SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE MEDICINAL PRODUCT

Lorazepam Orion 1 mg Tablets

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each tablet contains 1 mg lorazepam.
Excipient with known effect:
Each tablet contains 63.75 mg lactose monohydrate.
For the full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Tablet
White to off white, circular, flat faced, bevel edged, uncoated tablet with '1' debossed on one side and deep breakable score-line on other side. The tablet can be divided into two equal doses.

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

FOR SHORT TERM (2-4 weeks only) USE (adults only)

- Symptomatic relief of anxiety that is severe, disabling or subjecting the individual to unacceptable distress occurring alone or in association with insomnia or short-term psychometric, organic or psychotic illness.

AS PREMEDICATION (adults and children 5 years and above)

- Before operative dentistry and general surgery

NOT FOR USE

- Long term (i.e. longer than 4 weeks)
- For mild/moderate anxiety
- For insomnia or anxiety in children

4.2 Posology and method of administration

Route of administration: oral

Treatment to be given:

Under close medical supervision

At the lowest effective dose

Doses should be individualised

Extension of use should not take place without further clinical evaluation

Chronic use not recommended (little is known of the long term safety and efficacy; potential for dependence–see section 4.4).

Prior to starting treatment with Lorazepam, a discussion should be held with patients to put in place a strategy for ending treatment with Lorazepam in order to minimise the risk of dependence, addiction and drug withdrawal syndrome (see section 4.4).

Treatment should be given for the shortest possible duration.

The patient should be informed that:

treatment should be given for the shortest possible duration (not exceeding 4 weeks).

the dosage will be progressively decreased

there is a possibility of rebound phenomena

Dosage:

Adults:

Anxiety: 1-4mg daily in divided doses.

Insomnia: 1-2mg before retiring

Premedication before operative dentistry or general surgery:

2-3mg the night before operation 2-4mg one to two hours before the procedure

Elderly and debilitated patients:

For elderly and debilitated patients reduce the initial dose by approximately 50% and adjust the dosage as needed and tolerated (see section 4.4 Special warnings and precautions for use).

Children (aged 5-13 years):

Premedication: 0.5-2.5mg at 0.05mg/kg to the nearest 0.5mg according to weight, not less than one hour before operation.

Patients with Renal or Hepatic impairment:

Lower doses may be sufficient in these patients (See section 4.4). Use in patients with severe hepatic insufficiency is contraindicated. (See section 4.6).

4.3 Contraindications

- Hypersensitivity to benzodiazepines or to any of the other ingredients
- Acute pulmonary insufficiency: respiratory depression; sleep apnoea (risk of further respiratory depression)
- Obsessional states (inadequate evidence of safety and efficacy)
- Severe hepatic insufficiency (may precipitate encephalopathy)
- Planning a pregnancy (see section 4.6)
- Pregnancy (unless there are compelling reasons- see section 4.6)
- Myasthenia gravis;

Benzodiazepines should not be used alone in depression or anxiety with depression (may precipitate suicide)

4.4 Special warnings and precautions for use

Patients should be advised that since their tolerance for alcohol and other CNS depressants will be diminished in the presence of Lorazepam, these substances should either be avoided or taken in reduced dosage.
Lorazepam is not intended for the primary treatment of psychotic illness or depressive disorders, and should not be used alone to treat depressed patients. The use of benzodiazepines may have a disinhibiting effect and may release suicidal tendencies in depressed patients. Therefore, large quantities of Lorazepam should not be prescribed to these patients.
Pre-existing depression may emerge during benzodiazepine use.

