1	DALMANE®IV		
2	(flurazepam hydrochloride)		
3	CAPSULES		
4	For Relief of Insomnia		
4 5	For Kener of msomma		
6	<b>DESCRIPTION:</b> Dalmane is available as capsules containing 15 mg or 30 mg		
7	flurazepam hydrochloride. Each 15-mg capsule also contains cornstarch, lactose,		
8	magnesium stearate and talc; gelatin capsule shells contain the following dye systems:		
9	D&C Red No. 28, FD&C Red No. 40, FD&C Yellow No. 6 and D&C Yellow No. 10.		
10	Each 30-mg capsule also contains cornstarch, lactose and magnesium stearate; gelatin		
11	capsule shells contain the following dye systems: FD&C Blue No. 1, FD&C Yellow No.		
12	6, D&C Yellow No. 10 and either FD&C Red No. 3 or FD&C Red No. 40.		
13			
14	Flurazepam hydrochloride is chemically 7-chloro-1-[2-(diethylamino)ethyl]-5-(o-		
15	fluorophenyl)-1,3-dihydro-2 <i>H</i> -1,4-benzodiazepin-2-one dihydrochloride. It is a pale		
16	yellow, crystalline compound, freely soluble in USP alcohol and very soluble in water. It		
17 18	has a molecular weight of 460.826 and the following structural formula:		
18 19	$CH_2CH_2N(C_2H_5)_2$		
20	0		
20			
$\frac{21}{22}$	• 2HCI		
23			
24			
25			
26			
27	<b>CLINICAL PHARMACOLOGY:</b> Flurazepam hydrochloride is rapidly absorbed from		
28	the GI tract. Flurazepam is rapidly metabolized and is excreted primarily in the urine.		
29	Following a single oral dose, peak flurazepam plasma concentrations ranging from 0.5 to		
30	4.0 ng/mL occur at 30 to 60 minutes post-dosing. The harmonic mean apparent half-life		
31	of flurazepam is 2.3 hours. The blood level profile of flurazepam and its major		
32	metabolites was determined in man following the oral administration of 30 mg daily for 2		
33	weeks. The $N_1$ -hydroxyethyl-flurazepam was measurable only during the early hours		
34 25	after a 30-mg dose and was not detectable after 24 hours. The major metabolite in blood		
35	was $N_1$ -desalkyl-flurazepam, which reached steady-state (plateau) levels after 7 to 10 days of desing at levels approximately 5 to 6 fold greater than the 24 hour levels		
36 37	days of dosing, at levels approximately 5- to 6-fold greater than the 24-hour levels observed on Day 1. The half-life of elimination of $N_1$ -desalkyl-flurazepam ranged from		
38	47 to 100 hours. The major urinary metabolite is conjugated $N_1$ -desarky1-ilurazepath ranged from		
38 39	flurazepam which accounts for 22% to 55% of the dose. Less than 1% of the dose is		
40	excreted in the urine as $N_1$ -desalkyl-flurazepam.		
41	enerete in the anno as I (1 desant) i narazepani.		
12	This pharmagolinatic profile may be responsible for the alinical charmation that		

42 This pharmacokinetic profile may be responsible for the clinical observation that43 flurazepam is increasingly effective on the second or third night of consecutive use and

that for 1 or 2 nights after the drug is discontinued both sleep latency and total wake timemay still be decreased.

46

47 Geriatric Pharmacokinetics: The single dose pharmacokinetics of flurazepam were studied in 12 healthy geriatric subjects (aged 61 to 85 years). The mean elimination half-48 49 life of desalkyl-flurazepam was longer in elderly male subjects (160 hours) compared 50 with younger male subjects (74 hours), while mean elimination half-life was similar in 51 geriatric female subjects (120 hours) and younger female subjects (90 hours). After 52 multiple dosing, mean steady-state plasma levels of desalkyl-flurazepam were higher in 53 elderly male subjects (81 ng/ml) compared with younger male subjects (53 ng/ml), while 54 values were similar between elderly female subjects (85 ng/ml) and younger female 55 subjects (86 ng/ml). The mean washout half-life of desalkyl-flurazepam was longer in 56 elderly male and female subjects (126 and 158 hours, respectively) compared with 57 younger male and female subjects (111 and 113 hours, respectively).<sup>1</sup>

58

59 **INDICATIONS AND USAGE:** Dalmane is a hypnotic agent useful for the treatment of 60 insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings, and/or early morning awakening. Dalmane can be used effectively in patients with 61 recurring insomnia or poor sleeping habits, and in acute or chronic medical situations 62 63 requiring restful sleep. Sleep laboratory studies have objectively determined that 64 Dalmane is effective for at least 28 consecutive nights of drug administration. Since 65 insomnia is often transient and intermittent, short-term use is usually sufficient. 66 Prolonged use of hypnotics is usually not indicated and should only be undertaken 67 concomitantly with appropriate evaluation of the patient.

