



NeuroBloc®

Botulinum toxin type B
solution for injection 5,000 U/ml

Important safety information for physicians

The purpose of this Manual is to provide physicians qualified to prescribe and administer **NeuroBloc®** with information relating to the correct injection technique, so as to minimise the occurrence of injection-related adverse effects, and also to warn of the main risks associated with treatment.

1 Correct injection technique

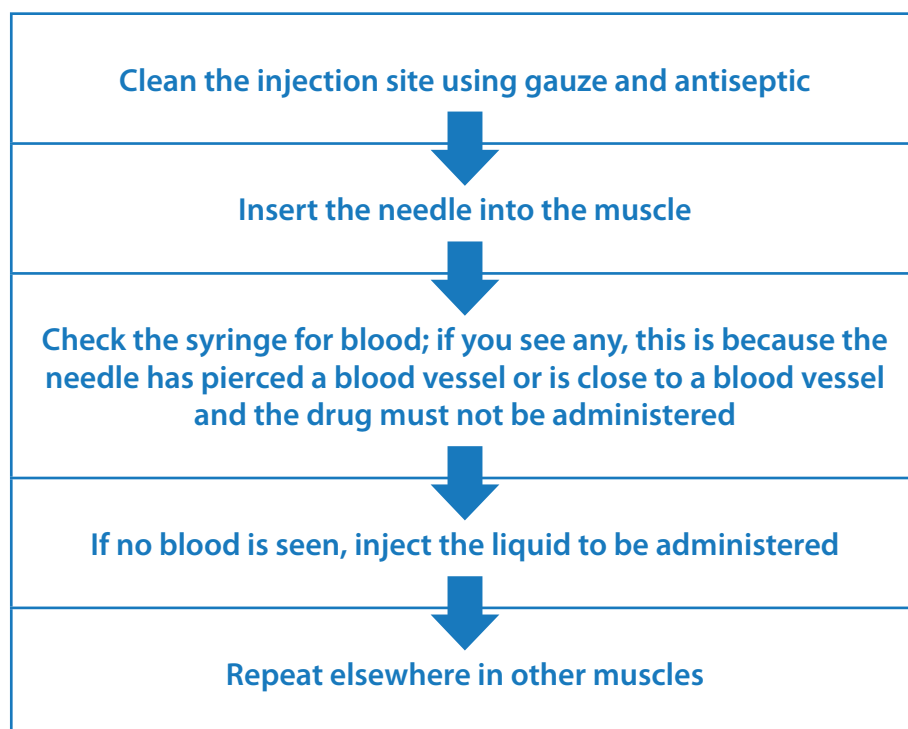
Equipment required

- NeuroBloc (Botulinum toxin type B), solution for injection
- Tuberculin syringe(s)
- 27 G/1/2" needle
- Alcohol
- Sterile gauze
- If electromyographic techniques are used (needles for chemodenervation, EMG equipment or EMG amplifier)

Considerations:

- NeuroBloc should only be administered by a physician who is familiar with and experienced in the treatment of cervical dystonia and in the use of botulinum toxins.
- Restricted to hospital use only
- Single use
- Intramuscular injection
- Do not inject into a blood vessel
- Ready to use, does not need to be reconstituted
- Do not shake
- To allow division of the total dose between several injections, NeuroBloc may be diluted with sodium chloride 9 mg/ml (0.9%) solution for injection and used immediately.

Administration technique



2 Selecting the appropriate dose and administration interval

The recommended initial dose is **10,000 U** and should be divided between the two to four most affected muscles.

Data from clinical studies suggest that efficacy is dose dependent, but these trials, because they were not powered for a comparison, do not show a significant difference between 5,000 U and 10,000 U. Therefore an initial dose of 5,000 U may also be considered, but a dose of 10,000 U may increase the likelihood of clinical benefit.

The dosing frequency should therefore be adapted based on the clinical assessment /response of an individual patient.

Injections should be repeated as required to maintain good function and minimise pain. In long term clinical studies, the average dosing frequency was approximately every 12 weeks, however this may vary between subjects. A proportion of patients maintained a significant improvement relative to baseline for 16 weeks or longer.

