Pergamon

European Journal of Cancer Vol. 32A, No. 8, pp. 1273–1278, 1996

Printed in Great Britain
0959–8049/96 $15.00+0.00

International Cancer News

Compiled by Robert Short, News Editor, London

From the Globe

Cancer Risk of Low-level Radiation Challenged

Cancer risk is not always proportional to dose of radiation, especially at the lowest levels of radiation. This is the contention of Dr Marvin Goldman, Department of Surgical and Radiological Sciences, University of California, U.S.A.

"It is time for us to step back and take a careful view of the way we use science to estimate possible risks from low-level exposures, especially delivered at very low dose rates," he said in a recent article in *Science* [1].

"Cancer risk assessments tend to be derived from studies of cohorts exposed to high levels of insult. The assumption made is to connect the high-level risk values to the zero intercept and decribe the slope of the resulting line as a risk coefficient, fatal cancers per unit of dose" he said. However, it is now possible to evaluate the results of low levels of exposure and to apply new tools to test this assumption.

He said that it is now known that continual radiation exposure is less carcinogenic than acute exposure. Also, animal studies show that as the dose rate is decreased, the risk per unit dose not only decreases, but the latent period becomes longer. "If the latent period exceeds the life expectancy, we see in the intersect the equivalent of an effective threshold." It also appears that combined exposures to both radiation and chemicals at 'low' levels exert an additive and not a multiplicative effect.

Cancer is induced by more steps than a single ionisation and submolecular lesion. The various intracellular repair mechanisms of mammals are often able to repair such lesions. 'Risk' may be the integrated sum of the failure probabilities of all the steps involved in such repair.

"Thus, the universial cancer risk curve may later prove to be more of an S or sigmoid curve. Our limited data, short-sightedly, only one order of magnitude wide, are seemingly straight-line segments of that curve," concluded Dr Goldman.

1. M Goldman. Cancer risk of low-level exposure. *Science* 1996, **271**, 1821–1822.

Helping Your Patient to Kill Himself: Troubles Ahead

Psycho-oncologist Dr F. Stiefel, Lausanne, Switzerland believes that articles describing a legislation of physician-assisted suicide should integrate the critical and problematic issues of the topic, as does a scientific manuscript. "A report on euthanasia—as any other medical communication—has to include the limits and possibilities and the advantages and disadvantages, of a given proceeding".

Dr Stiefel was giving a critique of two papers on euthanasia appearing in the *New England Journal of Medicine* this year. His full report is published in the *Journal of Supportive Care in Cancer* [1].

"Authors have to be aware that their communications are not only received by the medical community, but also by the public. In a time where the discussion on physician-assisted suicide has crossed the borders of medicine and ethics and has entered the field of politics, the danger of manipulation and misuse of such information is very real".

The two articles he discussed summarised different information. One was a description of a "Rights of the Terminally Ill Act", which is expected to take effect this year in the Northern Territory of Australia [2], and the other is a survey among physicians on physician-assisted suicide in Oregon, where the implementation of this legalisation has been barred by an injunction [3].

According to the authors, the Australian Rights of the Terminally Ill Act "is a good first attempt to create an act permitting voluntary euthanasia". Only the disadvantage of an unclear definition of terminal illness is highlighted.

In Oregon, where this issue has been 'resolved' with a definition of terminal illness as an illness that is likely to produce death within 6 months, the survey shows several severe problems with this legislation.

- Firstly, most responding physicians cited financial pressure as a possible reason for a request for physician-assisted suicide (there are 418 000 medically uninsured citizens in Oregon). Yet, physicians in Oregon have no guidelines for responding to a patient's request for assisted suicide if they think the request is prompted by financial pressure.

- Secondly, half the respondents in the Oregon survey were not confident they could predict that a patient had less than 6 months to live, and one third were not confident they could recognise depression in a patient asking for a lethal medicine. In addition, half of the respondents stated that they were not sure what drug they would prescribe and half of them were concerned about the possible harm if an attempt failed or a complication developed.