68

69 CONTRAINDICATIONS: Dalmane is contraindicated in patients with known70 hypersensitivity to the drug.

71

72 Usage in Pregnancy: Benzodiazepines may cause fetal damage when administered 73 during pregnancy. An increased risk of congenital malformations associated with the use 74 of diazepam and chlordiazepoxide during the first trimester of pregnancy has been 75 suggested in several studies.

76

77 Dalmane is contraindicated in pregnant women. Symptoms of neonatal depression have 78 been reported; a neonate whose mother received 30 mg of Dalmane nightly for insomnia 79 during the 10 days prior to delivery appeared hypotonic and inactive during the first 4 80 days of life. Serum levels of N<sub>1</sub>-desalkyl-flurazepam in the infant indicated 81 transplacental circulation and implicate this long-acting metabolite in this case. If there is 82 a likelihood of the patient becoming pregnant while receiving flurazepam, she should be 83 warned of the potential risks to the fetus. Patients should be instructed to discontinue the 84 drug prior to becoming pregnant. The possibility that a woman of childbearing potential 85 may be pregnant at the time of institution of therapy should be considered.

86

87 **WARNINGS:** Because sleep disturbances may be the presenting manifestation of a 88 physical and/or psychiatric disorder, symptomatic treatment of insomnia should be 89 initiated only after a careful evaluation of the patient. **The failure of insomnia to remit**  90 after 7 to 10 days of treatment may indicate the presents of a primary psychiatric 91 and/or medical illness that should be evaluated. Worsening of insomnia or the 92 emergence of new thinking or behavior abnormalities may be the consequence of an 93 unrecognized psychiatric or physical disorder. Such findings have emerged during the 94 course of treatment with sedative-hypnotic drugs. Because some of the important 95 adverse effects of sedative-hypnotics appear to be dose related (see Precautions and 96 Dosage and Administration), it is important to use the smallest possible effective dose, 97 especially in the elderly.

98

99 Complex behaviors such as "sleep-driving" (i.e., driving while not fully awake after 100 ingestion of a sedative-hypnotic, with amnesia for the event) have been reported. These 101 events can occur in sedative-hypnotic-naïve as well as in sedative-hypnotic-experienced 102 persons. Although behaviors such as sleep-driving may occur with sedative-hypnotics 103 alone at therapeutic doses, the use of alcohol and other CNS depressants with sedative-104 hypnotics appears to increase the risk of such behaviors, as does the use of sedative-105 hypnotics at doses exceeding the maximum recommended dose. Due to the risk to the 106 patients and the community, discontinuation of sedative-hypnotics should be strongly 107 considered for patients who report a "sleep-driving" episode.

108

Other complex behaviors (e.g., preparing and eating food, making phone calls, or having
sex) have been reported in patients who are not fully awake after taking a sedativehypnotic. As with sleep-driving, patients usually do not remember these events.

- 112
- 113 114

## Severe anaphylactic and anaphylactoid reactions

115 Rare cases of angioedema involving the tongue, glottis or larynx have been reported in 116 patients after taking the first or subsequent doses of sedative-hypnotics, including 117 Dalmane. Some patients have had additional symptoms such as dyspnea, throat closing, 118 or nausea and vomiting that suggest anaphylaxis. Some patients have required medical 119 therapy in the emergency department. If angioedema involves the tongue, glottis or 120 larynx, airway obstruction may occur and be fatal. Patients who develop angioedema 121 after treatment with Dalmane should not be rechallenged with the drug.

122

Patients receiving Dalmane should be cautioned about possible combined effects with alcohol and other CNS depressants. Also, caution patients that an additive effect may occur if alcoholic beverages are consumed during the day following the use of Dalmane for nighttime sedation. The potential for this interaction continues for several days following discontinuance of flurazepam, until serum levels of psychoactive metabolites have declined.