For **patients with reduced muscle mass** the dose should be adjusted according to individual patient need.

Special populations:

Elderly population: No dose adjustment is required in the elderly population ≥ 65 years of age.

Renal and hepatic impairment: Studies have not been carried out in patients with hepatic or renal impairment. However, the pharmacological characteristics do not indicate any need to adjust the dose.

Paediatric population: The safety and efficacy of NeuroBloc® in children aged 0-18 years have not yet been established. No data are available. NeuroBloc is not recommended in children aged 0-18 years until further data become available.

3 Lack of interchangeability between botulinum toxin products

The potency of this medicinal product is expressed in NeuroBloc® 5,000 U/ml. These units are not interchangeable with the units used to express the potency of other botulinum toxin preparations.

NeuroBloc® (Botulinum toxin type B) is **only indicated for the treatment of cervical dystonia (torticollis)**. NeuroBloc® must not be administered to individuals with other neuromuscular diseases (e.g. motor neurone disease or peripheral neuropathy) or neuromuscular junctional disorders (e.g. myasthenia gravis or Lambert-Eaton syndrome).

Recommendations for healthcare professionals:

- NeuroBloc® **must not be used in children.**
- NeuroBloc® **must not be given to individuals with known neuromuscular diseases or known neuromuscular junctional disorders.**

4 Monitoring of patients at risk of the toxin spreading from the injection site to other parts of the body and identification of these patients so that precautionary measures can be taken

Neuromuscular effects related to spread of toxin from the administration site, such as exaggerated muscle weakness, dysphagia, dyspnoea and aspiration pneumonia, proving fatal in some cases, have been reported.

NeuroBloc® must not be given to individuals with known neuromuscular diseases (e.g. amyotrophic lateral sclerosis or peripheral neuropathy) or known neuromuscular junctional disorders (e.g. myasthenia gravis or Lambert-Eaton syndrome).

These patients may be at increased risk of clinically significant systemic effects, including exaggerated muscle weakness, severe dysphagia and respiratory compromise from typical doses of NeuroBloc®. Rare cases of dysphagia sufficiently severe to cause aspiration pneumonia or require the insertion of a nasogastric tube have also been reported in these patients

Children (non-approved for use) and patients with underlying neuromuscular disorders including swallowing disorders are at increased risk of these adverse reactions. In patients with neuromuscular disorders or history of dysphagia and aspiration, botulinum toxins should only be used in an experimental setting under strict medical supervision

5 Detailed discussion of the risk/benefit between physician and patient

The SPC of the drug/drug profile should always be read before administering NeuroBloc®. **It is important to arrange a meeting with your patient to discuss in detail the risks and benefits of the drug**, before administering the drug.

The most commonly reported adverse reactions associated with NeuroBloc® in patients receiving botulinum toxin type B for the first time, or who have already been exposed to botulinum toxin type A, are dry mouth, dysphagia and injection site pain.

Following treatment with this drug, all patients must be advised to speak to their doctor in case of respiratory difficulty, shortness of breath or any other aggravated dysphagia.

Co-administration of this medicinal product and aminoglycosides or agents interfering with neuromuscular transmission (e.g. curare-like compounds) should be considered with caution, since the effect of the toxin may be potentiated.

The safety and efficacy of NeuroBloc® in children aged 0-18 years has not yet been established, nor is there any data on this. Therefore this drug is not recommended in children aged 0-18 years until further data is available.

The safety of NeuroBloc outside the approved indication has not been established. This warning includes use in children and in any other indication besides cervical dystonia. The risks, which can include death, may outweigh the potential benefits.

6 Making patients aware of educational material

A Guide for the patient containing important information on the main risks of treatment with NeuroBloc® has been prepared; this must be given to the patient and its importance explained.

7 Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via HPRA Pharmacovigilance, Earlsfort Terrace, IRL - Dublin 2; Tel: +353 1 6764971; Fax: +353 1 6762517; Website: <http://www.hpra.ie/>; e-mail: medsafety@hpra.ie