



EONS

eons newsletter

Winter 2007

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from...**

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Cancer**

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The goal of the EONS Newsletter is to inform nurses about EONS and its activities and to provide a forum for cancer nurses throughout Europe to network. The information published in the EONS Newsletter is intended to inspire nurses to improve the care of the cancer patient through improved knowledge.

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Letter from the Editor

Brussels, december 2007

Lung cancer is the most common cancer in the world. In men, the highest incidence rates are seen in Europe (especially eastern Europe) and North America. In women, high incidence rates are found in North America and in Europe, particularly in northern and western Europe. It is estimated that there were about 375000 cases of lung cancer in Europe in 2000; 303000 in men and 72000 in women. The number of resulting deaths was about 347000 (280000 in men and 67000 in women). Tobacco smoking is well established as the main cause of lung cancer and about 90% of cases are thought to be tobacco related. There is a clear dose-response relation between lung cancer risk and the number of cigarettes smoked per day, degree of inhalation, and age at initiation of smoking. Someone who has smoked all their life has a lung-cancer risk 20-30 times greater than a non-smoker. However, the risk of lung cancer decreases with time since smoking cessation. Recently, there has been renewed interest in screening because spiral computerised tomography can detect small asymptomatic lesions more effectively than conventional radiography. Although cure rates for such lesions are very good, there is to date no evidence for effectiveness of mass-screening strategies.

Despite all that is known about the risk factors and life-threatening aspects of lung cancer, most patients are taken by surprise by their illness, according to a Europe-wide survey. The survey results, released for Lung Cancer Awareness Month, show that 70 per cent of people with the disease did not think of it as a threat before being diagnosed. Authors of the survey said the findings showed a "chronic lack of awareness" of the disease. About half of the patients surveyed had waited at least a month before consulting a doctor about serious symptoms. Dr Jesme Fox, medical director of The Roy Castle Lung Cancer Foundation and secretary of the Global Lung Cancer Coalition, said: "Lung cancer is often forgotten or simply misunderstood. If there is one thing that people need to know about lung cancer, it's that early diagnosis saves lives.



I found these survey results startling: that's why I think it is a very good idea to have lung cancer as a topic for the *EONS Newsletter Winter 2007/2008*.

More about the status of the current knowledge, staging, diagnosis and treatment of lung cancer can be found in the article, "Lung Cancer: Where are we now?" provided by Dr. Michael D. Peake from Leicester, UK.

Many patients with lung cancer, especially those with advanced disease, experience difficult and distressing physical and psycho-social problems throughout the entire disease trajectory. Sally Moore, Lung Cancer Nurse Specialist, Royal Marsden NHS Foundation Trust, UK explains in her article how we can support people affected by lung cancer.

For this issue we asked a patient organisation to provide an article. Jean Duckworth describes her experience with lung cancer and gives us information about The Roy Castle Lung Cancer Foundation. Smoking is associated with at least 10 different cancers and accounts for some 30% of all cancer deaths. As nurses, we can be instrumental in helping people to 'kick the habit' and thus reduce the burden of disease caused by smoking. An example of how oncology nurses in Spain helped to play a role in the fight against tobacco is explained by Christina Martinez from the Catalan Network of Smoke free Hospitals.

BREATHE (Breathing and Respiratory Education and Training for cancer Healthcare professionals) is a new E-learning educational programme initiated by EONS. The main purpose of this project is to identify the existing knowledge of nurses caring for cancer patients and from this to develop an educational resource for continuing professional development. The subsequent aim is to improve the standards of care for patients with advanced cancer. Sara Faithfull reports on the results of the training needs analysis done in conjunction with this project.

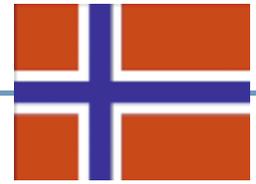
In this issue are also articles from the winners of the 'Excellence in Patient Education Award', an exciting article on meeting the needs of patients with colorectal cancer, a summary report of the Amgen satellite symposium held at ECCO, an update on the TITAN project, and an informative article on the European Healthcare Training and Accreditation Network.

Finally, I join all EONS members in welcoming the six newly elected Executive Board members to their post. We wish them a warm welcome and hope that they will work hard but enjoy their term on the Board. In other EONS matters, please take the time to read a report from the Advisory Council meeting which was held in November. Enjoy this issue. The Editorial Team wishes all EONS members a very healthy, happy and peaceful 2008! My words of wisdom for the New Year: remember yesterday, dream about tomorrow but live today.

Jan Foubert, Editor-in-Chief

Our Colleagues from the

Norwegian Society of Nurses in Cancer Care



Eva Mari Alvestad Harboe, Secretary

The Norwegian Society of Nurses in Cancer Care was founded in 1985, and elected Elisabeth Holter from the Radium Hospital in Oslo as its first chairman.

Intensions

The Cancer Care Forum (CCF) goals are:

- To keep nurses in cancer care, as well as nurses in general, well informed on new developments within cancer care.
- Help improving the education at nursing colleges in all areas regarding cancer care.
- Cooperate with related national and international organizations.
- Stimulate cancer research and development of cancer care skills.

Activities

To reach its goals the society shall, among other things:

- Arrange meetings and conferences.
- Keep the members informed on current topics and events.
- Encourage experienced members to participate with information and in the training of cancer care nurses.
- Participate in the European Oncology Nursing Society.

Membership

Nurses enrolled in the society who actively work with cancer patients, and those interested in cancer care, are welcomed as members.

Nursing colleges and health care institutions may become collective members. Others, like private companies may apply for membership as supporters. Memberships are accepted by supporters paying a fee decided on by the general assembly.

The annual membership fee is NOK 250.-. A stipendium of NOK 3,000.- to cover conference expenses and a stipendium of NOK 6,000.- for special projects can be granted. The periodical "Cancer Care" is issued quarterly and the members are encouraged to comment on the different topics.

The General Assembly

The general assembly is the decision making part of NSCC. Members are nominated by an election committee and elected by the general assembly. Elections are held every other year.

The Board

The board is made up by a chairman, a vice chairman, five boardmembers and four substitutes elected for a period of 2 years. Reelections are possible. A board member elected is restricted to serve for 8 years only. A number of local groups within our society arrange meetings and theme evenings.

We also have special interest groups (SIG), for instant nurses working with children and other young patients.

Number of members as of January 31, 2007: 1,250.

The board of 2007:

- Ingrid Lotsberg Norås – Chairman
- Elin Bruland – Vice Chairman
- Gro Snilstveit – Treasurer
- Torunn Haugstad – Local group contact
- Randi Værholm – WEB responsible
- Kristin Wolden – Editor of "Cancer Care"
- Eva Mari Alvestad Harboe – Secretary and Nordic contact
- Vibeche Fahsing – substitute
- Karin Tillnes – substitute
- Liv Borghild A. Aslaksen – substitute

1., 2. and 3. line duty of the cancer care are members of the board. They meet quarterly at different locations in Norway. The board is entitled to deal with different issues and also to make decisions by correspondence.

Nordic cooperation

The board has appointed one of its members to be the contact to SNCC in the other Nordic countries. They meet once a year to share experiences and are also responsible to arrange for a Nordic Evening at international conferences for instant.

We have been a member of Eons since 1985.

The Norwegian Society of Nurses in Cancer Care

- Influence the training of cancer care nurses in order for them to meet new challenges.
- Strengthen the local health care services.
- Further the education of cancer nurses to a Master degree.
- Cancer care nurses to be updated on research based results and to participate in research and cancer care development projects.
- To place cancer care nurse in every county and city neighbourhoods.
- Establish a closer relationship with the palliative milieu in Norway.
- To place a cancer care nurse in every ward where there is a cancer patient.
- A majority of cancer care nurses in cancer wards.
- The society to cooperate with Nordic and international organizations.
- The society to organize smaller groups within special areas (special interest groups "SIG")
- To keep our magazin and WEB site continuously updated and further developed.

Events which were sponsored by the Society in 2007 included:

- The celebration of International Nurses Day which was marked by setting up a stand in Oslo to present to the general public the goals and activities of the Society.
- Hosting of a 'Nordic Evening' at the ECCO conference in Barcelona.
- The national conference, entitled "Horizons", which took place in Stavanger in October.

From the EONS News Team

EONS and Elsevier Donate Books to Romanian Cancer Association

Discussions between Jan Foubert and Olga Cridland during the Patients Forum held in conjunction with the recent ECCO conference in Barcelona have led to a donation of journals and books to P.A.V.E.L., the Romanian Childhood Cancer Parents' Association. Elsevier donated cancer journals and textbooks to P.A.V.E.L. to be used by doctors, nurses and patients and their families. For more information about P.A.V.E.L. please visit their website at <http://www.asociatiapavel.home.ro/>.

EONS, Eusoma, ESSO Training Programme

Jan Foubert and Yvonne Wengström on behalf of EONS, are collaborating with Eusoma (the European Society of Mastology), ESSO (the European Society of Surgical Oncology) to develop an educational programme to train specialist health care professionals to better deal with patients with breast cancer. The aim of this programme is to allow young clinicians and nurses to improve their theoretical knowledge and practical skills in the management of patients with breast cancer. According to individual speciality, a core team made up of health professionals from various disciplines who have undergone specialist training in breast cancer beyond that given in general training will then be created.

A call was issued to solicit participants for a one-month training in a European breast cancer care unit that will take place between January and April 2008. The response to this call was hugely successful. A total of 16 nurses from Serbia, Romania, Turkey, Slovenia, Greece, UK, Germany, Israel, Malta, Spain and Bulgaria applied for the training course.

All applicants were very motivated nurses who expressed a willingness to improve their knowledge and a desire to extend their network to include colleagues working in other European countries. The selection of the five most appropriate candidates posed a real challenge for the reviewers of the applications but had to be done.

The nurses chosen by the panel of reviewers to participate in this training programme are:

Adamovic Marjia (Serbia), Kaligarić Lara (Slovenia), Kamptisi Antzouletta (Greece), Kodzopeljic (Serbia), and Vella Elisabeth (Malta).

Jan and Yvonne would like to thank all applicants for their efforts and hope that they will continue to participate in EONS activities. For those who were selected to participate in this exciting multidisciplinary training programme, the reviewers extend their congratulations and encourage them to make the most of this opportunity to learn more about nursing care of the cancer patient and to extend their network of European colleagues.

Former EONS President Agnes Glaus is awarded Distinguished Service Award

Dr. Agnes Glaus has received the "MASCC Distinguished Service Award" at the MASCC 20th Anniversary Symposium which was

held in St. Gallen, Switzerland in June 2007.

The MASCC Distinguished Service Award is the highest honor that MASCC can bestow. It acknowledges an individual who has made extraordinary contributions to the society. The award was given in recognition of Dr. Glaus's many years of outstanding work and contributions to the organization.

Dr. Glaus has devoted her professional career to the area of supportive care both in her daily clinical work as well as in her research and teaching activities. It is especially fitting that she receives this award. In 1987 she was the co-initiator of the first international conference in Supportive Care in cancer. She shared a vision with a number of other individuals that a multidisciplinary and multi-professional approach to helping patients and their families through the rigors and adverse effects of treatment and cancer itself was as important as finding a cure for cancer.

Since then, Dr. Glaus has been the co-organizer of four supportive care conferences including the conference held in 2007. Agnes has been a MASCC member since 1990, has served on the MASCC board since 1998 and has been a tireless contributor to the success of the Society's journal as Associate Editor and reviewer.

Her profile as an international leader in oncology nursing has enormously helped MASCC as she has reached out to other cancer societies to help advance the supportive care agenda and to recruit new members for MASCC. As Past President and founding member of the Swiss Oncology Nursing Society and as Past President of the European Oncology Nursing Society, Agnes's leadership has significantly raised the profile of cancer nursing and its role in supportive care throughout Europe and beyond.

EONS extends heartfelt congratulations to Agnes on the awarding of this much-deserved recognition for her achievements!



Dr. Paul Hesketh, President of MASCC, presented Dr. Agnes Glaus, co-chair of this year's symposium, with the MASCC Distinguished Service Award during the opening ceremony

Call for Applications for EONS Mentoring Grant 2008

About the Mentoring Grant

The EONS Mentoring Research Grant Program has been established to support oncology nursing research conducted by novice and experienced researchers. The grant, which totals €10,000, is provided as financial support for a research project conducted over one year.

Five such grants are available for interested nurses to pursue a research project under the mentorship of an experienced researcher. The aim of the proposed study should fit within the research priorities as established by the European Oncology Nursing Society. A detailed description of the EONS research priorities is provided on the EONS website.

Who may apply?

European oncology nurses with at least a BSN, preferably a Master's degree, in nursing. Applicants must be individual members of EONS, or are willing to become an individual member of the Society.

Application submission Deadline

Applications should be submitted to the EONS Secretariat no later than **February 15th**, 2008. The grant will be awarded 1 April 2008.

More information on the grant as well as the application form can be downloaded from EONS website.

Call for Applications for EONS Major Research Grant 2008

About the Research Grant

The EONS Major Research Grant has been established for European oncology nurse researchers, educated beyond a Master's degree, to conduct research. The aim of the study should fit within the research priorities set up by the European Oncology Nursing Society. A detailed description of the EONS research priorities is provided on the EONS website. The grant will be awarded for a project lasting two years. The grant is €30,000. Preference will be given to research proposals which involve multiple centres.

Who may apply?

European oncology nurses with at least a Master's degree, preferably a PhD, in Nursing. Applicants must be individual members of EONS, or are willing to become an individual member of the Society. Experience in conducting research is necessary, and proof of at least two publications published in a peer-reviewed journal where the applicant is the first author are required for consideration for the grant.

Application submission Deadline

Applications should be submitted to the EONS Secretariat no later than **February 15th**, 2008. The grant will be awarded 1 April 2008.

More information on the grant as well as the application form can be downloaded from EONS website.

TARGET– an EONS Training Initiative on Targeted Therapies

Needs assessment surveys have shown that European cancer nurses have limited experience with the new targeted therapies and many lack knowledge about how to meet the needs of patients receiving these novel treatments. There are few existing educational materials on this topic and many of those that are available are not up-to-date. EONS has decided to partner with Merck KGaA on an exciting

educational initiative that aims to bridge this gap. The TARGET project has the goal of enhancing European oncology nurses' understanding of the role and relevance of targeting the Epidermal Growth Factor Receptor (EGFR) in cancer care.

The TARGET materials are now available in English, Dutch, French, German, Italian, Spanish and a number of courses have been carried out or are planned in Belgium, Estonia, Germany, Greece, Ireland, Israel, the Netherlands, Portugal, Slovenia, Spain, Sweden, Switzerland and the UK.

In 2007, 16 courses were either conducted or are planned to take place. Approximately 350 nurses have participated in these courses. From the evaluations received, the majority of participants judged the quality of the course materials to be very good and the course itself was judged to be valuable or very valuable.

As part of the requirements for successful completion of the course, participants undertake a dissemination project. In this project, the participant outlines plans to share their new knowledge with colleagues and with patients thus spreading the interest of the course to as wide a group as possible. The affect of the dissemination of knowledge is reflected in the following note received from the Israel course organizer:

I would like to inform you that the dissemination project of the first Israeli TARGET course was completed successfully: the Hebrew nursing guidelines for administration and management of side effects of Erbitux were approved by the Sheba Medical Centre management); the patient education booklet was approved as well. All three are now in current use in this centre. We hope that in the future we will be able to implement these materials in other medical centres as well.

For more information on the structure of the TARGET course and on the time, date, and location of the next course, please visit the EONS website at <http://www.cancerworld.org/>.

The TARGET project is supported by an unrestricted grant from Merck KGaA, Darmstadt, Germany. For the future, it is planned to develop a TARGET update programme which will become a multi company sponsored project.

The objective of Involve, the new initiative from sanofi aventis in oncology, is to engage oncology nurses in the therapy management of patients with cancer.

The first event of Involve, the EONS accredited educational programme in breast cancer, which took place on September, 23rd 2007 in Barcelona before the start of ECCO14, was a big success with a world wide attendance of around 160 participants. The programme was split into 2 sessions. The first was a plenary session, with simultaneous translation, on advances and symptom management in surgery, chemotherapy and radiation therapy focussing on breast cancer treatment, illustrated by a patient journey. The second session was more interactive, sharing nurses' experiences and based on case studies.

At the end of the event, an Involve EONS approved meeting-in-a-box was distributed to the attendees to facilitate the dissemination of the knowledge and best practice sharing in the treatment and management of breast cancer to facilitate local implementation at country level.

We would like to express our sincere thanks for the active participation of nurses, expert speakers and in particular for the patient who shared her journey with the group.

And here they are

Profiles of newly elected members of the EONS Executive Board



The members of EONS have cast their ballots and voted six new officers to serve on the Executive Board. This is the first time in the recent history of EONS that so many new faces will join the Board. However, with guidance from the Advisory Council, and the support of the membership, these officers will strive to make decisions in the best interest of EONS and to further implement the strategic goals of the Society during their two-year term. Congratulations!

Kay Leonard, RGN, H. Dip Oncology, MSc Nursing, FFMRCSI



Kay works at St Luke's Hospital, Dublin, which is the largest radiation oncology facility in Ireland. During her 16 years experience in oncology nursing she has held a variety of clinical posts as staff nurse, ward manager and lecturer at several hospitals and universities. Currently, Kay is working towards accreditation as an advanced nurse practitioner a role which is clinically focussed but also includes clinical leadership, education and research.

She is a member of the National Executive Council of the Irish Association for Nurses in Oncology (IANO) since 2001 and served as the President of the Association from 2003-2006. During her term as President, she had the opportunity to work with EONS to implement the TITAN and TARGET educational programmes at a local level.

Kay is pleased to have been elected to the Executive Board and anticipates that her time on the Board will be an opportunity to facilitate collaboration between oncology nurses in Ireland and Europe to promote research, postgraduate education and to improve the quality of care for patients with cancer and their families.

Anita Margulies BSN, RN



Anita was born in Rochester, New York but moved a few months later to New York City. She received a BSN, RN at Michigan State University and then worked at the University of Michigan Medical Centre. A few years later, she went to Switzerland for a one-year stay. Anita has been living in Switzerland and working there in oncology nursing since 1968.

Her work at the University Hospital in Zürich in the oncology outpatient department started in 1969 when oncology nursing as a "specialty" was just being introduced. Anita devotes much of her time to nursing education within and out of the hospital. She serves on the Board of the Swiss Oncology Nursing Society and the Zürich Cancer League and actively takes part in projects supported by these organisations. Anita is absolutely convinced that nurses play a pivotal role in the field of oncology and that the need for knowledge and competency in nursing is rapidly increasing.

From the political perspective, Anita has a special position as new board member of EONS. Switzerland is not yet a member of the EU but as an EONS colleague once stated – "you are a part of Europe". Over the years, Switzerland has been very involved in EONS and EONS-sponsored projects. Anita herself has been an active participant in several EONS projects and hopes that this involvement will continue to everyone's benefit.

As the Swiss representative for the EONS Advisory Council, Anita has come to see many of the strengths and some difficulties of EONS and can identify with and support the EONS mission. Anita is well-known within EONS; her reputation as a critical but fair player is well-established.

