

## 1. NAME OF THE MEDICINAL PRODUCT

Dipyrone Kalceks 500 mg/ml

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

1 ml solution for injection contains 500 mg metamizole sodium monohydrate (dipyrone).

One ampoule (2 ml) contains 1000 mg (1 gr) metamizole sodium monohydrate (dipyrone).

One ampoule (5 ml) contains 2500 mg (2.5 gr) metamizole sodium monohydrate (dipyrone).

Excipient with known effect: Sodium

1 ml of solution for injection contains 32.71 mg of sodium.

For the full list of excipients, see section 6.1.

## 3. PHARMACEUTICAL FORM

Solution for injection.

Clear, almost colourless to brownish-yellow coloured solution, practically free from particles

## 4. CLINICAL PARTICULARS

### 4.1 Therapeutic indications

#### *As an Analgesic*

Dipyrone Kalceks 500 mg/ml solution for injection, by intravenous administration, is indicated for the relief of severe and acute pain when oral treatment is not feasible or suitable, as in post-traumatic or post-surgical pain, biliary or renal colic, and pain associated with malignant diseases.

#### *As an Antipyretic*

Dipyrone Kalceks 500 mg/ml solution for injection, by intramuscular administration, is indicated to lower temperature in life-threatening situations, when this cannot be achieved by other means. Hyperthermic patients in critical condition may also be treated in a non-hospital environment, under close medical supervision.

### 4.2 Posology and method of administration

*Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit.*

#### **Adults and Adolescents Over 14 Years of Age**

##### ***Intravenous Administration as an Analgesic***

1 g (2 ml), administered by slow injection, up to 4 times daily.

In severe pain, 2.5 g (5 ml) may be administered twice daily (the maximum daily dosage is 5 g).

Intravenous administration of dipyrone should be carried out slowly over a period of at least 5 minutes, followed by reasonable clinical observation.

Intramuscular administration of dipyron for relief of pain is not recommended.  
However, if medical circumstances require such administration, all due precautions should be exercised to permit reasonable clinical observation.

***Intramuscular Administration as an Antipyretic***

2.5 g (5 ml), to be repeated only if deemed necessary.

***Infants and Children***

Use of dipyron is contraindicated in infants under 3 months of age or 5 kg/body weight. In infants 3-12 months, Dipyron Kalceks 500 mg/ml solution for injection must be administered by the intramuscular route only. In older children, the injection may be administered by either the intramuscular or intravenous routes.

Dosage guidelines for the administration of Dipyron Kalceks 500 mg/ml solution for injection as an analgesic and/ or antipyretic, in infants over 3 months of age and in children, are presented in the table below.

**Dipyron Kalceks 500 mg/ml solution for injection**

**- Dosage Guidelines in Infants and children**

Age	Smallest Single Dosage	Maximum Daily Dosage
3-5 months	0.1 ml I.M. only	4 x 0.2 ml
6-11 months	0.1 ml I.M. only	4 x 0.3 ml
1-2 years	0.2 ml I.M./I.V.	4 x 0.4 ml
3-4 years	0.2 ml I.M./I.V.	4 x 0.6 ml
5-7 years	0.4 ml I.M./I.V.	4 x 0.8 ml
8-11 years	0.5 ml I.M./I.V.	4 x 1.0 ml
12-14 years	0.8 ml I.M./I.V.	4 x 1.6 ml

**Special populations**

**Elderly Population, debilitated patients and patients with reduced creatinine clearance**

The dose should be reduced in elderly people, in debilitated patients and in those with reduced creatinine clearance, as elimination of the metabolic products of Dipyron may be prolonged.

**Hepatic and renal impairment**

As the elimination rate is reduced when renal or hepatic function is impaired, multiple high doses should be avoided. No dose reduction is needed when used only for a short time. To date, there has been insufficient experience with long-term use of dipyron in patients with severe hepatic and renal impairment.

