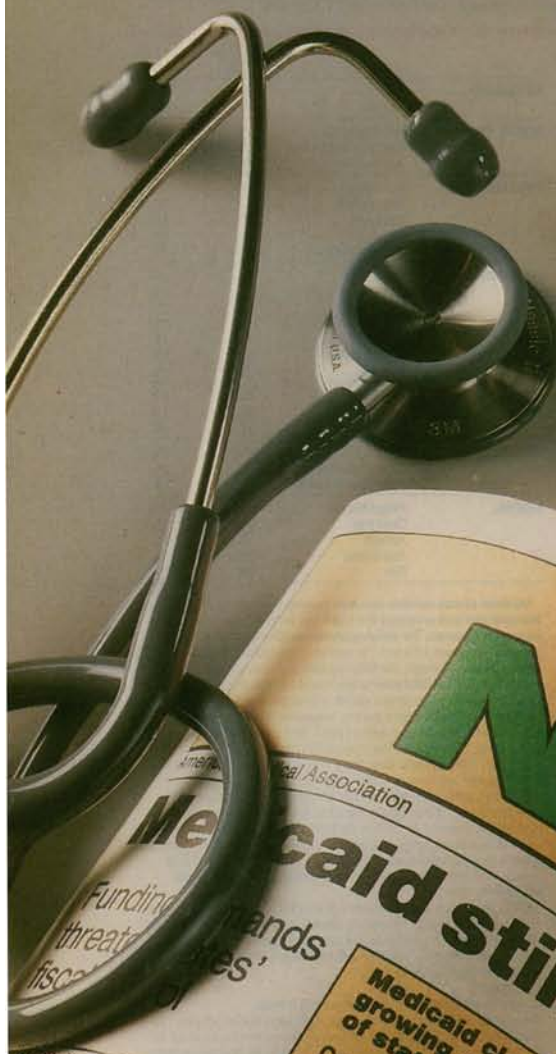
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# NEWS

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Medical Association

Funding  
threats  
fisc...

Medicaid has  
consecutive year.  
23% increase  
for the health pro-  
outpaced all other  
the National  
officials cau-  
state spend-  
next year,  
apt some

## Medicaid still busting budgets

Medicaid claiming growing chunk of state spending	
Comparison	
FY '91 actual spending vs. FY '90 actual spending	23%
FY '91 actual spending vs. FY '91 appropriations	7%
FY '92 appropriations vs. FY '91 actual spending	12%

Source: NCSL staff compilation, August 1991.

Health issues on state legislative agendas. Page 6

## Governors seek more federal funds while awaiting system reform

By Diane S. Lund  
AMN CORRESPONDENT  
SEATTLE

At the time, the nation's government down with health care programs as they say they want to see fit. The flow of federal funds is not adequate to do an old system. It's a joke. We need to produce health care, not statistics. What worries me is that the federal government won't welcome us with open arms. There is consensus by the American people to do something dramatic. The only lack of consensus is among elected officials, and I think they're afraid. I'm not sure what they're afraid of. The governors did not call for a national health care system, but rather agreed to be better able to fund and provide individual health care. The governor's Assn. meeting was a serious threat to the health care for the poor. The governor's Assn. meeting was a serious threat to the health care for the poor. The governor's Assn. meeting was a serious threat to the health care for the poor.

short-  
cause  
SL  
The possibility of how deep Medicaid may gouge some areas is reflected in figures from the past two years. In fiscal year 1991, states spent 7% more for Medicaid than they had appropriated. The year before, a projected 10% spending growth turned into an actual See BUDGETS, page 40

nding data  
of ca

SEPTEMBER 1991

# ARCHIVES OF FAMILY MEDICINE

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**References:** 1. Carr AA, Bottini PB, Prisant LM, et al. Once-daily verapamil in the treatment of mild-to-moderate hypertension: a double-blind placebo-controlled dose-ranging study. *J Clin Pharmacol.* 1991;31:144-150,490. 2. Further analysis of Carr AA, et al. (See reference 1.) Data on file. Lederle Laboratories, Pearl River, NY. 3. VERELAN Prescribing Information.

## Brief Summary

**VERELAN®**  
Verapamil HCl  
Sustained-Release Pellet-Filled Capsules

For complete Prescribing Information, consult package insert.

## CLINICAL PHARMACOLOGY

Food does not affect the extent or rate of the absorption of verapamil from the controlled release VERELAN capsule.

Atrioventricular block can occur in patients without preexisting condition defects (see **WARNINGS**).

Acceleration of ventricular rate and/or ventricular fibrillation has been reported in patients with atrial flutter or atrial fibrillation and a coexisting accessory AV pathway following administration of verapamil (see **WARNINGS**).

In patients with hepatic insufficiency, metabolism is delayed and elimination half-life prolonged up to 14 to 16 hours (see **PRECAUTIONS**), the volume of distribution is increased, and plasma clearance reduced to about 30% of normal.

## CONTRAINDICATIONS

Severe LV dysfunction (see **WARNINGS**), hypotension (systolic pressure <90 mmHg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), second- or third-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), (see **WARNINGS**), hypersensitivity to verapamil.

## WARNINGS

Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction <30%) or moderate-to-severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta blocker. Control milder heart failure with optimum digitalization and/or diuretics before VERELAN is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported.

Several cases of hepatocellular injury have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving IV verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (second- or third-degree, 0.8%). Development of marked first-degree block or progression to second- or third-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, second-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

## PRECAUTIONS

Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdose. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol clearance may occur with combined use. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digoxin. The digoxin dose should be reduced when verapamil is given and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Verapamil has been given concomitantly with short- and long-acting nitrates without any undesirable drug interactions. Interaction between cimetidine and chronically administered verapamil has not been studied. In healthy volunteers, clearance of verapamil was reduced or unchanged. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully.

Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporine. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. **Pregnancy Category C:** There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use. Safety and efficacy of verapamil in children below the age of 18 years have not been established.

## ADVERSE REACTIONS

Reversible (upon discontinuation of verapamil) nonobstructive, paralytic ileus has been infrequently reported in association with the use of verapamil.

In clinical trials with 285 hypertensive patients on VERELAN for more than 1 week, the following adverse reactions were reported: constipation (7.4%); headache (5.3%); dizziness (4.2%); lethargy (3.2%); dyspepsia (2.5%); rash (1.4%); ankle edema (1.4%); sleep disturbance (1.4%); myalgia (1.1%). In clinical trials of other formulations of verapamil HCl (N = 4,954), the following reactions have occurred at rates greater than 1.0%: constipation (7.3%); dizziness (3.3%); nausea (2.7%); hypotension (2.5%); edema (1.9%); headache (2.2%); rash (1.2%); CHF/pulmonary edema (1.8%); fatigue (1.7%); bradycardia (HR <50/min) (1.4%); AV block-total 1°, 2°, 3° (1.2%); 2° and 3° (0.8%); flushing (0.6%); elevated liver enzymes (see **WARNINGS**).

The following reactions, reported in 1.0% or less of patients, occurred under conditions (open trials, marketing experience) where a causal relationship is uncertain. **Cardiovascular:** angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope. **Digestive System:** diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia. **Hemic and Lymphatic:** echymosis or bruising. **Nervous System:** cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence. **Respiratory:** dyspnea. **Skin:** arthralgia and rash, exanthema, hair loss, hyperkeratosis, maculae, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme. **Special Senses:** blurred vision. **Urogenital:** gynecomastia, impotence, increased urination, spotty menstruation.

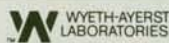



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# **VERELAN**

## **EXCELLENT TOLERABILITY SIMILAR TO PLACEBO IN A DOUBLE-BLIND STUDY<sup>1,2</sup>**

*Incidence of side effects commonly associated  
with calcium channel blockers*

Side effect	VERELAN clinical trials <sup>3</sup> (n=285)	Double-blind, placebo-controlled study*	
		VERELAN (n=81)	Placebo (n=26)
Constipation	7.4%	9.9%	11.5%
Headache	5.3%	7.4%	11.5%
Dizziness	4.2%	2.5%	3.8%
Edema	1.4%	3.7%	3.8%

\*Results of a 4-week, double-blind, placebo-controlled study of patients with essential hypertension. VERELAN 120 mg/day, n = 28; 240 mg/day, n = 27; 480 mg/day, n = 26; placebo, n = 26.

No patients discontinued VERELAN therapy due to constipation, headache, dizziness, or edema

Constipation, which can easily be managed in most patients, is the most frequently reported side effect of verapamil.

Please see brief summary of Prescribing Information including CONTRAINDICATIONS, WARNINGS, and PRECAUTIONS on adjacent page.

**ONCE-A-DAY**  
**VERELAN**<sup>®</sup>  
Verapamil HCl 120 mg  
180 mg  
240 mg  
**PELLET-FILLED CAPSULES**

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In osteoarthritis and adult rheumatoid arthritis



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# DAYPRO™

(oxaprozin) 600-mg  
caplets

*All you want in an NSAID<sup>†</sup>*



**Efficacy**



**Tolerability**



**Once-a-day  
dosing**

\*Usual adult dosage is 1200 mg (two 600-mg caplets) once a day. For osteoarthritis patients of low body weight or with milder disease, an initial dosage of one 600-mg caplet once a day may be appropriate.

<sup>†</sup>Nonsteroidal anti-inflammatory drug.

As with all NSAIDs, the most frequently reported adverse reactions were related to the GI tract: nausea (8%) and dyspepsia (8%). In patients treated with DAYPRO, as with other NSAIDs in the long-term, serious GI toxicity such as bleeding, ulceration, and perforation can occur and patients should be selected accordingly.

Please see brief summary of prescribing information on following page.

**SEARLE**

© 1993 Searle

✓ Usual adult dosage is 1200 mg (two 600-mg caplets) once a day\*

Experience with NSAIDs has shown that starting therapy with maximal doses in elderly patients or those with CHF, hepatic impairment, or mild-to-moderate renal insufficiency is likely to increase the frequency of adverse events and is not recommended.

\*For osteoarthritis patients of low body weight or with milder disease, an initial dosage of one 600-mg caplet once a day may be appropriate.

## BRIEF SUMMARY

**CONTRAINDICATIONS:** Patients with previously demonstrated hypersensitivity to oxaprozin or any of its components or in individuals with the complete or partial syndrome of nasal polyps, angioedema, and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory drugs (NSAIDs). Severe and occasionally fatal asthmatic and anaphylactic reactions have been reported in patients receiving NSAIDs, and there have been rare reports of anaphylaxis in patients taking oxaprozin.

**WARNINGS: RISK OF GASTROINTESTINAL (GI) ULCERATION, BLEEDING, AND PERFORATION WITH NONSTEROIDAL ANTI-INFLAMMATORY DRUG THERAPY:** Serious GI toxicity, such as bleeding, ulceration, and perforation, can occur at any time, with or without warning symptoms, in patients treated with NSAIDs. Although minor upper GI problems, such as dyspepsia, are common, and usually develop early in therapy, physicians should remain alert for ulceration and bleeding in patients treated chronically with NSAIDs, even in the absence of previous GI tract symptoms. In patients observed in clinical trials for several months to 2 years, symptomatic upper GI ulcers, gross bleeding, or perforation appear to occur in approximately 1% of patients treated for 3 to 6 months, and in about 2% to 4% of patients treated for 1 year. Physicians should inform patients about the signs and/or symptoms of serious GI toxicity and what steps to take if they occur. Patients at risk for developing peptic ulceration and bleeding are those with a prior history of serious GI events, alcoholism, smoking, or other factors known to be associated with peptic ulcer disease. Elderly or debilitated patients seem to tolerate ulceration or bleeding less well than other individuals, and most spontaneous reports of fatal GI events are in these populations. Studies to date are inconclusive concerning the relative risk of various NSAIDs in causing such reactions. High doses of any NSAID probably carry a greater risk of these reactions.

**PRECAUTIONS:** As with other NSAIDs, borderline elevations of one or more liver tests may occur in up to 15% of patients. These abnormalities may progress, remain essentially unchanged, or resolve with continued therapy. The SGPT (ALT) test is probably the most sensitive indicator of liver dysfunction. Meaningful (3 times the upper limit of normal) elevations of SGOT (AST) occurred in controlled clinical trials of Daypro in just under 1% of patients. A patient with symptoms and/or signs suggesting liver dysfunction or in whom an abnormal liver test has occurred should be evaluated for evidence of the development of more severe hepatic reaction while on therapy with this drug. Severe hepatic reactions including jaundice have been reported with Daypro, and there may be a risk of fatal hepatitis with oxaprozin, such as has been seen with other NSAIDs. Although such reactions are rare, if abnormal liver tests persist or worsen, clinical signs and symptoms consistent with liver disease develop, or systemic manifestations occur (eosinophilia, rash, fever), Daypro should be discontinued. Well-compensated hepatic cirrhosis does not appear to alter the disposition of unbound oxaprozin, so dosage adjustment is not necessary. Caution should be observed in patients with severe hepatic dysfunction. Acute interstitial nephritis, hematuria, and proteinuria have been reported with Daypro as with other NSAIDs. Long-term administration of some NSAIDs to animals has resulted in renal papillary necrosis and other abnormal renal pathology. This was not observed with oxaprozin, but the clinical significance of this difference is unknown. A second form of renal toxicity has been seen in patients with preexisting conditions leading to a reduction in renal blood flow, where the renal prostaglandins have a supportive role in the maintenance of renal perfusion. In these patients administration of an NSAID may cause a dose-dependent reduction in prostaglandin formation and may precipitate overt renal decompensation. Patients at greatest risk of this reaction are those with previously impaired renal function, heart failure, or liver dysfunction, those taking diuretics, and the elderly. Discontinuation of NSAID therapy is often followed by recovery to the pretreatment state. Those patients at high risk who chronically take oxaprozin should have renal function monitored if they have signs or symptoms that may be consistent with mild azotemia, such as malaise, fatigue, or loss of appetite. As with all NSAID therapy, patients may occasionally develop some elevation of serum creatinine and BUN levels without any signs or symptoms. The pharmacokinetics of oxaprozin may be significantly altered in patients with renal insufficiency or in patients who are undergoing hemodialysis. Such patients should be started on doses of 600 mg/day, with cautious dosage increases if the desired effect is not obtained. Oxaprozin is not dialyzed because of its high degree of protein binding. Like other NSAIDs, Daypro may worsen fluid retention by the kidneys in patients with uncompensated cardiac failure due to its effect on prostaglandins. It should be used with caution in patients with a history of hypertension, cardiac decompensation, in patients on chronic diuretic therapy, or in those with other conditions predisposing to fluid retention. Oxaprozin has been associated with rash and/or mild photosensitivity in dermatologic testing. An increased incidence of rash on sun-exposed skin was seen in some patients in the clinical trials. Because serious GI tract ulceration and bleeding can occur without warning symptoms, physicians should follow chronically treated patients for the signs and symptoms of ulceration and bleeding and should inform them of the importance of this follow-up. Anemia may occur in patients receiving oxaprozin or other NSAIDs. This may be due to fluid retention, gastrointestinal blood loss, or an incompletely described effect upon erythropoiesis. Patients on long-term treatment with Daypro should have their hemoglobin or hematocrit values determined at appropriate intervals as determined by the clinical situation. Oxaprozin, like other NSAIDs, can affect platelet aggregation and prolong bleeding time. Daypro should be used with caution in patients with underlying hemostatic defects or in those who are undergoing surgical procedures where a high degree of hemostasis is needed. The side effects of NSAIDs can cause discomfort and, rarely, serious side effects, such as GI bleeding, which may result in hospitalization and even fatal outcomes. Physicians may wish to discuss with their patients the potential risks and likely benefits of Daypro treatment, particularly in less-serious conditions where treatment without Daypro may represent an acceptable alternative to both the patient and the physician. Patients receiving Daypro may benefit from physician instruction in the symptoms of the more common or serious GI, renal, hepatic, hematologic, and dermatologic adverse effects. Daypro is not known to interfere with most common laboratory tests, including tests for drugs of abuse. Concomitant administration of Daypro and aspirin is not recommended because oxaprozin displaces salicylates from plasma protein binding sites. Coadministration would be expected to increase the risk of

salicylate toxicity. The anticoagulant effects of warfarin were not affected by the coadministration of 1200 mg/day of Daypro. Nevertheless, caution should be exercised when adding any drug that affects platelet function to the regimen of patients receiving oral anticoagulants. The total body clearance of oxaprozin was reduced by 20% in subjects who concurrently received therapeutic doses of cimetidine or ranitidine; no other pharmacokinetic parameter was affected. A change of clearance of this magnitude lies within the range of normal variation and is unlikely to produce a clinically detectable difference in the outcome of therapy. Subjects receiving 1200 mg Daypro qd with 100 mg metoprolol bid exhibited statistically significant but transient increases in sitting and standing blood pressures after 14 days. Therefore, as with all NSAIDs, routine blood pressure monitoring should be considered in these patients when starting Daypro therapy. The coadministration of oxaprozin and acetaminophen, or conjugated estrogens resulted in no statistically significant changes in pharmacokinetic parameters in single- and/or multiple-dose studies. The interaction of oxaprozin with lithium and cardiac glycosides has not been studied. In oncogenicity studies, oxaprozin administration for 2 years was associated with the exacerbation of liver neoplasms (hepatic adenomas and carcinomas) in male CD mice, but not in female CD mice or rats. The significance of this species-specific finding to man is unknown. Oxaprozin did not display mutagenic potential. Oxaprozin administration was not associated with impairment of fertility in male and female rats at oral doses up to 200 mg/kg/day (1180 mg/m<sup>2</sup>); the usual human dose is 17 mg/kg/day (629 mg/m<sup>2</sup>). However, testicular degeneration was observed in beagle dogs treated with 37.5 to 150 mg/kg/day (750 to 3000 mg/m<sup>2</sup>) of oxaprozin for 6 months, or 37.5 mg/kg/day for 42 days, a finding not confirmed in other species. The clinical relevance of this finding is not known. Pregnancy Category C: There are no adequate or well-controlled studies in pregnant women. Teratology studies with oxaprozin were performed in mice, rats, and rabbits, in mice and rats, no drug-related developmental abnormalities were observed at 50 to 200 mg/kg/day of oxaprozin (225 to 900 mg/m<sup>2</sup>). However, in rabbits, infrequent malformed fetuses were observed in dams treated with 7.5 to 30 mg/kg/day of oxaprozin (the usual human dosage range). Oxaprozin should be used during pregnancy only if the potential benefits justify the potential risks to the fetus. The effect of oxaprozin in pregnant women is unknown. NSAIDs are known to delay parturition, to accelerate closure of the fetal ductus arteriosus, and to be associated with dystocia. Oxaprozin is known to have caused decreases in pup survival in rat studies. Accordingly, the use of oxaprozin during late pregnancy should be avoided. Studies of oxaprozin excretion in human milk have not been conducted; however, oxaprozin was found in the milk of lactating rats. Since the effects of oxaprozin on infants are not known, caution should be exercised if oxaprozin is administered to nursing women. Safety and effectiveness of Daypro in children have not been established. No adjustment of the dose of Daypro is necessary in the elderly for pharmacokinetic reasons, although many elderly may need to receive a reduced dose because of low body weight or disorders associated with aging. No significant differences in the pharmacokinetic profile for oxaprozin were seen in studies in the healthy elderly. Although selected elderly patients in controlled clinical trials tolerated Daypro as well as younger patients, caution should be exercised in treating the elderly, and extra care should be taken when choosing a dose. As with any NSAID, the elderly are likely to tolerate adverse reactions less well than younger patients.

