its content

# **1. NAME OF THE MEDICINAL PRODUCT**

# PERICATE

International Non-Proprietary Name (INN) Haloperidol decanoate

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml of PERICATE 100 mg/ml is expressed in terms of the haloperidol content and is equivalent to 141.04 mg haloperidol decanoate. For excipients, see Section 6.1.

# 3. PHARMACEUTICAL FORM

Solution for injection Appearance: 100 mg/ml injectable solutions. Slightly amber, slightly viscous solution. Free from visible foreign material.

# 4. CLINICAL PARTICULARS

4.1. Therapeutic Indications

PERICATE is indicated for the maintenance therapy of chronic schizophrenic patients.

# 4.2. Posology and Method of Administration

PERICATE Injection is intended for use in chronic psychotic patients who require prolonged parenteral antipsychotic therapy. These patients should be previously stabilised on antipsychotic medication before considering a conversion to PERICATE.

PERICATE is for use in adults only and has been formulated to provide a one month's therapy for most patients following a single deep intramuscular injection in the gluteal region. PERICATE should not be administered intravenously. As the administration of volumes greater than 3 ml are uncomfortable for the patient, such large injection volumes are not recommended.

Since individual response to neuroleptic drugs is variable, dosage should be individually determined and is best initiated and titrated under close clinical supervision. The individual starting dose will depend on both the severity of the symptomatology and the amount of oral medication required to maintain the patient before starting depot treatment.

It is recommended that the initial dose of PERICATE be 10-15 times the previous daily dose of oral haloperidol. For most patients, this means a starting dose ranging between 25 and 75 mg of PERICATE. A maximum starting dose of 100 mg should not be exceeded.

Depending on the individual patient's response the dose may gradually be increased by 50 mg until an optimal therapeutic effect is obtained. The most appropriate monthly dose of PERICATE is often about 20 times the daily dose of oral haloperidol. During dose adjustment or episodes of exacerbation of psychotic symptoms, PERICATE therapy can be supplemented with regular haloperidol.

The usual time interval between injections is four weeks. However, variation in patient response may dictate a need for adjustment of the dosing interval.

Use in elderly and in debilitated patients

It is recommended to start with low doses, for example 12.5 mg-25 mg every 4 weeks, only increasing the dose according to the patient's response.

### 4.3 Contraindications

۲

Comatose state: CNS depression due to alcohol or other depressant drug; Parkinson's disease; known hypersensitivity to PERICATE or its excipients [contains sesame oil]; lesion of the basal ganglia.

In common with other neuroleptics, haloperidol has the potential to cause rare prolongation of the QT interval. Use of haloperidol is therefore contra-indicated in patients with clinically significant cardiac disorders e.g. recent acute myocardial infarction, uncompensated heart failure, arrhythmias treated with class IA and III antiarrhythmic medicinal products, QTc interval prolongation, history of ventricular arrhythmia or Torsades de pointes clinically significant bradycardia, second or third degree heart block and uncorrected hypokalaemia. Haloperidol should not be used concomitantly with other QT prolonging drugs (see section 4.5, Interactions).

# 4.4. Special Warnings and Special Precautions for Use

Rare cases of sudden death have been reported in psychiatric patients receiving antipsychotic drugs, including PERICATE.

Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death. Analyses of seventeen placebo-controlled trials (modal duration of 10 weeks), largely in patients taking atypical antipsychotic drugs, revealed a risk of death in drug-treated patients of between 1.6 to 1.7 times the risk of death in placebo-treated patients. Over the course of a typical 10 week controlled trial, the rate of death in drug-treated patients was about 4.5%, compared to a rate of about 2.6% in the placebo group. Although the causes of death were varied, most of the deaths appeared to be either cardiovascular (e.g., heart failure, sudden death) or infectious (e.g., pneumonia) in nature. Observational studies suggest that, similar to atypical antipsychotic drugs, treatment with conventional antipsychotic drugs may increase mortality. The extent to which the findings of increased mortality in observational studies may be attributed to the antipsychotic drug as opposed to some characteristic(s) of the patients is not clear. Cardiovascular effects

Very rare reports of QT prolongation and/or ventricular arrhythmias, in addition to rare reports of sudden death, have been reported with haloperidol. They may occur more frequently with high doses and in predisposed patients.

