

HLA-E mismatch is associated with better hematopoietic stem cell transplantation outcome in acute leukemia patients

509 adult patients with acute leukemia receiving allogeneic HSCT



10/10 allele level HLA-A, -B, -C, -DRB1, -DQB1 matched grafts



HLA-E high resolution genotyping of 509 patient-donor pairs

Endpoints

- overall survival
- relapse incidence
- disease free survival
- non-relapse mortality

HLA-E mismatch  Improved HSCT outcome

- univariate analysis (53% vs 38%, $p=0.002$, 5year OS)
- multivariate analysis (HR=0.63, CI 95%=0.48-0.83, $p=0.001$)

↑ Effect in patients with advanced disease (n=120)

- univariate analysis (50% vs 18%, $p=0.005$, 5year OS)
- multivariate analysis (HR=0.40, CI 95%=0.22-0.72, $p=0.002$)