**ADVERSE REACTIONS:** The most frequently reported adverse reactions were related to the GI tract. They were nausea (8%) and dyspepsia (8%).

**INCIDENCE GREATER THAN 1%:** In clinical trials the following adverse reactions occurred at an incidence greater than 1% and are probably related to treatment. Reactions occurring in 3% to 9% of patients treated with Daypro are indicated by an asterisk (\*); those reactions occurring in less than 3% of patients are unmarked: abdominal pain/distress, anorexia, constipation\*, diarrhea\*, dyspepsia\*, flatulence, nausea\*, vomiting, CNS inhibition (depression, sedation, somnolence, or confusion), disturbance of sleep, rash\*, tinnitus, dysuria or frequency.

**INCIDENCE LESS THAN 1%: Probable causal relationship:** The following adverse reactions were reported in clinical trials at an incidence of less than 1% or were reported from foreign experience. Those reactions reported only from foreign marketing experience are in *italics*. The probability of a causal relationship exists between the drug and these adverse reactions: anaphylaxis, edema, blood pressure changes, peptic ulceration and/or GI bleeding, liver function abnormalities including hepatitis, stomatitis, hemorrhoidal or rectal bleeding, anemia, thrombocytopenia, leukopenia, ecchymoses, weight gain, weight loss, weakness, malaise, symptoms of upper respiratory tract infection, pruritus, urticaria, photosensitivity, blurred vision, conjunctivitis, acute interstitial nephritis, hematuria, renal insufficiency, decreased menstrual flow.

**Causal relationship unknown:** The following adverse reactions occurred at an incidence of less than 1% in clinical trials, or were suggested from marketing experience, under circumstances where a causal relationship could not be definitely established. They are listed as alerting information for the physician: palpitations, alteration in taste, sinusitis, pulmonary infections, alopecia, hearing decrease, increase in menstrual flow.

**DRUG ABUSE AND DEPENDENCE:** Daypro is a non-narcotic drug. Usually reliable animal studies have indicated that Daypro has no known addiction potential in humans.

**OVERDOSAGE:** No patient experienced either an accidental or intentional overdose of Daypro in the clinical trials of the drug. Symptoms following acute overdose with other NSAIDs are usually limited to lethargy, drowsiness, nausea, vomiting, and epigastric pain and are generally reversible with supportive care. GI bleeding and coma have occurred following NSAID overdose. Hypertension, acute renal failure, and respiratory depression are rare. Patients should be managed by symptomatic and supportive care following an NSAID overdose. There are no specific antidotes. Gut decontamination may be indicated in patients seen within 4 hours of ingestion with symptoms or following a large overdose (5 to 10 times the usual dose). This should be accomplished via emesis and/or activated charcoal (60 to 100 g in adults, 1 to 2 g/kg in children) with an osmotic cathartic. Forced diuresis, alkalization of the urine, or hemoperfusion would probably not be useful due to the high degree of protein binding of oxaprozin.

2/2/93 • P93DA7916V

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**BECAUSE APPROXIMATELY 60% OF PATIENTS WITH PERSISTENT ANXIETY MAY EXHIBIT DEPRESSIVE SYMPTOMS...<sup>1</sup>**

# BuSpar<sup>®</sup> 10mg

---

(buspirone HCl)



**Now indicated for the relief of persistent anxiety with coexisting depressive symptoms.\***

▲ Anxiolytic efficacy demonstrated in anxious patients with or without coexisting depressive symptoms.<sup>2</sup>

▲ Relief of anxiety symptoms begins within 1 week, progresses steadily through the fourth week of therapy.<sup>3</sup>

▲ Nonaddictive, no more sedation (10%) than seen with placebo (9%).<sup>4,5</sup>

▲ The more commonly observed untoward events include dizziness (12%), nausea (8%), headache (6%), and nervousness (5%).

**Progressive Relief of Persistent Anxiety.**

\*BuSpar is not indicated for the relief of primary depressive disorder.

Please see references and brief summary on adjacent page.

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# BuSpar (buspirone HCl)

**References:** 1. Data on file, Bristol-Myers Squibb Company. 2. Cahn JB, Bowden CL, Fisher JG, Rodos JJ. Double-blind comparison of buspirone and diazepam in anxious outpatients with or without depressive symptoms. *Psychopharmacology*. 1992;23:10-21. 3. Feighner JP, Cahn JB. Analysis of individual symptoms in generalized anxiety—a pooled, multicenter, double-blind evaluation of buspirone. *Neuropsychopharmacology*. 1989;2:124-130. 4. Lader M. Assessing the potential for buspirone dependence or abuse and effects of its withdrawal. *Am J Med*. 1987;82(suppl 3A):20-26. 5. Newton RE, Maruyuzo JD, Aldridge MT, Napoliello MJ. Review of the side-effect profile of buspirone. *Am J Med*. 1986;80(suppl 3B):17-21.

**Contraindications:** Hypersensitivity to buspirone hydrochloride.

**Warnings:** The administration of BuSpar to a patient taking a monoamine oxidase inhibitor (MAOI) may pose a hazard. Since blood pressure has become elevated when BuSpar was administered concomitantly with an MAOI, such concomitant use is not recommended. BuSpar should not be employed in lieu of appropriate antipsychotic treatment.

**Precautions: General – Interference with cognitive and motor performance:** Although buspirone is less sedating than other anxiolytics and does not produce significant functional impairment, its CNS effects in a given patient may not be predictable; therefore, patients should be cautioned about operating an automobile or using complex machinery until they are reasonably certain that buspirone does not affect them adversely. Although buspirone has not been shown to increase alcohol-induced impairment in motor and mental performance, it is prudent to avoid concomitant use with alcohol.

**Potential for withdrawal reactions in sedative/hypnotic/anticholinergic drug dependent patients:** Because buspirone will not block the withdrawal syndrome often seen with cessation of therapy with benzodiazepines and other common sedative/hypnotic drugs, before starting buspirone withdrawal patients gradually from their prior treatment, especially those who used a CNS depressant chronically. Rebound or withdrawal symptoms may occur over varying time periods, depending in part on the type of drug and its elimination half-life. The withdrawal syndrome can appear as any combination of irritability, anxiety, agitation, insomnia, tremor, abdominal cramps, muscle cramps, vomiting, sweating, flu-like symptoms without fever, and occasionally, even as seizures.

**Possible concerns related to buspirone's binding to dopamine receptors:** Because buspirone can bind to central dopamine receptors, a question has been raised about its potential to cause acute and chronic changes in dopamine mediated neurological function (eg, dystonia, pseudoparkinsonism, akathisia, and tardive dyskinesia). Clinical experience in controlled trials has failed to identify any significant neuroleptic-like activity; however, a syndrome of restlessness, appearing shortly after initiation of treatment, has been reported; the syndrome may be due to increased central noradrenergic activity or may be attributable to dopaminergic effects (ie, represent akathisia).

**Information for Patients –** Patients should be instructed to inform their physician about any medications, prescription or nonprescription, alcohol or drugs they are now taking or plan to take during treatment with buspirone; to inform their physician if they are pregnant, are planning to become pregnant, or become pregnant while taking buspirone; to inform their physician if they are breast feeding; and not to drive a car or operate potentially dangerous machinery until they experience how this medication affects them.

**Drug Interactions –** Concomitant use with other CNS active drugs should be approached with caution (see **Warnings**). Concomitant use with trazodone may have caused 3- to 6-fold elevations of SGPT (ALT) in a few patients. Concomitant administration of BuSpar and haloperidol resulted in increased serum haloperidol concentrations in normal volunteers. The clinical significance is not clear. Buspirone does not displace tightly bound drugs like phenytoin, propranolol, and warfarin from serum proteins, but may displace less firmly bound drugs like digoxin. However, there was one report of prolonged prothrombin time when buspirone was given to a patient also treated with warfarin, phenytoin, phenobarbital, digoxin, and Synthroid.

**Carcinogenesis, Mutagenesis, Impairment of Fertility –** No evidence of carcinogenic potential was observed in rats or mice; buspirone did not induce point mutations, nor was DNA damage observed; chromosomal aberrations or abnormalities did not occur.

**Pregnancy: Teratogenic Effects –** Pregnancy Category B: Should be used during pregnancy only if clearly needed.

**Nursing Mothers –** Administration to nursing women should be avoided if clinically possible.

**Pediatric Use –** The safety and effectiveness have not been determined in individuals below 18 years of age.

**Use in the Elderly –** No unusual, adverse, age-related phenomena have been identified in elderly patients receiving a total, modal daily dose of 15 mg.

**Use in Patients with Impaired Hepatic or Renal Function –** Since buspirone is metabolized by the liver and excreted by the kidneys, it is not recommended in severe hepatic or renal impairment.

**Adverse Reactions (See also Precautions): Commonly Observed –** The more commonly observed untoward events, not seen at an equivalent incidence in placebo-treated patients, include dizziness, nausea, headache, nervousness, lightheadedness, and excitement.

**Associated with Discontinuation of Treatment –** The more common events causing discontinuation included: central nervous system disturbances (3.4%), primarily dizziness, insomnia, nervousness, drowsiness, lightheaded feeling; gastrointestinal disturbances (1.2%), primarily nausea; miscellaneous disturbances (1.1%), primarily headache and fatigue. In addition, 3.4% of patients had multiple complaints, none of which could be characterized as primary.

**Incidence in Controlled Clinical Trials –** Adverse events reported by 1% or more of 477 patients who received buspirone in four-week, controlled trials: **Cardiovascular:** Tachycardia/palpitations 1%, CNS: Dizziness 12%, drowsiness 10%, nervousness 5%, insomnia 3%, lightheadedness 3%, decreased concentration 2%, excitement 2%, anger/hostility 2%, confusion 2%, depression 2%, **EENT:** Blurred vision 2%, **Gastrointestinal:** Nausea 8%, dry mouth 3%, abdominal/gastric distress 2%, diarrhea 2%, constipation 1%, vomiting 1%, **Musculoskeletal:** Musculoskeletal aches/pains 1%, **Neurological:** Numbness 2%, paresthesia 1%, incoordination 1%, tremor 1%, **Skin:** Skin rash 1%, **Miscellaneous:** Headache 6%, fatigue 4%, weakness 2%, sweating/clamminess 1%.

**Other Events Observed During the Entire Premarketing Evaluation –** The relative frequency of all other undesirable events reasonably associated with the use of buspirone in approximately 3000 subjects who took multiple doses of the drug under well-controlled, open, and uncontrolled conditions is defined as follows: Frequent are those occurring in at least 1/100 patients; infrequent are those occurring in 1/100 to 1/1000 patients; and rare are those occurring in less than 1/1000 patients. **Cardiovascular –** frequent: non-specific chest pain, infrequent: syncope, hypotension, hypertension, rare: cerebrovascular accident, congestive heart failure, myocardial infarction, cardiomyopathy, bradycardia. **Central Nervous System –** frequent: dream disturbances; infrequent: depersonalization, dysphoria, noise intolerance, euphoria, akathisia, fearfulness, loss of interest, dissociative reaction, hallucinations, suicidal ideation, seizures; rare: feelings of claustrophobia, cold intolerance, stupor, slurred speech, psychosis. **EENT –** frequent: tinnitus, sore throat, nasal congestion, infrequent: redness and itching of the eyes, altered taste, altered smell, conjunctivitis; rare: inner ear abnormality, eye pain, photophobia, pressure on eyes. **Endocrine –** rare: galactorrhea, thyroid abnormality. **Gastrointestinal –** infrequent: flatulence, anorexia, increased appetite, salivation, irritable colon, rectal bleeding; rare: burning of the tongue. **Genitourinary –** infrequent: urinary frequency, urinary hesitancy, menstrual irregularity and spotting, dysuria; rare: amenorrhea, pelvic inflammatory disease, enuresis, nocturia. **Musculoskeletal –** infrequent: muscle cramps, muscle spasms, rigid/stiff muscles, arthralgias. **Neurological –** infrequent: involuntary movements, slowed reaction time; rare: muscle weakness. **Respiratory –** infrequent: hyperventilation, shortness of breath, chest congestion; rare: apistaxis. **Sexual Function –** infrequent: decreased or increased libido; rare: delayed ejaculation, impotence. **Skin –** infrequent: edema, pruritus, flushing, easy bruising, hair loss, dry skin, facial edema, blisters; rare: acne, thinning of nails. **Clinical Laboratory –** infrequent: increases in hepatic aminotransferases (SGOT, SGPT); rare: eosinophilia, leukopenia, thrombocytopenia. **Miscellaneous –** infrequent: weight gain, fever, roaring sensation in the head, weight loss, malaise; rare: alcohol abuse, bleeding disturbance, loss of voice, hiccoughs.

**Postintroduction Clinical Experience –** Rare occurrences of allergic reactions, cogwheel rigidity, dystonic reactions, ecchymosis, emotional lability, tunnel vision, and urinary retention have been reported. Because of the uncontrolled nature of these spontaneous reports, a causal relationship to BuSpar has not been determined.

**Drug Abuse and Dependence: Controlled Substance Class –** Not a controlled substance.

**Physical and Psychological Dependence –** Buspirone has shown no potential for abuse or diversion and there is no evidence that it causes tolerance, or either physical or psychological dependence. However, since it is difficult to predict from experiments the extent to which a CNS-active drug will be misused, diverted, and/or abused once marketed, physicians should carefully evaluate patients for a history of drug abuse and follow such patients closely, observing them for signs of buspirone misuse or abuse (eg, development of tolerance, incrementation of dose, drug-seeking behavior).

**Overdosage: Signs and Symptoms –** At doses approaching 375 mg/day the following symptoms were reported: nausea, vomiting, dizziness, drowsiness, miosis, and gastric distress. No deaths have been reported in humans either with deliberate or accidental overdosage.

**Recommended Overdosage Treatment –** General symptomatic and supportive measures should be used along with immediate gastric lavage. No specific antidote is known and dialyzability of buspirone has not been determined.

For complete details, see Prescribing Information or consult your Mead Johnson Pharmaceuticals Representative.  
U.S. Patent Nos. 3,717,634 and 4,182,763

MJL8-427002

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**NEW LOW-DOSE**  
**LOZOL<sup>®</sup> 1.25 MG**  
INDAPAMIDE TABLETS

# A LITTLE MEANS A LOT

## TO THE OLDER PATIENT WITH MILD TO MODERATE HYPERTENSION

Efficacy comparable to higher doses of indapamide with the benefits of a lower once-daily dose<sup>1</sup>\*

Favorable metabolic profile<sup>†</sup> — no effect on lipids, only 2% incidence of clinical hypokalemia<sup>‡</sup>

Less patient discontinuation than with placebo

Side-effect profile compatible with other antihypertensive agents

Please see brief summary of prescribing information on this page.

### LOZOL<sup>®</sup> (indapamide) 1.25 mg and 2.5 mg tablets

#### BRIEF SUMMARY

**INDICATIONS:** LOZOL (indapamide) is indicated for the treatment of hypertension, alone or in combination with other antihypertensive drugs, and for the treatment of salt and fluid retention associated with congestive heart failure.

**Usage in Pregnancy:** See PRECAUTIONS.

**CONTRAINDICATIONS:** Anuria, hypersensitivity to indapamide or other sulfonamide-derived drugs.

**WARNINGS:** Infrequent cases of severe hyponatremia, accompanied by hypokalemia, have been reported with 2.5 mg and 5.0 mg indapamide primarily in elderly females. Symptoms were reversed by electrolyte replenishment. Hyponatremia considered possibly clinically significant (<125 mEq/L) has not been observed in clinical trials with the 1.25 mg dosage (see PRECAUTIONS). Hypokalemia occurs commonly with diuretics (see ADVERSE REACTIONS, hypokalemia), and electrolyte monitoring is essential. In general, diuretics should not be given with lithium.

