

# NEWS...NEWS...NEWS

## Tobacco treaty becomes law

**T**he Framework Convention on Tobacco Control (FCTC), which commits governments to enacting public policies aimed at cutting tobacco consumption, became law in 40 countries on 27th February, 2005.

The FCTC has been signed by 168 countries, and ratified by 57 of them. The International Union Against Cancer (UICC) called on governments worldwide to back the international treaty.

UICC Executive Director, Ms Isabel Mortara, said, "Lung cancer will kill 1.2 million people this year – many of whom will be in the developing world. And as

The future health of millions is in your hands."

The treaty requires ratifying nations to eliminate all tobacco advertising, promotion and sponsorship (with an exception for nations whose constitutions

### "LUNG CANCER RATES ARE SET TO SOAR"

prohibit a complete ban); requires warning labels to occupy a minimum of 30% of the front and back of every pack of cigarettes; prohibits descriptors such as "light" and "mild"; commits nations to protecting non-smokers from tobacco smoke in public places; and calls for higher tobacco taxes, global co-ordination to fight tobacco smuggling, and promotion of tobacco prevention, cessation and research programs.

*A list of the signature/ratification status of countries can be found online at [www.globalink.org](http://www.globalink.org). A pocket guide to the FCTC, produced by UICC in collaboration with the British Medical Association, outlines why the FCTC is needed, what it commits governments to do; how it will make a difference; and when governments must act. It is available at [www.doctorsandtobacco.org](http://www.doctorsandtobacco.org).*

### "THE FUTURE HEALTH OF MILLIONS IS IN YOUR HANDS"

tobacco consumption continues to climb in much of the developing world, lung cancer rates are set to soar."

Dr Yussuf Saloojee, UICC Strategic Leader on Tobacco Control said, "We call on all governments to ratify and implement the treaty without delay. We congratulate the 57 ratifying countries at the forefront of the global movement to tackle tobacco – and call on leaders in other countries to ratify the treaty immediately.

## Scotland set to introduce ban

Scotland is set to ban smoking in enclosed public places in the spring of 2006. First Minister Jack McConnell has been the driving force behind the legislation, but the Scottish Parliament is now debating exemptions to the ban.

Objections have been raised by the hospitality industry, and by MPs representing disadvantaged communities with extremely high rates of smoking. However, a similar law is already in place

in Ireland, and the Irish Medical Organisation reported that cigarette sales fell by almost 16% in the first 6 months of the ban.

Dr Peter Terry, Chairman of BMA Scotland, congratulated the First Minister on the proposed ban and said, "We must not lose sight of the fact that this legislation is about protecting the health of workers and the public. Human life is worth more than any economic argument."

## NICE guidelines on lung cancer

The UK's National Institute for Clinical Excellence and National Collaborating Centre for Acute Care have issued new guidance on the diagnosis and treatment of lung cancer.

Key priorities for implementation include:

- Every cancer network should have rapid access to 18F-deoxyglucose positron emission tomography (FDG-PET) scanning for eligible patients.

- Patients with stage I or II non-small-cell lung cancer (NSCLC) who are medically inoperable but suitable for radical radiotherapy should be offered the continuous hyperfractionated accelerated radiotherapy (CHART) regime.

- Chemotherapy should be offered to patients with stage III or IV NSCLC and good performance status to improve survival disease control and quality of life.

- Non-drug interventions for breathlessness should be delivered by a multidisciplinary group, co-ordinated by a professional with an interest and expertise in the techniques.

- The care of all patients with a working diagnosis of lung cancer should be discussed at a multidisciplinary team meeting.

Dr Fergus Gleeson, consultant radiologist and a member of the Guideline Development Group said the guidelines "highlight the need for a significant increase in the existing capacity to provide diagnostic services such as PET and CT scanning. We are encouraged, however, by the Department of Health's recent consultation document for PET scanning in the NHS which agreed that the evidence of benefit from PET scanning is now sufficiently robust to support the establishment of facilities across the country, so that all appropriate patients can have access to this technology."

