**SUMMARY OF PRODUCT CHARACTERISTICS**

# NAME OF THE MEDICINAL PRODUCT

# <TRADE NAME> <STRENGTH> Tablets

# <REGARDING THE APPROVAL>

# QUALITATIVE AND QUANTITATIVE COMPOSITION

# Tablet containing <STRENGTH> <GENERIC NAME>

# Excipients with known effect:

# <REGARDING THE APPROVAL>

# For a full list of excipients, see 6.1

# PHARMACEUTICAL FORM

# Tablets.

# <REGARDING THE APPROVAL>

# CLINICAL PARTICULARS

# Therapeutic indications

# Relief of symptoms in all types of depression including depression accompanied by anxiety.

# Posology and method of administration

# *Method of administration*

# Oral

*Posology*

* **Depression:**

Adults:

Initially 150mg/day in divided doses after food or as a single dose on retiring.

This may be increased up to 300mg/day in a single or divided doses. The major portion of a divided dose to be taken on retiring. The dose may be further increased to 600mg/day in divided doses in hospitalised patients.

Elderly:

For very elderly or frail patients the recommended initial starting dose is reduced to 100mg/day given in divided doses or as a single night-time dose (see section 4.4). This may be incrementally increased, under supervision, according to efficacy and tolerance. In general, single doses above 100 mg should be avoided in these patients. It is unlikely that 300mg/day will be exceeded.

Children:

Molipaxin/Trazodone hydrochloride is not recommended for use in children below the age of 18 years due to a lack of data on safety.

* **Depression accompanied by anxiety:**

As for depression.

* **Anxiety:**

75mg/day increasing to 300 mg/day as necessary.

A decrease in side-effects (increase of the resorption and decrease of the peak plasma concentration) can be reached by taking Molipaxin/Trazodone hydrochloride after a meal.

Hepatic Impairment:

Molipaxin/Trazodone hydrochloride undergoes extensive hepatic metabolism, see section 5.2, and has also been associated with hepatotoxicity, see sections 4.4 and 4.8. Therefore caution should be exercised when prescribing for patients with hepatic impairment, particularly in cases of severe hepatic impairment. Periodic monitoring of liver function may be considered.

Renal Impairment:

No dosage adjustment is usually necessary, but caution should be exercised when prescribing for patients with severe renal impairment (see also section 4.4 and 5.2).

## Contraindications

* Known sensitivity to trazodone or to any of the excipients.
* Alcohol intoxication and intoxication with hypnotics.
* Acute myocardial infarction.
	1. **Special warnings and precautions for use**

Use in children and adolescents under 18

<GENERIC NAME> should not be used in children and adolescents under 18 years old. Suicidal behaviour (suicidal attempt and suicidal planning) and hostility (essentially aggressiveness, opposing behavior and anger) has been observed in a clinical study on children and adolescents treated with antidepressant more frequently than with placebo. Moreover, long-term safety data on children and adolescents regarding growth, maturation and cognitive and behavioral development are not available.

Suicide/suicidal thoughts or clinical worsening

Depression is associated with an increased risk of suicidal thoughts, self-harm and suicide (suicide related events). This risk persists until significant remission occurs. As improvement may not occur during the first few weeks or more of treatment, patients should be closely monitored until such improvement occurs. It is general clinical experience that the risk of suicide may increase in the early stages of recovery.

Other psychiatric conditions for which <GENERIC NAME> is prescribed can also be associated with an increased risk of suicide related events. In addition, these conditions may be co morbid with major depressive disorder. The same precautions observed when treating patients with major depressive disorder should therefore be observed when treating patients with other psychiatric disorders.

Patients with a history of suicide related events, or those exhibiting a significant degree of suicidal ideation prior to commencement of treatment are known to be at greater risk of suicidal thoughts or suicide attempts, and should receive careful monitoring during treatment. A meta analysis of placebo controlled clinical trials of antidepressant drugs in adult patients with psychiatric disorders showed an increased risk of suicidal behaviour with antidepressants compared to placebo in patients less than 25 years old.

