this will follow the same pattern as in younger patients and one awaits confirmatory studies which will prove or not that complex and expensive methodologies are superior to adequately quality controlled evaluations of endocrine-responsiveness or (over)expression of targets (like HER-2) in breast cancer. Drug dose adaptations will need to follow established guidelines, and care about potentially severe interactions in patients who receive many drugs is needed. The SIOG has many working groups that have published about these matters and some of these data will be highlighted.

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## 112 INVITED

## Optimizing geriatric oncology care: the EONS programme

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Cancer is largely a disease of elderly people with 60% of new cancers and over 70% of cancer deaths occurring in patients over 65 years and older in Europe. It is anticipated that the number of malignancies affecting this age group will continue to rise as the demographics of our society ages. Given the rising number of older adults in Europe the management of cancer in older people will be an increasingly common aspect of oncology practice. Inadequacies in the care and treatment received by older people with cancer as opposed to their younger counterparts has been well documented. This situation reflects the ageism within society generally but is particularly concerning within cancer care given the age of the majority of our patients. Despite the significant population of older people with cancer, there is limited opportunity for cancer care clinicians to access specialised education in relation to care of the older adult or engage in optimal multidisciplinary working with all relevant professionals. In recognition of these challenges EONS developed a core curriculum for Cancer in Older People (EONS 2006) which is the first comprehensive curriculum in this field in Europe for nurses. It provides a model for an integrated education programme for geriatric oncology that, if widely implemented, could substantially improve the supportive care of older adults with cancer.

#### 113 INVITED

## Ethics and the elderly: do we know what they want?

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Background: cancer is primarily a disease of senior adults with >60% of new diagnosis and >70% of cancer related death occurring in person 65+ years. Due to the aging of the population worldwide the increase in cancer mortality is being observed in developing countries. Many barriers to adequate management of senior adults with cancer still exist. Efforts we dedicate to research, care, and education in geriatric oncology are limited.

Results: Medical, psychological, social, economical, political and cultural factors contribute to the aging process in a interdependent manner. Competence and sensitivity to interface individual patient's request are increasingly required to the geriatric oncologist. To better understand older patients attitudes toward cancer care we need to consider the social and the cultural meanings of aging. Different cultures, societies and even health care systems recognize a different "value" to the older persons and this may collide with the crude medical data. Western societies tend to attribute value to persons based on a productive evaluation. Therefore elderly have less value because no longer productive. Other cultures, i.e. Far Eastern culture recognize a strong moral role to the elderly thus even physically and economically limited, thus they have reasons for living.

In western countries senior adults are less actively involved in the society and also their role within the family may change, reducing social interactions and increasing time at home alone. Gender differences in such behaviours are well known. In particular differences in the need for friendship and emotional support are prominent.

A second important aspect of cultural implications of aging is to rely in their family or more often in some member of the family, the informal care giver, and to delegate to them medical decisions.

We conducted a study in 622 elderly cancer patient undergoing chemotherapy to analyze by a structured interview, the patient/informal care giver and physician relationship and the type of information regarding cancer diagnosis and prognosis discussed with the patient.

We found that 32.8% of our patients received only limited information on their disease. Years of education, age, stage of disease and living with the spouse were strongly related with the chance to have more information. 86.5% of the patients reported to have the strongest support in facing the cancer experience in a family member. 45.5% prefer to discuss medical issue in the presence of a family member.

Conclusions: awareness of special needs of the older population and ability to negotiate cultural issues are now playing an important role in the clinical management of elderly cancer patient. Geriatric oncologists must familiarize with ethical and cultural issues as well as they are trained in physiological and psychological changes related to the aging process.

### *Symposium* (Tue, 25 Sep, 14:45–16:45)

# Primary brain tumours – molecular targets and clinical applications

114 INVITED

Malignant glioma: molecular pathways, mechanisms of disease and resistance to chemoradiotherapy

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As part of a comprehensive translational research effort accompanying the randomized clinical trial EORTC26981/NCIC CE.3 we determined profiles of gene expression (Affymetrix HG-U133 Plus 2.0) and genomic copy number aberrations (aCGH, BAC array) of glioblastoma tissues obtained from patients enrolled. This trial established a survival benefit for glioblastoma patients, who received concomitant and adjuvant temozolomide to standard radiotherapy (Stupp et al., 2005). However, benefit from the addition of TMZ was basically confined to patients, whose tumors had an epigenetically inactivated MGMT gene (Hegi et al., 2005). In order to identify other resistance factors and new therapeutic targets we combined unsupervised and supervised analysis of the gene expression profiles.

Correlated gene sets identified by CTWC (Coupled Two Way Clustering) were investigated for their association with survival of patients treated