Advances prompt release of new recommendations for diagnosis, management of adult AML

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An international panel of experts has released updated evidence-based and expert-opinion-based recommendations for the diagnosis and treatment of acute myeloid leukemia (AML) in adults.

The recommendations were issued by the European LeukemiaNet (ELN) and published in the journal *Blood*. The paper's senior author was Clara D. Bloomfield, MD, Distinguished University Professor, Ohio State University Cancer Scholar and Senior Adviser, and the William Greenville Pace III Endowed Chair in Cancer Research.

"These guidelines are an important update of the current and widely used recommendations for managing AML, for constructing clinical trials and for predicting outcomes of AML patients," says Bloomfield, who co-chaired the panel. "They will be the new standard of care and will replace the 2010 ELN recommendations for managing AML patients and designing clinical trials."

Adult AML affects an estimated 21,400 Americans per year and kills 10,600 of them, according to the American Cancer Society.

The updated recommendations include revised ELN genetic categories, a proposed response category based on minimal residual disease status, and a proposed category for progressive disease for clinical trials. They also include the newly updated World Health Organization classification

of myeloid neoplasms and acute leukemia, also published in the journal *Blood*.

Bloomfield said updating the ELN recommendations was prompted by new insights into the molecular and genomic causes of the disease, by the development of new genetic tests and tests for detecting minimal residual disease and by the development of novel anti-leukemic agents.

The panel that produced the new guidelines included 22 international members with recognized AML clinical and research expertise. Bloomfield notes three particularly significant changes in the updated ELN recommendations:

- There are now three genetic-risk categories, rather than four, and the FLT3-ITD mutation has been added as a marker of risk;
- "Complete remission with no evidence of minimal residual disease" is a new proposed response category; this criterion requires that genetic markers present at diagnosis are no longer detectable. "It is no longer good enough to examine bone-marrow samples and say the leukemia is gone," Bloomfield says. "We must also see the loss of genetic markers."
- "Progressive disease" is a new provisional response category to be used in clinical trials only; the purpose of the category is to harmonize the various definitions of progressive disease that are used in different clinical trials.

More information: H. Dohner et al, Diagnosis and management of AML in adults: 2017 ELN recommendations from an international expert panel, *Blood* (2016). DOI: 10.1182/blood-2016-08-733196

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