**Duration of administration**

The duration of administration depends on the nature and severity of the disorder.

In the case of prolonged treatment with dipyron, regular blood counts, including differential blood count, are necessary.

### 4.3 Contraindications

- Hypersensitivity to the active substance or to other pyrazolones or pyrazolidines (this includes patients who have reacted with agranulocytosis, for example, after administration of these substances) or to any of the excipients listed in section 6.1.
- Patients with known analgesic asthma syndrome or known urticaria/angio-oedema type intolerance of analgesics, i.e., patients who react with bronchospasm or other anaphylactoid reactions (e.g., urticaria, rhinitis, angio-oedema) to salicylates, paracetamol or other non-narcotic analgesics such as diclofenac, ibuprofen, indometacin or naproxen.
- Disturbances of bone marrow function (e.g., after treatment with cytostatics) or disorders of the haematopoietic system.
- Acute intermittent hepatic porphyria (risk of triggering a porphyria attack).
- Existing hypotension and unstable circulatory situation.
- Newborn babies and infants under 3 months of age or weighing less than 5 kg, as no scientific data are available on the safety of its use.
- Infants (aged 3 months to 1 year) with regard to intravenous injection.

### 4.4 Special warnings and precautions for use

Dipyrone Kalceks 500 mg/ml solution for injection contains the pyrazolone derivative metamizole and carries the rare but life-threatening risks of shock and agranulocytosis (see section 4.8).

Patients who display anaphylactoid reactions to dipyrone are at particular risk of reacting in the same way to other non-narcotic analgesics.

Patients who display an anaphylactic or other immunologically mediated reaction (e.g., agranulocytosis) to dipyrone are also at particular risk of reacting in the same way to other pyrazolones and pyrazolidines.

Patients who display an anaphylactic or other immunologically mediated reaction to other pyrazolones, pyrazolidines or other non-narcotic analgesics are also at high risk of having such a reaction to Dipyrone Kalceks 500 mg/ml solution for injection.

#### Agranulocytosis

The treatment must be suspended immediately as soon as neutropenia ( $<1,500$  neutrophils/mm<sup>3</sup>) occurs and the full blood count monitored until it returns to normal. If the following signs and symptoms occur, patients should be instructed to stop using this medicinal product immediately and seek medical advice: unexpected deterioration in their general condition (such as fever, rigor, sore throat, difficulty swallowing), refractory or new-onset fever and painful mucosal changes, especially in the region of the mouth, nose and throat or in the genital or anal region.

The use of Dipyrone Kalceks 500 mg/ml solution for injection must be stopped immediately and the blood count (including differential blood count) checked. Do not wait for the results of the laboratory tests before stopping the treatment (see section 4.8).

#### Thrombocytopenia

If signs of thrombocytopenia occur such as an increased bleeding tendency and petechiae on the skin and mucosae (see section 4.8), the use of Dipyrone Kalceks 500 mg/ml solution for injection must be stopped immediately and the blood count

(including differential count) checked. Do not wait for the results of the laboratory tests before stopping the treatment.

#### Pancytopenia

If pancytopenia occurs, the treatment must be stopped immediately and the full blood count monitored until it normalises (see section 4.8). All patients should be informed that they should consult the doctor immediately if signs and symptoms indicating blood dyscrasia occur during the treatment (e.g., general malaise, infection, persistent fever, bruising, bleeding, pallor).

#### Anaphylactic/anaphylactoid reactions

In choosing the route of administration, it must be borne in mind that parenteral administration of dipyrone is associated with a higher risk of anaphylactic or anaphylactoid reactions.

The risk of potentially serious anaphylactoid reactions to dipyrone is distinctly higher in patients with:

- analgesic asthma syndrome or urticaria/angio-oedema type intolerance of analgesics (see section 4.3).
- bronchial asthma, especially if accompanied by rhinosinusitis and nasal polyps.
- chronic urticaria.
- intolerance of dyes (e.g., tartrazine) and preservatives (e.g., benzoates).
- alcohol intolerance. Such patients react even to small quantities of alcoholic drinks with symptoms such as sneezing, eye watering and pronounced facial reddening. An alcohol intolerance of this kind can be a sign of a previously undiagnosed analgesic asthma syndrome (see section 4.3).