**PRECAUTIONS:** Perform serum electrolyte determinations at appropriate intervals, especially in patients who are vomiting excessively or receiving parenteral fluids, in patients subject to electrolyte imbalance, or in patients on a salt-restricted diet. In addition, patients should be observed for clinical signs of fluid or electrolyte imbalance, such as hyponatremia, hypochloremic alkalosis, or hypokalemia. The risk of hypokalemia secondary to diuresis and natriuresis is increased with larger doses, with brisk diuresis, with severe orthosis, and with concomitant use of corticosteroids or ACTH. Interference with adequate oral intake of electrolytes will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effects of digitalis, such as increased ventricular irritability.

Dilutional hyponatremia may occur in edematous patients; appropriate treatment is usually water restriction. In actual salt depletion, appropriate replacement is the treatment of choice. Chloride deficit is usually mild, not requiring specific treatment except in extraordinary circumstances (liver, renal disease).

Hyperuricemia may occur, and frank gout may be precipitated in certain patients receiving indapamide. Serum concentrations of uric acid should be monitored periodically.

Use with caution in patients with severe renal disease; consider withholding or discontinuing if progressive renal impairment is observed. Renal function tests should be performed periodically.

Use with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Latent diabetes may become manifest and insulin requirements in diabetic patients may be altered during thiazide administration. A mean increase in glucose of 6.47 mg/dL was observed in patients treated with indapamide 1.25 mg, which was not considered clinically significant in these trials. Serum concentrations of glucose should be monitored routinely during treatment with indapamide. Calcium excretion is decreased by diuretics pharmacologically related to indapamide.

After six to eight weeks of indapamide 1.25 mg treatment and in long-term studies of hypertensive patients with higher doses of indapamide, however, serum concentrations of calcium increased only slightly with indapamide. Indapamide may decrease serum PBI levels without signs of thyroid disturbance. Complications of hyperparathyroidism have not been seen. Discontinue before tests of parathyroid function are performed. Thiazides have exacerbated or activated systemic lupus erythematosus. Consider this possibility with indapamide.

**DRUG INTERACTIONS:** LOZOL may add to or potentiate the action of other antihypertensive drugs. The antihypertensive effect of the drug may be enhanced in the postsympathectomized patient. Indapamide may decrease arterial responsiveness to norepinephrine, but this does not preclude the use of norepinephrine.

In mouse and rat lifetime carcinogenicity studies, there were no significant differences in the incidence of tumors between the indapamide-treated animals and the control groups.

**Pregnancy Category B:** Diuretics cross the placental barrier and appear in cord blood. Indapamide should be used during pregnancy only if clearly needed. Use may be associated with fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse effects that have occurred in adults. It is not known whether this drug is excreted in human milk. If use of this drug is deemed essential, the patient should stop nursing.

**ADVERSE REACTIONS:** Most adverse effects have been mild and transient. From Phase III placebo-controlled studies and long-term controlled clinical trials with LOZOL 2.5 mg or 5.0 mg, adverse reactions with  $\geq 5\%$  cumulative incidence: headache, dizziness, fatigue, weakness, loss of energy, lethargy, tiredness or malaise, muscle cramps or spasm or numbness of the extremities, nervousness, tension, anxiety, irritability or agitation,  $<5\%$  cumulative incidence: lightheadedness, drowsiness, vertigo, insomnia, depression, blurred vision, constipation, nausea, vomiting, diarrhea, gastric irritation, abdominal pain or cramps, anorexia, orthostatic hypotension, premature ventricular contractions, irregular heart beat, palpitations, frequency of urination, nocturia, polyuria, rash, hives, pruritus, vasculitis, impotence or reduced libido, rhinorrhea, flushing, hyperuricemia, hyperglycemia, hyponatremia, hypochloremia, increase in serum BUN

or creatinine, glycosuria, weight loss, dry mouth, tingling of extremities. Hypokalemia with concomitant clinical signs or symptoms occurred in 3% of patients receiving indapamide 2.5 mg q.d. and 7% of patients receiving indapamide 5 mg q.d. In long-term controlled clinical trials comparing the hypokalemic effects of daily doses of indapamide and hydrochlorothiazide, however, 47% of patients receiving indapamide 2.5 mg, 72% of patients receiving indapamide 5 mg, and 44% of patients receiving hydrochlorothiazide 50 mg had at least one potassium value (out of a total of 11 taken during the study) below 3.5 mEq/L. In the indapamide 2.5 mg group, over 50% of those patients returned to normal serum potassium values without intervention. Other adverse reactions reported with antihypertensive/diuretics are intrahepatic cholestatic jaundice, sialadenitis, xanthopsia, photosensitivity, purpura, bullous eruptions, Stevens-Johnson syndrome, necrotizing angitis, fever, respiratory distress (including pneumonitis), anaphylactic reactions, agranulocytosis, leukopenia, thrombocytopenia, aplastic anemia.

**CAUTION:** Federal (U.S.A.) law prohibits dispensing without prescription. Keep tightly closed. Store at controlled room temperature, 15°-30°C (59°-86°F). Avoid excessive heat. Dispense in tight containers as defined in USP.

See product circular for full prescribing information.

Revised: April 1993

\* In a controlled clinical trial, at 8 weeks the change in supine diastolic BP with 5 mg of indapamide was -10.8 mm Hg vs. -8.8 mm Hg with LOZOL 1.25 mg.

† Because of the diuretic effects of LOZOL 1.25, changes in certain electrolytes and blood chemistries can occur. Serum electrolytes and blood chemistries should therefore be monitored.

‡ 19.6% of patients had values less than 3.4 mEq/L. Only 7.5% had potassium levels below 3.2 mEq/L and less than 1% fell below 3.0 mEq/L. Metabolic changes at higher doses of indapamide may be greater.

Reference: 1. Data on file, Rhône-Poulenc Rorer Pharmaceuticals Inc.

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**AN ANALGESIC  
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**TORADOL**® **IM** INJECTION 15, 30, 60 MG  
**ORAL** TABLETS 10 MG  
(KETOROLAC TROMETHAMINE)

Please see brief summary of prescribing information on the last pages of this advertisement.

# THE ANALGESIC NSAID ALTERNATIVE TO NARCOTICS.

## FOR MODERATE TO SEVERE PAIN

### TORADOL IM

When you would use injectable narcotics for short-term management of pain

**Loading dose:** 30 mg IM or 60 mg IM

**Maintenance dose:** 15 mg IM or 30 mg IM q6h, respectively

**Duration of use:** TORADOL IM is only recommended for short-term therapy (not over 5 days), because the frequency and severity of adverse reactions may increase with longer use at recommended doses.

**Maximum daily dose:** 150 mg on first day, 120 mg/day thereafter

**Dosage adjustments:** The lower end of the dosage range is recommended for patients under 50 kg (110 pounds) of body weight, for patients over 65 years of age, and for patients with reduced renal function.

### TRANSITION DOSING FROM TORADOL IM TO TORADOL ORAL

When you would use Vicodin or Tylenol #3 for follow-on therapy of limited duration

For patients whose last IM dose was **30 mg**, give two (2) 10 mg tablets of TORADOL ORAL as a **first oral dose**, followed by one (1) 10 mg tablet every 4 to 6 hours (see Follow-on Dosing of TORADOL ORAL below).

For patients whose last IM dose was **15 mg**, give one (1) 10 mg tablet of TORADOL ORAL, followed by one (1) 10 mg tablet every 4 to 6 hours (see Follow-on Dosing of TORADOL ORAL below).

**Maximum combined daily dose:** Not to exceed 120 mg on day of transition, including a maximum of 40 mg orally.

### FOLLOW-ON DOSING: TORADOL ORAL

One (1) 10 mg tablet q4-6h prn; not to exceed four (4) tablets/day. Doses of 10 mg q.i.d. are not recommended for chronic use.

**Duration of use:** TORADOL ORAL is indicated for limited-duration use (average 5-14 days). TORADOL ORAL is not recommended for long-term use in patients with chronic painful conditions because of the possibility of increased frequency and severity of GI and other adverse reactions.

**Maximum daily dose:** 40 mg

**NONOPIOID. NONADDICTIVE. NONSCHEDULED.**

**TORADOL** <sup>®</sup> **IM** INJECTION  
15, 30, 60 MG  
**ORAL** TABLETS  
10 MG  
(KETOROLAC TROMETHAMINE)

**AN ANALGESIC  
NSAID FOR  
LIMITED-DURATION  
USE**

The most logical use of TORADOL ORAL is in patients who have benefited from TORADOL IM without limiting side effects. They can be continued on analgesic treatment with TORADOL ORAL. It is recommended to use the lowest effective dose of TORADOL IM at the transition to TORADOL ORAL and to continue treatment with TORADOL ORAL for as short a time as possible.

The most frequently reported side effects reported in clinical trials with TORADOL in which patients received up to 20 doses, in 5 days, of TORADOL IM 30 mg or up to 4 doses a day from long-term studies of TORADOL ORAL 10 mg q.i.d. were as follows: gastrointestinal pain 13%, nausea 12%, dyspepsia 12%, and headache 17%.

The most serious risks associated with TORADOL are gastrointestinal ulcerations, bleeding, and perforation; renal events ranging from interstitial nephritis to acute renal failure, especially in patients with preexisting kidney problems; hemorrhage; and anaphylactic reactions.

PRN narcotics may be added for "breakthrough" pain. TORADOL IM and narcotics should not be administered in the same syringe.

Please see brief summary of prescribing information on following pages.

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# STOP THE PAIN. NOT THE PATIENT.

## TORADOL<sup>®</sup> IM INJECTION 15, 30, 60 MG ORAL TABLETS 10 MG

### AN ANALGESIC NSAID FOR LIMITED- DURATION USE

The most frequently reported side effects are gastrointestinal (dyspepsia, nausea, and GI pain) and CNS (headache).

Before prescribing TORADOL, please consult full prescribing information.

#### TORADOL<sup>®</sup> IM and TORADOL<sup>®</sup> ORAL (ketorolac tromethamine)

##### BRIEF SUMMARY

##### DESCRIPTION

TORADOL (ketorolac tromethamine) is a member of the pyrrolo-pyrrole group of nonsteroidal anti-inflammatory drugs (NSAIDs). TORADOL<sup>®</sup> is available for intramuscular (IM) administration as 15 mg in 1 mL (1.5%), 30 mg in 1 mL (3%), or 60 mg in 2 mL (3%) of ketorolac tromethamine in sterile solution. The 15 mg/mL solution contains 10% (w/v) alcohol, USP and 6.68 mg of sodium chloride in sterile water. The 30 mg/mL solution contains 10% (w/v) alcohol, USP and 4.35 mg sodium chloride in sterile water. The pH is adjusted with sodium hydroxide or hydrochloric acid and the solutions are packaged with nitrogen. The sterile solutions are clear and slightly yellow in color. TORADOL<sup>®</sup> is available as round, white, film-coated, red-printed tablets. Each tablet contains 10 mg ketorolac tromethamine, the active ingredient, with lactose, magnesium stearate, and microcrystalline cellulose. The white film-coating contains hydroxypropyl methylcellulose, polyethylene glycol, and titanium dioxide. The tablets are printed with red ink which includes FDC Red #40 Aluminum lake as the colorant.

##### INDICATIONS AND USAGE

TORADOL<sup>®</sup> is indicated for the short-term management (up to 5 days) of pain (see "Clinical Studies" in CLINICAL PHARMACOLOGY section of full prescribing information). TORADOL<sup>®</sup> is not recommended for longer use (more than 5 days) because of the possibility of increased frequency and severity of adverse reactions associated with the recommended doses (see WARNINGS, DOSAGE AND ADMINISTRATION section of full prescribing information and ADVERSE REACTIONS). TORADOL<sup>®</sup> is not recommended as a pre-operative medication for support of anesthesia, because it inhibits platelet aggregation and may prolong bleeding time (see PRECAUTIONS—Hematologic Effects) and because it possesses no sedative or anxiolytic properties. TORADOL<sup>®</sup> is not recommended in obstetric analgesia because it has not been adequately studied for such use and because of the known effects of drugs that inhibit prostaglandin synthesis on uterine contraction and fetal circulation. TORADOL<sup>®</sup> has been used concomitantly with morphine and meperidine without apparent adverse effects. TORADOL<sup>®</sup> is indicated for limited duration prn use in the management of pain (see WARNINGS, ADVERSE REACTIONS and CLINICAL PHARMACOLOGY—Clinical Studies sections of full prescribing information for details about relative risks associated with TORADOL<sup>®</sup>). TORADOL<sup>®</sup> is not recommended for long-term use in patients with chronic painful conditions. TORADOL<sup>®</sup> is not recommended for concurrent use with other nonsteroidal anti-inflammatory drugs (NSAIDs) because of the potential for additive side effects. The protein-binding of ketorolac is affected by aspirin (see PRECAUTIONS) but not by acetaminophen, ibuprofen, naproxen or piroxicam; studies with other nonsteroidals have not been performed.

##### CONTRAINDICATIONS

TORADOL should not be used in patients with previously demonstrated hypersensitivity to ketorolac tromethamine, or in individuals with the complete or partial syndrome of nasal polyps, angioedema, bronchospastic reactivity (e.g., asthma) or other allergic manifestations to aspirin or other nonsteroidal anti-inflammatory drugs (NSAIDs). Severe anaphylactic-like reactions to TORADOL have been reported in such patients. Therefore, before starting therapy, careful questioning of patients for such things as asthma, nasal polyps, urticaria, and hypotension associated with nonsteroidal anti-inflammatory drugs is important. In addition, if such symptoms occur during therapy, treatment should be discontinued.

##### WARNINGS

The most serious risks associated with TORADOL are: **gastrointestinal** ulcerations, bleeding and perforation (see PRECAUTIONS); **renal** events ranging from interstitial nephritis to acute renal failure (see PRECAUTIONS), especially in patients with pre-existing kidney problems; **hemorrhage**, especially in patients where strict hemostasis is critical (see PRECAUTIONS); **hypersensitivity reactions** such as anaphylaxis, bronchospasm, vascular collapse, urticaria, angioedema, Stevens-Johnson syndrome and vesicular bullous rash. Anaphylactoid reactions may occur in patients with a history of hypersensitivity to aspirin, other nonsteroidal anti-inflammatory drugs, or TORADOL. They may, however, also occur in patients without a known previous exposure or hypersensitivity to these agents. Both types of reactions may be fatal. The use of TORADOL<sup>®</sup> at recommended doses for more than 5 days is associated with an increased frequency and severity of adverse events. The use of TORADOL<sup>®</sup> 10 mg on a long-term basis is associated with more GI tract adverse effects than aspirin 650 mg qid (see CLINICAL PHARMACOLOGY—Clinical Studies section of full prescribing information). Long-term treatment is not recommended (see INDICATIONS AND USAGE section of full prescribing information). High oral doses (e.g., 80 or 120 mg/day) are not recommended because risks of serious adverse events are greater with daily doses exceeding the recommended 40 mg oral per day (see ADVERSE REACTIONS).

##### PRECAUTIONS

Physicians should be alert for the pharmacologic similarity of TORADOL to other nonsteroidal anti-inflammatory drugs (NSAIDs) that inhibit cyclo-oxygenase. PHYSICIANS SHOULD CAREFULLY WEIGH THE POTENTIAL

#### TORADOL<sup>®</sup> IM and TORADOL<sup>®</sup> ORAL (ketorolac tromethamine)

RISKS AND BENEFITS OF TORADOL<sup>®</sup> USE ON A LONG-TERM BASIS. PATIENTS SHOULD BE INSTRUCTED TO WATCH FOR SIGNS OF SERIOUS GI ADVERSE EVENTS AND THEY SHOULD BE MONITORED MORE CLOSELY THAN IF THEY WERE ON ANOTHER NSAID.

**Individualization of Dosage:** Suggestions for using TORADOL<sup>®</sup> on a prn schedule.

Since the half-life of TORADOL is approximately 6 hours, an assessment of the size of a repeat dose can be based on the duration of pain relief from the previous dose. For example, if pain returns within 3 to 5 hours of a maintenance dose (15 or 30 mg), the next dose could be increased by up to 50% (Note: The recommended maximum total daily dose is 120 mg (150 mg on the first day); an alternative would be to use morphine or meperidine concomitantly (see INDICATIONS and DRUG INTERACTIONS)). Alternatively, if pain does not return for 8 to 12 hours, the next dose could be decreased by as much as 50%, or the dosage interval could be increased to 8 to 12 hours.

**Note:** The initial intramuscular loading dose (30 or 60 mg) should be given only once, unless therapy has been interrupted for 3 half-lives (15-40 hours, see half-life of TORADOL<sup>®</sup> in Table in CLINICAL PHARMACOLOGY section of full prescribing information).

TORADOL<sup>®</sup> is only recommended for short-term therapy (not over 5 days), because adverse reactions may increase with longer use at recommended doses (see WARNINGS and PRECAUTIONS).

The lower end of the dosage range is recommended for patients under 50 kg (110 pounds) of body weight, for patients over 65 years of age, and for patients with reduced renal function (see CLINICAL PHARMACOLOGY and PRECAUTIONS sections of full prescribing information).

If management by regular scheduled doses is elected, see DOSAGE AND ADMINISTRATION section of full prescribing information for dosing recommendations.

