American Osteopathic Association
Continuing Medical Education

CERTIFICATION OF HOME STUDY

This is to certify that I, _____ completed the following activity for AOA CME credits.
Please print

Type of activity (such as reading or listening) _____

Name of journal(s) *or* audio-tape and date(s) of issue(s): _____

_____

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(One-half CREDIT may be granted for each issue or tape)

_____ _____
AOA number D.O.'s signature

_____ _____
College and year of graduation Current address (including zip code)

MAIL TO: AOA Division of CME, 212 East Ohio Street, Chicago, Illinois 60611

KEEP A DUPLICATE FOR YOUR RECORDS!

The **Home Study** form is intended to document individual reading of recognized scientific journals, listening to approved audio-tapes, and other approved home study courses and programs under the criteria described for Category **2-B.**

Only one type of home study, such as reading, should be indicated on a single form, though multiple issues of scientific journals may be listed.

This form should **not** be used, however, when CME quiz cards for the AOA Journal are submitted separately.

FOR OFFICE USE ONLY
Cat. 2-B Credits _____
Date _____
Program # _____
Doctor # _____
Doctor's Name _____

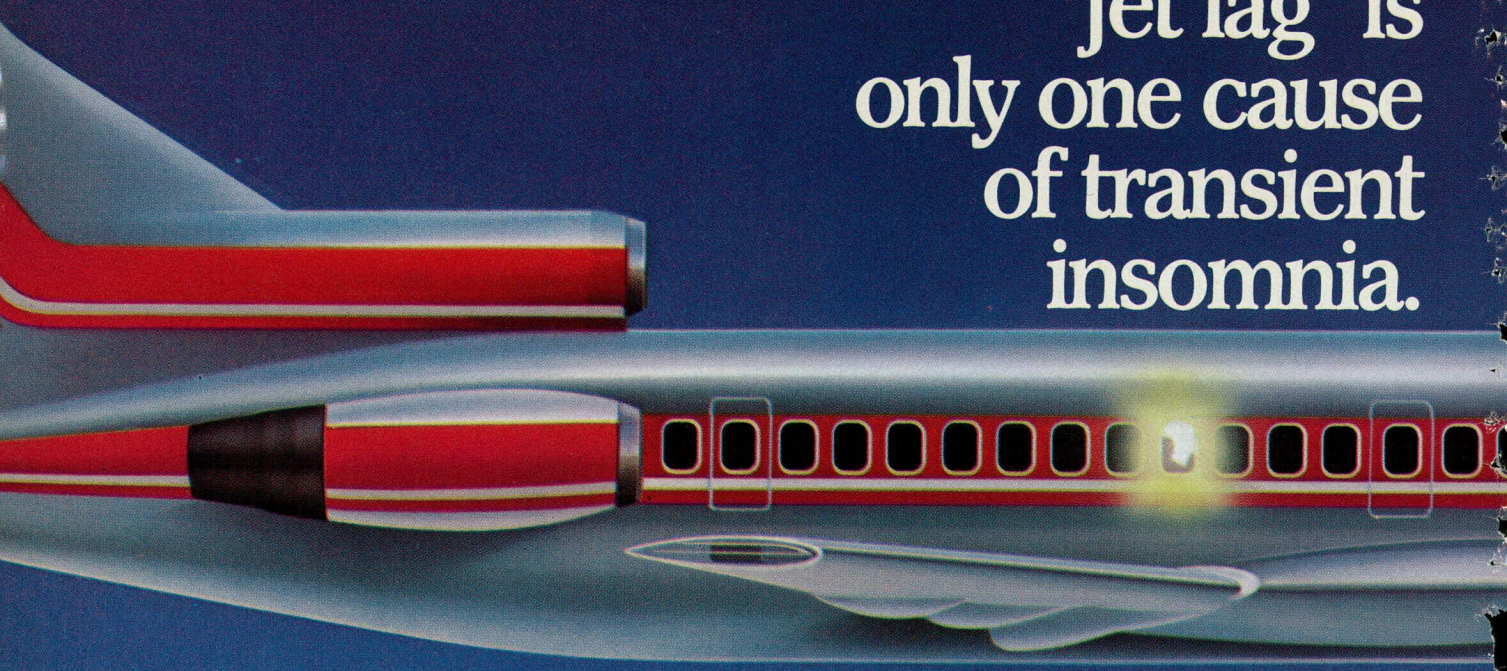
Please refer to the revised CME GUIDE for additional information.

