

This issue's topics



Temporal response in leukaemias to histone deacetylase inhibitor

Targets for therapeutic interventions in leukaemias

In this issue, a study by Chambers and colleagues may provide some clues as to possible therapeutic targets in leukaemias. They examined genes that may be highly sensitive to histone hyperacetylation by incubating leukaemic cells with the histone deacetylase inhibitor, trichostatin A (TSA). Gene expression profiles were then determined using oligonucleotide microarrays. They found that 9% of the genes were similarly regulated in the cells in response to TSA and that genes showing primary and secondary responses could be distinguished temporally. Interestingly, *MKN3*, an imprinted gene involved in the Prader–Willi syndrome, was the most rapidly repressed gene.

The pros and cons of exploiting p53

p53 inactivation is a common event in cancer and many cancer treatments result in the activation of p53. However, these therapies have the serious drawback of long-term DNA damaging effects. Also, some of the adverse side-effects of these therapies are thought to be due to the induction of p53 in normal tissues. In this issue, Lain and Lane discuss the most relevant discoveries with regard to the development of new therapies that aim to induce the transcriptional activity of p53 in a non-genotoxic way. They discuss the benefits of such therapies. The authors hope their review will “stimulate researchers to keep on discovering new suitable targets of the p53 pathway and encourage the search for novel, non-genotoxic activators of p53 by high throughput screenings”.

Loss of MMR gene and improved survival in advanced ovarian cancer

Ovarian cancer patients with loss of expression of the DNA mismatch repair (MMR) gene, hMLH1, have an improved survival when compared with those that expressed hMLH1 conclude Scartozzi and colleagues in this issue. They examined 34 evaluable patients with stage III–IV ovarian cancer for immunohistochemical expression of hMLH1. They divided the patients into 2 groups; those with loss of hMLH1 expression in 50% or more of the cells ($n = 19$; Group A) and those with $> 50\%$ expression ($n = 15$; Group B). Group A had a median survival of 55 months compared with only 12 months in the group B patients ($P = 0.014$). Furthermore, loss of hMLH1 expression was the only independent predictor of survival in multivariate analysis. The authors propose that if their data could be confirmed in a larger series, loss of hMLH1 immunostaining may be a useful prognostic marker in these patients.

Forthcoming papers

Editorial comment

Physical activity in long-term survivors of germ-cell cancer
S. Siejfer, R. de Wit

Reviews

Pathological work-up of sentinel lymph nodes in breast cancer. Review of current data to be considered for the formulation of guidelines

G. Cserni, I. Amendoeira, N. Apostolikas *et al.*

Genomics and proteomics in cancer

J.P.A. Baak, F.R.C. Path, M.A.J.A. Hermsen, *et al.*

Epidermal growth factor receptor (EGFR) as a target in cancer therapy: understanding the role of receptor expression and other molecular determinants that could influence response to anti-EGFR drugs

F. Ciardiello, G. Tortora

Original papers

Clinical

The level of physical activity in long-term survivors of testicular cancer

L. Thorsen, W. Nystad, S.D. Fossa

Concurrent hypermethylation of gene promoters is associated with MSI-H phenotype and diploidy in gastric carcinomas

B. Carvalho, M. Pinto, L. Cirnes, *et al.*

Fulvestrant versus anastrozole for the second-line treatment of advanced breast cancer in subgroups of postmenopausal women with visceral and non-visceral metastases: combined results from two multicentre trials

L. Mauriac, J.E. Pippen, J. Quaresma Albano, *et al.*

Intrinsic variability in the detection of micrometastases in lymph nodes for re-staging of colorectal cancer: effect of individual markers and tissue samples

M. Salto-Tellez, Say Li Kong, A.P.K. Leong, E.S.C. Koay

Prognostic significance of K-ras, p53, bcl-2, PCNA and CD34 in radically resected non-small cell lung cancers

F. Grossi, M. Loprevite, M. Chiaramondia, *et al.*

Oestrogen receptor beta is abundantly expressed in normal colonic mucosa, but declines in colon adenocarcinoma paralleling the tumour's dedifferentiation

P.A. Konstantinopoulos, A. Kominea, G. Vondoros, *et al.*

Development of an European Organisation for Research and Treatment of Cancer (EORTC) disease-specific quality of life questionnaire for use in patients with liver metastases from colorectal cancer

V. Kavadas, J.M. Blazeby, T. Conroy, *et al.*

Phase II trial with S1 in patients with gastric cancer, treated in first-line (An ECSG-EORTC Phase II Trial)
P. Chollet, P. Schoffski, U. Brunsch, *et al.*

Paediatric

Viridans streptococci bacteraemia in children with fever and neutropenia: a case-control study of predisposing factors
H. Paganini, V. Staffolani, P. Zubizarreta, *et al.*

Epidemiology and cancer prevention

Analysis of survival of mesothelioma cases in the Italian register (ReNaM)
A. Marinaccio, M. Nesti & Regional Operational Centers

Experimental

Differential expression of inducible nitric oxide synthase and peroxisome proliferation activated receptor gamma in non-small cell lung carcinoma
T.W. Lee, C.G. Chen, H. Xu, *et al.*
Activation of extracellular signal-related kinase by oestradiol interferes with the effects of Trastuzumab on HER2 signalling in endometrial adenocarcinoma cell lines
O. Treeck, K. Diedrich, O. Ortmann
Thymidylate synthase inhibition triggers apoptosis via caspases-8 and-9
H.H.J. Backus, D. Wouters, C.G. Gerreira, H.M. Pinedo and G.J. Peters
Trail-induced apoptosis and interaction with cytotoxic agents in soft tissue sarcoma cell lines
S. Tomek, W. Koestler, P. Horak, *et al.*