

For Sinusitis and URI

**Deconamine<sup>®</sup> SR  
Agrees:  
You Should  
Be Able To  
Prescribe Any  
Antibiotic  
You Want.**

**Deconamine<sup>®</sup> SR has no known  
contraindications with any antibiotic...**

*Surprisingly, this is not true of all antihistamine/decongestants.*

## **Deconamine<sup>®</sup> SR**

(chlorpheniramine maleate, 8 mg / *d*-pseudoephedrine HCl, 120 mg)

**SUSTAINED-RELEASE capsules** **Rx Only**

**Clears Nasal Congestion • Promotes Sinus Drainage**

Deconamine<sup>®</sup> SR offers onset of action within 1 hour. *Surprisingly, even some of the newer antihistamine/decongestants do not deliver this rapid onset of action.*

*Balanced antihistamine/decongestant therapy for effective, long-acting relief of sinusitis symptoms.*

- Mild CNS effect
- Low sedation<sup>1</sup>
- Lowest reported cardiotoxicity profile<sup>2</sup>

Chlorpheniramine has been rated as having a low drowsiness factor. However, all cold/flu/allergy medications may cause drowsiness in certain individuals. So, it is advisable to avoid driving a motor vehicle, operating machinery, or drinking alcoholic beverages while taking this or any similar product.

*Your Prescription Makes A World Of Difference*

Please see accompanying brief summary of Product Information.

©1995 BRADLEY PHARMACEUTICALS, INC.

**KENWOOD**

**KENWOOD LABORATORIES**

a division of BRADLEY PHARMACEUTICALS, INC.  
383 Route 46 West • Fairfield, NJ 07004-2402  
(201) 882-1505 • FAX: (201) 575-5366

#### References:

1. May RJ. Allergic rhinitis. *Pharmacotherapy: A Pathophysiologic Approach*. 1989;9:45-947.
2. White WB. Drugs for cough and cold symptoms in hypertensive patients. *AFP*. 1985;183-187.

#### Brief Summary of Product Information

**DECONAMINE** (brand of chlorpheniramine maleate and d-pseudoephedrine HCl) **SR CAPSULES, TABLETS, SYRUP** Consult package insert for full Prescribing Information.

#### DESCRIPTION:

**SR CAPSULES** Each sustained-release blue and yellow capsule contains:  
chlorpheniramine maleate ..... 8 mg  
d-pseudoephedrine hydrochloride ..... 120 mg  
The capsules are designed to provide prolonged release of medication.

#### TABLETS

Each scored, white tablet contains:  
chlorpheniramine maleate ..... 4 mg  
d-pseudoephedrine hydrochloride ..... 60 mg

#### SYRUP — No alcohol, no dye.

Each 5 mL (teaspoonful) clear, colorless to slightly yellow liquid contains:  
chlorpheniramine maleate ..... 2 mg  
d-pseudoephedrine hydrochloride ..... 30 mg  
in a grape-flavored, aromatic vehicle.

**INDICATIONS:** DECONAMINE<sup>®</sup> is indicated for the temporary relief of symptoms such as rhinorrhea, sneezing and nasal congestion due to upper respiratory infections (the common cold), sinusitis or allergic rhinitis; also to help clear nasal passages and shrink swollen membranes, decongest sinus openings and passages, promote sinus drainage and/or relieve sinus pressure.

**CONTRAINDICATIONS:** Patients with severe hypertension, severe coronary artery disease and patients on MAO inhibitor therapy. DECONAMINE<sup>®</sup> medications are also contraindicated in patients sensitive to antihistamines or sympathomimetic agents.

**WARNINGS:** Chlorpheniramine maleate should be used with extreme caution in patients with narrow angle glaucoma, stenosing peptic ulcer, pyloroduodenal obstruction, symptomatic prostatic hypertrophy, or bladder neck obstruction. Due to its mild atropine-like action, chlorpheniramine maleate should be used cautiously in patients with bronchial asthma, emphysema, or chronic pulmonary disease. May cause excitability especially in children.

Sympathomimetic amines should be used with caution in patients with hypertension, ischemic heart disease, diabetes mellitus, increased intraocular pressure, hyperthyroidism and prostatic hypertrophy. Sympathomimetics may produce central nervous system stimulation with convulsions or cardiovascular collapse with accompanying hypotension.

Nervousness, dizziness or sleeplessness may occur at higher doses.

**PRECAUTIONS: Information for patients:** Antihistamines may impair mental and physical abilities required for the performance of potentially hazardous tasks, such as driving a vehicle or operating machinery. Patients should also be warned about possible additive effects with alcohol and other central nervous system depressants (hypnotics, sedatives, tranquilizers).

**Drug interactions:** Pseudoephedrine containing drugs should not be given to patients treated with monoamine oxidase (MAO) inhibitors because of the possibility of precipitating a hypertensive crisis. MAO inhibitors also prolong and intensify the anticholinergic effects of antihistamines. Sympathomimetics may reduce the antihypertensive effect of methyldopa, reserpine, veratrum alkaloids and mecamylamine.

Alcohol and other sedative drugs will potentiate the sedative effects of chlorpheniramine.

Care should be taken in administering DECONAMINE<sup>®</sup> medications concomitantly with other sympathomimetic amines, since their combined effects on the cardiovascular system may be harmful to the patient.

**Pregnancy:** Pregnancy Category C: Animal reproduction studies have not been conducted with DECONAMINE<sup>®</sup> medications. It is also not known whether DECONAMINE<sup>®</sup> medications can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. DECONAMINE<sup>®</sup> medications should be given to a pregnant woman only if clearly needed.

**Nursing Mothers:** Due to the possible passage of pseudoephedrine and chlorpheniramine into breast milk, and because of the higher than usual risk for infants from sympathomimetic amines and antihistamines, the benefit to the mother vs. the potential risk should be considered and a decision should be made whether to discontinue nursing or to discontinue the drug.

**Pediatric Use:** DECONAMINE<sup>®</sup> Capsules or Tablets should not be given to children under 12 years of age.

**ADVERSE REACTIONS: Chlorpheniramine maleate:** Slight to moderate drowsiness may occur and is the most frequent side effect. Other possible side effects of antihistamines in general include: *General:* urticaria, drug rash, anaphylactic shock, photosensitivity, excessive perspiration, chills, dryness of mouth, nose and throat; *Cardiovascular:* hypotension, headache, palpitation, tachycardia, extrasystoles; *Hematological:* hemolytic anemia, thrombocytopenia, agranulocytosis; *CNS:* sedation, dizziness, disturbed coordination, fatigue, confusion, restlessness, excitation, nervousness, tremor, irritability, insomnia, euphoria, paresthesia, blurred vision, diplopia, vertigo, tinnitus, hysteria, neuritis, convulsion; *Gastrointestinal:* epigastric distress, anorexia, nausea, vomiting, diarrhea, constipation; *Genitourinary:* urinary frequency, difficult urination, urinary retention, early menses; *Respiratory:* thickening of bronchial secretions, tightness of chest, wheezing and nasal stuffiness.

**Pseudoephedrine hydrochloride:** Pseudoephedrine may cause mild central nervous system stimulation, especially in those patients who are hypersensitive to sympathomimetic drugs. Nervousness, excitability, restlessness, dizziness, weakness and insomnia may also occur. Headache and drowsiness have also been reported. Large doses may cause lightheadedness, nausea and/or vomiting. Sympathomimetic drugs have also been associated with certain untoward reactions including fear, anxiety, tenseness, restlessness, tremor, weakness, pallor, respiratory difficulty, dysuria, insomnia, hallucination, convulsion, CNS depression, arrhythmias and cardiovascular collapse with hypotension.

**OVERDOSAGE:** Acute overdosage may produce clinical signs of CNS stimulation and variable cardiovascular effects. Pressor amines should be used with great caution in the presence of pseudoephedrine. Patients with signs of stimulation should be treated conservatively.

#### DOSAGE AND ADMINISTRATION:

**SR Capsules:** Adults and children over 12 years, 1 capsule every 12 hours. Children under 12 years, DECONAMINE<sup>®</sup> Syrup is recommended.

**Tablets:** Adults and children over 12 years, 1 tablet three or four times daily. Children under 12 years, DECONAMINE<sup>®</sup> Syrup is recommended.

**Syrup:** Children 2 to 6 years, 1/2 teaspoonful (2.5 mL) three or four times daily, not to exceed 2 teaspoonfuls in 24 hours. Children 6 to 12 years, 1/2 to 1 teaspoonful (2.5 to 5 mL) three or four times daily, not to exceed 4 teaspoonfuls in 24 hours. Adults and children over 12 years, 1 to 2 teaspoonfuls (5 to 10 mL) three or four times daily. Children under 2 years, as directed by physician.

Caution: Federal law prohibits dispensing without prescription.

© 1995 Bradley Pharmaceuticals, Inc.

KENWOOD LABORATORIES

a division of BRADLEY PHARMACEUTICALS, INC.

Rev. 9/94

# Announcing

The American Medical Association

# Morris Fishbein Fellowship

July 1, 1996, through  
June 30, 1997



Applications are now being taken for the Morris Fishbein Fellowship in Medical Editing sponsored by the American Medical Association. Physicians interested in making a substantial commitment to medical editing are invited to apply for this full-time 1-year fellowship program.

**Work With JAMA** The successful candidate will work with the editorial and production staff of The Journal of the American Medical Association in all facets of editing and publishing a major weekly journal. At the completion of the program, it is expected that the candidate will be proficient in manuscript review and selection, issue makeup, copy editing and styling, art and layout of articles, issue planning and managing, in addition to the many other elements of journal publication. He/she will also be conversant with marketing and advertising procedures.

**Publishing** The candidate must have proven writing ability at the time of application, since he/she will be required during the course of the year to prepare articles for publication. Although the fellow will work under the supervision of a physician-editor, ability to work independently is a must.

**Stipend** A stipend of \$40,000 will be provided to the successful candidate to cover the 1-year period.

**Application Forms** For an application blank, please write to Richard M. Glass, MD, Deputy Editor, The Journal of the American Medical Association, 515 N State St, Chicago, IL 60610.

**Deadline for Applying** Completed applications should be forwarded as soon as possible and must be received no later than December 15, 1995.

American Medical Association

Physicians dedicated to the health of America



# Treasure.

# Map.



Introducing the complete text and graphics of JAMA & Archives Journals on CD-ROM. Mine the wealth of medical information from 10 of the world's most respected journals by tapping a few buttons on your computer.

This practice-enhancing tool provides powerful search capabilities (keyword, subject, article type, etc.) in an easily browsable format that journal readers will find appealing and familiar.

Research that used to take hours now takes minutes. You'll be more apt to seek information when it's this easy to locate, print and save. Anyone in your practice can do it.

See how simple CD-ROM can be with this special offer, featuring:

- Complete 1994 content
- Reference Links - click on cited reference for pop-up citation
- Full MEDLINE® Record Links and 5-Year Abstracts
- 5-Year Journal Index
- Print/Save - print full text and graphics, save full text into ASCII file
- Quick Outline Viewing - locate article sections



**Introductory Offer Only \$9.95**

Yes, send me the 1994 JAMA & Archives Journals on CD-ROM.

(Offered to individuals only; call for institutional rates)  
Phone orders: 8AM-8PM CST, Mon-Fri (10AM-6PM Sat.):

**1-800-AMA-2350**

Mail coupon to: AMA Subscription Dept-CD, P.O.10946, Chicago, IL 60610-0946.

Or, fax to **312-464-5831**

Minimum Windows System Requirements: 386-SX, 540 KB hard disk space, 4 MB RAM, VGA monitor.  
Macintosh format in development. OVID Software from OVID Technologies, Inc.  
Coming Soon (more details with your order): 1995 Full-Year Collection,  
1996 Cumulative Quarterly Subscription.

Please complete and return with your order:

Name

MD/DO  Other (please specify) \_\_\_\_\_

Address

City  State

Country

Zip/Postal Code

Phone Number

Check made payable to AMA  VISA  MC  AmEx  Optima

Card #

Exp. Date  Signature

Payment must accompany order. Nonrefundable. Residents in AZ, CA, CT, DC, IL, IA, MN, NJ, NY, NC, WI, add required sales tax. In Canada, add GST. Outside the U.S. & Canada, add \$30.

P5FAA

**BRIEF SUMMARY**

**INDICATIONS AND USAGE**

Ambien (zolpidem tartrate) is indicated for the short-term treatment of insomnia. Hypnotics should generally be limited to 7 to 10 days of use, and reevaluation of the patient is recommended if they are to be taken for more than 2 to 3 weeks.

Ambien should be prescribed in quantities exceeding a 1-month supply (see *Warnings*).

**CONTRAINDICATIONS**

None known.

**WARNINGS**

Since sleep disturbances may be the presenting manifestation of a physical and/or psychiatric disorder, symptomatic treatment of insomnia should be initiated only after a careful evaluation of the patient. The failure of insomnia to remit after 7 to 10 days of treatment may indicate the presence of a primary psychiatric and/or medical illness which should be evaluated. Worsening of insomnia or the emergence of new thinking or behavior abnormalities may be the consequence of an unrecognized psychiatric or physical disorder. Such findings have emerged during the course of treatment with sedative/hypnotic drugs, including Ambien. Because some of the important adverse effects of Ambien appear to be dose related (see *Precautions and Dosage and Administration*), it is important to use the smallest possible effective dose, especially in the elderly.

A variety of abnormal thinking and behavior changes have been reported to occur in association with the use of sedative/hypnotics. Some of these changes may be characterized by decreased inhibition (eg, aggressiveness and impatience) and/or changes in character, similar to effects produced by alcohol and other CNS depressants. Other reported behavioral changes have included bizarre behavior, agitation, hallucinations, and depersonalization. Amnesia and other neuropsychiatric symptoms may occur unpredictably, in primarily depressed patients, worsening of depression, including suicidal thinking, has been reported in association with the use of sedative/hypnotics.

It can rarely be determined with certainty whether a particular instance of the abnormal behaviors listed above are drug induced, spontaneous in origin, or a combination of drug and physical disorder. Nonetheless, the emergence of any new behavioral sign or symptom of concern requires careful and immediate evaluation.

Following the rapid dose decrease or abrupt discontinuation of sedative/hypnotics, there have been reports of signs and symptoms similar to those associated with withdrawal from other CNS-depressant drugs (see *Warnings*).