Form Revised: 1/77

Upjohn 100 A Century of Caring 1886·1986

NOF

"Jet lag" is only one cause of transient insomnia.



Hospitalization for elective surgery, job loss, and bereavement are other possible causes. In fact, according to a panel of sleep experts convened by the National Institute of Mental Health (NIMH), transient insomnia may be caused by acute situational stress lasting several days, whereas short-term insomnia is usually related to excessive stress associated with work or family life and may last up to three weeks.

HALCION provides the recommended therapeutic profile. When drug therapy is elected as appropriate in the total management of transient or short-term insomnia, the NIMH panel stated that benzodiazepines are preferred; they recommended a small dose of a rapidly eliminated hypnotic for the shortest clinically necessary period of time. HALCION, with a 2.6-hour mean elimination half-life, meets the panel's recommendations.

HALCION provides a full duration of sleep... In a double-blind, crossover study[1] comparing the effects of HALCION 0.5 mg tablets with placebo in ten healthy volunteers whose sleep was shifted to daytime hours, HALCION significantly ($P<0.01$) improved the total sleep time (+50.6 minutes).

...and better alertness after awakening. In another study,[2] the effects of HALCION 0.5 mg and flurazepam 30 mg on alertness after a 12-hour shift in sleep-wake schedule were compared in normal sleepers. Subjects taking HALCION did not show an increase in sleep tendency during the awake period of the study, while the flurazepam subjects demonstrated a significant increase in sleepiness compared with baseline. This difference was statistically significant ($P<0.05$).

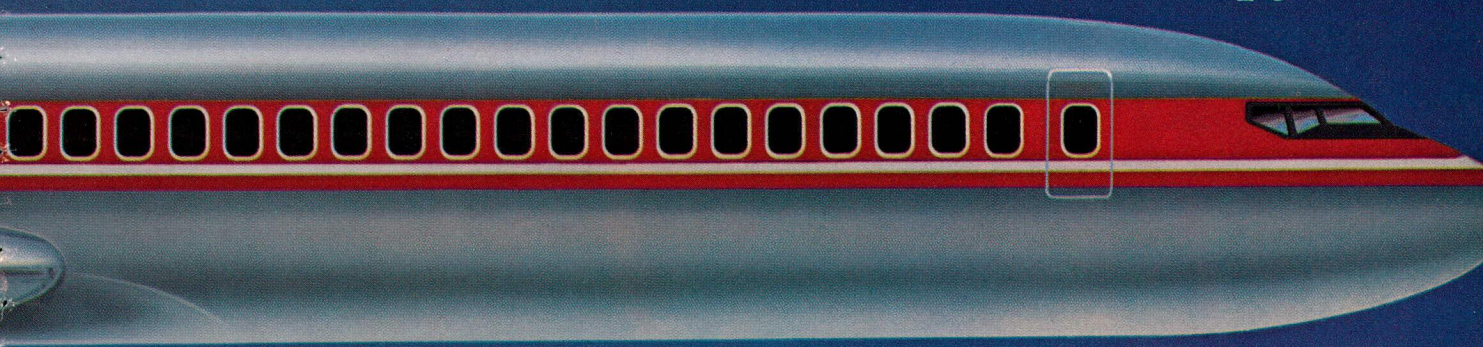
Patients should be cautioned against engaging in hazardous tasks that require mental alertness (operating machinery or driving a motor vehicle) while taking benzodiazepines.

0.25 MG TABLETS ®

Halcion

triazolam IV

Helps meet both goals of insomnia therapy



Please see adjacent page for brief summary of prescribing information.

"prompt use of glucocorticoids in the emergency treatment of severe asthma can prevent significant morbidity, reduce the number of hospitalizations, and effect substantial savings in health care costs."

Littenberg, B., and Gluck, E.H.: A controlled trial of methylprednisolone in the emergency treatment of acute asthma. N Engl J Med 314:150-2, 16 Jan 86

Nonsteroidal anti-inflammatory drugs and renal failure

The present report concerns itself with 17 patients who presented with renal failure associated with the use of nonsteroidal anti-inflammatory drugs (NSAID).

Four patients with acute tubular necrosis and 3 patients with acute interstitial nephritis presented with acute renal failure. Four other patients presented with symptomless renal impairment that was discovered during routine follow-up in a rheumatology clinic. All 11 patients recovered when NSAID treatment was discontinued. The 6 remaining patients presented with chronic renal failure, a disease that up to now has not been associated with NSAID therapy.