1. Stiefel, F. Supportive Care News. *J Supp Care Cancer* 1996, **4**, in press.
2. Ryan CJ. Euthanasia in Australia. The Northern Territory Rights of the Terminally Ill Act. *N Engl J Med* 1996, **334**, 326–328.
3. Lee MA, Nelson HD, Tilden VP, *et al.* Legalizing assisted suicide—views of physicians in Oregon. *N Engl J Med* 1996, **334**, 310–315.

From Europe

EORTC's Fight to Report on Cancer-causing Sunscreen Upheld

The EORTC Melanoma Co-operative Group have made European beaches a safer place this summer. The Group have provided clear evidence that bergamot-containing suntan lotions are associated with a significant increased risk of melanoma compared with sunscreens which do not contain this known carcinogen.

Dr Philippe Autier, Institut Jules Bordet, Brussels, Belgium, and colleagues were sued by the French company Bergaderm last year after issuing a press release connected to their landmark article appearing in the *International Journal of Cancer* [1]. The authors won their case in July of last year. Said Dr Autier, summarising the wording of the judgement: "Bergaderm could not prevent scientists from delivering a message they found grounded, and indeed there were elements of doubts on the safety of psoralen sunscreens even before we got our epidemiologic results."

Melanoma and Sunscreen Study

In 1991 and 1992, 418 melanoma cases and 438 healthy controls were interviewed in Germany, France and Belgium [1]. The questionnaire differentiated between regular sunscreens, psoralen sunscreens (prepared with 5-methoxypsoralen, a tanning activator and photocarcinogen), and self-tanning cosmetics (which produced a tan without ultraviolet radiation). Age, sex, hair colour and holiday weeks spent each year in sunny resorts were adjusted for. The melanoma risk was 1.5 for regular sunscreens, and 2.28 for psoralen sunscreens. No melanoma risk was associated with use of self-tanning cosmetics. Among subjects with a poor ability to tan, psoralen sunscreen users displayed a melanoma risk of 4.45 when compared with regular sunscreen users.

The authors concluded in their paper, "Our results support the hypothesis that sunscreens do not protect against melanoma, probably because of their ability to delay or avoid sunburn episodes, which may allow prolonged exposure to unfiltered ultraviolet radiation. Serious doubts are raised regarding the safety of sunscreens containing psoralens.

1. Autier P, Dore J-F, Schifflers E, *et al.* for the EORTC Melanoma Cooperative Group. Melanoma and use of sunscreens: an EORTC case-control study in Germany, Belgium and France. *Int J Cancer* 1995, 61, 749–755.

Dr Autier said that he did not now know of any psoralen containing sunscreens still being sold in Europe. However, he thought that some dangerous suntan lotions were being prepared by chemists: "Suntan lotions prepared with bergamot oil without UVB blocks are still prepared by some pharmacists in France and other Mediterranean countries. This production is relatively small but should normally be prohibited according to the EC decision of April 1995 on products containing psoralens."

Bergamot is an oil containing 5-methoxypsoralen (5-MOP) which encourages rapid tanning under sunlight. The faster tan was believed to protect against the harmful effects of solar radiation in addition to the protection provided by the sunscreens. Although 5-MOP is a carcinogen on rodent skin activated by ultraviolet A radiation, some investigators had concluded that the mixture of UVB filters and 5-MOP inhibited such carcinogenic properties while providing a better protection against the UVB. From such results, psoralen sunscreens had been represented as a good choice for people seeking a suntan. "Some scientists even claimed psoralen sunscreens were better than regular sunscreens," said Dr Autier.

Dr Autier explained that in the early 1980s three French companies produced this type of sunscreen, but when photocarcinogenic properties of the 5-methoxypsoralen were discovered, two stopped their production. Bergaderm did not.

Most of the recent scientific information circulating about psoralen sunscreens was produced by Bergaderm, according to Dr Autier. He commented: "Nearly all laboratory studies done after 1980 and in favour of psoralen sunscreens have been supported by Bergaderm. No other laboratory found support to perform really independent studies on these products."