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## Staff shortages hampering UK cancer care

Staff shortages are increasing waiting times for diagnostic and treatment services, and hampering delivery of quality cancer care in the UK, according to the report *Tackling cancer in England: saving more lives*. Published in January, 2005, by the UK House of Commons Committee of Public Accounts, it also highlights inequalities in drug prescribing, and notes that survival of UK patients with cancer is still behind other European countries.

But Michael Richards, UK National Cancer Director and one of the authors, warns, "Survival comparisons between England and Europe relate to patients diagnosed in 1990–1994 and I have no doubt that the gap is closing." He adds, "A redesign to streamline radiotherapy services is underway, led by the UK Cancer Services Collaborative. For example, we are buying radiographer-led fast-track services for patients requiring palliative radiotherapy...reducing diagnostic waits in England is a very high priority. We have already made progress installing new equipment and setting up training programmes."

Others disagree. Reform, an independent, non-party think-tank of about 900 UK doctors, says that the UK Department of Health's target for 2005 of a 1-month wait from diagnosis to first treatment is "impossible to achieve." Furthermore, even a wait of 1 month would be deemed unacceptable in most European countries, they reported in February, 2005 (*Cancer Care in the NHS*).

Despite recruitment of 23% more radiologists over the past 5 years, figures released in 2003 by the UK Royal College of Radiotherapists state that 72% of patients are receiving curative radiotherapy outside the maximum time recommended, compared with 32% in 1998. Results from 2004 continue to alarm: waiting times for radiotherapy after surgery for breast can-

cer have increased by 2 weeks since 1998 to a median of 5 weeks. Waits have increased in 73% of centres for radical and adjuvant treatments.

The UK National Health Service (NHS) has invested nearly 2 billion over the past 5 years since publication of the National Cancer Plan in 2000. Reform says this funding has been misdirected: several hundred new and highly paid administrative staff have been appointed, without any consequent increase in clinical staff. New machines are lying in boxes because of staff shortages. They propose outsourcing 30% of services within 2 years to reduce the delays.

Richard Sullivan, Cancer Research UK, says, "There is a lack of specialists, but there are many reasons for delays in diagnosis and treatment, including budgets running out at the end of the fiscal year. There is no doubt that more money and equipment are being provided, but two factors must be considered. Our case-mixes are now more complex and we are using radiotherapy more often, and the techniques are more complicated." He disagrees that outsourcing is the answer. "The long-term solution has to be a plan that is centralised within the NHS. The initiatives on the academic front to train more specialists are vital, but will take 5 or 6 years to come to fruition."

The UK has around two to four times fewer specialists than Holland, Germany, Belgium, and France, according to Jan-Willem Coebergh, (Department of Public Health, Erasmus University Medical Centre, Netherlands). He says that it would be impossible to fulfil many of the proposals in the report without structural improvements.

Around 50% of patients with cancer are treated with radiotherapy, and the demand for such services is set to increase further with an ageing population. A new

UK network to help boost radiotherapy research and improve training was launched in February, and radiology academies are to be set up later this year.

Furthermore, despite 124 million of extra funding for drugs per year, the report describes wide variances in the prescribing of cancer drugs approved by the UK National Institute of Clinical Excellence. It, therefore, recommends that electronic prescribing is introduced in 2006. "This will help us track whether drugs are being offered appropriately and improve safety," says Sullivan.

"Guidelines are about framing best practice, and hospitals should be monitored to ensure they are following them." However, he adds that the report was flawed. "We should have measured the number of cases from hospital statistics. For example, temozolomide, a drug used to treat brain tumours, was found to vary 12-fold across different regions. By taking registry data rather than hospital statistics, the report did not take into account patients crossing borders to be treated at specialist brain centres. Furthermore, the amount of drugs prescribed from pharmacies rather than wholesalers should have been measured."

There is no one answer to address these issues. "It would help if healthcare was not used as a political football. It has become very populist and reactive," concludes Sullivan.