The authors hypothesize that renal disease associated with NSAID may be more extensive than previously recognized. Patients who develop dyspnea, edema, proteinuria, diarrhea and vomiting, and unexplainable fatigue should probably be advised to discontinue the intake of NSAID until it is determined whether or not renal impairment is involved. Adams and associates also note that drugs with shorter half lives (for example, indomethacin and ibuprofen) are not implicated in renal failure as often as medications with long half lives (naproxen and piroxicam, for example).

Adams, D.H., et al.: Non-steroidal anti-inflammatory drugs and renal failure. Lancet 1:57-9, 11 Jan 86

A major turning point in seasonal allergic rhinitis therapy

Pharmacologically distinct

SELDANE®

(terfenadine) 60 mg tablets BID

Separating sedation from relief*

The #1 prescribed allergy product in the U.S.†

*The reported incidence of sedation with Seldane (9.0%) in controlled clinical studies did not differ significantly from that reported in patients receiving placebo (8.1%).

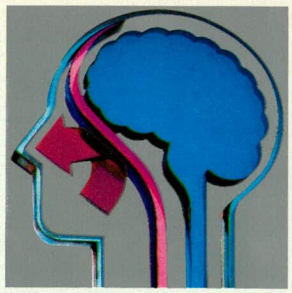
†Based on monthly prescription audits of single-entity antihistamines, combination antihistamine/decongestants, nasal steroids, and nasal cromolyn sodium.

Before prescribing Seldane, please see Brief Summary of Prescribing Information which appears on the last page.

Pharmacologically distinct

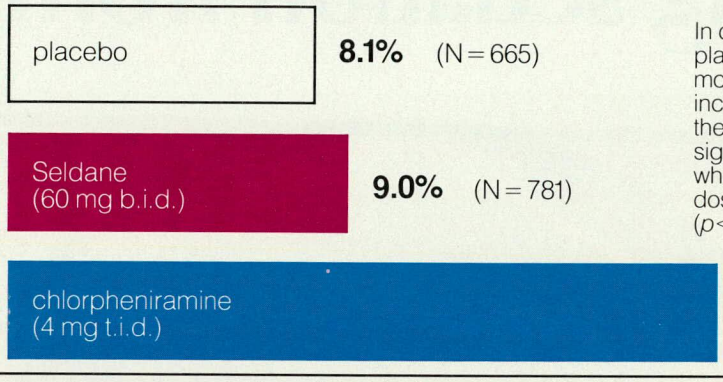
SELDANE®

(terfenadine) 60 mg tablets BID



Sedation equivalent to placebo

Incidence of drowsiness



In double-blind, randomized, placebo-controlled studies involving more than 1,700 patients, the reported incidence of sedation with Seldane in therapeutic doses did not differ significantly from that of placebo, while chlorpheniramine in therapeutic doses produced twice the incidence ($p<0.02$).[1]

Data from all controlled clinical studies in which Seldane (60 mg b.i.d.) was compared to either placebo or positive control.[1]

Efficacy equal to classical therapy

Percentage relief of symptoms[2]

In 12 well-controlled studies involving a total of 1,913 patients, Seldane was consistently as effective as classical antihistamines in relieving the symptoms of seasonal allergic rhinitis.[1] In a United Kingdom study, for example, Seldane reduced nasal and ocular symptoms as effectively as chlorpheniramine.[2]

Low incidence of undesired effects

In controlled clinical studies, the incidence of reported adverse effects in patients receiving Seldane was similar to that reported in patients receiving placebo.[1]

See Brief Summary for CONTRAINDICATIONS, PRECAUTIONS, and ADVERSE REACTIONS.