Ambien, like other sedative/hypnotic drugs, has CNS-depressant effects. Due to the rapid onset of action, Ambien should only be ingested immediately prior to going to bed. Patients should be cautioned against engaging in hazardous occupations requiring complete mental alertness or motor coordination, such as operating machinery or driving a motor vehicle after ingesting the drug, including potential impairment of the performance of such activities that may occur the day following ingestion of Ambien. Ambien showed additive effects when combined with alcohol and should not be taken with alcohol. Patients should be cautioned about possible combined effects with other CNS-depressant drugs. Dosage adjustments may be necessary when Ambien is administered with such agents because of the potentially additive effects.

**PRECAUTIONS**

**General**  
**Use in the elderly and/or debilitated patients:** Impaired motor and/or cognitive performance after repeated exposure or unusual sensitivity to sedative/hypnotic drugs is a concern in the treatment of elderly and/or debilitated patients. Therefore, the recommended Ambien dosage is 5 mg in such patients (see *Dosage and Administration*) to decrease the likelihood of side effects. These patients should be closely monitored.

**Use in patients with concomitant illness:** Clinical experience with Ambien in patients with concomitant systemic illness is limited. Caution is advisable in using Ambien in patients with diseases or conditions that could affect metabolism or hemodynamic responses. Although preliminary studies have not revealed respiratory depressant effects at hypnotic doses of Ambien in normals, precautions should be observed if Ambien is prescribed to patients with compromised respiratory function, since sedative/hypnotics have the capacity to depress respiratory drive. Post-marketing reports of respiratory insufficiency, most of which involved patients with pre-existing respiratory impairment, have been received. Data in end-stage renal failure patients repeatedly treated with Ambien did not demonstrate drug accumulation or alterations in pharmacokinetic parameters. No dosage adjustment in renally impaired patients is required; however, these patients should be closely monitored (see *Pharmacokinetics*). A study in subjects with hepatic impairment did reveal prolonged elimination in this group; therefore, treatment should be initiated with 5 mg in patients with hepatic compromise, and they should be closely monitored.

**Use in depression:** As with other sedative/hypnotic drugs, Ambien should be administered with caution to patients exhibiting signs or symptoms of depression. Suicidal tendencies may be present in such patients and protective measures may be required. Intentional overdose is more common in this group of patients; therefore, the least amount of drug that is feasible should be prescribed for the patient at any one time.

**Information for patients:** Patient information is printed in the complete prescribing information and is available in pads for distribution to patients.

**Laboratory tests:** There are no specific laboratory tests recommended.

**Drug interactions**

**CNS-active drugs:** Ambien was evaluated in healthy volunteers in single-dose interaction studies for several CNS drugs. A study involving haloperidol in combination with zolpidem revealed no effect of haloperidol on the pharmacokinetics or pharmacodynamics of zolpidem. Imipramine in combination with zolpidem produced no pharmacokinetic interaction other than a 20% decrease in peak levels of imipramine, but there was an additive effect of decreased alertness. Similarly, chlorpromazine in combination with zolpidem produced no pharmacokinetic interaction, but there was an additive effect of decreased alertness and psychomotor performance. The lack of a drug interaction following single-dose administration does not predict a lack following chronic administration.

An additive effect on psychomotor performance between alcohol and zolpidem was demonstrated.

Since the systematic evaluations of Ambien in combination with other CNS-active drugs have been limited, careful consideration should be given to the pharmacology of any CNS-active drug to be used with zolpidem. Any drug with CNS-depressant effects could potentially enhance the CNS-depressant effects of zolpidem.

**Other drugs:** A study involving cimetidine/zolpidem and ranitidine/zolpidem combinations revealed no effect of either drug on the pharmacokinetics or pharmacodynamics of zolpidem. Zolpidem had no effect on digoxin kinetics and did not affect prothrombin time when given with warfarin in normal subjects. Zolpidem's sedative/hypnotic effect was reversed by amazeblin; however, no significant alterations in zolpidem pharmacokinetics were found.

**Drug/Laboratory test interactions:** Zolpidem is not known to interfere with commonly employed clinical laboratory tests.

**Carcinogenesis, mutagenesis, impairment of fertility**

**Carcinogenesis:** Zolpidem was administered to rats and mice for 2 years at dietary dosages of 4, 18, and 80 mg/kg/day. In mice, these doses are 28 to 520 times or 2 to 35 times the maximum recommended human dose on a mg/kg or mg/m<sup>2</sup> basis, respectively. In rats these doses are 43 to 876 times or 6 to 115 times the maximum 10-mg human dose on a mg/kg or mg/m<sup>2</sup> basis, respectively. No evidence of carcinogenic potential was observed in mice. Renal liposarcoma were seen in 4/100 rats (3 males, 1 female) receiving 80 mg/kg/day and a renal lipoma was observed in one male rat at the 18 mg/kg/day dose. Incidence rates of lipoma and liposarcoma for zolpidem were comparable to those seen in historical controls and the tumor findings are thought to be a spontaneous occurrence.

**Mutagenesis:** Zolpidem did not have mutagenic activity in several tests including the Ames test, genotoxicity in mouse lymphoma cells in vitro, chromosomal aberrations in cultured human lymphocytes, unscheduled DNA synthesis in rat hepatocytes in vitro, and the micronucleus test in mice.

**Impairment of fertility:** In a rat reproduction study, the high dose (100 mg base/kg) of zolpidem resulted in irregular estrus cycles and prolonged preovulatory intervals, but there was no effect on male or female fertility after daily oral doses of 4 to 100 mg base/kg or 5 to 130 times the recommended human dose in mg/m<sup>2</sup>. No effects on any other fertility parameters were noted.

**Pregnancy**

Category B. Studies to assess the effects of zolpidem on human reproduction and development have not been conducted.

In rats, adverse maternal and fetal effects occurred at 20 and 100 mg base/kg and included dose-related maternal lethargy and ataxia and a dose-related trend to incomplete ossification of fetal skull bones.

In rabbits, dose-related maternal sedation and decreased weight gain occurred at all doses tested. At the high dose, 16 mg base/kg, there was an increase in postimplantation fetal loss and underossification of sternebrae in viable fetuses.

This drug should be used during pregnancy only if clearly needed.

**Nonteratogenic effects:** Studies to assess the effects on children whose mothers took zolpidem during pregnancy have not been conducted. However, children born of mothers taking sedative/hypnotic drugs may be at some risk for withdrawal symptoms from the drug during the postnatal period. In addition, neonatal flaccidity has been reported in infants born of mothers who received sedative/hypnotic drugs during pregnancy.

**Labor and delivery:** Ambien has no established use in labor and delivery.

**Nursing mothers:** Studies in lactating mothers indicate that between 0.004 and 0.019% of the total administered dose is excreted into milk, but the effect of zolpidem on the infant is unknown.

The use of Ambien in nursing mothers is not recommended. Safety and effectiveness in children below the age of 18 have not been established.

**ADVERSE REACTIONS**

**Associated with discontinuation of treatment:** Approximately 4% of 1,701 patients who received zolpidem at all doses (1.25 to 90 mg) in U.S. premarketing clinical trials discontinued treatment because of an adverse clinical event. Events most commonly associated with discontinuation from U.S. trials were daytime drowsiness (0.5%), dizziness (0.4%), headache (0.5%), nausea (0.6%), and vomiting (0.5%).

Approximately 6% of 1,320 patients who received zolpidem at all doses (5 to 50 mg) in similar foreign trials discontinued treatment because of an adverse event. Events most commonly associated with discontinuation from these trials were daytime drowsiness (1.6%), amnesia (0.8%), dizziness (0.8%), headache (0.6%), and nausea (0.6%).

**Incidence in controlled clinical trials**

**Most commonly observed adverse events in controlled trials:** During short-term treatment (up to 10 nights) with Ambien at doses up to 10 mg, the most commonly observed adverse events associated with the use of zolpidem and seen at statistically significant differences from placebo-treated patients were drowsiness (reported by 2% of zolpidem patients), dizziness (1%), and diarrhea (1%). During longer-term treatment (28 to 35 nights) with zolpidem at doses up to 10 mg, the most commonly observed adverse events associated with the use of zolpidem and seen at statistically significant differences from placebo-treated patients were dizziness (5%) and drugged feelings (3%).

**Incidence of Treatment-Emergent Adverse Experiences in Short-term Placebo-Controlled Clinical Trials (Percentage of patients reporting)**

Body System/ Adverse Event*	Zolpidem (≤ 10 mg) (N=685)	Placebo (N=473)
Central and Peripheral Nervous System		
Headache	7	6
Drowsiness	2	—
Dizziness	1	—
Gastrointestinal System		
Nausea	2	3
Diarrhea	1	—
Musculoskeletal System		
Myalgia	1	2

\*Events reported by at least 1% of Ambien patients are included.

**Incidence of Treatment-Emergent Adverse Experiences in Long-term Placebo-Controlled Clinical Trials (Percentage of patients reporting)**

Body System/ Adverse Event*	Zolpidem (≤ 10 mg) (N=152)	Placebo (N=161)
Autonomic Nervous System		
Dry mouth	3	1
Body as a Whole		
Allergy	4	1
Back pain	3	2
Influenza-like symptoms	2	—
Chest pain	1	—
Fatigue	1	2
Cardiovascular System		
Palpitation	2	—
Central and Peripheral Nervous System		
Headache	19	22
Drowsiness	8	5
Dizziness	5	1
Lethargy	3	1
Drugs — feeling	3	—
Lightheadedness	2	1
Depression	2	1
Abnormal dreams	1	—
Amnesia	1	—
Anxiety	1	—
Nervousness	1	3
Sleep disorder	1	—
Gastrointestinal System		
Nausea	6	6
Dyspepsia	5	2
Diarrhea	2	2
Abdominal pain	2	2
Constipation	2	1
Anorexia	1	1
Vomiting	1	—
Immunologic System		
Infection	1	1
Musculoskeletal System		
Myalgia	4	7
Arthralgia	7	4

**Incidence of Treatment-Emergent Adverse Experiences in Long-term Placebo-Controlled Clinical Trials (Cont'd) (Percentage of patients reporting)**

Body System/ Adverse Event*	Zolpidem (≤ 10 mg) (N=152)	Placebo (N=161)
Respiratory System		
Upper respiratory infection	5	6
Sinusitis	4	2
Pharyngitis	3	1
Rhinitis	1	3
Skin and Appendages		
Rash	2	1
Urogenital System		
Urinary tract infection	2	2

\*Events reported by at least 1% of patients treated with Ambien.

There is evidence from dose comparison trials suggesting a dose relationship for many of the adverse events associated with zolpidem use, particularly for certain CNS and gastrointestinal adverse events.

Adverse events are further classified and enumerated in order of decreasing frequency using the following definitions: frequent adverse events are defined as those occurring in greater than 1/100 subjects; infrequent adverse events are those occurring in 1/100 to 1/1,000 patients; rare events are those occurring in less than 1/1,000 patients.

**Frequent:** abdominal pain, amnesia, ataxia, confusion, depression, diarrhea, fatigue, dizziness, dreaming abnormal, drowsiness, drugged feeling, dry mouth, dyspepsia, euphoria, fatigue, headache, insomnia, lethargy, lightheadedness, myalgia, nausea, upper respiratory infection, vertigo, vision abnormal, vomiting.

**Infrequent:** agitation, allergy, anorexia, anxiety, arthralgia, arthritis, asthenia, back pain, bronchitis, cerebrovascular disorder, chest pain, constipation, coughing, cystitis, decreased cognition, detached, difficulty concentrating, dysarthria, dysphagia, dyspnea, edema, emotional lability, eye irritation, falling, fever, flutuation, gastroenteritis, hallucination, hiccup, hyperglycemia, hypertension, hyposaesthesia, infection, influenza-like symptoms, malaise, menstrual disorder, migraine, nervousness, pallor, palpitation, paraesthesia, pharyngitis, postural hypotension, pruritus, rash, rhinitis, scleritis, SGPT increased, sinusitis, sleep disorder, sleeping (after daytime dosing), stupor, sweating increased, tachycardia, taste perversion, tinnitus, tooth disorder, trauma, tremor, urinary incontinence, urinary tract infection, vaginitis.

**Rare:** abdominal body sensation, abscess, acne, acute renal failure, aggressive reaction, allergic reaction, allergy aggravated, anaphylactic shock, anemia, appetite increased, arrhythmia, arteritis, arthrosis, bilirubinemia, breast fibroadenosis, breast neoplasm, breast pain female, bronchospasm, bullous eruption, BUN increased, circulatory failure, coma, constipation, delirium, dementia, depersonalization, dermatitis, dysphasia, dysuria, edema periorbital, ententis, epistaxis, eructation, esophagospasm, ESR increased, extrasystoles, eye pain, face edema, feeling strange, flushing, furunculosis, gastritis, glaucoma, gout, hemorrhoids, hepatic function abnormal, herpes simplex, herpes zoster, hot flashes, hypercholesterolemia, hyperhemoglobinemia, hyperlipidemia, hypertension aggravated, hypotension, hypotonia, hypoxia, hysteria, illusion, impotence, injection site inflammation, intestinal obstruction, intoxicated feeling, laceration abnormal, laryngitis, leg cramps, leukopenia, libido decreased, lymphadenopathy, macrocytic anemia, manic reaction, microdrift frequency, muscle weakness, myocardial infarction, neuritis, neuritis, neuroleptic neurosis, otitis externa, otitis media, pain, panic attack, paresis, personality disorder, phlebitis, photopsia, photosensitivity reaction, pneumonia, polyuria, pulmonary edema, pulmonary embolism, purpura, pyelonephritis, rectal hemorrhage, renal pain, restless legs, rigors, saliva altered, scleritis, SGOT increased, somnambulism, suicide at tempt, syncope, tendinitis, tenosimus, tetany, thinking abnormal, thirst, tolerance increased, tooth caries, urinary retention, urticaria, varicose veins, ventricular tachycardia, weight decrease, yawning.

**DRUG ABUSE AND DEPENDENCE**

**Controlled substance:** Schedule IV.

**Abuse and dependence:** Studies of abuse potential in former drug abusers found that the effects of single doses of zolpidem tartrate 40 mg were similar, but not identical, to diazepam 20 mg, while zolpidem tartrate 10 mg was difficult to distinguish from placebo.

Sedative/hypnotics have produced withdrawal signs and symptoms following abrupt discontinuation. These reported symptoms range from mild dysphoria and insomnia to a withdrawal syndrome that may include irritability and muscle cramps, vomiting, sweating, tremors, and convulsions. The U.S. clinical trial experience from zolpidem does not reveal any clear evidence for withdrawal syndrome. Nevertheless, the following adverse events included in DSM-III-R criteria for uncomplicated sedative/hypnotic withdrawal were reported at an incidence of ≤ 1% during U.S. clinical trials following placebo substitution on average within 48 hours following last zolpidem treatment: fatigue, nausea, flushing, lightheadedness, uncontrolled crying, emesis, stomach cramps, panic attack, nervousness, and abdominal discomfort.

