METOPROLOL IV MYLAN

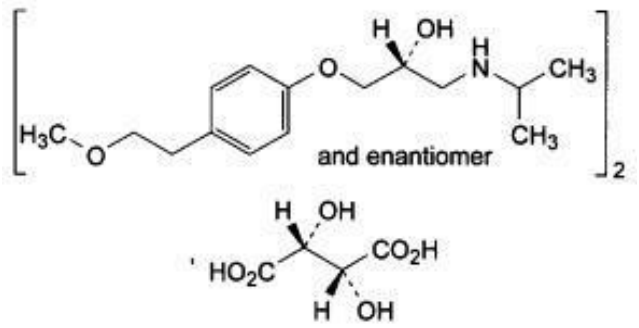
Metoprolol tartrate injection, 5 mg/5 mL

PRODUCT INFORMATION

NAME OF THE MEDICINE

The active ingredient in Metoprolol IV Mylan is metoprolol tartrate.

Metoprolol tartrate is designated chemically as di(±)-1-(isopropylamine)-3-[p-(2-methoxyethyl) phenoxy] -2 propranol L (+)- tartrate. Its molecular formula is $(C_{15}H_{25}NO_3)_2,C_4H_6O_6$



CAS Number: 56392-17-7

DESCRIPTION

Metoprolol tartrate is a white crystalline powder with a melting point of approximately 120°C. The powder is practically odourless. It is very soluble in water, soluble in chloroform, methylene chloride and alcohol, and almost insoluble in benzene, diethylether and acetone. It forms a clear and colourless solution in water.

Molecular weight: 684.81 g/mol

Metoprolol IV Mylan 5 mg/5 mL injection solution vial contains 5 mg of metoprolol tartrate as the active ingredient. It also contains the following excipients: sodium chloride and water for injections.

PHARMACOLOGY

Metoprolol tartrate is a relatively cardioselective beta adrenoceptor blocking drug without intrinsic sympathomimetic activity, and is suited for the treatment of hypertension. It acts on β1- receptors mainly located in the heart at lower doses than those needed to influence the β2-receptors mainly located in the bronchi and peripheral vessels. It reduces the blood pressure in patients with hypertension, in both the standing and supine position. It also reduces the extent of rises in blood pressure occurring in response to physical and mental stress

In angina pectoris metoprolol tartrate reduces the frequency and severity of the attacks and the need for glyceryl trinitrate relief, and increases exercise tolerance.

Metoprolol tartrate has been shown to reduce mortality in patients with suspected or definite

myocardial infarction. The mechanisms of action for these effects of metoprolol tartrate are not fully understood but may be related to a lower incidence of ventricular fibrillation and limitation of infarct size. Metoprolol tartrate has also been shown to reduce the incidence of recurrent myocardial infarction.

In cases of supraventricular tachycardia or atrial fibrillation, and in the presence of extrasystoles, metoprolol tartrate has a regulating effect on the heart rate

Orthostatic reactions or disturbances of electrolyte balance have not been observed.

In therapeutic doses, metoprolol tartrate has less effect on the peripheral circulation and the bronchial muscles than non selective beta-blockers. However, metoprolol tartrate should be used with caution in patients with asthma, and concomitant use of an adrenergic bronchodilator, e.g. terbutaline or salbutamol, is advisable. Patients with reversible airways obstruction who are already taking beta-2 stimulants may require adjustment of the dosage of these if metoprolol tartrate therapy is subsequently introduced.

The stimulant effect of catecholamines on the heart is reduced or inhibited by metoprolol tartrate. This leads to a decrease in heart rate, cardiac contractility, and cardiac output. Metoprolol tartrate will inhibit catecholamine-induced lipolysis.

Metoprolol tartrate has also been shown to reduce diuretic induced increase in plasma renin activity. It will inhibit catecholamine induced insulin secretion to a far lesser degree than non-selective beta-blockers.