As QT-prolongation has been observed during haloperidol treatment, caution is advised in patients with QTprolonging conditions (long QT-syndrome, hypokalaemia, electrolyte imbalance, drugs known to prolong QTsee Section 4.5, cardiovascular diseases, family history of QT prolongation), especially if haloperidol is given parenterally. The risk of QT prolongation and/or ventricular arrhythmias may be increased with higher doses or with parenteral use, particularly intravenous administration.

# Haloperidol Decanoate must not be administered intravenously

Tachycardia and hypotension have also been reported in occasional patients

Neuroleptic malignant syndrome In common with other antipsychotic drugs, PERICATE has been associated with neuroleptic malignant syndrome: a rare idiosyncratic response characterized by hyperthermia, generalised muscle rigidity, autonomic instability, altered consciousness. Hyperthermia is often an early sign of this syndrome. Antipsychotic treatment should be withdrawn immediately and appropriate supportive therapy and careful monitoring instituted. Tardive dyskinesia

As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or after drug discontinuation. The syndrome is mainly characterized by rhythmic involuntary movements of the tongue, face, mouth or jaw. The manifestations may be permanent in some patients. The syndrome may be masked when treatment is reinstituted, when the dosage is increased or when a switch is made to a different antipsychotic drug. Treatment should be discontinued as soon as possible.

# Extrapyramidal symptoms

The format of this leaflet was determined by the Ministry of Health that checked and approved used only with great caution and must always be accompanied by therapy to achieve a euthyroid state. Hormonal effects of antipsychotic neuroleptic drugs include hyperprolactinaemia, which may cause galactorrhoea, gynaecomastia and oligo- or amenorrhoea. Very rare cases of hypoglycaemia and of Syndrome

#### of Inappropriate ADH Secretion have been reported. Venous thromboembolism

Cases of venous thromboembolism (VTE) have been reported with antipsychotic drugs. Since patients treated with antipsychotics often present with acquired risk factors for VTE, all possible risk factors for VTE should be identified before and during treatment with PERICATE and preventive measures undertaken. Additional considerations

It is recommended that patients being considered for PERICATE therapy be initially put on oral haloperidol to exclude the possibility of an unexpected adverse sensitivity to haloperidol

As with all antipsychotic agents, PERICATE should not be used alone where depression is predominant. It may be combined with antidepressants to treat those conditions in which depression and psychosis coexist. In schizophrenia, the response to antipsychotic drug treatment may be delayed. If drugs are withdrawn, recurrence of symptoms may not become apparent for several weeks or months. Caution is advised in patients with renal failure and phaeochromocytoma.

### 4.5. Interactions with other Medicinal Products and Other Forms of Interaction

As with other antipsychotics, caution is advised when prescribing haloperidol with medications known to prolong the QT interval.

Haloperidol is metabolized by several routes, including glucuronidation and the cytochrome P450 enzyme system (particularly CYP 3A4 or CYP 2D6). Inhibition of these routes of metabolism by another drug or a decrease in CYP 2D6 enzyme activity may result in increased haloperidol concentrations and an increased risk of adverse events, including QT-prolongation. In pharmacokinetic studies, mild to moderately increased haloperidol concentrations have been reported when haloperidol was given concomitantly with drugs characterized as substrates or inhibitors of CYP 3A4 or CYP 2D6 isozymes, such as, itraconazole, nefazodone, buspirone, venlafaxine, alprazolam, fluvoxamine, quinidine, fluoxetine, sertraline, chlorpromazine, and promethazine. A decrease in CYP2D6 enzyme activity may result in increased haloperidol concentrations. Increases in QTc have been observed when haloperidol was given with a combination of the metabolic inhibitors ketoconazole (400 mg/day) and paroxetine (20 mg/day). It may be necessary to reduce the haloperidol dosage. Caution is advised when used in combination with drugs known to cause electrolyte imbalance.

# Effect of Other Drugs on Haloperidol

When prolonged treatment with enzyme-inducing drugs such as carbamazepine, phenobarbital, rifampicine is added to PERICATE therapy, this results in a significant reduction of haloperidol plasma levels. Therefore, during combination treatment, the PERICATE dose or the dosage interval should be adjusted, when necessary. After stopping such drugs, it may be necessary to reduce the dosage of PERICATE.