The most logical use of TORADOL<sup>®</sup> is in patients who have benefited from TORADOL<sup>®</sup> without limiting side effects. They can be continued on analgesic treatment with TORADOL<sup>®</sup> (see DOSAGE AND ADMINISTRATION—Transition from TORADOL<sup>®</sup> to TORADOL<sup>®</sup>). It is recommended to use the lowest effective dose of TORADOL<sup>®</sup> at the transition to TORADOL<sup>®</sup> and to continue treatment with TORADOL<sup>®</sup> for as short a time as possible (see WARNINGS and ADVERSE REACTIONS).

##### General Precautions

**Risk of Gastrointestinal Ulcerations, Bleeding and Perforation:** Serious gastrointestinal toxicity, such as bleeding, ulceration, and perforation, can occur at any time, with or without warning symptoms, in patients treated with NSAIDs. Studies to date with NSAIDs have not identified any subset of patients not at risk of developing peptic ulceration and bleeding. Except for a prior history of serious GI events and other risk factors known to be associated with peptic ulcer disease, such as alcoholism, smoking, etc., no other factors have been associated with increased risk. Elderly or debilitated patients seem to tolerate ulceration or bleeding less well than other individuals, and most spontaneous reports of fatal GI events are in this population. Postmarketing experience with TORADOL<sup>®</sup> suggests that there may be a greater risk of gastrointestinal ulcerations, bleeding and perforation in the elderly. Studies so far are inconclusive concerning the relative risk of various nonsteroidal anti-inflammatory drugs (NSAIDs) in causing such reactions. High doses of any such agent probably carry a greater risk of these reactions, although this is rarely established in controlled clinical trials. In considering the intramuscular use of relatively large doses (within the recommended dosage range), or treatment with TORADOL<sup>®</sup> for a duration longer than 5 days, sufficient benefit should be anticipated to offset the potential increased risk of GI toxicity. The risks of gastrointestinal side effects associated with long-term use of TORADOL<sup>®</sup> are described under CLINICAL PHARMACOLOGY—Clinical Studies (Long-Term Use of TORADOL<sup>®</sup>) section of full prescribing information.

**Impaired Renal or Hepatic Function:** As with other nonsteroidal anti-inflammatory drugs (NSAIDs), TORADOL should be used with caution in patients with impaired renal or hepatic function, or a history of kidney or liver disease.

**Renal Effects:** As with other nonsteroidal anti-inflammatory drugs (NSAIDs), administration of ketorolac tromethamine to animals resulted in renal papillary necrosis and other abnormal renal pathology. In humans, there have been reports of hematuria, proteinuria, glomerular nephritis, interstitial nephritis, renal papillary necrosis, nephrotic syndrome, and acute renal failure. Another, equally important, renal toxicity has been seen in patients with conditions leading to a reduction in blood volume and/or renal blood flow, where renal prostaglandins have a supportive role in the maintenance of renal perfusion. In these patients, administration of a nonsteroidal anti-inflammatory drug (NSAID) may cause a dose-dependent reduction in renal prostaglandin formation and may precipitate acute renal failure. Patients at greatest risk of this reaction are those with impaired renal function, heart failure, liver dysfunction, those taking diuretics and the elderly. Discontinuation of NSAID therapy is usually followed by recovery to the pretreatment state. TORADOL and its metabolites are eliminated primarily by the kidneys which, in patients with reduced creatinine clearance, will result in diminished clearance of the drug (see CLINICAL PHARMACOLOGY

#### TORADOL<sup>®</sup> IM and TORADOL<sup>®</sup> ORAL (ketorolac tromethamine)

section of full prescribing information). Therefore, TORADOL should be used with caution in patients with impaired renal function (see WARNINGS, and DOSAGE AND ADMINISTRATION section of full prescribing information) and such patients should be followed closely.

**Fluid Retention and Edema:** As with other nonsteroidal anti-inflammatory drugs (NSAIDs) that inhibit prostaglandin biosynthesis, fluid retention, edema, retention of NaCl, oliguria, elevations of serum urea nitrogen and creatinine have been reported in clinical trials with TORADOL. Therefore, TORADOL should be used with caution in patients with acute renal failure, cardiac decompensation, hypertension, or similar conditions.

**Hepatic Effects:** As with other nonsteroidal anti-inflammatory drugs (NSAIDs), treatment with TORADOL may cause elevations of liver enzymes, and in patients with pre-existing liver dysfunction, it may lead to the development of a more severe hepatic reaction. The ALT (SGPT) test is probably the most sensitive indicator of liver injury. In patients with symptoms and signs suggesting liver dysfunction, or in whom an abnormal liver test has occurred as a result of TORADOL therapy, the administration of the drug should be discontinued.

**Hematologic Effects:** TORADOL inhibits platelet aggregation and may prolong bleeding time. Unlike aspirin, the inhibition of platelet function by TORADOL disappears within 24 to 48 hours after the drug is discontinued. TORADOL does not appear to affect platelet count, prothrombin time (PT) or partial thromboplastin time (PTT). In controlled clinical studies where TORADOL was administered intramuscularly or intravenously postoperatively, the incidence of clinically significant postoperative bleeding was 0.4% for TORADOL compared to 0.2% in the control groups receiving narcotic analgesics. Because prostaglandins play an important role in hemostasis, and NSAIDs affect platelet aggregation as well, use of TORADOL in patients who have coagulation disorders should be undertaken with caution, and those patients should be carefully monitored. Patients on therapeutic doses of anticoagulants (e.g., heparin or dicumarol derivatives) have an increased risk of bleeding complications if given TORADOL concurrently; physicians should administer such concomitant therapy with extreme caution. The concurrent use of TORADOL and prophylactic, low-dose heparin (2500-5000 units q12h) has not been studied extensively, but may also be associated with an increased risk of bleeding. Physicians should weigh the benefits against the risk, and exercise caution in using such concomitant therapy in these patients. In patients who receive anticoagulants for any reason, there is an increased risk of intramuscular hematoma formation from TORADOL<sup>®</sup> injections (see PRECAUTIONS—Drug Interactions). In postmarketing experience, postoperative hematomas and other signs of wound bleeding have been reported in association with the perioperative use of TORADOL<sup>®</sup>. Caution should be used, therefore, when TORADOL is administered pre- or intraoperatively. Perioperative use of TORADOL should be undertaken with caution when strict hemostasis is critical.

##### Information for Patients

TORADOL, like other drugs of its class, is not free of side effects. The side effects of these drugs can cause discomfort and, rarely, there are more serious side effects, such as gastrointestinal bleeding, which may result in hospitalization and even fatal outcomes. Physicians may wish to discuss with their patients the potential risks (see WARNINGS, PRECAUTIONS, and ADVERSE REACTIONS Sections) and likely benefits of TORADOL treatment, particularly when it is used for less serious conditions when lengthy treatment is anticipated and when acceptable alternatives to both the patient and physician may be available.

##### Laboratory Tests

Because serious GI tract ulceration and bleeding can occur without warning symptoms, physicians should follow patients for the signs and symptoms of ulceration and bleeding and should inform them of the importance of this follow-up (see PRECAUTIONS—Risk of GI Ulceration, Bleeding and Perforation).

##### Drug Interactions

TORADOL is highly bound to human plasma proteins (mean 99.2%) and binding is independent of concentration. The *in vitro* binding of warfarin to plasma proteins is only slightly reduced by TORADOL (99.5% control vs 99.3%) with TORADOL plasma concentrations of 5 to 10 µg/mL. TORADOL does not alter digoxin protein binding. *In vitro* studies indicate that, at therapeutic plasma concentrations of salicylate (300 µg/mL), the binding of TORADOL was reduced from approximately 99.2% to 97.5%, representing a potential two-fold increase in unbound TORADOL plasma levels; hence, TORADOL should be used with caution (or at a reduced dosage) in patients being treated with high-dose salicylate regimens. Therapeutic concentrations of digoxin, warfarin, ibuprofen, naproxen, piroxicam, acetaminophen, phenytoin, and tolbutamide did not alter TORADOL protein binding. In a study involving 12 volunteers, oral TORADOL was co-administered with a single dose of 25 mg warfarin, causing no significant changes in pharmacokinetics or pharmacodynamics of warfarin. In another study, intramuscular TORADOL (following oral dosing) was given with two doses of 5000 U of heparin to 11 healthy volunteers, resulting in a mean template bleeding time of 6.4 minutes (3.2-11.4 min) compared to a mean of 6.0 minutes (3.4-7.5 min) for heparin alone and 5.1 minutes (3.5-8.5 min) for placebo. Although these results do not indicate a significant interaction between TORADOL and warfarin or heparin, the administration of TORADOL, or other NSAIDs, to patients taking anti-coagulants should be done with caution and patients should be closely monitored (see PRECAUTIONS—Hematologic Effects). Intramuscular TORADOL reduced the diuretic response to furosemide in normovolemic healthy subjects by approximately 20% (mean sodium and urinary output decreased 17%). Concomitant administration of oral TORADOL and probenecid resulted in decreased clearance of ketorolac and significant increases in ketorolac plasma levels (total AUC increased approximately 3-fold from 5.4 to 17.8 µg·h/mL) and terminal half-life (increased approximately 2-fold from 6.6 to 15.1 hours). Inhibition of renal lithium clearance, leading to an increase in plasma lithium concentration, has been reported with some prostaglandin synthesis inhibiting drugs. The effect of TORADOL on plasma lithium has not been studied. Concomitant administration of methotrexate and some NSAIDs has been reported to reduce the clearance of methotrexate, enhancing the toxicity of methotrexate. The effect of TORADOL on methotrexate clearance has not been studied. In postmarketing experience, there have been three reports of a possible interaction between TORADOL<sup>®</sup> and non-depolarizing muscle relaxants, appearing to enhance the effect of the muscle relaxant. The concurrent use of TORADOL with muscle relaxants has not been formally studied. Intramuscular TORADOL has been administered concomitantly with morphine in several clinical trials of postoperative pain without evidence of adverse interactions. There is no evidence, in animal or human studies, that TORADOL induces or inhibits hepatic enzymes capable of metabolizing itself or other drugs.



**TORADOL<sup>®</sup>™ and TORADOL<sup>®</sup> ORAL**  
(ketorolac tromethamine)

**Carcinogenesis, Mutagenesis, and Impairment of Fertility**

An 18-month study in mice at oral doses of ketorolac tromethamine equal to the parenteral MRHD (Maximum Recommended Human Dose) and a 24-month study in rats at oral doses 2.5 times the parenteral MRHD, showed no evidence of tumorigenicity. Ketorolac tromethamine was not mutagenic in Ames test, unscheduled DNA synthesis and repair, and in forward mutation assays. Ketorolac did not cause chromosome breakage in the *in vivo* mouse micronucleus assay. At 1590 µg/mL (approximately 1000 times the average human plasma levels) and at higher concentrations, ketorolac tromethamine increased the incidence of chromosomal aberrations in Chinese hamster ovarian cells. Impairment of fertility did not occur in male or female rats at oral doses of 9 mg/kg (53.1 mg/m<sup>2</sup>) and 16 mg/kg (94.4 mg/m<sup>2</sup>), respectively.

**Pregnancy**  
**Pregnancy Category C**

Reproduction studies have been performed in rabbits, using daily oral doses at 3.6 mg/kg (42.35 mg/m<sup>2</sup>) and in rats at 10 mg/kg (59 mg/m<sup>2</sup>) during organogenesis. Results of these studies did not reveal evidence of fetotoxicity to the fetus. Oral doses of ketorolac tromethamine at 1.5 mg/kg (8.8 mg/m<sup>2</sup>), which was half of the human oral exposure, administered after gestation day 17 caused dystocia and higher pup mortality in rats. There are no adequate and well-controlled studies in pregnant women. Ketorolac tromethamine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Labor and Delivery**

TORADOL is not recommended for use during labor and delivery (see INDICATIONS AND USAGE section of full prescribing information).

**Lactation and Nursing**

After a single administration of 10 mg of TORADOL<sup>®</sup>™ to humans, the maximum milk concentration observed was 73 ng/mL and the maximum milk-to-plasma ratio was 0.037. After one day of dosing (qid), the maximum milk concentration was 79 ng/mL and the maximum milk-to-plasma ratio was 0.025. Caution should be exercised when TORADOL<sup>®</sup>™ is administered to a nursing woman.

**Pediatric Use**

Safety and efficacy in children have not been established. Therefore, TORADOL is not recommended for use in children.

**Use in the Elderly**

Because ketorolac tromethamine is cleared somewhat more slowly by the elderly (see CLINICAL PHARMACOLOGY section of full prescribing information) who are also more sensitive to the renal effects of NSAIDs (see PRECAUTIONS—Renal Effects), extra caution and reduced dosages (see DOSAGE AND ADMINISTRATION section of full prescribing information) should be used when treating the elderly with TORADOL.

**ADVERSE REACTIONS**

Adverse reaction rates from short-term use of NSAIDs are generally from 1/10 to 1/2 the rates associated with long-term use. This is also true for TORADOL. Adverse reaction rates also may increase with higher doses of TORADOL (see WARNINGS, and DOSAGE AND ADMINISTRATION section of full prescribing information). TORADOL<sup>®</sup>™ is indicated for short-term use. Physicians using TORADOL<sup>®</sup>™ should be alert for the usual complications of NSAID treatment, and should be aware that with longer use (exceeding 5 days) of TORADOL<sup>®</sup>™, the frequency and severity of adverse reactions may increase. Physicians using TORADOL<sup>®</sup>™ should be alert to the relative risks associated with dose and dose duration as described in CLINICAL PHARMACOLOGY—Clinical Studies section of full prescribing information. Physicians using TORADOL should be alert for the usual complications of NSAID treatment. The adverse reactions listed below were reported in clinical trials with TORADOL in which patients received up to 20 doses, in 5 days, of TORADOL<sup>®</sup>™ 30 mg or up to 4 doses a day from long-term studies of TORADOL<sup>®</sup>™ 10 mg qid. In addition, adverse reactions that were reported from TORADOL<sup>®</sup>™ postmarketing surveillance are included in "Incidence 1% or Less." **Incidence Greater than 1%** (probably causally related): **Body as a Whole:** EDEMA<sup>\*</sup>; **Cardiovascular:** HYPERTENSION; **Dermatologic:** RASH, pruritus<sup>\*</sup>; **Gastrointestinal:** NAUSEA (12%), DYSPEPSIA (12%), GASTROINTESTINAL PAIN (13%), constipation, diarrhea<sup>\*</sup>, flatulence, gastrointestinal fullness, vomiting, STOMATITIS; **Hemic and Lymphatic:** purpura; **Nervous System:** drowsiness<sup>\*</sup>, dizziness<sup>\*</sup>, HEADACHE (17%), sweating. Injection site pain was reported by 2% of patients in multidose studies (vs. 5% for the morphine control group). **Incidence of reported reaction between 3% and 9%.** Those reactions occurring in less than 3% of the patients are unmarked. Reactions reported predominantly from long-term TORADOL<sup>®</sup>™ studies are CAPITALIZED. **Incidence 1% or Less** (probably causally related): **Body as a Whole:** hypersensitivity reactions such as anaphylaxis<sup>\*</sup>, bronchospasm, laryngeal edema, tongue edema, hypotension, and flushing, weight gain, fever; **Cardiovascular:** flushing, palpitation, pallor, hypotension, syncope; **Dermatologic:** Lyell's syndrome, Stevens-Johnson syndrome, exfoliative dermatitis, maculo-papular rash, urticaria; **Gastrointestinal:** peptic ulceration, GI hemorrhage, GI perforation (see WARNINGS and PRECAUTIONS), melena, rectal bleeding, gastritis, eructation, anorexia, increased appetite; **Hemic and Lymphatic:** postoperative wound hemorrhage rarely requiring blood transfusion (see WARNINGS and PRECAUTIONS), thrombocytopenia, epistaxis, anemia; **Nervous System:** convulsions, vertigo, tremors, abnormal dreams, hallucinations, euphoria; **Respiratory:** dyspnea, asthma, pulmonary edema; **Urogenital:** acute renal failure (see WARNINGS and PRECAUTIONS), flank pain with or without hematuria and/or azotemia, oliguria, nephritis.

<sup>\*</sup>Italics denote reactions reported from postmarketing experience.

**Other Adverse Events** (causal relationship unknown): **Body as a Whole:** asthenia; **Gastrointestinal:** pancreatitis; **Hemic and Lymphatic:** leukopenia, EOSINOPHILIA; **Nervous System:** paresthesia, depression, insomnia, nervousness, excessive thirst, dry mouth, abnormal thinking, inability to concentrate, hyperkinesia, stupor; **Respiratory:** RHINITIS, COUGH, dyspnea; **Special Senses:** abnormal taste, abnormal vision, blurred vision, tinnitus, HEARING LOSS; **Urogenital:** polyuria, increased urinary frequency.

<sup>†</sup>Reactions occurred under circumstances where the causal relationship to TORADOL treatment has not been clearly established; they are presented as alerting information for physicians. Reactions reported predominantly from long-term TORADOL<sup>®</sup>™ studies are CAPITALIZED.

See package insert for full prescribing information.

Caution: Federal law prohibits dispensing without prescription.

U.S. Patent No. 4,089,969 and others



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**BOOK REVIEWS**

**Practical Dermatology**

by Beth G. Goldstein and Adam O. Goldstein, 328 pages, 211 illus, \$51.95, ISBN 0-8151-3542-4, St Louis, Mo, Mosby-Year Book Inc, 1992.

