To the editor:

HLA-identical sibling stem-cell transplantation in first-remission AML

In their publication, Cornelissen et al have described data from the HOVON/SAKK (Dutch-Belgian Hemato-Oncology Cooperative Group and the Swiss Group for Clinical Cancer Research) donor versus no-donor analysis of myeloablative HLA-identical sibling stem-cell transplantation in first remission (CR1) acute myeloid leukemia (AML) in young and middle-aged adults.1 They reported an improvement in disease-free survival (DFS) and overall survival (OS) in patients with unfavorable cytogenetics, who were less than 35 years of age and had an HLA-matched sibling donor for allogeneic stem-cell transplantation in CR1 AML. These conclusions were based on a meta-analysis of the HOVON study along with previous Medical Research Council (MRC), Bordeaux-Grenoble-Marseille-Toulouse (BGMT), and European Organisation for Research and Treatment of Cancer (EORTC) studies. We would be interested in knowing a few more details, which will help interpret the data better.

(1) Were the patients stratified on the basis of performance status? With improvement in transplantation techniques, the age eligibility for allogeneic transplants has been increasing, with better patient outcomes, and a more appropriate screening criterion is physiologic age, as judged by performance status.

(2) In addition, we would like to know what conditioning regimens were used prior to transplantation, as transplantation outcomes, including GVHD (graft-versus-host disease) and GvL (graft versus leukemia) as well as treatment-related mortality (TRM), are affected by the choice of these regimens (with and without total body irradiation). This will in turn affect the OS.

(3) There is no mention whether the mortality noted in the study group was indeed due to disease progression, treatment-related toxicity, or GVHD. This would help compare the transplantation techniques and effectiveness of the treatment strategies.

(4) The dose of daunorubicin or idarubicin used for induction or the reason for choice of either of these agents is not mentioned in the paper. Prospective randomized data comparing idarubicin and cytosine arabinoside with daunorubicin and cytosine arabinoside in adult patients with newly diagnosed acute myelogenous leukemia. Blood. 1991;77:1666-1674.

(5) Another question we have is regarding the consolidation therapies various patients received. Fifty-five patients who had a donor available got chemotherapy for consolidation instead of receiving an allogeneic transplant, and we would like to know if these were indeed good risk patients, as defined by cytogenetics.

(6) The major strengths of this study are the prospective randomized design (genetic randomization) and a large number of enrolled patients, which permit evaluation of several questions of biologic and clinical importance regarding AML and allogeneic stem-cell transplantation. Although the authors mention the availability of newer tests like FLT-3 and NPM-1, these were not done for the entire patient population mentioned. It will be interesting to go back to the stored tissue, if available, to study these markers and correlate them with disease behavior and treatment response.

Sikander Ailawadhi and Swaminathan Padmanabhan

Conflict-of-interest disclosure: The authors declare no competing financial interests.

Correspondence: Swaminathan Padmanabhan, MD, Department of Medicine, Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, NY 14263; email: swami.padmanabhan@roswellpark.org.

References


Response:

Allogeneic hematopoietic stem-cell transplantation in acute myeloid leukemia

In their letter to the editor, Ailawadhi and Padmanabhan raise a number of questions relating to the donor versus no-donor analysis, recently reported by the Dutch-Belgian Hemato-Oncology Cooperative Group and the Swiss Group for Clinical Cancer Research (HOVON-SAKK) cooperative group and the subsequent meta-analysis with the Medical Research Council (MRC), Bordeaux-Grenoble-Marseille-Toulouse (BGMT), and European Organisation for Research and Treatment of Cancer (EORTC) studies.1 Here, a specific reply to each question is provided.

(1) Patients were not stratified on the basis of performance status. We wish to stress that, even in older patients (> 40 years of age), treatment-related mortality (TRM) was not particularly high.
HLA-identical sibling stem-cell transplantation in first-remission AML

Sikander Ailawadhi and Swaminathan Padmanabhan