for females = 45 + 2.3 kg for each inch >60 inches [60 inches = 152 cm]. Correlation with age, T & N status, hormonal status and HER2 status was done in the two groups.
Results: At median follow up period of 17 months there was statistical significance of disease free survival in favor of group B (70.3 months Vs. 52.4 months, p = 0.004). Both groups showed non-significant difference as regards correlation with other parameters: ER, PR, HER2 status, Age, T & N.
Conclusion: Using adjusted body weight is considered a proper alternative method for the calculation of anti-cancer drugs doses. An effort is currently using the substantial information to retrospectively examine outcome with respect to toxicities.

3028 POSTER

Diffusion effects of an inpatient hospice unit on improving the parent hospital's pain management of terminally ill cancer patients not receiving hospice care in Taiwan

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Background: Impact of hospice care on cancer pain management at the institution level of an acute hospital setting has not been addressed in prior research. The purpose of this study was to investigate the diffusion effects of an inpatient hospice unit on improving the parent hospital's quality of pain management as perceived by terminally ill cancer patients not receiving hospice care in Taiwan.
Methods: A convenience sample of 1,370 terminally ill cancer patients with pain who were cared for at hospitals with and without hospice units were compared for their pain relief experiences and perceived pain-management practices of healthcare professionals by generating multivariate logistic regression models using the generalized estimating equation (GEE) method.
Results: After controlling for selected hospital and patient characteristics and accounting for clustering of individuals at the same hospital, Taiwanese terminally ill cancer patients in the with-hospice group were 2.40 times (95% CI [1.53−3.76]) more likely than those in the without-hospice group to report their pain as not controlled before hospital admission. However, after patients with uncontrolled pain were hospitalized, they were equally as likely as those in the without-hospice group to report pain as not yet been relieved when interviewed (Adjusted Odds Ratio 1.42, 95% CI [0.77−2.64]). Patients in the with-hospice group were (1) less likely to complain about waiting too long for pain medication (AOR (95% CI): 0.41 [0.18−0.96]); and (2) more or as likely to rate the amount of pain medication received as adequate (depending on the status of adequate pain control before admission) than/as those from hospitals without an inpatient hospice unit.
Conclusion: Hospice care adds value at the institution level by effectively and appropriately managing the cancer pain of Taiwanese terminally ill patients not receiving hospice care.

3029 POSTER

The dosing frequency of sustained-release opioids and the prevalence of end-of-dose failure in cancer pain control: a Korean multicenter study

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Background: End of dose failure is commonly observed as therapeutic levels of sustained release opioids fall. However, little is known in case when using those for cancer pain control. To determine the dosing frequency of sustained release opioids (morphine, oxycodone and transdermal fentanyl) and prevalence of end of dose failure in clinical practice, patient-reported survey was performed.
Methods: A multicenter survey conducted in 56 hospitals in Korea between June and November 2008.
Results: The study enrolled 1,506 cancer outpatients who were prescribed sustained-release oral opioids (morphine or oxycodone) or transdermal fentanyl. Of the sustained-release oral opioid patients, 62% took sustained-release oral opioids twice daily, while 30% took them more than twice daily. Of the transdermal fentanyl patients, 89% wore the patch for 72 hrs. The median dose of daily supplemental short-acting opioids did not differ between the patients who took sustained-release oral opioids twice daily or and those who took them more than twice daily. Of the enrolled patients, 50% experienced worsening pain just before the next sustained-release opioid dose, and 60% of these took medication earlier than the prescribed dosing schedule. Of the patients with severe cancer pain, 77% complained of end-of-dose failure, compared to 57 and 33% of the patients with moderate and mild pain, respectively. End-of-dose failure was present irrespective of the administration frequency of sustained-release oral opioids in 49% of the patients taking twice-daily doses and in 61% of those taking more frequent doses. Patients felt that sustained-releases oral opioids gave adequate pain control lasting an average of 9.7 hrs, versus an average of 62.5 hrs for transdermal fentanyl.
Conclusion: This survey demonstrated that sustained-release opioids are used by patients in a manner that is inconsistent with standard recommendations. End-of-dose failure is thought to explain the increased dosing frequency, as half of the enrolled patients complained of worsening pain just before the next dose of sustained-release opioid and reported that adequate pain relief lasted for less time than was stated in the manufacturers' prescription recommendation.