Anaphylactic shock can occur, primarily in sensitive patients. Particular caution is therefore indicated in the case of administration to patients with asthma or atopy. The patient must be asked about this before the administration of Dipyrone Kalceks 500 mg/ml solution for injection. In patients with an increased risk for anaphylactoid reactions, Dipyrone Kalceks 500 mg/ml solution for injection may be used only after carefully weighing up the possible risks against the expected benefit (see also section 4.3). If Dipyrone Kalceks 500 mg/ml solution for injection is administered in such cases, the patient must be closely monitored by a doctor, ensuring emergency equipment is on standby.

#### Severe skin reactions

Severe cutaneous adverse reactions (SCARs), including Stevens-Johnson syndrome (SJS), toxic epidermal necrolysis (TEN) and drug reaction with eosinophilia and systemic symptoms (DRESS), which can be life-threatening, or fatal, have been reported in connection with dipyrone therapy.

The patients are to be informed about the signs and symptoms and monitored closely for skin reactions.

If signs and symptoms suggestive of these reactions occur, Dipyrone Kalceks 500 mg/ml solution for injection should be discontinued immediately and dipyrone must not be resumed at any stage (see section 4.3).

#### Isolated hypotensive reactions

Dipyrone can trigger hypotensive reactions (see also section 4.8). These reactions are possibly dose-dependent. They are more likely in the case of parenteral than with enteral administration. The risk of such reactions is also higher in:

- the case of too rapid intravenous injection (see section 4.2),
- patients with, for example, pre-existing hypotension, volume depletion or dehydration, unstable circulation or incipient circulatory failure (e.g., patients with myocardial infarction or multiple injuries),
- patients with a high fever.

Careful verification of the indication (see also section 4.3) and close monitoring are therefore necessary in these patients. Preventive measures (e.g., stabilisation of the circulation) may be necessary to reduce the risk of hypotensive reactions.

Dipyrone may be used only with careful monitoring of the haemodynamic parameters in patients in whom a fall in blood pressure must be avoided at all costs, e.g., in severe coronary heart disease or relevant stenoses of the blood vessels supplying the brain.

#### Drug-induced liver damage

Cases of acute hepatitis with a predominantly hepatocellular pattern occurring within a few days to a few months of the start of treatment have been reported in patients treated with metamizole. The signs and symptoms include raised serum levels of liver enzymes with or without jaundice, often in association with other drug hypersensitivity reactions (e.g. rash, blood count abnormalities, fever and eosinophilia) or accompanied by features of autoimmune hepatitis. Most patients recovered after the discontinuation of metamizole treatment. In isolated cases, however, progression to acute liver failure with the need for liver transplantation has been reported.

The mechanism of metamizole-induced liver damage has not been clearly elucidated. However, the data suggest an immunoallergic mechanism.

Patients should be told to consult their doctor if they develop symptoms that suggest liver damage. Treatment with metamizole should be discontinued in such patients and hepatic function checked.

Metamizole should not be administered again if liver damage has previously occurred on treatment with metamizole for which no other cause could be found.

#### Impaired renal or hepatic function

The risks should be weighed rigorously against the benefits and appropriate precautions taken before Dipyrone Kalceks 500 mg/ml solution for injection is used in patients with renal or hepatic dysfunction (see section 4.2).

#### **Dipyrone Kalceks 500 mg/ml solution for injection contains sodium**

In daily dose up to 0.7 ml this medicinal product contains less than 1 mmol sodium (23 mg), that is to say essentially 'sodium-free'. If daily dose 0.8 ml or more is administered (equivalent to more than 1 mmol sodium) the following should be taken into account: This medicinal product contains 32.71 mg sodium per ml of solution, equivalent to 1.64% of the WHO recommended maximum daily intake of 2 g sodium for an adult.

