

This issue's topics



Second cancer—a marker of immune deficiency?

Second cancers—markers of immune deficiency?

In this issue Hemminki and colleagues have analysed the risk of second primary skin cancers (SCC) and non-Hodgkin's lymphomas (NHL) after primary cancers at several different sites. The primary cancers had to be associated with a survival of at least 2 years and to be relatively common. Fourteen different primary sites in males and 17 different primary sites in females were examined using data from the nationwide Swedish family database. 4301 SCC and 1672 NHL were identified as second cancers. They found an increased risk for skin cancers in 11/14 sites in males and 11/17 sites in females. The increased risk for NHL was found at 10/14 and 12/17 sites, respectively. The authors concluded that although their results may be partly influenced by surveillance bias, immune response may be a contributory mechanism in the development of subsequent neoplasms and further molecular epidemiological studies should be undertaken.

HOX gene expression in the breast

There are 39 HOX genes that act as transcriptional regulators and cellular modulators during embryonic development and adult life. The genes can be divided into 3 groups that are active on the cervical, thoracic and lumbo-sacral regions of the body. Cantile and colleagues examined the expression of the whole HOX gene network by reverse transcriptase-polymerase chain reaction analysis of normal and neoplastic breast tissue. They found 17/39 genes were expressed in the normal tissue. In the thoracic group, the expression in the normal and neoplastic tissue was similar. In contrast, the other 2 groups of genes had differing expression levels and may therefore be involved in breast cancer progression. The authors suggest that these genes may be targets for future therapies.

Decreased clearance of unbound paclitaxel with age

The pharmacokinetics of anti-cancer drugs may change with age due to differences such as a reduced renal and/or hepatic function and changes in body composition. This can result in changes in the efficacy and toxicity of treatments. Smorenburg and colleagues have investigated in this issue unbound paclitaxel clearance in two groups of patients; one group aged ≥ 70 years with metastatic breast cancer ($n=8$) and the other aged <70 years with metastatic solid tumours ($n=15$). They found that in the older patients there was an approximately 50% decrease in the clearance of unbound paclitaxel compared with those aged <70 years. Interestingly, an increased total plasma clearance of the formulation vehicle, Cremophor EL, was observed in the older age group. The authors conclude that "the clinical relevance of these observations with respect to toxicity profiles and anti-tumour efficacy requires further evaluation".

Forthcoming papers

Position paper

The challenges and achievements of implementation of quality of life research in cancer clinical trials
A. Bottomley, V. Vanvoorden, H. Flechtner, P. Therasse

Editorial Comment

Editorial comment on the management of primary breast cancer in the elderly patient
R. Blamey

Current Perspective

Quality of life in patients with advanced colorectal cancer—what has been learnt?
T. Conroy, H. Bleiberg, B. Glimelius

Review

Health effects of the Chernobyl accident: fears, rumours and the truth
M. Rahu

Original papers

Clinical

Treatment of operable breast cancer in the elderly: a randomised clinical trial EORTC 10850 comparing modified radical mastectomy with tumor-ectomy plus tamoxifen

I.S. Fentiman, M.-R. Christiaens, R. Paridaens *et al.*

Treatment of operable breast cancer in the elderly: a randomised clinical trial EORTC 10851 comparing tamoxifen alone with modified radical mastectomy
I.S. Fentiman, J. van Zijl, I. Karydas, *et al.*

Phase II study of LU 103793 (Dolastatine analogue) in patients with metastatic breast cancer

P. Kerbrat, V. Dieras, N. Pavlidis, *et al.*

Predictive factors for blastoid transformation in the common variant of mantle cell lymphoma

R. Raty, K. Franssila, S.-E. Jansson, *et al.*

A mutant *TP53* gene status is associated with a poor prognosis and anthracycline—resistance in breast cancer patients

E. Rahko, G. Blanco, Y. Soini, R. Bloigu, A. Jukkola

Elevated plasma levels of transforming growth factor-B1 (TGF-B1) in patients with advanced breast cancer: association with disease progression

V. Ivanovic, N. Todorovic-Rakovic, M. Demajo, *et al.*

Phase II study of XR 5000 (DACA), an inhibitor of topoisomerase I and II, in patients with non-small cell lung cancer

C. Dittrich, B. Coudert, L. Paz-Ares, *et al.*

Assessing the clinical significance of health-related quality of life (HrQOL) improvements in anaemic cancer patients receiving epoetin alfa

D.L. Patrick, D.D. Gagnon, M.J. Zagari, *et al.*

Mannose-6-phosphate/insulin-like growth-factor-II receptor expression levels during the progression from normal human mammary tissue to invasive breast carcinomas

M.L. Berthe, M. Esslimani Sahla, P. Roger, *et al.*

The activity of raltitrexed (Tomudex(R)) in malignant pleural mesothelioma: an EORTC Phase II Study (08992)

P. Baas, A. Ardizzoni, F. Grossi, *et al.*

Paediatric

Intellectual outcome in children and adolescents with acute lymphoblastic leukaemia treated with chemotherapy alone: age and sex related differences

N. von der Weid, I. Mosimann, A. Hirt, *et al.*

Epidemiology and Cancer Prevention

No evidence of involvement of *BACH1* germline mutations in Finnish breast and ovarian cancer families

S.-M. Karppinen, J. Vuosku, K. Heikkinen, M. Allinen, R. Winqvist

Does alternative medicine use predict survival in cancer?

T. Risberg, A. Vickers, R.M. Bremnes, E.A. Wist, A. Kaasa, B.R. Cassileth

Experimental

Expression of uracil DNA glycosylase (UDG) does not affect cellular sensitivity to thymidylate synthase (TS) inhibition

S.J. Welsh, S. Hobbs, G. Wynne Aherne

Reliability of quantitative reverse-transcriptase-PCR-based detection of tumour cells in the blood between different laboratories using a standardised protocol

F.A. Vlems, A. Ladanyi, R. Gertler, *et al.*

Increased tumour extracellular pH induced by Bafilomycin A1, alters 5-fluorouracil pharmacokinetics and inhibits tumour growth and mitosis *in vivo*

P.M.J. McSheehy, H. Troy, L.R. Kelland, *et al.*

Interferon-gamma upregulates MUC1 expression in haematopoietic and epithelial cancer cell lines, an effect associated with MUC1 mRNA induction

P.K. Reddy, D.V. Gold, T.M. Cardillo, D.M. Goldenberg, H. Li, J.D. Burton