Perhaps not a day goes by that a family physician does not encounter a patient with a rash. With common complaints of red spots, scaly skin, or terrible itching, dermatology is an intricate part of family medicine.

*Practical Dermatology*, by Beth and Adam Goldstein (she is a dermatologist and he, a family physician), is a book that will fill a void on many clinicians' bookshelves. The book is divided into four parts. Part I discusses the art of dermatology. This includes the dermatologic basics (terminology, differential diagnoses, and pitfalls in diagnoses), dermatologic therapies (topical agents, corticosteroid agents, patient-centered therapy, and pitfalls of treatment), diagnostic procedures (potassium hydroxide preparation, fungal culture, scabies test, Tzanck smear, Wood's light examination, cryosurgery, curettage, electrodesiccation, and shave and punch biopsies, as well as shave, punch, snip, elliptical, and cyst excisions), and preventive dermatology (occupational and environmental).

Discussions of the common skin dermatoses are found in part II. The authors also include discussions of 110 dermatologic disorders and 25 skin manifestations of systemic disease. The sections are logically arranged in outline order. Each in-

cludes classic description (distribution, primary, secondary), diagnosis, differential diagnosis, treatment, and prevention.

The authors have used more than 125 color illustrations and 200 figures to help the reader understand the physical presentation of the dermatologic findings associated with the clinical disorders.

The sections on treatment include common sense instructions to promote symptomatic relief and resolution of the problem. Pharmacologic options, techniques for surgical intervention, and preventive steps are presented in a straightforward manner.

In addition, this book contains special sections on skin disorders of pregnancy, geriatric patients, acquired immunodeficiency syndrome, the newborn, and the cutaneous manifestations of systemic diseases.

A thoughtful and useful addition is the appendix, which includes patient education handouts on 14 of the most commonly encountered dermatologic problems. The publisher has granted permission to reproduce these handouts for distribution to one's patients.

In summary, this book is very easy to use and will be quite helpful as a rapid reference source for most commonly and some not so commonly encountered dermatologic problems. Collected from the files of two medical schools and two practices, the photographs are excellent. The common-sense approaches to therapy and prevention contain many of the practical pearls of dermatology that can make a family physician's practice more successful and rewarding. This book would make an excellent basic text and/or reference text for medical students, residents, faculty, and prac-

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For pain/inflammation

**Rx** <sup>550 MG TABLETS</sup> **Anaprox<sup>®</sup> DS** <sup>275 MG TABLETS</sup> **Anaprox<sup>®</sup>**  
(NAPROXEN SODIUM)



As with other NSAIDs, the most frequent complaints are gastrointestinal. See Warnings, Precautions, and Adverse Reactions sections of prescribing information. Please see adjacent page for brief summary of prescribing information.  
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**Brief Summary:**

**Contraindications:** Patients who have had allergic reactions to NAPROSYN® ANAPROX® or ANAPROX® DS or in whom aspirin or other NSAIDs induce the syndrome of asthma, rhinitis, and nasal polyps. Because anaphylactic reactions usually occur in patients with a history of such reactions, question patients for asthma, nasal polyps, urticaria, and hypotension associated with NSAIDs before starting therapy. If such symptoms occur, discontinue the drug.

**Warnings:** Serious GI toxicity such as bleeding, ulceration, and perforation, can occur at any time, with or without warning symptoms, in patients treated chronically with NSAIDs. Remain alert for ulceration and bleeding even in the absence of previous GI tract symptoms. In clinical trials, symptomatic upper GI ulcers, gross bleeding or perforation occur in about 1% of patients treated for 3-6 months, and in about 2-4% of patients treated for one year. Inform patients of signs and/or symptoms of serious GI toxicity and what steps to take if they occur. Studies have not identified any subset of patients not at risk of developing peptic ulceration and bleeding. Except for a prior history of serious GI events and other risk factors associated with peptic ulcer disease, such as alcoholism, smoking, etc., no risk factors (e.g., age, sex) have been associated with increased risk. Elderly or debilitated patients seem to tolerate ulceration or bleeding less well and most spontaneous reports of fatal GI events are in this population. In considering the use of relatively large doses (within the recommended dosage range), sufficient benefit should be anticipated to offset the potential increased risk of GI toxicity.

**Precautions:** DO NOT GIVE NAPROSYN® (NAPROXEN) CONCOMITANTLY WITH ANAPROX® OR ANAPROX® DS (NAPROXEN SODIUM) SINCE THEY CIRCULATE IN PLASMA AS THE NAPROXEN ANION. Acute interstitial nephritis with hematuria, proteinuria, and nephrotic syndrome has been reported. Patients with impaired renal function, heart failure, liver dysfunction, patients taking diuretics, and the elderly are at greater risk of overt renal decompensation. If this occurs, discontinue the drug. Use with caution and monitor serum creatinine and/or creatinine clearance in patients with significantly impaired renal function. Use caution in patients with baseline creatinine clearance less than 20 ml/minute. Use the lowest effective dose in the elderly or in patients with chronic alcoholic liver disease or cirrhosis. Borderline elevations of liver tests may occur in up to 15% of patients. Elevations of SGPT or SGOT occurred in controlled trials in less than 1% of patients. Severe hepatic reactions, including jaundice and fatal hepatitis, have been reported rarely. If liver disease develops or if systemic manifestations occur (e.g., eosinophilia or rash), discontinue therapy. If steroid dosage is reduced or eliminated during therapy, do so slowly and observe patients closely for adverse effects, including adrenal insufficiency and exacerbation of arthritis symptoms. Determine hemoglobin values periodically for patients with initial values of 10 grams or less who receive long-term therapy. Peripheral edema has been reported. For patients with restricted sodium intake, note that each tablet contains approximately 25 or 50 mg (1 or 2 mEq) sodium. Use with caution in patients with fluid retention, hypertension or heart failure. The drug may reduce fever and inflammation, diminishing their diagnostic value. Conduct ophthalmic studies if any change or disturbance in vision occurs. **Information for Patients:** Side effects can cause discomfort and, rarely, more serious side effects, such as GI bleeding, may result in hospitalization and even fatal outcomes. Physicians may wish to discuss with patients potential risks and benefits of NSAIDs, particularly when they are used for less serious conditions where treatment without NSAIDs may be acceptable. Patients should use caution for activities requiring alertness if they experience drowsiness, dizziness, vertigo or depression during therapy. **Laboratory Tests:** Because serious GI tract ulceration and bleeding can occur without warning symptoms, follow chronically treated patients and inform them of the importance of the follow-up. **Drug Interactions:** Use caution when giving concomitantly with coumarin-type anticoagulants; a hydantoin, sulfonamide or sulfonylurea; furosemide; lithium; beta-blockers; probenecid; or methotrexate. **Drug/Laboratory Test Interactions:** May decrease platelet aggregation and prolong bleeding time or increase urinary values for 17-ketogenic steroids. Temporarily stop therapy for 72 hours before adrenal function tests. May interfere with urinary assays of SHIAA. **Carcinogenesis:** A 2-year rat study showed no evidence of carcinogenicity. **Pregnancy:** Category B. Do not use during pregnancy unless clearly needed. Avoid use during late pregnancy. **Nursing Mothers:** Avoid use. **Pediatric Use:** Single doses of 2.5-5 mg/kg (as naproxen suspension), with total daily dose not exceeding 15 mg/kg/day, are safe in children over 2 years of age.

**Adverse Reactions:** In a study, GI reactions were more frequent and severe in rheumatoid arthritis patients on 1650 mg/day naproxen sodium than in those on 825 mg/day. In children with juvenile arthritis, rash and prolonged bleeding times were more frequent, GI and CNS reactions about the same, and other reactions less frequent than in adults. Incidence Greater Than 1%, Probable Causal Relationship: GI: The most frequent complaints related to the GI tract: constipation, heartburn, abdominal pain, nausea, dyspepsia, diarrhea, stomatitis. CNS: headache, dizziness, drowsiness, light-headedness, vertigo. Dermatologic: itching (pruritus), skin eruptions, ecchymoses, sweating, purpura. Special Senses: tinnitus, hearing disturbances, visual disturbances. Cardiovascular: edema, dyspnea, palpitations. General: thirst. \*Incidence of reported reaction 3%-9%. Where unmarked, incidence less than 3%. Incidence Less Than 1%: Probable Causal Relationship: GI: abnormal liver function tests, colitis, GI bleeding and/or perforation, hematemesis, jaundice, melena, peptic ulceration with bleeding and/or perforation, vomiting. Renal: glomerular nephritis, hematuria, hyperkalemia, interstitial nephritis, nephrotic syndrome, renal disease, renal failure, renal papillary necrosis. Hematologic: agranulocytosis, eosinophilia, granulocytopenia, leukopenia, thrombocytopenia. CNS: depression, dream abnormalities, inability to concentrate, insomnia, malaise, myalgia and muscle weakness. Dermatologic: alopecia, photosensitive dermatitis, skin rashes. Special Senses: hearing impairment. Cardiovascular: congestive heart failure. Respiratory: eosinophilic pneumonitis. General: anaphylactoid reactions, menstrual disorders, pyrexia (chills and fever). Causal Relationship Unknown: Hematologic: aplastic anemia, hemolytic anemia. CNS: aseptic meningitis, cognitive dysfunction. Dermatologic: epidermal necrolysis, erythema multiforme, photosensitivity reactions resembling porphyria cutanea tarda and epidermolysis bullosa, Stevens-Johnson syndrome, urticaria. GI: non-peptic GI ulceration, ulcerative stomatitis. Cardiovascular: vasculitis. General: angioneurotic edema, hyperglycemia, hypoglycemia.

**Overdosage:** May have drowsiness, heartburn, indigestion, nausea, vomiting. A few patients have had seizures. Empty stomach and use usual supportive measures. In animals 0.5g/kg of activated charcoal reduced plasma levels of naproxen.

**Dosage and Administration for Mild to Moderate Pain, Dysmenorrhea and Acute Tendinitis and Bursitis:** Recommended starting dose is 550 mg, followed by 275 mg every 6 to 8 hours. Total daily dose should not exceed 1375 mg.

**Dosage and Administration for Rheumatoid Arthritis, Osteoarthritis and Ankylosing Spondylitis:** Recommended dose in adults is 275 mg or 550 mg twice daily. In patients who tolerate lower doses well, the dose may be increased to 1650 mg per day for limited periods when a higher level of anti-inflammatory/analgesic activity is required. At this dosage, physicians should observe sufficient increased clinical benefits to offset potential increased risk.

**Caution:** Federal law prohibits dispensing without prescription.

See package insert for full Prescribing Information.

#35

Revised 9/91



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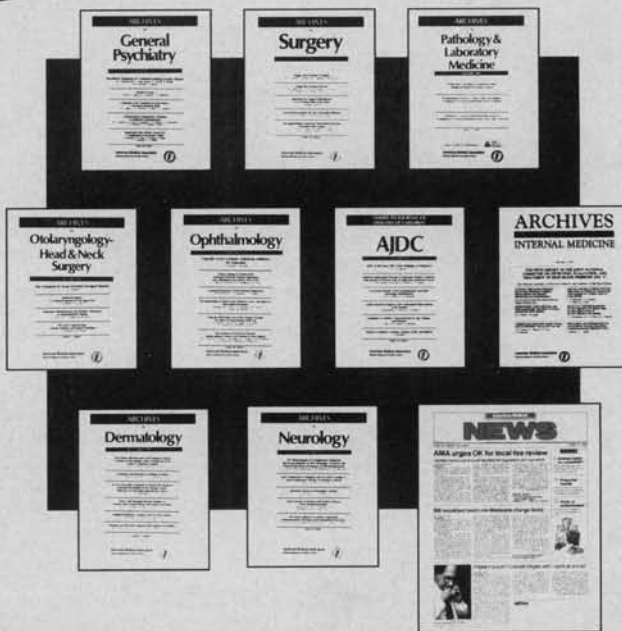
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P3AA1

**Ismo® (isosorbide mononitrate) 20 mg tablets**

BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION AND PATIENT INFORMATION, SEE PACKAGE CIRCULAR.)

**Indications and Usage** Ismo is indicated for prevention of angina pectoris due to coronary artery disease. The onset of action is not rapid enough for it to be useful in aborting an acute anginal episode.

**Clinical Pharmacology** Isosorbide mononitrate is the major active metabolite of isosorbide dinitrate; most of the clinical activity of the dinitrate comes from the mononitrate. Ismo is not subject to first-pass metabolism in the liver and the absolute bioavailability of isosorbide mononitrate from Ismo tablets is nearly 100%. The rate of clearance of Ismo is the same in healthy young adults, in patients with various degrees of renal, hepatic, or cardiac dysfunction, and in the elderly.

Several well-controlled studies have demonstrated that active nitrates were indistinguishable from placebo after 24 hours (or less) of continuous therapy due to the development of tolerance. Only after nitrates are absent from the body for several hours is their antianginal efficacy restored.

The drug-free interval sufficient to avoid tolerance to isosorbide mononitrate is not completely defined. The only regimen shown to avoid development of tolerance with isosorbide mononitrate involves two daily doses of Ismo tablets given 7 hours apart, so there is a gap of 17 hours between the second dose of each day and the first dose of the next day. Taking account of the relatively long half-life of isosorbide mononitrate this result is consistent with those obtained for other organic nitrates.

The same twice-daily regimen of Ismo tablets successfully avoided significant rebound/withdrawal effects. In studies of other nitrates, the incidence and magnitude of such phenomena appear to be highly dependent upon the schedule of nitrate administration.

**Contraindications** Allergic reactions are extremely rare, but do occur. Ismo is contraindicated in patients allergic to it.

**Warnings** Because the effects of Ismo are difficult to terminate rapidly and have not been established in patients with acute myocardial infarction (MI) or congestive heart failure (CHF), this drug is not recommended in these patients. If Ismo is used in these patients, careful clinical or hemodynamic monitoring is required to avoid the hazards of hypotension and tachycardia.

**Precautions** GENERAL Severe hypotension, particularly with upright posture, may occur with even small doses. Therefore, use with caution in patients who may be volume depleted or who are already hypotensive. Paradoxical bradycardia and increased angina pectoris may accompany Ismo-induced hypotension.

Nitrates may aggravate angina caused by hypertrophic cardiomyopathy.

**INFORMATION FOR PATIENTS** Tell patients they must carefully follow the prescribed dosing schedule (2 doses taken 7 hours apart) to maintain the antianginal effect (eg, take first dose on awakening and second dose 7 hours later).

Daily headaches sometimes accompany treatment with nitrates, including Ismo, and are a marker of drug activity. Patients with headaches should not alter their treatment schedule since loss of headache may be associated with simultaneous loss of antianginal efficacy. Headaches may be treated with aspirin and/or acetaminophen without affecting the antianginal activity of Ismo.

Light-headedness on standing, especially just after rising from a recumbent or seated position, may occur. This may be more frequent in patients who have consumed alcohol.

**DRUG INTERACTIONS** Vasodilating effects of Ismo may be additive with those of other vasodilators, especially alcohol.

Marked symptomatic orthostatic hypotension has been reported when calcium channel blockers and organic nitrates were used in combination. Dose adjustments of either class of agents may be necessary.

**CARCINOGENESIS, MUTAGENESIS, AND IMPAIRMENT OF FERTILITY** No carcinogenic effects were observed in mice or rats exposed to oral Ismo, nor were adverse effects on rat fertility observed.

No mutagenic activity was seen in *in vitro* or *in vivo* assays.

**PREGNANCY CATEGORY C** Ismo has been shown to have embryocidal effects in rats and rabbits at doses at least 70 times the maximum human dose. There are no adequate and well-controlled studies in pregnant women. Use during pregnancy only if potential benefit justifies potential fetal risk.

**NURSING MOTHERS** Excretion in human milk is unknown. Use caution if administered to a nursing woman.

**PEDIATRIC USE** Safety and effectiveness have not been established.

**Adverse Reactions** Frequency of Adverse Reactions (Discontinuations)\* Occurring in >1% of Subjects

	6 Controlled U. S. Studies		92 Clinical Studies
	Placebo	20 mg	(varied)
Patients	204	219	3344
Headache	9% (0%)	38% (9%)	19% (4.3%)
Dizziness	1% (0%)	5% (1%)	3% (0.2%)
Nausea, Vomiting	<1% (0%)	4% (3%)	2% (0.2%)

\*Some individuals discontinued for multiple reasons

Fewer than 1% of patients reported each of the following (in many cases a causal relationship is uncertain): **Cardiovascular**; angina pectoris, arrhythmias, atrial fibrillation, hypotension, palpitations, postural hypotension, premature ventricular contractions, supraventricular tachycardia, syncope. **Dermatologic**; pruritus, rash. **Gastrointestinal**; abdominal pain, diarrhea, dyspepsia, tenesmus, tooth disorder, vomiting. **Genitourinary**; dysuria, impotence, urinary frequency. **Miscellaneous**; asthenia, blurred vision, cold sweat, diplopia, edema, malaise, neck stiffness, rigors. **Musculoskeletal**; arthralgia. **Neurologic**; agitation, anxiety, confusion, dyscoordination, hypoesthesia, hypokinesia, increased appetite, insomnia, nervousness, nightmares. **Respiratory**; bronchitis, pneumonia, upper respiratory tract infection.

Rarely, ordinary doses of organic nitrates have caused methemoglobinemia in normal-seeming patients (See **Overdosage**).