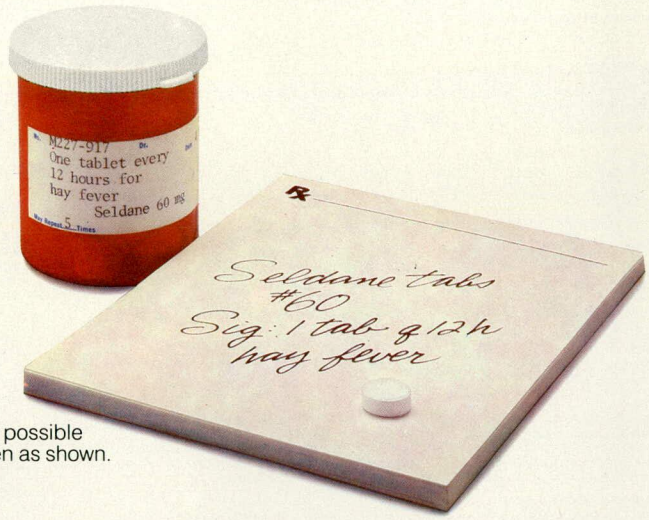
Merrell Dow

Extensively metabolized, with favorable half-life

Seldane® (terfenadine) is rapidly and extensively metabolized and distributed in tissues, resulting in extremely low levels of circulating unchanged drug. It has an alpha (distribution) half-life of 3.4 hours and a beta (elimination) half-life of 20.3 hours.[1]

Rapid, long-lasting relief with b.i.d. dosage

Studies have shown that the antihistaminic effect of Seldane on histamine wheals begins within 1 to 2 hours, reaching maximum at 3 to 4 hours. A 60 mg tablet of Seldane shows antihistaminic action for 12 hours or more.[1]



Because Seldane is a recently introduced drug, to eliminate any possible confusion with similar trademarks, prescriptions should be written as shown.

Pharmacologically distinct

SELDANE®

(terfenadine) 60 mg tablets BID

Separating sedation from relief

The only peripheral, H_1-specific antagonist available in the U.S.

Before prescribing Seldane, please see Brief Summary of Prescribing Information which appears on the last page.

Pharmacologically distinct

SELDANE®

(terfenadine) 60 mg tablets BID

Separating sedation from relief

The #1 prescribed allergy product in the U.S., with more than 13 million patient-months of experience worldwide

- Sedation equivalent to placebo
- Efficacy equal to classical therapy
- Low incidence of adverse effects
- Rapid, long-lasting relief
- Convenient b.i.d. dosage

Seldane® (terfenadine)

60 mg Tablets

BRIEF SUMMARY

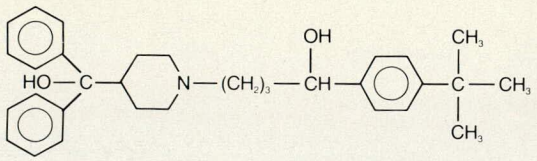
CAUTION: Federal law prohibits dispensing without prescription.

DESCRIPTION

Seldane (terfenadine) is available as tablets for oral administration. Each tablet contains 60 mg terfenadine. Tablets also contain, as inactive ingredients: corn starch, gelatin, lactose, magnesium stearate, and sodium bicarbonate.

Terfenadine is a histamine H_1-receptor antagonist with the chemical name α-[4-(1,1-Dimethylethyl) phenyl]-4-(hydroxydiphenylmethyl)-1-piperidinebutanol.

It has the following chemical structure:



Terfenadine occurs as a white to off-white crystalline powder. It is freely soluble in chloroform, soluble in ethanol, and very slightly soluble in water.

CONTRAINDICATIONS

Seldane is contraindicated in patients with a known hypersensitivity to terfenadine or any of its ingredients.

PRECAUTIONS

Information for patients

Patients taking Seldane should receive the following information and instructions. Antihistamines are prescribed to reduce allergic symptoms. Patients should be questioned about pregnancy or lactation before starting Seldane therapy, since the drug should be used in pregnancy or lactation only if the potential benefit justifies the potential risk to fetus or baby. Patients should be instructed to take Seldane only as needed and not to exceed the prescribed dose. Patients should also be instructed to store this medication in a tightly closed container in a cool, dry place, away from heat or direct sunlight, and away from children.

Carcinogenesis, mutagenesis, impairment of fertility

Oral doses of terfenadine, corresponding to 63 times the recommended human daily dose, in mice for 18 months or in rats for 24 months, revealed no evidence of tumorigenicity. Microbial and micronucleus test assays with terfenadine have revealed no evidence of mutagenesis.

Reproduction and fertility studies in rats showed no effects on male or female fertility at oral doses of up to 21 times the human daily dose. At 63 times the human daily dose there was a small but significant reduction in implants and at 125 times the human daily dose reduced implants and increased post-implantation losses were observed, which were judged to be secondary to maternal toxicity.