Metoprolol tartrate is practically devoid of membrane stabilising activity and does not display partial agonist activity (i.e. intrinsic sympathomimetic activity = ISA) at doses required to produce beta-blockade.

Metoprolol tartrate forms an active metabolite (2-hydroxymetoprolol), which does not, however, contribute significantly to the therapeutic effect.

Metoprolol tartrate is considered a relatively lipid-soluble compound ie less soluble than propranolol and more lipid soluble than atenolol.

Metoprolol tartrate has been shown to exert a prophylactic effect in both classical and common migraine.

Pharmacokinetics

Absorption and Distribution

Metoprolol tartrate is rapidly and almost completely (more than 95%) absorbed from the gastrointestinal tract. It is rapidly and extensively distributed to the extravascular tissues. The volume of distribution is 5.6 L/kg. At therapeutic concentrations, approximately 12% of metoprolol tartrate is bound to human serum proteins.

Metabolism and Elimination

Studies with the radioactively labelled drug have shown that more than 90% of the dose is excreted in the urine within 72 hours, mainly in the form of known metabolites. Only about 3% of the administered dose is excreted unchanged in the urine in 72 hours. The rate of renal excretion of metoprolol tartrate has a linear relationship to its plasma concentration. Metoprolol tartrate is excreted mainly by glomerular filtration

Long-term studies have shown that metoprolol tartrate neither enhances nor inhibits its own metabolism.

The elimination half-life of metoprolol tartrate is between 3 and 5 hours.

Dose-response
The duration of the beta-blocking effect is dose dependent (as measured by reduction of exercise heart rate). For instance, in healthy subjects the effect of 20 mg metoprolol tartrate given intravenously is halved after about 6 hours.

Pharmacokinetics in the elderly
Elderly subjects showed no significant differences in the plasma concentrations of metoprolol tartrate as compared with young subjects, in a study involving eight healthy elderly (mean age 74.5 years) and eight healthy young (mean age 26.3 years) subjects.

INDICATIONS

Intravenous therapy

Disturbances of cardiac rhythm, in particular supraventricular tachyarrhythmias.

CONTRAINDICATIONS

- Bronchospasm

  Beta-adrenergic blockade of the smooth muscle of bronchi and bronchioles may result in an increased airways resistance. These drugs also reduce the effectiveness of asthma treatment. This may be dangerous in susceptible patients.

  Therefore, beta-blockers are contraindicated in any patient with a history of airways obstruction or a tendency to bronchospasm. Use of cardioselective beta blockers can also result in severe bronchospasm. If such therapy must be used, great caution should be exercised. Alternative therapy should be considered.

- Allergic disorders (including allergic rhinitis) which may suggest a predisposition to bronchospasm

- Right ventricular failure secondary to pulmonary hypertension

- Significant right ventricular hypertrophy

- Sinus bradycardia (less than 45-50 beats/minute)

- Second and third degree A-V block

- Shock (including cardiogenic and hypovolaemic shock)

- Hypersensitivity to metoprolol tartrate, related derivatives, or any of the excipients in Metoprolol IV Mylan. Cross-sensitivity between beta-blockers can occur.

- Non-compensated congestive heart failure (but see PRECAUTIONS below).
- Sick-sinus syndrome

- Severe peripheral arterial circulatory disorders

- Myocardial infarction patients with a heart rate of <45 beats/minute, a P-R interval of >0.24 seconds, a systolic blood pressure of <100 mmHg, and/or moderate to severe non-compensated heart failure

- Hypotension
- Untreated phaeochromocytoma (see “PRECAUTIONS”)
- Continuous or intermittent inotropic therapy acting through β-receptor agonism

PRECAUTIONS

Cardiac failure
Beta-blockade depresses myocardial contractility and may precipitate cardiac failure in some patients with a history of cardiac failure, chronic myocardial insufficiency, or unsuspected cardiomyopathy. In patients without a history of cardiac failure, continuing depression of the myocardium may lead to cardiac failure. If signs of cardiac failure are present, the patient should be fully digitalised and/or given a diuretic and carefully monitored. If cardiac failure persists, metoprolol tartrate should be discontinued gradually (see PRECAUTIONS - Abrupt Withdrawal).