129

Patients should also be cautioned about engaging in hazardous occupations requiring complete mental alertness such as operating machinery or driving a motor vehicle after ingesting the drug, including potential impairment of the performance of such activities which may occur the day following ingestion of Dalmane.

134

Usage in Children: Clinical investigations of Dalmane have not been carried out in
children. Therefore, the drug is not currently recommended for use in persons under 15
years of age.

138

Withdrawal symptoms of the barbiturate type have occurred after the discontinuation of
benzodiazepines. (See DRUG ABUSE AND DEPENDENCE Section.)

142 **PRECAUTIONS:** Since the risk of the development of oversedation, dizziness, 143 confusion and/or ataxia increases substantially with larger doses in elderly and debilitated 144 patients, it is recommended that in such patients the dosage be limited to 15 mg. If 145 Dalmane is to be combined with other drugs having known hypnotic properties or CNS-146 depressant effects, due consideration should be given to potential additive effects.

147

148 The usual precautions are indicated for severely depressed patients or those in whom 149 there is any evidence of latent depression; particularly the recognition that suicidal 150 tendencies may be present and protective measures may be necessary.

151

152 The usual precautions should be observed in patients with impaired renal or hepatic153 function and chronic pulmonary insufficiency.

154

155 *Information for Patients:* 

- 156
- 157 158

## "Sleep-Driving" and other complex behavior:

159 There have been reports of people getting out of bed after taking a sedative-hypnotic and 160 driving their cars while not fully awake, often with no memory of the event. If a patient 161 experiences such an episode, it should be reported to his or her doctor immediately, since 162 "sleep-driving" can be dangerous. This behavior is more likely to occur when sedative-163 hypnotics are taken with alcohol or other central nervous system depressants (see 164 WARNINGS). Other complex behaviors (e.g., preparing and eating food, making phone 165 calls, or having sex) have been reported in patients who are not fully awake after taking a 166 sedative-hypnotic. As with sleep-driving, patients usually do not remember these events.

167

168 To assure the safe and effective use of benzodiazepines, patients should be informed that 169 since benzodiazepines may produce psychological and physical dependence, it is 170 advisable that they consult with their physician before either increasing the dose or 171 abruptly discontinuing this drug.

172

*Geriatric Use:* Since the risk of the development of oversedation, dizziness, confusion
and/or ataxia increases substantially with larger doses in elderly and debilitated patients,
it is recommended that in such patients the dosage be limited to 15 mg. Staggering and
falling have also been reported, particularly in geriatric patients.

177

Following single-dose administration of flurazepam, the elimination half-life for desalkyl-flurazepam was longer in elderly male subjects compared with younger male subjects, while values between elderly and young females were not significantly different. After multiple dosing, elimination half-life of desalkyl-flurazepam was longer
in all elderly subjects compared with younger subjects, and mean steady-state serum
concentrations were higher only in elderly male subjects relative to younger subjects (see
CLINICAL PHARMACOLOGY: *Geriatric Pharmacokinetics*).

185

ADVERSE REACTIONS: Dizziness, drowsiness, light-headedness, staggering, ataxia
 and falling have occurred, particularly in elderly or debilitated persons. Severe sedation,
 lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage,
 have been reported.

190

191 Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, 192 constipation, gastrointestinal pain, nervousness, talkativeness, apprehension, irritability, 193 weakness, palpitations, chest pains, body and joint pains and genitourinary complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, 194 195 flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, 196 shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, 197 anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, 198 and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase. 199 Paradoxical reactions, eg, excitement, stimulation and hyperactivity, have also been 200 reported in rare instances.

201

202 DRUG ABUSE AND DEPENDENCE: Abuse and addiction are separate and distinct 203 from physical dependence and tolerance. Abuse is characterized by misuse of the drug 204 for non-medical purposes, often in combination with other psychoactive substances. 205 Physical dependence is a state of adaptation that is manifested by a specific withdrawal 206 syndrome that can be produced by abrupt cessation, rapid dose reduction, decreasing 207 blood level of the drug and/or administration of an antagonist. Tolerance is a state of 208 adaptation in which exposure to a drug induces changes that result in a diminution of one 209 or more of the drug's effects over time. Tolerance may occur to both the desired and 210 undesired effects of the drug and may develop at different rates for different effects.