Dr Autier told the *European Journal of Cancer* "Many physicians and scientists had become reluctant to contradict claims from Bergaderm or to challenge studies they had paid for" because of their alleged aggressiveness. But he and his colleagues felt they needed to broadcast their findings. "We were convinced of our findings, and that it was not acceptable any more to see people using such a hazardous product."

Although other studies have supported Dr Autier's paper, these have been basic science studies that are difficult for the non-specialist to understand, so the EORTC Melanoma Group's epidemiology group were the first to show the problem from an epidemiological angle and in a way that was clear to people. "Showing that Bergasol increased melanoma risk was discovered thanks to epidemiology, just as epidemiology found that cigarette smoking caused lung cancer."

FECS Responds to Scientific Innovation Crisis

It is a paradox of the European Union (EU) that despite its scientific excellence, it launches fewer new products, services and processes than its main competitors. The EU is innovating less and less well at a time when innovation is becoming a driving force in economic competitiveness. This is a handicap to European companies and hence to employment. It is the result of a number of structural obstacles (complex legal and administrative environment, inadequate research and development input, unsuitable financing systems, poorly adapted education and training systems and too little mobility).

On the initiative of Edith Cresson, Commissioner responsible for research, education and training, and Martin Bangemann, Commissioner responsible for industrial affairs, telecommunications and information technology, the European Commission (EC) adopted on 20 December of last year a *Green Paper on Innovation* (COM(95) 668 final) in which it sets out 13 routes for action in a series of concrete proposals (approximately 130 in total) that would stimulate innovation in Europe. The document was intended to stimulate debate within the Member States and interested organisations were invited to respond to it before 10 May. At the end of the consultation, the EC intends to draw up in June 1996 a synthesis report together with an action plan to be submitted to other EU institutions for approval and implementation.

Following consultation with its full members, the Federation sent a response to the EC within the given deadline. In general, the Federation welcomed the Green Paper and was pleased that the EC had at last begun a process to

identify the obstacles that pose a handicap to the development of the EU as an important international economic force. While recognising that the main proposals for action in the Green Paper were comprehensive and attainable, the Federation expressed concern that there was little in the document to indicate how these actions would be supported in practice. The most important criterion was that substantial new funding must be made available if the proposals were to succeed given that it seems likely that, as suggested, projects identified in the Green Paper would be financed by redirecting existing programme funds. There was also little discussion in the Green Paper on how other major initiatives currently on the EC's agenda would impact or interrelate with the proposals.

More specifically, the Federation addressed its remarks to those issues in the Green Paper that dealt with:

- directing research efforts towards innovation (supporting those proposals that sought to increase the capacity to anticipate technical evolution, markets and competitors, developing research efforts and their coordination, assessing projects and programmes with particular reference to their relevance for innovations, and facilitating social acceptance of new technologies and change);

- reinforcing human resources for innovation (developing formal and vocational training and the need for closer links between educational institutions and businesses, and encouraging the mobility of students and researchers, not only with the Member States but also within each country, between universities or research centres and companies); and

- fostering a legal and regulatory environment favourable to innovations (recognising the pressing need to adapt existing regulations to ensure that innovation is not strangled by bureaucracy, and reviewing the entire matter of free movement of people, standards, intellectual and industrial property and competition).

The Federation's response has been forwarded to key members of the European Parliament and Commission.
Copies of the complete response in English are available on request from the FECS office at 83 Avenue E Mounier, B-1200 Brussels (Tel: +32 2 775 0207; Fax: +32 2 775 0200; e-mail: p.pritchard@fecs.be).

A. Phylip Pritchard, Chief Administrator, FECS

Phylip Pritchard: FECS wants to know how Green Paper proposals impact on funds of existing programme

EORTC Studies Guide in Second Edition

A Practical Guide to EORTC Studies is now available. "This is the second issue of the Practical Guide to EORTC studies. The value of the first issue is reflected in the wide acceptance of its content and the interest shown by non-EORTC investigators," says Pieter De Mulder, Chairman of the Quality Control Committee of the EORTC.

