Spread the word

Emma Mason

Specialising in a cancer with very poor prognosis, **Heine Hansen** is as keen as anyone to find new therapies that can improve survival. But he also believes that significantly better results could be achieved using currently available treatments, if only everyone knew about and followed best-practice guidelines – and he has done more than most to ensure they do.

Heine Hansen initially considered using his considerable talents to tend the forests of his native Denmark. Happily, he opted instead to go into medicine, where his efforts to improve the quality of cancer care have had an impact worldwide.

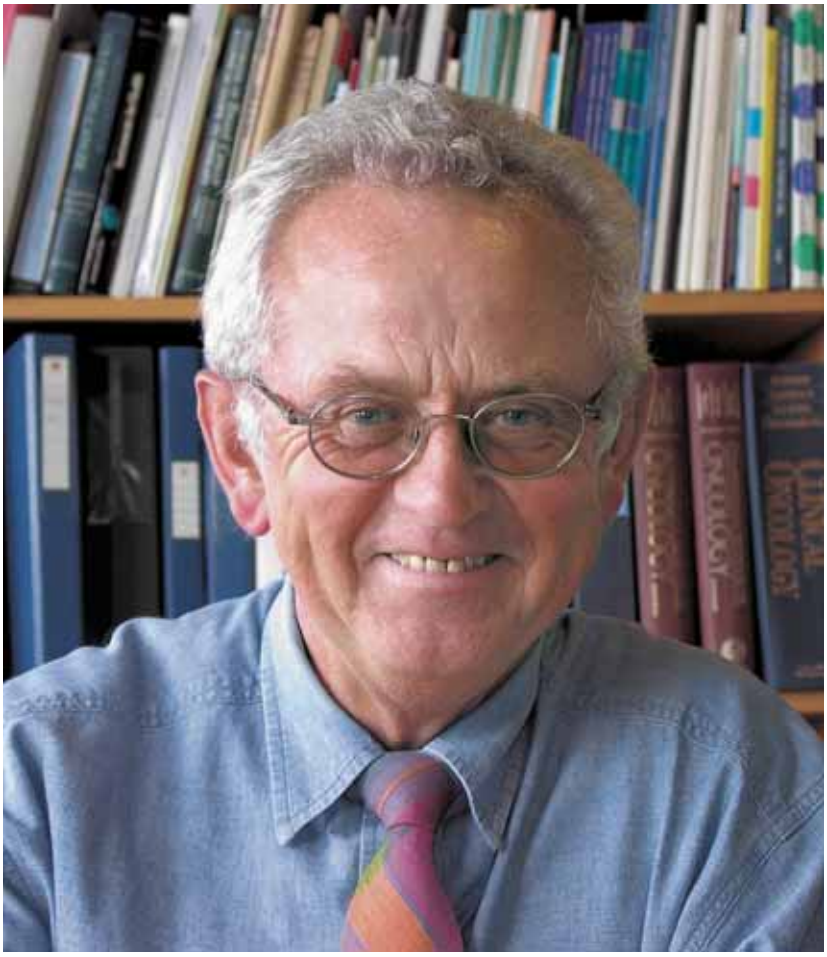
A revealing moment came during our interview for this article when Hansen reached for his collection of photographs and chose a group shot of himself with Eastern European colleagues in preference to an image of himself alone. Team building and working has been a central theme throughout Hansen's career, and he had to be encouraged to hunt out the portrait photo shown opposite.

Hansen believes that it is through building strong relations at national and international levels with other medical professionals (physicians, nurses, basic and translational researchers) and decision-makers, as well as, importantly, with patients and their families, that progress can be made in finding better treatments and cures for the range of diseases that makes up cancer.

Hansen chose to specialise, early on in his career, in one of the most intractable and difficult to treat – lung cancer. Now, aged 68, and with a personal chair as Professor of Clinical Oncology at the University of Copenhagen, Denmark, he looks back over the past decades and sees three important threads running through his work: lung cancer, the search for new drugs, and the importance of communication at all levels through team working.

