

# **NORMOSANG® 25 mg/ml, concentrate for solution for infusion**

## **Educational materials**

**Information for Healthcare Professionals**  
administering Normosang

UK

Version 2.0

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**This guide is intended for Health Care Professionals to highlighting the risks associated with NORMOSANG® 25 mg/ml, concentrate for solution for infusion administration (thrombosis, extravasation and necrosis) and the precautions to take in order to avoid them.**

This guide should be followed in conjunction with the NORMOSANG® 25 mg/ml, concentrate for solution for infusion Summary of Product Characteristics (SmPC).

To ensure your patients' safety, please read this guidance carefully.

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## **Introduction**

### **Indications and posology**

NORMOSANG® 25 mg/ml, concentrate for solution for infusion is a hematological agent indicated for the treatment of acute attacks of hepatic porphyria (acute intermittent porphyria, porphyria variegata, hereditary coproporphyria).

The recommended daily dose is 3 mg/kg once daily for four days, diluted in 100 ml of 0.9% sodium chloride in a glass bottle and infused intravenously over at least 30 minutes into a large antebachial or central vein using an inline filter. The dose should not exceed 250 mg (1 ampoule) per day. Exceptionally, the course of the treatment may be repeated under strict biochemical surveillance if there is inadequate response after the first course of treatment.

Attacks of porphyria are rare in children but limited experience in tyrosinaemia suggests that it is safe to use a dose of not more than 3 mg/kg daily for 4 days, administered with the same precautions as for adults.

### **Administration and preparation**

The infusions should be administered in a large antebachial or central vein over a period of at least 30 minutes. After the infusion, the vein should be rinsed with 100 ml of 0.9 % NaCl. It is recommended to flush the vein initially with 3 to 4 bolus injections of 10 ml 0.9 % NaCl after which the remaining volume of saline can be infused for 10 - 15 minutes.

NORMOSANG® 25 mg/ml, concentrate for solution for infusion, presented in ampoules, should be diluted immediately prior to administration in 100 ml of 0.9 % NaCl solution in a glass bottle; the amount of product required, calculated according to the patient's weight, is transferred from the ampoule to the glass bottle. The dilution should be prepared in a glass bottle because of slightly faster degradation of hemin in PVC plastic container. Do not prepare more than one ampoule a day. The solution should be used within the hour following dilution.

As NORMOSANG® 25 mg/ml, concentrate for solution for infusion is dark coloured even after dilution, it is difficult to verify visually the absence of particles in suspension. It is therefore recommended to use an infusion set with a filter.

For full details, please refer to the SmPC, which can be found on the EMC website: <https://www.medicines.org.uk/emc/>

## Management of extravasation, thrombosis and necrosis

Although it is recognized that extravasation, thrombosis and necrosis are the conditions associated with the intravenous administration of medications, the risk must be proactively managed with the aim of preventing an incident.

It is recommended the cannula is tested before the infusion and that it is checked regularly during the infusion. As the diluted solution is hypertonic, it should be administered by very slow IV infusion only. To prevent vein irritation, it is advised that the infusion be administered over at least 30 minutes in a large vein of the forearm or in a central vein. It is recommended to rinse the vein with 100ml of 0.9% NaCl after the infusion as peripheral venous alterations have been reported after repeated infusions and can prevent the use of the affected veins for further infusions, necessitating the use of a central venous line.

## Risk factors

The risk is increased in the following cases and additional vigilance is required:

- **Elderly patients** can be more at risk due to:
  - Interference with cannula when the patient is confused or agitated - Reduced pain sensation
  - Fragile skin and veins
- Patients suffering from **decreased sensation or circulation**
- **Inadequate visibility** of the cannula and surrounding tissue
- **Central venous access devices (CVADs)**
- **Fragile, mobile veins** which are **difficult to cannulate**.
- **Repeated venipunctures or cannula sites** due to previous treatments.
- **Risk factors for thromboembolic events:**
  - Age  $\geq$  40 years
  - Obesity
  - History of venous thromboembolism
  - Cancer
  - Bed rest  $\geq$  5 days
  - Major surgery

## **Management and procedure for peripheral extravasation**

If peripheral extravasation is suspected treatment must begin as soon as possible. Early detection and starting treatment within 24 hours can significantly reduce tissue damage.