Individuals with a history of addiction to, or abuse of, drugs or alcohol are at risk of habituation and dependence; they should be under careful surveillance when receiving any hypnotic.

**OVERDOSAGE**

**Signs and symptoms:** In European postmarketing reports of overdose with zolpidem alone, impairment of consciousness has ranged from somnolence to light coma, with one case each of cardiovascular and respiratory compromise. Individuals have fully recovered from zolpidem tartrate overdoses up to 400 mg (40 times the maximum recommended dose). Overdose cases involving multiple CNS-depressant agents, including zolpidem, have resulted in more severe symptomatology, including fatal outcomes.

**Recommended treatment:** General symptomatic and supportive measures should be used along with immediate gastric lavage where appropriate. Intravenous fluids should be administered as needed. Flumazenil may be useful. Respiration, pulse, blood pressure, and other appropriate signs should be monitored and general supportive measures employed. Sedating drugs should be withheld following zolpidem overdose. Zolpidem is not dialyzable.

The possibility of multiple drug ingestion should be considered.

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

4/11/94

Manufactured and distributed by

G.D. Searle & Co.  
Chicago, IL 60680  
by agreement with  
Lorex Pharmaceuticals  
Skokie, IL

Address medical inquiries to:  
G.D. Searle & Co.  
Medical & Scientific Information Department  
4901 Searle Parkway  
Skokie, IL 60077

**SEARLE** Box 5110  
Chicago, IL 60680-5110

**AMBIEN**  
(ZOLPIDEM TARTRATE) <sup>IV</sup>  
5-MG & 10-MG TABLETS

# From a unique chemical class of non-benzodiazepine sleep agents



## More sleep

Total sleep time is significantly increased compared with placebo. Patients fall asleep quickly; generally within 20 to 30 minutes.<sup>1-3</sup>

## Better sleep

Awakenings were reduced, compared to placebo.

## Through the night

No evidence of increased wakefulness during the last third of the night. Normal sleep stages are generally preserved<sup>1</sup> (clinical significance unknown).

## With no objective evidence of tolerance or rebound insomnia

In studies of up to 35 consecutive nights at recommended doses.<sup>1,2</sup>

## Favorable safety and tolerability profile

Adverse events with dosages of ≤ 10 mg that were statistically significant vs placebo

	Short-term: ≤10 nights	Long-term: 28 to 35 nights
drowsiness	2%	dizziness 5%
dizziness	1%	drugged
diarrhea	1%	feelings 3%



**AMBIEN**  
(ZOLPIDEM TARTRATE) <sup>IV</sup> 5-MG & 10-MG TABLETS

In the short-term treatment of insomnia

**First in a unique chemical class of non-benzodiazepine sleep agents**

# ARCHIVES

OF

## FAMILY MEDICINE

The ARCHIVES OF FAMILY MEDICINE is a member of the consortium of AMA journals listed below. The ARCHIVES reaches more than 81 500 readers in family and general practice each month, in addition to paid subscribers. The complete text of all AMA journals is available online from Dialog Information Services and Information Access Company.

### The Journal of the American Medical Association (JAMA)

Archives of Dermatology  
Archives of Family Medicine  
Archives of General Psychiatry  
Archives of Internal Medicine  
Archives of Neurology  
Archives of Ophthalmology  
Archives of Otolaryngology—Head & Neck Surgery  
Archives of Pathology & Laboratory Medicine  
Archives of Pediatrics & Adolescent Medicine  
Archives of Surgery

The ARCHIVES OF FAMILY MEDICINE (ISSN 1063-3987) is published monthly by the American Medical Association, 515 N State St, Chicago, IL 60610, and is an official publication of the Association. Second-class postage rates paid at Chicago and at additional mailing office. GST registration number R126 225 556. Canada Post International Publications Mail (Canadian Distribution) Sales Agreement No. 319600. Printed in the USA.

**SUBSCRIPTION RATES**—The subscription rates for the ARCHIVES OF FAMILY MEDICINE are as follows: \$95 for 1 year, \$190 for 2 years in the United States and US possessions; in the Americas, 1 year, \$130, 2 years, \$260; the rest of the world, 1 year, £90, 2 years, £180. The institution rates are as follows: \$105 for 1 year, \$210 for 2 years in the United States and US possessions; in the Americas, 1 year, \$140, 2 years, \$280; the rest of the world, 1 year, £97, 2 years, £194. Rates for subscriptions for delivery to Japan are available through our exclusive agents—contact the publisher. Special rates for residents and medical students in the United States and US possessions are available. Address inquiries to Subscriber Services Center, American Medical Association, PO Box 10945, Chicago, IL 60610. Phone: (800) 262-2350. Fax: (312) 464-5831. For mailing addresses outside the United States and US possessions, see International Subscription Information.

**CHANGE OF ADDRESS**—POSTMASTER, send all address changes to ARCHIVES OF FAMILY MEDICINE, c/o Subscriber Services, American Medical Association,

515 N State St, Chicago, IL 60610. Please notify us of address change at least 6 weeks in advance to ensure uninterrupted service. Include both old and new addresses, a recent mailing label, and new ZIP code. For mailing addresses outside the US and US possessions, see International Subscription Information.

**SUBSCRIBER SERVICES**—For information about subscribing to any of the AMA publications, change of address, missing issues, or purchasing back issues, please contact Subscriber Services Center, American Medical Association, PO Box 10945, Chicago, IL 60610, or call (312) 670-SUBS (670-7827) between 8:30 AM and 4:30 PM CST. Fax: (312) 464-5831. For mailing addresses outside the US and US possessions, see International Subscription Information.

**INTERNATIONAL SUBSCRIPTION INFORMATION**—Subscriptions outside the United States and US possessions are served according to geographic region. Please address correspondence to the following two offices based on delivery address: 1) For delivery in North America, Central America, and South America, contact Subscriber Services Center, AMA, PO Box 10945, Chicago, IL 60610, USA. Phone: 1-312-670-7827. Fax: 1-312-464-5831; 2) For delivery outside the Americas, contact JAMA & Archives Journals Reader Services Centre, PO Box 299, London, England WC1H 9TD. Phone: 44-(0)-171-383-6270. Fax: 44-(0)-171-383-6402.

**REPRINTS**—Authors place their reprint order at the time the edited typescript is reviewed and should allow 4 to 6 weeks for delivery following publication. Requests for individual reprints should be sent directly to the author at the address shown in the article.

For bulk reprint orders for distribution by commercial organizations, please contact Wanda Bartolotta, 500 Fifth Avenue #2210, New York, NY 10010. Phone: (212) 354-0050. Fax: (212) 354-1169. For reprint orders in limited quantities for distribution by educational organizations, please contact Joseph R. Reakash, 515 N State St, Chicago, IL 60610. Phone: (312) 464-2512. Fax: (312) 464-5835.

**PERMISSIONS**—Contact Laslo Hunyady, Permissions Assistant, 515 N State St, Chicago, IL 60610. Phone: (312) 464-2513.

**ADVERTISING PRINCIPLES**—Each advertisement in this issue has been reviewed and complies with the principles governing advertising in AMA scientific publications. A copy of these principles is available on request. The appearance of advertising in AMA publications is not an AMA guarantee or endorsement of the product or the claims made for the product by the manufacturer.

### Publication Staff

Offices: 515 N State St  
Chicago, IL 60610

### Editorial Processing Department, Specialty Journals

**Director:** Paula Glitman

**Manager:** Barbara J. Clark

**Freelance Manager:**  
Vickey Golden

**Assistant Freelance Coordinator:**  
Diane L. Cannon

**Senior Copy Editor/Alex Specialist:**  
Paul Frank

**Senior Copy Editor:**  
Mary E. Coerver

**Copy Editors:**  
Gwen Chaffen  
Brenda J. Gregoline

### Specialty Journal Division Office

**Assistant to the Publisher**  
Marla Hall

### Publishing Operations Division

**Manager, Budgets & Costs:**  
Bonnie Van Clevon

**Office Manager:**  
Karen Branham

**Production Assistant:**  
Valerie Balkcom

### Advertising & Production Department

**Director:** Vanessa Hayden

**Paper & Planning:** Diane Darnell

**Manager, Advertising Services:**  
Carole Piszker

**Manager, Production Services:**  
Susan Price

**Production Associates:**  
Karen Adams-Taylor  
Betty Frigerio  
Anita Jackson  
Debbie Pogorzelski  
Sarah Powell  
Jennifer Reiling  
Christine M. Wagenknecht  
E. Ruth White

**Production Assistant:**  
Jo Anne Turner

### Electronic Production Department

**Electronic Production Supervisor:**  
Linda Knott

**Electronic Production Operators:**  
Gail Barrett

Brenda Chandler-Haynes  
Michael L. Culbert

Mary Ann Kuranda  
Sandra Lopez

**Graphics Manager:**  
Charl Richey-Davis

**Graphics Operators:**  
JoAnne Weiskopf  
Alicja Wojcik

**Manager, Proofreading:**  
Teresa H. Omiotek

**Proofreaders:**  
David Antos  
Daniel James

Mary Kay Tinerella

**Production Assistant:**  
Melanie Parenti

### Distribution

**Distribution Manager:** Paul Gasielki

### Circulation Processing Department

**Director:** Beverly Martin

### Circulation Development Department

**Director:** Ann Westerbeke

### Licensing & Permissions Department

**Director:** Norman Frankel

**Indexing:** Kathy Gaydar

**Permissions:** Laslo Hunyady

### Database & New Media

**Manager:** Emily Moreno

**Electronic Coordinator:**  
Mary Ellen Johnston

**Database Assistant:** Peter Watkins

### Reprints

**Reprint Coordinator:** Joseph Reakash



# A MORE COMPLETE OTC ANALGESIC.

ALEVE IS THE ONLY OTC ANALGESIC WITH:

THE **ENDURANCE**  
OF 8-12 HOUR DOSING.

THE **TOLERABILITY**  
THAT'S COMPARABLE TO IBUPROFEN  
AND EVEN ACETAMINOPHEN.

AND THE **SPEED**  
AND ACTIVITY OF NAPROXEN SODIUM.

INSTEAD OF ADVIL OR TYLENOL  
RECOMMEND

**ALEVE**<sup>®</sup>

NAPROXEN SODIUM 220 MG  
PAIN RELIEVER/FEVER REDUCER

A MORE COMPLETE  
OTC ANALGESIC.

# ARCHIVES

OF

# FAMILY MEDICINE

VOL 4 NO. 11, NOVEMBER 1995

---

Special Selection

- Sheep Nasal Botfly (*Oestrus ovis*) Larvae Infestation of the Conjunctiva** 915  
*Jose Miguel Risco, MD;*  
*Fatima Al-Dosari, MD; Lynn Miller*

---

Letters to the Editor

- Miscoding of Mental Health Diagnoses and Stigmatization** 917  
*Neal Devitt, MD*
- In Reply** 917  
*W. Eugene Broadhead, MD, PhD*
- Rural Health Care** 918  
*Roger K. Howe, MD*
- In Reply** 918  
*John W. Saultz, MD*

---

Living in Medicine

- Harrison's** 920  
*Jeanne Parr Lemkau, PhD*

---

Special Article

- Prevention, Diagnosis, and Management of Viral Hepatitis: A Guide for Primary Care Physicians** 923  
*Gary A. Noskin, MD, with the AMA Advisory Group on Prevention, Diagnosis, and Management of Viral Hepatitis*

---

Editorials

- Whose Data Are These, Anyway?** 935  
*David Nowels, MD*
- Managed Care in JAMA and the Archives Journals: A Call for Papers for Coordinated Theme Issues** 937  
*George D. Lundberg, MD*

---

Commentary

- The Role of Intuitive Thinking in the Diagnostic Process** 939  
*Robert M. Peters, MD, MBA*

---

## American Medical Association

Physicians dedicated to the health of America



Copyright 1995 by the American Medical Association. All rights reserved. Reproduction without permission is prohibited.

All articles published, including editorials, letters, and book reviews, represent the opinions of the authors and do not reflect the policy of the American Medical Association, the Editorial Board, or the institution with which the author is affiliated, unless this is clearly specified.

**James S. Todd, MD**  
Executive Vice President

**Kenneth E. Monroe**  
Deputy Executive Vice President

**James F. Rappel**  
Group Vice President,  
Business and Management Services

**George D. Lundberg, MD**  
Editor in Chief, Scientific  
Information and Multimedia

**Robert L. Kennett**  
Vice President, Publishing

**Michael D. Springer**  
Publisher

**Mary C. Steermann**  
Director, Publishing Operations  
Division

**Cheryl Iverson**  
Director, Editorial Processing Division

**Peter L. Payerli**  
Director, Advertising Sales

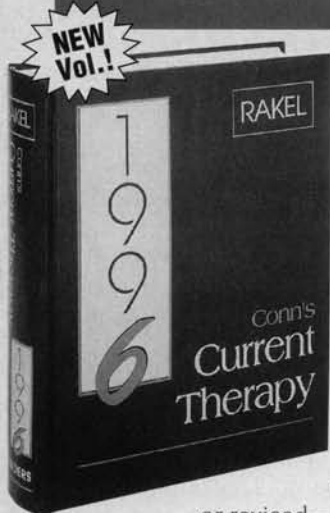
**Geoffrey A. Flick**  
Manager, Marketing Services

**Advertising Offices: East:** Phillip B. Altamore, Peter G. Messina, John L. Reeves, 119 Cherry Hill Rd, 3rd Flr, Parsippany, NJ 07054 (201) 263-9191.  
**Midwest/West:** Monica E. Brent, 515 N State St, Chicago, IL 60610 (312) 464-2470. **AMA Physician Recruitment Advertising Department:** Carri Lynch, Supervisor, 800-262-2260.



# An unbelievable offer for 2 unbeatable references!

Order both books NOW; SAVE 10% on each!



**Rings with success!**

## Conn's CURRENT THERAPY 1996

Where do you find over 1,000 proven therapies for over 300 medical conditions? In the latest volume of **Conn's CURRENT THERAPY!** The **new 1996** volume features 297 up-to-the-minute articles—283 of

which are completely new or revised—making it the source you'll turn to first for fast, effective management.

With contributions from 430 international experts. Dec. 1995. Over 1310 pp. Illust.