Sodium valproate, a drug known to inhibit glucuronidation, does not affect haloperidol plasma concentrations. Effect of Haloperidol on Other Drugs

In common with all neuroleptics, PERICATE can increase the central nervous system depression produced by other CNS-depressant drugs, including alcohol, hypnotics, sedatives or analgesics. An enhanced CNS effect, when combined with methyldopa, has been reported.

PERICATE may antagonise the action of adrenaline and other sympathomimetic agents and reverse the bloodpressure lowering effects of adrenergic blocking agents such as guanethidine.

PERICATE may impair the antiparkinsonian effects of levodopa.

Haloperidol is an inhibitor of CYP 2D6. PERICATE inhibits the metabolization of tricyclic antidepressants. thereby increasing plasma levels of these drugs. Other Forms of Interaction

- In rare cases the following symptoms were reported during the concomitant use of lithium and haloperidol decanoate: encephalopathy, extrapyramidal symptoms, tardive dyskinesia, neuroleptic malignant syndrome, brain stem disorder, acute brain syndrome and coma. Most of these symptoms were reversible. It remains
- unclear whether this represents a distinct clinical entity Nonetheless, it is advised that in patients, who are treated concomitantly with lithium and PERICATE, therapy should be stopped immediately if such symptoms occur.

Antagonism of the effect of the anticoagulant phenindione has been reported.

### 4.6. Pregnancy and Lactation

Animal studies have demonstrated a teratogenic effect of haloperidol (see Section 5.3).

Neonates exposed to antipsychotic drugs (including haloperidol) during the third trimester of pregnancy are at risk for extrapyramidal and/or withdrawal symptoms that may vary in severity following delivery. These symptoms in the neonates may include agitation, hypertonia, hypotonia, tremor, somnolence, respiratory distress, or feeding disorder.

PERICATE has shown no significant increase in fetal anomalies in large population studies. There have been isolated case reports of birth defects following fetal exposure to PERICATE in combination with other drugs. PERICATE should be used during pregnancy only if the anticipated benefit justifies the potential risk to the fetus. PERICATE is excreted in breast milk. If the use of PERICATE is considered essential, the benefits of breastfeeding should be balanced against its potential risks. Extrapyramidal symptoms have been observed in breastfed infants of PERICATE treated women.

#### 4.7. Effects on Ability to Drive and Use Machines

Some degree of sedation or impairment of alertness may occur, particularly with higher doses and at the start of treatment and may be potentiated by alcohol or other CNS depressants. Patients should be advised not to drive or operate machinery during treatment, until their susceptibility is known.

### 4.8. Undesirable Effects Clinical Trial Data

# Comparator and Open-Label Trial Data – Adverse Drug Reactions Reported at ≥1% Incidence

The safety of haloperidol decanoate (15-500 mg/month) was evaluated in 410 subjects who participated in 13 clinical trials in the treatment of schizophrenia or a schizoaffective disorder.

Adverse Drug Reactions (ADRs) reported by ≥1% of haloperidol decanoate-treated subjects in these trials are shown in Table 1.

Table 1. Adverse Drug Reactions Reported by ≥1% of Haloperidol Decanoate-treated Subjects in Comparator and Open-Label Clinical Trials of Haloperidol Decanoate.

Adverse Reaction Haloperidol decanoate

	(n=410) %
Nervous System Disorders Extrapyramidal disorder Tremor Parkinsonism Somnolence Masked facies Akathisia Sedation	13.6 8.0 7.3 4.9 4.1 3.4 2.7
Gastrointestinal Disorders Dry mouth Constipation Salivary hypersecretion	3.4 2.0 1.2
Musculoskeletal and Connective Tissue Disorders Muscle rigidity	6.1
Reproductive System and Breast Disorders Sexual dysfunction	1.5
General Disorders and Administration Site Conditions Injection site reaction	1.2
Investigations Weight increased	2.9

are listed below in Table 2

۲

Table 2. Adverse Drug Reactions Reported by <1% of Haloperidol Decanoate -treated Subjects in Comparator and Open-Label Clinical Trials of Haloperidol Decanoate