What would she like to achieve as a member of the EONS Executive Board? To be able to promote clinical oncology nursing excellence and competency within the member societies, to bridge gaps with physicians, especially with ESMO, and to enhance collaboration with multidisciplinary projects. A more intense collaboration with ONS (Oncology Nursing Society – USA) would be a wonderful challenge for EONS in Anita's opinion.

Anita is married and the proud mother of two sons, 23 and 29. All three men are in non-medical professions, can cook, iron and are extremely supportive to her work and new position on the EONS Board.

Daniel Kelly, RGN, PhD



Originally from Scotland, Daniel graduated from Edinburgh University in 1984 and now lives and works in London. He undertook oncology training at the Royal Marsden Hospital gaining experience in both adult and paediatric settings. After this, he worked as a Charge Nurse in hospice, acute oncology, and HIV units in Edinburgh. Daniel then once again returned to London and the Royal Marsden School of Nursing before being appointed as Senior Nurse for Nursing Research at University College Hospital

London.

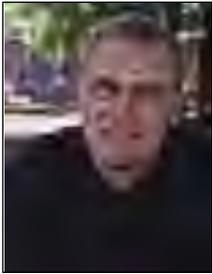
Daniel has gathered cancer nursing experience in foreign countries including India, Canada and the USA. Throughout his career, his interests have been focused on enhancing the scope of cancer nursing and questioning whether services respond appropriately to the needs of patients. He strongly believes that good nursing makes a real difference to patients and families on a daily basis and that nurses can improve their practice by having access to education, inspirational leaders and the knowledge generated through research. Daniel's PhD topic explored the impact of prostate cancer on men from a sociological perspective. Work on his doctoral thesis confirmed his long term interest in the psychosexual and emotional impact of cancer.

Dr. Kelly is now based at Middlesex University in north London, and his research interests include the experience of cancer on particular groups, such as men with prostate cancer and young adults, as well as workforce education and wider issues relating to cancer and palliative care.

Daniel is pleased to have been elected to the Board and hopes to be able to build on previous initiatives to help strengthen the role of research as cancer nursing develops across Europe. He especially looks forward to working with colleagues who are advancing the care of all cancer patients.

Daniel lives in south London with his partner and in his free time he enjoys theatre, exhibitions and cinema – and luckily London has plenty to offer!

Rolf Bäumer, Nurse



Rolf completed his basic nursing training in Dortmund and started his career as a nurse working on an oncology unit at a hospital in north Germany. Following this experience, he returned to the area of Dortmund where he continued to work in his chosen field of interest, oncology.

In 1989 he began studies in Sociology and Economics at the Universities of Marburg and Bonn. His desire for knowledge didn't stop there and following the completion of a first university degree, he then successfully completed a further qualification in Communication Psychology.

At present, Rolf works in a post-basic course in cancer nursing. In addition to teaching responsibilities, he is involved in counselling cancer patients and their families.

As a member of the Board, Rolf has set as his goal the increased visibility of EONS within the community of German cancer nurses. In his opinion, German nurses have not profited from the activities and opportunities presented by EONS to the extent that perhaps other countries have. Although the name 'EONS' has become better known among German nurses, Rolf feels that there is still much work to be done.

Through his work as President of the German Cancer Nursing Association (KOK) during which he also served on the Board of the German Cancer Society, he was able to gain insight into the care and management of cancer patients in Germany. Through his representation of the KOK on the EONS Advisory Council, Rolf has learned a lot about EONS and has offered his critical but constructive advice at meetings of the Council. Rolf believes that his critical thinking will be an asset to the EONS Board.

Rolf is excited about his term of office and looks forward to being involved in the development of EONS projects especially the issue of the recognition of the qualification of cancer nurses in Europe. He is a strong believer that post-basic cancer nursing education is important and that it is an important professional issue which must be further developed under close scrutiny and in collaboration with the appropriate authorities. Rolf looks forward to the challenge this situation presents!

Charnay Sonnek, Nurse



Charnay lives with her husband and two of their three sons in Geudertheim, a little village 25 km away from Strasbourg, the main city of Alsace. Her hobbies are painting, ballet, swimming, reading and cooking. Unfortunately, due to work responsibilities she doesn't have much time to engage in her favourite hobbies at the moment.

She trained to be a nurse at the Schwerter Schule of the Heidelberg University Hospital and completed her qualifications to practice as a nurse in 1992. She has been working in oncology for 15 years first in Germany at Heidelberg University Hospital and since 1998 in France at the Strasbourg University Hospital. During her career as a nurse, Charnay has worked both in the clinical setting and in education. In 2000 she obtained a post-basic diploma in pain management. Since 2005 she has been studying management and education at the management institute in health care located in Strasbourg.

Since 2006 she has been working as head nurse in the Strasbourg University Hospital in the urological department. Through her position she has become familiar with surgical oncology and has come to recognize the need for developing nursing practice in surgical-urological oncology at a national and European level. As a result, her goals for her term of office on the Board are to further develop nursing care in the area of surgical oncology, especially in urology.

Charnay serves on the board of the AFIC, the French Association of Nurses in Cancer Care, and has represented this association at EONS Advisory council meetings until her election to the EONS Executive Board. She is delighted to have been elected to the Board of EONS and is looking forward to working with her new colleagues. "It will be hard work, but we surely will have a lot of fun!"

Ulrika Östlund, RN OCN MSc



Ulrika has been an oncology nurse for 20 years. She started her nursing career working with inpatient care on an oncology ward and later in the radiotherapy department at the oncology clinic at the county hospital in Gävle, Sweden. She has also worked as a clinical nurse and head nurse for shorter periods at the oncology unit at the Karolinska University Hospital in Stockholm. Ulrika is interested in education issues and this interest has

led her to begin studies in education. Her present position is oncology nurse educator at the division of nursing, Karolinska Institutet in Stockholm. Ulrika is pursuing her doctoral degree, although she has taken a temporary leave from the programme. The focus for of her thesis is, 'Health and quality of life aspects in cancer care, from the individual patient to the family perspective' and she plans to complete her dissertation in Spring 2008. To enhance her own quality of life, Ulrika enjoys skiing, cycling, golf, or reading a scary criminal novel in her leisure time.

During the eight years of her oncology nursing career, Ulrika has been active as a board member in the Swedish Oncology Nursing Society. She left the board last year and misses her involvement there. To fill this gap, she is pleased to have been elected to the EONS Executive Board which will give her the chance to get involved in a new and exciting commitment. As an EONS board member she will strive for oncology nurses through Europe to have access to education and research in oncology nursing in a step towards further developing the care of cancer patients and their families. She feels strongly that oncology nurses should be proud of their profession and should think of EONS as a "meeting place" to interchange experiences and knowledge.

Report of the Advisory Council Meeting

from 17th November, 2007

Cath Miller, member of the EONS News team

The Advisory Council met with the new EONS Executive Board in Brussels to discuss, review and agree priorities for the EONS strategic agenda in 2008, as outlined in the CARE (communication, political agenda, research and education) plan. This was the first meeting chaired by the new President of EONS, Sara Faithfull. She welcomed participants and discussed the legacy she wishes to leave at the end of her presidency; which is to ensure more nurses at a clinical level utilise the range of services and opportunities EONS affords them. The new Executive Board members were then introduced and their respective roles outlined. Sara then emphasised the Presidents role which is to ensure the governance of EONS and explained the role of the Charity Commission in ensuring transparency of the work of the organisation and its board members. The role and process of the Charity Commission had in assisting EONS in appointing to a new post of Executive Director was explained. Jan Foubert who was appointed to this role in April, 2007 talked to the group about the role and responsibilities in supporting EONS in all aspects of its activities.

The rationale for the change of FECS (a federation) to ECCO (European CanCer Organisation) was discussed and the potential benefits this has for EONS. The new organisation has one guaranteed nurse representation at Board level and there is the opportunity to nominate a further nurse to this new board structure. ECCO is keen to pull together multidisciplinary groups and patient groups to increase inclusiveness and ensure appropriate representation. It has been agreed that the ECCO Conference will be held every other year and the next conference will be held in Berlin in 2009. The popularity of this conference continues to grow with estimates of 19,000 delegates in Barcelona in September.

Updates on the CARE plan were presented:

Communication

Communication forums were discussed, including a call for papers in 2008 for the newsletter. Societies and individual members are encouraged to share practice through this publication. The EONS website continues to flourish and a future development is to create multi-language sections for greater interactivity. The European Journal of Oncology Nursing (EJON) is now 12 years old and in 2008 will sponsor the Novice Research Award which will be announced at the Spring Convention in March, 2008.

Political Agenda

The European Specialist Nurses Organisation (ESNO) facilitates communication between European Specialist Nurses organisations and the European Specialist Nurses Interest Groups to represent mutual interests. The goal of European Specialist Nurses Organisations (ESNO) is to facilitate and provide an effective framework for communication, co-operation and co-ordination between *the European Specialist Nurses Organisations and The European Specialist Nurses' Interest Groups*, in order to represent the mutual interests and benefits of these organizations in relation to and within the *European Federation of Nurses (EFN)*. Its mission and values were launched in 2006 and can be found at www.esno.org. EONS can promote its work and representation through the ESNO platform.

Research

EONS is increasing its support for nursing research in 2008 by providing research grants for experienced researchers (30,000 euros per grant) and introducing mentoring research grants (10,000 euros per grant) Applications are now sought and the closing date is February, 2008. Awards will be granted in April 2008. Further information is available on the EONS website.

Education

An update and review of the accreditation processes has been undertaken this year to ensure compliance with the EU Bologna process. There will be a seminar on the 2nd June 2008 in Brussels entitled Modernising Cancer Nursing Education and all EONS members are invited to attend. Developing specialist education to advance practice will be a key priority in 2008 and a guide for practice educators to support curricula development will be published in December which will facilitate this work. Key to educational developments will be accessing new ways of learning such as e-learning and Pod casts. This will be explored and considered within the educational group. A number of educational initiatives were discussed including the continuing development of clinical guidelines such as extravasation and Cancer Tales, a cancer communication teaching publication. All such developments can be found on the EONS website.

Other News

- The European pain in cancer survey (EPIC) has been completed but not yet published.
- GAEA initiative which is looking at women receiving hormone therapy for breast cancer and the effects of this form of management.
- BREATHE – a European wide training needs analysis of breathing and respiratory training for health care professionals has been concluded. An article on the results of this survey will be published in the winter edition of the EONS Newsletter.
- The 2nd Masterclass in oncology nursing 2008 will be held in Sofia, Bulgaria.
- EONS 6th Spring Convention is to be held in Geneva in March 2008.

Following a sociable lunch, Professor Petra Riemer-Hommel gave a presentation entitled: Challenging future values in EU health care cancer provision.

She discussed the growing tensions of the health care market, that of limited resources, higher public expectation and increased possibilities of treatments and where the trade off's can be against a growing economic burden of cancer management. Petra also highlighted the complexity of the conflicting strategies of health economics in relation to workforce and the movement of health care staff across Europe and the unique demands of different European countries in attempting to consider this issue. It is expected by 2020, 15 million new cancers will be diagnosed (WHO) and the costs of novel cancer treatments will grow with the difficult decision of where best to target resources, on treatment or early detection and prevention.

The delegates then broke out into workshop groups to discuss 3 topics.

- 1) Enhancing the cancer workforce: migration/workforce redesign/skills and education for nurses chaired by Sara Faithfull.
- 2) Planning for future cancer care provision: Developing the evidence base/ social issues, communication, chaired by Yvonne Wengstrom.
- 3) Action for change: leadership/health care managers/organisational change, chaired by Sultan Kav.

Group 1 had a wide ranging discussion and it was clear that the educational opportunities afforded to nurses across Europe varied widely. In light of this, the participants agreed that the mentoring research grants needed to be extended to clinical opportunities as well as nursing research to facilitate professional development. There needed to be a Master class advanced level curriculum developed which could be adapted and used at national level to progress cancer nursing expertise across Europe. The need to involve patient user groups and user experience in education initiatives was explored and particular issues such as survivorship, training the trainers and developing nurses communication skills to become a 'smart communicator' will be progressed as future issues for EONS.

Group 2 explored the differences in the status of cancer nursing across Europe and the everyday challenges that brings. The group agreed a scoping study to understand the status of cancer nursing evidenced from an educational point of view would help focus need and priority for development as well as understanding the

value of nursing within an EU context. The group suggested a partnership approach with EU sponsorship and EONS matching funding. The group agreed that undertaking one project thoroughly and generating new evidence would be the best approach to making change happen.

Group 3 tackled the inequity of leadership across nursing in Europe but agreed a common understanding of the components of leadership. Evidenced by the differing perspectives of leadership in action in different countries, the group considered ways EONS could help in developments. National societies should invite oncology nurse leaders to speak at national events to promote cancer nursing and its leaders. Future developments put forward were the development of a Masterclass in Leadership which will also promote a European network and to develop curricula for leadership courses which use shared experiences to learn. The importance of celebrating cancer nurse leaders by EONS members nominating individuals for the Distinguished Merit Award was reinforced as a powerful platform to promote the work of cancer nurses.

Following a full and packed agenda, delegates made their way home with a clear message that the success of cancer nursing is made up of the sum parts of the national societies contributing fully to complex agenda's nursing faces and to promote and encourage the activities and opportunities EONS provides on behalf of the cancer nursing population in Europe. Difficult, maybe, but to quote Dr Martin Luther King, 'change does not roll in on the wheels of inevitability, but comes through continuous struggle'. Let us do it!

EONS welcomes a new member : Hungary !!!!

A Red Letter Day in Oncology in Hungary 10 November 2007



Csaba Avramucz, RN, MSN, Vice President Responsible for International Affairs, Hungarian Cancer Society, Oncology Nursing Section Assistant Lecturer, Semmelweis University Faculty of Health Sciences

The Hungarian Cancer Society organized its 27th congress and simultaneously celebrated its 50th anniversary. The congress, held in Budapest, offered an opportunity for oncology nurses to attend sessions on three important aspects of cancer care: prevention, active clinical oncology nursing, and „cure of the soul” which is better known as rehabilitation.

I could also call 10 November a day of historic importance since because the Hungarian Cancer Society had the opportunity to reorganize itself and subsequently hold a statutory meeting. On this occasion, the Oncology Nursing Section was offered the possibility to join the Cancer Society. This had no previously been possible and only became reality due to the newly founded collegial cooperation between doctors, nurses and other cancer experts. The 10th of November was really a remarkable day because now all disciplines could start to work together in the fight against cancer.

The fact that at the congress the Oncology Nursing Section could be formed is a result of the commitment of Dr. Edit Oláh, Professor, and President of the Hungarian Oncology Society. Dr Oláh has long recognised the importance of multidisciplinary cooperation and has been working towards making her idea a reality for quite a long time.

Jan Foubert, Executive Director of EONS, was warmly welcomed at the congress and was most kind in offering us valuable advice on organising cancer nursing within Hungary. One important result coming from our discussions with Jan is that our newly formed cancer nursing society will be able to join EONS as a well-prepared member effective as of 1 December 2007. Thank you, Jan!

We are pleased to announce that Mrs Tamas Szalai was elected President of the Oncology Nursing Section and Csaba Avramucz was elected Vice President Responsible for International Affairs. At our statutory meeting, Csaba outlined the necessity, aim and ambitions of establishing the Oncology Nursing Section of the Hungarian Cancer Society during his inaugural presentation.

For those of you who want to learn more about our newly formed society, watch for the Spring 2008 issue of the EONS Newsletter in which we will have the opportunity to inform members of EONS all about ourselves. Until then, please contact the Hungarian Oncology Nursing Section through the email address: csabaavramucz@yahoo.com.

TITAN Dissemination Project Award ceremony

at ECCO 14

The TITAN Dissemination Project Award ceremony at ECCO 14 was a resounding success.

The ceremony began with a short introduction from Jan Foubert, the Chair of TITAN and Executive Director of EONS, who praised the work of the prize winning project and the dedication and commitment shown by the prize winners, Hilary Noonan and Fiona Brady, to have achieved such outstanding results. This is the second time that an Irish project has won the European TITAN Dissemination Project Award, which is a tribute to the enthusiasm of Irish oncology nurses and the commitment the Irish Association of Nurses in Oncology (IANO) to continuing education programmes such as TITAN. Jan Foubert highlighted how TITAN has expanded across Europe and beyond, even as far as Australia, and attributed this expansion to the quality of the TITAN programme. In 2007 a further 744 nurses took part in TITAN, bringing the total to 3062 TITAN participants.

"I felt so proud for us and Irish oncology"
- Winner, Fiona Brady

The podium was then handed over to the winners to present their work. Despite feeling very nervous beforehand, they soon overcame their nerves and delivered a clear and concise presentation which was very well received by their audience. Members of the audience were impressed by how well prepared the winners were and found their talk both interesting and informative. The winners had practiced their presentation beforehand to make sure it all went well on the day and the practice paid off.

"We practiced so much we nearly forgot it!"
- Winner, Hilary Noonan

The winning TITAN Dissemination Project 2006 involved creating a user-friendly education package about febrile neutropenia for doctors, nurses and other health care professionals working in paediatric oncology.

Hilary Noonan, a staff nurse at the paediatric unit of Midwestern Regional Hospital, Limerick, took the floor first. She set the scene by explaining how the paediatric oncology/ haematology service is managed in Ireland through a shared care system. This involves a specialist paediatric hospital in Dublin – Our Lady's Hospital for Sick Children (OLHSC) and many tertiary hospitals, each of which share the same policies and protocols as the specialist centre. She identified the need for further education about the risks, consequences and treatment of febrile neutropenia within this system. The aim of their project was to meet this need by developing an education package consisting of a 'Pocket Guide on Febrile Neutropenia' and a 'Bedside Checklist' which they taught colleagues how to use during an education session.

Fiona Brady, a staff nurse in the paediatric unit of Porticuncla Hospital in Galway, then described how they started the project and identified key people who provided support and guidance, particularly at the OLHSC, Dublin. She clearly explained the process of development of their education package and highlighted some obstacles that were encountered along the way.

She discussed how they measured the effectiveness of the package by assessing colleagues' knowledge before and after an education session.

The winners acknowledged the assistance given to them by the IANO which supports TITAN in Ireland, by Amgen Europe for sponsoring the European TITAN dissemination project award and for their help in organising the trip to ECCO 14, and by Amgen Ireland who sponsored the Irish National TITAN dissemination project award – an educational travel bursary.



The winners were grateful for support from the IANO and Amgen. Pictured from left: Mary Uhlenhopp, Amgen Europe; Louise Maher, Amgen Ireland; winner Fiona Brady; winner Hilary Noonan; Marie Lavin, President IANO

The session ended with the presentation of the TITAN Dissemination Project Award 2006 to the winners. The winners commented that the presentation was more than they had expected – "we were honoured to be invited to the conference... for us the opportunity of speaking at such an important conference was the reward."

The Pocket Guide and Bedside Checklist developed by Hilary and Fiona will soon be published with support from Amgen Ireland, and the winners plan more education sessions for colleagues caring for paediatric cancer patients in shared care centres across Ireland.