**Overdosage** The ill effects of overdosage are generally related to the ability of Ismo to induce vasodilation, venous pooling, reduced cardiac output and hypotension. Symptoms may include increased intracranial pressure, with any or all of persistent throbbing headache, confusion, and moderate fever; vertigo; palpitations; visual disturbances; nausea and vomiting (possibly with colic and even bloody diarrhea); syncope (especially with upright posture); air hunger and dyspnea, later followed by reduced ventilatory effort; diaphoresis, with the skin either flushed or cold and clammy; heart block and bradycardia; paralysis; coma; seizures and death.

Serum levels have no role in managing overdose. The likely lethal dose in humans is unknown.

There is neither a specific antidote to Ismo overdose, nor data to suggest a means for accelerating its elimination from the body; dialysis is ineffective. Hypotension associated with Ismo overdose results from venodilatation and arterial hypovolemia; therefore, direct therapy toward an increase in central fluid volume. Use of arterial vasoconstrictors (eg, epinephrine) is likely to do more harm than good. In patients with renal disease or CHF, treatment of Ismo overdose may be difficult and require invasive monitoring.

Methemoglobinemia has occurred in patients receiving other organic nitrates, and probably could occur as a side effect of Ismo. There are case reports of significant methemoglobinemia in association with moderate overdoses of organic nitrates. None of the affected patients had been thought to be unusually susceptible. Suspect the diagnosis in patients who exhibit signs of impaired oxygen delivery despite adequate cardiac output and adequate arterial pO<sub>2</sub>. Classically, methemoglobinemic blood is chocolate brown, without color change on exposure to air. The treatment of choice for methemoglobinemia is methylene blue, 1-2 mg/kg intravenously.

**DOSAGE AND ADMINISTRATION** The recommended regimen of Ismo tablets is 20 mg (one tablet) twice daily, with the two doses given 7 hours apart. For most patients, this can be accomplished by taking the first dose on awakening and the second dose 7 hours later. This dosing regimen provides a daily nitrate-free interval to avoid the development of refractory tolerance (see **Clinical Pharmacology**).

Well-controlled studies have shown that tolerance to Ismo tablets is avoided when using the twice daily regimen in which the two doses are given 7 hours apart. This regimen has been shown to have antianginal efficacy beginning 1 hour after the first dose and lasting at least 5 hours after the second dose. The duration (if any) of antianginal activity beyond 12 hours has not been studied; large controlled studies with other nitrates suggest that no dosing regimen should be expected to provide more than 12 hours of continuous antianginal efficacy per day.

Dosage adjustments are not necessary in the elderly patients or in patients with altered renal or hepatic function.

This Brief Summary is based upon the current Ismo direction circular, CI 4127-1, Issued January 10, 1992.

# HELP PREVENT HEART ATTACK WITH A STROKE.



The back stroke. The crawl. The butterfly. It doesn't matter which you choose, as long as you do it up to 40 minutes, 3 to 4 times a week. Or try cycling or jogging. Any type of aerobic exercise program can help reduce your risk of heart attack and stroke. The only hard part is diving in. To learn more, contact the American Heart Association, 7272 Greenville Avenue, Box 47, Dallas, TX 75231-4596.

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# Ismo<sup>®</sup>

20 mg tablets  
(isosorbide mononitrate)



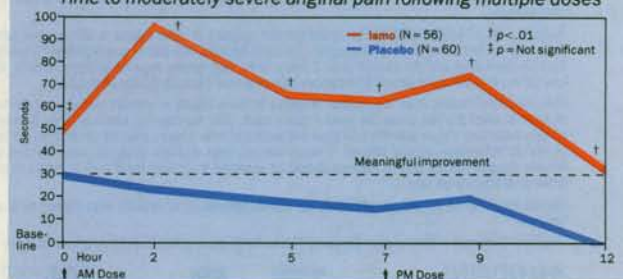
## ACTIVITY YOU CAN COUNT ON

### Antianginal activity for at least 12 hours\*

In clinical trials, Ismo dosed at 8 AM and 3 PM for a period of 2 weeks demonstrated efficacy for at least 12 hours after the first dose, ie, 5 hours after the second dose, of each day.<sup>1</sup>

#### DIFFERENCE IN EXERCISE PERFORMANCE VS PRETHERAPY

Time to moderately severe anginal pain following multiple doses



(Adapted from Protocol 12)<sup>1</sup>

### Predictable pharmacokinetic profile

Ismo is nearly 100% bioavailable. Blood levels following oral dosage are as predictable as those seen with I.V. isosorbide mononitrate administration.<sup>2</sup>

### Helps get active patients active again

\*The dosing schedule of 20 mg, twice daily, 7 hours apart (with a 17-hour dose-free interval) must be followed carefully.

Ismo is not recommended for use in aborting acute anginal episodes. The most common side effect, headache, may be managed with simple analgesics. As with other long-acting nitrates, Ismo is not recommended in patients with acute myocardial infarction or congestive heart failure.

**References:** 1. Data on file, Wyeth-Ayerst Laboratories, Protocol 12. 2. Abshagen U: Overview of the pharmacokinetics of isosorbide-5-mononitrate. In Julian DG, Rittinghausen R, Überbacher HJ, eds. Mononitrate II. New York: Springer-Verlag; 1987:pp 28-36.

Please see brief summary of prescribing information on adjacent page.

# HARNESS THE TRIPLE THE POTENT

## 1. Fungicidal action

- Naftin® is fungicidal, not just fungistatic, to dermatophytes at low concentrations\*.
- Imidazoles (Spectazole®, Nizoral®, Lotrimin® and Lotrisone®\*) are fungistatic at low concentrations.



## 3. Broad spectrum coverage

- Naftin® is effective against the dermatophytes which are associated with the majority of tinea infections.

*Recommend Broad Spectrum Naftin® (naftifine hydrochloride) for the everyday treatment of tinea pedis, tinea cruris.*

*The Standard of Skin Care*

**ALLERGAN Herbert**

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**For a copy of "Diagnosis and Treatment of Fungal Infections"**

\**In vitro* data, clinical significance unknown. A low incidence of irritation and

Please see adjacent page for brief summary of pres.

# ACTION POWER OF ANTIFUNGAL.

## 2. Rapid symptomatic relief

- Even without a steroid, Naftin® Cream is as effective as Lotrisone® at relieving tinea-related pruritus and erythema.<sup>1</sup>
- In comparative studies, Naftin® Cream-treated patients showed a marked decrease in scaling at week one and fissuring at week two compared to Spectazole®-treated patients.<sup>2</sup>



NAFTIN®  
(naftifine  
hydrochloride)

hydrochloride) 1% Cream and Gel  
for tinea corporis.

For more information, call: 1-800-934-3169.

Dryness was observed in clinical trials with Naftin® Cream.  
For more information.



NAFTIN®

(naftifine hydrochloride) 1%  
Cream 15g, 30g, 60g • Gel 20g, 40g, 60g

# NAFTIN®

(naftifine hydrochloride) 1%  
Cream & Gel

**INDICATIONS AND USAGE:** Naftin® Cream, 1% is indicated for topical application in the treatment of tinea pedis, tinea cruris and tinea corporis caused by the organisms *Trichophyton rubrum*, *Trichophyton mentagrophytes*, and *Epidermophyton floccosum*. Naftin® Gel 1% is indicated for the topical treatment of tinea pedis, tinea cruris and tinea corporis caused by the organisms *Trichophyton rubrum*, *Trichophyton mentagrophytes*, *Trichophyton tonsurans*\* and *Epidermophyton floccosum*. \*Efficacy for this organism in this organ system was studied in fewer than ten infections. **CONTRAINDICATIONS:** Naftin® Cream and Gel, 1% is contraindicated in individuals who have shown hypersensitivity to any of its components. **WARNING:** Naftin® Cream and Gel, 1% is for topical use only and not for ophthalmic use. **PRECAUTIONS: General:** Naftin® Cream and Gel, 1% is for external use only. If irritation or sensitivity develops with the use of Naftin® Cream and Gel, 1%, treatment should be discontinued and appropriate therapy instituted. Diagnosis of the disease should be confirmed either by direct microscopic examination of a mounting of infected tissue in a solution of potassium hydroxide or by culture on an appropriate medium. **Information for patients:** The patient should be told to: 1. Avoid the use of occlusive dressing or wrappings unless otherwise directed by the physician. 2. Keep Naftin® Cream and Gel, 1% away from the eyes, nose, mouth and other mucous membranes.

**Carcinogenesis, mutagenesis, impairment of fertility:** Long-term animal studies to evaluate the carcinogenic potential of Naftin® Cream and Gel, 1% have not been performed. *In vitro* and animal studies have not demonstrated any mutagenic effect or effect on fertility. **Pregnancy: Teratogenic Effects: Pregnancy Category B.** Reproduction studies have been performed in rats and rabbits (via oral administration) at doses 150 times or more the topical human dose and have revealed no evidence of impaired fertility or harm to the fetus due to naftifine. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

**Nursing mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when Naftin® Cream and Gel, 1% is administered to a nursing woman. **Pediatric use:** Safety and effectiveness in children have not been established. **ADVERSE REACTIONS:** During clinical trials with Naftin® Cream, 1%, the incidence of adverse reactions was as follows: burning/stinging (6%), dryness (3%), erythema (2%), itching (2%), local irritation (2%). During clinical trials with Naftin® Gel, 1%, the incidence of adverse reactions was as follows: burning/stinging (5%), itching (1%), erythema (0.5%), rash (0.5%), skin tenderness (0.5%).

## REFERENCES

1. Smith EB *et al.* Double-blind comparison of naftifine cream and clotrimazole/betamethasone dipropionate cream in the treatment of tinea pedis. *J Am Acad Dermatol* 1992;26:125-7.
2. Millikan LE, *et al.* Naftifine cream 1% versus econazole cream 1% in the treatment of tinea cruris and tinea corporis. *J Am Acad Dermatol* 1988; 18:52-6.

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**vicodin** **ES** 

(hydrocodone bitartrate 7.5mg [Warning: May be habit forming]  
and acetaminophen 750mg)

Extra strength pain relief  
you can phone in.

<sup>1</sup> Data on file, Knoll Pharmaceutical Company

<sup>2</sup> Standard industry new prescription audit.

\* (hydrocodone bitartrate 5mg [Warning: May be habit forming] and acetaminophen 500 mg)



# Maintain control of your patient's pain therapy.

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(hydrocodone bitartrate 7.5mg (Warning: May be habit forming)  
and acetaminophen 750mg)

### It's your prescription – not a suggestion.

**INDICATIONS AND USAGE:** For the relief of moderate to moderately severe pain. **CONTRAINDICATIONS:** Hypersensitivity to acetaminophen or hydrocodone. **WARNINGS: Respiratory Depression:** At high doses or in sensitive patients, hydrocodone may produce dose-related respiratory depression. **Head Injury and Increased Intracranial Pressure:** The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a preexisting increase in intracranial pressure. Furthermore, narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries. **Acute Abdominal Conditions:** The administration of narcotics may obscure the diagnosis or clinical course of patients with acute abdominal conditions. **PRECAUTIONS: Special Risk Patients:** VICODIN/VICODIN ES Tablets should be used with caution in elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture. **Cough Reflex:** Hydrocodone suppresses the cough reflex; as with all narcotics, caution should be exercised when VICODIN/VICODIN ES Tablets are used postoperatively and in patients with pulmonary disease. **Drug Interactions:** Patients receiving other narcotic analgesics, antipsychotics, anti-anxiety agents, or other CNS depressants (including alcohol) concomitantly with VICODIN/VICODIN ES Tablets may exhibit an additive CNS depression. The use of MAO inhibitors or tricyclic antidepressants with hydrocodone preparations may increase the effect of either the antidepressant or hydrocodone. The concurrent use of anticholinergics with hydrocodone may produce paralytic ileus. **Usage in Pregnancy: Teratogenic Effects:** Pregnancy Category C. Hydrocodone has been shown to be teratogenic in hamsters when given in doses 700 times the human dose. There are no adequate and well-controlled studies in pregnant women. VICODIN/VICODIN ES Tablets should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus. **Nonteratogenic effects:** Babies born to mothers who have been taking opioids regularly prior to delivery will be physically dependent. The withdrawal signs include irritability and excessive crying, tremors, hyperactive reflexes, increased respiratory rate, increased stools, sneezing, yawning, vomiting, and fever. **Labor and Delivery:** Administration of VICODIN/VICODIN ES Tablets to the mother shortly before delivery may result in some degree of respiratory depression in the newborn, especially if higher doses are used. **Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk and because of the potential for serious adverse reactions in nursing infants from VICODIN/VICODIN ES Tablets, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother. **Pediatric Use:** Safety and effectiveness in children have not been established. **ADVERSE REACTIONS:** The most frequently observed adverse reactions include light-headedness, dizziness, sedation, nausea and vomiting. These effects seem to be more prominent in ambulatory than in nonambulatory patients and some of these adverse reactions may be alleviated if the patient lies down. Other adverse reactions include: **Central Nervous System:** Drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, psychic dependence and mood changes. **Gastrointestinal System:** The antiemetic phenothiazines are useful in suppressing the nausea and vomiting which may occur (see above); however, some phenothiazine derivatives seem to be antianalgesic and to increase the amount of narcotic required to produce pain relief, while other phenothiazines reduce the amount of narcotic required to produce a given level of analgesia. Prolonged administration of VICODIN/VICODIN ES Tablets may produce constipation. **Genitourinary System:** Ureteral spasm, spasm of vesical sphincters and urinary retention have been reported. **Respiratory Depression:** Hydrocodone bitartrate may produce dose-related respiratory depression by acting directly on the brain stem respiratory center. Hydrocodone also affects the center that controls respiratory rhythm, and may produce irregular and periodic breathing. If significant respiratory depression occurs, it may be antagonized by the use of naloxone hydrochloride. Apply other supportive measures when indicated. **DRUG ABUSE AND DEPENDENCE:** VICODIN/VICODIN ES Tablets are subject to the Federal Controlled Substance Act (Schedule III). Psychic dependence, physical dependence, and tolerance may develop upon repeated administration of narcotics; therefore, VICODIN/VICODIN ES Tablets should be prescribed and administered with caution. **OVERDOSAGE: Acetaminophen Signs and Symptoms:** In acute acetaminophen overdosage, dose-dependent, potentially fatal hepatic necrosis is the most serious adverse effect. Renal tubular necrosis, hypoglycemic coma, and thrombocytopenia may also occur. Early symptoms following a potentially hepatotoxic overdose may include: nausea, vomiting, diaphoresis and general malaise. Clinical and laboratory evidence of hepatic toxicity may not be apparent until 48 to 72 hours post-ingestion. **Hydrocodone Signs and Symptoms:** Serious overdose with hydrocodone is characterized by respiratory depression (a decrease in respiratory rate and/or tidal volume, Cheyne-Stokes respiration, cyanosis), extreme somnolence progressing to stupor or coma, skeletal muscle flaccidity, cold and clammy skin, and sometimes bradycardia and hypotension. In severe overdosage, apnea, circulatory collapse, cardiac arrest and death may occur.

Revised March 1992

5890

Knoll Pharmaceutical Company  
30 North Jefferson Road  
Whippany, New Jersey 07981

BASF Group



# WHY CONSIDER TENORMIN BEFORE ALL OTHER BETA BLOCKERS?



- ▼ Convenient, once-daily dosing for all indications
- ▼ Effective control of blood pressure and angina
- ▼ Cardioprotection—improving survival during and after MI<sup>1,2\*</sup>
- ▼ Well-tolerated

I.V. INJECTION/TABLETS  
**TENORMIN**<sup>®</sup>  
(atenolol)

\* Good clinical judgment suggests that patients who are dependent on sympathetic stimulation for adequate cardiac output and BP are not good candidates for beta blockade. In addition to patients excluded from the ISIS-1 study, those with borderline BP (ie, systolic < 120, especially if over age 60) are less likely to benefit.

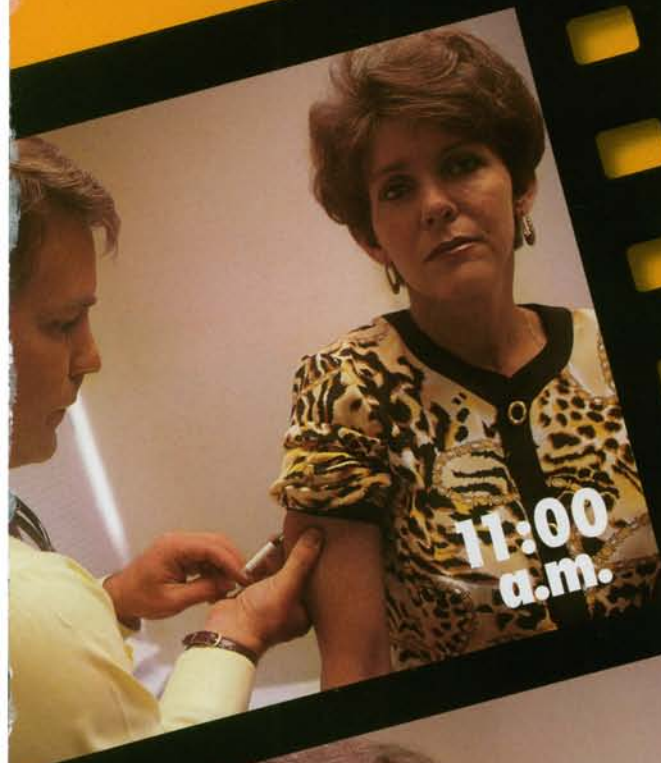
References: 1. ISIS-1 (First International Study of Infarct Survival) Collaborative Group. Randomised trial of intravenous atenolol among 16 027 cases of suspected acute myocardial infarction: ISIS-1. *Lancet*. 1986;2:57-66. 2. Glamann DB, Lange RA, Hillis LD. Beneficial effect of long-term beta blockade after acute myocardial infarction in patients without anterograde flow in the infarct artery. *Am J Cardiol*. 1991;68:150-154.