"The EORTC is one of the very few independent supranational organisations that plays an important role in the development and execution of clinical trials in almost all areas of cancer care. Its broad expertise is laid down in this guide and will be a standard not only for EORTC based studies but also for third parties," said Dr De Mulder. The guide is made possible by a grant from the European Union.

He said that it was important to realise that rules alone will not improve the outcome of cancer treatment. The effort of professionals and volunteers form the true basis of EORTC strength. "Therefore, the practical guide should be considered as an aid to and not as an obstacle to clinical research into 1996 and will continuously require positive criticism from its users to serve us even better in the next century."

To obtain this book ring Dominique Eeckhoudt, Executive Secretary at the EORTC Central Office. Tel: +32-2-774-629; Fax: +32-2-772-3545.

European Network of Cancer Registries (ENCR) Estimate Cancer Incidence in Europe

The EUROCIM database has been used to estimate cancer incidence in the European Union as a whole and in countries which do not have complete registration systems. Recently, they have submitted a paper to the *European Journal of Cancer.*

"It is intended to publish the methodology, summary results and discussion in the *European Journal of Cancer* and the detailed results in a windows-based software package in the IARC Scientific Publications series," says Roger Black of the Unit of Descriptive Epidemiology at the International Agency for Research on Cancer, Lyon, France.

This updates the previous publication on "Facts and Figures of Cancer in the European Community [1]. "A programme of more detailed country-specific analyses of trends is underway, in collaboration with local cancer registries. The first report of this series concerns France 1975–1995." He added that a booklet providing information on the ENCR for a general audience has been produced in four European Languages by the European Commission.

The Second version of the EUROCIM (European Cancer Incidence and Mortality) database and analysis software, containing detailed information from 85 cancer registries, was distributed to collaborating ENCR members in 1995. Researchers can access the data through collaborative projects with ENCR member registries.

The ENCR currently has 138 members from among the population-based cancer registries in the European continent. Eighty-five of these are in European Union countries, representing 43% of the population. The ENCR is run by a Steering Committee composed of nominees of international cancer registry and research organisations.

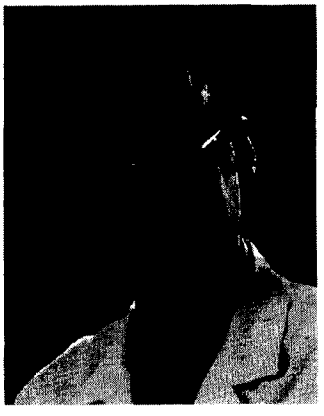
The ENCR aims to improve the quality, comparability and availability of cancer registry data in Europe, and to encourage their use in epidemiological, clinical and health services research.

Said Mr Black, "The most important ENCR activities are common training courses in cancer registration data collection and in statistical methods, working groups on standard data definitions for key variables, fellowships for cancer registry personnel, consultancy for cancer registries under development, the maintenance of a cancer incidence and mortality database (EUROCIM) and the publication of information on cancer in Europe."

1. Esteve J, Kricker A, Ferlay J, Parkin DM. Facts and figures of cancer in the European Community. Lyon, International Agency for Research on Cancer, 1993.

Appointments and Awards

Professor Silvio Monfardini Appointed Scientific Director for National Cancer Institute in Naples



Professor Silvio Monfardini: Appointed Scientific Director for National Cancer Institute in Naples

Professor Silvio Monfardini has been appointed Scientific Director of the National Cancer Institute in Naples, Italy. For the last 10 years he has served as the first Scientific Director and Head of the Division of Medical Oncology of the National Cancer Institute, CRO, Aviano, Italy.

