Proffered Papers

**Results:** AWP provides a graphical user interface for the selection of analysis type and parameters, for performing the analysis and for displaying the results in text and in graphs. It also allows the user to save a statistical report in Microsoft Word and PDF format.

At present, a functional Web portal has been established at one department.

**Conclusion:** The Analytic Web Portal helps physicians and decision makers to assess the efficacy of standard cancer treatments.

Data on the quality of standard treatment can be generated whenever needed. It facilitates a possibility to change standard treatment if data shows inferior survival compared to what would be expected. Survival data between different institutions can be compared due to the well defined interface of AWP to other databases.

55 POSTE

Does self regulation and autonomic regulation have an influence on survival in breast and colon carcinoma patients? – results of a prospective study

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Background: Cancer Related Fatigue (CRF) and circadian rhythm both have a substantial impact on the quality of life (HRQL) of patients with breast (BC) and colorectal cancer (CRC) patients. In these patients, new measures of adaptability and resilience, such as sense of coherence or self regulation, could be more sensitive prognostic tools than classical HRQL measures. The aim of this study was to assess the influence of autonomic regulation (aR) and self regulation (SR) on survival. For this, we tested a) a scale to measure autonomic regulation (aR) and its subscale for restactivity rhythm (RA.aR); and b) a psychosomatic self-regulation scale.

Material and Methods: 146 cancer patients and 120 healthy controls (C) took part in an initial evaluation in 2000/2001. On average 6 years later, 62 of 95 BC, 17 of 51 CRC patients, and 87 of 120 healthy controls completed the follow-up questionnaire. 41 of 266 participants (14 BC, 25 CRC, 2 C) had died. For the follow-up evaluation, participants were requested to complete the aR and SR questionnaires as well as a self-evaluation of the Karnofsky index (KPI).

Results: On average, cancer patients had survived for 10 years with the disease, at an actual KPI: 93%. Survival was analyzed using Cox proportional hazard regression including age, gender, diagnosis group, with aR and SR as independent parameters. Of the latter two, aR did not influence survival (odds ratio (OR) = 1.043, n.s.), whereas SR showed a positive and independent effect, with an OR of 0.502 (95%-CI: 0.307 – 0.819; p = 0.006). This positive effect was corroborated by the analysis of subscales for Achieve satisfaction/well-being (OR = 0.918; 95%-CI: 0.867 – 0.972) and Change behaviour to reach goal (OR = 0.936; 95%-CI: 0.942 – 0.987), and also reproducible when diagnoses were replaced by their respective tumour stages in the analysis for a finer resolution of the cancer diseases.

**Conclusions:** Self regulation might be an independent prognostic factor for the survival of breast and colon carcinoma patients. Further prospective studies are required to elucidate the prognostic relevance and utility of self regulation.

3056 POSTER

Risk factors for severe anaemia: a prospective, multicentric, observational survey of 645 patients treated with first-line chemotherapy (INDEX study)

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Aim of the study: To describe clinical, therapeutical and biological factors associated to the occurrence of chemotherapy-induced anaemia (haemoglobin (Hb) level <10 g/dl).

Methods: A French prospective, multicentric, observational survey was conducted between November 2007 and March 2008, in cancer patients treated by first line chemotherapy (CT). All pts were followed during 24 weeks or until prescription of erythropoietin-stimulating agents (ESA). Risk factors for anaemia were studied by multivariate logistic regression.

**Results:** A total of 645 patients (pts) were evaluable, including lung (n = 299), breast (n = 114), ovarian cancer (n = 68) and lymphomas (n = 164). In the whole population, 151 pts (23.4%) developed anaemia during the survey (Hb level <10 g/dl); ESA prescription or blood transfusion were performed in 340 pts (52.7%) and 73 pts (11.3%) respectively. Regarding the factors associated to the occurrence of chemotherapy-induced anaemia in this population the results were: age >62 years, Hb level at baseline and CT including cisplatin.

Concerning the use of ESA in this population, associated factors were age ≥62 yrs, CT including anthracyclines, initial Hb level <12 g/dl, performance status (PS) at baseline, PNN and Lymphocytes levels.

**Conclusion:** In routine oncology practice, ESA is prescribed in more than 50% of the patients in first line CT for a metastatic cancer. Risk factors for CT-induced anaemia and ESA prescription for each type of tumours will be presented during the meeting.