Beta-blockers should not be used in patients with untreated congestive heart failure. This condition should first be stabilised. (NOTE: Although congestive heart failure has been considered to be a contraindication to the use of beta-blockers, there is growing literature on the experimental use of beta-adrenergic blocking drugs in heart failure. As further trials are needed to identify which patients are most likely to respond to which drugs, beta-blockers should not normally be prescribed for heart failure outside specialist centres.)

Prinzmetal angina
There is a risk of exacerbating coronary artery spasm if patients with Prinzmetal or variant angina are treated with a beta-blocker. If this treatment is essential, it should only be undertaken in a Coronary or Intensive Care Unit.

Conduction disorders
Very rarely a pre-existing A-V conduction disorder of moderate degree may become aggravated (possibly leading to A-V block). Metoprolol IV Mylan should be administered with caution to patients with first degree A-V block (see CONTRAINDICATIONS).

Phaeochromocytoma
In patients with this condition, an alpha-blocking drug (e.g. phentolamine/phenoxybenzamine) should be administered before the beta-blocker to avoid exacerbation of hypertension.

Diabetes
Metoprolol tartrate should be used with caution in patients with diabetes mellitus, especially those who are receiving insulin or oral hypoglycaemic agents. Diabetic patients should be warned that beta-blockers affect glucose metabolism and may mask some important premonitory signs of acute hypoglycaemia, such as tachycardia

In patients with insulin or non-insulin dependent diabetes, especially labile diabetes, or with a history of spontaneous hypoglycaemia, beta-blockade may result in the loss of diabetic control and delayed recovery from hypoglycaemia. The dose of insulin or oral hypoglycaemic agent may need to be adjusted. Diabetic patients receiving metoprolol tartrate should be monitored to ensure diabetes control is maintained.

Allergic conditions
Allergic reactions may be exaggerated by beta-blockade (eg. allergic rhinitis during the pollen season and allergic reactions to bee and wasp stings). Beta-blockers should be avoided if there is a risk of bronchospasm.

In patients taking beta-blockers, anaphylactic shock assumes a more severe form and may be resistant to normal doses of adrenaline. Whenever possible, beta- blockers should be avoided in patients who are at increased risk of anaphylaxis.

Hyperthyroidism
Special care should be exercised in those patients who are hyperthyroid and also receiving beta-blockers because beta-blockers may mask the clinical signs of developing or continuing hyperthyroidism, resulting in symptomatic improvement without any change in thyroid status. Where metoprolol tartrate is administered to patients having, or suspected of developing thyrotoxicosis, both thyroid and cardiac function should be closely monitored.

Peripheral vascular disease
Beta-blockade may impair the peripheral circulation and exacerbate the symptoms of peripheral vascular disease (see CONTRAINDICATIONS).

Renal disease
In patients with severe renal disease, haemodynamic changes following beta- blockade may impair renal function further. Beta-blockers which are excreted mainly by the kidney may require dose adjustment in patients with renal failure.

Liver disease
Metoprolol tartrate is mainly eliminated by hepatic metabolism (see PHARMACOLOGY - Pharmacokinetics). Therefore, liver cirrhosis may increase the systemic bioavailability of metoprolol tartrate and reduce its total clearance, leading to increased plasma levels.

Intravenous therapy
The intravenous administration of metoprolol tartrate to patients with a systolic blood pressure below 100 mmHg (13.3 kPa) should be carried out with special care as it can result in a further significant decrease of blood pressure.

