## This issue's topics



Only 97% are predicted to arrive safely on this 2 hour hypothetical flight—would you get on board?

#### Focus on quality assurance in radiotherapy

"It is time for everyone to take this area seriously." That is the statement of Dixon and Sullivan. In this issue, they compare radiotherapy treatment and delivery to high-risk industries, where attention to detail, alertness, precision as well as adequate resources (both personnel and materials) are required to minimise risks. Referring to a previous publication by Berwick and Leape, they use an analogous example of a flight to emphasise that the safety statistics for the airline industry are relatively good when compared with healthcare statistics (see above). Their Current Perspective also highlights two papers by Kouloulias and colleagues published in this issue that examine the needs and process for quality assurance in radiotherapy. Dixon and Sullivan provide an outline of key components for a comprehensive quality assurance programme.

#### Smoking in adolescents

A cohort from Lyon in France was followed over time from the age of 11 to 17 years. Cross-sectional questionnaires were used to try to identify factors associated with regular smoking. Adolescents who played sports, used computers and read were less likely to be regular smokers whereas those caring less about the importance of health and who associated with friends and family who smoked were more likely to be regular smokers. Those living with one or no parent and with increased alcohol and drug use, as well as those that were sexually active, were also more likely to smoke. The authors suggest that those with a sense of well-being are less likely to smoke. Their results also indicated that the percentage of never smokers that expected to remain non-smokers increased with age. Thus, this emphasises the need to begin prevention efforts in early adolescence or even earlier. The similarity of their results to data obtained in other countries "underlines a universal need for age-specific prevention," they said. On a related theme, we are publishing in the *EJC* later this year a Special Issue on 'Adolescents and Cancer'.

## E-cadherin expression in NPCs is associated with the methylation status of the gene

This is the conclusion of the study by Tsao and colleagues in this issue who looked at the expression level of E-cadherin and the methylation of the E-cadherin 5' CpG promoter region. They examined six cell lines and found that those that were heavily methylated showed little or no E-cadherin expression—either at the protein or mRNA level. These results were confirmed in clinical tissue samples where 15/29 were methylated and all of these had weak expression. In contrast, in 10 non-malignant nasopharyngeal samples (NPCs), there was only one sample that showed weak expression and this sample was also found to be heavily methylated. This study confirms similar observations in other cancers, but is the first to show such a link for NPC cells. Interestingly, two cell lines that showed comparable methylation and mRNA expression differed in their level of protein expression, leading the authors to suggest that there may be other post-transcriptional mechanisms also operating in these cells. Moreover, some of the samples with a weak E-cadherin expression did not show evidence of methylation, indicating that E-cadherin is likely to be down-regulated by several mechanisms. E-cadherin has often been associated with an advanced stage of disease and a poor survival and is frequently lost or reduced in NPCs. Thus, the authors propose that their findings "suggest that the restoration of E-cadherin to prevent or reduce the metastatic phenotype of NPC cells may be a potential therapeutic strategy". On a related theme, Chen and colleagues, studying methylation status and E-cadherin expression in cervical cancer tissues—a study also published in this issue—concluded that E-cadherin expression was (in part) correlated with DNA methylation in cervical cancer. These two studies are discussed in an accompanying editorial by Drs. Di Croce and Pelicci.

# Forthcoming papers

## **Editorial Comment**

Dose-adjusting epirubicin in patients with altered liver function: when classical pharmacology makes good practical sense L. Gianni

## Reviews

The use of GnRH agonists in early and advanced breast cancer in pre- and peri-menopausal women J.F.R. Robertson, R.W. Blamey

Potential role of magnetic resonance spectroscopy (MRS) in the assessment of tumour response in childhood cancer S.J. Vaidya, G.S. Payne, M.O. Leach, C.R. Pinkerton

Altered fractionation and combined radio-chemotherapy approaches: pioneering new opportunities in head and neck oncology J. Bernier, S.M. Bentzen

Tamoxifen chemoprevention of breast cancer and genetic risk factors

T.J. Powles

## **Original Papers**

## Clinical

Concurrent sequencing of full dose CMF chemotherapy and radiation therapy in early breast cancer has no effect on treatment delivery C. Faul, A. Brufsky, K. Gerszten, et al.

PII: S0959-8049(03)00024-8

Age-specific norms and determinants of anxiety and depression in 73148 women with breast cancer recruited through a population-based cancer registry

R.H. Osborne, G.R. Elsworth, J.L. Hopper

Quality of life during radiotherapy for rectal cancer

M.G. Guren, S. Dueland, E. Skovlund, et al.

Identification and characterisation of a group of cervical carcinoma patients with profound downregulation of intratumoral type 1 (IFN gamma) and type 2 (IL-4) cytokine mRNA expression

A. Gey, P. Kumari, A. Sambandam, et al.

The role of pelvic lymph node dissection as a predictive and prognostic factor in bladder cancer

M.M. Knap, F. Lundbeck, J. Overgaard

Epirubicin in patients with liver dysfunction: development and evaluation of a novel dose modification scheme

N.A. Dobbs, C.J. Twelves, W. Gregory, et al.

Measurement of an apoptotic product in the sera of breast cancer patients

T. Ueno, M. Toi, K. Biven, et al.

Continuing chemotherapy or not after the induction treatment in advanced breast cancer patients: clinical outcomes and oncologists' preferences M.A. Nooij, J.C.J.M. de Haes, L.V.A.M. Beex, *et al.*An EORTC-ECSG phase I study of LU 79553 administered every 21 or 42 days in patients with solid tumours

A. Awada, R. Thodtmann, M.J. Piccart, et al.

## Paediatric

# Paediatric Update

Management of infection (including the use of CSF) in children with malignancy

G. Miflin, S.E. Kinsey

## Commentary

A. Reilly

## **Epidemiology and Cancer Prevention**

Differences in the epidemic rise and decrease of prostate cancer among geographical areas in southern Europe: an analysis of differential trends in incidence and mortality in France, Italy and Spain

A. Quaglia, S. Parodi, P. Grosclaude, et al.

Neovascularisation, expression of fibroblast growth factor-2, and mast cells with tryptase activity increase simultaneously with pathological progression in human malignant melanoma

D. Ribatti, A. Vacca, R. Ria, et al.

Predicting the maximum-tolerated dose of PNU-159548 (4-demethoxy-3'-deamino-3'-aziridinyl-4'-methysulphonyl-daunorubicin) in humans using CFU-GM clonogenic assays and prospective validation

D. Moneta, C. Geroni, O. Valota, et al.

Detection of the human papillomavirus and analysis of the TP53 polymorphism of exon 4 at codon 72 in penile squamous cell carcinomas

O. Humbey, M.P. Algros, S. Cairey-Remonnay, et al.