Emma Cannell

The report *Tackling cancer in England: saving more lives* can be found at [http://www.parliament.uk/parliamentary\\_committees/committee\\_of\\_public\\_accounts/pac250105\\_pn2.cfm](http://www.parliament.uk/parliamentary_committees/committee_of_public_accounts/pac250105_pn2.cfm).

This story originally appeared in *Lancet Oncol* 2005, 6, 133.

## Training to discuss trials

An 8 hour training course significantly improved participants' confidence and competence in discussing randomised clinical trials with patients. Researchers from University of Sussex, UK, found the course increased key communication behaviours such as checking patients' understanding, discussing standard treatment and side effects (*BMJ* 2005, doi:10.1136/bmj.38366.562685.8F).

The use of training videos for health professionals is common, but the researchers say they can encourage a passive audience "which leads to little learning." By contrast, the course comprised interactive exercises, didactic

presentations and facilitated discussion about videotaped scenarios.

Before and after the course, participants were videotaped discussing a trial with an actor portraying a patient. The consultations were assessed for delivery of information required by good clinical practice guidelines. Assessors were unaware whether the consultations had taken place before or after the course.

Many important behaviours specific to trial discussion improved significantly after the course. For example, the odds of participants checking a patient's understanding of the term randomisation were 3 times higher after the course.

Worldwide, fewer than 5% of eligible patients with cancer participate in randomised clinical trials, limiting the progress of research. Despite the availability of publications on trial conduct and good clinical practice, "few help clinicians in their discussions with patients," the researchers said.

"If communication is inadequate patients may not understand the experimental nature of the trial, be unclear about treatment options outside the trial, and be unable to give truly educated consent," the researchers said. "The findings from our study confirm that healthcare professionals can benefit from structured advice and guidance about communicating about trials."

## The ‘Big Four’: Concerted action required!

A “concerted attack” is needed on lung, colorectal, breast and stomach cancer, according to Professor Peter Boyle, Director of the International Agency for Research on Cancer (IARC). Combined, they account for nearly half of all cancer deaths in Europe.

“If we wish to make great progress quickly against cancer in Europe, then the need is evident to make a concerted attack on the big killers,” he said (*Annals of Oncology* 2005, **16**, 481–488).

The number of cancer deaths in the 15 European Union (EU) Member States fell by over 9% between 1985 and 2000. However, the paper notes that the population is ageing and by 2015, compared with 2000, there will be a 22% increase in the number of over-65s; and a 50% increase in the over-80s. It means that even if the age-specific cancer mortality rates remain constant at year 2000 levels, “there will be large increases in the absolute numbers of cancer cases and deaths into the foreseeable future.”

Speaking to *EJC*, Professor Boyle said that the largest single contribution to the fall in cancer deaths since 1985 was a dramatic reduction in deaths from gastric cancer. The rate of decline is unlikely to continue. There was also a notable reduction in lung cancer deaths among men.

“We have got to take prevention seriously,” he said. Smoking cessation remains the number one health priority and

“the biggest public health gain in the near future will come from stopping current

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### “WE HAVE GOT TO TAKE PREVENTION SERIOUSLY”

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smokers from smoking.” A particular effort is need to stop girls and women from smoking.

In breast cancer, prospects for primary prevention are unclear, but mammography screening with quality control procedures “is effective at reducing mortality,” he said. Treatment outcomes are slowly improving “but there is still a clear need to accelerate prospects for preventing women getting breast cancer as well as dying from the disease.”

Mortality from colorectal cancer is coming down slowly “but it could come down a whole lot more quickly.” A multi-dimensional approach including a change of diet, increased physical exercise, better treatment and screening could make colorectal cancer preventable. Sufficient evidence from randomised controlled trials exists for colorectal cancer screening programmes to be set up throughout Europe, he said.

Changing a population’s behaviour may be difficult, but Professor Boyle insisted it could be done. “80% of men smoked 50 years ago. Now it’s 30%. It’s not impossible to change behaviour, it’s just finding out how to do it,” he said.

