

HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use QUAZEPAM TABLETS safely and effectively. See full prescribing information for QUAZEPAM TABLETS.

QUAZEPAM TABLETS for oral use C-IV

Initial U.S. Approval: 1985

WARNING: RISKS FROM CONCOMITANT USE WITH OPIOIDS; ABUSE, MISUSE, AND ADDICTION; and DEPENDENCE AND WITHDRAWAL REACTIONS

See full prescribing information for complete boxed warning.

- Concomitant use of benzodiazepines and opioids may result in profound sedation, respiratory depression, coma, and death. Reserve concomitant prescribing of these drugs for use in patients for whom alternative treatment options are inadequate. Limit dosages and durations to the minimum required.
- Follow patients for signs and symptoms of respiratory depression and Sedation (5.1, 7).
- The use of benzodiazepines, including quazepam, exposes users to risks of abuse, misuse, and addiction, which can lead to overdose or death. Before prescribing quazepam and throughout treatment, assess each patient's risk for abuse, misuse, and addiction (5.2).
- Abrupt discontinuation or rapid dosage reduction of quazepam after continued use may precipitate acute withdrawal reactions, which can be life-threatening. To reduce the risk of withdrawal reactions, use a gradual taper to discontinue quazepam or reduce the dosage (2.3, 5.3).

RECENT MAJOR CHANGES

Boxed Warning	09/2020
Dosage and Administration (2.3)	09/2020
Warnings and Precautions (5.2, 5.3)	09/2020

INDICATIONS AND USAGE

Quazepam, a gamma-aminobutyric (GABAA) agonist, is indicated for the treatment of insomnia characterized by difficulty falling asleep, frequent nocturnal awakenings, and/or early morning awakenings. (1)

DOSAGE AND ADMINISTRATION

Use the lowest dose effective for the patient:

- Recommended initial dose is 7.5 mg (2)
- Split the 15 mg tablet along the score line to achieve 7.5 mg dose (2)
- The elderly and debilitated may be more sensitive to benzodiazepines (2)

DOSAGE FORMS AND STRENGTHS

FULL PRESCRIBING INFORMATION: CONTENTS*

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15 mg functionally scored tablet, oral (3)

CONTRAINDICATIONS

- Hypersensitivity to quazepam or other benzodiazepines (4)
- Established or suspected sleep apnea, or chronic pulmonary insufficiency (4)

WARNINGS AND PRECAUTIONS

- CNS depressant effects: Impaired alertness and motor coordination, including risk of daytime impairment. Caution patients against driving and other activities requiring complete mental alertness (5.4)
- 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 that should be evaluated. (5.5)
- Severe anaphylactic/anaphylactoid reactions: Angioedema and anaphylaxis have been reported. Do not rechallenge if such reactions occur. (5.7)
- Sleep driving and other complex behaviors while not fully awake. Risk increases with dose and concomitant CNS depressants and alcohol. Immediately evaluate any new onset behavioral changes (5.8)
- Worsening of depression or suicidal thinking may occur: Prescribe the least number of tablets feasible to avoid intentional overdose (5.9)

ADVERSE REACTIONS

Most common adverse reactions (>1%): drowsiness, headache, fatigue, dizziness, dry mouth, dyspepsia (6.1)

To report SUSPECTED ADVERSE REACTIONS, contact Atland Pharmaceuticals at 1-844-416-4284 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch (6)

DRUG INTERACTIONS

- CNS Depressants: downward dose adjustment may be necessary due to additive effects (7)

USE IN SPECIFIC POPULATIONS

- Pregnancy: Based on animal data, may cause fetal harm (8.1)
- Nursing Mothers: Administration of Quazepam Tablets to nursing mothers is not recommended as quazepam and its metabolites are excreted in human milk. (8.3)

See 17 for PATIENT COUNSELING INFORMATION and Medication Guide.

