Pergamon

European Journal of Cancer Vol. 32A, No. 4, pp. 567–568, 1996

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

International Cancer News

From the Globe

Tamoxifen Under Scrutiny as Carcinogen in California

As reported in *Science* (6 October 1995), this issue will be put before a California toxic review panel concerning tamoxifen under California Proposition 65. Currently, the matter is before the Carcinogen Identification Committee (CIC) of the state's Office of Environmental Health Hazard Assessment (OEHHA).

In May 1995, the CIC issued a preliminary finding that tamoxifen can itself cause endometrial cancer. However, Leslie Ford of the U.S. National Cancer Institute stated, "it is premature to make a determination as to whether tamoxifen plays a causal role in the development of endometrial cancer". Craig Jordan from the Northwestern University in Chicago argues that the benefits of tamoxifen therapy to breast cancer patients far outweigh the risks.

Zeneca holds that, by listing tamoxifen as a carcinogen, the OEHHA would interfere with the physician–patient relationship, and that the patient's doctor, not the state of California, is best able to interpret the drug's risk for a given cancer patient.

Controversy about tamoxifen being listed as a "carcinogen" also erupted in the 17 November 1995 issue of *Science*. A UCLA representative from Los Angeles stated that the legally mandated process of hazard identification does not address the issue of the anti-oestrogenic components not benefiting in anticancer therapy in primary and metastatic breast cancer.

While the controversy on tamoxifen clearly is directed at the "preventive" use of the drug (known for 20 years in anticancer therapy), Zeneca company officials and responsible clinical oncologists in the U.S.A. are highly concerned about the fact that many worried breast cancer patients across the Atlantic are taking the drug for therapeutic, not preventative reasons.

In this unfortunate situation, Zeneca (and other tamoxifen-selling pharmaceutical companies) are uniting with clinical and basic research breast cancer experts inside and outside the U.S.A., to generate a comprehensive and real view about the merits and risks of this anti-oestrogen, which has been used worldwide in tens of thousands of women with breast cancer or women who were at high risk of developing the disease, during the past 10–20 years.

Meanwhile, the International Agency for Research on Cancer (IARC) in Lyon, France is mounting an urgent international, retrospective cohort study about the influence of tamoxifen, and its dose and duration on the occurrence of second endometrial (and other) cancers in breast cancer patients. Tamoxifen was also classified as a carcinogen in February 1996. However, this study will not be able to report on the respective risks of preventive use of the drug in "healthy" women at high risk from breast cancer, the information needed most.

UICC International Cancer Fellowships

The UICC (address below) offers the following fellowships:

American Cancer Society International Cancer Research Fellowships: 6–12 months of original work in basic, clinical, behavioural or epidemiologic areas of cancer research abroad by senior investigators. Application deadline 1 October 1995, average award value U.S.$ 40000, funded by the American Cancer Society.

Yamagiwa–Yoshida Memorial International Cancer Study Group Grants: 3 months to establish bilateral research projects abroad. Application deadlines 1 July 1996 and 1 January 1997. Average grant value U.S.$ 8000, funded by the Olympus Optical Company, Tokyo and the Japan National Committee for UICC.

International Cancer Technology Transfer Fellowships (ICRETT). Up to 3 months for cancer reasearch technology and clinical expertise transfer. Applications accepted at any time. Average award value U.S.$ 3000, funded by a group of cancer institutes and societies.

International Oncology Nursing Fellowship: 1–3 months observerships at renowned comprehensive cancer centers for registered, English speaking nurses from developing and East European countries. Application deadline 12 November 1995, average award value U.S.$ 2800, funded by the Nursing Oncology Society, U.S.A.

Application forms may be obtained from:
UICC Fellowship Department, 3 Rue du Conseil-Général, CH-1205 Geneva, Switzerland. Fax: +41 22 320 1810

Mammography for Ages 40–49: Do Younger Women Benefit From Screening

A meta-analysis of seven randomised trials reported in the May 1995 issue of *Cancer* found that mammography screening in women between the ages of 40 and 49 significantly reduced the breast cancer mortality rate by 24%.