## Androgen deprivation and cognition

Hormone therapy for prostate cancer can cause temporary cognitive changes affecting verbal fluency, visual recognition and visual memory, say Finnish researchers (*Cancer* 2005, doi:10.1002/cncr.20962). The cognitive dysfunction appeared to be related to the decline in serum oestradiol brought on by hormonal treatment.

Dr Eeva Salminen (University of Turku, Finland) and colleagues investigated the relationship between serum oestradiol and cognitive functioning in 23 men treated with androgen-deprivation (AD) therapy. Extensive tests were carried out after 6 and 12 months of the treatment.

At 6 months, men had temporary but significant declines in visual memory of

figures and recognition speed of numbers. At 12 months, a marginal improvement in verbal fluency was associated with oestradiol declines. The degree of cognitive change was related to the magnitude of oestradiol decline.

The changes were “selective and marginal,” the authors said, and in 12 months of androgen deprivation “cognitive function appears to be well preserved in men without previous neurological or psychological diseases.”

Previous studies have shown that declining oestradiol levels have an impact on cognition in women, but little data exists on men. This study “has substantial implications for informed patient support in hormonally treated prostate cancer,” the authors concluded.

## Launch of cancer prevention handbook

The French edition of “Evidence-based Cancer Prevention: Strategies for NGOs” has been launched by the International Union Against Cancer (UICC). English and Italian versions are already available and a German edition plus Spanish summary is set to follow soon.

The peer-reviewed strategy handbook presents scientific evidence on the effectiveness of interventions for cancer prevention and early detection. It focuses on the main avoidable risk factors for cancer that non-governmental organisations (NGOs) can address, and aims to help national and local cancer organisations develop effective strategies adapted to the specifics of each European country.

Chief editor, Dr Hélène Sancho-Garnier, said, “By translating what we know today into individual and social change, we could significantly reduce Europe’s cancer burden.” “The time to act is now,” added UICC Executive Director Isabel Mortara.

The handbook is available online in French, English and Italian at [www.uicc.org](http://www.uicc.org).

## Big is best for microarray studies

Microarrays and molecular research need to be studied in thousands of patients, “a 100-fold more than the current standard,” according to Dr John Ioannidis (University of Ioannina, Greece). Microarrays need evidence which cannot be obtained from small studies, no matter how high-tech (*Lancet* 2005, **365**, 454–455).

“Small studies might actually hinder the identification of truly important genes,” he said. “If we truly believe that microarrays and molecular research in general are important, we should not settle for less.”

Dr Ioannidis was commenting on French work (*Lancet* 2005, **365**, 488–492) which reanalysed data from the 7 largest studies attempting to predict the prognosis of cancer patients on the basis of DNA microarray analysis. The researchers found that 5 of the studies “did not classify patients better than chance” and they concluded, “The prognostic value of published microarray results in cancer studies should be considered with caution.”

## New breast co-ordinator for Canton Ticino



Dr Alberto Costa

Dr Alberto Costa, Director of the European School of Oncology (ESO) and Head of the Pavia Breast Unit, Italy, has been appointed co-ordinator of the Breast Unit for Italian-speaking Switzerland (Canton Ticino). He will continue with his existing roles.

Agreement was reached between the Maugeri Foundation in Pavia and the Ticino Cantonal Hospital for Dr Costa to work 2 days a week in Bellinzona and Lugano, Switzerland. He aims to organise breast cancer management according to European Society of Mastology (EUSOMA and EUROPA DONNA) guidelines (see *EJC* 2000, **36**, 2288–2293), and to establish a permanent breast unit by the end of 2006.

He will chair a breast unit committee (including Professor Aron Goldhirsch and Dr Jacques Bernier); and will be supervised by an International Advisory Board (including Dr Franco Cavalli, Professor Umberto Veronesi and Professor Hans-Jörg Senn). The aim of the project is to increase the Swiss contribution to the European effort against breast cancer.