Close supervision of patients and in particular those at high risk should accompany drug therapy especially in early treatment and following dose changes. Patients (and caregivers of patients) should be alerted about the need to monitor for any clinical worsening, suicidal behaviour or thoughts and unusual changes in behaviour and to seek medical advice immediately if these symptoms present.

To minimise the potential risk of suicide attempts, particularly at therapy initiation, only restricted quantities of <GENERIC NAME> should be prescribed at each occasion.

It is recommended that careful dosing and regular monitoring is adopted in patients with the following conditions:

* Epilepsy, specifically abrupt increases or decreases of dosage should be avoided
* Patients with hepatic or renal impairment, particulary if severe
* Patients with cardiac disease, such as angina pectoris, conduction disorders or AV blocks of different degree, recent myocardial infarction
* Hyperthyroidism
* Micturition disorders, such as prostate hypertrophy, although problems would not be anticipated as the anticholinergic effect of <GENERIC NAME> is only minor
* Acute narrow angle glaucoma, raised intra-ocular pressure, although major changes would not be anticipated due to the minor anticholinergic effect of <GENERIC NAME>.

Should jaundice occur in a patient, <GENERIC NAME> therapy must be withdrawn.

Severe hepatic disorders with potential fatal outcome have been reported with trazodone use (see adverse reaction section). Patients should be instructed to report immediately signs such as asthenia, anorexia, nausea, vomiting, abdominal pain or icterus to a physician. Investigations including clinical examination and biological assessment of liver function should be undertaken immediately, and withdrawal of tradozone therapy be considered.

Administration of antidepressants in patients with schizophrenia or other psychotic disorders may result in a possible worsening of psychotic symptoms. Paranoid thoughts may be intensified. During therapy with <GENERIC NAME> a depressive phase can change from a manic – depressive psychosis into a manic phase. In that case <GENERIC NAME> must be stopped.

Interactions in terms of serotonin syndrome/malignant neuroleptic syndrome have been described in case of concomitant use of other serotonergically acting substances like other antidepressants (e.g. tricyclic antidepressants, SSRI’s, SNRI’s and MAO-inhibitors) and neuroleptics. Malignant neuroleptic syndromes with fatal outcome have been reported in cases of co-administration with neuroleptics, for which this syndrome is a known possible adverse drug reaction, see sections 4.5 and 4.8 for further information.

Since agranulocytosis may clinically reveal itself with influenza-like symptoms, sore throat, and fever, in these cases it is recommended to check haematology.

Hypotension, including orthostatic hypotension and syncope, has been reported to occur in patients receiving <GENERIC NAME>. Concomitant administration of antihypertensive therapy with <GENERIC NAME> may require a reduction in the dose of the antihypertensive drug.

Elderly patients may more often experience orthostatic hypotension, somnolence and other anticholinergic effects of trazodone. Careful consideration should be given to the potential for additive effects with concomitant medication use such as with other psychotropics or antihypertensives or in the presence of risk factors such as comorbid disease, which may exacerbate these reactions. It is recommended that the patient/carer is informed of the potential for these reactions and monitored closely for such effects following initiation of therapy, prior to and following upward dose titration.

Following therapy with <GENERIC NAME>, particularly for a prolonged period, an incremental dosage reduction to withdrawal is recommended, to minimise the occurrence of withdrawal syptoms, characterised by nausea, headache, and malaise.

There is no evidence that <GENERIC NAME> possesses any addictive properties.

As with other antidepressant drugs, cases of QT interval prolongation have been reported with <GENERIC NAME> very rarely. Caution is advised when prescribing <GENERIC NAME> with medicinal products known to prolong QT interval. <GENERIC NAME> should be used with caution in patients with known cardiovascular disease including those associated with prolongation of the QT interval.

