

**Read all of this leaflet carefully before you start taking this medicine.**

- Keep this leaflet. You may need to read it again.
- If you have further questions, ask your doctor or pharmacist.
- This medicine has been prescribed for you. Do not pass it on to others. It may harm them, even if their symptoms are the same as yours.
- If any of the side effects gets serious, or if you notice any side effects not listed in this leaflet, please tell your doctor or pharmacist.

### **Berirab® P**

Solution for injection for intramuscular use

**Active ingredient:** Human rabies immunoglobulin

### **PHARMACOTHERAPEUTIC GROUP**

Immune sera and immunoglobulins, human rabies immunoglobulin

ATC-code: J06B B05

### **THERAPEUTIC INDICATIONS**

Post-exposure prophylaxis of rabies infection after

- exposure to scratches, bites or other injuries caused by a suspected rabid animal
- mucous membrane contamination with infectious tissue or saliva of a suspected rabid animal
- contact of mucous membranes or newly skin injury with rabies live attenuated vaccine e.g. vaccination baits.

Human rabies immunoglobulin must always be used in combination with a rabies vaccine.

National and/or WHO guidelines regarding protection against rabies should be observed.

### **CONTRAINDICATIONS**

Because of the life-threatening risk due to rabies, there are no contraindications to the administration of rabies immunoglobulin.

### **SPECIAL WARNINGS AND PRECAUTIONS FOR USE**

Ensure that Berirab P is not administered into a blood vessel because of the risk of shock.

True hypersensitivity reactions are rare. Berirab P contains a small quantity of IgA. Individuals who are deficient in IgA have the potential for developing IgA

antibodies and may have anaphylactic reactions after administration of blood components containing IgA. Rarely human rabies immunoglobulin can induce a fall in blood pressure with anaphylactic reactions, even in patients who had tolerated previous treatment with human immunoglobulin.

Therapeutic measures depend on the nature and severity of the event. The current medical standards for shock treatment are to be observed.

Patients should be observed for at least 20 minutes after administration of Berirab P.

Particularly in cases of inadvertent i.v. injection, patients should be observed for longer term (at least 1 hour) after administration.

#### **Important information about some of the ingredients of Berirab P**

This medicinal product contains less than 1 mmol sodium (23 mg) per dose, i.e. essentially "sodium free".



#### **Virus safety**

Standard measures to prevent infections resulting from the use of medicinal products prepared from human blood or plasma include selection of donors, screening of individual donations and plasma pools for specific markers of infection and the inclusion of effective manufacturing steps for the inactivation/removal of viruses. Despite this, when medicinal products prepared from human blood or plasma are administered, the possibility of transmitting infective agents cannot be totally excluded. This also applies to unknown or emerging viruses and other pathogens.

The measures taken are considered effective for enveloped viruses such as HIV, HBV and HCV, and for the non-enveloped viruses HAV and parvovirus B19.

There is reassuring clinical experience regarding the lack of hepatitis A or parvovirus B19 transmission with immunoglobulins and it is also assumed that the antibody content makes an important contribution to the viral safety

It is strongly recommended that every time that Berirab P is administered to a patient, the name and batch number of the product are recorded in order to maintain a link between the patient and the batch of the product.

#### **Pregnancy and lactation**

The safety of Berirab P for use in human pregnancy has not been established in controlled clinical trials. Long lasting clinical experience with immunoglobulins does indicate that no harmful effects on the course of



pregnancy, on the foetus or the neonate are to be expected.

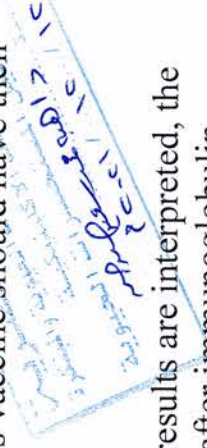
### **Effects on ability to drive and use machines**

No effects on the ability to drive and use machines have been observed.

## **INTERACTIONS WITH OTHER MEDICINAL PRODUCTS AND OTHER FORMS OF INTERACTIONS**

### **Vaccinations with live attenuated virus vaccines**

Immunoglobulin administration may impair the efficacy of live attenuated virus vaccines such as measles, rubella, mumps and varicella vaccines for a period of up to three months. After administration of Berirab P an interval of at least three months should elapse before vaccination with live attenuated virus vaccines. In the case of measles, this impairment may persist for up to four months. Therefore, patients receiving measles vaccine should have their antibody status checked.



### **Interference with serological testing**

It has to be considered that when serological test results are interpreted, the transitory rise of passively transferred antibodies after immunoglobulin injection may result in misleading positive test results.

Passive transmission of antibodies to erythrocyte antigens, e.g., A, B and D may interfere with some serological tests for red cell allo-antibodies (e.g. Coombs test).

### **Incompatibilities**

In the absence of compatibility studies, this medicinal product must not be mixed with other medicinal products, diluents or solvents.

## **POSODOLOGY AND METHOD OF ADMINISTRATION**

### **Posology**

Post-exposure prophylaxis consists of a regimen of one dose of immunoglobulin and full courses of rabies vaccination. Rabies immunoglobulin and the first dose of rabies vaccine should be given as soon as possible after exposure. Additional doses of rabies vaccine should be given according to official guidelines or the manufacturer's instruction.