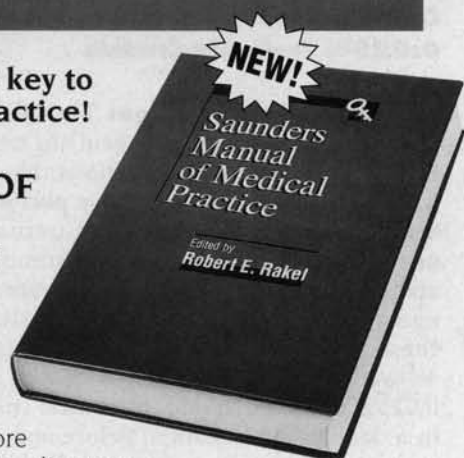
Special, limited-time price—**\$49.50**—  
**SAVE 10%** off the regular price of \$55.00.  
**Order #W6259-5/SCONP\***.

**CALL TOLL-FREE 1-800-545-2522**

8:30-7:00 Eastern Time to order!

Be sure to mention **DM#33657**. Or complete, detach, and mail the form to the address below.

**SAVE on both books today! ▼**



**Your master key to  
everyday practice!**

## Saunders MANUAL OF MEDICAL PRACTICE

A user-friendly outline format speeds you to the symptoms, diagnosis, and treatment of more than 318 common diseases and disorders. You'll find step-by-step coverage of nearly 60 office procedures • cross referencing from symptoms to disease chapters • a body system organization • and much more.

With contributions from 414 experts. Jan. 1996. Over 1295 pp. Over 255 ills.

**Only \$85.50** when you subscribe to the **CURRENT THERAPY** series — **10% off** the regular price of \$95.00. **Order #W5192-5.**

Both references are edited by **Robert E. Rakel, MD**, Professor and Chairman, Department of Family Medicine, and Associate Dean for Academic and Clinical Affairs, Baylor College of Medicine, Houston, Texas

**YES!** W6259-5/SCONP\* Please send my copy of **Rakel: Conn's CURRENT THERAPY 1996** at the limited-time price of \$49.50—a **10% SAVINGS** off of the regular price of \$55.00. I may review it and, if not completely satisfied, I may return it with the invoice within 30 days at no further obligation.

**W5192-5** Also send **Rakel: Saunders MANUAL OF MEDICAL PRACTICE** for only \$85.50 — a **10% savings**. I understand when I order **CURRENT THERAPY** as a subscriber, I qualify for this **limited-time** discount.

**W5192-5** Send only **Saunders Manual** at its regular price of \$95.00.

\* For your convenience, when you purchase a volume of **Conn's CURRENT THERAPY**, W.B. Saunders Co. enters you as a subscriber to future volumes and sends you annual announcements approximately 2 months before publication—saving you the trouble of reordering every year. If you wish to preview the new edition, do nothing, and we'll send you the volume as soon as it is available. Each new volume may be examined for 30 days, and may be returned for full credit. If you decide you no longer want to receive each new volume, use the advance notice to let us know of your decision...you always have at least 20 days to decide. You may cancel your subscription at any time. Please sign below.

Signature \_\_\_\_\_

## W.B. SAUNDERS COMPANY

A Division of Harcourt Brace & Company

Order Fulfillment Department

6277 Sea Harbor Drive, Orlando, FL 32887

Bill me later  Check enclosed  VISA  MasterCard  AmEx

Card# \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Exp. \_\_\_\_ / \_\_\_\_

Prepaid orders save shipping. Add the applicable sales tax for your area. Make checks payable to **W.B. SAUNDERS COMPANY**. Staple this to your purchase order to expedite delivery.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone ( \_\_\_\_\_ ) \_\_\_\_\_

© W.B. SAUNDERS COMPANY 1995.

Professional references may be tax-deductible. Offer valid in USA only.

Prices subject to change without notice.

AFM 11/95 lmd1095 DM#33657



Turn everyday  
challenges into

everyday

*activities*

In studies up to 5 years, cumulative GI side effects included diarrhea (14%), dyspepsia (13%), and abdominal pain (12%). In patients treated chronically with NSAID therapy, serious GI toxicity such as perforation, ulceration, and bleeding can occur. Contraindicated in patients who have shown hypersensitivity to aspirin, *Relafen*, or other NSAIDs. Should not be given to patients in whom aspirin or other NSAIDs induce asthma, urticaria, or other allergic-type reactions.

Please see brief summary of prescribing information on adjacent page.

**Effective relief with a low  
incidence of peptic ulcer**

**RELAFEN<sup>®</sup>**  
NABUMETONE



## RELAFEN<sup>®</sup> brand of nabumetone

**Brief Summary:** Consult full prescribing information before using.

**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\*, tinnitus\*, 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, toxic epidermal necrolysis, vasculitis, weight gain, dyspnea, eosinophilic pneumonia, hypersensitivity pneumonitis, albuminuria, azotemia, hyperuricemia, interstitial nephritis, nephrotic syndrome, vaginal bleeding, abnormal vision, anaphylactoid reaction, anaphylaxis, 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, impotence, renal stones, taste disorder, fever, chills, anemia, leukopenia, granulocytopenia, thrombocytopenia, hyperglycemia, hypokalemia, weight loss.

†Adverse reactions reported only in worldwide postmarketing experience or in the literature; not seen in clinical trials, are considered rarer and 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 hemoglobin 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).

Store 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	750 mg 100's: NDC 0029-4852-20
500 mg 500's: NDC 0029-4851-25	750 mg 500's: NDC 0029-4852-25
500 mg SUP 100's: NDC 0029-4851-21	750 mg SUP 100's: NDC 0029-4852-21

BRS-RL17

# To earn and display with pride

American Medical Association  
Physicians dedicated to the health of America



## Physician's Recognition Award

has fulfilled the requirements for the Physician's Recognition Award  
in Continuing Medical Education.

The AMA Physician's Recognition Award lets your patients, your hospital, and your colleagues know that you are continually expanding your knowledge and improving your skills. One hour of CME each week, 50 hours a year, and you can be eligible to receive this prestigious proof of your voluntary achievements in programs of Continuing Medical Education.

## Facts about the Physician's Recognition Award

You need just 50 hours of CME - about 1 hour per week. 20 hours must be AMA PRA education hours, the remainder may be either Category 1 or Category 2 hours.

- One, two or three year certificates are provided, based on your needs.
- Your CME can be reported at any time.
- You can fax or mail your application.
- PRA staff will review hospital CME transcripts in place of the application form.
- A certificate with Special Commendation for Self-Directed Learning is available.
- The PRA certificate is accepted by many specialty societies as satisfying CME requirements and it is reciprocal with 4 state medical society certificate programs - CA, NJ, VA and PA.

Call today to receive information and your application for the Physician's Recognition Award. Materials are available by mail or fax. Call 800 621-8335, and press 4 for a fax application.

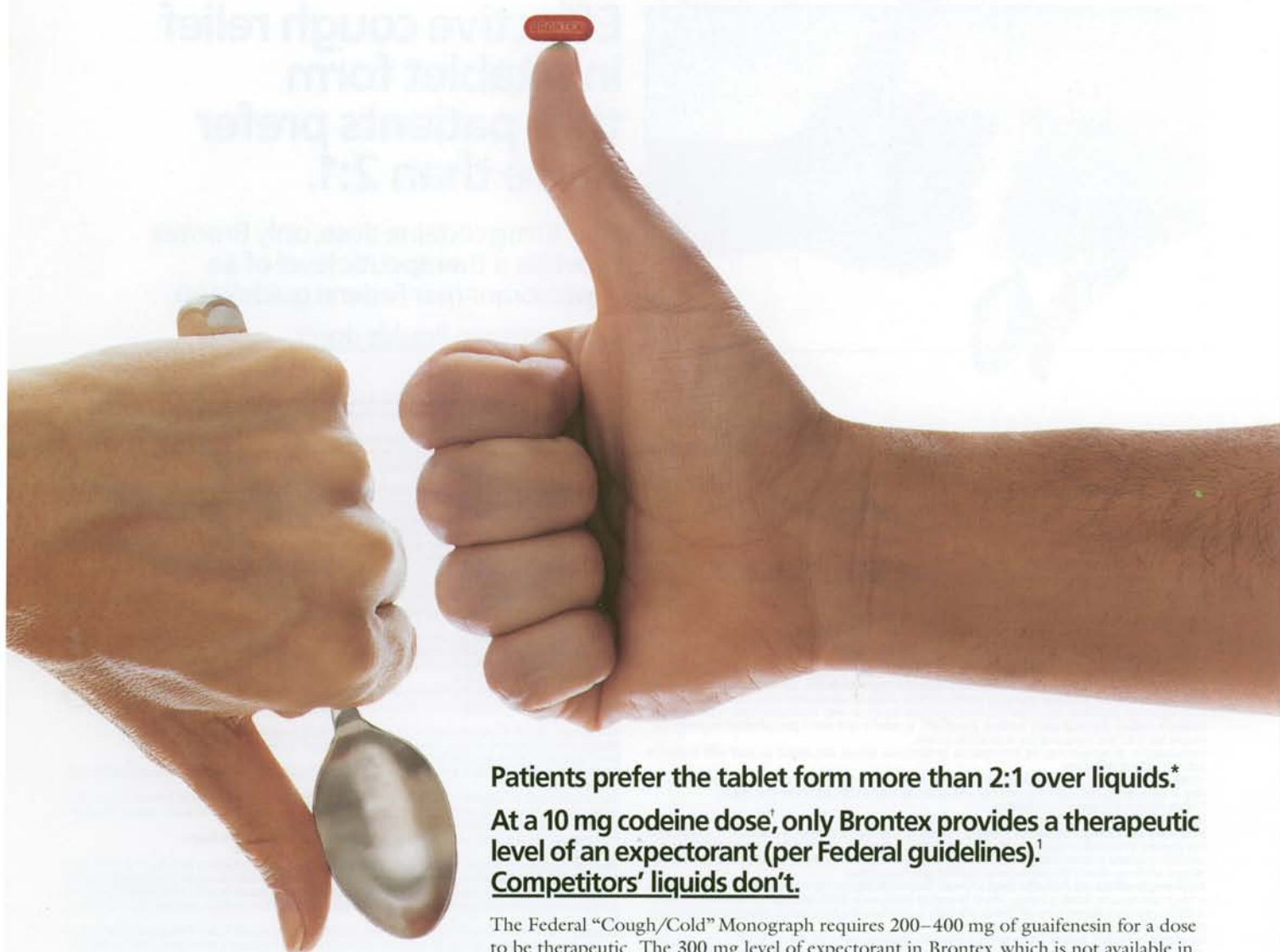
American Medical Association  
Physicians dedicated to the health of America



**SB SmithKline Beecham**  
Pharmaceuticals

Philadelphia, PA 19101  
©SmithKline Beecham, 1994

# Patients prefer cough tablets, and so will you when you see the unique Brontex® formula.



**Patients prefer the tablet form more than 2:1 over liquids.\***

**At a 10 mg codeine dose<sup>†</sup>, only Brontex provides a therapeutic level of an expectorant (per Federal guidelines)<sup>†</sup>.  
Competitors' liquids don't.**

The Federal "Cough/Cold" Monograph requires 200–400 mg of guaifenesin for a dose to be therapeutic. The 300 mg level of expectorant in Brontex, which is not available in a teaspoon of any codeine cough liquid likely due to taste and solubility limitations, is made possible by the unique tablet form. And, since the tablet form is patient-preferred, Brontex not only has the formula for you, but the form for your patients as well.

FROM THE MAKERS OF ENTEx® PRODUCTS

**Brontex**® III

CODEINE PHOSPHATE...10mg

(Warning: May be habit forming)

GUAIFENESIN.....300mg



**RIGHT FORM. RIGHT FORMULA.**

Because Brontex contains codeine, some patients may experience dizziness, sedation, nausea, emesis, and constipation. Please see brief summary of prescribing information on next page.

\* In a recent survey among 100 cough sufferers who took Brontex tablets and a prescription cough liquid in the past 12 months. Survey conducted via geographically dispersed pharmacies. 71% of patients expressed a preference for the tablet form, 24% of patients expressed a preference for liquid form, and 5% of patients expressed no preference for either form. Data on file.

† The most commonly prescribed dose of most codeine/guaifenesin products is 1 teaspoon (1994 NDTI data). Recommended adult dosage for most codeine/guaifenesin products is 2 teaspoons every 4 hours.

1 Tablet  
Every  
4 Hours

# Brontex®

CODEINE PHOSPHATE...10mg

(Warning: May be habit forming)

GUAIFENESIN.....300mg



## RIGHT FORM. RIGHT FORMULA.



## Effective cough relief in a tablet form that patients prefer more than 2:1.

At a 10 mg codeine dose, only Brontex provides a therapeutic level of an expectorant (per Federal guidelines).

Competitors' liquids don't.

References:  
1. Cold, Cough, Allergy, Bronchodilator, and Antiasthmatic Drug Products for Over-the-Counter Human Use; Expectorant Drug Products for Over-the-Counter Human Use; Final Monograph, Final Rule. *Federal Register*, Vol. 54, No. 38, Tuesday, February 28, 1989.  
Please see brief summary of prescribing information below.

### Brontex®

(codeine phosphate/guaifenesin) tablets

**DESCRIPTION:** Each Brontex® tablet and 4 teaspoonfuls (20 mL) of Brontex liquid contains

codeine phosphate.....10 mg

Warning— May be habit forming

guaifenesin.....300 mg

**INDICATIONS AND USAGE:** Temporarily relieves cough due to minor throat and bronchial irritation as may occur with a cold, or inhaled irritants. Helps loosen phlegm (mucus) and thin bronchial secretions to rid the bronchial passageways of bothersome mucus.

**CONTRAINDICATIONS:** Brontex tablets are contraindicated in patients with known hypersensitivity to any of its ingredients. Brontex tablets are contraindicated for use in patients with asthma.

**WARNINGS:** Codeine is not recommended for use in pediatric patients under 2 years of age. Pediatric patients under 2 years may be more susceptible to the respiratory depressant effects of codeine, including respiratory arrest, coma, and death.

**PRECAUTIONS: General:** Codeine should be used with extreme caution in patients with severe CNS depression, respiratory depression, or those prone to respiratory depression, acute alcoholism, chronic pulmonary disease and those with substantially decreased respiratory reserve. Codeine should be administered with caution in patients with acute abdominal conditions, convulsive disorders, significant hepatic or renal impairment, fever, hypothyroidism, Addison's disease, ulcerative colitis, prostatic hypertrophy, in patients with recent gastrointestinal or urinary tract surgery, and in the very young or elderly or debilitated patients.

Administration of codeine may be accompanied by histamine release and should be used with caution in pediatric patients with atopy.

Dosage of codeine should not be increased if cough fails to respond; an unresponsive cough should be reevaluated in 5 days or sooner for possible underlying pathology, such as foreign body or lower respiratory tract disease. Codeine may cause or aggravate constipation.