Potent CYP3A4 inhibitors may lead to increases in trazodone serum levels. See section 4.5 for further information.

As with other drugs with alpha-adrenolytic activity, <GENERIC NAME> has very rarely been associated with priapism. This may be treated with an intracavernosum injection of an alpha-adrenergic agent such as adrenaline or metaraminol. However there are reports of Molipaxin/Trazodone-induced priapism which have required surgical intervention or led to permanent sexual dysfunction. Patients developing this suspected adverse reaction should cease <GENERIC NAME> immediately.

Serotonin syndrome

Concomitant administration of <GENERIC NAME> and buprenorphine/opioids may result in serotonin syndrome, a potentially life-threatening condition (see section 4.5).

If concomitant treatment with other serotonergic agents is clinically warranted, careful observation of the patient is advised, particularly during treatment initiation and dose increases.

Symptoms of serotonin syndrome may include mental-status changes, autonomic instability, neuromuscular abnormalities, and/or gastrointestinal symptoms.

If serotonin syndrome is suspected, a dose reduction or discontinuation of therapy should be considered depending on the severity of the symptoms.

Important information about the ingredients of <GENERIC NAME>

This medicine contains lactose. Patients with rare hereditary problems of galactose intolerance, total lactose deficiency or glucose-galactose malabsorption should not take this medicine.

This medicine contains less than 1 mmol sodium (23mg) per 5 ml, that is to say essentially ‘sodium-free’.

## Interaction with other medicinal products and other forms of interaction

## *General*: The sedative effects of antipsychotics, hypnotics, sedatives, anxiolytics, and antihistaminic drugs may be intensified; dosage reduction is recommended in such instances.

## The metabolism of antidepressants is accelerated due to hepatic effects by oral contraceptives, phenytoin, carbamazepine and barbiturates. The metabolism of antidepressants is inhibited by cimetidine and some other antipsychotics.

*In vitro* drug metabolism studies suggest that there is a potential for drug interactions when <GENERIC NAME> is given with potent CYP3A4 inhibitors such as erythromycin, ketoconazole, itraconazole, ritonavir, indinavir, and nefazodone. It is likely that potent CYP3A4 inhibitors may lead to substantial increases in trazodone plasma concentrations with the potential for adverse effects. Exposure to ritonavir during initiation or resumption of treatment in patients receiving <GENERIC NAME> will increase the potential for excessive sedation, cardiovascular, and gastrointestinal effects. It has been confirmed in *in-vivo*-studies in healthy volunteers, that a ritonavir dose of 200 mg BID increased the plasma levels of <GENERIC NAME> by greater than twofold, leading to nausea, syncope and hypotension. If <GENERIC NAME> is used with a potent CYP3A4 inhibitor, a lower dose of <GENERIC NAME> should be considered. However, the co-administration of <GENERIC NAME> and potent CYP3A4 inhibitors should be avoided where possible.

Carbamazepine reduced plasma concentrations of trazodone when co-administered. Concomitant use of carbamazepine 400 mg daily led to a decrease of plasma concentrations of <GENERIC NAME> and its active metabolite m-chlorophenylpiperazine of 76% and 60%, respectively. Patients should be closely monitored to see if there is a need for an increased dose of <GENERIC NAME> when taken with carbamazepine.

<GENERIC NAME> may enhance the effects of muscle relaxants and volatile anaesthetics, and caution should be exercised in such instances. Similar considerations apply to combined administration with sedative and anti-depressant drugs, including alcohol. <GENERIC NAME> intensifies the sedative effects of alcohol. Alcohol should be avoided during <GENERIC NAME> therapy. <GENERIC NAME> has been well tolerated in depressed schizophrenic patients receiving standard phenothiazine therapy and also in depressed parkinsonian patients receiving therapy with levodopa. Antidepressants can accelerate the metabolism of levodopa.