Nervous System Disorders Akinesia Dyskinesia Hypertonia Dystonia Cogwheel rigidity Eye Disorders Vision blurred Visual disturbance Oculogyric crisis Cardiac Disorders

Tachycardia

The following is a list of additional ADRs that have been identified in clinical trials with other formulations of haloperidol (non decanoate):

Endocrine Disorders: Hyperprolactinaemia

Psychiatric Disorders: Libido decreased; Loss of libido; Restlessness Nervous System Disorders: Neuroleptic malignant syndrome; Tardive dyskinesia; Bradykinesia; Dizziness; Hyperkinesia; Hypokinesia; Motor dysfunction; Muscle contractions involuntary; Nystagmus

Vascular Disorders: Hypotension; Orthostatic hypotension Musculoskeletal and Connective Tissue Disorders: Trismus; Torticollis; Muscle spasms; Musculoskeletal

stiffness; Muscle twitching

Reproductive System and Breast Disorders: Amenorrhoea; Galactorrhoea; Menstrual disorder; Erectile dysfunction; Breast discomfort; Breast pain; Dysmenorrhoea; Menorrhagia General Disorders and Administration Site Conditions: Gait disturbance

#### Postmarketing Data

Adverse events first identified as ADRs during postmarketing experience with haloperidol are included in Tables 3. The postmarketing review was based on review of all cases including haloperidol and haloperidol decanoate containing products. In each table, the frequencies are provided according to the following convention: 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, including isolated reports

In Table 3, ADRs are presented by frequency category based on spontaneous reporting rates

Table 3: Adverse Drug Reactions Identified During Postmarketing Experience with Haloperidol (oral, solution, or decanoate) by Frequency Category Estimated From Spontaneous Reporting Rates

# Blood and Lymphatic System Disorders

Agranulocytosis, Pancytopenia, Thrombocytopenia, Leukopenia, Very rare Neutropenia

# Immune System Disorders

Verv rare

Very rare

۲

Investigations

4.9. Overdose

Very rare Anaphylactic reaction, Hypersensitivity **Endocrine Disorders** 

Inappropriate antidiuretic hormone secretion

Metabolic and Nutritional Disorders Very rare Hypoglycaemia

**Psychiatric Disorders** 

Psychotic disorder, Agitation, Confusional state, Depression, Insomnia Nervous System Disorders

#### Very rare Convulsion, Headache

Cardiac Disorders

Urinary retention

Torsade de pointes, Ventricular fibrillation, Ventricular tachycardia, Extrasystoles

# Respiratory, Thoracic and Mediastinal Disorders Very rare

Bronchospasm, Laryngospasm, Laryngeal oedema, Dyspnoea **Gastrointestinal Disorders** 

# Vomiting, Nausea

Very rare Hepatobiliary Disorders

Renal and Urinary Disorders

#### Acute hepatic failure, Hepatitis, Cholestasis, Jaundice, Liver function test Very rare abnormal

Drug withdrawal syndrome neonatal

Priapism, Gynaecomastia

Injection site abscess

halperidol is presented, modified only to reflect the extended duration of action of PERICATE.

Leukocytoclastic vasculitis, Dermatitis exfoliative, Urticaria,

Sudden death, Face oedema, Oedema, Hypothermia, Hyperthermia,

Electrocardiogram QT prolonged, Weight decreased

Photosensitivity reaction, Rash, Pruritis, Hyperhidrosis

# Skin and Subcutaneous Tissue Disorders

Pregnancy, Puerperium and Perinatal Conditions

General Disorders and Administration Site Conditions

**Reproductive System and Breast Disorders** 

in common with all neuroleptics, extrapyramidal symptoms may occur, e.g. tremol, rigidity, hypersalivation,
bradykinesia, akathisia, acute dystonia.

