

## Association analysis between HLA-DRB1 allelic polymorphisms and age to identify genes promoting the early onset of solid cancers

Liu Hui

Dalian Medical University, China

To explore relationships between the early-onset solid cancer and HLA-DRB1 allelic polymorphism and develop an efficient research method for identifying early onset solid cancer-related genes. Patients with different solid cancers, including gastric, liver, and lung cancers, were recruited as the cancer group. On the basis of their age at the time of the first surgery, 70 patients were divided into the following 7 age groups with 5 males and 5 females in each group: < 50 years, 50–54 years, 55–59 years, 60–64 years, 65–69 years, 70–74 years, and 75–79 years. The 70 healthy subjects, who were also divided into 7 age groups as was the cancer group, were served as the control group. The samples were typed using an HLA-DRB1 PCR-SSP typing kit. The mean age of patients and healthy subjects with and without the alleles was calculated respectively. In the cancer group, the mean age of patients with HLA-DRB1\*01 (52.5 years old) was less than that of patients without this allele (62.1 years old). There was an interaction between the mean age of patients in both groups (cancer and control) and the genes (positive and negative expression;  $p < 0.05$ ). HLA-DRB1 alleles may be involved in the pathogenesis of early-onset solid cancer. The inherent anti-cancer mechanisms may be a common pathway for different cancers and are associated with the immune system and HLA.

### Biography

Liu Hui is a Professor in Department of Clinical Immunology at Dalian Medical University.

[liuhui60@sina.com](mailto:liuhui60@sina.com)