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IN BRIEF

HEMATOLOGICAL CANCER

Gene classifier helps identify therapy for leukemia

Scientists have developed a 38-gene classifier that can accurately predict patients who are at risk of developing leukemia. Gene expression was assessed in CD34⁺ cells from patients who developed therapy-related myelodysplasia or acute myeloid leukemia (t-MDS/AML) after transplantation and compared the results with control patients who did not develop t-MDS/AML. In an independent cohort, this classifier accurately distinguished patients who developed t-MDS/AML from those who did not, indicating the use of this classifier for determining those at risk for this complication.

Original article Li, L. *et al.* Altered hematopoietic cell gene expression precedes development of therapy-related myelodysplasia/acute myeloid leukemia and identifies patients at risk. *Cancer Cell* 20, 591–605 (2011)

BREAST CANCER

Pregnancy does not adversely affect prognosis

It has long been believed that pregnancy after a breast cancer diagnosis adversely affects prognosis. A study of 115 women with breast cancer who were followed for a mean period of 6 years revealed no significant difference in prognosis between those that became pregnant and those who did not. Surprisingly, a higher proportion of pregnant women were disease free compared with non-pregnant women, suggesting that pregnancy after development of breast cancer might have a protective effect.

Original article Córdoba, O. *et al.* Pregnancy after treatment of breast cancer in young women does not adversely affect the prognosis. *Breast* doi:10.1016/j.breast.2011.10.001

BREAST CANCER

Improving the AJCC staging system

There is wide variation in the survival of patients whose prognosis is determined using the American Joint Committee on Cancer (AJCC) staging system. A study in 3,728 patients who underwent surgery as first-line treatment has shown that the inclusion of pathologic stage, grade and estrogen receptor status improves the current AJCC staging system; these results were also confirmed in an external validation cohort. These findings indicate that the AJCC staging system should be revised to incorporate these three biologic markers.

Original article Yi, M. *et al.* Novel staging system for predicting disease-specific survival in patients with breast cancer treated with surgery as the first intervention: time to modify the current American Joint Committee on Cancer Staging System. *J. Clin. Oncol.* doi:10.1200/JCO.2011.38.3174

HEMATOLOGICAL CANCER

BCR-ABL1 level at 3 months predicts outcome

A single measurement of *BCR-ABL1* transcripts 3 months after imatinib treatment is the best way to identify the patients who will not respond well, according to a study of 282 patients with chronic-phase chronic myeloid leukemia. Patients with elevated transcript levels at 3 months had a reduced overall survival; thus, measuring *BCR-ABL1* levels at this time point might allow earlier clinical intervention.

Original article Marin, D. *et al.* Assessment of *BCR-ABL1* transcript levels at 3 months is the only requirement for predicting outcome for patients with chronic myeloid leukemia treated with tyrosine kinase inhibitors. *J. Clin. Oncol.* doi:10.1200/JCO.2011.38.6565