**Hypotensive Effects:** Codeine may produce hypotension in ambulatory patients.

**Head Injury and Increased Intracranial Pressure:** The risk of respiratory depression and elevation of cerebrospinal fluid pressure is increased by opiate agonists, including codeine, in the presence of head injury, intracranial lesions, or a pre-existing increase in intracranial pressure. They also may produce adverse reactions such as sedation and pupillary changes which may obscure the clinical course of patients with head injuries.

**Respiratory Conditions with Productive Cough or Chronic Respiratory Disease:** The risks and benefits of opiate agonists or cough suppressants, including codeine, should be carefully considered in illness associated with productive cough or in chronic respiratory disease where interference with ability to clear the tracheobronchial tree of secretions would have a deleterious effect on the patient's respiratory function.

**Information for Patients:** Brontex tablets may cause marked drowsiness or may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as driving a vehicle or operating machinery. Ambulatory patients should be told to avoid engaging in such activities until it is known that they do not become drowsy or dizzy from Brontex tablets. Pediatric patients should be supervised to avoid potential harm in bike riding or in other hazardous activities.

The concomitant use of alcohol or other central nervous system depressants, including opiate agonists, sedatives, hypnotics, and tranquilizers, may have an additive effect and should be avoided or their dosage reduced. Codeine, like other opiate agonists, may produce orthostatic hypotension in some ambulatory patients. Patients should be cautioned accordingly.

**Drug Interactions:** Caution should be used when taking this product with CNS depressants including alcohol, sedatives, tranquilizers and drugs used for depression, especially monoamine oxidase inhibitors (MAOIs). These combinations may cause greater sedation than is caused by the products used alone.

**Drug/Laboratory Test Interactions:** Guaifenesin has been reported to interfere with clinical laboratory determinations of urinary 5-hydroxyindoleacetic acid (5-HIAA) and urinary vanillylmandelic acid (VMA).

Because opiate agonists may increase biliary tract pressure, with resultant increases in plasma amylase or lipase levels, determination of these enzyme levels may be unreliable for 24 hours after an opiate agonist has been given.

**Carcinogenic, Mutagenesis, Impairment of Fertility:** Studies with Brontex tablets in animals to evaluate carcinogenic, mutagenic, or impairment of fertility potential have not been conducted. Studies conducted by the National Toxicology Program with codeine in rats and mice to evaluate its carcinogenic potential are in progress.

#### Pregnancy:

**Teratogenic Effects:** Pregnancy Category C. Animal reproduction studies have not been conducted with Brontex tablets. It is also not known whether Brontex tablets can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Brontex tablets should be given to a pregnant woman only if clearly needed.

Studies with codeine in hamsters and mice to evaluate its developmental toxicity potential have been reported by the National Toxicology Program. Codeine produced a decrease in mean fetal weight in both hamsters and mice, but did not produce structural malformations.

**Nonteratogenic Effects:** Dependence has been reported in newborns whose mothers took opiates regularly during pregnancy. Signs of withdrawal include irritability, excessive crying, tremors, hyperreflexia, fever, vomiting, and diarrhea. These signs usually disappear during the first few days of life.

#### Patent Pending

© 1995 by Procter & Gamble Pharmaceuticals P&GP C.S. Printed in U.S.A. August 1995

Brontex® (codeine phosphate/guaifenesin) tablets

**Labor and Delivery:** Use should be avoided during labor and delivery. Opiates cross the placental barrier. The closer to delivery and the larger the dose used, the greater the possibility of respiratory depression in the newborn. If the mother received opiates during labor, the newborn should be closely observed for signs of respiratory depression. Resuscitation, and in severe cases, naloxone may be required. Codeine may also prolong labor.

**Nursing Mothers:** Codeine is excreted in breast milk in amounts that are probably insignificant when given at usual therapeutic dose. It is not known whether guaifenesin is excreted in breast milk. Caution should be exercised when Brontex tablets are administered to a nursing mother. The possibility of clinically important amounts of codeine being excreted in breast milk in individuals abusing codeine should be considered.

**Pediatric Use:** Brontex tablets are not recommended for use in pediatric patients below the age of 12 years. Brontex liquid is not recommended for use in pediatric patients below the age of 6 years.

#### ADVERSE REACTIONS:

**Nervous System:** CNS depression, particularly respiratory depression, light-headedness, dizziness, sedation, euphoria, dysphoria, headache, transient hallucination, disorientation, visual disturbances, and convulsions.

**Cardiovascular:** Tachycardia, bradycardia, palpitation, faintness, syncope, orthostatic hypotension (common to opiate agonists), and circulatory depression.

**Gastrointestinal:** Nausea, vomiting, stomach pain, constipation, and biliary tract spasm. Patients with chronic ulcerative colitis may experience increased colonic motility; in patients with acute ulcerative colitis, toxic dilation has been reported.

**Genitourinary:** Oliguria and urinary retention; antidiuretic effect has been reported (common to opiate agonists).

**Other:** Infrequent pruritus, urticaria, angioneurotic edema, laryngeal edema, and rare anaphylactic reaction.

**DRUG ABUSE AND DEPENDENCE:** Brontex tablets are a Schedule III Controlled Substance. Brontex liquid is a Schedule V controlled substance.

Codeine is known to be subject to abuse; however, the abuse potential of oral codeine is lower than that of most other opiate agonists because of its lower potency at therapeutic doses. However, codeine must be administered only under close supervision to patients with a history of drug abuse or dependence.

Psychological dependence, physical dependence, and tolerance are known to occur with codeine.

#### OVERDOSAGE:

**Signs and Symptoms:** Serious overdose with codeine 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, miosis (mydriasis may occur in terminal necrosis or hypoxia), skeletal muscle flaccidity, cold and clammy skin, and sometimes bradycardia and hypotension. In severe overdose, apnea, circulatory collapse, cardiac arrest and death may occur.

**Treatment:** The treatment of overdose should provide symptomatic and supportive care. Primary attention should be given to the reestablishment of adequate respiratory exchange through provision of a patent airway and the institution of assisted or controlled ventilation as necessary. The narcotic antagonist naloxone is a specific antidote against respiratory depression resulting from overdose or unusual sensitivity to opiate agonists, including codeine. Therefore, an appropriate dose of naloxone hydrochloride (see package insert) may be administered, preferably by the intravenous route, and simultaneously with efforts at respiratory resuscitation. Since the duration of action of codeine may exceed that of the antagonist, the patient should be kept under continued surveillance and repeated doses of the antagonist should be administered as needed to maintain adequate respiration.

An antagonist should not be administered in the absence of clinically significant respiratory or cardiovascular depression. Oxygen, intravenous fluids, vasopressors and other supportive measures should be employed as indicated.

If the amount ingested is considered dangerous or excessive, induce vomiting with ipecac syrup unless the patient is convulsing, comatose, or has lost the gag reflex, in which case perform gastric lavage using a large-bore tube. If indicated, follow with activated charcoal and a saline cathartic.

#### DOSEAGE AND ADMINISTRATION:

**Adults and pediatric patients 12 years of age and older:** one tablet every 4 hours.

Brontex tablets are not recommended for pediatric patients under 12 years of age.

**Liquid: Adults and pediatric patients 12 years of age and older:** 4 teaspoonfuls every 4 hours. **Pediatric patients 6 to under 12 years of age:** 2 teaspoonfuls every 4 hours.

#### HOW SUPPLIED:

Brontex tablets are available as a red, capsule-shaped tablet, embossed "BRONTEx".

NDC 0149-0440-01 bottle of 100.

Brontex liquid is available as NDC 0149-0441-16 1 pint (473 mL) bottle.

Store at controlled room temperature (59°-86°F or 15°-30°C).

CAUTION: Federal law prohibits dispensing without prescription.

Procter & Gamble Pharmaceuticals

Cincinnati, Ohio 45202

May 1995

Procter & Gamble  
PHARMACEUTICALS

## Members Invited

# National Health Council December Events

### What?

December 13: The National Health Council's 75th Anniversary Gala Reception

December 14: The 42nd National Health Forum

### Where?

Hyatt Regency Capitol Hill, Washington, DC



### When?

December 13: Diamond Anniversary Gala Reception 5:30–7:30 pm

December 14: 42nd National Health Forum on "Quality Managed Care: Meeting the Needs of High-Risk Patients and Populations"—8:45 am until 5:00 pm

### Who?

Shakers and Movers in Health Care (President and Mrs. Clinton have been invited, along with key members of the Cabinet, leaders and key staff in the Congress, members of all Council Member organizations, and selected guests from the private and public sectors)

For more details, call NHC on 202-785-3910 or FAX this completed form to 202-785-5923

TO: Joseph C. Isaacs, President  
National Health Council  
1730 M Street, NW #500  
Washington, DC 20036

VIA FAX: 202-785-5923

*Congratulations on the 1995 events celebrating the 75th anniversary of the National Health Council. Please send me more information about the two terrific events planned for December 13 and 14!*

Name \_\_\_\_\_ Title \_\_\_\_\_

Organization \_\_\_\_\_ Position \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ + \_\_\_\_\_

- Please ensure that I receive an invitation to *both* the 75th Anniversary Gala Reception on December 13 *and* the 42nd National Health Forum.
- I am interested in Sponsorship of the 42nd National Health Forum.
- I am interested in the Commemorative Journal to be released during the 75th Anniversary. I understand that it will feature historical vignettes highlighting progress in healthcare over the past 75 years. Please send more details.

# Reader Information

## CD/ROM

JAMA & Archives Journals  
Subscriber Services, American Medical Association  
515 North State Street, Chicago, IL 60610  
Phone: 800-AMA-2350/312-670-7827; Fax: 312-464-5831

*Electronic subscription to AMA scientific journals. Full text format includes color graphics and line art. Information available beginning with 1994 data.*



## INTERNET

Visit the AMA's new home page on the World Wide Web:  
<http://www.ama-assn.org>

*Access current abstracts from JAMA and the Archives journals, full text of the new Archives Journal Club/Women's Health, article highlights from American Medical News, career opportunities in the Physician Recruitment section, immediate links to other pertinent medical resources on the Internet, and much more.*



## ONLINE SERVICES

Ovid Technologies, Inc.  
333 Seventh Avenue, New York, NY 10001  
Phone: 212-563-3006; Fax: 212-563-3784  
*Full-text articles from JAMA*

Dialog Information Services, Inc.  
3460 Hillview Avenue, PO Box 10010, Palo Alto, CA 94303  
Phone: 800-3-DIALOG; Fax: 415-858-7069  
*Full-text articles from JAMA and the Archives*

Information Access Company  
362 Lakeside Drive, Foster City, CA 94404  
Phone: 800-227-8431; Fax: 415-378-5369  
*Full-text articles from JAMA, the Archives and American Medical News*



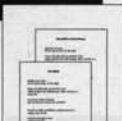
## DOCUMENT DELIVERY

*Copies of complete articles from JAMA and the Archives journals*

Genuine Article/Institute for Scientific Information  
3501 Market Street, Philadelphia, PA 19104  
Phone: 215-386-0100, ext. 1140-1145; Fax: 215-386-4343  
and 215-222-0840; Internet: TGA@ISINET.COM

Uncover Company  
3801 E. Florida, Suite 200, Denver, CO 80210  
Phone: 303-758-3030; Fax: 303-758-5946; Internet: database.carl.org

UMI InfoStore  
500 Sansome Street, Suite 400, San Francisco, CA 94111  
Phone: 800-248-0360; Fax: 415-433-0100



## ALERT SERVICE

Individual Inc.  
8 New England Executive Park West, Burlington, MA 01803  
Phone: 800-866-2266; Fax: 617-273-6060  
*Provides abstracts only for current issues of JAMA and the Archives by fax*



## MICROFILM

UMI  
300 North Zeeb Road, Ann Arbor, MI 48106-1346  
Phone: 313-761-4700; Fax: 313-973-2088  
*JAMA and the Archives journals available*



## SUBSCRIBER SERVICES

For information regarding subscriptions, change of address, missing issues, or purchasing back issues, please contact Subscriber Services Center, PO Box 10945, Chicago, IL 60610, at the numbers below. The Center's hours are between 8:30 am and 4:30 pm CST.

## JAMA BOUND VOLUMES

Preserve a complete year of JAMA with an archival, bound volume set. Issues are printed on acid-free paper and include full-color covers. Each compact volume holds six months of issues and is just 2 1/4 inches thick for easy handling. Bound volume sets are available beginning with 1994. See information below to order. Please specify 1994 or 1995 subscription year when ordering.

## SINGLE COPY SALES

Issues published in the last two years are available for purchase, subject to availability. Single copy rates for delivery in the US are: \$11 per copy of JAMA; \$16 per copy of the Archives journals; and \$8 per copy of American Medical News. Prepayment is required. Issues can be ordered by phone, mail, or fax through Subscriber Services at the numbers below.

## REPRINTS

Authorized reprints may be purchased in quantities of 300 or more. For smaller quantities, back issues may be purchased at the single copy rate. For prices and ordering information, contact the Reprints Coordinator, PO Box 10945, Chicago, IL 60610. Phone: 312-464-2521.

## PHYSICIAN RECRUITMENT ADVERTISING

JAMA physician recruitment advertising rates are \$4.25 per word, per issue (bold type is \$4.65 per word, per issue), with a minimum of 20 words. Blind Box Service is available at an additional cost of \$20 per issue. For further information and rates on physician recruitment advertising and network buys for all AMA publications, contact an AMA Physician Recruitment Representative at 312-464-2475/2490/2491/4485; Fax: 312-464-5909.

## SUBSCRIBE TO AMA PUBLICATIONS

For information on any of these AMA publications, or to place an order, contact Subscriber Services at 800-AMA-2350 (Fax: 312-464-5831). A surcharge for expedited airmail delivery will be added for all orders outside the US. Mail your order to: Subscriber Services Center, PO Box 10945, Chicago, IL 60610.