He works in the major areas of medical oncology and has a particular interest in non-Hodgkin's lymphomas, Hodgkin's lymphomas, chronic myeloid leukaemias, solid tumours (in particular cancer of the testis), phase I–II studies, and tumours in elderly people. He is the current chairman of the EORTC Study Group on Neoplasia in the Elderly.

According to the press office of the Istituto Nazionale Tumori Centroeuropeo, the appointment of Professor Monfardini signals the intention of the Regional and National Health Authorities to relaunch the clinical and research activities of the Institute.

Professor Ian Hart Chairs British Association for Cancer Research

Professor Ian Hart has become the Chairman of the British Association for Cancer Research. The Association has approximately 1300 members and is active in promoting cancer research through the organisation of two scientific meetings each year, one large one in the spring and one in the winter in conjunction with another learned society. The society also makes an annual "Young Researcher of the Year" award of £600.

Professor Hart is the Editor for Experimental Oncology for the *European Journal of Cancer* and is Richard Dimbleby Professor of Cancer Research at United Medical and Dental Schools, St Thomas' Hospital, University of London, U.K. He also represents the interests of the European Association for Cancer Research on the Journal.

Professor Hart was trained in Bristol, U.K., and supplemented this with extensive research training at the NCI Cancer Research Facility in Frederick, Maryland, U.S.A. Thereafter he was a principal staff scientist at the Imperial Cancer Research Fund laboratories in London, U.K., before moving to his present post in 1993.

Professor Jan Ponten now President of the European Assocation for Cancer Research

Professor Jan Ponten is the new President of the European Association for Cancer Research. He is based at the

Professor Jan Ponten from Uppsala now President of EACR

Department of Pathology at the University of Uppsala, Sweden. Previous positions include Professor and Chairman of the Department of Pathology in Uppsala 1972–1992, and Professor of Tumour Pathology at the Karolinska Institutet in Stockholm 1970–1972. He has served as Chairman of the Research Council of the Swedish Cancer Society 1982–1992, and Chairman of the International Programme for International Cancer Research Technology Transfer Project run by the International Union of Cancer 1976–1994.

Professor van Oosterom Moves to University of Leuwen

Professor Allan T. van Oosterom has been appointed Head of the Department of Medical Oncology at the University of Leuwen, Belguim.

Professor Oosterom was trained in Leiden, at The Netherlands Cancer Institute, at the U.S. NCI, and at the Royal Marsden Hospital in London. To take up his new position, he moves from his post as Professor of Oncology, Head of the Oncology Department at the University of Antwerp, and Chairman of the Laboratory of Cancer Research and Clinical Oncology at the University of Antwerp.

He is Chairman of the EORTC Treatment Division and has a very long association with clinical research, mainly related to chemotherapy and associated pharmacological problems. His main areas of interest include sarcomas, gynaecological and urogenital tumours, as well as quality assurance programmes.

Special Report

EORTC Highlights from ASCO 1996

An EORTC study on prostate cancer was the subject of a major press conference at the thirty-second Annual Meeting of the American Society of Clinical Oncology (ASCO) which took place in Philadelphia in May of this year. The study was picked out of the 1800 abstracts submitted to ASCO and was one of 27 selected for publicity at the annual meeting. The highlights of this study and a selection of EORTC studies and one study using a quality of life tool developed by the EORTC are reported below.

High-dose Doxorubicin in Soft Tissue Sarcoma No Better than Standard

The use of rhu-GM-CSF allowed high-dose doxorubicin to be given safely in a multicentre study of advanced soft tissue sarcomas, but this high-dose regimen proved no better than the standard dose schedule.

These were the findings of a large randomised phase III trial by the EORTC Soft Tissue and Bone Sarcoma Group. For 10 years, the EORTC group has been conductiong phase III trials of active drug combinations in advanced soft tissue sarcomas with disappointing results. No combination has acheived better activity than single-agent doxorubicin at optimal dosage (75 mg/m^2).