211

Addiction is a primary, chronic, neurobiological disease with genetic, psychosocial, and environmental factors influencing its development and manifestations. It is characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving. Drug addiction is a treatable disease, utilizing a multidisciplinary approach, but relapse is common.

217

218 Withdrawal symptoms, similar in character to those noted with barbiturates and alcohol 219 (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating), have 220 occurred following abrupt discontinuance of benzodiazepines. The more severe 221 withdrawal symptoms have usually been limited to those patients who had received 222 excessive doses over an extended period of time. Generally milder withdrawal symptoms 223 (eg, dysphoria and insomnia) have been reported following abrupt discontinuance of 224 benzodiazepines taken continuously at therapeutic levels for several months. 225 Consequently, after extended therapy, abrupt discontinuation should generally be avoided 226 and a gradual dosage tapering schedule followed. Addiction-prone individuals (such as drug addicts or alcoholics) should be under careful surveillance when receiving
flurazepam or other psychotropic agents because of the predisposition of such patients to
habituation and dependence.

230

231 **OVERDOSAGE:** Manifestations of Dalmane overdosage include somnolence, 232 confusion and coma. Respiration, pulse and blood pressure should be monitored as in all 233 cases of drug overdosage. General supportive measures should be employed, along with 234 immediate gastric lavage. Intravenous fluids should be administered and an adequate 235 airway maintained. Hypotension and CNS depression may be combated by judicious use 236 of appropriate therapeutic agents. The value of dialysis has not been determined. If 237 excitation occurs in patients following Dalmane overdosage, barbiturates should not be 238 used. As with the management of intentional overdosage with any drug, it should be 239 borne in mind that multiple agents may have been ingested.

240

241 Flumazenil, a specific benzodiazepine-receptor antagonist, is indicated for the complete 242 or partial reversal of the sedative effects of benzodiazepines and may be useful in 243 situations when an overdose with a benzodiazepine is known or suspected. Prior to the 244 administration of flumazenil, necessary measures should be instituted to secure airway, 245 ventilation and intravenous access. Flumazenil is intended as an adjunct to, not as a 246 substitute for, proper management of benzodiazepine overdose. Patients treated with 247 flumazenil should be monitored for resedution, respiratory depression and other residual 248 benzodiazepine effects for an appropriate period after treatment. The prescriber should 249 be aware of a risk of seizure in association with flumazenil treatment, particularly in 250 long-term benzodiazepine users and in cyclic antidepressant overdose. The complete 251 flumazenil package insert, including CONTRAINDICATIONS, WARNINGS and 252 PRECAUTIONS, should be consulted prior to use.

253

DOSAGE AND ADMINISTRATION: Dosage should be individualized for maximal beneficial effects. The usual adult dosage is 30 mg before retiring. In some patients, 15 mg may suffice. In elderly and/or debilitated patients, 15 mg is usually sufficient for a therapeutic response and it is therefore recommended that therapy be initiated with this dosage.

259

HOW SUPPLIED: Dalmane (flurazepam hydrochloride) Capsules are available in the
 following presentations:

262

15 mg hard gelatin capsules in bottles of 100 (NDC 0187-4051-10), with ICN logo
 imprinted on the opaque orange cap and Dalmane<sup>®</sup> 15 imprinted on the opaque ivory
 body.

266

30 mg hard gelatin capsules in bottles of 100 (NDC 0187-4052-10), with ICN logo
 imprinted on the opaque red cap and Dalmane<sup>®</sup> 30 imprinted on the opaque ivory body.

269

270 Store at 25°C (77°F); excursions permitted to 15C°-30°C (59°F-86°F).

271 [See USP Controlled Room Temperature]

272

273	<b>REFERENCE:</b>		
274	1. Greenblatt DJ, Divoll M, Harmatz JS, MacLauglin DS, Shader RI: Kinetics and		
275	clinical effects of flurazepam in young and elderly noninsomniacs. Clin Pharmacol Ther		
276	30:475-486, 1981.		
277			
278	Valeant Pharmaceuticals North America		
279	Aliso Viejo, CA 92656		
280			
281			
282			
283	VALEANT™		
284	Valeant Pharmaceuticals North America		
285	Aliso Viejo, 92656 U.S.A.		
286			
287	3405197EX06 Re	ev. April 2007	