

TO THE EDITOR:

In response to “American Society of Hematology 2020 guidelines for treating newly diagnosed acute myeloid leukemia in older adults”

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On behalf of the Board of Directors of the American Society for Transplantation and Cellular Therapy, we congratulate Sekeres and colleagues as well as the American Society of Hematology (ASH) for generating and promulgating new guidelines on the management of older individuals with acute myelogenous leukemia (AML).¹

Although the guidelines are comprehensive and provide a roadmap for the use of antineoplastic agents and supportive measures in the treatment of newly diagnosed older individuals with AML, the role of allogeneic hematopoietic stem cell transplantation (HSCT) in managing this disease is not thoroughly discussed. As such, we wish to provide some recommendations regarding the role of HSCT in the comprehensive management of the older adult AML patient.

AML in older individuals (defined as those above age 55 in the current ASH guideline) is often associated with adverse cytogenetic and molecular features, and a prior and often unrecognized myelodysplastic disorder. As such, AML in older patients is often considered incurable using conventional chemotherapeutic approaches alone. Although newer regimens and targeted agents have reduced treatment-related toxicity, increased remission rates, and offered hope to a larger proportion of older AML patients, these newer approaches have not increased long-term cures and have only increased median survivals by weeks to months.^{2,3} However, by increasing remission rates for older individuals, these new approaches offer an enhanced opportunity to pursue HSCT as a curative approach in a higher proportion of patients.

With the broad acceptance of reduced-intensity and nonmyeloablative approaches to transplantation conditioning, many older AML patients may in fact be candidates for HSCT. Outcomes of HSCT in older AML patients in prospective, multicenter studies demonstrate 2-year overall survival rates of 48%,⁴ a number much higher than with conventional chemotherapy approaches alone. As noted in the ASH guidelines, prospective comparisons of HSCT to conventional consolidative therapy do not exist; therefore, it is the responsibility of the treating hematologist to initiate a discussion regarding the role of HSCT as consolidation for a newly diagnosed older patient. We recommend that this discussion occur at the transplantation center, so that a complete understanding of the potential risks, benefits, and outcomes associated with HSCT can occur. As older subjects are less likely to have a sibling who is a candidate for stem cell donation, it is critical that referrals be made early to allow for a longer process of an unrelated donor search, where appropriate. This recommendation is consistent with the National Marrow Donor Program's recommendation for early referral to a transplantation center.⁵

The American Society for Transplantation and Cellular Therapy has published guidelines on indications for HSCT,⁶ including indications for HSCT in older patients,⁷ and will be publishing guidelines specifically on HSCT for AML in the coming months. In the interim, we strongly recommend that ASH incorporate into their guidelines that older patients with newly diagnosed AML be referred to a transplantation center early in their disease course in order to determine HSCT eligibility and discuss the appropriate role of HSCT as part of the comprehensive management of AML.

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