### 1995 Subscription Rates

		Individual	Institution
JAMA: The Journal of the American Medical Association (48 issues)	\$120	\$140	
Archives of Dermatology (12 issues)	\$135	\$150	
Archives of Family Medicine (12 issues)	\$ 95	\$105	
Archives of General Psychiatry (12 issues)	\$ 95	\$110	
Archives of Internal Medicine (22 issues)	\$115	\$135	
Archives of Neurology (12 issues)	\$145	\$175	
Archives of Ophthalmology (12 issues)	\$110	\$125	
Archives of Otolaryngology— Head & Neck Surgery (12 issues)	\$125	\$145	
Archives of Pediatrics & Adolescent Medicine (12 issues)	\$100	\$125	
Archives of Surgery (12 issues)	\$100	\$115	
American Medical News (48 issues)	\$ 99	\$139	
<b>New!</b> JAMA Bound Volumes (2 archival volumes)	Set \$ 95	\$ 95	

**PHONE: 312-670-SUBS [670-7827]**

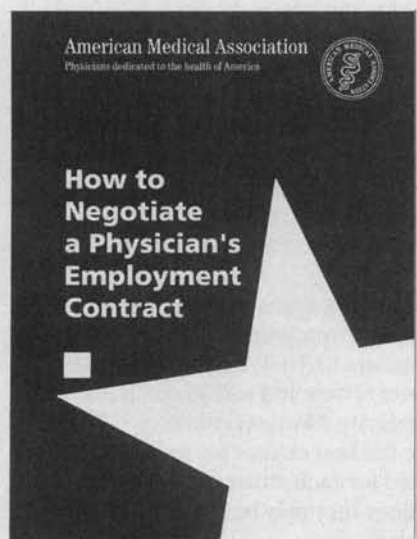
**FAX: 312-464-5831**

**E-MAIL: AMA-SUBS@AMA-ASSN.ORG**

# What will you do when sued for breach of contract?

***What you should know before you sign a physician employment contract.***

**New!**



Most suits brought by medical entities for breach of contract allege violation of covenants not to compete, also known as restrictive covenants. Physicians entering their first employment following residency training too often anticipate a permanent career relationship and sign contracts containing restrictive covenants. These may result in a severe economic hardship for the physician if the physician is forced to relocate after a brief period of employment.

***How to Negotiate a Physician's Employment Contract***, just published by the American Medical Association (AMA), provides an extensive review of cases involving judicial treatment of restrictive covenants and numerous other issues physicians and employers need to know before signing an employment contract. These include compensation, essential information about the Americans with Disabilities Act, impact of income taxes on various forms of compensation and an overview of the Stark II self-referral legislation.

A basic specimen form of a physician's employment agreement, a checklist for preparing an employment contract and an array of optional and alternative clauses are also included.

Written for both employers and physicians, this new publication offers a road map for exploring every critical aspect of a contract and for paving the way to a satisfactory relationship between employer and employee. Published June, 1995. 43 pages.

## ***How to Negotiate a Physician's Employment Contract***

Order #: OP653795UA

AMA member price: \$29.95

Nonmember price: \$40.00

# 800 621-8335

Appropriate US State or Canadian sales tax plus shipping and handling will be added as applicable. Visa, MasterCard, Optima or American Express accepted.

**American Medical Association**

Physicians dedicated to the health of America





# Before You Buy...

Consider the Benefits of Leasing with AT&T Capital.



## Minimize your time investment.

Time is one of your most precious assets. Buying or leasing a car can be very time consuming. So let AT&T Capital work for you. You can lease the vehicle of your choice without ever leaving your office! Just call us and we'll locate the best deal available on the model

of your choice – foreign or domestic – at a dealership near you. And when you're ready for a new vehicle, leasing eliminates the hassle of selling a used car. You simply return the vehicle at the end of the lease after all lease obligations have been met.



## Maximize your cash flow.

With leasing, you conserve capital. No down-payment is required at the beginning of a lease, so the money you conserve is available for alternate uses.

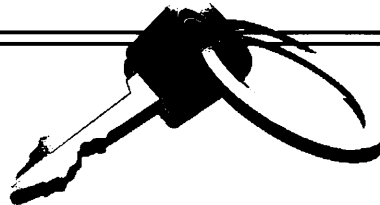
Leasing a car typically results in lower monthly payments than installment financing. You only pay for and have use of the vehicle during the term of the lease.



## Maintain flexible options.

Auto leasing gives you the flexibility to drive a new car every few years. If your vehicle needs change during the term of the lease, you may buyout your

existing lease at any time after 12 months, return the vehicle, and apply for a new vehicle that better suits your current needs.



Convenient "One-Stop" Shopping  
Automotive Experts • Price Negotiation  
Flexible Terms and Options

**Call: 1 800-262-AUTO**

**AT&T Capital Corporation – We Give Your Business The Credit It Deserves**

AMA Financing & Practice Services, Inc.  
A Subsidiary of the American Medical Association



Over the past 15 years, eight large controlled clinical trials of antihypertensive therapy in the elderly have clearly documented that treatment is associated with a reduction in the incidence of strokes. The meta-analysis of these data reported in the article by Pearce et al clearly demonstrates a reduction of 18% in the incidence of coronary heart disease, a 35% reduction in the incidence of strokes, and a significant reduction in mortality rate, along with a blood pressure reduction of 15/6 mm Hg (systolic/diastolic) over approximately a 5-year period. Further analysis of these results suggests that diuretics and  $\beta$ -blockers were equally efficacious for stroke prevention, but diuretics may be superior in terms of reducing coronary heart disease events and the all-cause mortality rate.

The results of this meta-analysis as well as those of the Systolic Hypertension in the Elderly Program and the Medical Research Council Hypertension Trial support the concept that the practitioner should be more aggressive in lowering blood pressure in the geriatric population. Furthermore, the treatment of systolic hypertension, which is relatively common in this population, is as important, if not more critical, in the treatment of diastolic hypertension.

Based on the available data, it appears that therapy with low-dose diuretics (25 mg or less of hydrochlorothiazide) should be the cornerstone of therapy for both systolic and diastolic hypertension in the elderly. Indeed, low-dose diuretic therapy is generally well tolerated and does not cause clinically relevant metabolic problems in this population. In contrast to negative notions held in the past regarding compliance and tolerance issues in antihypertensive therapy, we now know that compliance is at least as good as it is in younger individuals. Thus, we have relatively inexpensive, generally well tolerated antihypertensive medications that have been proven to reduce the incidence of stroke and coronary events and the all-cause mortality rate. Unfortunately, this information has not been adequately conveyed to many practitioners who still do not appreciate the tremendous benefits of treating elevated blood pressures in the most rapidly growing patient population in the United States and other Westernized countries: the elderly.

James R. Sowers, MD  
Wayne State University School of Medicine  
Detroit, Mich

<http://www.ama-assn.org>

## YOUR ACCESS TO THE WORLD OF MEDICINE

- Abstracts, tables of contents and medical news briefs
- Weekly science news releases
- Current career opportunities
- Full text of *Archives Journal Club/ Women's Health*
- Links to other medical resources
- More features coming soon!

American Medical Association  
Physicians dedicated to the health of America



We thank Sheila M. McNab, Buys Ballot Laboratory, University of Utrecht (the Netherlands) for translating this article into English and Didi M. W. Kriegsman, Vrije Universiteit Amsterdam (the Netherlands), for her statistical advice.

Correspondence to Institute for Research in Extramural Medicine, Vrije Universiteit Amsterdam, Van der Boechorststraat 7, 1081 BT Amsterdam, the Netherlands (Dr Onwuteaka-Philipsen).

## REFERENCES

1. Van der Wal G, van Eijk JTM, Leenen HJJ, Spreuwenberg C. Euthanasia and assisted suicide, I: how often is it practised by family doctors in the Netherlands? *Fam Pract.* 1992;9:130-134.
2. Van der Wal G, van Eijk JTM, Spreuwenberg C. Euthanasia and assisted suicide, II: do Dutch family doctors act prudently? *Fam Pract.* 1992;9:135-140.
3. Van der Wal G, Muller MT, Christ LM, Ribbe MW, van Eijk JTM. Voluntary active euthanasia and physician-assisted suicide in Dutch nursing homes: requests and administration. *J Am Geriatr Soc.* 1994;42:620-623.
4. Muller MT, van der Wal G, van Eijk JTM, Ribbe MW. Voluntary active euthanasia and physician-assisted suicide in Dutch nursing homes: are the requirements for prudent practice properly met? *J Am Geriatr Soc.* 1994;42:624-629.
5. Van der Maas PJ, van Delden JJM, Pijnenborg L, Looman CWN. Euthanasia and other medical decisions concerning the end of life. *Lancet.* 1991;338:669-674.
6. De Haan M, Ribbe MW. General practice and nursing home medicine: a comparison [in Dutch]. *Ned Tijdschr Geneesk.* 1993;137:2629-2701.
7. Final report of the Dutch State Commission on Euthanasia: an English summary. *Bioethics.* 1987;1:163-174.
8. Pronouncement Supreme Court 21 June 1994 [in Dutch]. *Med Contact.* 1994;49:917-918.
9. Public Verdict, Medical Disciplinary Court, Amsterdam, March 30, 1995 [in Dutch].
10. Kuhse H, Singer P. Doctors' practices and attitudes regarding voluntary euthanasia. *Med J Aust.* 1988;148:623-627.
11. Kinsella TD, Verhoef MJ. Alberta Euthanasia Survey, 1: physicians' opinions about the morality and legalization of active euthanasia. *Can Med Assoc J.* 1993;148:1921-1926.
12. Stevens CA, Hassan R. Management of death, dying and euthanasia: attitudes and practices of medical practitioners in South Australia. *J Med Ethics.* 1994;20:41-46.
13. Shapiro RS, Derse AR, Gottlieb M, Schiedermayer D, Olson M. Willingness to perform euthanasia, a survey of physician attitudes. *Arch Intern Med.* 1994;154:575-584.
14. Ward BJ, Tate PA. Attitudes among NHS doctors to requests for euthanasia. *BMJ.* 1994;308:1332-1334.
15. Cohen JS, Fihn SD, Boyko EJ, Jonsen AR, Wood RW. Attitudes toward assisted suicide and euthanasia among physicians in Washington State. *N Engl J Med.* 1994;331:89-94.
16. Bachman JG, Doekas DJ, Lichtenstein RL, Alcer KH. Assisted suicide and euthanasia in Michigan. *N Engl J Med.* 1994;331:812-813.
17. Kimsma GK, van Leeuwen E. Dutch euthanasia: background, practice, and present justifications. *Camb Q Healthc Ethics.* 1993;2:19-35.
18. Battin MP. Euthanasia: the way we do it, the way they do it. *J Pain Symptom Manage.* 1991;6:298-305.
19. Van der Wal G, Dillmann RJM. Euthanasia in the Netherlands. *BMJ.* 1994;308:1346-1349.
20. Jecker NS. Physician-assisted death in the Netherlands and the United States: ethical and cultural aspects of health policy development. *J Am Geriatr Soc.* 1994;42:672-678.

## Introducing . . . Archives Journal Club/Women's Health Only in Archives of Family Medicine

*Archives Journal Club/Women's Health* will be featured as a special section of *Archives of Family Medicine* for the second half of 1995. Designed to keep primary care physicians up-to-date with important issues and advances in women's health, this section provides the information you need to make the right decisions for your female patients in this new practice environment.

- Multidisciplinary information — available from no other single source
- Quick to read — the latest information in summary format
- Clinically relevant — current knowledge useful in your daily practice
- Authoritative — brought to you by the world's largest medical publisher



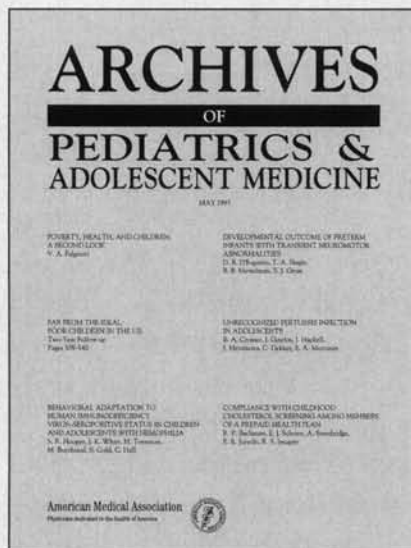
For subscriber information  
call 1-800-AMA-2350  
FAX: 312-464-5831

American Medical Association  
Physicians dedicated to the health of America



Now with an expanded focus —  
from infancy to young adulthood

# A unique resource for pediatrics in a time of change



**A**rchives of Pediatrics & Adolescent Medicine, incorporating AJDC: American Journal of Diseases of Children, has been a trusted voice in children's health for over 80 years. To better serve the changing needs of the specialty, the journal now focuses on the entire range of pediatrics ... from newborns to young adults.

## Knowledge that meets daily practice needs

The new Archives is a practical forum for articles, debate and information applicable to clinical decision-making. In-depth coverage of the latest advancements and common problems in patient care are fully addressed in the journal's wide-ranging editorial content.

## Expansive coverage of pediatric care

Archives of Pediatrics & Adolescent Medicine examines the complex issues facing the specialty, both today and in the future. Look to the Archives for a diversity of articles on the clinical, scientific and social issues relevant to pediatric and adolescent care.

## The latest peer-reviewed, primary source material

Original articles are comprehensive yet concise, and include quick-reading abstracts. Published monthly by the world's leading medical authority, Archives of Pediatrics & Adolescent Medicine provides the latest insights into pediatric primary care today.

*The new resource for clinical advances in the care of children and adolescents.*

## SUBSCRIBE TODAY!

**American Medical Association**

Physicians dedicated to the health of America



### Selected recent topics from Archives of Pediatrics & Adolescent Medicine

- The Prone Sleeping Position & SIDS
- Pertussis in Fully Immunized Adolescents
- Early Recognition of Autism
- Timing and Rate of Sexual Maturation and the Onset of Cigarette and Alcohol Use Among Teenage Girls
- A Program Developing Residents as Teachers
- Recurrent Intussusception

**Yes! Please enter my one-year subscription (12 issues) to Archives of Pediatrics & Adolescent Medicine for \$100.**

My check made payable to the AMA is enclosed.

Please charge my subscription to:

Visa  MasterCard  American Express

Card # \_\_\_\_\_

Exp. / Signature \_\_\_\_\_

Name (Please Print) \_\_\_\_\_

MD/DO  Other (Please Specify) \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Individual rate is \$125. Individual rate does not apply if payment is made through an institution. Washington, DC residents add 6% sales tax. Canada residents add 7% GST (R 126 225 556). An airmail delivery surcharge of \$35 for individual orders (\$40 surcharge for institution orders) will be applied to all orders outside the US. Rates subject to change.

**Mail to: American Medical Association**

**P.O. Box 10945**

**Chicago, IL 60610 USA**

**For fast service, call toll-free 1-800-AMA-2350 or fax your order to 312-464-5831 today!**

Medical Practice Databank

# Fast Stats

Current Data on the Physician Market

This new 1995 edition of *Physician Marketplace Statistics* provides the very latest statistics – at the most detailed level possible – for answering questions about the practice environment of today's patient care physician. This edition is published only 8 weeks after the survey data are processed so you are using the most timely information available.