Dissemination projects represent the most important outcome of the TITAN training initiative. By implementing what they have learned, nurses have an opportunity to make a real difference to patient care. Hilary and Fiona found an innovative and creative way to improve the quality of care experienced by paediatric cancer patients in Ireland. If you feel inspired by their example, why not do a TITAN dissemination project yourself? Next time it could be you...

The award winning presentation can be accessed from the TITAN zone of the EONS website at:
http://www.cancerworld.org/cancerworld/home.aspx?id_sito=2&id_stato=1 and further information can be obtained from Hilary Noonan hilarynoonan@gmail.com and Fiona Brady bradyfb@gmail.com

Joint SIOP Europe and EONS FECS Special Project Collaboration Between Nurses and Doctors in Paediatric Oncology



The research project funded by SIOP Europe and FECS and led by Dr Faith Gibson from the UK, which started as a two year project in 2006 is progressing well. It involves pairs of doctors and nurses from across eastern and western Europe working collaboratively to improve patients care in their centre using Appreciative Inquiry, a technique which seeks to develop the positive aspects of existing practices and develop them further.

So far there have been two residential weekends, in November 2006 and June 2007, and each team – comprising one nurse and one doctor from a paediatric oncology centre in each of the thirteen countries – is now working on their own piece of developmental work in their own centre. The countries involved are in Switzerland, Greece, Belgium, Poland, Estonia, Lithuania, Serbia, France, Germany, UK and Netherlands. The project will be completed in November 2008.

President letter



Sara Faithfull

It is a great honour as well as a responsibility becoming President of EONS and I feel very privileged to be awarded this task. With winter approaching this season is good for reflection and thoughts ahead of the New Year. There are many EONS events planned this year not only the spring convention in Geneva but also other training events which I hope I can meet many members. Winter and seasons is a good analogy for what it is like to become President and I share some of my reflections. I feel rather like a new gardener helping shape and support the growth of a beautiful garden that has already been developed by many past successful gardeners. The winter is when the EONS board thinks about new projects and strategy following the advisory board. It is like a garden where each season new plants such as projects and ideas come up and grow as well as the trusty usual plants i.e. the conferences that are fundamental to the structure of our annual events come to fruition. I hope that like a garden EONS will provide a place, a haven for cancer nurses to be able to share, reflect and learn and that in turn from this new ideas and growth will occur.

This is a time of great change and innovation in cancer care, with increasingly complex therapeutic regimes and management; cancer nurses need to be shaping future health care services in Europe and therefore we need to be developing skills and a voice that influences these agendas. Ever increasing information and messages flood clinical areas and it is difficult to sift through this mass of communication to know what works and what should be implemented. EONS can assist in providing direction and support for clinical nurses at all levels not only through training, networking, conferences and financial support (translation and grants) but also in guiding at a macro level cancer nurse education and political action. We also need to be conscious of the context of new ways of working in health care. The increasing patient numbers and constraints on resources have shifted the boundaries of some nursing roles and this shift raises issues about who are

the future nurses caring for cancer patients and how should we define advanced practice. Should EONS be doing more to educate community and general nurses or working across speciality boundaries for example cancer in older people and gerontology or lung cancer and thoracic medicine. These are difficult issues, not easy to address but where specialist knowledge is needed. The time now is not just for raising awareness but to have action in providing leadership and support either through research evidence or in training specialist nurses and providing blue prints for education and standards of practice within Europe.

Talk is easy but making this work in reality is much harder. It must be remembered that Europe is not one place but a linking of countries and that to change health care it requires change from the EU and national policy level to that of social and cultural change. Back to my garden then, how could I as head gardener influence this diversity with Europe being a range of garden styles? Part of this would be to have a vision or a view of what I would like to see growing in the garden in the future but also primarily to give structure and support so that these new ideas can grow and flourish. Part of this is to see how future changes will impact. For example in my garden we have summer hose pipe bans and climate change is influencing what I can grow. A garden never stays still. I see my role as president as providing vision, structure and support for the very talented EONS board and team who make the work of EONS a reality. I have been asked many times what one thing would I like to make happen whilst I am EONS president. This is a difficult request but if I had to say one thing, it would be reaching the clinical nurses and providing valuable support for them in their work in caring for those suffering with cancer whether they are a specialist or a generalist. The two years will go quickly and I hope that I can provide the direction that is needed for the beautiful EONS garden.

Supporting people affected by lung cancer

Sally Moore, Lung Cancer Nurse Specialist, Royal Marsden NHS Foundation Trust, UK

Lung cancer is one of the most challenging cancers in terms of mortality and morbidity. Many patients, especially those with advanced disease, experience difficult and distressing physical and psycho-social problems throughout the entire disease trajectory (1,2). The physical, emotional, financial and social impact on family members is increasingly recognised also. (3,4) It is vital, therefore, that health care professionals ensure patients and their family members receive excellent supportive and palliative care.

Supportive care and palliative care are inextricably linked. Both are concerned with the physical, psycho-social and spiritual issues faced by the person with cancer (5,6). Both help patients and their families cope with cancer and the treatment of it; maximising the benefits of treatment to live as well as possible with the effects of the disease (6). Management of pain and other difficult symptoms are a particular focus of palliative care (6). Good supportive and palliative care should be integrated throughout the whole of the lung cancer pathway, from pre-diagnosis through investigations, diagnosis, treatment, and finally death and bereavement. Ensuring good supportive and palliative care relies on multi-professional working and collaboration. However, nurses can play a pivotal role in not only assisting patients and their families in managing symptoms, but also by ensuring the involvement of other specialists at appropriate times.

The symptoms associated with lung cancer can be related to the disease itself, effects from treatment, and/or the effects of co-existing disease such as chronic obstructive airways disease or cardiac disease. Optimal management depends on the likely cause(s) of each symptom. Therefore, an accurate and detailed assessment is vital to ensure the most appropriate interventions are implemented. Assessment should be a regular and continuous process throughout the patient's illness since symptoms and their intensity may vary over time. Anti-cancer treatments such as chemotherapy and radiotherapy can be effective in reducing disease-related symptoms despite their potential for side-effects.

Patients with lung cancer describe the most common problems as:

- Fatigue
- Pain
- Breathlessness
- Loss of appetite
- Cough
- Low mood
- Social disruption (1,2,7).

Increasingly, we recognise that cancer-related symptoms are multidimensional and multi-factorial. Symptoms and problems associated with lung cancer often occur in combination or clusters, and are interrelated for example breathlessness and cough (1,8). Symptoms often impact on patients' physical functioning leading to a slowing down of activities, alteration in the way an activity is done or elimination of it altogether (1). Physical symptoms also impact significantly on patients' emotional and social functioning (1). Therefore, if we are to impact on patients' overall burden from lung cancer, we cannot address symptoms in isolation. They must be considered in context and in relation to each other.

Fatigue

Fatigue is described as 'an unremitting and overwhelming lack of energy and an inability to maintain usual routines' (9). Strategies addressing the cause of fatigue such as correcting anaemia, insomnia and controlling disabling symptoms such as pain and breathlessness are vital first steps. Exploring and advising on the role of nutrition, exercise and the planning of activities to help better manage fatigue may also help patients. Addressing symptoms such as anxiety and depression may help patients feel more energised also.

The following table (Table 2) is a list of strategies that patients may find helpful in managing fatigue.

Table 2. Strategies for patients that may help alleviate fatigue (10).

Exercise	Regular, light exercise may decrease fatigue and improve sleep. Plan some light exercise or activity into the day.
Diet	Try to take advantage of the times when appetite is best. Drink plenty of fluids. Try new foods or eat foods that taste best. Eat little and often.
Sleep	Sleep as much as needed to feel refreshed but not more than necessary, especially during the day as this can make you feel sluggish and disrupt sleep patterns at night. Wake up at the same time every day. Eliminate noise when sleeping. Avoid stimulants such as coffee prior to sleep.
Plan activities	Plan activities ahead of time so that there is time for activities and time for rest. Spread tasks out over the week. Ask others to do heavy work. Sit down to do chores where ever possible.
Relaxation	Make time for relaxation. Avoid stressful situations whenever possible. Talk to others about anxiety. Try distraction techniques such as reading and music.

Pain

Pain may be associated with effects from the primary tumour in the chest or from metastases to other sites, for example to bone. More than one site of pain is common and causes may overlap. Levels of pain can be influenced by emotional elements such as anxiety, fear and hopelessness (11).

Pharmacology plays a large role in pain management for patients with lung cancer, particularly where its cause is resistant to other treatments. The goal of treatment is to optimize pain relief while minimising side-effects and inconvenience to the patient. Many analgesic drugs are available and medications should be individualised. The WHO analgesic ladder (1986) (12) remains a useful guide for prescribing analgesics in lung cancer. It is a three-step process (Figure 1). If pain relief is not achieved on one step, patients should proceed to the next step.

Step One	(mild pain)
Non-Opioid	eg Paracetamol
+/- Adjuvant	eg ibuprofen or diclofenac
Level Two	(mild to moderate pain)
Mild Opioid	eg codeine
+/-Non-Opioid	eg paracetamol
+/- Adjuvant	eg ibuprofen or diclofenac
Level Three	(moderate to severe pain)
Opioid	eg morphine or fentanyl
+/-Non-Opioid	eg paracetamol
+/- Adjuvant	eg ibuprofen or diclofenac

Figure 1: The WHO Analgesic ladder (1986).

Neuropathic pain, as a result of nerve injury or irritation may not respond to these usual analgesics and may be better managed using tricyclic antidepressants or anti-epileptic drugs eg amitriptyline, gabapentin or carbamazepine.

A multidimensional approach to managing pain is often more helpful than drug therapy alone. Strategies may include:

- Trans-electrical or transcutaneous nerve stimulation (TENS)
- Acupuncture
- Massage and aromatherapy
- Heat and cold
- Relaxation
- Distraction therapy
- Hypnosis.

It is also vital to remember that psychological, social and spiritual concerns can impact negatively on a person's pain and/or response to analgesia.

Breathlessness

Breathlessness is an unpleasant or uncomfortable awareness of breathing or need to breathe (13). Patients with lung cancer may experience breathlessness for a variety of reasons such the position of the tumour in the airways or lung, an associated pleural effusion, effects of anti-cancer treatment or other co-existing illnesses.

For patients with a life-threatening disease such as lung cancer, breathlessness can often be a frightening and difficult symptom to manage. In this context, it is important therefore to address not only the physical component of breathlessness but also the emotional distress it causes patients and their carers (14). Recent research suggests that by using non-pharmacological techniques such as breathing retraining, relaxation, pacing activities, goal setting and working with the emotional component of breathlessness, in conjunction with pharmacology, nurses can significantly improve the experience of breathlessness for patients with cancer (14).

Drug therapy for breathlessness includes the use of opioids, benzodiazepines and oxygen. A recent Cochrane review suggests that morphine may decrease the level of distress from breathlessness (15). Some patients find anxiolytics such as the benzodiazepines; lorazepam and diazepam, helpful in relieving breathlessness because of their sedative effect, which like morphine may depress respiration and thus dull the sensation of breathlessness for patients. Anxiolytics may also reduce anxiety related to breathlessness and assist the action of breathing by their muscle relaxation effect.

Although oxygen is widely used by patients with cancer who are breathless, there are no studies confirming its benefit in the absence of hypoxia. People without hypoxia may gain as much benefit from a cool draft of air across the face from a fan as from oxygen (16). Psychological dependency on oxygen may decrease physical functioning and increase social isolation. To avoid giving oxygen inappropriately, it should be initially administered for a short trial period and only continued if the patient derives clear benefit from it.

Corticosteroids may have a useful effect on breathlessness when there is thought to be oedema around the tumour exacerbating airways obstruction, superior vena cava obstruction, lymphangitis carcinomatosa, radiation induced pneumonitis, chronic airways disease or asthma.

Poor appetite

Poor appetite in patients with lung cancer is common. This may be caused by the effects of the cancer itself, other symptoms such as breathlessness, constipation and pain, effects from anti-cancer treatment such as chemotherapy and radiotherapy, and emotional factors. As with all symptoms, a thorough assessment of the problem is vital to identify the most helpful strategies.

Firstly, it is important to correct any factors where possible which may inhibit oral intake such as dry mouth, mucositis, infection and nausea. Appetite may be stimulated with the use of alcohol before meals or drugs such as megestrol acetate or corticosteroids. In addition, nutritional supplements in liquid or powder forms can be given. However, in advanced cancer, it may be important to recognise and acknowledge with the patient and family members that weight gain is unlikely and that the aim should be to maintain weight as far as possible. The following simple advice may be helpful for patients and carers.

- Keep the mouth as moist and clean as possible.
- Eat small meals and snacks instead of a large meal.
- Drink plenty of fluids, particularly nourishing drinks and nutritional supplements.
- Eat what you fancy.
- Choose a wide variety of foods to avoid getting bored with the same flavours.
- Allow others to prepare food for you.
- If you have to attend the hospital regularly, take a snack with you that you enjoy.
- If you have difficulty chewing or swallowing, try a soft or pureed diet.
- Try not to become anxious over not eating.
- If you are a carer, remember there is a fine balance between encouragement and nagging. Try not to become over-anxious about a loved one's dietary intake.

Cough

Cough can also be a troublesome symptom for people with lung cancer and one which is often difficult to ameliorate. A trial of an opiate such as codeine or morphine can often prove useful. Methadone linctus may be tried if these fail, but care must be taken as its effects can be cumulative. Nebulised saline may help patients who complain of a dry cough, although there is little evidence to support its use. Corticosteroids may also benefit some patients but the cough often returns once these are withdrawn.

Low mood

The psychological morbidity that accompanies a diagnosis of cancer is well-documented (17,18). Patients with lung cancer have high levels of emotional distress (2,19,20,21), and this interferes with and impacts negatively on their quality of life (8,22). A variety of factors can negatively impact a person's psychological well-being. These can be related to patients':

- disease status, for example advanced stage of disease, poorly controlled symptoms, threat of death,
- experience of care, for example difficult diagnostic pathway, poor relationships with health care providers, lack of information,
- social issues, for example lack of supportive relationships, financial concerns, spiritual concerns, and
- psychological factors, for example history of depression.

Patients with lung cancer consider psycho-social concerns as priorities (22,23). However, there is evidence that these needs are poorly addressed by health care professionals (19, 23). Providing care that is supportive and holistic may prevent low mood and psychological distress. Ensuring that care is co-ordinated and timely, patients and family members are kept well-informed, and providing continuity of care may help patients' psychological adjustment to cancer and its treatments (24). Developing therapeutic relationships with patients and their families may improve patients' coping, and enable nurses to recognise low mood, anxiety and depression early, and offer treatment strategies or referrals to specialists appropriately.

Social disruption

A diagnosis of lung cancer significantly impacts social functioning; enforcing alterations in work, family roles and social activities for both patients and family members (25,26). Social changes may cause financial difficulties if employment and earnings are lost or reduced, and increases in living costs because of demands of the illness and treatment schedule. Accommodation may become unsuitable if there are functional limitations.

It is important the broader impact of lung cancer is recognised and addressed by health care professionals. Nurses are in an ideal position to make an initial needs assessment and refer to the relevant specialists and outside agencies where necessary. Assessment should be ongoing and undertaken with both the patient and family to ensure that all needs are considered. There are many professionals and outside agencies who can have a significant role in helping patients with lung cancer maximise their social functioning including:

- Occupational therapists
- Physiotherapists
- Palliative care teams
- Social services
- Benefits advisors
- Housing teams
- General practitioners
- Chaplaincy
- District nursing teams.

Conclusion

Nurses can make a significant difference in the way that patients with lung cancer and their families experience lung cancer. Strategies initiated by nurses can lead to improvements in how well patients and their families manage the physical, psychological and social effects of this disease. Comprehensive and on-going assessment of need is essential.

References

1. Kiteley CA, Fitch MI (2006) Understanding the symptoms experienced by individuals with lung cancer. *Canadian Oncology Nursing Journal* 16(1), 25-30
2. Hopwood P, Stephens R (2000) Depression in patients with lung cancer: prevalence and risk factors derived from quality of life data. *Journal of Clinical Oncology* 18(4), 893-903
3. Plant HJ (2000) Living with cancer. Understanding the experiences of close relatives of people with cancer. Unpublished PhD thesis, University of London
4. Payne S, Smith P, Dean S (1999) Identifying the concerns of informal carers in palliative care. *Palliative Medicine* 13: 37-44
5. Wells M, Faithfull S (2003) The future of supportive care in radiotherapy. In Faithfull S, Wells M, editors: *Supportive care in radiotherapy*. London: Churchill Livingstone, p372-382
6. National Institute for Clinical Excellence (NICE) (2004) *Guidance on Cancer Services. Improving Supportive and Palliative Care for Adults with Cancer. The Manual*. NICE, London
7. Krishnasamy M, Wilkie E (1999) Lung cancer: patients', families' and professionals' perceptions of health care need. A national needs assessment study. *Macmillan Practice Development Unit/Centre for Cancer and Palliative Care Studies*, London
8. Fox SW, Lyon DE (2006) Symptom clusters and quality of life in survivors with lung cancer. *Oncology Nursing Forum* 33(5), 931-936
9. Piper B, Lindsay D and Dodd M (1987) Fatigue mechanisms in cancer patients: developing a nursing theory. *Oncology Nursing Forum* 14, 17-23
10. CancerBackup (2005) *Coping with fatigue*. London: CancerBackup. Accessed at: <http://www.cancerbackup.org.uk/ResourceSupport/Symptomsideeffects/Fatigue>
11. Ahles TA, Blanchard EB, Ruckdeschel JC (1983) The multidimensional nature of cancer related pain. *Pain* 17, 277-288
12. World Health Organisation (WHO) (1986) *Cancer pain relief*. Geneva: WHO. Accessed at: <http://www.who.int/cancer/palliative/painladder/en/>
13. Gift A (1990) Dyspnea. *Nursing Clinics of North America* 25(4), 955-965
14. Bredin M, Corner J, Krishnasamy M et al (1999) Multicentre randomised controlled trial of nursing intervention for breathlessness in patients with lung cancer. *British Medical Journal*. 318, 901-904
15. Jennings AL, Davies AN, Higgins JPT, Broadley K (2003) Opioids for the palliation of breathlessness in terminal illness (Cochrane Review). In: *The Cochrane Library* 2003. Issue 3. Oxford: Update Software
16. Schwartzstein RM, Lahive K, Pope A, Weinberger SE (1987) Cold facial stimulation reduces breathlessness induced normal subjects. *The American Review of Respiratory Diseases*. 136, 58-61
17. Holland JC (1989) Lung Cancer In: Holland JC and Rowland JH eds. *Handbook of Psychooncology*. New York: Oxford University Press, pp 184
18. Maguire P (1985) The psychological impact of cancer. *British Journal of Hospital Medicine*. 34(2), 100-103
19. Houts PS, Yasko JM, Kahn SB et al (1986) Unmet psychological, social and economic needs of persons with lung cancer in Pennsylvania. *Cancer* 58(10), 2355-2361
20. Carlsen K, Jensen A, Jacobsen E (2005) Psychosocial aspects of lung cancer. *Lung Cancer* 47, 293-300
21. Zabora J, BrintzenhofeSzoc, K, Curbow B et al (2001) The prevalence of psychological distress by cancer site. *Psycho-Oncology* 10, 19-28
22. Sarna L, Brown JK, Cooley ME et al (2005) Quality of life and meaning of illness of women with lung cancer. *Oncology Nursing Forum* 32(1), E9-E19
23. Krishnasamy M, Wells M, Wilkie E (2007) Patients and carer experiences of care provision after a diagnosis of lung cancer in Scotland. *Supportive Care Cancer* 15, 327-332
24. The London and South East Lung Cancer Forum for Nurses (2004) Guidelines on the role of the specialist nurse in supporting patients with lung cancer. *European Journal of Cancer Care* 13, 344-348
25. Ryan L (1996) Psychosocial issues and lung cancer: a behavioural approach. *Seminars in Oncology Nursing* 12(4), 285-294
26. Ramalingam S, Balani C (2002) Meaningful survival in lung cancer patients. *Seminars in Oncology* 29(1)(suppl 4), 125-131

Lung Cancer:

Where are we now?