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

#### Pharmacokinetic induction of metabolic enzymes:

Dipyron can induce metabolic enzymes including CYP2B6 and CYP3A4. The concomitant use of dipyron with bupropion, efavirenz, methadone, valproate, ciclosporin, tacrolimus or sertraline can bring about a reduction in the plasma concentration of these medicinal products, with a potential decrease in clinical efficacy. Caution is therefore required in the case of co-administration with dipyron; the clinical response and/or active substance levels should be monitored accordingly.

If dipyron and chlorpromazine are co-administered, severe hypothermia can occur.

The concomitant administration of dipyron with methotrexate can potentiate the haematotoxicity of methotrexate, especially in elderly patients. This combination should therefore be avoided.

Dipyron, if co-administered, can reduce the effect of aspirin on platelet aggregation. Dipyron should therefore be used with caution in patients who are taking low-dose aspirin for cardioprotection.

It is known of the pyrazolone substance class that interactions can occur with oral anticoagulants, captopril, lithium and triamterene, as well as changes in the efficacy of antihypertensives and diuretics. It is not known to what extent dipyron has these Interactions.

#### Effect on test methods

Interference with laboratory diagnostic tests based on the Trinder reaction or Trinder-like reactions (e.g. determination of serum creatinine, triglyceride, HDL-cholesterol or uric acid levels) have been reported in patients on treatment with dipyron.

Possible interaction between dipyron and diagnostics :

1. Enzymatic Creatinine
2. Cholesterol
3. Triglyceride
4. Uric acid
5. Lactase
6. Lipase.

The possible interaction is significantly lower results than the real values in patients treated by dipyron prior to undergoing the above testing. In case any of those tests have to be performed, dipyron has to be administered after the testing.

## **4.6 Pregnancy and lactation**

### Pregnancy

There are insufficient data for the use of dipyron in pregnant women. Dipyron crosses the placenta. Dipyron did not show any teratogenic effects in animal studies (see section 5.3). As sufficient data for humans are not available, dipyron should be used during pregnancy only after a rigorous risk-benefit assessment by a doctor.

Although dipyron is only a weak inhibitor of prostaglandin synthesis, the possibility of premature closure of the ductus arteriosus (Botallo's duct) and of perinatal complications resulting from a reduction in foetal and maternal platelet aggregability cannot be ruled out. The use of dipyron in the third trimester (after week 28) should be limited to cases which do not respond to the use of paracetamol and used at the lowest effective dose.

### Lactation

Dipyrone metabolites are excreted in breast milk. The use of dipyrone should be limited to cases which do not respond to the use of paracetamol or ibuprofen.

#### 4.7 Effects on ability to drive and use machines

In the recommended dose range, no impairment of concentration and reaction speeds is known. Nevertheless, as a precaution, the possibility of impairment should be considered, at least in the case of higher dosages, and the use of machines, driving or other dangerous activities should be avoided. This applies particularly if the product is taken with alcohol.

#### 4.8 Undesirable effects

The frequency of undesirable effects is stated on the basis of the following categories:

Very common	$\geq 1/10$
Common	$\geq 1/100, < 1/10$
Uncommon	$\geq 1/1000, < 1/100$
Rare	$\geq 1/10,000, < 1/1000$
Very rare	$< 1/10,000$
Not known	Frequency cannot be estimated from the available data

#### *Blood and lymphatic system disorders*

*Rare:* Leucopenia.

*Very rare:* Agranulocytosis, including cases with a fatal outcome, thrombocytopenia.

*Not known:* Aplastic anaemia, pancytopenia, including cases with a fatal outcome.

These reactions can occur even if dipyrone has previously been administered without complications.

There are isolated reports suggesting that the risk of agranulocytosis may possibly be increased if Dipyrone Kalceks 500 mg/ml solution for injection is administered for longer than a week.