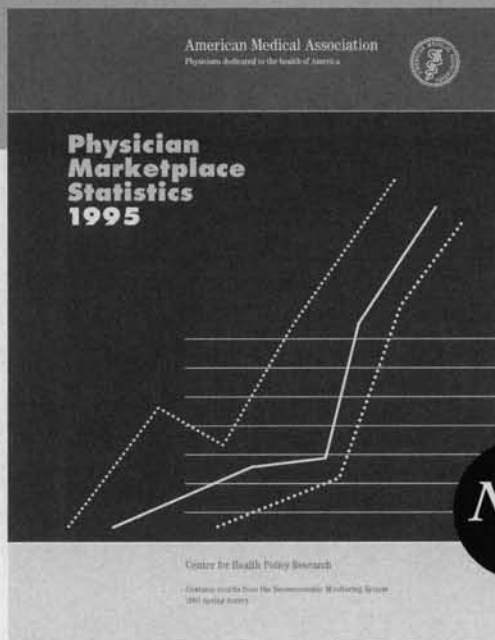
This year's edition, available in textbook and diskette, includes new tables on federal physicians and physician involvement with capitated managed care contracts by specialty, practice size and type including geographic regions.

Topics covered in the tables include:

- weeks worked
- hours and visits in different settings
- fees for visits
- expenses for six categories
- physician net income
- Medicare practice characteristics
- physician revenue by source of payor
- involvement with managed care systems
- distribution of physicians by employment status

Statistics are broken out for 18 specialties, 9 geographic regions and the ten largest states (excluding income). Softbound, 150 pages, over 100 tables and 25 figures.

Published December 1995.



## *Physician Marketplace Statistics 1995*

ISBN: 0-89970-736-X

Order #: OP193195VC

AMA member price: \$199.95

Nonmember price: \$329.95

# 800 621-8335

Visa, American Express, MasterCard and Optima accepted

Mail your check to Order Department, AMA, PO Box 7046, Dover, DE 19903.

### Sales Tax Chart

AZ 7.05	IA 6	NJ 6
CA 8.25	IL 8.75	NY 8.25
CT 6	MN 7	WI 5.50
DC 6	NC 6	

### Shipping & Handling

\$150-\$199.99	\$15.95
Over \$200	\$19.95

Canadian residents add 7% Goods and Service Tax.

American Medical Association

Physicians dedicated to the health of America



# Now get the article you need within 24 hours!

Information fast . . . information complete

Now there's a convenient way to get the article you need - when you need it. Document delivery puts any article from the American Medical Association (AMA) clinical journals at your fingertips, complete with charts, figures and graphics. Articles from any issue of JAMA and the Archives journals are available, whether they were published last week or even decades ago.

Order by phone, fax or computer

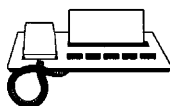
It's quick and convenient to arrange delivery of an article using the sources below. A black and white copy of the article will be sent within 24 hours of your order. Articles can be delivered by fax, or you can choose from other delivery options, including overnight service.

When you need an article that was published in JAMA or the Archives journals, and time is important, contact these sources for fast document delivery.

The Genuine Article  
Institute for Scientific Information  
3501 Market Street  
Philadelphia, PA 19104  
Phone: 1-215-386-0100, ext 1140-1145  
Fax: 1-215-386-4343 and 1-215-222-0840  
Internet: TIG@ISI.NET.COM

The Uncover Company  
3801 E. Florida Ave., Suite 200  
Denver, CO 80210, USA  
Phone: 1-800-787-7979  
Fax: 303-758-5946  
Internet: database.carl.org

UMI InfoStore  
500 Sansome Street, Suite 400  
San Francisco, CA 94111  
Phone: 1-800-248-0360  
Fax: 415-433-0100



Articles available from these AMA journals:

- JMA: The Journal of the American Medical Association
- Archives of Dermatology • Archives of Family Medicine
- Archives of General Psychiatry • Archives of Internal Medicine
- Archives of Neurology • Archives of Ophthalmology
- Archives of Otolaryngology-Head & Neck Surgery
- Archives of Pediatrics & Adolescent Medicine • Archives of Surgery



## Statement of Ownership, Management, and Circulation

(Required by 39 U.S.C. 3685)

1. Publication Title Archives of Family Medicine		2. Publication No. 0 0 9 - 5 0 5		3. Filing Date 9-30-95	
4. Issue Frequency Monthly		5. No. of Issues Published Annually 12		6. Annual Subscription Price \$95.00	
7. Complete Mailing Address of Known Office of Publication (Street, City, County, State, and ZIP+4) (Not Printer) 515 N. State Street, Chicago, Cook, IL 60610					
8. Complete Mailing Address of Headquarters or General Business Office of Publisher (Not Printer) 515 N. State Street, Chicago, Cook, IL 60610					
9. Full Names and Complete Mailing Addresses of Publisher, Editor, and Managing Editor (Do Not Leave Blank)					
Publisher (Name and Complete Mailing Address) American Medical Association, 515 N. State Street, Chicago, IL 60610					
Editor (Name and Complete Mailing Address) Majorie A. Bowman, M.D., MPA, 515 N. State Street, Chicago, IL 60610					
Managing Editor (Name and Complete Mailing Address) None					
10. Owner (If owned by a corporation, its name and address must be stated and also immediately thereafter the names and addresses of stockholders owning or holding 1 percent or more of the total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address as well as that of each individual must be given. If the publication is published by a nonprofit organization, its name and address must be stated.) (Do Not Leave Blank.)					
Full Name		Complete Mailing Address			
American Medical Association		515 N. State Street, Chicago, IL, 60610			
11. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or Other Securities. If none, check here. <input checked="" type="checkbox"/> None					
Full Name		Complete Mailing Address			
None					
12. For completion by nonprofit organizations authorized to mail at special rates. The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes. (Check one) <input type="checkbox"/> Has Not Changed During Preceding 12 Months <input checked="" type="checkbox"/> Has Changed During Preceding 12 Months (If changed, publisher must submit explanation of change with this statement)					

PS Form 3526, October 1994 (See Instructions on Reverse)

13. Publication Name Archives of Family Medicine		14. Issue Date for Circulation Data Below 9/95	
15. Extent and Nature of Circulation		Average No. Copies Each Issue During Preceding 12 Months	Actual No. Copies of Single Issue Published Nearest to Filing Date
a. Total No. Copies (Net Press Run)		10/94 9/95	63262 53569
b. Paid and/or Requested Circulation (1) Sales Through Dealers and Carriers, Street Vendors, and Counter Sales (Not Mailed) (2) Paid or Requested Mail Subscriptions (Include Advertisers' Proof Copies/Exchange Copies)		32 61445	54 52072
c. Total Paid and/or Requested Circulation (Sum of 15b(1) and 15b(2))		61477	52126
d. Free Distribution by Mail (Samples, Complimentary, and Other Free)		0	0
e. Free Distribution Outside the Mail (Carriers or Other Means)		0	0
f. Total Free Distribution (Sum of 15d and 15e)		0	0
g. Total Distribution (Sum of 15c and 15f)		61477	52126
h. Copies Not Distributed (1) Office Use, Leftovers, Spoiled (2) Return from News Agents		1785 0	1443 0
i. Total (Sum of 15g, 15h(1), and 15h(2))		63262	53569
Percent Paid and/or Requested Circulation (15c / 15g x 100)		100%	100%

16. This Statement of Ownership will be printed in the 11/95 issue of this publication.  Check box if not required to publish.

17. Signature and Title of Editor, Publisher, Business Manager, or Owner  
Date  
Michael Spitzer, Publisher 9/28/95

I certify that all information furnished on this form is true and complete. I understand that anyone who furnishes false or misleading information on this form or who omits material or information requested on the form may be subject to criminal sanctions (including fines and imprisonment) and/or civil sanctions (including multiple damages and civil penalties).

### Instructions to Publishers

- Complete and file one copy of this form with your postmaster on or before October 1, annually. Keep a copy of the completed form for your records.
  - Include in items 10 and 11, in cases where the stockholder or security holder is a trustee, the name of the person or corporation for whom the trustee is acting. Also include the names and addresses of individuals who are stockholders who own or hold 1 percent or more of the total amount of bonds, mortgages, or other securities of the publishing corporation. In item 11, if none, check box. Use blank sheets if more space is required.
  - Be sure to furnish all information called for in item 15, regarding circulation. Free circulation must be shown in items 15d, e, and f.
  - If the publication had second-class authorization as a general or requester publication, this Statement of Ownership, Management, and Circulation must be published; it must be printed in any issue in October or the first printed issue after October. If the publication is not published during October.
  - In item 16, indicate date of the issue in which this Statement of Ownership will be printed.
  - Item 17 must be signed.
- Failure to file or publish a statement of ownership may lead to suspension of second-class authorization.

# How to Use Archives Journal Club

EDITOR

**Rebecca P. McAllister, MD**  
Washington University School of Medicine  
St Louis, Mo

SECTION EDITORS

FAMILY MEDICINE

**Louise S. Acheson, MD, MS**

OBSTETRICS/MATERNAL-FETAL MEDICINE

**Dorothea J. Mastello, MD**

GYNCOLOGY/GYNCOLOGIC SURGERY

**Lisa M. Bernhard, MD**

REPRODUCTIVE ENDOCRINOLOGY/MENOPAUSE

**Randall R. Odom, MD**  
**Daniel B. Williams, MD**  
**Ronald C. Strickler, MD**  
**Kelle H. Moley, MD**  
**Valerie S. Ratts, MD**

UROGYNECOLOGY/UROLOGY

**Linda Brubaker, MD**

GYNCOLOGIC ONCOLOGY

**Janet S. Rador, MD**

BREAST DISEASE

**Dorothy P. Andriole, MD**  
**Barbara Monsees, MD**  
**Peter E. Shilo, MD**

ADOLESCENT GYNCOLOGY/PEDIATRIC AND

ADOLESCENT MEDICINE

**Diane F. Morrill, MD**  
**Robert T. Brown, MD**

INTERNAL MEDICINE

**Daniel M. Goodenberger, MD**

DERMATOLOGY

**Luclann L. Hruza, MD**

INFECTIOUS DISEASE/AIDS

**Victoria Fraser, MD**  
**Mary Horgan, MD**

PSYCHIATRY

**Elizabeth F. Priber, MD**

PAIN/ANESTHESIA

**Robert Parker, DO**

AMERICAN MEDICAL WOMEN'S ASSOCIATION

**Donnica Moore, MD**

ALLIED HEALTH

**Catherine Garner, RNC, DrPH, FAAN**  
**Nancy Morrow-Howell, PhD**  
**Shannon E. Perry, RN, PhD, FAAN**

*Archives Journal Club* draws on the American Medical Association's vast network of editors, reviewers, and specialist physicians to identify the most important articles in the world literature relevant to the treatment of women patients—not only from the weekly *JAMA* and the AMA's nine primary-source *Archives* specialty journals, but from more than 50 other journals from around the world. The *Journal Club* presents a "windows approach" to the medical literature by providing structured summaries of the selected articles, with a clinical conclusion by a specialist in that area that attempts to address the more practical implications of the article.

### Visit the World Wide Web

By virtue of receiving each issue of *Archives Journal Club*, you participate in a "virtual journal club" with thousands of members. The complete text of *Archives Journal Club* is available on the World Wide Web as well as in print. To access the *Journal Club* on-line, simply use your PC and modem to reach the Internet. Commercial online services such as America Online, Compuserve, and Prodigy provide Internet browsers, or you may use your own browser software such as Netscape Navigator.

The address for the American Medical Association's Web site is <http://www.ama-assn.org> Click on the *Archives Journal Club/Women's Health* icon to scan the full text of the latest issue. You are also welcome to browse the site for other medical information from the AMA including the latest abstracts from the AMA scientific journals, Medical News Briefs from *American Medical News*, information about AMA membership, the Federation directory, and more.

### Ordering Full Text of Articles

Most of the journals from which *Journal Club* articles are selected participate in one or more document delivery services. Full-text copies of the original articles are available through the following sources. Per-copy charges for these articles are established by the individual publishers, not by the AMA or the *Archives Journal Club*.

Genuine Article/Institute for Scientific Information

Phone: 215-386-0100, ext. 1140-1145

Fax: 215-386-4343 and 215-222-0840

Internet: [TGA@ISINET.COM](mailto:TGA@ISINET.COM)

Uncover Company

Phone: 303-758-3030

Fax: 303-758-5946

Internet: [database.carl.org](http://database.carl.org)

UMI InfoStore

Phone: 800-248-0360

Fax: 415-433-0100

### Questions or Comments About Archives Journal Club

Questions, comments, and suggestions about the *Journal Club* can be addressed to the Publisher, *Archives Specialty Journals*, 515 N State St, Chicago, IL 60610, or may be left on the World Wide Web at the Internet address shown above.

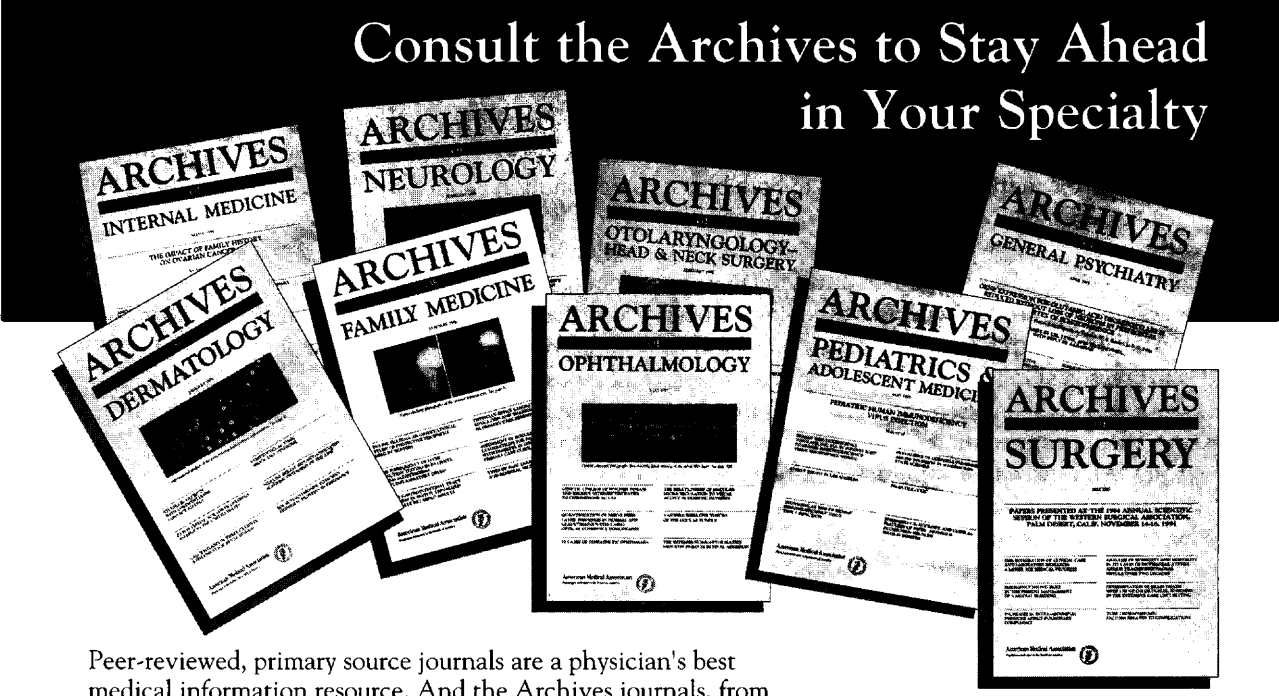
(BRCA2), located at 13q12-13, may be responsible for some inherited breast cancers, and that p53 mutations and the ataxia telangiectasia gene may also cause breast cancer.