Concomitant therapy with calcium antagonists
The concomitant use of calcium antagonists with myocardial suppressant and sinus node activity (eg. verapamil and to a lesser extent diltiazem) and beta- blockers may cause bradycardia, hypotension and asystole. Extreme caution is required if these drugs have to be used together.

A calcium antagonist of the phenylalkylamine type (e.g verapamil) should not be administered intravenously to patients receiving metoprolol tartrate because there is a risk of cardiac arrest in this situation. Patients taking oral calcium antagonists of this type in combination with metoprolol tartrate should be closely monitored.

The combination of beta-blockers with dihydropyridine calcium channel blockers with a weak myocardial depressant effect (eg. felodipine, nifedipine) can be administered together with caution. In case excess hypotension develops, the calcium antagonist should be stopped or the dosage reduced.

Clonidine
Concurrent use of beta-blockers and clonidine should be avoided because of the risk of adverse interaction and severe withdrawal symptoms. If administered concomitantly, the clonidine should not be discontinued until several days after the withdrawal of the beta-blocker.

Antiarrhythmic drugs
Care should be taken when prescribing beta-blockers with antiarrhythmic drugs. Interactions have been reported during concomitant beta-blocker therapy with the Class IA agents disopyramide, and less frequently quinidine; Class IB agents, tocainide, mexiletine

and lignocaine; Class IC agents, flecainide and propaferone (not available in Australia); the Class III agent, amiodarone; and the Class IV antiarrhythmic agents (e.g. verapamil).

Catecholamine depleting agents
Concomitant use of drugs such as reserpine and guanethidine requires careful monitoring since the added effect of a beta-blocker may produce an excessive reduction of the resting sympathetic nervous tone.

General anaesthesia
Beta-blockade may have beneficial effects in decreasing the incidence of arrhythmias and myocardial ischaemia during anaesthesia and the post-operative period. It is currently recommended that maintenance beta-blockade be continued peri-operatively. The anaesthetist must be made aware of beta-blockade because of the potential for interactions with other drugs, resulting in severe bradyarrhythmias and hypotension, the decreased reflex ability to compensate for blood loss, hypovolaemia and regional sympathetic blockade, and the increased propensity for vagal-induced bradycardia. Incidents of protracted severe hypotension or difficulty restoring normal cardiac rhythm during anaesthesia have been reported.

Acute initiation of high-dose metoprolol tartrate to patients undergoing non-cardiac surgery should be avoided, since it has been associated with bradycardia, hypotension and stroke including fatal outcome in patients with cardiovascular risk factors.

Modern inhalational anaesthetic agents are generally well tolerated, although older agents (ether, cyclopropane, methoxyflurane, trichlorethylene) were sometimes associated with severe circulatory depression in the presence of beta-blockade. If it is thought necessary to withdraw beta-blocker therapy before surgery, this should be done gradually and completed about 48 hours before surgery (see PRECAUTIONS - Abrupt Withdrawal).

Effects on the heart rate
If the patient develops increasing bradycardia (heart rate less than 50 to 55 beats/minute) the dosage of BETALOC should be gradually reduced or treatment gradually withdrawn (see CONTRAINDICATIONS).

Effects on the thyroid
The effects of beta-blockers on thyroid hormone metabolism may result in elevations of serum free thyroxine (T4) levels. In the absence of any signs or symptoms of hyperthyroidism, additional investigation is necessary before a diagnosis of thyrotoxicosis can be made.

Other metabolic effects
Beta adrenoreceptors are involved in the regulation of lipid as well as carbohydrate metabolism. Some drugs affect the lipid profile adversely although the long-term clinical significance of this change is unknown and the effect appears to be less for drugs with intrinsic sympathomimetic activity.

Effects on the eye and skin
Various skin rashes and conjunctival xerosis have been reported with beta blocking agents. Cross-reactions may occur between beta-blockers, therefore substitutions within the group may not necessarily preclude occurrence of symptoms.