This reaction is not dose-dependent and can occur at any time during treatment. It manifests as high fever, shivering, sore throat, swallowing difficulties and inflammation of the mouth, nose, throat, genitals or anal regions. In patients receiving antibiotics, however, these signs may be minimal. Swelling of lymph nodes or the spleen is minor or completely absent. The erythrocyte sedimentation rate is greatly increased and granulocytes considerably reduced or completely absent. In general, but not always, haemoglobin, erythrocyte and platelet values are normal (see section 4.4).

Immediate cessation is crucial to recovery. It is therefore urgently recommended to stop Dipyrone Kalceks 500 mg/ml solution for injection immediately, without waiting for the laboratory results, if an unexpected deterioration in the patient's general condition

occurs, the fever does not subside or recurs, or painful changes occur in the mucosa, especially in the mouth, nose and throat.

Typical signs of thrombocytopenia include an increased bleeding tendency and petechiae on the skin and mucosae.

If pancytopenia occurs, the treatment must be stopped immediately and the full blood count monitored until it normalises (see section 4.4).

#### *Immune system disorders*

*Rare:* Anaphylactoid or anaphylactic reactions\*.

*Very rare:* Analgesic-induced asthma syndrome. In patients with analgesic asthma syndrome, intolerance reactions typically appear in the form of asthma attacks.

*Not known:* Anaphylactic shock\*.

\*These reactions can occur especially after parenteral administration, can be serious and life-threatening, and in some cases have a fatal outcome. They can occur even if dipyron has previously been administered without complications.

Such reactions can develop during the injection or immediately after ingestion, but also hours later. However, in the majority of cases, they occur during the first hour after administration. Milder reactions typically manifest as skin and mucous membrane reactions (e.g., itching, burning, reddening, urticaria, swelling), dyspnoea and rare gastrointestinal symptoms. Milder reactions of this kind can transition into more severe forms with generalised urticaria, severe angio-oedema (including laryngeal), severe bronchospasm, arrhythmias, hypotension (sometimes preceded by a rise in blood pressure) or circulatory shock.

Dipyron Kalceks 500 mg/ml solution for injection must therefore be stopped immediately if skin reactions occur.

#### *Cardiac disorders*

*Not known:* Kounis syndrome.

#### *Vascular disorders*

*Uncommon:* Hypotensive reactions during or after administration which are possibly pharmacological in origin and not accompanied by other signs of an anaphylactoid or anaphylactic reaction. Such a reaction can lead to severe hypotension. Rapid intravenous injection increases the risk of a hypotensive reaction.

Even in cases of hyperpyrexia, dose-dependent critical hypotension can occur without other signs of a sensitivity reaction.

#### Gastrointestinal disorders

Not known: Cases of gastrointestinal bleeding have been reported.

#### Hepatobiliary disorders

Not known: Drug-induced liver damage including acute hepatitis, jaundice, raised liver enzymes (see section 4.4)



#### *Skin and subcutaneous tissue disorders*

*Uncommon:* Fixed drug eruption.

*Rare:* Rash (e.g., maculopapular rash).

*Very rare:* Stevens-Johnson syndrome or toxic epidermal necrolysis (see section 4.4).

*Not known:* Drug reaction with eosinophilia and systemic symptoms (DRESS, see section 4.4).

#### *Renal and urinary disorders*

*Very rare:* Acute deterioration of kidney function in which, very rarely, proteinuria, oligo- or anuria or acute kidney failure can develop; acute interstitial nephritis.

#### *General disorders and administration site conditions*

If the product is injected, pain and local reactions, very rarely even phlebitis, can occur at the injection site.

Red discoloration of the urine has been reported; this may be caused by the harmless dipyrone metabolite rubazonic acid, which is present at a low concentration.