"I have been lucky that I have had, and still have, very good co-workers around me, so we are a team, and team work and team spirit is an important part of one's professional life, particularly if you have activities that you want to initiate and you want to implement," said Hansen.

The activities he has initiated and achieved through his team working and networking have related to pursuing better treatments not only for his own patients, but for patients Europe- and world-wide, via international collaboration. He was a founder member, office-holder and moving light of the International Association for the Study of Lung Cancer (IASLC), an active



and influential member and office-holder of the European Society for Medical Oncology (ESMO), and a member and office-holder of other organisations too numerous to list here, but which include the Danish Cancer Society, the American Society of Clinical Oncology (ASCO), and the European Organisation for Research and Treatment of Cancer (EORTC).

That all patients, wherever they are, should receive the best possible treatment and management of their disease, irrespective of their social and financial status, is an article of faith with Hansen. He believes that if people can gather evidence about what cancer treatments are working best in which countries, and then present this to the decision-makers, change will be more likely to happen. This task of informing doctors, patients and decision-makers is what he has been doing through the IASLC and ESMO.

"The impact, the impression, is bigger than if individual physicians say 'we want that'. This is the force of working internationally and working with guidelines that are common across Europe, for example. In general, physicians are not using sufficient time to discuss these items and let the decision-makers understand what the situation is. Sometimes they are too busy doing other things, but this aspect of presenting information is very important," argued Hansen.

A GLOBAL CURRICULUM

Hansen counts his work on this as a key success in his career. Probably it is best illustrated by his development of the Global Core Curriculum in Medical Oncology – the result of collaboration between ESMO and ASCO, which started life as an initiative to help colleagues in Eastern and Central Europe.

"We set up the Task Force for Central and Eastern Europe just after the Berlin Wall came down, because we felt there was a need to get out and see what was the situation, what were the options, how could we meet, how could we assist them (if they wanted – and that's

"Physicians are not using sufficient time to let decision-makers understand what the situation is"

A job well done. Heine Hansen founded ESMO's Task Force for Central and Eastern Europe in 1996. It was wound up at a farewell symposium at the ESMO congress this September, its task having been successfully concluded. The Task Force is pictured here at its second meeting, held in 1997 in Copenhagen. Hansen is seated on the left

important) not with money, but with knowledge, experience and so on."

Hansen's aim was to be guided by his Eastern European colleagues, and for them to say what they needed, rather than have help imposed on them from outside. Together they set up a series of meetings and courses that were open not just to medical oncologists, but to nurses too. "This was unusual in Eastern Europe at that time, when the physician was king," said Hansen.

The meetings revealed the need in Eastern Europe for clinical recommendations for cancer treatment to help with the education and training of medical oncologists and to influence decision-makers. "This is what ESMO has developed since. It has been used in the arguments in individual countries to improve treatment and to help the politicians and decision-makers get to the point where they have to say 'well, we are part of Europe, we are going into the EU, we also need to improve our healthcare system and see what is happening in the other countries.' This was what gave us the idea for developing a core curriculum not just for Eastern Europe, not a European one, but a global one."

So, out of the needs of Eastern Europe was born an initiative which would help medical oncology around the world, and which has assisted in another aim – that of having medical oncology recognised as an independent speciality in Eastern Europe; Bosnia-Herzegovina, Croatia, the Czech Republic, Hungary, Latvia,

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Poland, Slovakia and Slovenia all recognise medical oncology as a specialty now.

The Eastern European initiative is an example of Hansen's ability to capitalise on current events. Another example comes from the beginning of his career, when he started to specialise in lung cancer at a time when few people were interested, because survival rates were so poor that it seemed pointless.

Hansen's medical career started when he had to choose between studying forestry or medicine after leaving high school. Influenced by a friend's medical textbooks, he chose medicine and went to the University of Copenhagen. However, his interest in the natural world has persisted throughout his life. He loves gardening and he owns a summer house on the coast where he goes fishing.