The authors reported that the results obtained were remarkable considering that each of these trials had severe major weaknesses such as long screening intervals (18 to 24 months versus 12 months), one instead of two mammographic views per breast, use of outdated mammographic equipment and techniques, no clinical examination or self-examination and inclusion of breast cancer death due to women refusing screening.

Benefits outweigh risks

The authors believe that no woman has ever developed breast cancer due to mammography even with multiple exam-

inations at doses many times higher than the currently used 0.25 cGy from a two-view-per-breast examination. The possibility of low-dose risk has been theorised based on excess rates of cancer among populations, who have received doses of 100 to more then 1000 cGy.

At median costs of U.S.$ 6360 biennially and U.S.$ 8899 annually per life-year saved, mammography screening itself is more cost-effective than many other accepted lifesaving interventions, including cervical cancer screening, osteoporosis screening, hormone replacement therapy and cholesterol treatment with median costs ranging from U.S.$ 12000 to U.S.$ 154000 per year of life saved.

On the other hand, a study published in the August 16 1995 issue of the *Journal of the National Cancer Institute* concludes that most of the reduction in breast cancer deaths among women who started mammography between the ages of 40 and 49 years came as a result of testing done after they were 50. The finding supports the NCI position that breast cancer mammography before age 50 is of reduced value. Using computer modelling to evaluate five Swedish studies, the analysis found that mammograms reduced breast cancer mortality by 29.5% among women aged between 50 and 69 years.

For women who started mammography screening between the ages of 40 and 49 years, the study found a reduction in mortality of 3% only. The study said previous findings of a 10% reduction in breast cancer deaths among this age group may have been skewed because many of the breast cancers were detected only after the women turned 50. This means their cancers would have been found by the later-age screening and they received no benefit from the earlier screening.

In a "pro" editorial in the *Journal of the National Cancer Institute,* Robert Smith of the American Cancer Society said some studies show a distinct survival benefit for regular mammography tests for women aged between 40 and 49 years. We do not have the same quality of evidence about the efficacy of mammography in women aged between 40 to 49 years compared to women aged 50 years and older, but there is compelling data that mammography is also beneficial to the younger age group.

However, a counter-editorial by A. Patrick Forrest and Freda Alexander said that studies in the U.S., Sweden, Scotland and Canada support the idea of not promoting regular mammography for all women over 50. The problem therefore remains controversial – and the *EJC* will come back to it again soon.

Beat Thürlimann
St Gallen, Switzerland
(Based on *The Clinical Cancer Letter*, November 1995)

From the Countries: United Kingdom

Imperial Cancer and Major U.S. Biotech Company Genzyme to Collaborate on Gene Therapy

The Imperial Cancer Research Fund and Genzyme Corporation's General Division announced that they are to collaborate in developing gene therapy treatments for cancer.

Under the terms of the agreement, Genzyme will work with Imperial Cancer's technology company, Imperial Cancer Research Technology Ltd (IRCT), and the charity's senior scientists to identify gene therapy projects with commercial development potential. Genzyme will fund a specialist technology manager in ICRT to identify ICRF discoveries with potential and will provide the financial backing for selected projects in exchange for rights to develop the results commercially. Imperial Cancer, a leading U.K. player in the field of cancer gene therapy, will receive royalties to plough back into research.

Dr John Wall, ICRT's chief executive, commented: "Working closely with Genzyme, one of the world's leading gene therapy companies, will help us in our mission to move laboratory-based research findings into commercial clinical development. We expect this collaboration to lead to important new products which will benefit cancer patients and generate future revenues to support further ICRF research".

Commenting on the agreement, Gail Maderies, Genzyme's Vice President for gene therapy, said "Cancer is one of the leading targets of gene therapy research worldwide. Collaborating with the Imperial Cancer Research Fund, one of the most respected institutions in cancer research, presents an exciting opportunity for Genzyme and enhances our positions as a broad-based gene therapy company."

The Imperial Cancer Research Fund is a charity employing over 1000 doctors, scientists and technicians and spends over £50 million a year on all forms of research to understand cancer, devise ways to prevent it and develop more effective treatments.

One of the world's top five biotechnology companies, Genzyme, which is based in Massachusetts, U.S.A., focuses on developing innovative products and services for major unmet medical needs.

(Press release)