fect, says Burgoon. In any case, an amendment passed by the House of Representatives would exempt universities, small businesses and independent investigators from the rule. The House of Representatives has passed one of the patent bills, HR 400, sponsored by Howard Coble (R-N.Carolina), and the Senate Judiciary Committee has voted for the second, S 507, sponsored by Orrin Hatch (R-Utah).The full Senate is expected to consider S 507 this summer.

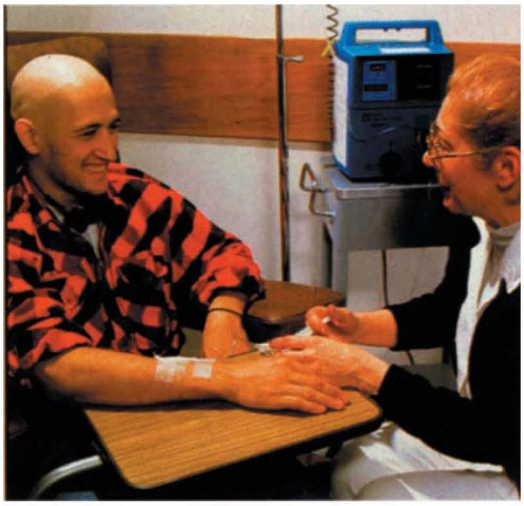
DOUGLAS STEINBERG
New York

British health service balks at cost of cancer trials

Clinical trials for cancer treatments in the UK are being held back by arguments over who should pay for expensive drugs and procedures within the "internal market" of the National Health Service, say oncologists. The trials at greatest risk are large, randomised trials in multiple centers that compare new treatments with old. The oncologists fear that the situation will not improve even after the Department of Health issues new guidelines on support for trials.The guidelines, which are expected to be published within the next few months, will commit health authorities — the "purchasers" of care — to pay certain treatment costs. But Robert Souhami, professor of oncology at University College Hospital, London, doubts that they will pay because they are strapped for cash. "I don't think a Department of Health edict... is going to help at all," he says. Barry Hancock, professor of oncology at Weston Park Hospital, Sheffield and chairman of the Association of Professors of Oncology, agrees: "Trials will not get done and clinical cancer research as we know it will not forge ahead," he says.

Currently, large multicenter trials take place in National Health Service (NHS) hospitals and are run by the Medical Research Council, health research charities or universities, who pay for basic research costs such as data collection but not for patient treatments. Since the introduction of an internal market to the NHS, purchasers have bought services and care from "providers", or hospitals. The need to account for all types of expenditure has led some purchasers to refuse locally to pay for experimental drugs and procedures. "NHS national and regional executives will in general say 'Yes, we will support trials', but on a local level, you may not get a 'Yes'," says Peter Selby, professor of cancer medicine at St James's University Hospital, Leeds.

The problem appears to be widespread. For example, the Bristol Oncology Centre is barred from entering patients into a multicenter trial of high-dose chemotherapy for women who have had surgery for early-stage breast cancer, and whose risk of metastasis is high. In this trial, known as the Anglo-Celtic trial, bone marrow cells are removed before chemotherapy to protect them from its effects and then transplanted back afterwards, a procedure that costs £8000 ($12,800). And other hospitals in southwest England are unable to get funding to run trials involving the experimental anticancer drug taxol.



Experimental cancer trials threatened.

Selby is trying to set up a national trial of adjuvant therapy with interleukin-2 and interferon after nephrectomy for kidney cancer. In small studies, this treatment has produced complete remission in the disease, the first to do so. But Selby is now "concerned" that he might not get local funding, because the drugs will cost £200,000 for each year of the trial. Souhami has collected other examples, in confidence, of many purchasers and hospitals nationwide who, he says, "simply won't fund certain treatments for certain cancers".

The Department of Health's expected new guidelines are based on a published consultation document. Under its terms, the NHS is likely to give a corporate commitment that purchasers will pay treatment costs, such as those of externally funded clinical trials. The consultation document describes a series of partnership agreements, including a Concordat with the Medical Research Council published in May that says the NHS will meet treatment costs associated with MRC-funded research. In the case of research funded by charities and universities, the NHS reserves the right first to assess the benefits of very high cost treatments. Unconvinced that the guidelines will help, the 31-member Association of Professors of Oncology has alerted the new health minister, Frank Dobson, to the lack of money for anticancer drugs. The problem with cancer trials will persist, says Hancock, "unless new resources are found".

CLAIRE O'BRIEN
Cambridge

Row erupts over Europe's move into hadron therapy

ITALY has embarked on a controversial project to build Europe's first dedicated center for treating cancer with hadron therapy — the bombardment of deep-seated tumors with subatomic particles such as protons and light ions. The center, only the third of its kind worldwide, will cost an estimated 100 billion lire ($60 million) and is scheduled to open at a site near Milan in 2002. But the country's medical researchers and public health specialists are divided over the project. Critics say that it is too early to judge the value of hadron therapy and that large parts of the country still lack good facilities for conventional radiotherapy.

The center is the brainchild of two physicists: Ugo Amaldi at CERN, the European Laboratory for Particle Physics