*Tricyclic antidepressants*: Concurrent administration should be avoided due to the risk of interaction. Serotonin syndrome and cardiovascular side effects are possible.

*Fluoxetine*: Rare cases have been reported of elevated <GENERIC NAME> plasma levels and adverse effects when <GENERIC NAME> had been combined with fluoxetine, a CYP1A2/2D6 inhibitor. The mechanism underlying a pharmacokinetic interaction is not fully understood. A pharmacodynamic interaction (serotonin syndrome) could not be excluded.

Possible interactions with monoamine oxidase inhibitors have occasionally been reported. Although some clinicians do give both concurrently, use of <GENERIC NAME> with MAOIs, or within two weeks of stopping treatment with these compounds is not recommended. The giving of MAOIs within one week of stopping <GENERIC NAME> is also not recommended.

*Phenothiazines*: Severe orthostatic hypotension has been observed in case of concomitant use of phenothiazines, like e.g. chlorpromazine, fluphenazine, levomepromazine, perphenazine.

*Serotonin syndrome*: <GENERIC NAME> should be used cautiously when coadministered with: Buprenorphine/opioids, as the risk of serotonin syndrome, a potentially lifethreatening condition, is increased (see section 4.4).

*Other*: Concomitant use of <GENERIC NAME> with drugs known to prolong the QT interval may increase the risk of ventricular arrhythmias, including torsade de pointes. Caution should be used when these drugs are co-administered with <GENERIC NAME>.

Since <GENERIC NAME> is only a very weak inhibitor of noradrenaline reuptake and does not modify the blood pressure response to tyramine, interference with the hypotensive action of guanethidine-like compounds is unlikely. However, studies in laboratory animals suggest that <GENERIC NAME> may inhibit most of the acute actions of clonidine. In the case of other types of antihypertensive drug, although no clinical interactions have been reported, the possibility of potentiation should be considered.

Undesirable effects may be more frequent when <GENERIC NAME> is administered together with preparations containing *Hypericum perforatum* (St John’s Wort).

There have been reports of changes in prothrombin time in patients concomitantly receiving trazodone and warfarin.

Concurrent use with <GENERIC NAME> may result in elevated serum levels of digoxin or phenytoin. Monitoring of serum levels should be considered in these patients.

* 1. **Fertility, pregnancy and lactation**

## Pregnancy

## Trazadone should only be administered during pregnancy if considered essential by the physician.

Data on a limited number (< 200) of exposed pregnancies indicate no adverse effects of Molipaxin/Trazodone on pregnancy or on the health of the foetus/newborn child. To date, no other relevant epidemiological data area available. The safety of Molipaxin/Trazodone in human pregnancy has not been established. Animal studies do not indicate direct or indirect harmful effects with respect to pregnancy, embryonal/foetal development, parturition or postnatal development at therapeutic doses. On basic principles, therefore, its use during the first trimester should be avoided.

When Molipaxin/Trazodone is used until delivery, newborns should be monitored for the occurrence of withdrawal symptoms.

## Breastfeeding

Limited data indicate that excretion of Molipaxin/Trazodone in human breast milk is low, but levels of the active metabolite are not known. Due to the paucity of data, a decision on whether to continue/discontinue breast-feeding or to continue/discontinue therapy with Molipaxin/Trazodone should be made taking into account the benefit of breast-feeding to the child and the benefit of Molipaxin/Trazodone therapy to the woman.

* 1. **Effects on ability to drive and use machines**

Trazodone has minor or moderate influence on the ability to drive and use machines.As with all other drugs acting on the central nervous system, patients should be cautioned against the risks of driving or operating machinery until they are sure they are not affected by drowsiness, sedation, dizziness, confusional states, or blurred vision.

### Undesirable effects

### Cases of suicidal ideation and suicidal behaviours have been reported during <GENERIC NAME> therapy or early after treatment discontinuation (see section 4.4).