During long-term treatment with the beta-blocking drug practolol a specific rash bearing a superficial resemblance to psoriasis was occasionally described. In a number of the patients affected, this rash was accompanied by adverse effects on the eye (xerophthalmia and/or keratoconjunctivitis) of varying severity. This condition is called the oculomucocutaneous or practolol syndrome. On a few rare occasions, serious otitis media, sclerosing peritonitis and pleurisy have been reported as part of this syndrome.

The oculomucocutaneous syndrome as reported with practolol has not been reported with metoprolol tartrate. However, dry eyes and skin rash have been reported with metoprolol tartrate. If such symptoms occur, discontinuation of metoprolol tartrate should be considered

More recently, an association between Peyronie's disease (a fibrosing induration of the penis) and various beta-blockers has been suggested but is not proven.

Abrupt withdrawal

Care should be taken if beta-blockers have to be discontinued abruptly in patients with coronary artery disease. Severe exacerbation of angina and precipitation of myocardial infarction and ventricular arrhythmias have occurred following abrupt discontinuation of beta-blockade in patients with ischaemic heart disease.

Therefore, it is recommended that the dosage be reduced gradually over a period of 8-14 days during which time the patient's progress should be assessed. metoprolol tartrate should be temporarily reinstituted if the angina worsens.

If the drug must be withdrawn abruptly in these patients, close observation is required. In the peri-operative period metoprolol tartrate should not be withdrawn, unless withdrawal is specifically indicated.

Use in pregnancy – Category C

Beta-blockers may reduce placental perfusion and cause bradycardia in the foetus and newborn infant. Metoprolol tartrate crosses the placental barrier in pregnant women; in one study the concentration in the umbilical vein was almost the same as in maternal vein plasma.

During the late stages of pregnancy these drugs should only be given after weighing the needs of the mother against the risk to the foetus.

The lowest possible dose should be used and discontinuation of treatment should be considered at least 2 to 3 days before delivery to avoid increased uterine contractility and effects of beta-blockade in the newborn (eg. bradycardia, hypoglycaemia).

Use in lactation

Metoprolol tartrate is excreted in human breast milk. Beta-blockers taken by the mother may cause side-effects, e.g. bradycardia, in the breast fed infant, although when the doses used are within the recommended therapeutic range, the very small amount of drug ingested by the infant renders such effects unlikely.

Experience suggests that metoprolol tartrate only need be discontinued during lactation if the infant's hepatic function is severely impaired.

Use in children

The safety and efficacy of metoprolol tartrate in children has not been established.

INTERACTIONS WITH OTHER MEDICINES

Other anti-hypertensive agents

Metoprolol tartrate enhances the effects of other antihypertensive drugs. Particular care is required when initiating administration of a beta-blocker and prazosin together.

Sympathetic ganglion blocking agents, other beta-blockers or monoamine oxidase (MAO) inhibitors
Patients receiving concomitant treatment with sympathetic ganglion blocking agents, other beta-blockers (including eye drops), or monoamine oxidase (MAO) inhibitors should be kept under close surveillance.

Clonidine
If concomitant treatment with clonidine is to be discontinued, the beta-blocker medication should be withdrawn several days before clonidine. The rebound hypertension associated with clonidine withdrawal can be exacerbated by the presence of a beta-blocker. If both drugs are withdrawn simultaneously, a marked rise in blood pressure and/or arrhythmias may result.

Calcium antagonists
When metoprolol tartrate is given together with calcium antagonists of the verapamil and diltiazem type the patient should be monitored for possible negative inotropic and chronotropic effects. Calcium antagonists of the verapamil type should not be given by intravenous administration to patients treated with beta-blockers.

Anti-arrhythmic agents
When metoprolol tartrate is given together with anti-arrhythmic agents the patient should be monitored for possible negative inotropic and chronotropic effects. The negative inotropic and negative chronotropic effects of antiarrhythmic agents of the quinidine type and amiodarone may be enhanced by beta-blockers.

