

## **Rasburicase Dosing Criteria**

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Background: Rasburicase (Elitek) is indicated for initial management of plasma uric acid levels in pediatric and adult patients with leukemia, lymphoma, and solid tumor malignancies who are receiving anti-cancer therapy expected to result in tumor lysis and subsequent elevation of plasma uric acid. Approved dosing is at 0.2 mg/kg as an intravenous infusion over 30 minutes daily for up to 5 days, but fixed dosing strategies have also been described.<sup>1-7</sup>

Based on a Rasburicase MUE presented at the February 2015 P&T meeting, the following criteria are proposed:

- 1. Flat dosing: Adult patients would receive a maximum of rasburicase 6 mg IV X 1 dose**
- 2. Rasburicase criteria for use:**

To receive a dose of rasburicase, patients should one have the following criteria:

- *Established diagnosis of malignancy associated with a high risk of tumor lysis syndrome (TLS) such as:*
  - *Acute leukemias with WBC >50,000*
  - *Burkitt's or lymphoblastic lymphoma*
  - *Other lymphomas with bulky disease*

Or two of the following:

- *Hematologic malignancy which may be associated with TLS but not listed above*
- *Solid tumors with high proliferative rates and rapid response to therapy (germ cell tumor, small cell lung cancer, etc.)*
- *Uric acid >7.5 mg/dL*
- *Signs of renal dysfunction in patients with a malignancy diagnosis*
  - *SCr >1.5XULN (1.875) or oliguria*
  - *Patients that are scheduled to receive dialysis should not be considered*

- 3. Patients may receive an additional dose of rasburicase 6 mg IV X 1 within 7 days if the uric acid >2.5 mg/dL.**
- 4. Laboratory: Uric acid levels obtained for 4 days after a dose of rasburicase will be ordered under a separate Cerner orderable. Rasburicase and the uric acid levels will be ordered as part of a Powerplan.**

## References:

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4. Clemmons AB, Ensley E, Hoge S, et al. Fixed-Dose Rasburicase in Overweight and Obese Patients Versus Normal-Weight Patients. *Ann Pharmacother*. 2014; 48(9):1152-1158.
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9. Coiffier B, Altman A, Pui CH, et al. Guidelines for the management of pediatric and adult tumor lysis syndrome: an evidence-based review. *J Clin Oncol*. 2008; 26:2767-78.
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