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Background

Lung cancer is the commonest cause of cancer death in the world with an estimated 1.18 million people dying worldwide from the disease in 2002 (1). In the UK in 2002 there were 33,600 deaths from lung cancer, 22% of all cancer deaths (2). In the West the incidence and mortality in males increased steadily between the 1950s and the end of the 1980s since when they have steadily fallen, but in women the incidence has been increasing since the 1970s. In most of the Western world more women now die of lung cancer than of breast cancer. The male to female ratio in the UK has dropped from around 4:1 in the 1970s to 3:2 in 2006 (3).

Although smoking remains the major aetiological factor, at least 15% of lung cancers occur in patients who have never smoked. This amounts to around 5000 deaths per year in the UK, more than from many other cancers.

International survival rates

Published five year survival rates vary widely across the world with the USA reporting the highest rate - 15% for cases diagnosed since 1996 (4). The recently published Eurocare-4 study (5) reported a pan-European mean age-standardised 5 year survival rate of 10.2% for the period 1995-99, with the highest rates being in Iceland (14.7%) and The Netherlands (14.3%). The rate for England was 8.6%, with only Scotland (8%), Denmark (7.9%) and the Czech Republic (8.2%) having lower survival rates. There are widely acknowledged differences in the way such incidence and survival data are collected, but there are countries in Europe such as Iceland, The Netherlands and Sweden where data collection is of high quality where survival is significantly better than the UK.

The explanations for these differences are unclear, but there is evidence from breast and colo-rectal cancers that patients have more advanced disease in the UK by the time they are diagnosed and it is likely that this is at least part of the explanation. However, even between districts within the UK there is an almost four-fold variation in 5 year survival (6) suggesting that other factors, including standards of care, may be involved.

Improving standards of care

There have been major efforts in the UK over the last few years to try and improve the standards of care. A report in 1995 (7) outlined a new structure for cancer services with a Network of larger Cancer Centres and smaller Cancer Units across the country. Multi-disciplinary teams began to be established and a systematic process of Peer-review was implemented. In 2001 the English Department of Health published a National Cancer Plan (8) which set out a strategy with the aspiration of making our cancer services as good as the best in Europe. This resulted in a significant injection of cash into cancer services and was accompanied by a systematic national programme of service re-design. This is called the Cancer Services Collaborative Improvement Programme (CSC-IP) (9) which has been very successful in driving forward many aspects of improved standards of care, including:

- the implementation of referral guidelines from primary care
- the establishment of rapid referral lung cancer clinics
- pre-planning of the care pathway to reduce waiting times and increase efficiency
- the improvement in quality of MDT teams and their working method
- increasing the proportion of patients seen by specialists and hence the proportion of patients receiving effective treatments
- reducing unnecessary in-patient episodes
- promoting better models of follow-up
- ensuring all patients have the support of a lung cancer nurse specialist
- better written and verbal patient information
- improving the end of life experience for patients and carers

Systematic guidance on the management of lung cancer has been produced in several countries; in the UK this was published by the National Institute for Health and Clinical Excellence (NICE) in 2005 (10).

Early diagnosis and screening

The major problem faced when trying to improve outcomes in lung cancer is the fact that up to 80% of patients have locally advanced or metastatic disease by the time they reach specialist care. Most lung cancers are probably symptom-free in their earliest stages and will only be detectable either incidentally (when investigations are being carried out for other purposes) or by screening techniques if and when are shown to be of proven benefit. However, there is evidence suggesting that symptoms may appear much earlier in the course of the disease than we once thought (11) and many studies have shown delays of many months in diagnosis (12). Such delays can broadly be divided 50/50 between patient-related and doctor-related factors. Valuable work could therefore be done to improve awareness of the early symptoms both in the general population and in the health care community. In the UK guidelines on the referral of patients suspected of having cancer are available, aimed at primary care physicians (13).

Diagnostic and staging techniques

There have been significant improvements in the techniques to diagnose and stage lung cancer in recent years. These include:

- a) High quality multi-slice CT images** which allow for 3D reconstruction. This gives much better definition of local tumour invasion, particularly in patients with superior sulcus (Pancoast) tumours, chest wall and vertebral body invasion.
- b) Non-surgical node sampling** is becoming much more widespread and reduces the need for general anaesthesia and enables both a tissue diagnosis and stage to be established in one procedure. Techniques include:
 - Ultrasound of the neck (14)
 - Transbronchial Node Aspiration (TBNA)
 - Endobronchial ultrasound (EBUS)
 - Endoscopic ultrasound

c) ⁵FDG PET-CT scanning (figure 1) has been a major advance and has a role several clinical situations (table 2).

Table 2:

Potential roles for ⁵FDG PET-CT scanning

- **Diagnosis of pulmonary nodules**
- **Staging of the mediastinum**
- **Detection of occult metastatic disease**
- **Assessment of response to treatment**

Most of the published data on PET scanning so far has been in Non-Small Cell Lung Cancer (NSCLC), but more is now emerging in Small Cell Lung Cancer (SCLC). It has a major role in the reduction of unnecessary thoracotomies and up to 20% of inappropriate surgical procedures can be avoided if PET scanning is part of the routine work-up for surgery (15).

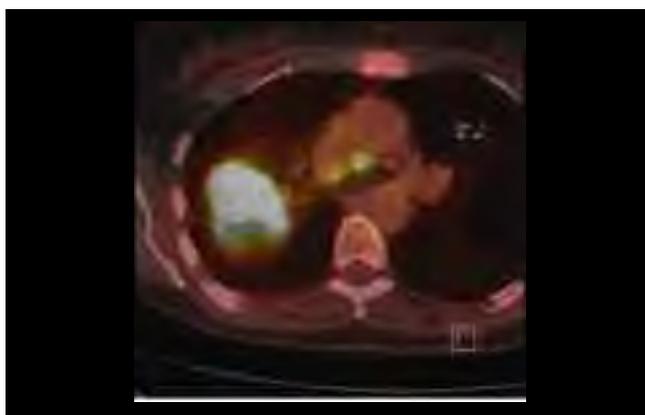


Figure 1. PET CT image showing intense ⁵FDG uptake in a right upper lobe non-small cell carcinoma (a), and pre-tracheal lymph node (b).

Staging of NSCLC

The TNM method of staging patients with NSCLC has remained more or less unchanged for over 20 years (16). The database upon which that staging system was based was small and very surgically biased. The International Association for the Study of Lung Cancer (IASLC) has therefore pulled together a much larger and more broadly based database from across the world and is due to publish a revised TNM system in 2008. The provisional report of the IASLC staging committee is already published (17).

Treatment: Non Small Cell Carcinoma

Surgery and adjuvant therapy

Surgical resection rates vary around with world and widely within countries. In the UK only around 9% of lung cancer patients undergo surgery (3) and there is at least a four-fold difference between the areas with the highest and lowest rates (18). This may, in part, be a variation in the frequency of early stage disease in the population served or in the frequency and severity of co-morbidities (e.g. COPD) (19), but there is evidence that having a specialist thoracic surgeon as part of a Multi-Disciplinary Team can significantly increase resection rates (20). One of the major factors in operating on a higher proportion of patients is the availability of expertise to carry out surgical resection in patients with poor lung function. The most important of these are shown in table 1.

Table 1:

Surgical techniques in patients with poor lung function

- **Sub-lobar (wedge) resection**
- **Video-assisted thoracoscopic surgery (VATS)**
- **Sleeve resection**
- **Concurrent lung volume-reduction surgery**

A number of trials published over the last few years have confirmed the benefits of adjuvant chemotherapy following surgery in fit patients with all but very early stage disease (21). The absolute increase in survival at five years is between 6 and 10%. Treatment is usually with three cycles of Cisplatin combined with either Gemcitabine, Vinorelbine or Paclitaxel.

Routine post-operative radiotherapy has been shown to be of no benefit and indeed may be detrimental (22), but most centres give post operative radiotherapy to patients with incompletely resected disease.

Radical radiotherapy and combination therapy

Radical radiotherapy is a potentially curative treatment in patients with stage IA – IIB disease who are not considered fit for surgery. Radiotherapy regimes vary widely between centres and it is disappointing that CHART (Continuous Hyperfractionated Accelerated Radiotherapy) which was demonstrated to be significantly superior to conventional large fraction treatments (23) has only been taken up by a minority of centres. Combination chemo-radiotherapy is now the standard of care for inoperable stage III disease that can be encompassed in a radiotherapy field. There is mounting evidence that giving the two treatments concurrently results in better survival outcomes than when given sequentially.

Advanced stage disease

Patients with advanced stage NSCLC (IIIB and IV) are one of the commonest patient groups in lung cancer. Untreated, their median survival is no more than six months and distressing symptoms are common. Chemotherapy with a platinum- containing doublet is now established as first line therapy in patients with a Performance Status of 0 and 1 (24). Carboplatin is often combined with Gemcitabine, Vinorelbine or Paclitaxel, usually given as three cycles every 3 weeks. Objective response rates are around 40% with symptomatic improvement in up to 60% of patients. The median survival is improved by around 10 weeks, but the proportion of patients who survive to one year is nearly doubled. Unfortunately relapse is the rule and second line treatment is both less effective and potentially more toxic. Both Docetaxol and Pemetrexed are licensed for use in this situation with response rates of less than 10% but do result in modest survival improvements.

'Targeted' agents

There have recently been huge advances in the understanding of how tumours develop, grow and spread which have led to the development of many new compounds and antibodies that target key steps in the growth pathways. Inhibitors of EGFR (Epithelial Growth Factor Receptor - e.g. Erlotinib) and VEGF (Vascular Endothelial Growth Factor - e.g. Bevacizumab) are under most scrutiny. EGFR and VEGF are both commonly over-expressed in patients with NSCLC. Erlotinib has been shown to significantly improve survival in patients with advanced NSCLC who have relapsed after 2nd and 3rd line chemotherapy (25). There is a minority of patients who have a

dramatic response to these agents. Bevacizumab combined with chemotherapy is now becoming the standard of care in the USA in patients with advanced non-squamous NSCLC with peripheral lesions. These new compounds have a different and generally much less troublesome toxicity profile; in particular they lack significant haematological toxicity. The main side effects of Erlotinib, for example, are skin rash and diarrhoea and it also has the advantage of oral administration. Genetic mutations are being identified which may be able to identify sub-groups of patients who might be most likely to respond to specific agents, hence the term 'targeted therapy'.

Treatment: Small cell carcinoma

The incidence of SCLC is falling and in England in 2005 it made up only 10% of all histologically confirmed cases (3). There have been few major changes in the management of SCLC in recent years; combination chemotherapy with a platinum containing doublet is the foundation of treatment with cisplatin/etoposide in most common use. Concomitant radiotherapy to the thorax is now standard practice in patients with limited disease and good performance status. Prophylactic cranial irradiation is established in patients with limited disease and a good response to first line therapy. Topotecan looks promising as a second line therapy (26).

The role of the Lung Cancer Nurse Specialist

The UK has led the way in developing the role of the Lung Cancer Nurse Specialist. From a handful in the early 1990s there are perhaps 300 across the UK today. They have proved of enormous value in improving the experience of care for patients and carers and provide a strong 'thread' for the patient to hang on throughout their cancer journey. They are a vital source of information from the time that the 'bad news' is first given to the patient, right up until their death. They provide a strong link between hospital and community health services and have the important role of acting as advocates for patients. They are key members of the lung cancer MDT.

Raising public and political profile

Lung cancer has never had the public and political profile of breast cancer and has received a much lower level of research funding. This situation is beginning to change and it is no longer enough to concentrate on one aspect of care such as chemotherapy or surgery, what is needed is a concerted team effort to diagnose the disease as early as possible and improve the standards of care and outcomes for all patients.

References

1. GLOBOCAN 2002. Cancer Incidence, Mortality and Prevalence Worldwide 2002 estimates. 2006. <http://www-dep.iarc.fr/>
2. Cancer Research UK 2007. CancerStats: Lung Cancer and Smoking. www.info.cancerresearchuk.org/cancerstats
3. National Lung Cancer Audit: Report for the audit period 2005. The Information Centre for Health and Social Care, 2006. www.ic.nhs.uk
4. SEER Database: <http://seer.cancer.gov>
5. Berrino F, De Angelis R, Sant M, et al. 'Survival for eight major cancers and all cancers combined for European adults diagnosed in 1995-99: results of the EUROCARE-4 study.' *Lancet Oncology*, 2007; 8(9): 773-783.
6. NHS Executive (2000) National Performance Indicators for the NHS, London, Department of Health www.dh.gov.uk
7. Calman K and Hine D. A policy framework for commissioning cancer services. A report by the Expert Advisory Group on Cancer to the Chief Medical Officers of England and Wales, 1995; London, Department of Health www.dh.gov.uk
8. Department of Health. The NHS National Cancer Plan, 2001; London, Department of Health www.dh.gov.uk
9. Cancer Services Collaborative Improvement Partnership. www.cancerimprovement.nhs.uk
10. National Institute for Clinical Excellence. 'Diagnosis and treatment of lung cancer. London, 2005; www.nice.org.uk
11. Corner, J., Hopkinson, J., Fitzsimmons, D., Barclay, S., and Muers, M. 'Is late diagnosis of lung cancer inevitable? Interview study of patients' recollections of symptoms prior to diagnosis.' *Thorax* 2004.
12. Birring S S & Peake MD. 'Symptoms and the early diagnosis of lung cancer.' *Thorax*, 2005; 60: 268-269
13. National Institute for Health and Clinical Excellence. Referral guidelines for suspected cancer. NICE 2004. www.nice.org.uk
14. Kumaran M, Benamore R E, Vaidyanath R, Muller S, Richards C J, Peake M D, Entwisle J J. 'Ultrasound guided cytological aspiration of supraclavicular lymph nodes in patients with suspected lung cancer.' *Thorax*, 2005; 60: 229-233
15. Van Tinteren H, Hoekstra OS, Smit EF, et al. 'Effectiveness of positron emission tomography in the pre-operative assessment of patients with non-small cell lung cancer. The PLUS multicentre randomised trial.' *Lancet*; 2002; 359: 1388-1392
16. Mountain CF. 'Revisions in the International System for Staging Lung Cancer.' *Chest* 1997; 111: 1710-1717
17. Goldstraw P, Crowley J, Chansky MS, et al. 'The IASLC Lung Cancer Staging Project: Proposals for the Revision of the TNM Stage Groupings in the Forthcoming (Seventh) Edition of the TNM Classification of Malignant Tumours.' *J Thorac Oncol*, 2007; 2:686-693
18. NHS Hospital Episode Statistics as analysed by: The National Cancer Service Analysis Team (NATCANSAT). www.canceruk.net
19. Silvestri GA, Peake M, Waller D and Spiro S. 'A tale of two cities: comparing lung cancer outcomes in Teeside, UK and Varese, Italy.' *Thorax*, 2006;61:188
20. Martin-Ucar AE, Waller DA, Atkins JA, Swinson D, O'Byrne K and Peake MD. 'The beneficial effects of specialist Thoracic Surgery on the resection rate for non-small cell lung cancer.' *Lung Cancer*, 2004; 46: 227-232
21. Hotta K, Matsuo K, Ueoka H, et al. 'Role of adjuvant chemotherapy in patients with resected Non-Small Cell Lung Cancer: Reappraisal with a meta-analysis of randomised controlled trials.' *J Clin Onc*, 2004; 22:1-8
22. PORT Meta-analysis Trials Group. 'Postoperative radiotherapy for non-small cell carcinoma.' *Cochrane Database of Systematic Reviews*, 2003; Issue 1, Art No.: CD002142
23. Saunders M, Dische S, Barrett A, et al. Continuous hyperfractionated accelerated radiotherapy (CHART) versus conventional radiotherapy in non-small cell lung cancer; mature data from the randomised trial. *Radiotherapy and Oncology*, 1999;52:137-48
24. Non-small Cell Lung Cancer Collaborative Group: Chemotherapy in non-small cell lung cancer: a meta analysis using updated data on individual patients from 52 randomised clinical trials. *Brit Med J*, 1995; 311: 899-909
25. Shepherd FA, Pereira JR, Ciuleanu T, et al. Erlotinib in previously treated non-small-cell lung cancer. *New Eng J Med*, 2005; 353(2):123-132.
26. O'Brien MER, Ciuleanu T-E, Tsekov H et al. 'Phase III trial comparing supportive care alone with oral Topotecan in patients with relapsed small-cell lung cancer.' *J Clin Oncol*, 2006;24:5441-5447





Anthracycline extravasation could strike at any time

Savene™ – Brief prescribing information

(based on the UK Summary of Product Characteristics SPC)
Please refer to the SPC for full prescribing information.
Each Savene™ box contains 10 vials of Savene™ (dexrazoxane) Powder (10 x 500 mg each) and 3 bags of Savene™ Diluent (3 x 500 ml each) for infusion. **Indications:** Treatment of anthracycline extravasation. **Dosage and administration:** Administration of Savene™ should begin as soon as possible and within 6 hours after the accident. Savene™ should be given as an intravenous infusion once daily for 3 consecutive days according to body surface area: day one, 1000 mg/m²; day two, 1000 mg/m²; day three, 500 mg/m². For patients with a body surface area of more than 2 m² the single dose should not exceed 2000 mg. Cooling procedures such as ice packs should have been removed from the affected area at least 15 min before administration. Before infusion, Savene™ Powder must be reconstituted with sterile water before further dilution in Savene™ Diluent. Savene™ is not recommended in children and patients with renal and hepatic impairment. Safety and efficacy have not been evaluated in the elderly. **Contraindications:** Hypersensitivity to the active substance or to any of the excipients, women of child-bearing potential not using contraceptive measures, lactation or concomitant vaccination with yellow fever vaccine. **Precautions:** Local examination should be performed on a regular basis after treatment until resolution and haematological monitoring should be undertaken regularly. Savene™ should be administered only under the supervision of a physician experienced in the use of cancer chemotherapeutic agents. Routine liver function tests are recommended before each administration of Savene™ in patients with known liver function disorders. Patients with renal dysfunction should be monitored for signs of haematological toxicity. Men are advised not to father a child during and up to 3 months after treatment. Women of childbearing potential must use contraceptive measures during treatment. This product is generally not recommended in combination with live attenuated vaccines or with phenytoin. Dimethyl sulfoxide (DMSO) should not be used in patients who are administered Savene™. As the Savene™ diluent contains potassium (98 mg/500 ml) the plasma potassium level of the patient must be closely monitored in patients at risk of hyperkalaemia. It also contains sodium (1.61 g/500 ml) which may be harmful to patients on a low sodium diet. **Interactions:** Interactions common to all cytotoxics, which may also react with oral anticoagulants. Concomitant use of immunosuppressives such as cyclosporine and tacrolimus receive extra consideration due to excessive immunosuppression. **Pregnancy and lactation:** Savene™ should not be administered to pregnant women unless clearly necessary. Women of childbearing potential should use contraceptive measures during treatment. Mothers should discontinue nursing during Savene™ therapy. **Side-effects:** Very common: nausea, injection site pain, post-operative infection. Common: vomiting, diarrhoea, stomatitis, dry mouth, pyrexia, injection site phlebitis, injection site erythema, fatigue, injection site induration, injection site swelling, peripheral oedema, somnolence, infection, neutropenic infection, wound complication, weight decrease, decreased appetite, myalgia, dizziness, sensory loss, syncope, tremor, vaginal haemorrhage, dyspnoea, pneumonia, alopecia, pruritus, phlebitis, thrombophlebitis superficial, limb venous thrombosis. All adverse reactions have been rapidly reversible. More rarely increased concentrations of liver enzymes (ALT/AST) have been reported. Refer to the SPC for additional information. **MA:** EU/1/06/350/001. Date of Preparation: January 2007. TopoTarget A/S Fruebjergvej 3, DK



Be prepared

Anthracycline chemotherapy has long been a cornerstone of cancer therapy. However, it carries a relatively rare but potentially devastating risk: extravasation.