Prostaglandin synthetase inhibiting agents
Concomitant treatment with indomethacin or other prostaglandin synthetase inhibiting agents may decrease the antihypertensive effect of beta-blockers.

Alcohol
Metoprolol tartrate may modify the pharmacokinetic behaviour of alcohol when taken together. The plasma level of metoprolol tartrate may be raised by alcohol.

Liver enzyme effects
Enzyme-inducing and enzyme-inhibiting substances may change the plasma level of metoprolol tartrate. The plasma level of metoprolol tartrate is lowered by rifampicin and may be raised by cimetidine, alcohol, hydralazine and selective serotonin re-uptake inhibitors (SSRI's) eg paroxetine, fluoxetine and sertraline.

Oral antidiabetic agents
The dosages of oral antidiabetics may need to be adjusted in patients receiving beta-blockers (see PRECAUTIONS).

Anaesthetics
Inhalation anaesthetics enhance the cardiosuppressant effect of beta-blocker therapy (see PRECAUTIONS). Metoprolol tartrate may also reduce the clearance of other drugs (e.g. lignocaine).

Warfarin
A limited number of reports have demonstrated a rise in AUC and concentration of warfarin when taken with another beta-blocker. This could potentially increase the anti-coagulant effect of warfarin.

Digitalis glycosides
Digitalis glycosides, in association with beta blockers, may increase atroventriuclar conduction time and may induce bradycardia.

Effects on ability to drive or use machinery

Metoprolol tartrate may cause dizziness, fatigue or visual disturbances (see ADVERSE REACTIONS) and, therefore, may adversely affect the patient's ability to drive or use machinery.

ADVERSE EFFECTS

Occasionally, especially at the start of treatment, beta blockers may give rise to gastro-intestinal upsets, sleep disturbances, or exertional tiredness. These effects, however, are of a mild nature and seldom necessitate a reduction in the dosage.

The following events have been reported as adverse events in clinical trials or reported from routine use. In many cases a relationship with metoprolol tartrate has not been established. The following definitions of frequency are used: very common ≥10%; common 1 - 9.9%; uncommon 0.1 - 0.9%; rare 0.01 - 0.09%; very rare < 0.01%.

Cardiovascular

Common: bradycardia, postural disorders (very rarely with syncope), cold hands and feet (Raynaud's phenomenon), palpitations, clinically significant falls in blood pressure after intravenous administration.

Uncommon: transient deterioration of heart failure symptoms, A-V block I, oedema, precordial pain, cardiogenic shock in patients with acute myocardial infarction*.

Rare: disturbances of cardiac conduction, cardiac arrhythmias.

Very rare: gangrene in patients with pre-existing severe peripheral circulatory disorders.

* Excess frequency of 0.4% compared with placebo in a study of 46000 patients with acute myocardial infarction where the frequency of cardiogenic shock was 2.3% in the metoprolol tartrate group and 1.9% in the placebo group in the subset of patients with low shock risk index. The shock risk index was based on the absolute risk of shock in each individual patient derived from age, sex, time delay, Killip class, blood pressure, heart rate, ECG abnormality, and prior history of hypertension. The patient group with low shock risk index corresponds to the patients in which metoprolol tartrate is recommended for use in acute myocardial infarction.

Central nervous system

Very common: fatigue.

Common: dizziness, headache.

Uncommon: paraesthesia, muscle cramps.

Gastrointestinal

Common: nausea, diarrhoea, constipation, abdominal pain.

Uncommon: vomiting.

Rare: dry mouth.

Haematologic

Very rare: thrombocytopenia.

Hepatic

Rare: liver function test abnormalities.

Very rare: hepatitis

Metabolic

Uncommon: weight gain.

Psychiatric

Uncommon: depression, impaired concentration, somnolence or insomnia, nightmares

Rare: nervousness, anxiety, impotence / sexual dysfunction.

