self-evaluation (EVA) and investigator recording (NCI-CTC) of nausea and vomiting intensities, and compliance.
Results: From September 05 to January 08, 431 patients were randomized (217 to P and 214 to C). Patient characteristics were well balanced between groups. Median age was 53 years, 35% of the patients experienced nausea or vomiting. In total, 403 patients (93.5%) were assessable for the primary endpoint, with few nausea episodes (FLIE nausea scores after the 1st CT course were 6.02 and 6.07 for P and C, respectively) and very good compliance (81% patients complied with the protocol). Adverse events related to nausea occurred in 51% vs. 47% of the patients treated with P and C, respectively ($p = 0.48$). FLIE and NCI-CTC vomiting scores were similar between the 2 arms (6.91 vs. 6.88, $p = 0.47$, and 20% vs. 21%, $p = 0.73$, for P and C, respectively). Grade II-III nausea occurred in 17.6% and 15.7% of patients receiving P and C ($p = 0.62$).
Conclusions: No benefit of homeopathy over standard treatment was noted in this study. But surprisingly we observed lower rates of nausea and vomiting measured by patients and by investigators, than in other studies using identical chemotherapy regimens. The observation and management of emesis could modify the perception and rate of such adverse events.

5194 POSTER

UK national survey on the use of Adjuvantonline as a decision-making tool in early breast cancer (www.adjuvantonline.com)

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Background: Adjuvantonline is a web-based tool, which enables us to predict 10-year relapse and mortality outcomes in patients with or without adjuvant systemic chemotherapy and/or endocrine treatment. This enables us to make informed and transparent decision regarding adjuvant treatment in early breast cancer. Recent NICE guidance has advocated the routine use of Adjuvantonline in early breast cancer.
Methods: We contacted all cancer networks in England by email for a survey on the use of Adjuvantonline. Twenty-five replies were received from 13 oncology centers.
Results: Of the 25 responders, 24 (96%) oncologists said they use Adjuvantonline in clinical practice and 1 (4%) oncologist said no, but answered subsequent questions on its use. When asked the frequency of use, 10 (40%) oncologists said they always (75–100%); 10 (40%) said frequently (50−75%) and 5 (20%) said sometimes (25−50%) use Adjuvantonline. When asked if they discussed the percentage of benefit with patients, 7 (28%) said always; 9 (36%) said frequently; 7 (28%) said sometimes; 1 (4%) said rarely (0−25%) and 1 (4%) did not answer. Majority 12 (48%) of the responders rarely, and none of them always, gave copies of the results to their patients with 5 (20%) saying frequently and 8 (32%) saying sometimes. All (100%) the oncologists calculated outcome for mortality and 9 (36%) calculated for both mortality and relapse. When asked as to at what percentage of mortality benefit they would discuss and recommend chemotherapy, the answer varied from 0 to 10%, but majority (60%) said they would discuss chemotherapy at 2−3% and recommend chemotherapy at 4−5%. When asked as to at what percentage of relapse benefit they would discuss and recommend chemotherapy, the answer varied from 0 to 20%, but majority (66.6%) said they would recommend chemotherapy at 10−20%.
Conclusions: There is great variability in the use of Adjuvantonline. Currently, there is no consensus on its use as a decision-making tool for adjuvant treatment in early breast cancer. Our survey showed that most of the Oncologists would calculate the outcomes for mortality benefit and would discuss chemotherapy with their patients for 2−3% benefit and recommend chemotherapy for 4−5% benefit. As this tool is designed to be used in conjunction with patients and to improve patient communication and transparency, it was surprising to see that majority rarely (48%) or only sometimes (32%) gave copies of the results to their patients.

