Rasburicase Intravenous for Adults

Who can administer

May be administered by registered competent doctor or nurse/midwife

Important information

- To prevent **false measurements** of uric acid levels in samples during treatment with rasburicase, a strict sample handling procedure must be followed - see 'monitoring' requirements below
- GUH have moved to **STAT dosing as first-line prophylaxis in tumour lysis syndrome,** with repeated day dosing reserved for patient's with continued evidence of clinical or laboratory tumour lysis syndrome (ref 1)
- When rasburicase is being used for tumour lysis syndrome, the addition of allopurinol is unnecessary and has the potential to reduce the effectiveness of rasburicase (ref 2)

Available preparations

Fasturtec 7.5mg vial

Fasturtec 1.5mg vial

Reconstitution

Reconstitute vial using solvent supplied,to produce a solution containing 1.5mg/ml

1ml solvent provided per 1.5mg vial

5ml solvent provided per 7.5mg vial

- Mix by swirling very gently
- Do not shake
- Only a clear and colourless solution without particles should be used

Dilute further prior to administration

Infusion fluids

Sodium chloride 0.9%

Methods of intravenous administration

Intermittent intravenous infusion (administer using an electronically controlled infusion device)

- Add to infusion fluid to **make a final volume of 50ml** and administer over 30 minutes
- The residual volume in the infusion line must be flushed through at the same rate to avoid significant underdosing

Dose in adults

First line treatment: pre-chemotherapy

- High risk patients: give 7.5mg IV STAT 4 to 24 hours prior to chemotherapy (unlicensed, ref 1)

Alternatively, if uric acid levels remain elevated or continued evidence of clinical or laboratory tumour lysis syndrome

- Administer 0.2mg per kg every twenty-four hours, **commenced immediately prior to** and during the initiation of **chemotherapy**
- The **duration of treatment may be up to seven days** - the exact duration should be based upon adequate monitoring of uric acid levels in plasma and clinical judgement
- There are insufficient data to recommend multiple treatment courses

Monitoring

- May cause severe hypersensitivity reactions including anaphylaxis
- If allergic reaction occurs, treatment should be immediately and permanently discontinued
- If it is necessary to monitor a patient's uric acid level, a strict sample-handling procedure must be followed to prevent **false readings of uric acid levels.** (Uric acid levels may appear artificially low as the drug continues to break down uric acid in the sample)
  - Blood must be collected into **pre-chilled tubes** containing heparin anticoagulant.
  - Samples must be **immersed in an ice/water bath.**
  - Plasma samples should immediately be prepared by centrifugation in a pre-cooled centrifuge (4^0C)
  - Finally, plasma must be maintained in an ice/water bath and analysed for uric acid within 4 hours

Further information

- Rasburicase should be infused through a different line to that used for chemotherapy agents to prevent drug incompatibility. If not possible, flush line well with Sodium chloride 0.9% between infusions
- Administration of rasburicase does not require any change in the timing/schedule of chemotherapy

Storage

Store between 2 and 8^0C

References

SPC 12th Nov 2020

1. "Prevention and Management of Tumour Lysis Syndrome". eVIQ Cancer Treatments Online. ID 000108v2.0. 3 April, 2014. , Local expert advice has recommended that 7.5mg be given rather than 6mg.

2. Management of Tumour Lysis Syndrome in Adults and Children with Haematological Malignancies" BCSH(2015)

Therapeutic classification

Drug used in the management of hyperuricaemia