and the incidence of cancers other than those generally accepted as smoking associated in people over 30 years of age.

1. Engeland A, Bjørge T, Haldorsen T, Tretli S. Use of multiple primary cancers to indicate associations between smoking and cancer incidence: an analysis of 500 000 cancer cases diagnosed in Norway during 1953–1993. *Int J Cancer* 1997, 70, 401.

FRANCE

Colon Dose of Iodine-131 Higher Than Estimates After Use for Thyroid Cancer

The dose to the colon as a result of ^{131}I given for the treatment of thyroid cancer could be higher than expected according to a calculation made by the International Commission on Radiological Protection.

Dr F. de Vathaire from the National Institute of Health and Medical Research, Institut Gustave Roussy, Villejuif Cedex, France, and colleagues studied 1771 patients treated for a thyroid cancer, of whom 651 had received ^{131}I for diagnosis and 846 for therapy [1].

The average ^{131}I cumulative activity given was 7.2 GBq, and the estimated average dose was 0.34 Sv to the bone marrow and 0.80 Sv to the whole body. After a follow-up averaging 10 years, no leukaemia was found and this was 2.5 less than expected from calculations based on Japanese atomic bomb survivors. A total of 80 patients developed a solid second malignant neoplasm, among whom 13 developed a colorectal cancer. Say the researchers, "The risk of colorectal cancer was found to be related to the total activity of ^{131}I administered 5 years or more before its diagnosis (excess relative risk 0.5 per GBq). These findings were probably caused by the accumulation of ^{131}I in the colon lumen."

They concluded that the dose to the colon, in the absence of laxative treatment, as a result of ^{131}I given for the treatment of thyroid cancer could be higher than expected from calculation of the International Commission on Radiological Protection. When digestive tract cancers were excluded, the overall excess relative risk of second cancer per estimated effective sievert received to the whole body was –0.2.

1. de Vathaire F, Schlumberger M, Delisle MJ, *et al.* Leukaemias and cancers following iodine-131 administration for thyroid cancer. *Br J Cancer* 1997, 75, 734–736.

U.K.

U.K. Group to Explore the Use of Biological Markers in Cancer

The United Kingdom Co-ordinating Committee on Cancer Research has convened an *ad hoc* Group, Chaired by Dr Robin Leake, to explore the use of biological markers in cancer studies. It is hoped that the results of the work will have an application throughout Europe. He said, "The Group is preparing a series of recommendations and welcomes input from all interested clinicians and scientists." Dr Leake is also chairman of the EORTC Receptor and Biomarkers Group.

The U.K. Group is interested in establishing which markers are of most value (predictive and prognostic) in which subgroups of cancer patients, what are the best assay methods, what is the best approach to incorporating such markers into future studies and how these markers can be reported to clinicians in order to achieve maximum benefits to the patient in terms of selection of best first-line (and subsequent) therapy.

U.K. clinicians have been reserved about using biological markers as an aid to therapy selection compared with clinicians in some other countries. Therefore, the UKCCCR decided to set up a committee of a mixture of clinicians and scientists to look into biological markers in general and to establish which clinical studies should have biological endpoints. The UKCCCR also encourages people to use the appropriate biological end-points so that they can establish which ones are useful in which subgroups of patients.

Dr Leake expects the first products of the committee to be in breast cancer and then either prostate or ovarian cancer. The Group sees itself as advisors to clinicians setting up trials rather than running trials itself. However, one breast cancer study has been set up by a member of the committee incorporating biological end-points. The study will be finished in 5 years and recruitment will be about 1200 women.

The Chairman of the Committee can be contacted at R.Leake@bio.gla.ac.uk or on Tel: +44 141 330 5268, address c/o UKCCCR, P.O. Box 123, Lincoln's Inn Fields, London WC2A 3PX, U.K.