<GENERIC NAME> has had no effect on arterial blood pCO2 or pO2 levels in patients with severe respiratory insufficiency due to chronic bronchial or pulmonary disease.

The following symptoms, some of which are commonly reported in cases of untreated depression, have also been recorded in patients receiving <GENERIC NAME> therapy.

| **MedDRA System** **Organ** **Class** | **Frequency not known (cannot be estimated from the available data)** |
| --- | --- |
| Blood and the lymphaticsystem disorders | Blood dyscrasias (including agranulocytosis, thrombocytopenia, eosinophilia, leucopenia and anaemia) |
| Immune system disorders | Allergic reactions |
| Endocrine disorders | Syndrome of Inappropriate Antidiuretic Hormone Secretion |
| Metabolism and nutrition disorders | Hyponatraemia1, weight loss, anorexia, increased appetite, |
| Psychiatric disorders | Suicidal ideation or suicidal behaviours2, confusional state, insomnia, disorientation, mania, anxiety, nervousness, agitation(very occasionally exacerbating to delirium), delusion, aggressive reaction, hallucinations, nightmares, libido decreased, withdrawal syndrome |
| Nervous system disorders | Serotonin syndrome, convulsion, neuroleptic malignant syndrome, dizziness, vertigo, headache, drowsiness3, restlessness, decreased alertness, tremor, blurred vision, memory disturbance, myoclonus, expressive aphasia, paraesthesia, dystonia, taste altered |
| Cardiac disorders | Cardiac arrhythmias4(including Torsade de Pointes, palpitations, premature ventricular contractions, ventricular couplets, ventricular tachycardia), bradycardia, tachycardia, ECG abnormalities (QT prolongation)2 |
| Vascular disorders | Orthostatic hypotension, hypertension, syncope |
| Respiratory, thoracic and mediastinal disorders | Nasal congestion, dyspnoea |
| Gastrointestinal disorders | Nausea, vomiting, dry mouth, constipation, diarrhoea, dyspepsia, stomach pain, gastroenteritis, increased salivation, paralytic ileus |
| Hepato-biliary disorders | Hepatic function abnormalities (including jaundice and hepatocellular damage)5, cholestasis intrahepatic, severe hepatic disorders such as hepatitis/fulminant hepatitis, hepatic failure with potential fatal outcome. |
| Skin and subcutaneous tissue disorders | Skin rash, pruritus, hyperhidrosis |
| Musculoskeletal andconnective tissue disorders | Pain in limb, back pain, myalgia, arthralgia |
| Renal and urinary disorders | Micturition disorder |
| Reproductive system and breast disorders | Priapism6 |
| General disorders and administration site conditions | Weakness, oedema, influenza-like symptoms, fatigue, chest pain, fever |
| Investigations | Elevated liver enzymes |

1 Fluid and electrolyte status should be monitored in symptomatic patients.

2 See also Section 4.4.

3 Trazodone is a sedative antidepressant and drowsiness, sometimes experienced during the first days of treatment, usually disappears on continued therapy.

4Studies in animals have shown that trazodone is less cardiotoxic than the tricyclic antidepressants, and clinical studies suggest that the drug may be less likely to cause cardiac arrhythmias in man. Clinical studies in patients with pre-existing cardiac disease indicate that trazodone may be arrhythmogenic in some patients in that population.

5Adverse effects on hepatic function, sometimes severe, have been rarely reported. Should such effects occur, trazodone should be immediately discontinued.

6 See also Section 4.4

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 Health Product Vigilance Center; HPVC

### Overdose

Features of toxicity

The most frequently reported reactions to overdose have included drowsiness, dizziness, nausea and vomiting. In more serious cases coma, tachycardia, hypotension, hyponatraemia, convulsions and respiratory failure have been reported. Cardiac features may include bradycardia, QT prolongation and torsade de pointes. Symptoms may appear 24 hours or more after overdose.

