

Rasburicase (Elitek®) Orders

INDICATION:

Allopurinol oral or IV if needed should generally be regarded as first line therapy for prevention/treatment of tumor lysis syndrome, along with adequate hydration. Rasburicase should be considered in the setting of a hematologic or high-risk malignancy (i.e. Burkitt lymphoma, ALL, etc.) with evidence of significant metabolic derangements, such as hyperuricemia, hyperkalemia, renal dysfunction, etc. Aggressive hydration plus allopurinol are the first-line steps to preventing and treating tumor lysis, however, that may be inadequate for some intermediate and high risk patients. Below are criteria, of which at least one should be met, for the use of rasburicase.

CONTRAINDICATIONS TO RASBURICASE:

- Glucose-6-phosphatase dehydrogenase (G6PD) deficiency
- History of anaphylaxis, hypersensitivity reaction, or methemoglobinemia with rasburicase

INDICATION - PLEASE SELECT APPROPRIATE SECTION BELOW:

- Patients at high risk for tumor lysis syndrome (i.e. leukemia, lymphoma, or high-risk solid tumor) with a SCr > 1.5 times ULN AND meet at least one of the following criteria:
 - Uric acid level > 8 mg/dL before chemotherapy
 - WBC > 25,000 units/mm³
 - LDH > 500 units/L
- Patients at high risk for tumor lysis syndrome (i.e. leukemia, lymphoma, or high-risk solid tumor) with a SCr < 1.5 times ULN and meet at least two of the following criteria:
 - Uric acid level > 8 mg/dL before chemotherapy
 - WBC > 25,000 units/mm³
 - LDH > 500 units/L
- Patients with newly diagnosed or relapsed malignancy about to undergo or already undergoing chemotherapy treatment with hyperuricemia (uric acid ≥ 8 mg/dL) despite 48 hours of oral/IV allopurinol therapy (exception: Burkitt's lymphoma, leukemia with packed marrow)
- Patients who are considered appropriate for allopurinol therapy and have hyperuricemia (uric acid ≥ 8), but have a history of a serious adverse event associated with allopurinol use

DOSING & ADMINISTRATION:

Fixed dose therapy (3 mg or 6 mg) is preferred over weight based dosing due to similar clinical efficacy.

Single dose therapy

- 3 mg IV over 30 minutes x 1 dose (*adult patients weighing < 90 kg AND baseline uric acid < 18*)
- 6 mg IV over 30 minutes x 1 dose (*adult patients weighing ≥ 90 kg OR baseline uric acid ≥ 18 mg/dL*)

Repeat doses:

A second repeat dose of 3 or 6 mg can be administered if uric acid levels have not normalized within 12 to 24 hours after the first dose. Subsequent repeat doses (if needed) should also be capped at 6mg.

MONITORING:

Uric acid samples should be ordered/entered for early AM following rasburicase dose, but not sooner than 12 hours after rasburicase dosing.