

Package leaflet: Information for the user

NORMOSANG 25 mg/ml, concentrate for solution for infusion Human hemin

Read all of this leaflet carefully before you start using this medicine because it contains important information for you.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet

1. What NORMOSANG is and what it is used for
2. What you need to know before you use NORMOSANG
3. How to use NORMOSANG
4. Possible side effects
5. How to store NORMOSANG
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1. What NORMOSANG is and what it is used for

NORMOSANG contains human hemin, which is a substance derived from human blood. NORMOSANG is used to treat sudden attacks that occur in patients suffering from acute hepatic porphyria; the disease is characterized by liver accumulation of compounds (including porphyrins and its toxic precursors). There are three types of hepatic porphyria whose medical names are: acute intermittent porphyria, porphyria variegata and hereditary coproporphyria. This accumulation leads to symptoms of the disease including pain (mainly abdomen, back and thighs), nausea, vomiting and constipation.

2. What you need to know before you use NORMOSANG

Do not use NORMOSANG:

- if you are allergic to human hemin or any of the other ingredients of this medicine (listed in section 6).

Warnings and precautions

- Before treatment with NORMOSANG, your doctor should confirm an attack of hepatic porphyria by series of clinical and biological criteria :
 - suggestive family or personal history;
 - suggestive clinical signs;
 - quantitative determination of delta-amino-laevulinic acid and porphobilinogen (specific markers of the disease) in urines.
- The sooner NORMOSANG treatment is started after the onset of an attack, the greater its efficacy.
- As a result of NORMOSANG infusions, abdominal pain and other gastro-intestinal symptoms generally disappear within 2 - 4 days. Neurological complications (paralysis and psychological disorders) are less affected by the treatment.
- You will be monitored during the whole course of the treatment, because porphyria attacks are often associated with various effects on the heart and circulation, and on the nervous system.

- Do not:
 - make sudden changes to your normal diet, in particular, do not stop eating for long periods
 - take drugs or substances such as oestrogens (e.g. oral contraceptives), barbiturates (drugs which help you to sleep and drugs sometimes used to treat epilepsy) or steroids (body hormone-like drugs), because this can bring on an attack or make the attack worse.

Please ask your doctor or pharmacist for advice on the drugs and substances you should not take (now and in the future).

- To prevent vein irritation, the solution will be administered by infusion in a large vein (blood vessel) of your arm or in a vein in your chest over a period of at least 30 minutes. After the infusion, the vein shall be rinsed with a saline solution.
- A blood clot (known as a ‘venous thrombosis’) can block the vein used for infusion.
- The infused solution can give your blood an unusual colour.
- To limit the risk of iron compound increase, NORMOSANG should not be used as a preventive treatment of the acute attacks.
- Human hemin contains iron. It can sometimes happen that iron builds up in the body after several years of treatment with repeated infusions of NORMOSANG. Your doctor may perform blood tests from time to time to check the level of iron in your body.
- 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 for specific markers of infections 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. It is strongly recommended that every time that NORMOSANG 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

Other medicines and NORMOSANG

Do not take drugs or substances such as oestrogens (e.g. oral contraceptives), barbiturates (drugs which help you to sleep and drugs sometimes used to treat epilepsy) or steroids (body hormone-like drugs), because they can bring on an attack or make the attack worse.

Tell your doctor if you are taking, have recently taken or might take any other medicines.

Pregnancy and breast-feeding

It is not known if there is a risk in using the medicine during pregnancy. However, mothers treated with have delivered normal babies.

When you are pregnant, ask your doctor for advice before NORMOSANG is administered to you. Your doctor will only prescribe the medicine when absolutely necessary.

NORMOSANG has not been studied during breast-feeding. However, since a lot of drugs are passed into the breast-milk, you should inform your doctor when you are breast-feeding and ask for advice before NORMOSANG is administered to you. Your doctor will only prescribe NORMOSANG treatment when absolutely necessary, or may advise you to stop breast-feeding.

NORMOSANG contains ethanol (alcohol). This should be taken into account if you are pregnant or breast feeding women. See heading “Important information about some of the ingredients of NORMOSANG”.

Driving and using machines

Your medicine should not affect your ability to drive or to use machines.