Anthracycline extravasation can result in severe injuries including ulceration, necrosis, slow-healing lesions, serious joint damage and may not only require surgical intervention, but also long-term suspension of cancer chemotherapy¹.

Now there is an Antidote* - Savene™ from TopoTarget.

Savene™ has shown a clinical success rate of > 98% in biopsy proven anthracycline extravasation. It not only avoids the need for surgery but also allows to continue chemotherapy without interruption².

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The Antidote to anthracycline extravasation

* Effective against doxorubicin, epirubicin, daunorubicin, idarubicin
1. Mouridsen H.T. et al. Treatment of anthracycline extravasation with Savene (dexrazoxane): results from two prospective clinical multicentre studies. *Ann Oncol.* 2007; Volume 18 Issue 3:546 - 550. 2. Mouridsen HT, et al. Treatment of anthracycline extravasation with Savene (dexrazoxane). Results from two prospective clinical multicenter studies. *ESMO late-breaking Abstract Session: 2 Oct 2006.*

PROGRAMME UPDATE

Definition of the sessions & translations

Plenary session

State of the art educational lectures and presentations on key topics related to the theme of the conference.

All plenary sessions will have simultaneous translations into German and French.

In addition, we are pleased to announce that, thanks to the support received from the European School of Oncology (ESO), EONS-6 will also offer simultaneous translations into Italian and Spanish.

Instructional session

Provides an introduction and overview of the session's subject while allowing interaction and audience participation encouraged by practical examples, case studies and questions to the audience.

Instructional sessions are presented in the language as indicated in the programme below.

Workshop

Highly interactive session in which delegates are encouraged to participate and learn from practical application and discussions.

The workshop is presented in the languages as indicated in the programme below.

The Workshop is presented in German and in English as indicated in the programme below.

Updated Programme Overview

Thursday 27 March 2008

08:00 - 10:00 Registration and poster set up

10:00 - 11:00 Plenary Session 1: (R)Evolution in oncology nursing?

Welcome address EONS
Sara Faithfull (UK)

10:10 Welcome address SONS
Irène Bachmann-Mletler (CH)

10:20 The changing face of cancer care: can nurses help structure new services?
Karen Luker (UK)

11:00 - 11:30 Coffee Break

11:30 - 13:00 Plenary Session 2: Changing setting in cancer nursing

Chair: Sara Faithfull (UK)

11:30 Involving people affected by cancer in research planning, policy and practice
Gill Hubbard (UK)

11:50 From hospital to home: a pain education programme for cancerpatients with chronic pain
Rianne De Wit (NL)

12:10 Breast care nurse programme in Switzerland: better outcome?
Manuela Eicher (CH)

12:30 Panel discussion

13:00 - 14:00 Lunch and poster viewing

14:00 - 15:30 Satellite Symposia

15:30 - 16:00 Coffee Break

16:00 - 17:30 Plenary Session 3: Developing practice-based evidence

Chair: Yvonne Wengström (SE)

16:00 Evidence-based nursing (EBN) and its contribution to cancer care - introduction
Eike Wimmer (DE)

16:20 Clinical pathways to plan and evaluate evidence-based nursing care of patients with breast cancer
Jane Bryce (IT)

16:40 Development and implementation of a patient education programme for head and neck cancer patients and their relatives: teamwork between practice and science
Franziska Mathis-Jäggi (CH)

17:00 Use of randomised trials to develop practice-based evidence in nursing
Yvonne Wengström (SE)

17:20 Questions and answers

17:30 - 18:30 Platinum Satellite Symposium

18:30 - 20:00 Welcome Reception

Friday 28 March 2008

08:30 - 10:30 Plenary Session 4: Nursing-sensitive outcomes

Chair: Anita Margules (CH)

08:30 Introduction and overview
Diane Doran (CA) (Prof. D. Doran will further explore this theme during an instructional session on Saturday from 08:00 to 10:00)

08:55 Innovation in symptom management
Annie Young (UK)

09:20 Prevalence and evolution of symptom experience in cancer patients
Elisabeth Spichiger (CH)

09:45 Nail changes due to docetaxel: a neglected side-effect and nuisance for the patient
Dorte Winther (DK)

10:10 Questions & answers

10:30 - 11:00 Coffee Break

11:00 - 13:00 Satellite Symposia

13:00 - 14:00 Lunch and poster viewing

14:00 - 15:30 Plenary Session 5: Proffered paper session

Oral presentation of 6 selected abstracts

15:30 - 15:45 Coffee Break

15:45 - 17:30 Plenary Session 6: Ethical issues in cancer care

Chair: Jan Foubert (B)

15:45 Ethical considerations inherent in undertaking research with potentially vulnerable people
Sonja McIlfatrick (IE)

16:05 Ethics and palliative care
Henna Myller (FI)

16:25 How can nurses learn ethical reasoning for practice?
Ritita Bislimi (CH)

16:45 The role of the health care sector in tackling poverty and social exclusion in Europe: the "haves and have nots" in health care
Nicoline Tamsma (NL)

17:05 Questions & answers

19:30 Presidential dinner

Saturday 29 March 2008

- 08:00 - 10:00 Instructional Session - English**
Cultural diversities
(repeated from 10:30 to 12:30)
Coordinators: Vasso Vydelingum (UK), Sultan Kav (TR)
- Instructional Session - English**
Symptom clusters case studies: 4 case studies followed by questions and answers
(repeated from 10:30 to 12:30)
Coordinators: Emma K. Ream (UK), Ulrika Östlund (SE)
- Instructional Session - English**
Nursing-sensitive patient outcomes
Coordinators: Diane Doran (CA), Daniel Kelly (UK)
- Instructional Session - English**
Psychological issues on diagnosis
(repeated from 10:30 to 12:30)
Coordinators: Luigi Grassi (IT), Kay Leonard (IE)
- Instructional Session - German**
A trans-professional consultation model for integrated oncology and palliative care: patients with nutritional problems and fatigue
(repeated from 10:30 to 12:30)
Coordinator: Florian Strasser (CH)
Experts: Susanne Wiedmer (CH), Elisabeth Bösch (CH)
- Workshop - German**
Look good, feel better programme
(repeated in English from 10:30 to 12:30)
Coordinators: Anita Margulies (CH), Johanna Ruys (CH), Antje Horta (CH)
- Instructional Session - German**
Ethics in oncology: case studies
(repeated from 10:30 to 12:30)
Coordinators: Roif Bäumer (DE), Andrea Maiwald (DE)
- Instructional Session - German**
Implementing standards
(repeated from 10:30 to 12:30)
Coordinators: Hansrudi Stoll (CH), Irene Bachmann-Mettler (CH)

- 10:00 - 10:30 Instructional Session - French**
Advanced nursing practice
(repeated in German from 10:30 to 12:30)
Coordinators: Françoise Cerexhe (B), Lucienne Bigler-Perrotin (CH)
- Coffee Break**
- 10:30 - 12:30 Instructional Sessions - English**
Cultural diversities (bis)
Coordinators: Vasso Vydelingum (UK), Sultan Kav (TR)
- Instructional Session - English**
Psychological issues on diagnosis (bis)
Coordinators: Luigi Grassi (IT), Kay Leonard (IE)
- 16.20
Clinical pathways to plan and evaluate
- Instructional Session - English**
Symptom clusters case studies: 4 case studies followed by questions and answers (bis)
Coordinators: Emma K. Ream (UK), Ulrika Östlund (SE)
- Workshop - English**
Look good, feel better programme
Coordinators: Anita Margulies (CH), Johanna Ruys (CH), Antje Horta (CH)
- Instructional Session - German**
A trans-professional consultation model for integrated oncology and palliative care: patients with nutritional problems and fatigue (bis)
Coordinator: Florian Strasser (CH)
Experts: Susanne Wiedmer (CH), Elisabeth Bösch (CH)
- Instructional Session - German**
Advanced nursing practice
Coordinators: Lyn Singer Lindpaintner (CH), Jan Foubert (B)
- Instructional Session - German**
Ethics in oncology: case studies (bis)
Coordinators: Roif Bäumer (DE), Andrea Maiwald (DE)
- Instructional Session - German**
Implementing standards (bis)
Coordinators: Hansrudi Stoll (CH), Irene Bachmann-Mettler (CH)

- 08:00 - 12:30 Instructional Session - French**
Implementing standards
Coordinators: Françoise Maillard Strüby (CH), Lucienne Bigler-Perrotin (CH)
- 08:00 - 12:30 Novice Research Workshop – English**
Research makes a difference to practice: demystifying research
Coordinator: Sara Faithfull (UK)
Expert: Yvonne Wengström (SE)
- 10:30 - 11:00 Coffe Break**
- Novice Research Workshop – German**
Forschung dient der besseren Praxis: Ein Blick hinter den Kulissen
Coordinator: Christine Widmer (CH)
Expert: Sebastian Probst (CH)
- Novice Research Workshop – French**
La recherche influence la pratique: démystification de la recherche
Coordinator: Maya Shaha (CH)
Expert: Anne Murphy (CH)
- 12:30 - 13:30 Lunch and poster viewing**
- 13:30 - 15:00 Satellite Symposia**
- 15:00 - 15:30 Coffee Break**
- 15:30 - 17:30 Plenary session 7: EONS Award session and take home messages**
Chair: Sara Faithfull (UK)
- Award lecture – Novice Researcher Award 2008*
EONS Nursing Management Grant
EONS Excellence in Education Grant

Improve the chances of a successful outcome in cancer



NUTRICIA *Oncology*
Optimizing outcomes

Breathing and Respiratory Education and Training for cancer Healthcare professionals E-learning programme:

Project team: Faithfull S, Heath H, Beech N, Kav S, Munoz M,

Expert panel: Moore S (UK), Dark G (UK), Ekfors H (SE), Richmond (Eire), Tadic D (S)

Results of a training needs analysis

Symptom management is particularly important for those with lung cancer as this disease often progresses fast with significant morbidity. Lung cancer is the most common cause of death from cancer in the European Union (EURO-Care 4). Lung cancer also has one of the lowest survival outcomes of any cancer. As patients move through the continuum of the disease from aggressive therapies to palliative treatment the focus of interventions change, however symptom management remains constant with both symptoms of disease and side effects from treatment impacting on patient's quality of life (Montazeri 2003). The most commonly reported symptoms for those with lung cancer are cough, haemoptysis, dyspnoea, pain and fatigue. Quality of life is influenced by symptoms, coping capacity and social support (Hench 2007, Krishnsamy 2007) Symptoms are often identified by patients resulting in anxiety and forming areas of unmet need (Porter 2007). Evidence from the literature suggests that many patients are not having needs met (Hill et al 2003). The ability to access specialist help is variable and often dependent on local or community resources.

Despite short comings in service provision innovative ways of managing care between active therapy and palliative care stages have been implemented in some centres. Being able to feel confident and manage symptoms effectively requires nurses to have knowledge and information of how best to manage illness, how patients can access benefits or local services. Nurses also require the ability to assess physical and psychological problems and identify when they should refer for specialist advice as well as be able to offer practical strategies for managing symptoms.

The main purpose of this educational project is to identify the existing knowledge of nurses caring for cancer patients with lung cancer and from this to develop an educational resource for continuing professional development. The subsequent aim is to improve the standards of care for patients with advanced cancer.

Method

A training needs analysis questionnaire was translated in 6 languages and circulated through the National Oncology Societies. Replies were received from 233 health care professionals. These included the United Kingdom and Republic of Ireland 45% (n=106), Spain 6% (n=15), Belgium 0.4% (n=1), Germany (8% n=19), Serbia 9% (n=20), Turkey 29% (n=67), France 2% (n=5)

Results

About three quarters of the nurses had worked with people with lung cancer for longer than five years (64%). 18% of nurses had worked for over two years in the area and 13% over one year. 83% of respondents had worked with 30 or more people with lung cancer. 6% of nurses cared for 20 – 30 people per year and 3% less than 10 people. This would suggest that nurses were often involved in the care of these patients. Half the respondents worked in specialist cancer services and 26% in general hospital settings. 5% of nurses worked with people in their own homes, and 12% in a pulmonary or specialist lung centre. Nurses from most countries were more likely to work in specialist cancer settings

whereas most of the German nurses (n=13) worked in pulmonary or specialist lung centres. Not all respondents were nurses; the sample included two physiotherapists and an occupational therapist.

The level of intervention that nurses undertook for patients with respiratory symptoms varied across countries. With 20% of respondents providing care at the level of vital care (such as mouth care) and support of patients and relatives, with 32% undertaking symptom management (e.g. oxygen, breathlessness or relaxation) under medical direction. 9% of nurses identified themselves as being involved in physical assessment (e.g. percussion, auscultation, palpation) and making decisions on symptom management. 11% identified themselves as advanced practitioners involved in pharmacological prescribing and intervention or X-ray observation and interpretation.

Table 1: Priorities for learning

Topic	Number of respondents identifying this as their priority 1 (N=233)	Number of respondents identifying this among their overall priorities (i.e. 1-4)
Recognising and managing airways obstruction, pulmonary oedema, pneumothorax, pulmonary embolus	138	150
Skills in symptom management	75	101
Skills in pharmacological strategies and medication side-effects	89	102
Skills in dealing with emotional issues (e.g. panic, anxiety or depression)	83	115
Skills in palliative care and ongoing support	76	96
Managing fatigue and planning to minimise fatigue	42	76
Recognising and managing supra vena cava obstruction	36	64
Overall assessment skills in lung cancer	29	51
Managing pain	47	70
Psychological and social support skills in lung cancer care	58	92
Radiotherapy and side effects	12	37
Recognising and managing infection	16	37
Skills for patient teaching in lung cancer	18	45
Surgical intervention, preparation and aftercare	16	30
Nutritional problems, dietary modification, nutritional supplements	17	52
Recognising and managing anaemia	3	22

Overall nurse's knowledge was good in relation to cancer development but poor in relation to ongoing health promotion. 68% of nurses identified that stopping smoking can relieve symptoms and assist management even in advanced cancer. 16% believed that stopping smoking has no effect once cells start to become cancerous. 7% incorrectly believed that smoking cessation must be total for 15 years in order to have any effect on cancer growth. Only 3% incorrectly believed that once someone has smoked for over ten years, stopping makes no difference to the development of cancer cells.

Nurses wanted to develop their skills in symptom management as one of their priorities for education 59% (n=137). Developing assessment skills was a priority for 30% (n=70) of nurses. The priorities for training were identified (summary in Table 1.). For 60% of nurse's acute symptom management was a priority with increased knowledge and skills required in recognising and managing airway obstruction, pulmonary oedema, pneumothorax or pulmonary embolus. Developing psychological and support skills were also considered essential with 25% of respondents identifying this as a priority for training needs. Surgical skills were considered a low priority with only 7% of nurses identifying this as a priority. More knowledge on a variety of issues was identified by nurses 38% wanted more about pharmacological strategies and side effect management as their first priority, with 6% identifying this as their second. Developing palliative care and ongoing support was also a priority for 33% and the second priority for 6%. The management of co-morbid disease was also an area of need with 73% of the nurses wanting to learn more about chronic airways disease (such as chronic obstructive pulmonary disease or chronic asthma). Most nurses wanted to learn breathing retraining techniques, improving exercise tolerance, energy conservation and activity management was the priority for over half of the respondents and the second priority for 4%. 13% of nurses identified continuing activities of daily living such as self-care activities or the use of aids as their main priority and this was a second priority for 8%. 20% identified psychosocial interventions such as tailored counselling; progressive muscle relaxing or group psychiatric support as their priority and this was the second priority for 4%.

Managing acute symptoms such as cough, haemoptysis, dyspnoea management, breathing exercises or positioning was the priority for 46% of respondents and the second priority for 3%. 15% identified other techniques such as relaxation, distraction, visualisation or guided imagery as their priority and this was the second priority for 12%. Another 15% identified developing a therapeutic relationship with patient and carer as their priority, with 55% identifying this as their second. Surprisingly 24% of nurses had never undertaken any education on lung cancer or its management. The preferred learning method was pre- and post-course learning materials with a taught face-to-face module (41%). 9% identified a preference for e-learning and 4% identified this as their second choice. For only 7% the first choice was distance learning (a package of material on which they could work) and this was the second choice for 1%. 67% of nurses preferred to have learning from local clinicians or teachers. 16% of nurses had some access to computers whilst 4% had limited access to computers and 12 (5%) nurses no access to computers at all. 64% of nurses had not heard of any EONS programmes. Some nurses identified the lack of knowledge and skills on lung cancer within their services and thus the need for a programme such as BREATHE. Other priorities for learning were identified in the comments these included issues around the care and management of patients with mesothelioma including pain and symptom management of this condition, patient expectations and the roles of different specialist nurses.

Discussion

The survey offered useful insights into the background and experience of the respondents, their level of knowledge and their priorities for learning. This information provides a useful basis from which to develop the BREATHE curriculum and education programme. The potential diversity of the perspectives from which respondents answered the questions should be acknowledged. Most of the nurses had considerable experience of working with lung cancer patients although respondents worked in a range of settings. Under half the respondents worked at a level of giving vital care and support to patient and relatives and, within this, a third of the overall sample were involved in symptom management under medical direction. A small proportion of the sample was advanced practitioners or nurse consultants involved in pharmacological prescribing and intervention which could include X-ray observation and interpretation.