5195 POSTER

HMPS (2-hydroxy-4-methoxyphenylstilbene), a stilbene derivative of rhapontigenin, induces cell death by mitochondrial apoptotic pathway in breast cancer cells

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Purpose: Breast cancer with resistance to clinical therapy is a significant threat to live of recurrent breast cancer patients, and chemo-resistant breast cancer is increasing rapidly. During last several decades, natural stilbenoids have been studied on anticancer effects in vitro and in vivo, and resveratrol is the most famous stilbene as a leading compound in the studies of anticancer compounds derived from plants. HMPS (2-hydroxy-4-methoxyphenylstilbene) is an analogue derived from rhapontigenin (3,5,3'-trihydroxy-4'-methoxy-*trans*-stilbene), which is a stilbene of herbal plant *Rheum undulatum*. TMS (2,3',4,5'-tetramethoxystilbene), an another stilbene analogue from rhapontigenin, was reported potent anticancer effect on tamoxifen-resistant MCF-7 cells. In the previous study on several stilbene analogues, HMPS also exhibited potent inhibitory effect on growth of breast cancer cells. In this study we investigated inhibitory effect of HMPS on proliferation of breast cancer and a potential for a new therapeutic candidate.
Methods: We examined cell viability of MCF-7 and MDA-MB-231 by MTT assay after exposure to various concentrations of HMPS. Apoptotic cell death induced by HMPS was investigated by florescence microscopy, cell cycle analysis and western blotting.
Results: Cell viability of breast cancer cells after 24 h exposure to HMPS decreased significantly, and both ER-positive and ER-negative breast cancer cells responded to HMPS. HMPS induced nucleus fragmentation and G2/M arrest followed by sub-G1 accumulation of apoptotic cells in time- and dose-dependent manner. During the process of cell death induced by HMPS, mitochondrial membrane potential was disturbed and caspase-3 and PARP cleavage were observed. Moreover, HMPS decreased cell number of LTED MCF-7 cells (Long term estradiol deprived cell) effectively.
Conclusion: Our results demonstrates that proliferation inhibitory effect of HMPS is about 50-fold more potent than those of rhapontigenin and furthermore HMPS also inhibits cell growth of LTED cells which are difficult to treat therapeutic agents. Therefore, HMPS may be a potential therapeutic candidate to treat the recurrent breast cancer by alone or combination with other conventional anticancer agents.

5196 POSTER

Factors associated with delayed presentation in the cohort ELIPPSE40 of young breast cancer women

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Background: early diagnosis and treatment can reduce the specific mortality in breast cancer women. Young women rarely undergo mammography before diagnosis and usually present with breast symptoms. We attempted to identify factors associated with delay in presentation in a cohort of young women recently diagnosed with breast cancer.
Material and Methods: SinceJuly 2005, all consecutive women included in the Long Duration Disease File of the French National Health Insurance Fund for a diagnosis of primary non-metastatic breast cancer, aged 18−40 years and living in South Eastern France are asked to participate in a 5 years follow-up. Women who agree to participate answer a mailed self-questionnaire at enrolment (in the month after diagnosis) and then telephone interviews every year. Medical record is yearly collected from physicians. Between January 2005 and March 2009, 291 women have been included (response rate: 70%). Patient delay was defined as time elapsing between symptom discovery and first presentation to a medical provider. This was studied in relation to socio-demographic factors, clinical variables, and subsequent diagnosis using logistic models.
Results: 222 women (76%) reported breast symptoms, discovered by themselves or their partner. Twenty-two percent of the symptomatic women delayed presentation 4 weeks or more. In multivariate analysis, women who delayed were more likely to live in rural areas (OR = 7.9, 95%CI [2.1−29.6]), to have a higher level of education (2.7, [1.1−6.5]), to have a body mass index $\leqslant$25 (5.0, [1.2−10.0], to have a better prognosis (low grade tumours) (4.6, [2.0−10.9], and not to have a family history of breast or ovarian cancer (2.6, [1.1−6.3]. Age, maternal language, marital status, children, type of symptom and tumour size were unrelated to patient delay.
Conclusion: Our results suggest that woman's physical and socio-demographic characteristics and living area have an influence on delay to presentation. Health education messages are needed to convince symptomatic women to present quickly to a physician even if they do not have known risk factors and if they live in rural areas with few medical services available.