PATIENT RISK ASSESSMENT OF TUMOR LYSIS SYNDROME (TLS)

For newly diagnosed, refractory, or relapsed patients with leukemia, lymphoma, other hematologic malignancies, or solid tumors undergoing anticancer therapy:

- Conduct patient risk assessment prior to initiating anticancer therapy
- It may be important to document one or more patient risk factors when treating with anticancer regimens with clinically significant TLS risk

Patient Name: _____ Date: _____

Laboratory Risks[1,2]

Patient is at risk for TLS if they have at least one of the following:

- ☐ Uric acid >7.5 mg/dL
- ☐ Creatinine ≥1.5 mg/dL*
- ☐ LDH ≥2x upper limit of normal
- ☐ Reduced GFR (CKD stage 3 begins with a GFR <59 mL/min)*

Tumor Burden and Other Patient Risks[3-5]

Patient is at risk for TLS if they have at least one of the following:

- ☐ Bone marrow involvement
- ☐ Organ infiltration by cancer cells
- ☐ Bulky disease (≥7 cm) that is chemo-sensitive
- ☐ Renal disease or renal involvement by tumor

Malignancy Risks[3,4,6]

- ☐ Non-Hodgkin's lymphoma (eg, Burkitt lymphoma, lymphoblastic lymphoma, diffuse large B-cell lymphoma)
- ☐ ALL (acute lymphoblastic leukemia) with WBC ≥50,000
- ☐ AML (acute myeloid leukemia) with WBC ≥10,000
- ☐ CLL (chronic lymphocytic leukemia) with WBC ≥10,000 or concurrent renal disease
- ☐ Other hematologic malignancies, including chronic myeloid leukemia and multiple myeloma, with rapid proliferation and expected rapid response to therapy
- ☐ Solid tumors with high proliferative rates and rapid response to therapy

Regimen Risks[7-21]

Anticancer agents associated with a clinically significant risk of TLS†:

- ☐ Venetoclax
- ☐ Imatinib
- ☐ Nilotinib
- ☐ Cetuximab
- ☐ Ibrutinib
- ☐ Obinutuzumab
- ☐ Omacetaxine
- ☐ Rituximab
- ☐ Carfilzomib
- ☐ Lenalidomide
- ☐ Thalidomide
- ☐ Pomalidomide
- ☐ Romidepsin
- ☐ Bortezomib
- ☐ Bendamustine HCl
- ☐ Vincristine sulfate
- ☐ Doxorubicin HCl
- ☐ Ixazomib
- ☐ Brentuximab vedotin

Prescribe Antihyperuricemia Therapy Prior to Anticancer Therapy?

☐ Yes ☐ No

CKD=chronic kidney disease; GFR=glomerular filtration rate; LDH=lactate dehydrogenase; WBC=white blood cell.
*Indicators of renal impairment.
†This is not a comprehensive list of agents.

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