Systemic Anti-Cancer Therapy Protocol

Glucarpidase (Voraxaze®) Treatment of High Dose Methotrexate Toxicity

PROTOCOL REF: MPHAGLUVST
(Version No: 1.1)

Approved for use in:

Urgent treatment of methotrexate-induced renal dysfunction in patients who have:

- received high dose (> 1g/m^2) methotrexate
- optimised supportive measures including the use of fluids and folinic acid
- significant deterioration in renal function (serum creatinine > 1.5 x ULN or oliguria)
- toxic plasma methotrexate levels (as per treatment protocol used)

All of the criteria **must** be met in order to be funded by NHS England. The decision to use glucarpidase must be approved by a consultant oncologist or haematologist.

Please note that glucarpidase is an orphan medicine that is unlicensed in the UK.

Glucarpidase reduces methotrexate levels by >98% within 15 minutes.

Blueteq registration not required

Dosage:

Drug	Dose	Route	Frequency
Glucarpidase	**50 units/kg**	IV bolus	Once only

Multiple doses are not permitted

Accessing drug:

Glucarpidase is not stocked at NHS trusts and must be procured directly from Wep Clinical on a named-patient basis.

Delivery can take up to 24 hours

In hours:

Contact 020 8004 7320

Given the cost of treatment, the decision to treat must be made by a consultant and the discussion documented. Involve the ward pharmacist as early as possible who can then assist with any dosing and administration queries as well as ensuring the order progresses as quickly as possible.

Physician must complete physician section of patient access form that will need to be requested from the company via phone, and e-mail to PharmaC (ccf-tr.PharmaCCC@nhs.net) who will complete the request and raise an order through Wep Clinical.

PharmaC should complete the pharmacist section before sending to Wep Clinical. If delivery is expected out of normal working hours the on call pharmacist should be informed and arrangements made.

Out of hours:

The decision to treat must be made by a consultant and the rationale documented. The on call pharmacist should be contacted at the earliest opportunity to assist with dosing and supply.

Physicians should call **020 7887 2235** (out of hours Wep Clinical) once a decision is made to treat. Physician and on call pharmacist should complete the Voraxaze® access form and email to Wep Clinical. A wet signature is required on this form.

The delivery address should be the ward that the patient is on and the name, e-mail address and telephone number of the responsible person should be that of the on call pharmacist.

The on call pharmacist must let PharmaC staff know at the earliest opportunity that out of hours access has been required.

Administration:

- Reconstitute each vial with 5mL sodium chloride 0.9% to make a 200 unit/ml solution. Roll and tilt the vial gently to mix
- Give the required dose via IV bolus over 5 minutes
- Flush the line before and after use with sodium chloride
- Continue to administer fluids as per methotrexate treatment protocol
- **Vials must be stored in fridge**

Dosing in renal and hepatic impairment:

No dose adjustment is recommended for patients with renal impairment

No specific studies of glucarpidase in patients with hepatic impairment have been conducted.

Interactions:

DO NOT administer calcium folinate within 2 hours of glucarpidase

Do not co-prescribe medicines that reduce methotrexate excretion e.g. NSAIDS, ciprofloxacin, co-trimoxazole, penicillin, probenacid, omeprazole and Tazocin.

Main toxicities:

Severe allergic reaction (including anaphylaxis) may occur. Monitor the patient and ask them to report any signs and symptoms of an infusion reaction e.g. fever, chills, flushing, rash, hives, itching, throat tightness or breathing problems, tingling, numbness or headache.

Monitoring:

Samples taken within 48 hours of administration of glucarpidase will be unreliable for determining methotrexate levels.

For the 48 hours post glucarpidase administration work out the dose of calcium folinate based on the last level of methotrexate prior to the glucarpidase administration.

Continue calcium folinate treatment once methotrexate levels reach < 0.1 for a minimum of 3 days.

References:

1. Clinical Commissioning Policy: Glucarpidase for the urgent treatment of methotrexate-induced renal dysfunction. NHS England, January 2015
2. Summary of Product Charceteristics for Voraxaze. March 2013 (FDA)