Revised: 09/2020

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FULL PRESCRIBING INFORMATION

WARNING: RISKS FROM CONCOMITANT USE WITH OPIOIDS; ABUSE, MISUSE, AND ADDICTION; and DEPENDENCE AND WITHDRAWAL REACTIONS

- **Concomitant use of benzodiazepines and opioids may result in profound sedation, respiratory depression, coma, and death. Reserve concomitant prescribing of these drugs in patients for whom alternative treatment options are inadequate. Limit dosages and durations to the minimum required. Follow patients for signs and symptoms of respiratory depression and sedation [see Warnings and Precautions (5.1), Drug Interactions (7)].**
- **The use of benzodiazepines, including quazepam, exposes users to risks of abuse, misuse, and addiction, which can lead to overdose or death. Abuse and misuse of benzodiazepines commonly involve concomitant use of other medications, alcohol, and/or illicit substances, which is associated with an increased frequency of serious adverse outcomes. Before prescribing quazepam and throughout treatment, assess each patient's risk for abuse, misuse, and addiction [see Warnings and Precautions (5.2)].**
- **The continued use of benzodiazepines, including quazepam, may lead to clinically significant physical dependence. Abrupt discontinuation or rapid dosage reduction of quazepam after continued use may precipitate acute withdrawal reactions, which can be life-threatening. To reduce the risk of withdrawal reactions, use a gradual taper to discontinue quazepam or reduce the dosage [see Dosage and Administration (2.3) and Warnings and Precautions (5.3)].**

1 INDICATIONS AND USAGE

Quazepam is indicated for the treatment of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings, and/or early morning awakenings. The effectiveness of quazepam has been established in placebo-controlled clinical studies of 5 nights duration in acute and chronic insomnia. The sustained effectiveness of quazepam has been established in chronic insomnia in a sleep lab (polysomnographic) study of 28 nights duration. Because insomnia is often transient and intermittent, the prolonged administration of Quazepam Tablets is generally not necessary or recommended. Since insomnia may be a symptom of several other disorders, the possibility that the complaint may be related to a condition for which there is a more specific treatment should be considered.

2 DOSAGE AND ADMINISTRATION

2.1 Dosage Recommendations

Use the lowest dose effective for the patient, as important adverse effects of quazepam are dose related. The recommended initial dose is 7.5 mg. The 7.5 mg dose can be increased to 15 mg if necessary for efficacy. The 7.5 mg dose can be achieved by splitting the 15 mg tablet along the score line.

2.2 Special Populations

Elderly and debilitated patients may be more sensitive to benzodiazepines.

2.3 Discontinuation or Dosage Reduction of Quazepam

To reduce the risk of withdrawal reactions, use a gradual taper to discontinue quazepam or reduce the dosage. If a patient develops withdrawal reactions, consider pausing the taper or increasing the dosage to the previous tapered dosage level. Subsequently decrease the dosage more slowly [see Warnings and Precautions (5.3) and Drug Abuse and Dependence (9.3)].

3 DOSAGE FORMS AND STRENGTHS

Tablets, 15 mg, functionally scored, capsule-shaped, light orange, slightly white speckled tablets, impressed with the product identification number 15 on one side of the tablet, and the product name (DORAL) on the other.

4 CONTRAINDICATIONS

Quazepam Tablets are contraindicated in patients with known hypersensitivity to quazepam or other benzodiazepines. Rare cases of angioedema involving the tongue, glottis or larynx have been reported in patients after taking the first or subsequent doses of quazepam. Some patients have had additional symptoms such as dyspnea, throat closing, or nausea and vomiting that suggest anaphylaxis. Patients who develop such reactions should not be rechallenged with quazepam.

Contraindicated in patients with established or suspected sleep apnea, or with pulmonary insufficiency.

5 WARNINGS AND PRECAUTIONS

5.1 Risks from Concomitant Use with Opioids

Concomitant use of benzodiazepines, including quazepam, and opioids may result in profound sedation, respiratory depression, coma, and death. Because of these risks, reserve concomitant prescribing of these drugs in patients for whom alternative treatment options are inadequate.