Important information about some of the ingredients of NORMOSANG

NORMOSANG contains 11.78 vol. % ethanol (alcohol), i.e. up to 1000 mg per daily dose (one ampoule), equivalent to 23.6ml beer or 9.8ml wine per daily dose.

This can be harmful for those suffering from alcoholism. To be taken into account in pregnant or breast feeding women, children and high risk groups such as patients with liver disease, or epilepsy.

Ask your doctor for advice before NORMOSANG is administered to you, if you suffer from one of the above conditions.

3. How to use NORMOSANG

The medicine will only be administered to you in a hospital setting by qualified hospital personnel.

The dose to be administered will be calculated from your body weight and is about 3 mg per kg of body weight per day, but not more than 250 mg (1 ampoule) per day. This calculated amount will be diluted with a saline solution (0.9 % sodium chloride) in a glass bottle and this will form a dark coloured solution.

The solution will be administered by infusion in a large vein (blood vessel) of your arm or in a vein in your chest over a period of at least 30 minutes. The infused solution can give your blood an unusual colour.

After the infusion, the vein shall be rinsed with a saline solution.

Usually, you will receive one infusion per day during four days.

If after this first course of treatment the symptoms are not relieved, your doctor can decide exceptionally to start a second course of treatment.

If you have received more NORMOSANG than it should

If you have received more NORMOSANG than you should have, your doctor will treat you to prevent harmful effects.

4. Possible side effects

Like all medicines, this medicine can cause side effects, although not everybody gets them.

Rare (may affect up to 1 in 1,000 people): fever and serious allergic reactions (rash, tongue swelling) including anaphylactoid reaction may rarely occur.

Anaphylactoid reactions are sudden and potentially life-threatening reactions that may rarely occur. If you suffer symptoms such as facial oedema, dyspnoea, tightness in the chest, tachycardia, low blood pressure, urticaria, spontaneous loss of consciousness (caused by insufficient blood to the brain), the infusion must be stopped and the doctor must be contacted immediately.

Very common (may affect more than 1 in 10 people): after repeated treatments, access to veins in your arm may become difficult, which may mean that a tube needs to be placed in a chest vein.

Common (may affect up to 1 in 10 people): if administered in too small a vein, pain and inflammation can be caused.

Uncommon (may affect up to 1 in 100 people): the amount of an iron compound (called ferritin) may increase in the blood following repeated treatments over several years. To limit the risk of iron compound increase, NORMOSANG should not be used as a preventive treatment of the acute attacks.

Frequency unknown (frequency cannot be estimated from the available data): headache, venous thrombosis (clots formation in the peripheral or central veins) including injection site thrombosis.

Reporting of side effects

If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via [the national reporting system listed in Appendix V](#). By reporting side effects you can help provide more information on the safety of this medicine.

5. How to store NORMOSANG

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the ampoule label and carton after EXP. The expiry date refers to the last day of that month.

Store in a refrigerator (2°C – 8°C).

Keep the ampoule in the outer carton in order to protect from light.

After dilution, the solution should be used within 1 hour.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

6. Contents of the pack and other information

What NORMOSANG contains

- The active substance is human hemin (25 mg/ml). 10 ml ampoule contains 250 mg of human hemin. After dilution of one 10 ml ampoule in 100 ml of 0.9 % NaCl solution, the diluted solution contains 2273 micrograms per ml of human hemin.
- The other ingredients are arginine, ethanol (96 %), propylene glycol and water for injections.

What NORMOSANG looks like and contents of the pack

NORMOSANG is presented as a Concentrate for solution for infusion (10 ml in ampoule – pack size of 4). NORMOSANG is a dark coloured solution even after dilution of the concentrate for solution for infusion.

Marketing Authorisation Holder and Manufacturer

Orphan Europe
Immeuble “Le Wilson”
70 avenue du Général de Gaulle
F-92800 Puteaux
France

This medicinal product is authorised in the Member States of the EEA under the following names:

Normosang – Austria / Belgium / Cyprus / Czech Republic / Denmark / Estonia / Finland / France / Germany / Greece / Hungary / Iceland / Ireland / Italy / Latvia / Lithuania / Luxembourg / Malta / Netherland / Norway / Portugal / Spain / Sweden / Slovenia / Slovakia / United Kingdom
Human Hemin Orphan Europe - Poland

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