3030 POSTER

Incidence of chemotherapy-induced nausea and vomiting (CINV) after highly and moderately emetogenic therapy in the era of NK-1 inhibitors – perception versus reality

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Background: Physicians and nurses had underestimated the incidence of chemotherapy-induced nausea and vomiting (CINV) after both high emetogenic chemotherapy (HEC) and moderately emetogenic chemotherapy (MEC) (Grumberg, Cancer 2004;100:2261–8; Erazo Valle, Curr Med Res Opin 2006;22:2403−10). We have assessed if physicians and nurses' perception of CNIV in their own practices after the introduction of Aprepitant was closer to reality.
Methods: A prospective, observational unicenter study of adult patients receiving their first chemotherapy cycle was performed. Medical oncologists and oncology nurses also estimated the incidence of acute (Day 1) and delayed (Days 2–5) CINV after first administration of HEC and MEC. Eligible patients completed a 6-day diary including emetic episodes, nausea assessment, and antiemetic medication use. Observed incidence rates of acute and delayed CINV were compared with physician/nurse predictions.
Results: Twenty-nine physicians and nurses and 95 patients (86.3% receiving HEC and 13.7% MEC) were recruited. Acute nausea and emesis were observed in 14.3% and 2.4% respectively of HEC patients receiving Aprepitant and delayed nausea and emesis were observed in 14.3% and 7.1% respectively of these patients. Physicians and nurses accurately predicted the incidence of acute and delayed CINV after HEC patients receiving Aprepitant. Acute nausea and emesis were observed in 22.2% and 0% respectively of MEC patients and delayed nausea and emesis in 33.3% and 22.2% respectively of MEC patients. All physicians and nurses underestimated the incidence of acute nausea and delayed nausea and emesis after MEC by 15, 28 and 18 percentage points, respectively.
Conclusions: The addition of Aprepitant in the prevention of CINV after HEC allows a better control of CINV that is perceived accurately by physicians and nurses. By contrary, physicians and nurses continue markedly underestimating the incidence of CINV after MEC. CINV still remain important targets for improved therapeutic intervention and physicians and nurses must be aware about the real incidence of CNIV.

3031 POSTER

Facing decision about biological therapy in developing countries – to tell or not to tell – physicians perspective

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Background: Biological therapy has improved outcomes in cancer treatment, nevertheless many of those agents are unavailable in public health systems in develping countries and only a minority of patients can afford high cost drugs. The aim of this study was to explore physicians'

perceptions about the use of biological therapy in five countries in Central America.
Methods: Through November 2008 to April 2009 cancer specialists were invited to complete a survey evaluating demographic variables, practice characteristics, and opinion about target therapy in theirs clinical setting.
Results: 68 physician were surveyed. 44 males and 24 females. 34 medical oncologists (50%), 15 (22%) surgical oncologists and 19 (28%) gynecologist oncologists. Median age was 46±8.4 years. 85% do both public and private practice. While 28% of patients in private practice frequently ask about biological therapy only 7% of patients in public practice do ($p < 0.001$). 93% of oncologists acknowledge the patient's right to be inform regardless the inequities of the system. 43 (63%) physicians comment about biological therapy to patients with clinical indication and 20 (37%) hysicians do not comment unless the patient ask. There were no differences between the physicians characteristics and tell or not to tell about the biological therapy. Not having the biological therapy available for patient produce some degree of stress in 70% of physicians ($p = 0.001$). 68% of physician whom would not tell the patient about the biological therapy consider that raising the topic would only produce anxiety in patients and their families versus 32% whom disagree ($p = 0.023$). In a situation without budget deficit 97% and 95% of physicians would use trastuzumab in adjuvant and palliative setting ($p < 0.001$), 86% erlotinib after chemotherapy failure in metastatic lung cancer ($p < 0.001$), 91% first line monoclonal antibodies in metastatic colorectal cancer ($p < 0.001$), 96% sunitinib in metastatic renal carcinoma. Only 37% agree the use of trastuzumab beyond progression ($p = 0.038$) and 30% would use monoclonal antibodies beyond progression in metastatic colorectal cancer ($p = 0.007$). 70% of physician use NCCN treatment guidelines and 10% ESMO recommendation, but 79% refer that clinical guidelines do not consider cost-effectiveness issues.
Conclusion: Facing decision about biological therapy in public health system in low and middle income countries involve ethical and social dilemma for doctors and patients. A balance between information and realistic option is recommended.