See adjacent page for brief summary of prescribing information.



A Clinical Demonstration of

**MIGRAINE  
RELIEF  
YOU CAN  
SEE IN  
MINUTES**



CERENEX PHARMACEUTICALS INTRODUCES

**NEW**

SUBCUTANEOUS

**IMITREX™**

SUMATRIPTAN  
SUCCINATE



Actual clinical course of a patient following administration of one 6-mg subcutaneous injection of IMITREX for migraine (time-lapse footage).

# MIGRAINE RELIEF THAT CAN CHANGE PATIENTS' LIVES

**IMITREX is the first highly specific 5-HT<sub>1</sub> receptor agonist—offering a profile of relief unlike any other migraine therapy.**

Relief that begins within 10 minutes.<sup>1,2</sup>

---

Relief any time IMITREX is taken during the attack.<sup>1,3,4</sup>

---

Relief of the total symptom complex: pain, nausea, vomiting, and light and sound sensitivity.<sup>1-4</sup>

---

Relief of the disability caused by migraine.<sup>1-4</sup>

---

Relief without sedation.

---

Relief in a simple, convenient dose: one 6-mg subcutaneous injection.\*

---

Relief within reach for patients: The IMITREX™ SELFdose System— a push-button autoinjector with single-dose, prefilled syringes.

---

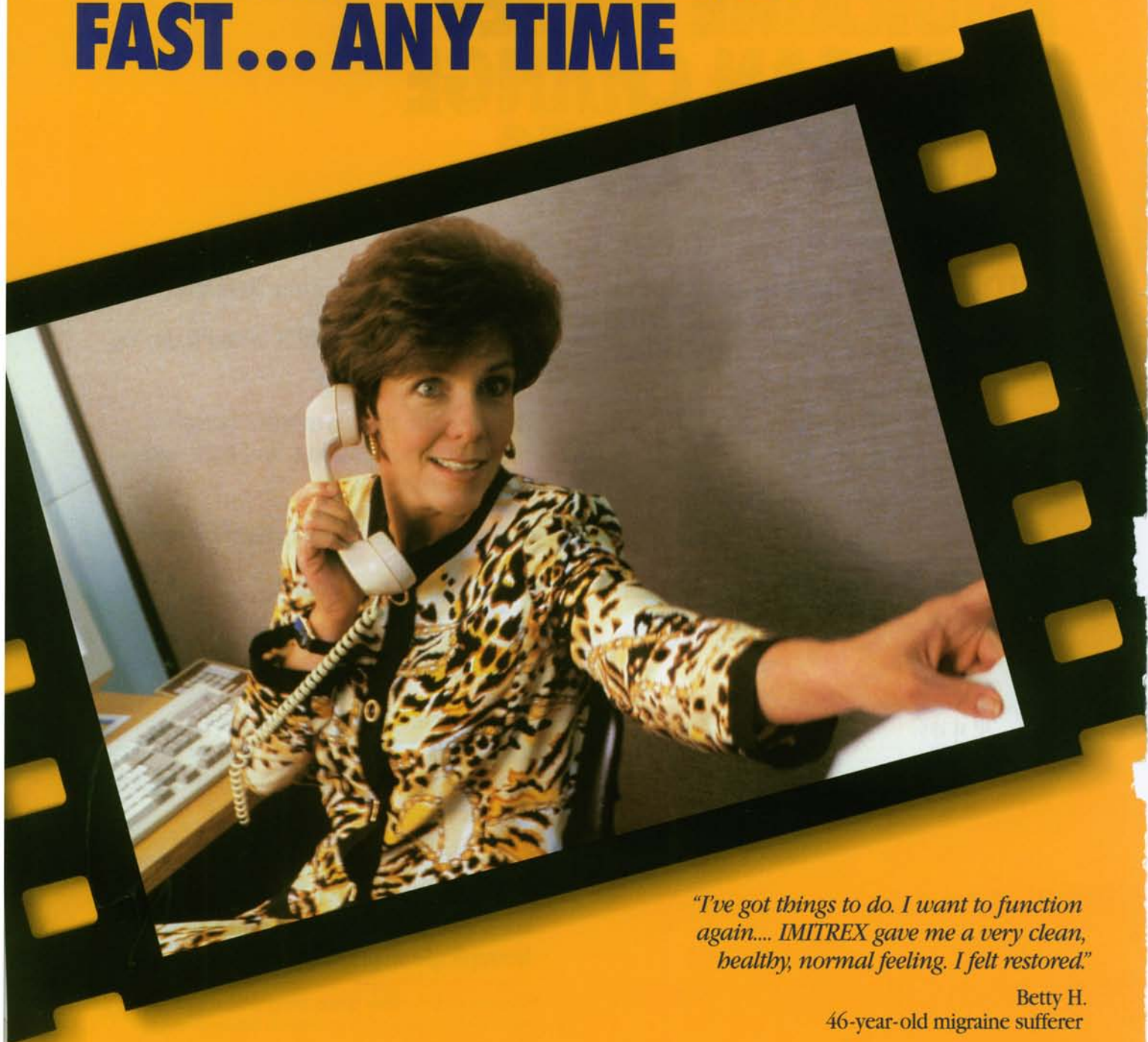
Relief of migraine attacks with or without aura. (IMITREX should not be administered to patients with basilar or hemiplegic migraine.)

---

\*Maximum daily dose is two 6-mg subcutaneous injections (minimum 1-hour interval between doses). No clear benefit is associated with the administration of a second 6-mg dose in patients who have failed to respond to a first injection.

C E R E N E X   P H A R M A C E U T I C A L S

# RELIEF OF THE TOTAL SYMPTOM COMPLEX FAST... ANY TIME



*"I've got things to do. I want to function again.... IMITREX gave me a very clean, healthy, normal feeling. I felt restored."*

Betty H.  
46-year-old migraine sufferer



# INTRODUCES

## NEW

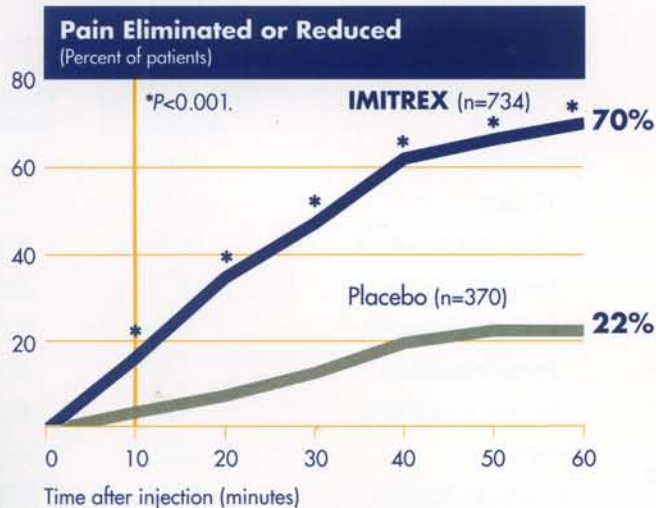
# SUBCUTANEOUS IMITREX™

## SUMATRIPTAN SUCCINATE

## MIGRAINE RELIEF THAT CAN CHANGE PATIENTS' LIVES

**IMITREX significantly relieves pain, beginning 10 minutes after injection.<sup>1,2</sup>**

Percent of Patients With Moderate to Severe Pain Eliminated or Reduced After One 6-mg Injection<sup>2</sup>



Data are from a randomized, double-blind, placebo-controlled, multicenter study of 1,104 migraine patients receiving injection with IMITREX 6 mg or placebo. Pain relief was defined as reduction of moderate or severe headache pain (grade 2 or 3) to mild or no headache pain (grade 1 or 0).<sup>2</sup>

**IMITREX relieves nausea, vomiting, and light and sound sensitivity—helping patients get back to work, back to their lives.<sup>1,4</sup>**

IMITREX eliminated nausea, photophobia, and disability due to migraine significantly better than placebo—beginning within 20 minutes after injection ( $P<0.001$ ;  $n=1,104$ ).<sup>2</sup>

**IMITREX works at any time during the attack.<sup>1,3,4</sup>**

Its efficacy is unchanged whether administered early or later in the migraine episode.<sup>1,3,4</sup>

Please consult Brief Summary of Prescribing Information on the last page of this advertisement.

# RELIEF WITHOUT COMPROMISE

## IMITREX is highly selective.

IMITREX is nonsedating.

There is no evidence of interactions between IMITREX and prophylactic migraine medications (verapamil, amitriptyline, and propranolol).

## Cardiovascular considerations

IMITREX is contraindicated in patients with ischemic heart disease, symptoms or signs consistent with ischemic heart disease, or Prinzmetal's angina because of the potential to cause coronary vasospasm. IMITREX is contraindicated in patients with uncontrolled hypertension because it can give rise to increases in blood pressure (usually small).

Although serious coronary events are extremely rare, consideration should be given to administering the first dose of IMITREX in-office to patients in whom unrecognized coronary disease is comparatively likely.

## Pregnancy category C

There are no adequate and well-controlled studies in pregnant women; IMITREX should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus. (Please see Precautions.)

## Worldwide clinical experience

IMITREX has been utilized by over 6,000 patients, treating more than 10,000 attacks in well-controlled clinical trials.<sup>5</sup>

## Reported adverse events are generally mild and transient.

	IMITREX (6 mg) (n=547)	Placebo (n=370)
Atypical sensations	42.0%	9.2%
Tingling	13.5%	3.0%
Warm/hot sensation	10.8%	3.5%
Burning sensation	7.5%	0.3%
Feeling of heaviness	7.3%	1.1%
Pressure sensation	7.1%	1.6%
Feeling of tightness	5.1%	0.3%
Flushing	6.6%	2.4%
Injection-site reaction	58.7%	23.8%
Dizziness/Vertigo	11.9%	4.3%

Most adverse events were mild and resolved spontaneously within 10 to 30 minutes.<sup>3</sup>

Withdrawals due to adverse events are comparable to those seen with placebo ( $\leq 3.5\%$  in controlled clinical trials).<sup>2,4</sup>

# INTRODUCES

**NEW**

SUBCUTANEOUS  
**IMITREX™**

SUMATRIPTAN  
SUCCINATE

**MIGRAINE RELIEF  
THAT CAN CHANGE  
PATIENTS' LIVES**

## RELIEF WITHIN REACH FOR PATIENTS

**The IMITREX™ SELFdose System:  
a push-button autoinjector with  
single-dose, prefilled syringes.**

Allows patients to self-administer IMITREX  
whenever and wherever migraine strikes.

High patient acceptance.<sup>4</sup>

— 92% of patients who self-administered  
IMITREX would be willing to take it again.<sup>5</sup>

Efficacy equivalent to physician-  
administered IMITREX.<sup>2-4</sup>

For use only by patients for whom  
a 6-mg dose has been prescribed.



**IMITREX offers simple,  
convenient dosing.**

The recommended dose is one 6-mg  
subcutaneous injection.

If migraine symptoms return, a second  
6-mg dose may be administered.

The maximum dose within 24 hours  
is two 6-mg subcutaneous injections  
(minimum 1-hour interval between doses).

No clear benefit is associated with the  
administration of a second 6-mg dose in  
patients who have failed to respond to a  
first injection.

Although the recommended dose is 6 mg,  
if side effects are dose limiting, then lower  
doses may be used.

IMITREX should not be used within  
24 hours of administration of  
ergotamine-containing preparations.

**References:** 1. Complete Prescribing Information, IMITREX™ (sumatriptan succinate) Injection. January 1993. 2. Cady RK et al. Treatment of acute migraine with subcutaneous sumatriptan. *JAMA*. 1991;265:2831-2835. 3. The Subcutaneous Sumatriptan International Study Group. Treatment of migraine attacks with sumatriptan. *N Engl J Med*. 1991;325:316-321. 4. The Sumatriptan Auto-Injector Study Group. Self-treatment of acute migraine with subcutaneous sumatriptan using an auto-injector device. *Eur Neurol*. 1991;31:323-331. 5. Data on file, Glaxo Inc.

Please consult Brief Summary of Prescribing Information  
on the last page of this advertisement.



# Now lactose-free doesn't

*The "best of both worlds" in an everyday formula*



# have to mean milk-free!

*More like breast milk than other lactose-free formulas*

	CARBOHYDRATE	PROTEIN	FAT
Breast Milk	LACTOSE	HUMAN MILK PROTEIN	HUMAN MILK FAT
Milk-Based Formula	LACTOSE	MILK PROTEIN	VEGETABLE OIL BLEND*
Lactofree™	<b>LACTOSE FREE</b>	<b>MILK PROTEIN</b>	<b>VEGETABLE OIL BLEND</b>
Soy-Based Formula	LACTOSE FREE	SOY PROTEIN	VEGETABLE OIL BLEND*

*The benefits of milk protein without the problems of lactose*

- Keeps milk protein—the preferred† protein source—in the infant's diet
- Avoids or resolves common feeding problems associated with lactose:
  - fussiness/crying
  - gas
  - diarrhea
- Easy to digest
- No other formula has a fat blend closer to breast milk‡

Recommend...

**Lactofree** *Iron Fortified*

*Lactose-Free Formula  
for Baby's First Year and Beyond*

*The first milk-based formula§ with the  
lactose-free difference*

\* SMA® and Nursoy® (registered trademarks of Wyeth-Ayerst Laboratories, Philadelphia, PA) contain some animal fats.

† Data on file, Mead Johnson & Company

**Mead Johnson**

NUTRITIONALS

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Evansville, Indiana 47721, U.S.A.

L-K370-4-93

‡ We know of no studies showing clinical benefits from fatty acid profiles closer to breast milk, but Mead Johnson believes such profiles are prudent and appropriate.

§ Based on milk protein isolate

## Effective with a low incidence of peptic ulcers

- As effective as NSAID standards for OA and RA<sup>1</sup>
- 0.5% incidence of peptic ulcers up to 1 year.\*<sup>1</sup> Other G.I. symptoms comparable to other NSAIDs, including diarrhea, dyspepsia and abdominal pain
- No significant effect on platelet aggregation<sup>1</sup>
- Convenient once-a-day dosing: Starting dose two 500 mg tablets once a day, may be adjusted up to 2000 mg

\*Cumulative rate of ulcers by duration of treatment in U.S. clinical trials with Relafen. 1000 mg n=833, 1500 mg n=614, 2000 mg n=69; 95% confidence intervals (0.1%, 0.9%).



**RELAFEN<sup>®</sup>**  
NABUMETONE

Effective with a low  
incidence of peptic ulcers<sup>†</sup>

<sup>†</sup>Other G.I. symptoms comparable to  
other NSAIDs. Please see brief summary of  
prescribing information on adjacent page.





**RELAFEN®**  
brand of nabumetone

See complete prescribing information in SmithKline Beecham Pharmaceuticals literature or PDR. The following is a brief summary.

**CLINICAL PHARMACOLOGY:** *Relafen* is a nonsteroidal anti-inflammatory drug (NSAID) that exhibits anti-inflammatory, analgesic and antipyretic properties in pharmacologic studies. As with other nonsteroidal anti-inflammatory agents, its mode of action is not known. However, the ability to inhibit prostaglandin synthesis may be involved in the anti-inflammatory effect.

The parent compound is a prodrug, which undergoes hepatic biotransformation to the active component, 6-methoxy-2-naphthylacetic acid (6MNA), a potent inhibitor of prostaglandin synthesis.

**INDICATIONS AND USAGE:** Acute and chronic treatment of signs and symptoms of osteoarthritis and rheumatoid arthritis.

**CONTRAINDICATIONS:** Patients (1) who have previously exhibited hypersensitivity to it; (2) in whom *Relafen*, aspirin or other NSAIDs induce asthma, urticaria or other allergic-type reactions.

**WARNINGS:** Remain alert for ulceration and bleeding in patients treated chronically, even in the absence of previous G.I. tract symptoms.

In controlled clinical trials involving 1,677 patients treated with *Relafen* (1,140 followed for one year and 927 for two years), the cumulative incidence of peptic ulcers was 0.3% (95% CI: 0%, 0.6%) at three to six months, 0.5% (95% CI: 0.1%, 0.9%) at one year and 0.8% (95% CI: 0.3%, 1.3%) at two years. Inform patients of the signs and symptoms of serious G.I. toxicity and what steps to take if they occur. In patients with active peptic ulcer, weigh the benefits of *Relafen* therapy against possible hazards, institute an appropriate ulcer treatment regimen and monitor the patients' progress carefully.

In considering the use of relatively large doses (within the recommended dosage range), anticipate benefit sufficient to offset the potential increased risk of G.I. toxicity.

**PRECAUTIONS:** Because nabumetone undergoes extensive hepatic metabolism, no adjustment of *Relafen* dosage is generally necessary in patients with renal insufficiency. However, as with all NSAIDs, monitor patients with impaired renal function more closely than patients with normal renal function.

Evaluate patients with symptoms and/or signs suggesting liver dysfunction, or in whom an abnormal liver test has occurred, for evidence of the development of a more severe hepatic reaction while on *Relafen* therapy. If abnormal liver tests persist or worsen, if clinical signs and symptoms consistent with liver disease develop, or if systemic manifestations occur (e.g., eosinophilia, rash, etc.), discontinue *Relafen*. Use *Relafen* cautiously in patients with severe hepatic impairment.