Conclusion

The responses suggest that people with lung cancer receive care in a variety of services, including non-specialist services such as general hospital and community care. Education should therefore be applicable to the care and support of these patients in a range of settings. Despite most of the sample having considerable experience working with people with lung cancer, the overall results suggest that nurses want, and in some cases need, to enhance their knowledge and skills in this area. This offers evidence of the need for the BREATHE Education Programme.

The knowledge questions were answered correctly by the majority of respondents but the percentage of correct answers to health promotion questions was poor. Priorities for inclusion in the programme focus around acute and chronic symptom management as well as palliative and psychological care. Co-existing disease is recognised as an issue for nurses in practice, particularly chronic obstructive pulmonary disease and cardiovascular problems. Interventions needed by nurses include assessment skills, managing acute and chronic symptoms, psychosocial interventions and also developing a therapeutic relationship with patient and carer. There would appear to be potential for the BREATHE education programme to offer education and training for nurses working in lung and thoracic care as well as cancer care.

References

1. EUROCARE 4 data set. *Lancet Oncology* (2007)
2. Hensch I, Bergman B, Gustafsson M, Gaston-Joansson F, Danielson E (2007) The impact of symptoms, coping capacity and social support on quality of life experience over time in patients with lung cancer *J Pain Symptom Manage.* 34(4) 370-9
3. Hill KM, Amir Z, Muers MF, Connolly CK, Round CE (2003) Do newly diagnosed lung cancer patients feel their concerns are being met? *Eu J Cancer Care (Engl)* 12(1) 35-45
4. Montazeri A, Milroy R, Hole D, McEwen J, Gillis CR (2003) Health quality of life data contribute to our understanding of cancer patients' experiences? A study of patients with lung cancer *Qual Life Res.* 12(2) 157-66
5. Porter LS, Keefe FJ, Garst J, McBride CM, Baucom D (2007) Self efficacy for managing pain, symptoms and function in patients with lung cancer and their informal caregivers: Associations with symptoms and distress *Pain Oct 15 Epub*
6. Krishnasamy M, Wells, Wilkie E (2007) Patients and carer experiences of care provision after a diagnosis of lung cancer in Scotland *Support Care Cancer* 15(3) 327-32

Jennifer Dickson, BSc (dist) Information Services Manager, The Roy Castle Lung Cancer Foundation

In the United Kingdom, 40,000 new cases of lung cancer are diagnosed every year. Nationally, it is by far both the commonest cause of cancer and of cancer death, each year. It is estimated that at any one time, there are around 500,000 people in the UK either developing or suffering from this devastating disease.

The Roy Castle Lung Cancer Foundation is the only UK based charity wholly dedicated to defeating lung cancer. We fund unique research into the early detection of lung cancer, health promotion and lung cancer patient care.

Meeting the needs of people affected by lung cancer is central to the Foundation's vision. The Patient Care Division provides an information, support and advocacy service for people throughout the UK who are diagnosed with lung cancer. This patient focused service aims to make a real difference to people affected by lung cancer and tackle the inequalities that still exist in lung cancer patient care.

Through our Lung Cancer Helpline people we provide free lung cancer information booklets and information about local lung cancer services around the country. We have a continually updated database of every lung cancer nurse specialist in the UK. This enables us to provide callers to our helpline with the appropriate contact details for specialist support. Our information booklets are developed by a multi-professional team of lung cancer experts and patient representatives, and are internationally recognized for their high quality.

We have three main booklets, which are:

Lung cancer – answering your questions

An in-depth 60 page booklet providing information to answer commonly asked questions regarding lung cancer treatment and care. Over 100,000 copies of this booklet have been distributed to people affected by lung cancer in the UK.

You have just been told you have lung cancer

This booklet aims to address the initial thought of people just diagnosed with lung cancer and to point them in the right direction for appropriate in-depth information and support.

Lung cancer – A practical guide to breathlessness

The booklet explains the reasons for breathlessness, advises on managing everyday activities and provides helpful hints to cope with living with breathlessness. This booklet is accompanied by a video/DVD.

It is widely recognised that the use of the internet for obtaining health information has increased dramatically over the past few years. The Foundation recently reviewed its internet services, to ensure that the online information and support needs of people affected by lung cancer are met. As a result of this, we are

currently undertaking a two phased web development programme. Phase one being the creation of an online lung cancer support community, through moderated discussion forums. Phase two being a complete overhaul of the Foundation's current website.

Our new lung cancer discussion forum service launched in April and is called Talk & Share. It has four separate forums: information, support, advocacy and remember a loved one. Each forum provides people affected by lung cancer with the opportunity to share experiences with others in a similar position as themselves, providing a moderated online support community. Since its launch there have been over 150,000 visits to the forum homepage. Currently, there are on average around 150 new postings each month. This figure is continually increasing as use of the forums gathers momentum. Although the majority of registered users are from the UK, there are registered users from around the world. Over 50% of our registered users are lung cancer carers, with around 25% being lung cancer patients and the remaining being supporters.

Phase two is now underway, with the entire Foundation website being completely overhauled. Our new website will provide various new on-line lung cancer services and will launch in the New Year.

The Foundation also has a network of lung cancer support groups, which are affiliated to us. These groups are the result of a real partnership. Working together with local lung cancer nurse specialists and people affected by lung cancer, the groups are often a lifeline to many affected by this devastating disease.



Lung cancer remains the leading cause of cancer death in the UK, yet it still doesn't receive enough attention within the NHS or in the media. Furthermore very little money is spent by both the government and cancer charities on lung cancer research. However, lung cancer patient advocacy in the UK has slowly gained

momentum in recent years. Our Roy Castle Patient Involvement Programme provides a voice for lung cancer by supporting people affected by the disease, enabling them to help influence and improve lung cancer services. This is done in a variety of ways. We have various lung cancer advocates sitting on both regional and national key lung cancer committees. Their role being to ensure that the voice of the patient is heard.

In our role as secretariat for the Global Lung Cancer Coalition (GLCC), the Foundation is actively involved in providing an international voice for lung cancer. Established in 2001, the GLCC is comprised of non-government patient organizations from countries including Australia, Canada, France, Germany, Italy, Japan, Netherlands, Spain, UK and USA. The main aim of the GLCC is to promote global understanding of the burden of lung cancer and the right of patients to effective early detection, better treatment and supportive care.

The Foundation's lung cancer awareness initiatives help raise the profile of lung cancer by encouraging the general public to recognise the signs and symptoms of lung cancer and by campaigning for improvements in lung cancer patient care. Media coverage can be a very effective way of increasing the profile of lung cancer. We have a database of lung cancer patient advocates who are willing to "tell their story" to the media. Jean Duckworth is one of our lung cancer patient advocates. We have been able to place Jean's story in main UK daily newspaper. Like our other advocates, Jean is committed to doing all she can to help raise the profile of lung cancer.

For further information on The Roy Castle Lung Cancer Foundation please visit our website www.roycastle.org or email us on patientcare@roycastle.org.

My experience

– Jean Duckworth Lung Cancer Patient Advocate, England

In July 2006 I was running to catch a child when bang my Achilles tendon snapped, resulting in enforced inactivity with my leg in plaster for a couple of months. By the time the plaster was removed I was experiencing pain in my right shoulder which I assumed was from using crutches. Apart from that I felt very fit and well, back climbing the 16 flights of stairs to the office as part of my fitness regime.

By October the pain was annoying enough for me to mention it to my GP and she perceptively advised an x-ray. The subsequent bombshell she delivered that I had lung cancer was just too hard to believe, I felt so well apart from the shoulder pain.

Besides, I lived a very healthy lifestyle - loved and ate plenty of fruit and vegetables, particularly those containing antioxidants, ate mostly fish rather than meats, no junk food, I gave up smoking over 20 years ago, drank modestly, exercised and was not overweight. Within three weeks I could hardly walk across a room without gasping for breath as fluid was restricting my right lung. The service from our local NHS hospital was quick and efficient; I had a bronchoscopy and CT scan then transferred to the thoracic surgeon at another NHS hospital within a few days. By this time I was unable to lie down, so slept in a chair in considerable pain and with difficulty breathing, it had all happened so quickly. We were told I needed the fluid drained from around my lung urgently.

At the time I don't think I was aware how ill I really was and how lucky I was to get such quick treatment, as the next week is a painful blur. I just remember a wonderful succession of friends and

family and the most caring doctors and nursing staff I could have ever wished for. Then came the next bombshell, confirmation of adeno-carcinoma, a PET scan showed the advanced cancer in my right lung, spine and left pelvis and the prognosis of weeks or a few months to live.

Throughout all this I have always felt it is so much harder for my partner and family to cope with than me. They feel so totally helpless and scared yet have to stay positive and upbeat whilst continually being asked for health reports. The oncologist I have is fantastic; answering all our questions and with the nursing staff gives us both all the support we need. By Christmas I had undergone two of the six cycles of chemotherapy, felt very nauseous, had lost my appetite and over 2 ½ stone, was constantly tired and the future looked grim. However a dose of steroids restored my appetite and within three days I was hungry, eating well and was able to enjoy a lovely Christmas. Maybe the bottle of celebration champagne helped with the fantastic warmth and faith shown by friends and acquaintances from various religions and cultures.

Everyone deals with their demons in different ways; some prefer not to know everything but I need to know all, even the very worst scenario for me to cope. We accepted the condition was incurable and were advised to enjoy life as much as possible while we could. We had been planning a very special holiday to celebrate my husband's 50th in New York but everyone said this was now out of the question. Well I am known for being determined, some say stubborn, so I cashed in my pension, took a break in the chemotherapy and with help from the Oncologist and friends we enjoyed the holiday of a lifetime. We just had to do it; it could have been our last so we did as much as I was able to and made the most of it.

I think this gave us more than a holiday but the spirit to fight again and I am still fighting exactly one year later. After the final chemotherapy, a further CT scan showed, despite contrary predictions, the primary tumour had shrunk a little and my Oncologist suggested that although still incurable, my best option would be a course of Tarceva which may increase my life expectancy. The same week National Institute for Clinical Excellence (NICE) announced they would not approve Tarceva on the NHS in England. We seriously considered moving to Scotland, where it is approved, but were lucky to have private health insurance, which covered the costs.

I am now in my fifth month on Tarceva and managing all the side-effects, again I know how lucky I am as they could be a lot worse. I am eating normally, feel fit again recently completing an eight mile walk in the Lake District. If this awful disease has taught me anything it is the true value of life, which I will never take for granted again. There are days I feel that I could make 100 and prove them wrong, yet others when I'm more realistic.

By July I was feeling so well we even considered moving home to our beloved Lake District; however my oncologist advised us not to be too sanguine about the future, so we're staying put. It was suggested that another CT scan of chest and abdomen would be appropriate to see what, if anything, Tarceva was doing. My fear has always been that the cancer would spread to my brain, so I requested it should include a brain scan.

The results were better than we ever dreamt. After three months on Tarceva the main tumour in my lung had shrunk in size, the lymph nodes reduced, the skeletal lesions hadn't increased and the brain remained unaffected. Needless to say we are ecstatic and continue to believe in the power of "the pill" and of prayer. Tarceva is certainly working for me.



Božena Kapitari, RN and Branka Svetec, RN

In the capital of Croatia, Zagreb the international professional seminar titled „Clinical Oncology in Croatia-Strategic Planning and Beyond“ took place from 11th to 13th May, 2007.

The organizers of this seminar were National Cancer Institute, National Institutes of Health, Bethesda, Maryland, USA, Croatian Nurses Association – Professional Society of Oncology and Hematology, Ministry of Health and Social Affairs and Ministry of Education of Croatia.

We were glad to see that the organizers recognized the importance of nursing in connection to providing the care to oncology and hematology patients and invited us to this seminar. It is therefore important to mention the AONS President Georgia Decker, EONS President Jan Foubert and National Institute of Health, USA, President Sandra Mitchell who all took an active part in this gathering.

The members of CNA Professional Society of Oncology and Hematology who participated were Marica Miš an uk, Gordana Mami, Božena Kapitari, Branka Svetec, Dana Mihaljevi, Tiha Jovanovi, Silvija Piškorić, Ruzica Anić, Lidija Bijeli, Vlasta Predovan, Renata Povrzeni, Višnja Franić, Nevenka Stanić, Vesna Strmečki, and Ljiljana Pomper. The great success in communication would not be the same without Asja Delali, CNA Secretary and the importance of this seminar for the Croatian nursing especially stressed out our CNA President Branka Rimac, participating in this seminar.

Interdisciplinary event „Clinical Oncology in Croatia-Strategic Planning and Beyond“ gathered leading American, European and Croatian professionals from the field of oncology who in their discussions gave overview of the current situation on this field making references to Croatian situation and exchanging oncology and hematology knowledge and skills. It is important to mention the participation of Croatian nongovernmental organizations such as Association for Patients with Malign Diseases who particularly discussed these topics from the point of view of patients and their problems and needs.

The seminar topics were:

- Basic Principles in Cancer Surveillance - Epidemiology and cancer registry in the world, Europe and Croatia;
- Training of professionals in oncology - Educational systems and problems in continuing education;
- Pathohistology, diagnostics and cancer monitoring;
- Treatment of Individual Cancers in USA, Europe and Croatia.

The goal of professional seminar was to gather all leading professionals in this area in one place together with the different associations and organizations which work on the field of oncology/hematology in Croatia and to define the future strategy and development directions of Croatian oncology.

Our memorable guests from abroad visited the Clinic for Oncology and Hematology Institute in Zagreb on May 11th, 2007. The President of CNA Professional Society of Oncology and Hematology Marica Miš an uk introduced our guests to the history and current activities of Professional Society presenting them all major achievements during the period of 20 years of society's existence. The accent of presentation was on education of nurses in oncology and legislation when working with cytostatics. Our colleagues from USA recognized the need for education and offered us advice and support after which we together made a strategic educational plan. They also donated 20 text books on the topics of care for oncology/hematology patients and granted us the free of charge use of AONS web page for the year. This was valuable and precious gift for International Nursing Day which also pleasantly surprised all of us. We thank them very much for this gesture.

Jan Fubert, EONS President gave an interesting presentation on nursing education in EU and pointed towards important analysis of demographic condition and language problems as two major problems in continuous nursing oncology/hematology education. We thank for the support Branka Rimac and Asja Delali who participated with us in this three days event. Our special thanks go to dr.sc. Danica Ramljak, dr.sc. Živko Pavleti who made our participation possible.

What symptom and functional dimensions can be predictors for global ratings of overall quality of life in lung cancer patients?

Abstract

Purpose This study explores what dimensions of a health-related quality of life (HRQOL) questionnaire predict global ratings of overall quality of life (QOL) in lung cancer patients in assessments by patients and significant others, respectively.

Material and methods The analyses were based on dyadic assessments from lung cancer patients and their significant others. A subset of scales and items from the Swedish version of the European Organization for Research and Treatment of Cancer (EORTC) QLQ C30 and the lung-cancer-specific module, LC-13, was selected. Using multiple regression procedures, the relative importance of different symptoms and of functional impairments in predicting overall QOL was examined.

Results The multiple regressions revealed that emotional functioning and fatigue were the only significant predictors of overall QOL for both the patients and the significant others' assessments. In addition, physical functioning was found to be another predictor in the significant others' assessments.

Conclusion The results emphasize that it is essential to consider both emotional functioning and fatigue as important areas for overall QOL in lung cancer patients.

Reference

Östlund U, Wennman-Larsen A, Gustavsson P, Wengström Y. What symptom and functional dimensions can be predictors for global ratings of overall quality of life in lung cancer patients? Support Care Cancer (2007) 15:1199-1205

ICE – Improving the Chemotherapy Experience:

Nursing Impact Before, During and After Chemotherapy

During the recent ECCO 14 conference in Spain, 23 -27 September 2007, Amgen (Europe) GmbH, sponsored the only nurse specific (EONS), satellite symposium

The satellite symposium entitled 'ICE – Improving the Chemotherapy Experience: Nursing Impact Before, During and After Chemotherapy' was held on Sunday September 23, 2007, in a room which reached a capacity audience of over 150 oncology nurses.

Four distinguished International nurses were among the panel of speakers, while Jan Foubert, Executive Director of EONS, co-chaired the session with patient advocate Roger Wilson.

The speakers included;

Dr. Chris Friese, a Research Fellow at the Center for Outcomes and Policy Research and an Associate Clinical Scientist at the Cantor Center for Research in Nursing and Patient Care Services at the Dana-Farber Cancer Institute, Boston.

Dion Symth, a Lecturer-practitioner in Cancer and Palliative Care at the University of Central England, Birmingham, UK.

Barry Quinn, a Lecturer and Clinical Practitioner in haemato-oncology at The Royal Marsden School of Cancer Nursing and Rehabilitation, London, UK.

Liesbeth Lemmens a Coordinator of clinical trials in digestive oncology at the Department of gastroenterology, University Hospital Gasthuisberg, Leuven, Belgium.

Roger Wilson, President of Sarcoma UK and the Chariman of NCRI Consumer Liaison Group, a cancer survivor, who was diagnosed with Leiomyosarcoma in early 1999.



Distinguished Panel of Nurse Experts & Patient Advocate

Co-chair & Executive Director of EONS, Jan Foubert, welcomed delegates to the symposium and began by outlining that the aim of the meeting was to gain new insights into the impact of nurses on patient outcomes in the management of chemotherapy-related toxicities, from initiation to conclusion of treatment. His co-chair Roger Wilson, informed delegates of his own experiences as a cancer patient and gave a personal view of how a patient perceives the nurse's role. He explained that from a patient's perspective the nurse plays a pivotal role within the multi-disciplinary team in ensuring quality care.

Roger also felt that oncology nurses should be empowered to initiate improvements to benefit patients, the team and daily practice patterns.

Chris Friese discussed how patient outcomes can be improved through anaemia and neutropenia risk assessment before chemotherapy is initiated. In particular, Chris pointed out that **oncology nurses are ideally placed to carry out risk assessments** that identify treatment needs for consequent chemotherapy cycles, and allow for interventions to reduce neutropenia and anaemia incidence.

Dion Smyth's presentation focused on oncology nurses carrying out proactive haematological review and assessment of patients during chemotherapy to improve outcomes. He emphasized that **nurses have a vital role in assessment and management of haematological malignancies**, particularly because patients often fail to receive adequate care.

Continuing the theme of patient assessment during treatment, Barry Quinn discussed new guideline recommendations for the diagnosis of oral mucositis (OM) proposed by the EBMT and EONS.

OM is a serious and distressing consequence of high-dose chemotherapy or radiotherapy, and Barry outlined the current practice of OM assessment and the tools used, which **highlighted the need for routine, systematic OM assessment and assessment tools to identify the severity of the infection, and allow suitable treatment to be administered**. He concluded that the nurse plays a leading role in implementing routine and thorough OM assessments, and that a validated tool will be available through the soon to be published OM guidelines for HCP's in the European Journal of Cancer.

