Allogeneic HSCT offers good survival for select TKI-refractory CML patients

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Allogeneic hematopoietic stem cell transplantation (HSCT) is associated with a high rate of survival for carefully chosen chronic myeloid leukaemia (CML) patients who do not respond well to tyrosine kinase inhibitor (TKI) therapy, research suggests.

The study included CML patients experiencing their first chronic phase who underwent HSCT after myeloablative conditioning with T-replete bone marrow from an HLA-identical sibling donor.

The patients, all of whom had a suboptimal response to TKI therapy, represent 6% of the 3057 allogeneic HSCT procedures performed for CML in Europe between 2002 and 2005, the authors say.

A median of 87 months after HSCT, 85% of the 193 patients were alive, with a 5-year survival probability of 85%. The probability was 86%, 90% and 77% for patients with European Society of Blood and Bone Marrow Transplantation (EBMT) risk scores of 0, 1 and 2, respectively.

The cumulative incidence of death without relapse was 12% and after 50 months, 19% of patients had relapsed, say lead author Christian Koenecke, from Hannover Medical School in Germany, and team.

"This study shows the results that can be obtained today with allogeneic HSCT using standard myeloablative conditioning, standard [graft versus host disease] prophylaxis and an optimal stem cell source when the transplant is performed in [chronic phase] with a low-EBMT risk score", they write in a letter to *Bone Marrow Transplantation.*

They emphasize: "These results are even more remarkable as they were obtained from a large number of teams all over Europe. Based on the previously published long-term data, it can be expected that the probability of survival of these patients at 20 years will exceed 75% and >90% of these long-term survivors will be free of their disease."

However, the researchers advise that their findings "should not alter the current algorithms concerning first- or second-line therapy", but instead help to "define risk-adapted strategies for patients with suboptimal or failed response to TKIs".

Patients with a matched sibling donor and a low-risk EBMT score may prefer to be referred for HSCT, they conclude, whereas a third-generation TKI may be a "better option" for those without a suitable donor or with an EBMT score above 2.

Source:
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