Having chosen a career in medicine almost by accident, Hansen said: "It was chance that I went into oncology." After completing his medical degree and spending time in the air force, he married Lise, who is a nurse. They both felt it was too early to settle down in Denmark, so, at the suggestion of a family friend, he obtained a post in the haematology department at Montefiore Hospital, Bronx, in New York.

The year was 1967. "This was the period when there were major advances in the treatment of haematologic malignancies." These advances had stemmed from the discovery, during World War II, that mustard gas lowered white blood cell levels, especially lymphocytes.

"In 1967 I saw patients up in New York with lymphomas who were treated with chemotherapy, and I saw dramatic activity. So this was exciting."

A year later he was appointed to a new ward that was being set up by the National Cancer Institute, in collaboration with the VA Hospital, in Washington DC to explore the use of chemotherapy in tumour types that were common in war veterans, such as lung cancer. "During this period I got started on clinical research, and that included, first of all, lung cancer, but also new drugs, and these became the two main lines of my clinical research, which continued after I came back to Europe.

Lung cancer is not just lung cancer

"We observed that lung cancer was not just lung cancer. We identified small-cell lung cancer as a special clinical disease entity. Small-cell lung cancer has certain characteristics that make it different from the other histologic types. There are two very typical characteristics that we identified during that period, and these were that it has a tendency to spread early and wide. This we detected by doing routine evaluation of the patients by bone marrow examinations and laparoscopies with scopes and biopsies from the liver. So we found out that these patients had much more disease at the time of diagnosis than one would otherwise expect.

"The other particular aspect of this disease is that it is very chemo-sensitive. At that time it was identified as the most chemo-sensitive of all lung cancers. If you don't treat small-cell lung cancer, the majority of the patients die within a few weeks.

"We started to give first one drug, then two together, then three together, and we saw that a lot of patients responded to the treatment and they got better clinically, and their symptoms disappeared. But unfortunately, as time went on, the tumour recurred. But at that time, what was important was that we could identify a group of lung cancer patients where chemotherapy had an effect, and a worthwhile effect."

Hansen wrote many publications on lung cancer and new drugs at this period, followed by a doctoral thesis on bone metastasis in lung cancer after he returned to the University of Copenhagen in 1973 – where he has remained ever since. It was while he was in Washington

that he first started his international collaborations, setting up a trans-Atlantic study between the NCI and the Mayo Clinic and the largest clinic in Cape Town in South Africa. "This was very unusual then," said Hansen. "But it worked out. We treated patients the same way, with the same drugs, same doses, we had a protocol and we published together. And that was really the background for creating the IASLC. That has led to many years of work for me, in lung cancer, at an international level."

Spread the message

Hansen was executive director, founding editor, and chief editor of the journal *Lung Cancer* for 20 years, and president of the IASLC. "We set up a lot of activities around the world to spread the message about lung cancer, that there were treatments, that there were different treatments for different types and stages and so on. It provided the opportunity to meet on a global basis, because lung cancer is a global disease."

More than 30 years on, there have been small improvements in the treatment and survival of lung cancer, but there has been very little improvement in five-year survival rates, which are still poor, ranging from around 5% to 15% in different countries.

Surprisingly, perhaps, Hansen does not find it depressing to specialise in a disease where the prognosis for patients is so poor. This is partly because he treats a range of other tumours too, such as testicular and ovarian cancers, which have much better survival rates. But it is also because he knows that, while he may not always be able to cure his patients, he can offer them the best care possible in the meantime.

"With the lack of success we had, one had to realise that it's also important that, independent of whether the patients get cured or not, the majority of cancer patients need professional management. During the period that they get treatment, and also during follow-up, they need a lot of support, their family needs support and, again, you need teams, you need physicians, you need good nurses, who all have to work closely together. Of course, sometimes when you go home you feel the pressure, you feel it's been a tough day." Being able to talk with Lise helps him to unload the day's problems and he values her perspective on patient management.