As with other NSAIDs, use *Relafen* cautiously in patients with a history of congestive heart failure, hypertension or other conditions predisposing to fluid retention.

Based on U.V. light photosensitivity testing, *Relafen* may be associated with more reactions to sun exposure than might be expected based on skin tanning types.

Physicians may wish to discuss with their patients the potential risks (see WARNINGS, PRECAUTIONS and ADVERSE REACTIONS) and likely benefits of NSAID treatment, particularly when the drugs are used for less serious conditions where treatment without NSAIDs may represent an acceptable alternative to both the patient and the physician.

Exercise caution when administering *Relafen* with warfarin since interactions have been seen with other NSAIDs. In two-year studies conducted in mice and rats, nabumetone had no statistically significant tumorigenic effect. Nabumetone did not show mutagenic potential in the Ames test and mouse micronucleus test *in vivo*. However, nabumetone- and 6MNA-treated lymphocytes in culture showed chromosomal aberrations at 80 mcg/mL and higher concentrations (equal to the average human exposure to *Relafen* at the maximum recommended dose). Nabumetone did not impair fertility of male or female rats treated orally at doses of 320 mg/kg/day before mating.

Pregnancy Category C. Nabumetone did not cause any teratogenic effect in rats given up to 400 mg/kg and in rabbits up to 300 mg/kg orally. However, increased post-implantation loss was observed in rats at 100 mg/kg orally and at higher doses (equal to the average human exposure to 6MNA at the maximum recommended human dose). There are no adequate, well-controlled studies in pregnant women. Use the drug during pregnancy only if clearly needed. Because of the known effect of prostaglandin-synthesis-inhibiting drugs on the human fetal cardiovascular system (closure of ductus arteriosus), use of *Relafen* during the third trimester of pregnancy is not recommended.

The effects of *Relafen* on labor and delivery in women are not known. As with other drugs known to inhibit prostaglandin synthesis, an increased incidence of dystocia and delayed parturition occurred in rats treated throughout pregnancy.

It is not known whether nabumetone or its metabolites are excreted in human milk; however, 6MNA is excreted in the milk of lactating rats. Because of the possible adverse effects of prostaglandin-synthesis-inhibiting drugs on neonates, *Relafen* is not recommended for use in nursing mothers.

Safety and efficacy in children have not been established.

Of the 1,677 patients in U.S. clinical studies who were treated with *Relafen*, 411 patients (24%) were 65 years of age or older; 22 patients (1%) were 75 years of age or older. No overall differences in efficacy or safety were observed between these older patients and younger ones. Similar results were observed in a one-year, non-U.S. postmarketing surveillance study of 10,800 *Relafen* patients, of whom 4,577 patients (42%) were 65 years of age or older.

**ADVERSE REACTIONS: Incidence  $\geq$  1%—Probably Causally Related**—Diarrhea (14%), dyspepsia (13%), abdominal pain (12%), constipation\*, flatulence\*, nausea\*, positive stool guaiac\*, dry mouth, gastritis, stomatitis, vomiting, dizziness\*, headache\*, fatigue, increased sweating, insomnia, nervousness, somnolence, pruritus\*, rash\*, "lumps", edema\*

\*Incidence of reported reaction between 3% and 9%. Reactions occurring in 1% to 3% of the patients are unmarked.

**Incidence < 1%—Probably Causally Related**—Anorexia, cholestatic jaundice, duodenal ulcer, dysphagia, gastric ulcer, gastroenteritis, gastrointestinal bleeding, increased appetite, liver function abnormalities, melena, asthenia, agitation, anxiety, confusion, depression, malaise, paresthesia, tremor, vertigo, bullous eruptions, photosensitivity, urticaria, pseudoporphyria cutanea tarda, vasculitis, weight gain, dyspnea, hypersensitivity pneumonitis, albuminuria, azotemia, interstitial nephritis, abnormal vision, anaphylactoid reaction, angioneurotic edema.

**Incidence < 1%—Causal Relationship Unknown**—Bilirubinuria, duodenitis, eruption, gallstones, gingivitis, glossitis, pancreatitis, rectal bleeding, nightmares, acne, alopecia, erythema multiforme, Stevens-Johnson Syndrome, angina, arrhythmia, hypertension, myocardial infarction, palpitations, syncope, thrombophlebitis, asthma, cough, dysuria, hematuria, impotency, renal stones, taste disorder, fever, chills, anemia, leukopenia, granulocytopenia, thrombocytopenia, hypoglycemia, hypokalemia, weight loss.

†Adverse reactions reported only in worldwide postmarketing experience or in the literature are italicized.

**OVERDOSAGE:** If acute overdose occurs, empty the stomach by vomiting or lavage and institute general supportive measures as necessary. Activated charcoal, up to 60 grams, may effectively reduce nabumetone absorption. Coadministration of nabumetone with charcoal to man has resulted in an 80% decrease in maximum plasma concentrations of the active metabolite.

One overdose occurred in a 17-year-old female patient who had a history of abdominal pain and was hospitalized for increased abdominal pain following ingestion of 30 *Relafen* tablets (15 grams total). Stools were negative for occult blood and there was no fall in serum magnesium concentration. The patient had no other symptoms. She was given an H<sub>2</sub>-receptor antagonist and discharged from the hospital without sequelae.

**DOSE AND ADMINISTRATION:** Recommended starting dose: 1000 mg taken as a single dose with or without food. Some patients may obtain more symptomatic relief from 1500 mg to 2000 mg daily. Dosages over 2000 mg daily have not been studied. Use the lowest effective dose for chronic treatment.

**HOW SUPPLIED: Tablets:** Oval-shaped, film-coated: 500 mg—white, imprinted with the product name RELAFEN and 500, in bottles of 100 and 500, and in Single Unit Packages of 100 (intended for institutional use only); 750 mg—beige, imprinted with the product name RELAFEN and 750, in bottles of 100 and 500, and in Single Unit Packages of 100 (intended for institutional use only).

Stored at controlled room temperature (59° to 86°F) in well-closed container; dispense in light-resistant container.

500 mg 100's: NDC 0029-4851-20  
500 mg 500's: NDC 0029-4851-25  
500 mg SUP 100's: NDC 0029-4851-21

750 mg 100's: NDC 0029-4852-20  
750 mg 500's: NDC 0029-4852-25  
750 mg SUP 100's: NDC 0029-4852-21

BRS-RL-L4

Reference:

1. Data on file, Medical Department, SmithKline Beecham Pharmaceuticals.

**SB SmithKline Beecham**  
Pharmaceuticals

Philadelphia, PA 19101

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Williams & Wilkins 428 East Preston Street, Baltimore, MD 21202

The background of the advertisement is a vibrant, abstract composition of geometric shapes and colors. It features a mix of purple, blue, and yellow tones, with sharp, angular lines creating a sense of depth and movement. Scattered throughout the scene are numerous translucent, spherical particles of varying sizes, some appearing to be in motion. The overall aesthetic is futuristic and scientific.

**FLOXIN<sup>®</sup> TABLETS**  
*(ofloxacin tablets)*

**THE GRAM**

# CRACKER

**Cracks tough gram-negative cases\***

**Cracks tough gram-positive cases\***

**Cracks tough atypical cases due to  
*Chlamydia trachomatis*\***

**Millions of patients treated successfully  
worldwide over the past 7 years**

\*FLOXIN is indicated for the treatment of the following mild to moderate infections: community-acquired pneumonia and acute exacerbations of chronic bronchitis due to *Haemophilus influenzae* or *Streptococcus pneumoniae*; uncomplicated skin and skin structure infections due to *Staphylococcus aureus*, *Streptococcus pyogenes*, or *Proteus mirabilis*; uncomplicated cystitis due to *Citrobacter diversus*, *Enterobacter aerogenes*, *Escherichia coli*, *Klebsiella pneumoniae*, *Proteus mirabilis*, or *Pseudomonas aeruginosa*; complicated urinary tract infections due to *Escherichia coli*, *Klebsiella pneumoniae*, *Proteus mirabilis*, *Citrobacter diversus*, or *Pseudomonas aeruginosa*; prostatitis due to *Escherichia coli*; acute uncomplicated urethral and cervical gonorrhea due to *Neisseria gonorrhoeae*; nongonococcal urethritis and cervicitis due to *Chlamydia trachomatis*; and mixed infections of the urethra and cervix due to *Chlamydia trachomatis* and *Neisseria gonorrhoeae*.

The safety and efficacy of FLOXIN in children, adolescents (under 18), pregnant women, and lactating women have not been established. FLOXIN is contraindicated in persons with a history of hypersensitivity to FLOXIN or the quinolone group of antibacterial agents. Serious and occasionally fatal hypersensitivity (anaphylactic) reactions, often following the first dose, have been reported in patients receiving therapy with quinolones, including ofloxacin. The drug should be discontinued immediately at the first appearance of skin rash or any other sign of hypersensitivity. For information on Warnings, Precautions, and additional Adverse Reactions that may occur, regardless of drug relationship, please see full Prescribing Information.

Please see brief summary of Prescribing Information on last page of this advertisement.





THE NEW WEAPON  
 against MENTAL  
 RETARDATION

The enemy is PKU, an inherited disease that, if left untreated, causes mental retardation before a child is one year old. But using a test developed by a March of Dimes researcher, PKU can be identified when a baby is only a few days old. And by putting PKU babies on a special, low-protein diet, its effects can be avoided. Please, join our Campaign for Healthier Babies.

**March of Dimes**<sup>®</sup>  
 We deliver small miracles

© March Of Dimes Birth Defects Foundation, 1992

**NAPROSYN**  
 (NAPROXEN) 500 mg tablets

**Brief Summary:**  
**Contraindications:** Patients who have had allergic reactions to NAPROSYN, ANAPROX or ANAPROX DS or in whom aspirin or other NSAIDs induce the syndrome of asthma, rhinitis, and nasal polyps. Because anaphylactic reactions usually occur in patients with a history of such reactions, question patients for asthma, nasal polyps, urticaria, and hypotension associated with NSAIDs before starting therapy. If such symptoms occur, discontinue the drug. **Warnings:** Serious GI toxicity such as bleeding, ulceration, and perforation can occur at any time, with or without warning symptoms, in patients treated chronically with NSAIDs. Remain alert for ulceration and bleeding in such patients even in the absence of previous GI tract symptoms. In clinical trials, symptomatic upper GI ulcers, gross bleeding or perforation appear to occur in approximately 1% of patients treated for 3-6 months, and in about 2-4% of patients treated for one year. Inform patients about the signs and/or symptoms of serious GI toxicity and what steps to take if they occur. Studies have not identified any subset of patients not at risk of developing peptic ulceration and bleeding. Except for a prior history of serious GI events and other risk factors known to be associated with peptic ulcer disease, such as alcoholism, smoking, etc., no risk factors (e.g., age, sex) have been associated with increased risk. Elderly or debilitated patients seem to tolerate ulceration or bleeding less well than others and most spontaneous reports of fatal GI events are in this population. In considering the use of relatively large doses (within the recommended dosage range), sufficient benefit should be anticipated to offset the potential increased risk of GI toxicity. **Precautions:** DO NOT GIVE NAPROSYN (NAPROXEN) CONCOMITANTLY WITH ANAPROX (NAPROXEN SODIUM) OR ANAPROX DS (NAPROXEN SODIUM) SINCE THEY BOTH CIRCULATE IN PLASMA AS THE NAPROXEN ANION. Acute interstitial nephritis with hematuria, proteinuria, and nephrotic syndrome has been reported. Patients with impaired renal function, heart failure, liver dysfunction, patients taking diuretics, and the elderly are at greater risk of overt renal decompensation. If this occurs, discontinue the drug. Use with caution and monitor serum creatinine and/or creatinine clearance in patients with significantly impaired renal function. Use caution in patients with baseline creatinine clearance less than 20 mL/minute. Use the lowest effective dose in the elderly or in patients with chronic alcoholic liver disease or cirrhosis. With NSAIDs, borderline elevations of liver tests may occur in up to 15% of patients. They may progress, remain unchanged, or be transient with continued therapy. Elevations of SGPT or SGOT occurred in controlled clinical trials in less than 1% of patients. Severe hepatic reactions, including jaundice and fatal hepatitis, have been reported rarely. If liver disease develops or if systemic manifestations occur (e.g., eosinophilia or rash), discontinue therapy. If steroid dosage is reduced or eliminated during therapy, do so slowly and observe patients closely for adverse effects, including adrenal insufficiency and exacerbation of arthritis symptoms. Determine hemoglobin values periodically for patients with initial values of 10 grams or less when receiving long-term therapy. Peripheral edema has been reported. Therefore, use with caution in patients with fluid retention, hypertension or heart failure. The drug's antipyretic and anti-inflammatory activities may reduce fever and inflammation, diminishing their diagnostic value. Conduct ophthalmic studies if any change or disturbance in vision occurs. For patients with restricted sodium intake, note that the suspension contains 8 mg/mL of sodium. **Information for Patients:** Side effects of NSAIDs can cause discomfort and, rarely, there are more serious side effects, such as GI bleeding, which may result in hospitalization and even fatal outcomes. Physicians may wish to discuss with patients the potential risks and likely benefits of NSAID treatment, particularly when they are used for less serious conditions where treatment without NSAIDs may be an acceptable alternative. Patients should use caution for activities requiring alertness if they experience drowsiness, dizziness, vertigo or depression during therapy. **Laboratory Tests:** Because serious GI tract ulceration and bleeding can occur without warning symptoms, follow chronically treated patients for signs and symptoms of these and inform them of the importance of this follow-up. **Drug Interactions:** Use caution when giving concomitantly with coumarin-type anticoagulants; a hydantoin, sulfonamide or sulfonylurea; furosemide; lithium; beta-blockers; probenecid; or methotrexate. **Drug/Laboratory Test Interactions:** The drug may decrease platelet aggregation and prolong bleeding time or increase urinary values for 17-ketogenic steroids. Temporarily stop therapy for 72 hours before doing adrenal function tests. The drug may interfere with urinary assays of SHIAA. **Carcinogenesis:** A 2-year rat study showed no evidence of carcinogenicity. **Pregnancy:** Category B. Do not use during pregnancy unless clearly needed. Avoid use during late pregnancy. **Nursing Mothers:** Avoid use in nursing mothers. **Pediatric Use:** Single doses of 2.5-5 mg/kg, with total daily dose not exceeding 15 mg/kg/day, are safe in children over 2 years of age. **Adverse Reactions:** In a study, GI reactions were more frequent and severe in rheumatoid arthritis patients on 1,500 mg/day than in those on 750 mg/day. In studies in children with juvenile arthritis, rash and prolonged bleeding times were more frequent. GI and CNS reactions about the same, and other reactions less frequent than in adults. **Incidence Greater Than 1%; Probable Causal Relationship:** GI: The most frequent complaints related to the GI tract: constipation, heartburn, abdominal pain, nausea, dyspepsia, diarrhea, stomatitis. CNS: headache, dizziness, drowsiness, light-headedness, vertigo. Dermatologic: itching (pruritus), skin eruptions, ecchymoses, sweating, purpura. Special Senses: tinnitus, hearing disturbances, visual disturbances. Cardiovascular: edema, dyspnea, palpitations. General: thirst. **Incidence Less Than 1%; Probable Causal Relationship:** GI: abnormal liver function tests, colitis, GI bleeding and/or perforation, hematemesis, jaundice, melena, peptic ulceration with bleeding and/or perforation, vomiting. Renal: glomerular nephritis, hematuria, hyperkalemia, interstitial nephritis, nephrotic syndrome, renal disease, renal failure, renal papillary necrosis. Hematologic: agranulocytosis, eosinophilia, granulocytopenia, leukopenia, thrombocytopenia. CNS: depression, dream abnormalities, inability to concentrate, insomnia, malaise, myalgia and muscle weakness. Dermatologic: alopecia, photosensitive dermatitis, skin rashes. Special Senses: hearing impairment. Cardiovascular: congestive heart failure. Respiratory: eosinophilic pneumonitis. General: anaphylactoid reactions, menstrual disorders, pyrexia (chills and fever). Causal Relationship Unknown: Hematologic: aplastic anemia, hemolytic anemia. CNS: aseptic meningitis, cognitive dysfunction. Dermatologic: epidermal necrolysis, erythema multiforme, photosensitivity reactions resembling porphyria, cutaneous, photosensitivity reactions resembling porphyria, Stevens-Johnson syndrome and epidermolysis bullosa, Stevens-Johnson syndrome, urticaria. GI: non-peptic GI ulceration, ulcerative stomatitis. Cardiovascular: vasculitis. General: angioneurotic edema, hyperglycemia, hypoglycemia. **Overdosage:** May have drowsiness, heartburn, indigestion, nausea, vomiting. A few patients have had seizures. Empty stomach and use usual supportive measures. In animals 0.5 g/kg of activated charcoal reduced plasma levels of naproxen. **Caution:** Federal law prohibits dispensing without prescription. See package insert for full Prescribing Information.

\*Incidence of reported reaction 3%-9%.  
 Where unmarked, incidence less than 3%.  
 SYNTEX  
 U.S. patent nos. 3,904,682, 3,998,966 and others.  
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FOR CHRONIC ARTHRITIS

# EXPECT A REDUCTION IN JOINT PAIN AND TENDERNESS

Color-enhanced 3-D CT image of OA hip with joint space narrowing and marginal osteophytes.  
Supplied by David W. Stoller, MD, of  
California Advanced Imaging.

As with other NSAIDs, the most frequent complaints are gastrointestinal.

Please see brief summary of prescribing information on adjacent page.

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