### **Procedure for the IMMEDIATE management of peripheral extravasation**

1. Stop and disconnect the infusion immediately. DO NOT remove the cannula. Cap off the syringe on the giving set.
2. Explain to the patient what you suspect has happened and the procedure to deal with it.
3. Leave the cannula/needle in place and try to aspirate as much of the drug as possible from the cannula with a 10ml luer lock syringe. Try to draw blood from the cannula.
4. Mark around the affected area with an indelible pen.
5. Remove the cannula/needle.
6. DO NOT apply direct manual pressure to suspected extravasation site.
7. Place a piece of dry gauze on the affected skin.
8. Apply cold compress to affected area for 20 to 30 minutes. Apply the compress firmly, but without undue pressure.
9. Repeat cold compress four times daily for 24 – 48 hours.
10. Use hydrocortisone cream 1% if local inflammation occurs.
11. Administer pain relief (if required) as prescribed.
12. Encourage patient to move limb and elevate for 48 hours.
13. Arrange follow up out-patient/in-patient appointment for the patient and document in the notes.

## **Management and procedure for extravasation via a central venous access device (CVAD)**

If an extravasation via a central venous access device (CVAD) is suspected treatment must begin as soon as possible.

Early detection and starting treatment within 24 hours can significantly reduce tissue damage.

### **Procedure for the IMMEDIATE management of extravasation via a central venous access device (CVAD)**

1. Stop and disconnect the infusion immediately. DO NOT remove the central venous catheter (central line), PICC line or portacath. Cap off the syringe on the giving set.
2. Explain to the patient what you suspect has happened and the procedure to deal with it.
3. Leave the CVAD in place and try to aspirate as much of the drug as possible from the cannula with a 10ml luer lock syringe. Try to draw blood through the CVAD.
4. Mark around the affected area with an indelible pen.
5. DO NOT apply direct manual pressure to suspected extravasation site.
6. Place a piece of dry gauze on the affected skin.
7. Apply cold compress to affected area for 20 to 30 minutes. Apply the compress firmly, but without undue pressure.
8. Repeat cold compress four times daily for 24 – 48 hours.
9. Use hydrocortisone cream 1% if local inflammation occurs.
10. Administer pain relief (if required) against a valid signed prescription.
11. Arrange for line removal.
12. Encourage patient to move limb and elevate for 48 hours.
13. Arrange follow up out-patient/in-patient appointment for the patient and document in notes. All patients with CVAD extravasations must return for assessment of the affected area within 48 hours following the extravasation.

## Reporting of suspected adverse reactions

Healthcare professionals are reminded to continue to report suspected adverse reactions associated with NORMOSANG® 25 mg/ml, concentrate for solution for infusion in accordance with the National spontaneous reporting system.

When reporting please include the batch/lot number if available.

Adverse events should be reported via the Yellow Card Scheme Website: [www.mhra.gov.uk/yellowcard](http://www.mhra.gov.uk/yellowcard) or search for MHRA Yellow Card in the Google Play or Apple App Store.

Alternatively, adverse events of concern in association with NORMOSANG® 25 mg/ml, concentrate for solution for infusion can be reported to the Recordati Rare Diseases Pharmacovigilance department at:

[RRDPharmacovigilance@recordati.com](mailto:RRDPharmacovigilance@recordati.com)

Pharmacovigilance Department

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Please do not report the same adverse event(s) to both systems as all reports will be shared between Recordati Rare Disease and MHRA (in an anonymized form) and dual reporting will create unnecessary duplicates.

## References

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6. NHS Tayside Extravasation Policy for All Drugs, Chemotherapy and Non-Chemotherapy June 2008
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