Observational studies have demonstrated that concomitant use of opioid analgesics and benzodiazepines increases the risk of drug-related mortality compared to use of opioids alone. If a decision is made to prescribe quazepam concomitantly with opioids, prescribe the lowest effective dosages and minimum durations of concomitant use, and follow patients closely for signs and symptoms of respiratory depression and sedation. In patients already receiving an opioid analgesic, prescribe a lower initial dose of quazepam than indicated in the absence of an opioid and titrate based on clinical response. If an opioid is initiated in a patient already taking quazepam, prescribe a lower initial dose of the opioid and titrate based upon clinical response.

Advise both patients and caregivers about the risks of respiratory depression and sedation when quazepam is used with opioids. Advise patients not to drive or operate heavy machinery until the effects of concomitant use with the opioid have been determined [see *Drug Interactions* (7)].

5.2 Abuse, Misuse, and Addiction

The use of benzodiazepines, including quazepam, exposes users to the risks of abuse, misuse, and addiction, which can lead to overdose or death. Abuse and misuse of benzodiazepines often (but not always) involve the use of doses greater than the maximum recommended dosage and commonly involve concomitant use of other medications, alcohol, and/or illicit substances, which is associated with an increased frequency of serious adverse outcomes, including respiratory depression, overdose, or death [see *Drug Abuse and Dependence* (9.2)].

Before prescribing Quazepam Tablets and throughout treatment, assess each patient's risk for abuse, misuse, and addiction (e.g., using a standardized screening tool). Use of quazepam, particularly in patients at elevated risk, necessitates counseling about the risks and proper use of quazepam along with monitoring for signs and symptoms of abuse, misuse, and addiction. Prescribe the lowest possible dosage for the shortest duration; avoid or minimize concomitant use of CNS depressants and other substances associated with abuse, misuse, and addiction (e.g., opioid analgesics, stimulants); and advise patients on the proper disposal of unused drug. If a substance use disorder is suspected, evaluate the patient and institute (or refer them for) early treatment, as appropriate.

5.3 Dependence and Withdrawal Reactions

To reduce the risk of withdrawal reactions, use a gradual taper to discontinue quazepam or reduce the dosage (a patient-specific plan should be used to taper the dose) [see *Dosage and Administration* (2.3)].

Patients at an increased risk of withdrawal adverse reactions after benzodiazepine discontinuation or rapid dosage reduction include those who take higher dosages, and those who have had longer durations of use.

Acute Withdrawal Reactions

The continued use of benzodiazepines, including quazepam, for several days to weeks may lead to clinically significant physical dependence. Abrupt discontinuation or rapid dosage reduction of quazepam after continued use (for several days to weeks), or administration of flumazenil (a benzodiazepine antagonist) may precipitate acute withdrawal reactions, which can be life-threatening (e.g., seizures) [see *Drug Abuse and Dependence* (9.3)].

Protracted Withdrawal Syndrome

In some cases, benzodiazepine users have developed a protracted withdrawal syndrome with withdrawal symptoms lasting weeks to more than 12 months [see *Drug Abuse and Dependence* (9.3)].

5.4 CNS-Depressant Effects and Daytime Impairment

Quazepam is a central nervous system (CNS) depressant and can impair daytime function in some patients even when used as prescribed. Prescribers should monitor for excess depressant effects, but impairment can occur in the absence of subjective symptoms, and may not be reliably detected by ordinary clinical exam (i.e. less than formal psychomotor testing). While pharmacodynamics tolerance or adaptation to some adverse depressant effects of quazepam may develop, patients using quazepam should be cautioned against driving or engaging in other hazardous activities or activities requiring complete mental alertness.

Additive effects occur with concomitant use of other CNS depressants (e.g., other benzodiazepines, opioids, tricyclic antidepressants, alcohol), including daytime use. Downward dose adjustment of quazepam and concomitant CNS depressants should be considered. The potential for adverse drug interactions continues for several days following discontinuation of quazepam, until serum levels of both active parent drug and psychoactive metabolites decline.