Overdoses of Molipaxin in combination with other antidepressants may cause serotonin syndrome.

Management

There is no specific antidote to trazodone. Activated charcoal should be considered in adults who have ingested more than 1 g trazodone, or in children who have ingested more than 150 mg trazodone within 1 hour of presentation. Alternatively, in adults, gastric lavage may be considered within 1 hour of ingestion of a potentially life-threatening overdose.

Observe for at least 6 hours after ingestion (or 12 hours if a sustained release preparation has been taken). Monitor BP, pulse and Glasgow Coma Scale (GCS). Monitor oxygen saturation if GCS is reduced. Cardiac monitoring is appropriate in symptomatic patients.

Single brief convulsions do not require treatment. Control frequent or prolonged convulsions with intravenous diazepam (0.1-0.3 mg/kg body weight) or lorazepam (4 mg in an adult and 0.05 mg/kg in a child). If these measures do not control the fits, an intravenous infusion of phenytoin may be useful. Give oxygen and correct acid base and metabolic disturbances as required.

Treatment should be symptomatic and supportive in the case of hypotension and excessive sedation. If severe hypotension persists consider use of inotropes, eg dopamine or dobutamine

# PHARMACOLOGICAL PROPERTIES

# Pharmacodynamic properties

# ATC code: N06A X05. Other antidepressants.

# <GENERIC NAME> is a potent antidepressant. It also has anxiety reducing activity. <GENERIC NAME> is a triazolopyridine derivative chemically unrelated to known tricyclic, tetracyclic and other antidepressant agents. It has negligible effect on noradrenaline reuptake mechanisms. Whilst the mode of action of <GENERIC NAME> is not known precisely, its antidepressant activity may concern noradrenergic potentiation by mechanisms other than uptake blockade. A central antiserotonin effect may account for the drug's anxiety reducing properties.

## Pharmacokinetic properties

Trazodone is rapidly absorbed from the gastro-intestinal tract and extensively metabolised. Paths of metabolism of Trazodone include n-oxidation and hydroxylation. The metabolic m-chlorophenylpiperazine is active.Trazodone is excreted in the urine almost entirely in the form of its metabolites, either in free or in conjugated form. The elimination of Trazodone is biphasic, with a terminal elimination half-life of 5 to 13 hours. Trazodone is excreted in breast milk.

There was an approximate two-fold increase in terminal phase half-life and significantly higher plasma concentrations of Trazodone in 10 subjects aged 65 to 74 years compared with 12 subjects aged 23 to 30 years following a 100mg dose of Trazodone. It was suggested that there is an age-related reduction in the hepatic metabolism of Trazodone.

In vitro studies in human liver microsomes show that trazodone is metabolised by cytochrome P4503A4 (CYP3A4) to form m-chlorophenylpiperazine. Whilst significant, the role of this pathway in the total clearance of trazodone in vivo has not been fully determined.

* 1. **Preclinical safety data**

None stated.

# PHARMACEUTICAL PARTICULARS

# List of excipients

# <REGARDING THE APPROVAL>

# Incompatibilities

# <REGARDING THE APPROVAL>

* 1. **Shelf life**

<REGARDING THE APPROVAL>

* 1. **Special precautions for storage**

<REGARDING THE APPROVAL>

* 1. **Nature and contents of container**

<REGARDING THE APPROVAL>

* 1. **Special precautions for disposal**

<REGARDING THE APPROVAL>

1. **MARKETING AUTHORISATION HOLDER**

<REGARDING THE APPROVAL>

1. **MARKETING AUTHORISATION NUMBER(S)**

<REGARDING THE APPROVAL>

1. **DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION**

<REGARDING THE APPROVAL>

# DATE OF REVISION OF THE TEXT[[1]](#footnote-1)

# <REGARDING THE APPROVAL>

1. Ref: Trazodone, MHRA, 04/03/2021 [↑](#footnote-ref-1)