Meanwhile, Dr Costa is to chair the 5th European Breast Cancer Conference in Nice, France (21–25 March 2006). For further information, see [www.fecs.be](http://www.fecs.be) or contact [EBCC5@fecs.be](mailto:EBCC5@fecs.be)

## Recognition for two-hit model

Dr Alfred G Knudson Jr (Fox Chase Cancer Center, Philadelphia, Pennsylvania, USA) is to receive the 28th Annual Bristol-Myers Squibb “Freedom to Discover” Award for Distinguished Achievement in Cancer Research. He is being recognised for his “two-hit model” which enhanced our understanding of the role of heredity and other factors in causing cancer.

In 1971, after years of observing cases of childhood cancer and noting the likelihood that certain heredity patterns played a role, Dr Knudson focused on retinoblastoma, a paediatric eye cancer. While a child may inherit a predisposition to the disease through a genetic mutation from a parent, he hypothesised that this hereditary form would constitute only the first “hit.” The disease would develop only after a second mutation – a second “hit” – developed, either spontaneously or otherwise.

Bristol-Myers Squibb described the model as “groundbreaking,” “a visionary hypothesis that explained both the hereditary and sporadic forms of retinoblastoma.” It “provided a new and productive focus in cancer genetics and stimulated a great surge of activity in many laboratories” and “has served as an illuminating paradigm to guide the investigations of countless researchers throughout the world who are trying to discover the secrets of cancer origin and new ways for treating it.”

Dr Knudson further theorised that there are genes in a cell – which he called anti-oncogenes and are now called tumour-suppressor genes – whose



Dr Alfred G Knudson

function is to stop abnormal cell growth. Cancer would result when mutations in those genes occurred. The theory enhanced our understanding of how genetic errors can turn normal cells into cancer cells and how this could be potentially prevented.

For about 35 years, Dr Knudson, now in his 80s, served in numerous advisory capacities at the US National Cancer Institute. He has also been a longstanding member of committees of the National Academy of Sciences and the National Research Council. He has received other honours and awards in recognition of his seminal contributions to genetics and cancer research.

He will be officially presented with a cash prize of US \$50,000 and a silver commemorative medallion at a Bristol-Myers Squibb awards dinner in New York City in October, 2005.

## Glioma discs approved

Biodegradable carmustine implants (Gliadel) are now approved for use in newly-diagnosed high-grade malignant glioma patients in France, Luxembourg, Germany and the UK. The implants have been approved since 2003 in the US, and approval is being awaited in the Netherlands, Belgium, Austria and Switzerland.

The implant is a biodegradable disc, about 1.5 cm in diameter, which releases the chemotherapy drug carmustine. A number of the implants are applied directly to the surface of the brain tumour cavity left after the tumour has been removed. Manufacturer Link Pharmaceuticals says this allows immediate active treatment of the tumour while the patient

is waiting for radiotherapy. Use of the implants does not prevent patients from having further traditional chemotherapy if required later.

The new indication follows a phase III randomised, placebo-controlled, multicentre study (*Neuro-Oncol* 2003, **5**(2), 79–88), which demonstrated a 29% reduction in the risk of death in patients treated with the implants, compared with placebo. Neuro-performance measures were improved among those who received the active implants. The study concluded that the discs were not associated with systemic toxicities or side effects, and offered patients a considerably improved standard of life.

# PODIUM

## ACORRN: A New Beginning for Radiotherapy

*Professor Pat Price is Professor of radiation oncology at Manchester University, Christie Hospital, UK. She is Chair of the newly-formed ACORRN (Academic Clinical Oncology and Radiobiology Research Network), a network intended to modernise radiotherapy research in the UK.*



Professor Pat Price

### Why was ACORRN necessary?

In the UK, as in other countries, academic radiobiology and radiotherapy has declined over the last 10–15 years, at just the time when developments in science – molecular biology and technical delivery systems – were presenting us with great opportunities. A National Cancer Research Institute (NCRI) review (see [www.ncri.org.uk/documents/publications/reportdocs/NCRI\\_Radiotherapy\\_Radiobiology\\_Report\\_August\\_2003.pdf](http://www.ncri.org.uk/documents/publications/reportdocs/NCRI_Radiotherapy_Radiobiology_Report_August_2003.pdf)) highlighted the problem. Since then, the major funding bodies have committed sufficient funds to get us back on the starting blocks.