Rabies prophylaxis exclusively with simultaneous vaccination: recommended dose of rabies immunoglobulin is 20 IU Berirab P per kg body weight (bw). Because of the risk of interference with antibody production related to

vaccination, neither the dose should be increased nor repeat rabies immunoglobulin be given even if the onset of the simultaneous prophylaxis is delayed.

### **Method of administration**

Human rabies immunoglobulin should be administered via the intramuscular route.

Do not use solutions which are cloudy or contain residues (deposits/particles). Berirab P is a ready-for-use solution and should be administered at body temperature.

Of the total quantity of rabies immunoglobulin, as much as possible should be instilled deeply into and around the wound. The remainder is to be injected i.m. preferably into the vastus lateralis muscle with the patient lying down.

If comparatively large total volumes are required, it is advisable to administer them in divided doses at different sites. This applies in the case of doses above 2 ml for children up to 20 kg bw and doses above 5 ml for persons above 20 kg bw.

In case of simultaneous prophylaxis the immunoglobulin and the vaccine should be administered at contralateral sites of the body.

The immunoprophylaxis should be carried out immediately even in case that suspicion is not clarified if the animal was infected. Wounds should not be primarily sewed. Parts of the body that are possibly contaminated and all wounds are to be cleaned immediately with soap or detergent, washed well with water and treated with 70 % alcohol or iodine tincture; this is also true for contamination with vaccine solution from vaccination baits.

In the presence of a coagulation disorder, in the case of which intramuscular injections are contraindicated, Berirab P may be given subcutaneously.

Afterwards the injection site should be compressed with a swab.

However, it should be noted that there are no clinical efficacy data to support administration by the subcutaneous route.

### **UNDESIRABLE EFFECTS**

In rare cases the following adverse reactions may occur:

- allergic reactions including fall in blood pressure, dyspnoea, cutaneous reactions, in isolated cases reaching as far as anaphylactic shock, even when the patient has shown no hypersensitivity to previous administration of immunoglobulins.

- generalized reactions such as chills, fever, headache, malaise, nausea, vomiting, arthralgia and moderate back pain.



- cardiovascular reactions particularly if the product is inadvertently injected intravascularly.

#### Local reactions

At the injection site local pain, tenderness or swelling can be observed in rare cases.

For safety with respect to transmissible agents, see section “Special warnings and precautions for use”.

#### Reporting of side effects

If you get any side effects, talk to your doctor, nurse or pharmacist. This includes any possible side effects not listed in this leaflet. By reporting side effects you can help provide more information on the safety of this medicine.

#### **STORAGE AND STABILITY**

Berirab P is to be stored at +2 °C to +8 °C (refrigerator). Do not freeze!

Keep container in the outer carton in order to protect its contents from light.

Berirab P must not be used after the expiry date given on the pack and container.

Once the container has been opened the contents have to be used immediately.

Keep out of the reach and sight of children!

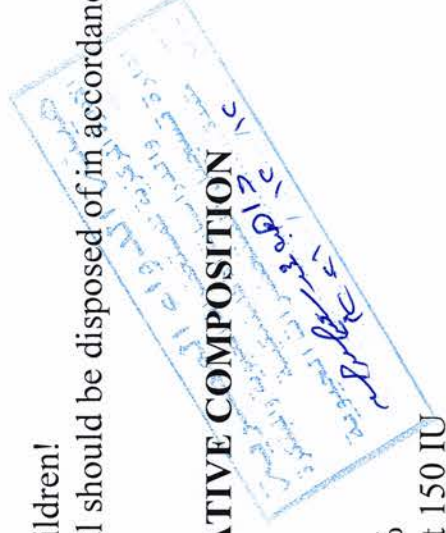
Any unused product or waste material should be disposed of in accordance with local requirements.

#### **QUALITATIVE AND QUANTITATIVE COMPOSITION**

1 ml contains:

##### **Active ingredients**

Human protein 100 – 170 mg  
thereof immunoglobulin at least 95 %  
with antibodies to rabies virus at least 150 IU



##### **Other ingredients**

Aminoacetic acid (glycine), sodium chloride, HCl or NaOH (in small amounts for pH adjustment), water for injections

#### **PHARMACEUTICAL FORM AND PRESENTATIONS**

##### **Pharmaceutical form**

Solution for injection for intramuscular use

Berirab P is a clear solution. The colour can vary from colourless to pale-yellow up to light-brown during shelf life.

### **Presentations**

Pack of 1 prefilled syringe with 2 ml containing at least 300 IU of rabies antibodies

Pack of 1 prefilled syringe with 5 ml containing at least 750 IU of rabies antibodies

Not all pack sizes may be marketed.

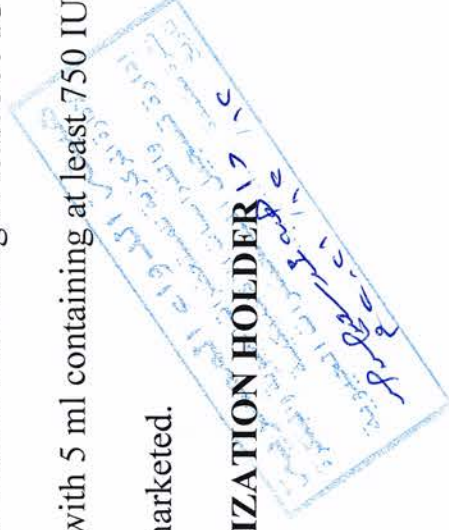
### **MARKETING AUTHORIZATION HOLDER**

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### **DATE OF LAST REVISION**

November 2014