Abuse of benzodiazepines has been reported.
Some loss of efficacy to the hypnotic effects of short-acting benzodiazepines may develop after repeated use for a few weeks.
Anxiety or insomnia may be a symptom of several other disorders. The possibility should be considered that the complaint may be related to an underlying physical or psychiatric disorder for which there is more specific treatment.
Caution should be used in the treatment of patients with acute narrow-angle glaucoma.
Patients with impaired renal or hepatic function should be monitored frequently and have their dosage adjusted carefully according to patient response. Lower doses may be sufficient in these patients. The same precautions apply to elderly or debilitated patients and patients with chronic respiratory insufficiency.
As with all CNS-depressants, the use of benzodiazepines may precipitate encephalopathy in patients with severe hepatic insufficiency. Therefore, use in these patients is contraindicated.
Some patients taking benzodiazepines have developed a blood dyscrasia, and some have had elevations in liver enzymes. Periodic haematology and liver-function assessments are recommended where repeated courses of treatment are considered clinically necessary.
Transient anterograde amnesia or memory impairment has been reported in association with the use of benzodiazepines. This effect may be advantageous when Lorazepam is used as a premedicant. However, if Lorazepam is used for insomnia due to anxiety, patients should ensure that they will be able to have a period of uninterrupted sleep which is sufficient to allow dissipation of drug effect (e.g., 7-8 hours).
Paradoxical reactions have been occasionally reported during benzodiazepine use. Such reactions may be more likely to occur in children and the elderly. Should these occur, use of the drug should be discontinued (see Undesirable effects).
Although hypotension has occurred only rarely, benzodiazepines should be administered with caution to patients in whom a drop in blood pressure might lead to cardiovascular or cerebrovascular complications. This is particularly important in elderly patients.

Risk from concomitant use of opioids:
Concomitant use of lorazepam and opioids may result in sedation, respiratory depression, coma and death. Because of these risks, concomitant prescribing of sedative medicines such as benzodiazepines or related drugs such as lorazepam with opioids should be reserved for patients for whom alternative treatment options are not possible. If a decision is made to prescribe lorazepam concomitantly with opioids, the lowest effective dose should be used, and the duration of treatment should be as short as possible (see also general dose recommendation in section 4.2).
The patients should be followed closely for signs and symptoms of respiratory depression and sedation. In this respect, it is strongly recommended to inform patients and their caregivers (where applicable) to be aware of these symptoms (see section 4.5).
Contains lactose. Patients with rare hereditary problems of galactose intolerance, the Lapp lactase deficiency or glucose-galactose malabsorption should not take this medicine.
Elderly patients
Lorazepam should be used with caution in elderly due to the risk of sedation and/or musculoskeletal weakness that can increase the risk of falls, with serious consequences in this population. Elderly patients should be given a reduced dose (see section 4.2 Posology).
Drug dependence, tolerance and potential for abuse
Drug addiction comprises behavioural, cognitive and physiological phenomena that may include a strong desire to take the drug, difficulties in controlling drug use and possible tolerance or physical dependence. Physical dependence is a state that develops as a result of physiological adaptation in response to repeated drug use, which manifests as withdrawal signs and symptoms after abrupt discontinuation or a significant dose reduction of a drug. Addiction and dependence are related but distinct presentations and in discussing these themes, terminology that apportion blame to the individual should be avoided.
For all patients, prolonged use of this product may lead to drug dependence and addiction but can occur with short-term use at recommended therapeutic doses. The risks are increased in individuals with current or past history of substance misuse disorder (including alcohol misuse) or mental health disorder (e.g., major depression).
Additional support and monitoring may be necessary when prescribing for patients at risk of drug misuse.
A comprehensive patient history should be taken to document concomitant medications, including over-the-counter medicines and medicines obtained on-line, and past and present medical and psychiatric conditions.
Patients may find that treatment is less effective with chronic use and express a need to increase the dose to obtain the same level of symptom control as initially experienced. Patients may also supplement their treatment with additional medications to achieve the same effect. These could be signs that the patient is developing tolerance. The risks of developing tolerance should be explained to the patient.
Overuse or misuse may result in overdose and/or death. It is important that patients only use medicines that are prescribed for them at the dose they have been prescribed and do not give this medicine to anyone else.

Patients should be closely monitored for signs of misuse, abuse, or addiction. The clinical need for treatment with lorazepam should be reviewed regularly, with frequent assessments of patients being undertaken during the course of their treatment.

Drug withdrawal syndrome

Prior to starting treatment with lorazepam, a discussion should be held with patients to explain the risk of dependence, addiction, and drug withdrawal syndrome. A withdrawal strategy for ending treatment with lorazepam should also be put in place with the patient before starting treatment (there may be exceptions to this in specific clinical situations such as symptom management in end of life palliative care).

Drug withdrawal syndrome may occur upon abrupt cessation of therapy or dose reduction. When a patient no longer requires therapy, it is advisable to taper the dose gradually to minimise symptoms of withdrawal. Tapering from a high dose may take in excess of weeks or months. Patients should be informed of this when the medication is first prescribed.