Pregnancy Category C

There was no evidence of animal teratogenicity. Reproduction studies have been performed in rats at doses 63 times and 125 times the human daily dose and have revealed decreased pup weight gain and survival when terfenadine was administered throughout pregnancy and lactation. There are no adequate and well-controlled studies in pregnant women. Seldane should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nonteratogenic effects

Seldane is not recommended for nursing women. The drug has caused decreased pup weight gain and survival in rats given doses 63 times and 125 times the human daily dose throughout pregnancy and lactation. Effects on pups exposed to Seldane only during lactation are not known, and there are no adequate and well-controlled studies in women during lactation.

Pediatric use

Safety and effectiveness of Seldane in children below the age of 12 years have not been established.

General

Consideration should be given to potential anticholinergic (drying) effects in patients with lower airway disease, including asthma.

ADVERSE REACTIONS

Experience from clinical studies, including both controlled and uncontrolled studies involving more than 2,400 patients who received Seldane, provides information on adverse experience incidence for periods of a few days up to six months. The usual dose in these studies was 60 mg twice daily, but in a small number of patients, the dose was as low as 20 mg twice a day, or as high as 600 mg daily.

In controlled clinical studies using the recommended dose of 60 mg b.i.d., the incidence of reported adverse effects in patients receiving Seldane was similar to that reported in patients receiving placebo. (See Table below.)

ADVERSE EVENTS REPORTED IN CLINICAL TRIALS

Adverse Event	Percent of Patients Reporting				
	Controlled Studies*			All Clinical Studies**	
	Seldane N = 781	Placebo N = 665	Control N = 626***	Seldane N = 2462	Placebo N = 1478
Central Nervous System					
Drowsiness	9.0	8.1	18.1	8.5	8.2
Headache	6.3	7.4	3.8	15.8	11.2
Fatigue	2.9	0.9	5.8	4.5	3.0
Dizziness	1.4	1.1	1.0	1.5	1.2
Nervousness	0.9	0.2	0.6	1.7	1.0
Weakness	0.9	0.6	0.2	0.6	0.5
Appetite Increase	0.6	0.0	0.0	0.5	0.0
Gastrointestinal System					
Gastrointestinal Distress (Abdominal distress, Nausea, Vomiting, Change in Bowel habits)	4.6	3.0	2.7	7.6	5.4
Eye, Ear, Nose, and Throat					
Dry Mouth/Nose/Throat	2.3	1.8	3.5	4.8	3.1
Cough	0.9	0.2	0.5	2.5	1.7
Sore Throat	0.5	0.3	0.5	3.2	1.6
Epistaxis	0.0	0.8	0.2	0.7	0.4
Skin					
Eruption or itching	1.0	1.7	1.4	1.6	2.0

*Duration of treatment in "CONTROLLED STUDIES" was usually 7-14 DAYS.
**Duration of treatment in "ALL CLINICAL STUDIES" was up to 6 months.
***CONTROL DRUGS: Chlorpheniramine (291 patients), d-Chlorpheniramine (189 patients), Clemastine (146 patients)

In addition to the more frequent side effects reported in clinical trials (See Table), adverse effects have been reported at a lower incidence in clinical trials and/or spontaneously during marketing of Seldane that warrant listing as possibly associated with drug administration. These include: alopecia, anaphylaxis, angioedema, bronchospasm, depression, galactorrhea, insomnia, menstrual disorders (including dysmenorrhea), musculoskeletal pain, nightmares, palpitation, paresthesia, sweating, tachycardia, tremor, urinary frequency, and visual disturbances. In clinical trials, several instances of mild, or in one case, moderate transaminase elevations were seen in patients receiving Seldane. Mild elevations were also seen in placebo treated patients. Foreign marketing experiences include isolated reports of jaundice, cholestatic hepatitis, and hepatitis; in most cases available information is incomplete. In neither the clinical trials nor foreign experience is a causal relationship of liver abnormalities to Seldane use clear.

OVERDOSAGE

Information concerning possible overdosage and its treatment appears in Full Prescribing Information.

Product Information as of May, 1985

Y191D

MERRELL DOW PHARMACEUTICALS INC.
Subsidiary of The Dow Chemical Company
Cincinnati, Ohio 45215

Merrell Dow

References: 1. Data available upon request, MERRELL DOW PHARMACEUTICALS INC., Cincinnati, Ohio 45215. **2.** Backhouse CI, Brewster BS, Lockhart JDF, et al: Terfenadine in allergic rhinitis. A comparative trial of a new antihistamine versus chlorpheniramine and placebo. Practitioner 226:347-348, 351, 1982.

6-6239 (B-1164) MNQ-872 January, 1986 Printed in U.S.A.