The present trial compared high dose (arm B) doxorubicin (75 mg/m^2), ifosfamide (5g/m^2) and rhu-GM-CSF (250 μg/m^2/d) s.c. for 14 days to a standard-dose regimen (arm A) of doxorubicin (50 mg/m^2) and ifosfamide (5 g/m^2). 301 of the 314 patients enrolled from 19 European centres in seven countries were eligible.

In the proceedings of the meeting, results were reported on 262 eligible off-study patients. The investigators said, "There were no statistically significant differences, neither in survival nor in progression-free survival." Responses were observed in 20% in arm A versus 21% in arm B, including five complete responses (4%) in arm A and three complete responses (2%) in arm B. No change was observed in 40.3% in arm A and 41.4% in arm B. Toxicities were manageable in both arms (grade III–IV neutropenia was 95% in A and 92% in B), but one toxicity-related death (kidney failure) occurred in arm B. Very few side-effects were attributable to GM-CSF and these were manageable.

Thus, the use of rhu-GM-CSF allowed safe escalation of chemotherapy doses in this multicentre study, with manageable toxicity comparable to those of standard-dose chemotherapy. However, despite a significant increase in the dose intensity of doxorubicin, the high-dose regimen failed to show any superiority over the standard-dose schedule in this prospective randomised trial.

Doxetaxel and Cisplatin a Success in Head and Neck Cancer

Doxetaxel and cisplatin have been found to be a highly active regimen for squamous cell carcinoma of the head and neck, according to Dr P. Schoffski and associates for the EORTC Early Clinical Trials Group.

Docetaxel is an active drug in head and neck cancer. The EORTC Early Clinical Trials Group performed a multicentre phase II study combining docetaxel with cisplatin in patients with locally advanced, unresectable and/or metastatic squamous cell carcinoma of the head and neck.

The treatment consisted of docetaxel 100 mg/m^2 i.v. infusion for 1 h followed after 3 h by cisplatin 75 mg/m^2 i.v. infusion for 3 h. Supportive medication included 5HT3-antagonists, a conventional hydration schedule and a 5-day methylprednisolone premedication starting the day before infusion. The treatment was repeated every 3 weeks for 24 courses. 28 patients entered the trial. At the time of the proceedings, 24 patients (median age 61 years; 22/24 male), and 57 courses of treatment were evaluable for protocol compliance and toxicity. A median number of two courses were given. Doses were reduced in three courses, and 12 courses were delayed for 1–6 days.

The following main toxicities were observed in 57 courses: neutropenia grade 1–2: 16%, 3–4: 72%; alopecia grade 1–2: 82%; anaemia grade 1–2: 59%, 3–4: 3%; asthenia grade 1–2: 33%, 3–4: 12%; nausea grade 1–2: 30%, 3–4: 3%; sensory neurotoxicity grade 1–2: 23%; skin toxicity grade 1–2: 19%, 3–4: 2%; stomatitis grade 1–2: 14%, 3–4: 3%; and thrombocytopenia grade 1–2: 14%, 3–4: 3%.

At the time of the proceedings, 18 patients were evaluable for response, 4 were too early, and 6 were not evaluable. Response rate: complete response 11%, partial response 67%, no change 11% and progressive disease 11%.

Metastatic Progression of Bladder Cancer Delayed

Three cycles of cisplatin, methotrexate and vinblastine (CMV) neoadjuvant chemotherapy have no apparent impact on overall survival in bladder cancer but show activity in the primary tumour and may delay locoregional and metastatic progression. This was the conclusion of the first analysis of MRC/EORTC intercontinental trial of neoadjuvant CMV chemotherapy and cystectomy or radiotherapy in muscle invasive bladder cancer.

In the trial, 975 patients with transitional cell carcinoma of the bladder from 89 institutions in 16 countries were randomised to receive either three cycles of cisplatin (100 mg/m^2), methotrexate (30 mg/m^2) and vinblastine (4 mg/m^2) every 3 weeks, or no chemotherapy prior to radical cystecomy, full dose external beam radiotherapy or pre-operative radiotherapy plus cystectomy. 489 patients were randomised to receive CMV, 486 no CMV. 484 underwent cystectomy, 414 radiotherapy and 77 combined treatment.