#### **Reporting of suspected adverse reactions**

Reporting suspected adverse reactions after authorization of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Any suspected adverse events should be reported to the Ministry of Health according to the National Regulation by using an online form <http://sideeffects.health.gov.il>

#### **4.9 Overdose**

##### *Symptoms of overdose:*

Nausea, vomiting, abdominal pain, impairment of kidney function/acute kidney injury (e.g., in the form of interstitial nephritis) and – more rarely- central-nervous symptoms (dizziness, drowsiness, coma, convulsions) and hypotension, to the extent of shock and tachycardia, have been observed in the context of acute overdose.

After very high doses, the excretion of rubazonic acid can cause red discoloration of the urine.

##### *Treatment in cases of overdose:*

There is no known specific antidote to dipyrone. If the ingestion of dipyrone has only recently occurred, an attempt can be made to limit absorption into the body through primary detoxification measures (e.g. gastric lavage) or measures to reduce absorption (e.g. activated charcoal). The main metabolite (4-N- methylaminoantipyrine) can be eliminated by haemodialysis, haemofiltration, haemoperfusion or plasma filtration. Treatment of intoxication, like the prevention of serious complications, can also require general and specialist intensive care monitoring and treatment.

##### *Emergency treatment of serious hypersensitivity reactions (shock):*

At the first signs (e.g., skin reactions such as urticaria and flushing, agitation, headache, Sweating, nausea), stop the injection. Leave the cannula in the vein, or create a venous access. In addition to standard emergency measures such as the head-down position, keeping the airways clear, and administering oxygen, the administration of sympathomimetics, volume replacement or glucocorticoids may be necessary.

## **5. PHARMACOLOGICAL PROPERTIES**

### **5.1 Pharmacodynamic properties**

Pharmacotherapeutic group: analgesics; other analgesics and antipyretics; pyrazolones  
ATC code: N02BB02

Dipyrone is a pyrazolone derivative and has analgesic, antipyretic and spasmolytic properties. The action mechanism has not been fully explained. Some study results show that dipyrone and its main metabolite (4-N-methylaminoantipyrine) probably have a central as well as a peripheral mechanism of action.

### **5.2 Pharmacokinetic properties**

After oral administration, dipyrone is completely hydrolysed to the pharmacologically active 4-N-methylaminoantipyrine (MAA). The bioavailability of MAA is approximately 90% and is somewhat higher after oral administration than after parenteral administration. Taking the product with meals has no relevant influence on the kinetics of dipyrone.

The main metabolite of metamizole, MAA, is further metabolised in the liver through oxidation and demethylation, followed by acetylation.

Its clinical efficacy is based mainly on MAA, and to a certain extent also on the metabolite 4-aminoantipyrine (AA). The AUC values for AA are approximately 25% of the AUC values for MAA. The metabolites 4-N-acetylaminoantipyrine (AAA) and 4-N-formylaminoantipyrine (FAA) appear to be pharmacologically inactive.

It must be noted that all metabolites have non-linear pharmacokinetics. It is not known whether this phenomenon has any clinical significance. The accumulation of metabolites is of little importance in short-term treatment.

Dipyrone crosses the placenta. Dipyrone metabolites are excreted in breast milk.

Plasma protein binding for MAA is 58%, for AA 48%, for FAA 18%, and for AAA 14%.

The plasma half-life of dipyrone after intravenous administration is about 14 minutes.

About 96% of a radiolabelled dose is recovered in the urine after intravenous administration, and about 6% in the faeces. After a single oral dose, 85% of the metabolites excreted in the urine could be identified. Of these, 3±1 % were MAA, 6±3 % AA, 26±8 % AAA and 23±4 % FAA. Renal clearance in mL/min after a single oral dose of 1 g dipyrone was 5±2 % for MAA, 38±13 % for AA, 61±8 % for AAA and 49±5 % for FAA. The respective plasma half-lives in hours were 2.7±0.5 % for MAA, 3.7±1.3 % for AA, 9.5±1.5 % for AAA and 11.2±1.5 % for FAA.