There is no doubt that Hansen is a very patient-focused physician. "If everything goes wrong, you can always go down to the patients and be around the patients and then you get extra strength to keep going, and that is why I am still seeing patients." He holds a clinic twice a week, in addition to his other duties.

Hansen is optimistic about the future for lung cancer patients, although he doesn't expect dramatic improvements in survival in the short term. For a start, their public profile is rising and they are less likely to be regarded as low priority because of smoking, social class and low survival rates.

"Things are changing for the better. More and more resources are going into basic and clinical research and we have also seen better results in the last decade than previously. But there's a long way to go, and for that reason we really have to focus on prevention."

As with many other cancers, biological therapies, with treatments tailored to the individual patient's genetic profile, are the way forward for lung cancer, Hansen believes.

"There are some drugs available already that are changing the overall treatment of lung cancer. At present, it is mainly in advanced disease, because that is where the clinical trials have taken place, but that is changing. Drug companies know lung cancer patients are a large group and worth investing in, so they are working on developing better agents, that are better tolerated, have fewer side-effects and can be taken in tablet form, for instance, rather than intravenously."

Get it early, treat it well

There is one key aspect of lung cancer that can make a significant difference in survival rates: how early the disease is detected and how aggressively and competently it is treated. One of the reasons why the US has better survival rates than Europe, Hansen believes, is because patients go to their doctors earlier and then their disease is treated more quickly and more aggressively.

Best practice is the same in any language. The development of the ESMO-ASCO Global Core Curriculum in Medical Oncology grew out of Hansen's concern to offer assistance to oncologists in Eastern Europe

"In Europe you often find a negative attitude to diagnosing and treating lung cancer from many physicians, because they think survival rates are so poor that it doesn't really make any difference. In the US, the attitude of doctors and patients is somewhat different. Technically they are ahead of Europe, and when patients have symptoms they get a better work-up, they are referred to the right specialist, and they will probably be treated by a multidisciplinary team including a chest physician, surgeon, radiotherapist and medical oncologist.

"In Europe, if a patient comes in with some modest symptoms, doctors will often take a 'wait and see' attitude, which means that lung cancer is diagnosed later, when it is harder to treat. This is a crucial difference, because if lung cancer is detected early, the five-year survival rates, while not impressive, are about 50% for early cases. If the patient has gone to the right place, at the right time, with the right stage [i.e. early-stage cancer], then they have a good chance of a cure."

At home, one of the ways that Hansen is making a contribution to improving Denmark's cancer survival rates is as a scientific advisor in oncology to the Danish Health Authorities. Together with a colleague, Hans van der Maase, he co-ordinates a panel of experts to whom individual doctors, hospital departments or even patients can appeal for advice on the best treatment for a particular cancer. This 'second-opinion' panel makes recommendations that may uphold the current approach, but equally can recommend a different approach, a different drug, or even a different hospital in another country that can treat the disease better. Patients can then have access to these treatments completely free. This scheme has only been running for two years, but already Hansen believes that it is making a difference not only to patients, but also to translational research, because the panel co-ordinates six new experimental units as well. In addition, it helps to inform doctors about the latest treatments.

"Already there are disease entities which we can treat that we couldn't two years ago," he said. He counts the panel of experts scheme as one of his successes, and hopes the idea might spread internationally.

Hansen says he is cutting his work back a bit so that he has more time to enjoy his family. He and Lise have two children, a son, Thomas, and daughter, Marie, and two twin grand-daughters, Frederikke and Rosemarie, with another grandchild expected later this year. "What I do in the future depends on the situation, on ideas, and whether I think I can make a difference. If you still feel that you can offer something, then you have an obligation to those around, because you have a lot of experience that you can offer. But, as Jonas Salk once said: 'Our greatest responsibility is to be good ancestors'."

"If you still feel that you can offer something, you have an obligation"