Use of quazepam with other sedative-hypnotics is not recommended. Alcohol generally should not be used during treatment with quazepam. The risk of next-day psychomotor impairment is increased if quazepam is taken with less than a full night of sleep remaining (7 to 8 hours); if higher than the recommended dose is taken; if co-administered with other CNS depressants [see *Dosage and Administration* (2.1)].

Because quazepam can cause drowsiness and a decreased level of consciousness, patients particularly the elderly, are at higher risk of falls.

5.5 Need to Evaluate for Co-morbid Diagnoses

Because 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 that 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.

5.6 Severe Anaphylactic and Anaphylactoid Reactions

Rare cases of angioedema involving the tongue, glottis or larynx have been reported in patients after taking the first or subsequent doses of sedative-hypnotics, including quazepam. Some patients have had additional symptoms such as dyspnea, throat closing, or nausea and vomiting that suggest anaphylaxis.

Some patients have required medical therapy in the emergency department. If angioedema involves the tongue, glottis or larynx, airway obstruction may occur and be fatal. Patients who develop angioedema after treatment with quazepam should not be rechallenged with the drug.

5.7 Abnormal Thinking and Behavior Changes

Abnormal thinking and behavior changes have been reported in patients treated with sedative-hypnotics including quazepam. Some of these changes include decreased inhibition (e.g., aggressiveness and extroversion that seemed out of character), bizarre behavior, and depersonalization. Visual and auditory hallucinations have also been reported. Amnesia, and other neuro-psychiatric symptoms may occur.

Paradoxical reactions such as stimulation, agitation, increased muscle spasticity, and sleep disturbances may occur unpredictably.

Complex behaviors such as "sleep-driving" (i.e., driving while not fully awake, with amnesia for the event) have been reported with use of sedative-hypnotics. These behaviors can occur with initial treatment or in patients previously tolerant of quazepam or other sedative-hypnotics. Although these behaviors can occur with use at therapeutic doses, risk is increased by higher doses or concomitant use of alcohol or other CNS depressants. Due to risk to the patient and community, quazepam should be discontinued if "sleep-driving" occurs.

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 sedative-hypnotic. As with sleep-driving, patients usually do not remember these events.

5.8 Worsening of Depression

Benzodiazepines may worsen depression. Consequently, appropriate precautions (e.g., limiting the total prescription size and increased monitoring for suicidal ideation) should be considered.

6 ADVERSE REACTIONS

The following serious adverse reactions are discussed in greater detail in other sections of the label:

- Risks from Concomitant Use with Opioids [see Warnings and Precautions (5.1)]
- Abuse, Misuse, and Addiction [see Warnings and Precautions (5.2)]
- Dependence and Withdrawal Reactions [see Warnings and Precautions (5.3)]
- CNS-depressant effects and next-day impairment [see Warnings and Precautions (5.4)]
- Abnormal thinking and behavior changes, and complex behaviors [see Warnings and Precautions (5.7)]
- Worsening of depression [see Warnings and Precautions (5.8)]

6.1 Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice. The table shows adverse reactions occurring at an incidence of 1% or greater in relatively short-duration, placebo-controlled clinical trials of quazepam.

	Quazepam 15 mg 267	PLACEBO 268
	% OF PATIENTS REPORTING	
Central Nervous System		
Daytime Drowsiness	12	3
Headache	5	2
Fatigue	2	0
Dizziness	2	<1
Autonomic Nervous System		
Dry Mouth	2	<1
Gastrointestinal System		
Dyspepsia	1	<1

A double-blind, controlled sleep laboratory study (N=30) in elderly patients compared the effects of quazepam 7.5 mg and 15 mg to that of placebo over a period of 7 days. Both the 7.5 mg and 15 mg doses appeared to be well tolerated. Caution must be used in interpreting this data due to the small size of the study.