**Conclusion:** Important further questions are raised by this discovery, ie, what are the biologic functions of the gene product; are there other genes located on chromosome 17q that play a role in sporadic breast cancer; are there other genes elsewhere causing susceptibility to breast cancer? The importance of this discovery is made clear not only by the significant contribution it makes to understanding cancer biology but also by the high prevalence of breast cancer.

Reprint Requests: The Johns Hopkins Oncology Center, Baltimore, MD 21231 (B. Vogelstein).

#### SELECTED BIBLIOGRAPHY

- Cropp CS et al. *Cancer Res.* 1994;54:2548-51.
- Hall JM et al. *Science.* 1990;250:1684-1689.
- Easton DF et al. *Am J Hum Genet.* 1993;52:678-701.
- Futreal PA et al. *Science.* 1994;266:12-22.
- Miki Y et al. *Science.* 1994;266:66-71.



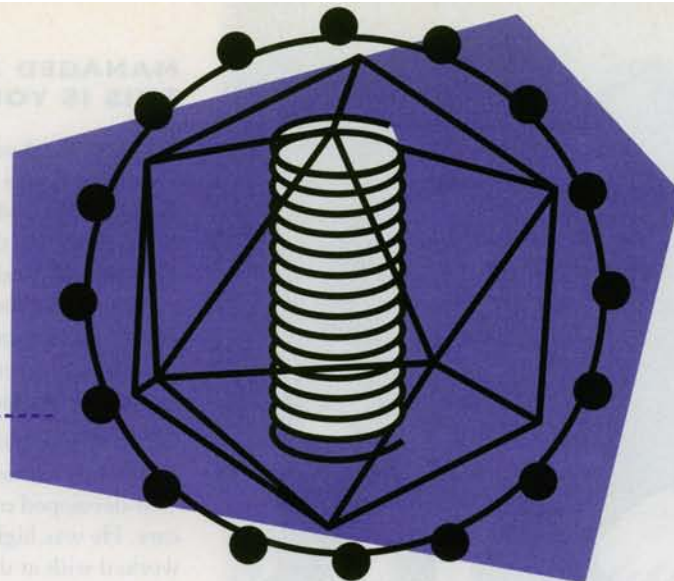
**Consult the Archives to Stay Ahead  
in Your Specialty**

Peer-reviewed, primary source journals are a physician's best medical information resource. And the Archives journals, from the world's leading publisher of medical information, are the best choice available to gain fresh insights and keep up with the latest advances.

**Subscribe today! Call toll-free 1-800-AMA-2350.**

Stay at the forefront  
of medicine.





# “HCV INFECTION: EPIDEMIOLOGY, DIAGNOSIS, AND TREATMENT”

**A 1995 International Symposium**

**May 11-12, 1995 Los Angeles, California**

➔ **NOW AVAILABLE FROM THE SYMPOSIUM:  
A FREE 3-PART CATEGORY 1 ACCREDITED CME KIT:**

- ▼ 41 MINUTE VIDEOTAPE
- ▼ 54 MINUTE AUDIOTAPE
- ▼ 32 PAGE MONOGRAPH

CME Material Sponsored by:

The University of Texas Southwestern Medical Center at Dallas  
Office of Continuing Medical Education

**Interested Physicians Call 1-800-209-3346**

AGA and AASLD members will automatically receive the kit.

The University of Texas Southwestern Medical Center at Dallas is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians.

The University of Texas Southwestern Medical Center at Dallas designates this continuing medical education activity for 2 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association. A fee of \$10.00 will be assessed for those physicians applying for credit.

Supported by an unrestricted educational grant by Schering Corporation Oncology Biotech Division

**SOUTHWESTERN**  
*An equal opportunity institution*



# ONCE-A-DAY CARDIZEM<sup>®</sup> CD (diltiazem HCl) 120-, 180-, 240-, 300-mg Capsules

## FOR HYPERTENSION OR ANGINA

R<sub>x</sub>  
Cardizem CD  
Start with one  
180-mg  
capsule daily

Brief Summary of  
Prescribing Information as of January 1995

### CARDIZEM<sup>®</sup> CD (diltiazem HCl) Capsules

#### CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, (3) patients with hypotension (less than 90 mm Hg systolic), (4) patients who have demonstrated hypersensitivity to the drug, and (5) patients with acute myocardial infarction and pulmonary congestion documented by x-ray on admission.

#### WARNINGS

- Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (13 of 3290 patients or 0.40%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
- Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). An acute study of oral diltiazem in patients with impaired ventricular function (ejection fraction 24% ± 6%) showed improvement in indices of ventricular function without significant decrease in contractile function (dp/dt). Worsening of congestive heart failure has been reported in patients with preexisting impairment of ventricular function. Experience with the use of CARDIZEM (diltiazem hydrochloride) in combination with beta-blockers in patients with impaired ventricular function is limited. Caution should be exercised when using this combination.
- Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
- Acute Hepatic Injury.** Mild elevations of transaminases with and without concomitant elevation in alkaline phosphatase and bilirubin have been observed in clinical studies. Such elevations were usually transient and frequently resolved even with continued diltiazem treatment. In rare instances, significant elevations in enzymes such as alkaline phosphatase, LDH, SGOT, SGPT, and other phenomena consistent with acute hepatic injury have been noted. These reactions tended to occur early after therapy initiation (1 to 8 weeks) and have been reversible upon discontinuation of drug therapy. The relationship to CARDIZEM is uncertain in some cases, but probable in some. (See PRECAUTIONS.)

#### PRECAUTIONS

##### General

CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any drug given over prolonged periods, laboratory parameters of renal and hepatic function should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing. Dermatological events (see ADVERSE REACTIONS section) may be transient and may disappear despite continued use of CARDIZEM. However, skin eruptions progressing to erythema multiforme and/or exfoliative dermatitis have also been infrequently reported. Should a dermatologic reaction persist, the drug should be discontinued.

##### Drug Interactions

Due to the potential for additive effects, caution and careful titration are warranted in patients receiving CARDIZEM concomi-

tantly with other agents known to affect cardiac contractility and/or conduction. (See WARNINGS.) Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

As with all drugs, care should be exercised when treating patients with multiple medications. CARDIZEM undergoes biotransformation by cytochrome P-450 mixed function oxidase. Coadministration of CARDIZEM with other agents which follow the same route of biotransformation may result in the competitive inhibition of metabolism. Especially in patients with renal and/or hepatic impairment, dosages of similarly metabolized drugs, particularly those of low therapeutic ratio, may require adjustment when starting or stopping concomitantly administered diltiazem to maintain optimum therapeutic blood levels.

**Beta-blockers.** Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers is usually well tolerated, but available data are not sufficient to predict the effects of concomitant treatment in patients with left ventricular dysfunction or cardiac conduction abnormalities. Administration of CARDIZEM (diltiazem hydrochloride) concomitantly with propranolol in five normal volunteers resulted in increased propranolol levels in all subjects and bioavailability of propranolol was increased approximately 50%. In vitro, propranolol appears to be displaced from its binding sites by diltiazem. If combination therapy is initiated or withdrawn in conjunction with propranolol, an adjustment in the propranolol dose may be warranted. (See WARNINGS.)

**Cimetidine.** A study in six healthy volunteers has shown a significant increase in peak diltiazem plasma levels (58%) and area-under-the-curve (53%) after a 1-week course of cimetidine at 1200 mg per day and a single dose of diltiazem 60 mg. Ranitidine produced smaller, nonsignificant increases. The effect may be mediated by cimetidine's known inhibition of hepatic cytochrome P-450, the enzyme system responsible for the first-pass metabolism of diltiazem. Patients currently receiving diltiazem therapy should be carefully monitored for a change in pharmacological effect when initiating and discontinuing therapy with cimetidine. An adjustment in the diltiazem dose may be warranted.

**Digitalis.** Administration of CARDIZEM with digoxin in 24 healthy male subjects increased plasma digoxin concentrations approximately 20%. Another investigator found no increase in digoxin levels in 12 patients with coronary artery disease. Since there have been conflicting results regarding the effect of digoxin levels, it is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing CARDIZEM therapy to avoid possible over- or under-digitalization. (See WARNINGS.)

**Anesthetics.** The depression of cardiac contractility, conductivity, and automaticity as well as the vascular dilation associated with anesthetics may be potentiated by calcium channel blockers. When used concomitantly, anesthetics and calcium blockers should be titrated carefully.

**Cyclosporine.** A pharmacokinetic interaction between diltiazem and cyclosporine has been observed during studies involving renal and cardiac transplant patients. In renal and cardiac transplant recipients, a reduction of cyclosporine dose ranging from 15% to 48% was necessary to maintain cyclosporine trough concentrations similar to those seen prior to the addition of diltiazem. If these agents are to be administered concurrently, cyclosporine concentrations should be monitored, especially when diltiazem therapy is initiated, adjusted, or discontinued. The effect of cyclosporine on diltiazem plasma concentrations has not been evaluated.

**Carbamazepine.** Concomitant administration of diltiazem with carbamazepine has been reported to result in elevated serum levels of carbamazepine (40% to 72% increase), resulting in toxicity in some cases. Patients receiving these drugs concurrently should be monitored for a potential drug interaction.

**Carcinogenesis, Mutagenesis, Impairment of Fertility**  
A 24-month study in rats at oral dosage levels of up to 100 mg/kg/day and a 21-month study in mice at oral dosage levels of up to 30 mg/kg/day showed no evidence of carcinogenicity. There was also no mutagenic response in vitro or in vivo in mammalian cell assays or in vitro in bacteria. No evidence of impaired fertility was observed in a study performed in male and female rats at oral dosages of up to 100 mg/kg/day.

##### Pregnancy

Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recom-

mended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

##### Nursing Mothers

Diltiazem is excreted in human milk. One report suggests that concentrations in breast milk may approximate serum levels. If use of CARDIZEM is deemed essential, an alternative method of infant feeding should be instituted.

##### Pediatric Use

Safety and effectiveness in pediatric patients have not been established.

##### ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded from these studies.

The following table presents the most common adverse reactions reported in placebo-controlled angina and hypertension trials in patients receiving CARDIZEM CD up to 360 mg with rates in placebo patients shown for comparison.

Adverse Reactions	Cardizem CD (n=607)	Placebo (n=301)
Headache	5.4%	5.0%
Dizziness	3.0%	3.0%
Bradycardia	3.3%	1.3%
AV Block First Degree	3.3%	0.0%
Edema	2.6%	1.3%
ECG Abnormality	1.6%	2.3%
Asthenia	1.8%	1.7%

In clinical trials of CARDIZEM CD capsules, CARDIZEM tablets, and CARDIZEM SR capsules involving over 3200 patients, the most common events (ie, greater than 1%) were edema (4.6%), headache (4.6%), dizziness (3.5%), asthenia (2.6%), first-degree AV block (2.4%), bradycardia (1.7%), flushing (1.4%), nausea (1.4%), and rash (1.2%).

In addition, the following events were reported infrequently (less than 1% in angina or hypertension trials):

**Cardiovascular:** Angina, arrhythmia, AV block (second- or third-degree), bundle branch block, congestive heart failure, ECG abnormalities, hypertension, palpitations, syncope, tachycardia, ventricular extrasystoles.

**Nervous System:** Abnormal dreams, amnesia, depression, gait abnormality, hallucinations, insomnia, nervousness, paresthesia, personality change, somnolence, tinnitus, tremor.

**Gastrointestinal:** Anorexia, constipation, diarrhea, dry mouth, dysgeusia, dyspepsia, mild elevations of SGOT, SGPT, LDH, and alkaline phosphatase (see hepatic warnings), thirst, vomiting, weight increase.

**Dermatological:** Peticiae, photosensitivity, pruritus, urticaria.

**Other:** Amblyopia, CPK increase, dyspnea, epistaxis, eye irritation, hyperglycemia, hyperuricemia, impotence, muscle cramps, nasal congestion, nocturia, osteoarthral pain, polyuria, sexual difficulties.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: alopecia, erythema multiforme, exfoliative dermatitis, extrapyramidal symptoms, gingival hyperplasia, hemolytic anemia, increased bleeding time, leukopenia, purpura, retinopathy, and thrombocytopenia. In addition, events such as myocardial infarction have been observed which are not readily distinguishable from the natural history of the disease in these patients. A number of well-documented cases of generalized rash, characterized as leukocytoclastic vasculitis, have been reported. However, a definitive cause and effect relationship between these events and CARDIZEM therapy is yet to be established.

Prescribing Information as of January 1995

Marion Merrell Dow Inc.  
Kansas City, MO 64114

ccdb0195c

**References:** 1. Food and Drug Administration. *Approved Drug Products With Therapeutic Equivalence Evaluations* (Orange Book). US Dept of Health and Human Services. 14th ed. Washington, DC; 1994. 2. Cardizem CD prescribing information 3. Data on file, Marion Merrell Dow Inc.



MARION MERRELL DOW INC.  
U S A  
KANSAS CITY, MO 64114

IN HYPERTENSION OR ANGINA

**CARDIZEM<sup>®</sup> CD**

(diltiazem HCl) 120-, 180-, 240-, 300-mg Capsules

**FOR EFFECTIVE  
24-HOUR CONTROL**

No other  
diltiazem is  
therapeutically  
equivalent to  
Cardizem CD<sup>1</sup>



**ONCE A DAY**

**A unique hemodynamic and safety profile  
for hypertension or angina<sup>2,3</sup>**

- A side-effect discontinuation rate comparable to placebo in both hypertension and angina trials<sup>3</sup>
- Most commonly reported side effects are headache (5.4%), bradycardia (3.3%), first-degree AV block (3.3%), dizziness (3.0%), edema (2.6%), ECG abnormality (1.6%), and asthenia (1.8%)<sup>2</sup>

Please see brief summary of prescribing information on adjacent page.