3032 POSTER

Dermatological side effect interventions for targeted cancer treatment untangled: a systematic review

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Significance & Background: Dermatological side effects, such as papulopustular rash, xerosis, pruritus, periungual inflammation and ocular changes, often occur during cancer treatment with Targeted Therapy. Patients are hindered in their daily activities and cannot maintain privacy about their illness because of these visible side effects. These circumstances can lead to a decreased health related quality of life (HRQoL) and to discontinuation of treatment. Conceptual Framework: At present, clear terminology of the dermatological symptoms and evidence of the effectiveness of the management options about the side effects are lacking. Both, guidelines and assessment tools to collect relevant data are little used in current daily practice.
Methods & Analysis: A very specific search strategy was constructed thoroughly. The literature research was performed in Medline through Pubmed, Embase and CINAHL, following the guidelines of the Cochrane Collaboration. All papers about management of dermatological reactions caused by Targeted Therapy were included. Different categories were developed in advance and all data were analyzed accordingly (a. patient education, b. assessment tools, c. guidelines, d. pharmacological agents, e. interventions not otherwise specified, f. effect on the seriousness of the dermatological reactions, g. HRQoL, and h. treatment compliance). Two reviewers independently assessed the papers and extracted the data.
Findings & Implications: 135 articles were included. Inconsistent advices on management strategies and their influence on the seriousness of the dermatologic reactions were found. The results indicate that for rash topical immunomodulators and oral antibiotics seem to be more effective than topical antibiotics, antibacterials and retinoids.
The review suggests that interventions like baseline assessment, patient education and measurement of HRQoL and treatment compliance can help managing the rash. The assessment tools FACT and SKINDEX-16 can be worthwhile to use.

3033 POSTER

Health-related quality of life (HRQL) of family members and cancer patients undergoing chemotherapy – final results

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Background: It was observed that although cancer patients undergoing chemotherapy had better mental component parameters, they faired worse in physicalcomponent parameters. In order to confirm the initial results we extended our survey to a higher sample population.
Methods: 212 family members (133 women) of mean age 48.9 and 212 cancer patients undergoing chemotherapy (119 women) of mean age 57.3 completed the SF-36 health survey by personal interview. The SF-36 health survey contains 36 questions covering functional health status and general health and has been validated in a Greek general population. The questions are summarized into eight scales measuring physical functioning (PF), role physical (RP), bodily pain (BP), general health perception (GH), vitality (VT), social functioning (SF), role emotional (RE), and mental health (MH), with higher scores (0–100 range) reflecting better-perceived health. Two component summary scores capture the overall physical and mental health (Physical Component Summary or PCS and Mental Component Summary or MCS).
Data analysis was performed with SPSS version 13.0 while statistical analysis was performed with Wilcoxon signed ranks test. Significance was set at 0.05.
Results: Table 1 summarizes the final results of our study. As it was expected the physical component parameters were higher in the family members of the patients ($p < 0.001$). Indeed, the mental component of the family members was lower than the cancer patients; statistically significant in MH and MCS.
Conclusions: The final results, with double the surveyed population, confirmed the preliminary findings of our study. Although the mental component parameters were significantly higher in cancer patients undergoing chemotherapy, the physical component ones were significantly higher in their family members. Supportive programs for both the patients and the family members seem mandatory.

Table 1

	PF	RP	BP	GH	VT	SF	RE	MH	PCS	MCS
Patients	68.9* (30.4)	31.2 (39.5)	64.9 (35.9)	55.0 (23.4)	61.6 (24.5)	67.7 (35.9)	60.2 (41.7)	67.6 (20.0)	40.7 (11.6)	47.6 (11.8)
Family members	93.3 (15.7)	83.0 (33.5)	88.2 (23.0)	72.6 (18.5)	67.1 (25.6)	65.6 (32.7)	55.9 (41.1)	60.3 (23.4)	57.0 (8.0)	40.1 (13.6)
p	<0.001	<0.001	<0.001	<0.001	0.024	0.305	0.408	0.001	<0.001	<0.001

* Mean score and (1Standard Deviation) is described.

3034 POSTER

CORRECT, a web-based, observational study, showing that darbepoetin alfa is effective in treating chemotherapy-induced anaemia and improves quality of life in patients with breast or colorectal cancer

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Background: Clinical studies have shown that darbepoetin alfa (DA) therapy is effective in treating chemotherapy-induced anaemia (CIA) in patients (pts) with non-myeloid cancer, resulting in improved haemoglobin (Hb) levels, reduced transfusion requirements and better quality of life (QoL). Less is known about the response to DA treatment in daily clinical practice.
Methods: This prospective, multicenter observational study evaluated the efficacy of DA in treating CIA in pts with breast cancer or colorectal cancer (CRC) in routine clinical use. A web-based registry was used to collect data on therapies, Hb levels, transfusions and QoL.
Results: The present analysis is based on data from 574 breast cancer pts and 222 CRC pts. Physicians' treatment objectives for DA included prevention of red blood cell (RBC) transfusions (81% of breast cancer pts vs 18% of CRC cancer pts), fatigue (36% for breast cancer pts vs 61%