7 DRUG INTERACTIONS

The concomitant use of benzodiazepines and opioids increases the risk of respiratory depression because of actions at different receptor sites in the CNS that control respiration. Benzodiazepines interact at GABAA sites and opioids interact primarily at mu receptors. When benzodiazepines and opioids are combined, the potential for benzodiazepines to significantly worsen opioid-related respiratory depression exists. Limit dosage and duration of concomitant use of benzodiazepines and opioids, and monitor patients closely for respiratory depression and sedation.

Benzodiazepines, including quazepam, produce additive CNS depressant effects when co-administered with ethanol or other CNS depressants (e.g. psychotropic medications, anticonvulsants, antihistamines). Downward dose adjustment of quazepam and/or concomitant CNS depressants may be necessary because of additive effects.

8 USE IN SPECIFIC POPULATIONS

8.1 Pregnancy

There are no adequate and well-controlled studies in pregnant women. Administration of benzodiazepines immediately prior to or during childbirth can result in a syndrome of hypothermia, hypotonia, respiratory depression, and difficulty feeding. In addition, infants born to mothers who have taken benzodiazepines during the later stages of pregnancy can develop dependence, and subsequently withdrawal, during the postnatal period. Although administration of quazepam to pregnant animals did not indicate a risk for adverse effects on morphological development at clinically relevant doses, data for other benzodiazepines suggest the possibility of adverse development effects (long-term effects on neurobehavioral and immunological function) in animals following prenatal exposure to benzodiazepines. Quazepam should be used during pregnancy only if the potential benefit justifies the potential risk.

Developmental toxicity studies of quazepam in mice at doses up to 400 times the human dose (15 mg) revealed no major drug-related malformations. Minor fetal skeletal variations that occurred were delayed ossification of the sternum, vertebrae, distal phalanges and supraoccipital bones, at doses approximately 70 and 400 times the human dose. A developmental toxicity study of quazepam in New Zealand rabbits at doses up to approximately 130 times the human dose demonstrated no effect on fetal morphology or development of offspring.

8.3 Nursing Mothers

Quazepam and its metabolites are excreted in human milk. Caution should be exercised when administering quazepam to a nursing woman.

8.4 Pediatric Use

Safety and effectiveness in pediatric patients have not been established.

8.5 Geriatric Use

Quazepam may cause confusion and over-sedation in the elderly. Elderly patients generally should be started on a low dose of quazepam and observed closely. Elderly and debilitated patients may be more sensitive to benzodiazepines, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy. A double-blind controlled sleep laboratory study (N=30) compared the effects of quazepam 7.5 mg and 15 mg to that of placebo over a period of 7 days. Both the 7.5 mg and 15 mg doses appeared to be well tolerated. Caution must be used in interpreting this data due to the small size of the study.

9 DRUG ABUSE AND DEPENDENCE

9.1 Controlled Substance

Quazepam Tablets contain quazepam, a Schedule IV controlled substance.

9.2 Abuse

Quazepam is a CNS depressant with a potential for abuse and addiction. Abuse is the intentional, nontherapeutic use of a drug, even once, for its desirable psychological or physiological effects. Misuse is the intentional use, for therapeutic purposes, of a drug by an individual in a way other than prescribed by a health care provider or for whom it was not prescribed. Drug addiction is a cluster of behavioral, cognitive, and physiological phenomena that may include a strong desire to take the drug, difficulties in controlling drug use (e.g., continuing drug use despite harmful consequences, giving a higher priority to drug use than other activities and obligations), and possible tolerance or physical dependence. Both abuse and misuse may lead to addiction, and some individuals may develop addiction even when taking quazepam as prescribed.

Abuse and misuse of benzodiazepines often (but not always) involve the use of doses greater than the maximum recommended dosage and commonly involve concomitant use of other medications, alcohol, and/or illicit substances, which is associated with an increased

frequency of serious adverse outcomes, including respiratory depression, overdose, or death. Benzodiazepines are often sought by individuals who abuse drugs and other substances, and by individuals with addictive disorders [see *Warnings and Precautions (5.2)*].