The reduction schedule for a patient should be tailored to the individual and should be modified to allow intolerable withdrawal symptoms to improve before making the next reduction. If using a published withdrawal schedule, apply it flexibly to accommodate the person's preferences, changes to their circumstances and the response to dose reductions.

Suggest a slow stepwise rate of reduction proportionate to the existing dose, so that decrements become smaller as the dose is lowered, unless clinical risk is such that rapid withdrawal is needed.

The patient should also be made aware of the possibility of "rebound" phenomena to minimise anxiety should they occur.

4.5 Interaction with other medicinal products and other forms of interaction

Not recommended

Alcohol

Lorazepam should not be used together with alcohol (enhanced sedative effects; impaired ability to drive/operate machinery)

Sodium oxybate

Avoid concomitant use (enhanced effects of sodium oxybate)

HIV-protease inhibitors

Avoid concomitant use (increased risk of prolonged sedation – see below for zidovudine

Take into account

Opioids

The concomitant use of sedative medicines such as benzodiazepines or related drugs such as lorazepam with opioids increases the risk of sedation, respiratory depression, coma and death because of additive CNS depressant effect. The dosage and duration of concomitant use should be limited (see section 4.4).

Centrally acting drugs

Enhancement of the central depressive effect may occur if lorazepam is combined with drugs such as neuroleptics, antipsychotics, tranquillisers,

antidepressants, hypnotics, analgesics, anaesthetics, barbiturates and sedative antihistamines. The elderly may require special supervision.

Anti-epileptic drugs

Pharmacokinetic studies on potential interactions between benzodiazepines and antiepileptic drugs have produced conflicting results. Both depression and elevation of drug levels, as well as no change have been reported.

Phenobarbital taken concomitantly may result in an additive CNS effect. Special care should be taken in adjusting the dose in the initial stages of treatment.

Side effects may be more evident with hydantoins or barbiturates

Valproate may inhibit the glucuronidation of lorazepam (increased serum levels: increased risk of drowsiness)

Narcotic analgesics

Enhancement of the euphoria may lead to increased psychological dependence

Clozapine

Reports of marked sedation, excessive salivation, hypotension, ataxia, delirium and respiratory arrest when given concurrently with lorazepam.

Muscle Relaxants

When taken with muscle relaxants, the overall muscle-relaxing effect may be increased (accumulative) therefore caution is advised, especially in elderly patients and at higher doses (risk of falling, see Section 4.4)

Other drugs enhancing the sedative effect of diazepam

Cisapride, lofexidine, nabilone, disulfiram and the muscle relaxants – baclofen and tizanidine

Compounds that affect hepatic enzymes (particularly cyctochrome P450)

Inhibitors (e.g. cimetidine, isoniazid; erythyromycin; omeprazole; esomeprazole) reduce clearance and may potentiate the action of benzodiazepines. Itraconazole, ketoconazole and to a lesser extent fluconazole and voriconazole are potent inhibitors of the cytochrome P450 isoenzyme CYP3A4 and may increase plasma levels of benzodiazepines. The effects of benzodiazepines may be increased and prolonged by concomitant use. A dose reduction of the benzodiazepine may be required.

Inducers (e.g. rifampicin) may increase clearance of benzodiazepines

Antihypertensives, vasodilators and diuretics

Enhanced hypotensive effect with ACE-inhibitors, alpha-blockers, angiotensin-II receptor antagonists, calcium channel blockers, adrenergic neurone blockers, beta-blockers, moxonidine, nitrates, hydralazine, minoxidil, sodium nitroprusside and diuretics

Enhanced sedative effect with alpha-blockers or moxonidine.

Dopaminergics

Possible antagonism of the effect of levodopa

Antacids

Concurrent use may delay absorption of lorazepam

Zidovudine

Increased zidovudine clearance by lorazepam

Oestrogen-containing contraceptives

Possible inhibition of hepatic metabolism of lorazepam

Theophylline/aminophylline

Increases metabolism of lorazepam which possibly reduces the effect

Caffeine

Concurrent use may result in reduced sedative and anxiolytic effects of lorazepam.
Grapefruit juice
Inhibition of CYP3A4 may increase the plasma concentration of lorazepam (possible increased sedation and amnesia). This interaction may be of little significance in healthy individuals, but it is not clear if other factors such as old age or liver cirrhosis increase the risk of adverse events with concurrent use.