B057 POSTER

KalinoxTM: an effective and well-tolerated method for pain management during invasive procedures in oncology – results of a randomized study

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**Background and Aims:** In oncology, general pain management is essential to ensure to the patient (pt) a good quality of life. Painful procedures are recognized as a real problem, specially for long term chronic pts. The aim of this clinical study was to evaluate the effectiveness and the safety of Kalinox<sup>TM</sup> (premix 50%  $N_2O/50\%$   $O_2$ ) inhalation method during invasive procedures for cancer pts.

**Methods:** Pts, older than 18 years, scheduled for different types of exploratory acts or therapeutic cares, were randomized in this double-blind study between Kalinox<sup>TM</sup> or placebo (PCB: 50% nitrogen/50% oxygen) in complement of usual preventive medication. Pts, were stratified into 2 arms: pts with or without previous permanent pain (ppp). Kalinox<sup>TM</sup> efficacy was evaluated by patient's self-assessment using Visual Analogic Scale (VAS); safety by recording adverse events. Patient's behaviour and satisfaction and medical staff's satisfaction were assessed.

**Results:** 204 pts were included: 199 were analysed as Intended To Treat. Demographic data were: 147 women and 50 men, 58 with and 139 without permanent pain, mean age: 59.5±13.9 years, mean gas inhalation 11.5±10.1 minutes, mean gas flow rate 9.3±1.4 L/min.

A significant difference (p=0.006) of 10 points was observed between Kalinox<sup>TM</sup> (n=98) and placebo (n=101) ITT randomized groups with a mean of 24 (IC<sub>95%</sub>: 19.1–29.0) and 35.2 (IC<sub>95%</sub>: 29.5–40.9) respectively. No serious adverse event was reported. 10.2% of patients under Kalinox<sup>TM</sup> had an adverse event. Patient's and medical staff acceptability was higher than 89%. Patient's behaviour was good to excellent in 92.31% of cases. **Conclusions:** Kalinox<sup>TM</sup> administration during invasive procedures in

**Conclusions:** Kalinox<sup>IM</sup> administration during invasive procedures in oncology is an efficient and safe complementary method for patient's pain management that is well accepted by both patients and nurses and practitioners.

## 3058 POSTER Opinion on different types of palliative care in Georgia

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**Purpose:** The opinions of cancer-patients and their family members different types of palliative care (Hospice or Home-based Care) were studied.

**Method:** Using the subjective 5-grade-questionnaires the following points have been studied:

- The quality of *Pain Management* and Symptom Control in terminally-ill cancer patients at hospice and at home;
- 2. Where do the cancer-patients and their family members prefer to receive palliative care at hospice or at home?

Symptom science 193

In the first survey 576 patients took part; 276 of them were questioned at home, 300 – at the hospice. The second survey consisted of 936 persons (cancer-patients and their family members) – representatives of all social groups with different financial background.

Results: Pain management and symptom control was considered as satisfactory by 92% of in-patients, and only by 58% of patients receiving treatment at home. The problems with home pain management appear due to strictness of regulations towards administration and prescription of opioids at home. In spite of the fact, 87% of cancer-patients and their family members find it desirable to receive Palliative Care at home.

Conclusion: Despite the conditions and quality for receiving Palliative Care in hospice are reliably higher than the level of equal procedures carried out at home, vast majority of cancer-patients and their family members support the idea of spending last days of the life in traditional family atmosphere. The fact deals with lifestyle developed for many centuries and traditional culture of support and sympathy from the family members and close relatives. According to this it was decided to support the development and incorporation in the National Health Care services of palliative care delivered through home care as well as to support the tradition of dying at home and avoiding future expensive Instituonalisation of dying and death. Research implication: Search for an optimal instrument to objectify and monitor the implementation of a satisfactory pain relief and palliative care through home care will be done.

Acknowledgements to SOCO foundation for financial support of conducted research.

3059 POSTER

Cognitive function association with anaemia in patients with methastasic or advanced solid tumour undergoing oncologic treatment – EVOLUTION study

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**Background:** To examine the association between cognitive function and haemoglobin levels in patients with metastatic or advanced solid tumour undergoing first-line oncologic treatment.

Material and Methods: Multicentre prospective clinic cohort was conducted. Patients over 18 years of age with a confirmed diagnosis of metastatic solid malignancy (breast, lung, prostate or colorrectal) undergoing first-line oncologic treatment (radio- or/and chemotherapy), haemoglobin (Hb) ≤11 g/dL, life expectancy of at least six months, minimal comprehension of lecture and gave written informed consent, in 2008, were included. Socio-demographic, treatment and clinical data were collected. Cognitive function (validated Mini-mental State Examination (MEC)) was measured at baseline and after 16 weeks (study completion). Patient's quality of life was obtained from the LASA (visual analog scale, energy, every-day activities capability and quality of life) at baseline and 16 weeks. Adjusted analysis were applicated. Data were analyzed using SPSS ver. 15.0

**Results:** A total of 298 eligible patients were recruited in 26 Spanish hospitals. 67.3% received anemia treatment during the study. 62.7% of the patients had an increase of the haemoglobin level of >1 g/dL after 16 weeks. No clinically significant alterations on global cognitive function were observed during the study but a significant improvement in orientation and memory scale items was found. In addition to that, the levels of haemoglobin and energy were increased.