There were eight chemotherapy-related deaths (1.6%) and 17 postcystectomy deaths (3%). Median follow-up was 22 months. 359 patients (36.9%) have died: 281 of bladder cancer, 25 of treatment toxicity and 53 of other causes. There was no difference in overall survival between patients receiving CMV or no CMV. Overall 2-year survival was 62% versus 60%. There was a 6% difference in reported overall disease-free survival at 2 years. "However, this may be due in part to arm-dependent biases in time to diagnosis of disease progression," speculate the investigators. Of 392 patients who underwent cystectomy, 12% in the no CMV arm compared with 33% who received CMV had no tumour in the cystectomy specimen, indicating a 21% pathological complete response rate of the primary tumour.

"We conclude that three cycles of CMV had no apparent impact on overall survival but demonstrated activity in the primary tumour and may have delayed locoregional and metastatic progression. Longer follow-up is awaited," said the researchers.

Adjuvant Hormone Therapy in Prostate Cancer

Immediate hormonal therapy improves locoregional control and survival in patients with locally advanced prostate cancer, according to the EORTC Radiotherapy and Genitourinary Tract Cancer Cooperative Groups.

Dr M. Bolla and colleagues of the EORTC groups studied 415 patients in their randomised phase III clinical trial to evaluate the impact of adjuvant hormone therapy with LHRH analogue, given at the onset of radiotherapy on local control, disease-free survival and crude survival. The patients were randomised to receive radiotherapy alone (arm 1) or radiotherapy plus immediate hormone therapy, the latter being continued for a period of 3 years (arm 2). In both arms, 50 Gy were delivered to the pelvis in 5 weeks, 5 days per week, and 20 Gy in 2 weeks as a prostatic boost. Hormone therapy was goserelin (Zoladex, 3.6 mg s.c. every 4 weeks) starting on the first day of irradiation and lasting for 3 years, plus cyproterone acetate (150 mg, per os) for 1 month. At the close of the study, 385 patients were evaluable for preliminary analysis, with a median follow-up of 33 months.

The results suggest that adjuvant LHRH analogue started at the onset of external irradiation improves local control and survival.

Table 1. *5-year Kaplan–Meier estimates (%)*

Arm	Local contol	Metastases free	Clinical disease-free survival	Survival
Radiotherapy alone	75	56	44	56
Adjuvant LHRH analogue	95	89	85	78

Women Need Extra Emotional Support Before Chemotherapy

Closer attention needs to be given to the 'emotional functioning' of women about to undergo chemotherapy for cancer. This was the conclusion of a study by Dr C. Cripps and colleagues of the Ottawa Regional Cancer Centre, Ottawa, Ontario, Canada. They showed a clear gender difference in the response on the QLQ-C30 questionnaire of 1071 patients (329 men and 742 women) with cancer entered into three studies of anti-emetics.

The patients received either moderately or highly emetogenic chemotherapy. Each patient completed the QLQ-C30 and a nausea and vomiting diary in the week before their first ever cycle of chemotherapy and on day 8 after chemotherapy.

The QLQ-C30 contains domains on functioning (physical role, emotional, cognitive and social), a global quality of life domain, three symptom domains (fatigue, pain nausea/vomiting), five single items (dyspnoea, insomnia, anorexia, constipation, diarrhoea, and financial impact).

Emotional functioning was the only domain to show a difference. "The answers to all the domains and single items were similar, regardless of gender, except for emotional function, where women showed a statistically significantly lower mean score at baseline with improvement after chemotherapy as compared with men," said the investigators. In 250 of the patients who had lung cancer, a similar change was highly significant in women as compared with men.

Although the change in emotional function was not reflected in a statistically signficiant change in global quality of life, the authors concluded, "Nevertheless, the implication is that closer attention needs to be given to the emotional functioning of women about to undergo chemotherapy for cancer."