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Titel des Beitrags: Prospective evaluation of allogeneic hematopoietic stem-cell transplantation from matched related and matched unrelated donors in younger adults with high-risk acute myeloid leukemia: German-Austrian trial AMLHD98A.

Abstract: To assess the impact of allogeneic hematopoietic stem-cell transplantation (HSCT) from matched related donors (MRDs) and matched unrelated donors (MUDs) on outcome in high-risk patients with acute myeloid leukemia (AML) within a prospective multicenter treatment trial. Between 1998 and 2004, 844 patients (median age, 48 years; range, 16 to 62 years) with AML were enrolled onto protocol AMLHD98A that included a risk-adapted treatment strategy. High risk was defined by the presence of unfavorable cytogenetics and/or by no response to induction therapy. Two hundred sixty-seven (32%) of 844 patients were assigned to the high-risk group. Of these 267 patients, 51 patients (19%) achieved complete remission but had adverse cytogenetics, and 216 patients (81%) had no response to induction therapy. Allogeneic HSCT was actually performed in 162 (61%) of 267 high-risk patients, after a median time of 147 days after diagnosis. Graft sources were as follows: MRD (n = 62), MUD (n = 89), haploidentical donor (n = 10), and cord blood (n = 1). The 5-year overall survival rates were 6.5% (95% CI, 3.1% to 13.6%) for
patients (n = 105) not proceeding to HSCT and 25.1% (95% CI, 19.1% to 33.0%; from date of transplantation) for patients (n = 162) receiving HSCT. Multivariable analysis including allogeneic HSCT as a time-dependent covariable revealed that allogeneic HSCT significantly improved outcome; there was no difference in outcome between allogeneic HSCT from MRD and MUD. Allogeneic HSCT in younger adults with high-risk AML has a significant beneficial impact on outcome, and allogeneic HSCT from MRD and MUD yields similar results.