Antiparkinson drugs of the anticholinergic type may be prescribed as required, but should not be prescribed routinely as a preventive measure. If concomitant antiparkinson medication is required, it may have to be continued after stopping PERICATE if its excretion is faster than that of haloperidol in order to avoid the development or aggravation of extrapyramidal symptoms. The physician should keep in mind the possible increase in intraocular pressure when anticholinergic drugs, including antiparkinson agents, are administered concomitantly with PERICATE. Seizures/Convulsions

It has been reported that seizures can be triggered by PERICATE. Caution is advised in patients suffering from epilepsy and in conditions predisposing to convulsions (e.g., alcohol withdrawal and brain damage) lepatobiliary concerns

As PERICATE is metabolized by the liver, caution is advised in patients with liver disease. Isolated cases of liver function abnormalities or hepatitis, most often cholestatic, have been reported

Endocrine system concerns

The manifestations are an exaggeration of the known pharmacological effects and adverse reactions. The most prominent symptoms are: severe extrapyramidal reactions, hypotension, and sedation. An extrapyramidal reaction is manifest by muscular rigidity and a generalised or localised tremor. Hypertension rather than hypotension is also possible. In extreme cases, the patient would appear comatose with respiratory depression 2. With the other hand, hold the tip of ampoule putting the index finger against the neck of ampoule, and the and hypotension that could be severe enough to produce a shock-like state. The risk of ventricular arrhythmias, thumb on the coloured point. possibly associated with QT-prolongation, should be considered. Treatment

While overdosage is less likely to occur with parenteral than with oral medication, information pertaining to oral

Since there is no specific antidote treatment is primarily supportive. For comatose patients a patent airway should be established by use of an oropharyngeal airway or endotracheal tube. Respiratory depression may necessitate artificial respiration. Hypotension and circulatory collapse may be counteracted by use of intravenous fluids, plasma, or concentrated albumin, and vasopressor agents such as dopamine or noradrenaline. Adrenaline should not be used

# 6.6. Instructions for Use and Handling <and Disposal>

PERICATE 100 mg/ml is supplied in 1 ml amber colored glass ampoules.

Before use, roll the ampoule between the palms of the hands for a moment to warm it up. 1. Hold the ampoule between the thumb and index finger, leaving the tip of the ampoule free.

administered and be continued for several weeks. They must be withdrawn very cautiously as extrapyramidal

ECG and vital signs should be monitored and monitoring should continue until the ECG is normal. Severe

Haloperidol decanoate is an ester of haloperidol and decanoic acid, and as such, a depot neuroleptic belonging

to the butyrophenones group. After intramuscular injection, haloperidol decanoate is gradually released from

In the brain, haloperidol has an incisive action on delusions and hallucinations (probably through an interaction

with dopamine receptors in the mesocortical and limbic tissues) and an inhibitory effect through its activity on

the basal ganglia, i.e. nigrostriatal bundles, which also underlies the extrapyramidal motor side-effects (namely

Haloperidol presents an effective psychomotor sedative effect, which also explains the favourable effect on

The more peripheral antidopaminergic effects explain the activity against nausea and vomiting (via the

chemoreceptor-trigger zone), the relaxation of the gastro-intestinal sphincters and the increased prolactin release

(through an inhibition of the activity of the prolactin inhibiting factor, PIF, at the level of the adenohypophysis).

Administration of haloperidol decanoate as a depot intramuscular injection results in a slow and sustained

release of free haloperidol. The plasma concentrations rise gradually, usually peaking within 3 to 9 days after

injection. The pharmacokinetics of haloperidol decanoate following intramuscular injections are dose-related.

Haloperidol is metabolized by several routes including the cytochrome P450 enzyme system (particularly CYP

After reaching peak plasma concentrations, levels fall with an apparent half-life of about 3 weeks. Haloperidol

It has been suggested that a plasma haloperidol concentration range from 4  $\mu$ g/l to an upper limit of 20 to 25

Nonclinical data reveal no special hazards for humans based on conventional studies of local tolerability, repeat

dose toxicity, genotoxicity and carcinogenicity. In rodents, haloperidol administration showed a decrease in

Haloperidol has been shown to block the cardiac hERG channel in several published studies in vitro. In a

number of in vivo studies intravenous administration of haloperidol in some animal models has caused

significant QTc prolongation, at doses around 0.3 mg/kg i.v., giving Cmax plasma levels 3 to 7 times higher

than the effective human plasma concentrations of 4 to 20ng/ml These intravenous doses which prolonged QTc

did not cause arrhythmias. In some studies higher intravenous doses of 1 to 5 mg/kg haloperidol i.v. caused

QTc prolongation and/or ventricular arrhythmias at Cmax plasma levels 19 to 68 times higher than the effective