4.6 Fertility, pregnancy and lactation

Pregnancy: Benzodiazepines should not be used during pregnancy, especially during the first and last trimesters. Benzodiazepines may cause foetal damage when administered to pregnant women.
If the drug is prescribed to a woman of childbearing potential, she should be warned to contact her physician about stopping the drug if she intends to become, or suspects that she is, pregnant.
There is a possibility that infants born to mothers who take benzodiazepines chronically during the later stages of pregnancy may develop physical dependence. Infants of mothers who ingested benzodiazepines for several weeks or more preceding delivery have been reported to have withdrawal symptoms during the postnatal period. Symptoms such as hypoactivity, hypotonia, hypothermia, respiratory depression, apnoea, feeding problems, and impaired metabolic response to cold stress have been reported in neonates born of mothers who have received benzodiazepines during the late phase of pregnancy or at delivery.
Lactation: Lorazepam is excreted in small amounts in breast milk. Mothers who are breast-feeding should not take benzodiazepines. Sedation and inability to suckle have occurred in neonates of lactating mothers taking benzodiazepines.

4.7 Effects on ability to drive and use machines

Patients should be advised that sedation, amnesia, impaired concentration, dizziness, blurred vision and impaired muscular function may occur and that, if affected, they should not drive or to use machines, or take part in other activities where this would put themselves or others at risk. If insufficient sleep duration occurs, the likelihood of impaired alertness may be increased. Concurrent medication may increase these effects (see section 4.5)
This medicine can impair cognitive function and can affect a patient's ability to drive safely. This class of medicine is in the list of drugs included in regulations under 5a of the Road Traffic Act 1988. When prescribing this medicine, patients should be told:

- The medicine is likely to affect your ability to drive
- Do not drive until you know how the medicine affects you
- It is an offence to drive while under the influence of this medicine
- However, you would not be committing an offence (called 'statutory defence') if:

- The medicine has been prescribed to treat a medical or dental problem and
- You have taken it according to the instructions given by the prescriber and in the information provided with the medicine and
- It was not affecting your ability to drive safely

4.8 Undesirable effects

Adverse reactions, when they occur, are usually observed at the beginning of therapy and generally decrease in severity or disappear with continued use or upon decreasing the dose.
Most frequently reported adverse reactions associated with benzodiazepines include daytime drowsiness, dizziness, muscle weakness, and ataxia.
Adverse reactions are listed by frequency:
Very common (≥1/10); Common (≥1/100 to <1/10); Uncommon (≥1/1,000 to <1/100); Rare (≥1/10,000 to <1/1,000); Very rare (<1/10,000); not known (cannot be estimated from the available data)
Blood and lymphatic system disorders
Very rare: Thrombocytopenia, leucopenia, agranulocytosis, pancytopenia
Immune system disorders
Very rare: Hypersensitivity including anaphylaxis/anaphylactoid reactions
Endocrine disorders
Very rare: Inappropriate antidiuretic hormone secretion, hyponatraemia
Psychiatric disorders
Rare: Confusion, depression and unmasking of depression, numbed emotions, disinhibition, euphoria, appetite changes, sleep disturbance, change in libido, decreased orgasm.
Unknown: Drug dependence (see section 4.4), Suicidal ideation/attempt
Paradoxical reactions such as restlessness, agitation, irritability, aggressiveness, delusion, rage, insomnia, nightmares, hallucinations, psychoses, sexual arousal, and inappropriate behaviour have been occasionally reported during use.
Nervous system disorders
Very common: Daytime drowsiness, sedation
Common: Dizziness, ataxia
Rare: headache, reduced alertness, dysarthria/slurred speech, transient anterograde amnesia or memory impairment.
Very rare: Tremor, extrapyramidal reactions, Coma (see 4.9 Overdose)
Eye disorders
Rare: Visual disturbances (diplopia, blurred vision)
Vascular disorders
Rare: Hypotension (see 4.4 Special warnings and precautions)
Respiratory thoracic and mediastinal disorders
Rare: Apnoea, worsening of sleep apnoea, worsening of obstructive pulmonary disease. Respiratory depression (see 4.9 Overdose).
Gastrointestinal disorders
Rare: Nausea, constipation, salivation changes
Hepatobiliary disorders