The following adverse reactions have occurred with benzodiazepine abuse and/or misuse: abdominal pain, amnesia, anorexia, anxiety, aggression, ataxia, blurred vision, confusion, depression, disinhibition, disorientation, dizziness, euphoria, impaired concentration and memory, indigestion, irritability, muscle pain, slurred speech, tremors, and vertigo.

The following severe adverse reactions have occurred with benzodiazepine abuse and/or misuse: delirium, paranoia, suicidal ideation and behavior, seizures, coma, breathing difficulty, and death. Death is more often associated with polysubstance use (especially benzodiazepines with other CNS depressants such as opioids and alcohol).

9.3 Dependence

Physical Dependence

Quazepam may produce physical dependence from continued therapy. Physical dependence is a state that develops as a result of physiological adaptation in response to repeated drug use, manifested by withdrawal signs and symptoms after abrupt discontinuation or a significant dose reduction of a drug. Abrupt discontinuation or rapid dosage reduction of benzodiazepines or administration of flumazenil, a benzodiazepine antagonist, may precipitate acute withdrawal reactions, including seizures, which can be life-threatening. Patients at an increased risk of withdrawal adverse reactions after benzodiazepine discontinuation or rapid dosage reduction include those who take higher dosages (i.e., higher and/or more frequent doses) and those who have had longer durations of use [see *Warnings and Precautions (5.3)*].

To reduce the risk of withdrawal reactions, use a gradual taper to discontinue quazepam or reduce the dosage [see *Dosage and Administration (2.3)* and *Warnings and Precautions (5.3)*].

Acute Withdrawal Signs and Symptoms

Acute withdrawal signs and symptoms have included abnormal involuntary movements, anxiety, blurred vision, cognitive disorder, depersonalization, depression, derealization, dizziness, fatigue, gastrointestinal adverse reactions (e.g., nausea, vomiting, diarrhea, weight loss, decreased appetite), headache, hyperacusis, hypertension, irritability, insomnia, memory impairment, muscle pain and stiffness, panic attacks, photophobia, restlessness, tachycardia, and tremor. More severe acute withdrawal signs and symptoms, including lifethreatening reactions, have included catatonia, convulsions, delirium tremens, depression, hallucinations, homicidal thoughts, mania, psychosis, and suicidality.

Protracted Withdrawal Syndrome

Protracted withdrawal syndrome associated with Benzodiazepines is characterized by anxiety, cognitive impairment, depression, insomnia, formication, motor symptoms (e.g., weakness, tremor, muscle twitches), paresthesia, and tinnitus that persists beyond 4 to 6 weeks after initial benzodiazepine withdrawal. Protracted withdrawal symptoms may last weeks to more than 12 months.

Tolerance

Tolerance to Quazepam may develop from continued therapy. Tolerance is a physiological state characterized by a reduced response to a drug after repeated administration (i.e., a higher dose of a drug is required to produce the same effect that was once obtained at a lower dose). Tolerance may develop within days or weeks of the therapeutic effects of quazepam; however, little tolerance develops to the amnestic reactions and other cognitive impairments caused by benzodiazepines.

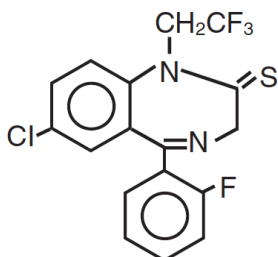
10 OVERDOSAGE

Contact a poison control center for up-to-date information on the management of benzodiazepine overdose.

Manifestations of quazepam overdose include somnolence, confusion, and coma. General supportive measures should be employed, along with immediate gastric lavage. Dialysis is of limited value. Flumazenil may be useful, but can contribute to the appearance of neurological symptoms including convulsions. Hypotension may be treated by appropriate medical intervention. Animal experiments suggest that forced diuresis or hemodialysis are of little value in treating quazepam overdose. As with the management of intentional overdose with any drug, the possibility of multiple drug ingestion should be considered.

