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IN BRIEF

HAEMATOLOGICAL CANCER

Profiling the molecular phenotype of Hodgkin lymphoma

The pathogenesis of treatment failure in patients with Hodgkin lymphoma (HL) treated with chemotherapy is not well understood. Now, a study has shown that a macrophage-like signature in Hodgkin Reed Sternberg cells from patients with HL significantly correlated with treatment failure. Moreover, expression of the *CSF1R* gene, part of this signature, was significantly associated with progression-free survival and overall survival in 132 patients in an independent validation cohort.

Original article Steidl, C. et al. Gene expression profiling of microdissected Hodgkin Reed Sternberg cells correlates with treatment outcome in classical Hodgkin lymphoma. *Blood* doi:10.1182/blood-2012-06-439570

HAEMATOLOGICAL CANCER

TP53 mutations prognostic for DLBCL treated with R-CHOP

The prognostic role of *TP53* mutations in patients with diffuse large B-cell lymphoma (DLBCL) treated with R-CHOP chemotherapy is undefined. In a large patient cohort study, those with *TP53* mutations had worse progression-free and overall survival, and mutant *TP53* was predictive of treatment outcome in patients with the germinal centre B-cell and activated B-cell subtypes; underscoring *TP53* stratification potential in these patient subsets.

Original article Xu-Monette, Z. Y. *et al.* Mutational profile and prognostic significance of TP53 in diffuse large B-cell lymphoma patients treated with rituximab-CHOP: a report from an International DLBCL Rituximab-CHOP Consortium Program study. *Blood* doi:10.1182/blood-2012-05-433334

HAEMATOLOGICAL CANCER

Reduced-intensity conditioning preferred for AML

In patients with acute myeloid leukaemia (AML) in first complete remission, reduced-intensity conditioning (RIC) regimens have been developed to minimize toxicity after allogeneic stem cell transplantation. Now, a randomized phase III trial that compared standard conditioning with RIC, showed that nonrelapse mortality, disease-free survival and overall survival were comparable, but grade 3 or 4 oral mucositis was lower with the RIC regimen, indicating that this is the preferred option.

Original article Bornhäuser, M. et al. Reduced-intensity conditioning versus standard conditioning before allogeneic haemopoietic cell transplantation in patients with acute myeloid leukaemia in first complete remission: a prospective, open-label randomised phase 3 trial. Lancet Oncol. doi:10.1016/S1470-2045(12)70349-2

HAEMATOLOGICAL CANCER

TAM predict inferior outcome in Hodgkin lymphoma

Tumour-associated macrophages have been linked with a poor outcome in patients with Hodgkin lymphoma. In a multicentre phase III trial of 287 patients randomized to a training cohort and validation cohort, increased expression levels of CD68 and CD163 were significantly associated with worse failure-free and overall survival outcomes in the validation cohort. Analysis of the validation cohort showed both markers were independent predictors of inferior survival outcomes, and thus have prognostic significance.

Original article Tan, K. L. *et al.* Tumor-associated macrophages predict inferior outcomes in classical Hodgkin lymphoma: a correlative study from the E2496 Intergroup study. *Blood* doi:10.1182/blood-2012-04-421057