

the intervention group may have contributed to these findings. The incidence of therapy-related leukemia was also increased in this group. The authors suggest that the utility of maintenance chemotherapy is dependent on the intensity of the chemotherapy delivered during the induction and consolidation phases. More success could be achieved with forms of continuous maintenance therapy, but further trials are needed.

Original article Asou N *et al.* (2007) A randomized study with or without intensified maintenance chemotherapy in patients with acute promyelocytic leukemia who have become negative for *PML-RAR α* transcript after consolidation therapy: the Japan Adult Leukemia Study Group (JALSG) APL97 study. *Blood* **110**: 59–66

Study demonstrates that a history of eczema or hayfever reduces the risk of ALL in children

Many studies have reported an inverse association between childhood leukemia and preceding history of allergy; however, the associations between specific allergy types and development of leukemia in children remain unclear. Recently, the United Kingdom Childhood Cancer Study group reported that children with a history of eczema or hayfever have a reduced risk of developing acute lymphoblastic leukemia (ALL).

The study recruited 839 individuals aged 14 years or younger who were diagnosed between 1991 and 1996 with either ALL ($n=720$) or acute myeloid leukemia ($n=101$), and 1,337 controls matched for age and sex. At least one allergy was diagnosed in more than one-third of cases and controls. A history of definite eczema significantly reduced the risk of developing ALL (odds ratio [OR] 0.70, 95% CI 0.51–0.97), as did a history of definite hayfever (OR 0.47, 95% CI 0.26–0.85). The risk of developing common ALL was also reduced in those children with a history of eczema or hayfever (OR 0.68, 95% CI 0.48–0.98 and OR 0.62, 95% CI 0.33–1.16, respectively). There was no association between a history of asthma and development of ALL. Moreover, none of the allergy types studied was associated with acute myeloid leukemia. The ability to detect such an association was, however, limited because of the small sample size.

This study showed an inverse relationship between childhood leukemia and preceding

history of certain types of allergy, confirming the hypothesis that immune dysfunction might correlate with the development of childhood hematological malignancies.

Original article Hughes AM *et al.* (2007) Allergy and risk of childhood leukaemia: results from the UKCCS. *Int J Cancer* **121**: 819–824

Distinct patterns of recurrence in triple-negative breast tumors

The basal-like subtype of breast cancer, which consists mainly of 'triple-negative' breast cancers (i.e. tumors negative for the estrogen receptor [ER], progesterone receptor [PR] and HER2), is associated with worse survival than other subtypes. A long-term follow-up study compared outcomes of women with triple-negative breast cancer with those of women with other types of breast cancer.

In this single-institution study, 1,601 patients diagnosed with invasive breast cancer during a 10-year period were stratified according to breast cancer subtype. Those with the triple-negative form (11.2% of the cohort) had much greater risks of distant recurrence (hazard ratio 2.6, 95% CI 2.0–3.5; $P<0.0001$) or death (hazard ratio 3.2, 95% CI 2.3–4.5; $P<0.001$) within 5 years of diagnosis. Moreover, triple-negative tumors were more likely to be grade III and were of a larger size (3.0 vs 2.1 cm) than were other subtypes. Patterns of distant recurrence were distinct. In women with triple-negative breast cancer the recurrence rate rose rapidly within the first 2 years after diagnosis, with a rapid decrease over the subsequent 5 years. Those with no evidence of progression after 8 years were unlikely to experience disease recurrence. By contrast, in women with other cancer subtypes the risk of recurrence was constant for the 17 years after diagnosis. Following distant recurrence, women with triple-negative tumors had a significantly shorter median survival interval than did those with other tumor types (9 vs 20 months).

The authors believe that staining for ER, PR and HER2 would enable the majority of basal-like tumors to be classified, permitting novel treatments to be directed at this aggressive cancer type.

Original article Dent R *et al.* (2007) Triple-negative breast cancer: clinical features and patterns of recurrence. *Clin Cancer Res* **13**: 4429–4434