11 DESCRIPTION

Quazepam Tablets contain quazepam, a trifluoroethyl benzodiazepine hypnotic agent, having the chemical name 7-chloro-5-(o-fluoro-phenyl)-1,3-dihydro-1-(2,2,2-trifluoroethyl)-2H-1,4-benzodiazepine-2-thione and the following structure:



Quazepam has the empirical formula $C_{17}H_{11}ClF_4N_2S$, and a molecular weight of 386.8. It is a white crystalline compound, soluble in ethanol and insoluble in water.

Each Quazepam Tablet contains 15 mg of quazepam. The inactive ingredients for Quazepam Tablets include cellulose, corn starch, FD&C Yellow No. 6, lactose, magnesium stearate, silicon dioxide, and sodium lauryl sulfate.

12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

Quazepam, like other central nervous system agents of the 1,4-benzodiazepine class, presumably exerts its effects by binding to stereo-specific receptors at several sites within the central nervous system (CNS). The exact mechanism of action is unknown.

12.3 Pharmacokinetics

Absorption

Quazepam is rapidly (absorption half-life of about 30 minutes) and well absorbed from the gastrointestinal tract. The peak plasma concentration of quazepam is approximately 20 ng/mL after a 15 mg dose and occurs at about 2 hours.

Metabolism

Quazepam, the active parent compound, is extensively metabolized in the liver; two of the plasma metabolites are 2-oxoquazepam and N-desalkyl-2-oxoquazepam. All three compounds show CNS depressant activity.

Distribution

The degree of plasma protein binding for quazepam and its two major metabolites is greater than 95%.

Elimination

Following administration of ^{14}C -quazepam, 31% of the dose appeared in the urine and 23% in the feces over five days; only trace amounts of unchanged drug were present in the urine.

The mean elimination half-life of quazepam and 2-oxoquazepam is 39 hours and that of N-desalkyl-2-oxoquazepam is 73 hours. Steady-state levels of quazepam and 2-oxoquazepam are attained by the seventh daily dose and that of N-desalkyl-2-oxoquazepam by the thirteenth daily dose.

Special Populations

Geriatrics: The pharmacokinetics of quazepam and 2-oxoquazepam in geriatric subjects are comparable to those seen in young adults; as with desalkyl metabolites of other benzodiazepines, the elimination half-life of N-desalkyl-2-oxoquazepam in geriatric patients is about twice that of young adults.

Drug Interactions

Bupropion (a CYP2B6 substrate): Co-administration of a single dose of 150 mg Bupropion Hydrochloride XL with steady state quazepam did not significantly affect the AUC and C_{max} of bupropion or its primary metabolite, hydroxybupropion.

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

Carcinogenesis

Quazepam showed no evidence of carcinogenicity in oral carcinogenicity studies in mice and hamsters.

Mutagenesis

Quazepam was negative in the bacterial reverse mutation (Ames) assay and equivocal in the mouse lymphoma tk assay.

Impairment of Fertility

Reproduction studies in mice conducted with quazepam at doses equal to 60 and 180 times the human dose of 15 mg produced slight reductions in fertility rate. Similar reductions in fertility rate have been reported in mice dosed with other benzodiazepines, and is believed to be related to the sedative effects of these drugs at high doses.

14 CLINICAL STUDIES

The effectiveness of quazepam was established in placebo-controlled clinical studies of 5 nights duration in acute and chronic insomnia. The sustained effectiveness of quazepam was established in chronic insomnia in a sleep laboratory (polysomnographic) study of 28 nights duration. In the sleep laboratory study, quazepam significantly decreased sleep latency and total wake time, and significantly increased total sleep time and percent sleep time, for one or more nights.