In the final presentation of the symposium, Liesbeth Lemmens outlined new challenges in symptom management after administration of new targeted therapies. Liesbeth informed delegates that the new generation of cancer therapies has side-effects which require special attention, but that are also manageable. She stressed that **oncology nurses play a central role in communicating with patients and ensuring they receive the best care possible**.

The audience were asked to critically evaluate the symposium and the top line results were extremely impressive and very positive; 82% thought that the overall quality of the symposium was excellent or good, 80% thought the symposium was as good as or better than other sessions they had attended at the congress, while 86% stated that it had met their educational needs.

Here are some direct quotes from the audience:

- 'I really enjoyed this symposium'
- 'Good level of knowledge of treatment in a systematic way'
- 'Good examples of actual cases and for case studies (these were effective)'
- 'All were very good, interesting and knowledgeable speakers'

Sara Faithfull, President EONS

ECCO 14 was in the most beautiful city of Barcelona and in September a welcome warm spot to catch up with colleagues. This is an excellent conference because it gives the opportunity to sample both the nursing and medical programme within one building. With over 15,000 delegates it must have been one of the biggest cancer conferences within Europe. With 118 nursing abstracts and over 500 nursing delegates the scientific nursing programme combined innovation, research and practice, therefore to reflect on the highlights of ECCO is a difficult task.

Survivorship was one of the themes that it seems will be a growing agenda, within the context of cancer therapy successes, with better screening and earlier diagnosis, more people are now surviving cancer. Ganz's presentation in the medical programme identified that there are more than 10.5 million cancer survivors in the USA and over 22 million worldwide. Despite this survivorship issues were difficult and often ignored on research and political agendas. The price paid for improved cancer survival, was described as physical, emotional and social late effects that limit the quality of life of survivors. Carol Curtis in the nursing programme explored the health of cancer survivors and identified the prevalence of problems and issues specific to cancer survivors (www.nursingcentre.com/ajncancersurvivors). While some people experience a few minor long-term effects, others have permanent and disabling symptoms that impair function and quality of life. Once acknowledged, many sequelae can be prevented, treated or managed and this was highlighted in sessions on sexuality, symptoms and rehabilitation within the nursing programme. Nurses can, and in many cases do have significant roles in promoting care. Posters also highlighted the research demonstrating the beneficial effects of education and the significant role of surveillance for patients who have completed cancer therapy. With the growing number of cancer survivors and the increasing age of the population this was reflected in 24 abstracts on rehabilitation in the conference. The emphasis however was predominantly on new therapeutic agents and this contrasts with 445 abstracts in the basic science programme on new agents for cancer treatment. Rehabilitation and survivorship is an area that will inevitably grow in future years.

The health economics of these new therapies was explored in meet the manager. Challenging assumptions about how the growing burden of new science that is going to be paid for by future health care services. Within the nursing programme the inequalities of cancer treatment provision were explored where EURO-CARE 4 data identified distinct differences in survival for cancer across the EU states. Despite the political and social view that patients have choice over therapies this was not the case in most of Europe. Economist Petra Reimer-Hommel described the increased burden of ambulatory cancer care for future health services and the lack of cancer registration in some countries with Germany being given as an example. She highlighted the geographical differences in availability of new therapies and how nurses were important in providing education and moderating patients' choices. The discussion raised many issues that choice was certainly difficult and factors patients used to make such decisions, such as patient education, distance to centre and friendliness of staff were often influential. The need for exploring

the whole system of care was identified as fundamental to enhancing patient choices.



Moving forward with the evidence base was the title of an early morning teaching lecture provided by Brendan McCormack. The need for whole systems approaches was explored in more depth, developing the evidence base was not enough to make change. Evidence-based practice was defined as the process of shared decision-making between practitioner, patient based on research evidence, the patient's experiences and preferences, clinical expertise or know-how, and other available robust sources of information. The message being that practice development comes about by engaging with practitioners and it is essential to take into account the context of health care to make change a success. Engaging with patients by providing sufficient information and patient education was a thread of the patient congress. Louis Denis described his experiences as a survivor of prostate cancer and the lack of information accessible for patients. Patient education was also a key theme for the EONS excellence in patient education award. A team of nurses from the Netherlands produced a patient resource for explaining therapy (www.signguideoncology.nl). Information and patient education were themes that came up in many contexts as still not being sufficient for patients and an important role of cancer nurses.

Innovation, new ideas and a sharing of knowledge were all part of the grand design of such conference events. More fundamentally is the meeting of new friends and sharing of ideas. Despite the size of the venue and number of delegates ECCO 14 at an intimacy about it that I have not experienced at previous ECCO's. The warm welcome and multi national context made for an event that was special in many ways. This was certainly a conference to be remembered.

Stephen O'Connor Ex Board Member EONS

It is hard when writing about the recent ECCO conference to avoid the hyperbole which accompanies each successive ECCO event; for as the press releases tell us, ECCO 14 was 'the biggest', 'the best', and 'the most successful' multidisciplinary cancer conference ever held in Europe. These claims are certainly true, for every ECCO conference seems bigger and better than the last, and clearly indicates that the ECCO 'brand' is very much alive and well. Indeed, the fact that the conference also marked the 're-branding' of the former Federation of European Cancer Societies (FECS) as the European CanCer Organisation (ECCO) gives credence to the fact that as health care professionals, we know as much as anyone about the importance of 'branding', 'image' and 'commercial necessity' in the delivery of modern, effective healthcare, and are capable of using this to our own, and our patient's advantage where necessary.

This issue was considered very effectively at one 'meet the manager' session which I chaired on the first day of the conference, and became for me, very much a theme for the week as I reflected on the impact of the commercial sector to the delivery of modern cancer services in both my own, and other countries within Europe. This point was put very succinctly by a speaker at another, unrelated session on altered body image and sexuality, who challenged those present to consider the insidious growth of the cancer 'industry' and remember that at its heart, cancer nursing should serve the interests of the patient and not those of the providers of healthcare services nor indeed, the vested interests of an industry whose primary motive is 'profit' and 'market share' rather than patient welfare (although the two are not mutually exclusive, as the beneficiaries of many modern cancer treatments will readily testify).

I must admit however; that as one who has attended many ECCO conferences now, I am more than a little jaded by the rampant commercialism of the exhibitors' stands and the tawdry paraphernalia of the conference 'give-away' or 'freebie'. Just how many pens, note-pads, CD-ROMS, umbrellas, laser pointers or lanyards does one need to bring back from a conference, and what do we do with them anyway? I for one have a box full of such trinkets that I am unlikely ever to use, and am more than a little concerned about the 'carbon footprint' that such events leave in their wake. I pity the poor chambermaid who had to empty the waste-paper basket on the last day of my stay in Barcelona - and that was only the unwanted contents of the ubiquitous 'conference bag' having studiously avoided every leaflet, flyer and invitation thrust at me throughout the conference! This made little difference however, as my post box at home was still filling up with flyers and invitations long after the event had finished, and the sheer wastage at such events is in stark contrast to the cost-restrictions and budgetary constraints faced by cancer nurses in their daily practice. Such excesses could surely be avoided - but perhaps I am just too long in the tooth to appreciate the excitement (not to mention the 'freebies') that being at such a huge event held for me all those years ago!

The buzz and excitement - not to mention the genuinely valuable information to be gleaned from many of the exhibitions is of course, one important aspect of attending such a huge and

successful conference as ECCO; but far more important for me is the opportunity that such events provide to meet and discuss the issues and concerns that cancer nurses face in their daily lives, and to share the many advances that we have made as a profession in the time that I have been attending such conferences. These were particularly evident in the poster exhibition which highlighted numerous innovations in service delivery and nursing roles developed in direct response to the contemporary challenges faced by cancer nurses and those they care for. There were of course a number of excellent posters focusing on the nursing implications of newer anti-cancer treatments such as targeted therapies, modern surgical techniques and advances in radiotherapy; but for the most part, the posters highlighted a genuine desire to work more closely with cancer patients and their carers in new and innovative ways, be that the development of a mobile cancer education and support unit serving the needs of a socially deprived area, a critical care outreach service in a major cancer centre, or the simple act of removing the barrier to nurse-patient interaction that the 'nursing station' has rapidly become in the modern in-patient setting.

Similarly, where once any poster display at a cancer conference would have focused primarily on pain, nausea and vomiting as the 'main' symptoms faced by cancer patients, posters at the recent conference indicate a greater desire to engage with the 'hidden' or 'long-term' - but no less problematic issues that cancer patients face as a result of extended cancer survivorship, longevity and its associated risk of co-morbidity, and an increasing reliance on the primary health care team to administer and monitor treatments which were once the sole preserve of those working in specialist cancer units. It was also encouraging to see the needs of vulnerable groups such as adolescents, the elderly, minority populations and those with learning disabilities addressed in a number of studies reported upon; and to see cancer nurses grappling with the complex legal and ethical issues posed by new treatments and changing professional roles which are undoubtedly improving the cancer experience for many patients, and the job satisfaction of those caring for them.

Overall, the proffered papers, posters, workshops and informal discussions reiterated the importance of EONS' CARE strategy, and highlighted how more (and improved) communication, political action, research and education are central to cancer nurses' hopes for the future of the specialty and improvements in cancer patient care. As such, the biennial ECCO conference provides a useful interval at which to appraise the issues confronting cancer nurses and develop new relationships that will help drive forward the cancer nursing agenda in Europe for the next few years. More importantly, it sets the scene for EONS' own spring convention in Geneva next year, where international relationships and collaboration will be further strengthened and EONS' strategic objectives further clarified under a new and vibrant Executive Board. If you missed the opportunity to attend ECCO on this occasion, I would warmly commend this next meeting to you as a suitable introduction to the world of European cancer nursing - 'freebies' and commercial interests being much less in evidence, and purely optional on this occasion!



6th • EONS Spring Convention

GENEVA
SWITZERLAND
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New ways of working: innovation in cancer nursing practise
Nouvelles méthodes de travail: innovation des pratiques de l'infirmierie en oncologie
Neue wege in der praxis: innovationen in der onkologiepflege

Conference Chair: Sara Faithfull

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An interview with the winners by Jan Foubert

By Jan Foubert

At a time when there is so much patient education in differing formats (eg internet, CD Rom), what led you to consider producing this particular format for your patients?

Indeed, there are many different formats produced for patient education. The idea of a flip chart instruction tool appears to be new and nothing similar was available on the Dutch market. It is a useful addition to the present set of guidance materials.

Which patients use this tool?

The SignGuideOncology is primarily aimed at patients who have a preference for visual communication rather than written information. Our experience is that particularly elderly patients benefit from this tool, but also patients for whom Dutch is not their first language.

How many copies have been distributed so far?

At this moment we have been able to distribute over 400 copies into 80 healthcare organisations. About 60% of the hospitals in the Netherlands are now using the tool. AMGEN, a human therapeutics company in the biotechnology industry, have been helpful in organising the distribution for us.

Has the tool been evaluated?

Early in the project we engaged patients and nurses in systemic evaluations of the tool. Based on their feedback we have revised the usage of visuals and colours in the SignGuideOncology. Also we included specific guidance for nurses in using the tool to help give the correct advice to patients.

Have patients had problems using the materials?

We have had feedback from some patients who thought this tool may be ok for other patients but was not in a particular format that they would derive most benefit. Of course, not everybody has the same preference in information styles, so some people prefer written or oral communication. Also some nurses have commented that existing ways of communicating patient education is preferable.

What about minority groups? Have you thought about translating it into other languages?

At the moment, we are working on translations of the SignGuideOncology in Turkish and in Arabic: This way we can also serve important minority groups in our country. Also we are investigating whether other countries would be interested in something similar.

How was the material produced?

As part of the TITAN programme, two years ago we developed a demonstration model of the flipchart. At that time we only covered haematological toxicities. Through this demonstration, we found a sponsor (AMGEN) who helped us further develop the tool. With their help we were able to engage a commercial agency with healthcare experience into the project team. As a team we have developed the SignGuideOncology as it looks now: with clear instructions, good use of colours and meaningful signs and symbols. Oncologists have screened the content of the tool and we have added new content with their help. Also recently we have

launched a website to promote our tool www.signaalwijzeroncologie.nl. In future we will also provide content in English on this website..

How long did it take to produce?

We have been working for two years on this project, and we want to continue to develop the formats and improve the information provided.

How was the project funded?

We have received financial support from AMGEN who sponsored our original ideas, but of course also the help and flexibility of our partners allowing us to spend a lot of our free time in delivering the project has been crucial to its success.

Do you have any plans to develop the project any further?

We plan to add some extra subjects to the tool, for example safe handling of excreta at home, about pain, hormonal therapy and radiotherapy.

How will you be using the prize money from the EPE award?

We are very grateful for winning this prize, although we have not yet decided how to use this money. We also feel the prize is a recognition and reward for the long hours that we have put into the development work.

What was the most valuable thing you learned from undertaking the project?

The most valuable lesson we learned was that a lot can happen when you really go for it! It is important for all team members to keep motivating each other. We learned a more business type approach is very useful when dealing with partners and suppliers in the project. A project with a lot of time and money involved really benefits from a serious and more organised approach. Also we learned that it is useful to evaluate processes that are already established practise; we give patient education as a core component of our role and it appears that we have found a gap in the informational needs of patients that has been filled with our tool.

What advice would you give to others who might be thinking about doing something similar?

Be sure to have a lot of stamina, you really need to keep going for the whole stretch. Also be sure to make clear (contractual) arrangements with all the parties involved in the project.

Are there any other members of the production team that you would like to thank specifically?

Many people and partners were involved but we would particularly like to thank AMGEN for their financial support and their kind coaching. Also we are grateful to Prins & van Waard Healthcare for the translation work on our ideas and the manufacturing of the SignGuideOncology. Also we would like to express our appreciation to colleagues and patients who helped and stimulated us in the development of the tool.

Meeting the patients' needs:

oral chemotherapy for colorectal cancer

Susan Mayor PhD, freelance medical journalist, London UK

Colorectal cancer (CRC) is the second most common cancer occurring in Europe, and represents nearly 13% of the total cancer cases (1).

Despite recent improvements in survival, CRC still ranks second as a cause of cancer death in Europe (1). The post-diagnosis survival rates for CRC vary widely within Europe, with a 5-year survival rate of approximately 52% in England to nearly 64% in France (2). The differences in survival rates are heavily dependent on the stage at diagnosis and trends in management.

Treatment options depend on the stage of the cancer – its size, position and whether it has spread. Treatments include surgery, radiotherapy and chemotherapy.

In the last decade there have been new chemotherapy agents approved for the management of metastatic CRC and these new options for CRC have in turn increased the complexity of treatment decisions for clinicians and patients.

When evaluating the most suitable treatment options for a patient, various factors must be considered. For example, with IV 5-FU therapies, central or peripheral access is required. Establishing access involves the more permanent placement of a central venous catheter or port (e.g. for continuous infusion regimens) (3). Infusional therapies place patients at higher risk of complications associated with central venous access (CVA) devices. These devices are also considered to be less convenient because they require trips to and from a medical clinic, and place a burden on patients to self-manage their pumps (IV lines), all of which may negatively affect patients' quality of life (4). In this context, oral chemotherapeutic drugs such as capecitabine are emerging as alternative adjuvant therapies for CRC.

A "smart" pill

Capecitabine is a highly active oral fluoropyrimidine carbamate designed to generate the active drug 5-FU preferentially in tumour tissue. Capecitabine has an innovative mode of action (see fig. 1), targeting 5-FU directly to cancer cells. The drug is initially inactive when swallowed, and is absorbed through the gut into the bloodstream. When capecitabine reaches the liver, it is converted into a non-toxic metabolite. This is then converted into the cancer-killing 5-FU by an enzyme called Thymidine Phosphorylase (TP) that occurs at higher levels in cancer cells than in healthy cells. The preferential activation of capecitabine in tumours potentially reduces systemic exposure to 5-FU – improving efficacy and enhancing tolerability (5).

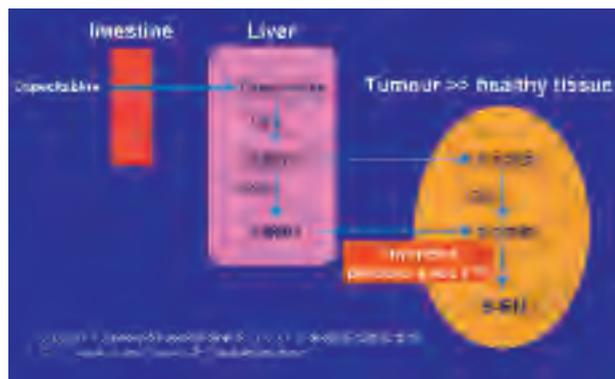


Fig 1. Capecitabine's smart mode of action.

Research has shown that oral agents can be as effective as IV regimens in the management of CRC, and capecitabine has shown good efficacy in clinical trials. As a monotherapy and compared with the current standard treatment of bolus intravenous 5-FU/LV, capecitabine achieves:

1. Superior tumour response rates
2. Equivalent progression-free survival
3. Equivalent overall survival rates (as recently shown at the ECCO meeting this year, see fig. 2)
4. A more favourable side-effect profile in patients with metastatic colorectal cancer.

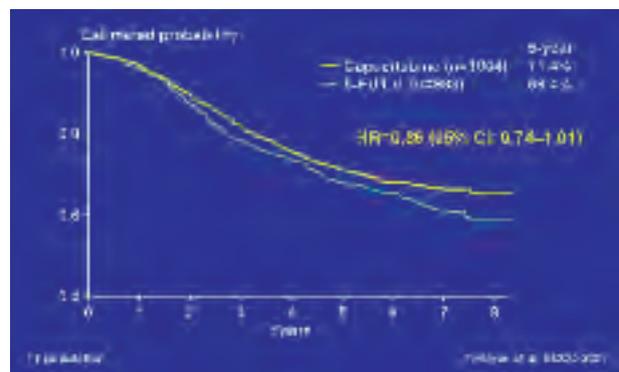


Fig 2. Five-year overall survival update from the X-ACT trial of capecitabine vs. 5-FU/LV as adjuvant treatment for stage III colon cancer (6).

The use of capecitabine is also associated with significantly less diarrhoea and nausea compared with bolus IV 5-FU/LV. Hand-foot syndrome (swelling, redness and pain affecting the palms of the hands and soles of the feet, associated with chemotherapy) does occur significantly more often (7), but this effect is visible and highly manageable. Trials have showed significantly less hospitalisation due to adverse events with capecitabine than with intravenous chemotherapy. (7)

Based on these results, capecitabine is approved as first-line monotherapy for metastatic colorectal cancer in most European countries. It has also been approved for adjuvant treatment of colon cancer.

In the UK, the National Institute for Health and Clinical Excellence (NICE) has recommended that oral chemotherapy should be one of the options considered for treating metastatic CRC (8). It suggests that patients should be told about the options and the differences between medicines so that they can be fully involved in treatment decisions.

The recommended starting dose for capecitabine as monotherapy is 1,250 mg/m² administered twice daily for 2 weeks followed by 1 week of rest. Capecitabine tablets should be swallowed with approximately 200 ml of water within 30 minutes of breakfast and evening meals (i.e. approximately 12 hours apart).