Haloperidol decanoate formulation when injected into the muscle is slowly hydrolyzed releasing the active

haloperidol molecule into the systemic circulation. Therefore, preclinical safety evaluations conducted on

haloperidol are also supportive for the decanoate formulation. Specific preclinical evaluations on the decanoate

formulation have revealed no new significant observations over that of the other haloperidol formulations,

except for some local irritation at the injection site. Preclinical evaluations testing haloperidol revealed no

clinically relevant toxic effects in rats or dogs following chronic toxicity studies up to 18 months in rats and 12

months in dogs. A no adverse effect level (NOAEL) of about 2 mg/kg/day and a NOAEL/low adverse effect level

(LOAEL) of about 0.65 to 2 mg/kg/day, has been determined for dogs and rats, respectively. Several in-vitro

and in-vivo tests for mutagenesis of haloperidol showed no relevant information on any mutagenic effect. Short-

term (6 to 12 month) alternative carcinogenicity studies in various mouse models have shown no carcinogenic

potential. Long-term (18 to 24 month) carcinogenicity studies in rats, up to 50 mg/kg/day (diet) showed no

increase in a tumor-generating potential, although in female mice increases in mammary tumors and pituitary

gland adenomas, as well as overall increases in neoplasia were observed at the mid- (6.3 mg/kg/day - diet)

and high-dose (25 mg/kg/day - diet) groups. Mammary tumors can be a consequence of increased prolactin

concentrations in the blood. Numerous antipsychotics also cause hyperprolactinemia in humans. In rodents,

haloperidol administration showed teratogenic effects (cleft palate at 5 mg/kg), changes in skeletal ossification

(0.5 mg/kg) as well as embryo-toxicity (0.5 mg/kg/day). After administration of haloperidol the fertility of female

mice and rats was decreased, possibly due to the sedative effect of the compound.

Due to the oily base, this injectable solution may not be used in infusions.

۲

is excreted in the urine (40%) and faeces (60%). About 1% of the dose is excreted unchanged with the urine.

Steady state plasma levels are reached within 2 to 4 months in patients receiving monthly injections.

The relationship between dose and plasma haloperidol level is roughly linear for doses below 450 mg.

muscle tissue and hydrolysed slowly into free haloperidol which enters the systemic circulation.

Haloperidol decanoate is a potent dopamine antagonist and, therefore, a very incisive neuroleptic.

arrhythmias should be treated with appropriate anti-arrhythmic measures

A resocializing effect has been observed in emotionally withdrawn patients.

Haloperidol crosses the blood-brain barrier easily. Plasma protein binding is 92%.

5. PHARMACOLOGICAL PROPERTIES

5.1. Pharmacodynamic Properties

dystonia, akathisia and parkinsonism).

mania and other agitation syndromes.

5.2. Pharmacokinetic Properties

3A4 or CYP 2D6) and glucuronidation

Multiple-Dose Pharmacokinetics

5.3. Preclinical Safety Data

human plasma concentrations.

Benzyl alcohol 1,5% w/v, sesame oil.

Benzyl alcohol 1,5% w/v, sesame oil.

6.4. Special Precautions for Storage

6.5. Nature and Contents of Container

Store at cool room temperature.

Keep out of reach of children

6.1. List of Excipients

6.2. Incompatibilities

6.3 Shelf Life

Protect from light.

3 years

6. PHARMACEUTICAL PARTICULARS

µg/l is required for a therapeutic response.

fertility, limited teratogenicity as well as embryo-toxic effects.

Therapeutic Concentrations

Absorption

Distribution

Metabolism

Elimination

symptoms may emerge

ATC Code N05AD01

3. Keeping the thumb on the point, sharply break the tip of ampoule while holding firmly the other part of the ampoule in the hand.

Manufactured by: RAFA LABORATORIES LTD. For UNIPHARM Ltd. , P.O.B 21429, Tel-Aviv.

# Comparator and Open-Label Trial Data – Adverse Drug Reactions Reported at <1% Incidence

Thyroxin may facilitate PERICATE toxicity. Antipsychotic therapy in patients with hyperthyroidism should be Additional ADRs that occurred in <1% of Haloperidol Decanoate -treated subjects either of the above trial data In case of severe extrapyramidal reactions, antiparkinsonian medication of the anticholinergic type should be