Quazepam 15 mg was effective on the first night of administration. Sleep latency, total wake time and wake time after sleep onset were still decreased and percent sleep time was still increased for several nights after the drug was discontinued. Percent slow wave sleep was decreased, and REM sleep was essentially unchanged. No transient sleep disturbance, such as "rebound insomnia," was observed after withdrawal of the drug in sleep laboratory studies in 12 patients using 15 mg doses.

A double-blind, controlled sleep laboratory study (N=30) in elderly patients compared the effects of quazepam 7.5 mg and 15 mg to that of placebo over a period of 7 days. Both the 7.5 mg and 15 mg doses appeared to be effective. Caution must be used in interpreting this data due to the small size of the study.

16 HOW SUPPLIED / STORAGE AND HANDLING

Quazepam Tablets, 15 mg, functionally scored, capsule-shaped, light orange, slightly white speckled tablets, impressed with the product identification number 15 on one side of the tablet, and the product name (DORAL) on the other.

15 mg	Bottles of 30	NDC 71993-265-30
15 mg	Bottles of 100	NDC 71993-265-30-10

Store Quazepam Tablets at controlled room temperature 20°-25°C (68°-77°F).

17 PATIENT COUNSELING INFORMATION

Advise the patient to read the FDA-approved patient labeling (Medication Guide).

Risks from Concomitant Use with Opioids

Inform patients and caregivers that potentially fatal additive effects may occur if quazepam is used with opioids and not to use such drugs concomitantly unless supervised by a health care provider [see *Warnings and Precautions (5.1)*, *Drug Interactions (7)*].

Abuse, Misuse, and Addiction

Inform patients that the use of quazepam even at recommended dosages, exposes users to risks of abuse, misuse, and addiction, which can lead to overdose and death, especially when used in combination with other medications (e.g., opioid analgesics), alcohol, and/or illicit substances. Inform patients about the signs and symptoms of benzodiazepine abuse, misuse, and addiction; to seek medical help if they develop these signs and/or symptoms; and on the proper disposal of unused drug [see *Warnings and Precautions (5.2)* and *Drug Abuse and Dependence (9.2)*].

Withdrawal Reactions

Inform patients that the continued use of quazepam for several days to weeks may lead to clinically significant physical dependence and that abrupt discontinuation or rapid dosage reduction of quazepam may precipitate acute withdrawal reactions, which can be life-threatening. Inform patients that in some cases, patients have developed a protracted withdrawal syndrome with withdrawal symptoms lasting weeks to more than 12 months. Instruct patients that discontinuation or dosage reduction of quazepam may require a slow taper [see *Warnings and Precautions (5.3)* and *Drug Abuse and Dependence (9.3)*].

CNS Depressant Effects and Next-Day Impairment

Tell patients that quazepam can cause next-day impairment, even in the absence of symptoms. Caution patients against driving or engaging in other hazardous activities or activities requiring complete mental alertness when using quazepam. Tell patients that daytime impairment may persist for several days following discontinuation of quazepam. Advise patients that increased drowsiness and decreased consciousness may increase the risk of falls in some patients [see *Warnings and Precautions (5.4)*].

Severe Allergic Reactions

Inform patients that severe allergic reactions can occur from quazepam. Describe the signs/symptoms of these reactions and advise patients to seek medical attention immediately if these occur [see *Warnings and Precautions (5.6)*].

Abnormal Thinking and Behavior Change

Instruct patients that sedative hypnotics can cause abnormal thinking and behavior change, including “sleep-driving” and other complex behaviors while not being fully awake (preparing and eating food, making phone calls, or having sex). Tell patients to call you immediately if they develop any of these symptoms [see *Warnings and Precautions (5.7)*].

Suicide

Tell patients that quazepam can worsen depression, and to immediately report any suicidal thoughts [see *Warnings and Precautions (5.8)*].

Alcohol and Other Drugs

Ask patients about alcohol consumption, medicines they are taking now, and drugs they may be taking without a prescription. Advise patients that alcohol generally should not be used during treatment with quazepam.

Pregnancy

Instruct patients to inform you if they are nursing or pregnant, or may become pregnant while taking quazepam.

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