What do patients prefer?

Cancer therapies have traditionally been evaluated using clinical outcomes such as time to disease progression, control of symptoms and overall survival. However, there is growing recognition of the importance of considering quality of life and broader issues as well, such as convenience and flexibility of treatment.

Chemotherapy given intravenously can be uncomfortable and inconvenient for patients, as it requires regular visits to hospital, and can be associated with significant toxicities, psychological distress and financial difficulties (9).

Oral chemotherapy offers several potential benefits. It is more flexible, as patients can generally take it at home and so require fewer hospital visits for treatment. This gives increased independence, allowing patients to carry on with their usual daily activities. It also provides patients with an active role in managing their own treatment, which can give psychological and practical benefits. There is also less need for, and therefore less risk of intravenous catheter-associated complications, and studies have shown that treatment at home may be associated with improved quality of life; decreased analgesic requirements and less psychosocial morbidity than hospital-based therapy in patients with advanced cancer (9, 10).

Patients generally prefer oral chemotherapy treatment, as it provides a sense of control over treatment and has less impact on their daily lives and activities. A prospective study asked 103 patients with advanced cancer who were likely to have palliative treatment how they would prefer to receive treatment, and whether they would accept decreased efficacy to keep their chosen route of administration. Results showed that 89% of patients preferred oral therapy. Reasons for this preference included convenience (57%), problems with intravenous lines or needles (55%) and a better environment for administering chemotherapy (33%) (11). However, patients were not willing to sacrifice efficacy in preference for oral treatment.

Nursing implications

Oral capecitabine not only offers benefits to patients, but also reduces the workload for oncology clinics in terms of time-consuming intravenous therapy. The challenge, however, is to ensure that patients are compliant with the prescribed regimen and oncology nurses have a central role in ensuring the safe and effective use of oral chemotherapy.

Oral treatments allow patients to take control of their own therapy but they need guidance and instruction to achieve successful management. Patient education is the cornerstone of successful oral chemotherapy treatment, and this is a key role for the oncology nurse ensuring the patients are compliant in taking their oral chemotherapy as prescribed and that they are aware of any side-effects that may occur and how to seek help should this happen.

Patient education can be nurse-led, and the development of patient care plans to include oral therapy taking account of the different requirements compared to intravenous therapy is a key first step. Secondly, it is essential to develop education and communication procedures that take account of the use of oral chemotherapy. Information should be provided during an initial, face-to-face session, checking the patient has understood what has been discussed, and patients should be given reference materials to take home. Education should be reinforced at subsequent treatment and follow-up visits.

It is also important to educate and support caregivers. They may fear that by not having to visit hospital so often, the patient may be receiving suboptimal care, so there is a need for reassurance on the efficacy and safety of oral chemotherapy, and where to seek assistance if there are any anxieties in association with this treatment option.

Setting up a nurse-led chemotherapy service

Setting up a nurse-led chemotherapy service is initially time-consuming, but investing time at the beginning of treatment can actually reduce the nursing workload, as patients only need to attend before the first two capecitabine courses (12). Capecitabine has been shown to lead to a reduction in medical resource utilization compared with 5-FU/LV in the treatment of colon cancer, and, as such, has been described as a dominant strategy in this setting, offering greater benefits at a reduced cost (13).

Introducing oral chemotherapy such as capecitabine requires an adapted cancer service (4):

- minimise or eliminate toxicity through appropriate self-assessment
- emphasise the importance of correct dosing to the patient
- ensure consistent patient education and support
- facilitate education of healthcare professionals
- identify potentially vulnerable patients

Establishing a nurse-led clinic can help maintain the quality of care provided to patients, enabling them to get the most out of their treatment with oral capecitabine. A protocol for establishing a nurse-led clinic that was developed at a UK hospital is described in Table 1 (12).

Procedure	Details
Booking into the clinic	The patient has a 1-hour appointment with a chemotherapy nurse before treatment is started.
Providing information	The chemotherapy nurse explains the importance of monitoring and reporting side-effects, and the rationale for dose reductions. General and capecitabine-specific chemotherapy information leaflets and 24-hour contact numbers are also provided.
Informing the primary care physician	The patient is provided with a letter to give to his/her physician, detailing all the relevant information relating to their treatment.
Pre-treatment investigations	Blood tests/surface area calculations are carried out by the chemotherapy nurse prior to treatment with capecitabine. Creatinine clearance is calculated to determine renal status and the capecitabine starting dose.
Dispensing capecitabine	The patient consults the oncology physician and gives agreement to start treatment. Medication is dispensed by the oncology pharmacist.
Subsequent courses of treatment	The patient consults the chemotherapy nurse and oncology pharmacist to discuss compliance and any problems experienced during the first course of treatment. The clinic can be bypassed for subsequent courses if there are no problems.

Table 1: Summary of protocols for prescribing and administering capecitabine at a UK-based, nurse-led clinic (12).

A recent example of how a nurse-led outpatient chemotherapy service can have positive benefits for both patients and providers is demonstrated by a recently presented study. The study was a 3-year prospective audit of a nurse-led chemotherapy service in Aberdeen, Scotland looking at the delivery of capecitabine in North East Scotland, an area which includes remote islands and rural areas. The audit showed that capecitabine chemotherapy can be supervised by trained nursing staff in a safe and effective manner to patients spread over a large geographical area, with considerable reductions in patient travel and demands on central cancer centre resources. Every year the Anchor Unit in Scotland has saved about 2,000 "bed days" as well as avoiding the need to reconstitute around 2,800 litres of IV chemotherapy (14).

Managing side-effects

As patients are managing their own chemotherapy at home, it is essential to ensure that they understand how to recognise side-effects and what to do if they occur. They should be told to follow the instructions they have been given on managing side-effects, and contact their oncology nurse if they develop any non-haematological toxicity of grade 2 severity or higher (see Table 2).

Symptom	≥ Grade 2
Diarrhoea	Increase of 4–6 stools a day and/or diarrhoea at night
Nausea/vomiting	Decreased oral intake/2–5 vomiting episodes in 24 hours
Stomatitis	Pain, redness and/or swelling of the mouth
Hand-foot syndrome	Pain, swelling or redness of the hands or feet

Table 2: Summary of symptoms of non-haematological toxicity of grade 2 severity or higher

Gastrointestinal toxicity, including diarrhoea, nausea, vomiting, should be managed promptly, to avoid the risk of dehydration. In case of ≥ grade 2 diarrhoea, patients should be advised to stop taking capecitabine, start taking loperamide (which they should keep at home) and contact the treatment team. For vomiting, patients should stop capecitabine and start taking anti-emetics, together with appropriate food and drink. Stomatitis should be managed by stopping capecitabine and using mouthwashes, together with avoiding foods and drink that exacerbate the problem. Hand and foot syndrome is visible and managed by using skin emollients and by avoiding putting pressure on their palms and soles. If a patient experiences grade 2 or higher toxicity, the dose of capecitabine should be reduced or interrupted.

Patients may be very concerned about stopping their oral chemotherapy treatment, fearing this will reduce its efficacy. Nurses play a vital role in reassuring patients that studies in colorectal cancer in which the dose of capecitabine has been reduced have shown no increase in the risk of cancer progression and reduced risk of adverse events recurring (7,15). If capecitabine is interrupted at the onset of toxicity, symptoms usually resolve within two to three days. However, if it is not interrupted promptly, the toxicity may worsen and result in permanent discontinuation. Once side-effects have resolved, they can restart capecitabine at the same dose, and rarely do patients experience the effect again when it is reintroduced.

Another management advantage of oral capecitabine is prompt dose interruptions or modifications to resolve side effects, which are not possible with IV regimens because the total drug dose has been delivered by the time a side effect occurs. This means the oncology team must treat the side effect and wait, possibly until the beginning of the next cycle, to reduce the dose.

A range of educational tools and support materials are available for patients and nurses. These include checklists for patient education, patient information leaflets, treatment diaries and treatment protocols and guidelines.

Summary

The combination of patient preference for oral chemotherapy and the efficacy offered by oral capecitabine make this an attractive treatment option for patients with colorectal cancer. Not all patients are suitable for oral chemotherapy and some patients may prefer to receive the care and treatment in a clinic. However, most patients do prefer to receive chemotherapy orally, and capecitabine is an important option to consider. Its efficacy, shorter drug administration time, improved tolerability, and decreased impact on patients' quality of life has resulted in the recognition of capecitabine as a treatment option for metastatic colorectal cancer, and is currently being investigated as part of combination therapies which may show further benefit for patients.

Nurses have a central role in ensuring that patients are suitably educated and prepared to manage their chemotherapy at home and ensure optimal efficacy, patient safety and quality of life.

This article has been sponsored by F. Hoffmann-La Roche

References

- Boyle et al: Estimates of the cancer incidence and mortality in Europe in 2006. *Annals of Oncology* 18: 581-592.
- Verdecchia A et al: Recent cancer survival in Europe: a 2000-02 period analysis of EURO-CARE-4 data. *Lancet Oncol* 8(9):784-796, 2007.
- Berg DT: Capecitabine: A new adjuvant option for colorectal cancer. *Clin J Oncol Nurs* 10(4): 479-486, 2006.
- Faithfull S, Deery P: Implementation of capecitabine (Xeloda®) into a cancer centre: UK experience. *Eur J Oncol Nurs* 8 (Suppl 1): S54-62, 2004
- Van Cutsem, E et al: Thymidine Phosphorylase (TP) Activation: Convenience Through Innovation. *The Oncologist* 6 (Suppl 4): 1-2, 2001.
- Twelves C et al: 5-year overall survival update from the X-ACT trial of capecitabine vs. 5-FU/LV as adjuvant treatment for stage III colon cancer. Abstract presented at the 14th European Cancer Conference (ECCO), September 2007, Barcelona, Spain
- Cassidy J et al: First-line oral capecitabine therapy in metastatic colorectal cancer: a favourable safety profile compared with intravenous 5-fluorouracil/leucovorin. *Ann Oncol* 13: 566-575, 2002.
- NHS National Institute for Clinical Excellence: Guidance on the use of capecitabine and tegafur with uracil for metastatic colorectal cancer. *Technology Appraisal* 61, May 2003.
- Payne SA: A study of quality of life in cancer patients receiving palliative chemotherapy. *Soc Sci Med* 35: 1505-1509, 1992.
- Vinciguerra V et al: A comparative assessment of home versus hospital comprehensive treatment for advanced cancer patients. *J Clin Oncol* 4(10):1521-1528, 1986.
- Liu G et al: Patient preferences for oral versus intravenous palliative chemotherapy. *J Clin Oncol* 15: 110-115, 1997.
- Harrold K: Development of a nurse-led service for patients receiving oral capecitabine. *Cancer Nursing Practice* 1: 1-7, 2002.
- Twelves C, Cassidy J: Which endpoints should we use in evaluating the use of novel fluoropyrimidine regimens in colorectal cancer? *Br J Cancer* 5;86(11):1670-6, 2002.
- Samuel L et al: A nurse led out-patient oral chemotherapy service for the delivery of capecitabine to patients with colorectal cancer in North East Scotland: an audit of the first 3 years. Abstract presented at the 14th European Cancer Conference (ECCO), September 2007, Barcelona, Spain
- Blum et al: Multicenter, Phase II study of capecitabine in taxane-pretreated metastatic breast carcinoma patients. *Cancer* 92: 1759-1768, 2001.

Cancer Tales

Improving Communication in Cancer Management

Jan Foubert, Eons representative on this initiative.

Cancer Tales: Communicating in cancer care is an innovative new educational workbook based on a play of real-life experiences of five inspirational women. Each scene acts as a preface for a chapter of the book in which particular communication issues arise, from diagnosis to discussions about disease progression, or anxiety about examinations and treatment procedures. Detailed chapters and practical exercises are designed to provide guidance and advice and to improve the interaction between healthcare professionals, patients and carers.

“The *Cancer Tales* workbook is a valuable new method to inform and teach healthcare professionals to help patients with cancer through their experience”, commented Lukas Radbruch, President of the European Association for Palliative Care. “It has already received good feedback from palliative care specialists, which I feel is well earned.”

At the recent launch event of the *Cancer Tales: Communicating in cancer care* at the International Psycho-Oncology Society Congress in London, there was a performance of the play to an audience of over 300 delegates, patient groups, key palliative care experts, healthcare professionals and media. The feedback received was outstanding, and it is hoped that the workbook will offer an inspiring new approach to healthcare professional education and will be a valuable tool for use in educational development programmes and seminars.

The need for more effective communication in the management of cancer is illustrated by recent results from the European Pain in Cancer (EPIC) survey¹, which showed that although 1 in 2 cancer patients were suffering from moderate to severe pain, most of those questioned in depth had to proactively raise the subject of pain with their physician.

Cancer Tales: Communicating in cancer care is for all medical professionals involved in the management of cancer, including primary care and specialist nurses, general practitioners and secondary care physicians. It is available online at www.cancertales.org or a hard copy may be requested from info@cancertales.org.

Cancer Tales: Communicating in cancer care is supported by an educational grant from Mundipharma International Ltd, Cambridge, UK, and developed by a panel of experts under the auspices of the European Oncology Nursing Society (EONS), the European Association of Palliative Care (EAPC), Lance Armstrong Foundation (LAF) and OpenMinds. The EPIC survey was supported by a restricted educational grant from Mundipharma International Ltd, Cambridge, England.

References

¹ European Pain in Cancer survey, data on file: www.EPICsurvey.com

ANNOUNCEMENT



European Journal of Oncology Nursing – Impact Factor from 2008

The *European Journal of Oncology Nursing* is delighted to announce that it has been accepted for inclusion in the Science Citation Index Expanded, the Social Sciences Citation Index and Current Contents/Social and Behavioural Sciences. Inclusion in these databases will lead to substantial international exposure for authors publishing their work in *EJON*.

- *EJON* will be awarded an Impact Factor. Our first Impact Factor will calculate the number of citations in 2008 to articles published in 2006 and 2007. The 2008 Impact Factors will be published by Thomson Scientific in 2009.
- Please remember to use the full name of the journal – *European Journal of Oncology Nursing* or *Eur J Oncol Nursing* – to cite articles published in *EJON*. You must also include the year of publication, the volume number and the pages of the article that you wish to cite.





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PHARMACEUTICAL FORM: Pre-filled syringe containing 6 mg of pegfilgrastim in 0.6 ml solution for injection, single dose use only.

INDICATION: Reduction in the duration of neutropenia and the incidence of febrile neutropenia in patients treated with cytotoxic chemotherapy for malignancy (with the exception of chronic myeloid leukaemia and myelodysplastic syndromes).

DOSAGE AND ADMINISTRATION: One 6 mg dose (a single pre-filled syringe) of Neulasta® is recommended for each chemotherapy cycle, administered subcutaneously approximately 24 hours following chemotherapy. There are insufficient data to recommend the use of Neulasta® in children and adolescents under 18 years of age.

CONTRAINDICATIONS: Hypersensitivity to pegfilgrastim, filgrastim, *E. coli* derived proteins, or to any excipients.

SPECIAL WARNINGS AND PRECAUTIONS: The safety and efficacy of Neulasta® have not been investigated in patients receiving high-dose chemotherapy. Limited clinical data suggest a comparable effect on time to recovery of severe neutropenia for pegfilgrastim and filgrastim in patients with *de novo* acute myeloid leukaemia (AML). The long-term effects of Neulasta® have not been established in *de novo* AML; therefore, it should be used with caution in this patient population. The safety and efficacy of Neulasta® administration in *de novo* AML patients aged < 55 years with cytogenetics t(15;17) have not been established. Neulasta® should not be used in patients with secondary AML. The safety and efficacy of Neulasta® for the mobilisation of blood progenitor cells in patients or healthy donors have not been adequately evaluated. Rare pulmonary adverse effects, in particular interstitial pneumonia, have been reported after G-CSF administration. Patients with a recent history of pulmonary infiltrates or pneumonia may be at higher risk. Onset of pulmonary signs such as cough, fever, and dyspnoea in association with radiological signs of pulmonary infiltrates, deterioration in pulmonary function with increased neutrophil count may be preliminary signs of Adult Respiratory Distress Syndrome (ARDS). In such circumstances Neulasta® should be discontinued at the discretion of the physician and the appropriate treatment given. There have been common but generally asymptomatic cases of increased spleen size and very rare cases of splenic rupture, including some fatal. Therefore, spleen size should be carefully monitored (e.g., clinical examination, ultrasound) and this diagnosis should be considered in patients reporting left upper abdominal pain or shoulder tip pain. Regular monitoring of platelet count and haematocrit is recommended during Neulasta® therapy.

Neulasta® should not be used to increase the dose of chemotherapy beyond established dosage regimens. Physicians should exercise caution and monitor appropriately when administering Neulasta® in patients with sickle cell disease and be attentive to the possible association of Neulasta® with splenic enlargement and vaso-occlusive crisis. Transient elevation of leucocyte counts $\geq 100 \times 10^9/L$ have been observed in < 1% of patients receiving Neulasta® with no attributable adverse events. Elevations were typically seen 24–48 hours after administration. The needle cover of the pre-filled syringe contains dry natural rubber (latex derivative), which may cause allergic reaction. Exercise caution when interpreting bone-imaging results as increased haematopoietic activity may lead to transient positive images.

INTERACTIONS: Concomitant use of Neulasta® with chemotherapy has not been evaluated in patients. In animal models, concomitant Neulasta® and 5-fluorouracil (5-FU) or other antimetabolites have been shown to potentiate myelosuppression.

PREGNANCY AND LACTATION: No adequate experience in human pregnancy and lactation. Neulasta® should not be used during pregnancy unless clearly necessary. Do not administer to women who are breast-feeding.

UNDESIRABLE EFFECTS: The most frequently reported study drug-related undesirable effect was bone pain, which was generally mild to moderate, transient, and controlled with standard analgesics. Reversible, mild to moderate elevations in uric acid, alkaline phosphatase and lactate dehydrogenase, with no associated clinical effects, occurred in patients receiving Neulasta® following chemotherapy. Allergic reactions, including anaphylaxis. Permanently discontinue use in patients who experience a serious allergic reaction.

PHARMACEUTICAL PARTICULARS: Store in a refrigerator at 2°C–8°C. Do not freeze. Keep container in outer carton to protect from light. Neulasta® may be exposed to room temperature (not above 30°C) for a maximum single period of up to 72 hours. Neulasta® is incompatible with sodium chloride solutions.

LEGAL CLASSIFICATION: Medicinal product subject to medical prescription.

MARKETING AUTHORISATION HOLDER: Amgen Europe B.V., Minervum 7061, 4817 ZK Breda, The Netherlands. Further information is available from Amgen (Europe) GmbH, Dammstrasse 23, PO Box 1557, Zug, Switzerland, CH-6301. Additional information may be obtained from your local Amgen office.

MARKETING AUTHORISATION NUMBER: Pre-filled syringe: EU/1/02/227/001-002.

Date of preparation: July 2007.

For the UK only, information about adverse event reporting can be found at www.yellowcard.gov.uk. Adverse events should also be reported to Amgen Limited on 01223 436441