#### Elderly patients and patients with hepatic dysfunction

The AUC increases 2- to 3-fold, in the treatment of elderly patients. After a single oral dose, the half-life of MAA and FAA increased approximately threefold in patients with cirrhosis of the liver, whereas the half-life of AA and AAA did not increase to the same extent. High doses should be avoided in these patients.

#### Children and adolescents

Children display more rapid elimination of the metabolites than adults.

#### Renal impairment

The data available from patients with impaired renal function show a reduced elimination rate for some metabolites (AAA and FAA). High doses should therefore be avoided in these patients.

### **5.3 Preclinical safety data**

Subchronic and chronic toxicity studies in various animal species are available. Rats received 100 to 900 mg dipyron per kg BW orally for 6 months. At the highest dose (900 mg per kg BW), an increase in reticulocytes and Heinz bodies was observed after 13 weeks.

Dogs received 30 to 600 mg per kg BW for 6 months. At doses of 300 mg per kg BW and higher, dose-dependent haemolytic anaemia and dose-dependent changes in renal and hepatic function were observed.

Contradictory results from *in vitro* and *in vivo* studies exist for dipyron in the same test systems.

Long-term studies in rats did not yield any evidence of carcinogenic potential. In two out of three long-term studies in mice, an increase in hepatocellular adenomas was observed at high doses.

Embryotoxicity studies in rats and rabbits did not yield any evidence of teratogenic effects.

Embryolethal effects were observed in rabbits from a daily dose of 100 mg per kg BW, which was not yet toxic to the mothers. Embryolethal effects occurred in rats at doses in the maternally toxic range. Daily doses above 100 mg per kg BW led to prolonged gestation and impairment of the birth process in rats, with increased mortality of mothers and young.

Fertility tests showed a slightly reduced gestation rate in the parent generation at doses above 250 mg per kg BW per day. The fertility of the F1 generation was not affected.

Dipyron metabolites pass into the mother's milk. There is no experience of their effects on the suckling young.

## **6. PHARMACEUTICAL PARTICULARS**

### **6.1 List of excipients**

Hydrochloric acid (for pH adjustment)

Water for injections

### **6.2 Incompatibilities**

This medicine must not be mixed with other medicinal products except those mentioned in section 6.6 due to possible incompatibilities.

### **6.3 Shelf life**

The expiry date of the product is indicated on the packaging materials.

#### Following dilution:

Mixtures of NaCl solution 0.9% and Ringer's solution with Dipyron Kalceks 500 mg/ml solution for injection should be applied within 6 hours at room temperature. Mixtures of glucose 5% solution and Dipyron Kalceks 500 mg/ml solution for injection should be applied within 20 minutes.

From a microbiological point of view the product should be used immediately. If not used immediately, in-use storage times and conditions prior to use are the responsibility of the user.

**6.4 Special precautions for storage**

Store below 25°C. Store in the original package in order to protect from light. Do not freeze.

**6.5 Nature and contents of container**

Type I hydrolytic resistant class brown glass ampoules of 2 ml or 5 ml in the PVC liner.

Liners are placed into a cardboard box.

Pack size: 10 x 2 ml, 100 x 2 ml, 5 x 5 ml, 100 x 5 ml.

Not all pack sizes may be marketed.

**6.6 Special precautions for disposal and other handling**

The solution for injection may be diluted using 5% glucose solution, 0.9% sodium chloride solution or Ringer's solution. For further information please refer to section 6.3.

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

**7. MANUFACTURER**

HBM Pharma s.r.o, Sklabinska 30, 036 80 Martin, Slovakia

**8. MARKETING AUTHORIZATION HOLDER**

A.L.Medi-Market Ltd., 3 Hakatif Street, Emek Hefer Industrial Park, 3877701

**9. REGISTRATION NUMBER**

163-58-35578-00

**10. REVISION DATE**

Revised in September 2022 according to MoH's guidelines