**Conclusions:** Cognitive function did not decline in patients with methastasic or advanced solid tumour undergoing first-line oncologic treatment. Anaemia treatment improves aspects comprised in health-related quality of life status.

3060 POSTER

Communication between doctors – breast cancer patients and their families

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**The aim** of this study was to establish the connection between the communication of doctors with their breast cancer patients and their families and the process of cancer disease treatment.

**Patients and Methods:** 51 patients suffering from advanced breast cancer as well as their families completed the questionnaire. The questions

included the following: previous place, kind of administered treatment, their knowledge of their state of health and a predicted prognosis.

Results: 45% of the relatives agreed to inform the patient about the diagnosis but not about the predicted prognosis, 39% did not agree to inform about the diagnosis or the prognosis, while 19% of the families agreed to inform the patient both about the diagnosis and the prognosis. 97% of the patients who were aware of the diagnosis but not of the predicted prognosis followed the doctors' advice. In the group of the patients whose families did not agree to inform them about the diagnosis or the prognosis – 83% followed the doctors' advice. 57% of the patients who were informed both followed the doctors' treatment.

Conclusion: The research revealed that the patients were better informed about state of health and showed a connection between a health service institution and the level of patients' knowledge of health state as well as the predicted prognosis. They were aware of prognosis, which led to a more cooperative attitude and willingness to undergo specialistic treatment. Also the patients' relatives who knew about the breast cancer cooperated with crew of palliative care in a better way. The results of the research was an evident connection between the level of patients' knowledge and relationships with relatives and the crew of palliative care.

3061 POSTER

## Psychological changes during chemotherapy for lung cancer

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The aim of this study was to assess the psychological changes during chemotherapy for lung cancer and predictors for psychological variables just after chemotherapy.

Patients and Method: We studied 49 patients (18 women and 31 men) who had undergone their first chemotherapy between July 2004 and December 2008. We investigated Profile of Mood States (POMS), Spielberger's State — Trait Anxiety Inventory (STAI), Rosenberg's Self-Esteem Scale, and the Lazarus type Stress Coping Inventory (SCI) before and just after chemotherapy. We assessed the changes of psychological variables during chemotherapy, and the predictors for psychological variables just after chemotherapy.

**Results:** State anxiety scores significantly decreased after chemotherapy and fatigue scores significantly increased. Depression scores after chemotherapy were significantly associated with self-esteem scores before chemotherapy (r=-0.42, p<0.05). Vigor scores after chemotherapy were significantly associated with "accepting responsibility" scores of SCI before chemotherapy (r=0.44, p<0.05). Confusion scores after chemotherapy were significantly associated with self-esteem scores before chemotherapy (r=-39, p<0.05).

Conclusion: Anxiety decreased and fatigue increased just after chemotherapy, and psychological states may be predicted by self-esteem before chemotherapy.

3062 POSTER

## The cancer pain survey, 2006 in Daegu, Korea

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**Background:** The objective of this study was to evaluate the second cross-sectional survey of cancer pain management since 2001 (Oncology 64:237, 2003) in Daegu, Korea.

**Material and Methods:** Ten medical oncologists and four radiation oncologists who working at Daegu and the neighboring districts, participated in this survey from 11th Sep 2006 to 30th Sep 2006. Physicians and patients independently answered the given questionnaires.

Results: Of the total 902 cancer patients, mean age was 59.4 years, male was 56.1% female was 43.9%, and inpatients was 30.6% and outpatients was 69.4%. The prevalence rate of cancer pain was 53.9% (57.1% of male and 50.0% of female patients, and 66.3% of inpatients and 48.4% of outpatients). The pain prevalence rate according to cancer type was 90.3% in pancreatic cancer, 80.0% in cancer of unknown primary, 80.0% in bladder cancer, 74.1% in hepatocellular carcinoma, 73.7% in multiple myeloma, 70.0% in lung cancer, 69.6% in esophageal cancer, 66.2% in gastric cancer, 65.2% in head/neck cancer in the order of frequency. The pain prevalence rate according to stage was 37.5% in stage I, 44.9%