Acute Myelogenous Leukemia - Adult (Greater than or equal to 18 years old)

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson’s specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient’s care. This algorithm should not be used to treat pregnant women.

Notes: Consider Clinical Trials as treatment options for eligible patients. Stem cell transplant guidelines are not included with this algorithm. Leukemia patients should be referred and treated at a comprehensive cancer center.

**INITIAL EVALUATION**

1. Acute promyelocytic leukemia
   - Arsenic trioxide plus all-trans retinoic acid (ATRA) with or without:
     - Idarubicin and/or
     - Gemtuzumab ozogamicin

2. Acute myelogenous leukemia (AML)
   - t(8;21) and inv(16)
     - Fludarabine, cytarabine, filgrastim plus idarubicin or
     - Clinical trials

3. Cytogenetics and molecular analysis
   - If FLT3 mutated, add midostaurin or sorafenib
   - Low intensity therapy

4. Age less than 60-65 years
   - Idarubicin plus cytarabine with or without cladribine or
   - Clinical trials
   - If FLT3 mutated, add midostaurin or sorafenib

5. Age greater than 65 years or not eligible for intensive chemotherapy
   - Low intensity therapy
   - Clinical trials
   - If FLT3 mutated add midostaurin or sorafenib

6. Maintenance or Surveillance or Stem cell transplant (if high risk) or consolidation, then consider maintenance or surveillance

Complete remission?

Yes

No

Clinical trials

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1. See Physical Activity, Nutrition, and Tobacco Cessation algorithms; ongoing reassessment of lifestyle risks should be a part of routine clinical practice.

2. Leukemia newsletter: http://www.mdanderson.org/leukemia (available programs-treatment priorities)
SUGGESTED READINGS


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