Rare: Abnormal liver function test values (increases in bilirubin, transaminases, alkaline phosphatise), jaundice
Skin and subcutaneous tissue disorders
Rare: Rash, allergic dermatitis
Musculoskeletal disorders
Common: Muscle weakness
Reproductive system and breast disorders
Rare: Impotence
General disorders
Common: Asthenia, fatigue
Very rare: Hypothermia
Drug withdrawal symptoms (see 4.4 Special warnings and precautions)
Symptoms reported following discontinuation of benzodiazepines include headaches, muscle pain, anxiety, tension, depression, insomnia, restlessness, confusion, irritability, sweating, and the occurrence of "rebound" phenomena whereby the symptoms that led to treatment with benzodiazepines recur in an enhanced form. These symptoms may be difficult to distinguish from the original symptoms for which the drug was prescribed.
In severe cases the following symptoms may occur: derealisation; depersonalisation; hyperacusis; tinnitus; numbness and tingling of the extremities; hypersensitivity to light, noise, and physical contact; involuntary movements; hyperreflexia, tremor, nausea, vomiting; diarrhoea, abdominal cramps, loss of appetite, agitation, palpitations, tachycardia, panic attacks, vertigo, short-term memory loss, hallucinations/delirium; catatonia; hyperthermia, convulsions. Convulsions may be more common in patients with pre-existing seizure disorders or who are taking other drugs that lower the convulsive threshold such as antidepressants.
Injury, poisoning and procedural complications
Not known: Fall
Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

In the management of overdose with any drug, it should be borne in mind that multiple agents may have been taken.
Overdose of benzodiazepines is usually manifested by degrees of central nervous system depression ranging from drowsiness to coma. In mild cases, symptoms include drowsiness, mental confusion, and lethargy. In more serious cases, and especially when other CNS-depressant drugs or alcohol are ingested, symptoms may include ataxia, hypotension, hypotonia, respiratory depression, coma, and very rarely, death.
If ingestion was recent, induced vomiting and/or gastric lavage should be undertaken followed by general supportive care, monitoring of vital signs and

close observation of the patient. If there is no advantage in emptying the stomach, activated charcoal may be effective in reducing absorption. Hypotension, though unlikely, may be controlled with noradrenaline. Lorazepam is poorly dialysable.
The benzodiazepine antagonist, flumazenil may be useful in hospitalised patients for the management of benzodiazepine overdose. Flumazenil product information should be consulted prior to use.
Patients should be informed of the signs and symptoms of overdose and to ensure that family and friends are also aware of these signs and to seek immediate medical help if they occur.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Psycholeptics, Benzodiazepine derivatives
ATC Code: N05BA06
Lorazepam is a benzodiazepine with anxiolytic, sedative and hypnotic properties.

5.2 Pharmacokinetic properties

Lorazepam is almost completely absorbed from the gastrointestinal tract and peak serum levels are reached in 2 hours. It is metabolised by a simple one-step process to a pharmacologically inert glucuronide. There are no major active metabolites. The elimination half-life is about 12 hours and there is minimal risk of excessive accumulation.

5.3 Preclinical safety data

Oesophageal dilation occurred in rats treated with lorazepam for more than one year at 6mg/kg/day.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Lactose monohydrate
Cellulose, microcrystalline
Polacrilin potassium
Magnesium stearate.

6.2 Incompatibilities

Not known.

6.3 Shelf life

2 years

6.4 Special precautions for storage

Store in the original package in order to protect from light and moisture. Do not store above 25°C.

6.5 Nature and contents of container

Strips of Alu-foil coated with PE film.
Pack sizes: 20, 28, 30, 50 and 100 tablets.
Not all pack sizes may be marketed.
Aluminium-Aluminium blister pack
Pack sizes: 20, 28, 30, 50 and 100 tablets.
Not all pack sizes may be marketed.

6.6 Special precautions for disposal

No special requirements for disposal.

7 MARKETING AUTHORISATION HOLDER

Orion Corporation
Orionintie 1
FI-02200 Espoo
Finland

8 MARKETING AUTHORISATION NUMBER(S)

PL 27925/0122

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

11/10/2022

10 DATE OF REVISION OF THE TEXT

09/02/2026