### What were the reasons for the decline?

In the 1970s and 1980s, radiotherapy and radiobiology was probably ahead of its time in the UK and we were using observations and physicists' models to explain the behaviour of tumours. But this was before we had the technology to implement our understanding. As molecular biological techniques such as polymerase chain reactions (PCR), genetic sequencing, and so on, have developed, we have needed a new breed of people to apply this to radiobiological research. Radiotherapy and radiobiology is difficult to understand, drugs seemed sexier, and funding was scarce. We failed to attract the next generation and radiotherapy and radiobiology became a minority sport.

At the same time, medical oncologists were being developed within an academic

specialty, but radiotherapists were out there treating thousands of patients. When the technology started coming through, we needed a strong academic input, but did not have the people in place.

### How will ACORRN help?

At present, our individuals are good, but few groups have enough infrastructure or resources to be outstanding. Put us all together and that changes. Britain is the right size to have a research network; and the culture and the basis of it already exists through Cancer Research UK.

### What has happened so far?

We have set up a national network office in Manchester, and have an interactive website ([www.acorrn.org](http://www.acorrn.org)), to help bring together all the right people. You will not have to work at a big centre to be part of big projects. ACORRN will introduce researchers who, together, can make successful grant applications for infrastructure funding and research projects.

### Can the UK really compete internationally?

The NHS is a very useful platform for research. Patients are treated according to protocol, they're followed up and records are kept electronically. NCRI's Bioinformatics Coordinating Unit is standardising and linking data from laboratory and clinical research databases. We can use this research resource and assess large databases. It is not the same in all European countries.

### Are there any projects up and running?

Cancer Research UK is funding a project called RAPPER (Radiogenomics: assessment of polymorphisms for predicting the effects of radiotherapy), as a result of a patient forum, which identified damage to normal tissues as a key area of concern. It may not be as glamorous as molecular biology but it is important to patients. RAPPER, linking with molecular biologists in Cambridge, aims to identify those who will react badly to radiation. It will include 3000 patients in several UK centres.

### How will ACORRN help rebuild the infrastructure?

Networking can only go so far and the second phase of ACORRN will be to de-

velop the infrastructure and increase training opportunities. We're asking people to put forward proposals for centres of excellence. 10–15 years ago, it was possible to conduct research alongside an NHS commitment; now that flexibility does not so readily exist and we need a system to protect and deliver research.

### What difference do you think ACORRN can make over the next 5–10 years?

By then, developments in the laboratory and in the technology will be improving patient care. For example, new hardware – linear accelerators incorporating cone beam imaging – allows you to scan patients in the treatment position and is a big area for development. But we need to test new protocols with good clinical science research. Otherwise new technology advances will be wasted.

Radiotherapy is a curative modality, received by 50% of cancer patients. It deserves proper study.

### How does the UK compare with other European countries?

The lack of critical mass of academics in radiotherapy and radiobiology is probably similar, though in other countries there may be more capacity to conduct research on the service side. Here radiotherapists have their heads down and see patients every 15 minutes, often seeing 800 new patients a year; it is often not possible for them to conduct research.

There are good research groups in Europe, which are perhaps not under the same pressure, but the lack of capacity for research is widespread.

### Will ACORRN afford opportunities for collaboration abroad?

Yes. The radiotherapy community in Europe is well-organised through ESTRO, though until now, the UK has often been viewed by some as having 3rd world-type treatment facilities. It's partly our own fault – we Brits do like to talk ourselves down – but we have had and still could have international standing in research. ACORRN is relying on the radiotherapy community to come forward, produce ideas, put forward proposals and make a difference. The community has lacked confidence, but now is the time to go for it!