Genetic variant ups risk of graft-versus-host disease in HSCT

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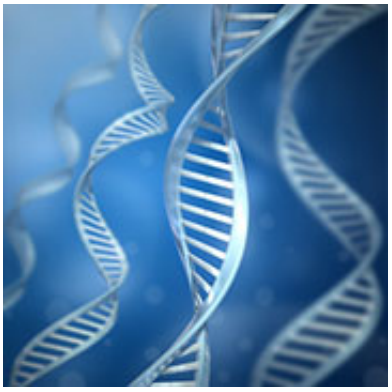

(HealthDay)—The risk of acute graft-versus-host disease (GVHD) in hematopoietic stem cell transplantation with HLA-DPB1 mismatching is influenced by the HLA-DPB1 rs9277534 expression marker, according to a study published in the Aug. 13 issue of the *New England Journal of Medicine*.

Effie W. Petersdorf, M.D., from University of Washington in Seattle, and colleagues first genotyped rs9277534 in 3,505 persons to define rs9277534-DPB1 haplotypes. Then, linkage of the rs9277534 A and G alleles to the mismatched HLA-DPB1 was determined among 1,441 recipients of transplants from HLA-A,B,C,DRB1,DQB1-matched unrelated donors with only one HLA-DPB1 mismatch. Quantitative

polymerase chain reaction was used to assess HLA-DPB1 expression.

The researchers found that mean HLA-DPB1 expression was lower with rs9277534A than with rs9277534G. In the case of donors with rs9277534A-linked HLA-DPB1, the risk of acute GVHD was higher for recipients with rs9277534G-linked HLA-DPB1 mismatches than for recipients with rs9277534A-linked HLA-DPB1 mismatches (hazard ratio, 1.54; 95 percent confidence interval, 1.25 to 1.89; P

"Among recipients of HLA-DPB1-mismatched transplants from donors with the low-expression allele, recipients with the high-expression allele had a high risk of GVHD," the authors write.

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