Very rare: amnesia / memory impairment, confusion, hallucinations.

Respiratory

Common: dyspnoea on exertion.

Uncommon: bronchospasm (which may also occur in patients without a history of obstructive lung disease).

Rare: rhinitis.

Sense organs

Rare: disturbances of vision, dry and/or irritated eyes, conjunctivitis (see PRECAUTIONS).

Very rare: tinnitus, taste disturbances.

Skin

Uncommon: rash (in the form of urticaria, psoriasiform and dystrophic skin lesions), increased sweating.

Rare: loss of hair.

Very rare: photosensitivity reactions, aggravated psoriasis

Miscellaneous

Very rare: arthralgia.

DOSAGE AND ADMINISTRATION

Intravenous Therapy

Initially, up to 5 mg is injected intravenously at a rate of 1 to 2 mg per minute. This dose may be repeated at 5-minute intervals until a satisfactory effect is achieved. A total dose of 10 to 15 mg will generally produce a satisfactory effect. Doses of 20 mg or more are unlikely to result in further therapeutic benefit. Blood pressure and ECG should be monitored during the treatment.

Parenteral administration should be conducted by experienced staff with suitable monitoring and resuscitating equipment available.

Contains no antimicrobial agent. Product is for single use in one patient only. Discard any residue.

Paediatrics

The safety and efficacy in children has not been established.

OVERDOSAGE

Overdosage is characterised by excessive bradycardia, hypotension, possible cardiac failure and bronchoconstriction. A-V block, cardiogenic shock, impairment of consciousness (even coma), convulsions, nausea, vomiting and cyanosis may also occur.

Concomitant ingestion of alcohol, antihypertensives, quinidine or barbiturates may aggravate the patient's condition.

The first signs of overdose can appear in 20 minutes after ingestion of tablets, but are more commonly seen within 1 to 2 hours. The effects of massive overdosage may persist for several days despite declining plasma concentrations.

Metoprolol IV Mylan should be withdrawn.

The patient should be hospitalised so vital functions can be monitored. In general, patients with acute or recent myocardial infarction may be more haemodynamically unstable than other patients and should be treated accordingly.

Induction of vomiting or gastric lavage should be undertaken. Treatment should be symptomatic. Marked bradycardia and hypotension should be treated immediately with a β1-stimulant (eg isoprenaline hydrochloride) intravenously at 2 to 5 minute intervals until the desired effect is achieved. Where a β1-stimulant is not available, administer IV atropine 0.5 to 2 mg in order to block the vagus nerve. If a satisfactory response is not achieved, agents such as dopamine, dobutamine, or noradrenaline may be given.

Glucagon may also be given in a dose of 1 to 5 mg (maximum 10 mg). Glucagon activates the adenylcyclase system independently of the β-receptor, augmenting contractility in the presence of β-blockade. A pacemaker may be necessary.

Bronchospasm may necessitate administration of a β2-stimulating agent or IV aminophylline.

Contact the Poisons Information Centre for advice on management.

PRESENTATION AND STORAGE CONDITIONS

Metoprolol IV Mylan injection is a clear, colourless solution for injection, available as 5mg/5mL in clear Type I glass vials with a bromobutyl rubber stopper, sealed with an aluminium seal in packs of 5.

5mg/5mL, 5 vials (AUST R 204665).

Storage
Store below 25°C. Protect from light.

NAME AND ADDRESS OF THE SPONSOR

Alphapharm Pty Limited
Level 1, 30 The Bond
30-34, Hickson Road
Millers Point NSW 2000

POISON SCHEDULE OF THE MEDICINE

Schedule 4 – Prescription-Only Medicine

DATE OF FIRST INCLUSION IN THE AUSTRALIAN REGISTER OF THERAPEUTIC GOODS (THE ARTG):

07/04/2014

DATE OF MOST RECENT AMENDMENT

10/03/2015

Metoprolol IV Mylan_pi\Mar15/01