Material and Methods: The study involved five outpatients with breast cancer. Urine samples were took 5 ml each time they urinated during 48 h after receiving chemotheapy. Wipe surveys were conducted to clarify the status of contamination of cyclophosphamide in the home settings at 48 h after receiving chemotherapy. All samples were stored frozen after sampling and during transport until sample preparation and analysis. Cyclophosphamide was analysed using the GC-MS methods, but on a GC-MSMS system (Exposure Control B.V., The Netherlands).
Results: Cyclophosphamide was detected in all samples. The percentage of the total dose of drug excreted in the urine of the four patients over 48 h ranged from 19.3% to 34.2% and averaged at 24.2%. Environmetal contamination of the drug in the homes of the five patients was detected 17 of the 30 target area. The drug was detected on the toilet seat in the homes of all patients. The degree of contamination was 8.35–0.04 ng/cm^2, and averaged at 3.35 ng/cm^2. The toilet seat was the most contaminated among all the target area. Contamination of 1.53 ng/cm^2 and 0.19 ng/cm^2 was observed on the toilet floor, 0.22 ng/cm^2 on the toilet lid and 0.79 ng/cm^2 on the toilet-door knob.
Conclusion: The present study identified the amount of a drug excreted over time in the urine of outpatinets receiving chemotherapy. It also provided an understanding of secondary environmental contamination of home settings with cyclophosphamide through patient excretions such as urine and faeces. The drug was detected in all urine samples provided by patients during the 48 h after chemotherapy. The degree of drug contamination of the home environmental varied depending on the patients. However, the drug was detected on the toilet seat in the homes of all patients, and this target area showed the highest degree of contamination among all target areas. It is important to prevent contamination with cyclophosphamide in home settings to avoide exposure of family members and friends to these drug.
This study was supported by a grant from The Secom Science and Technology Foundation in 2010.

3630 POSTER

Development of 46 Quality Indicators for Cancer Care in Office-based Medical Oncology

R.E. Buschmann-Maiworm[1], G. Klein[1], W. Bumann[1], H. Lebahn[2], B. Otremba[3], T. Steinmetz[4], U.R. Kleeberg[5], S. Schmitz[4]. *[1]WINHO, Department, Köln, Germany; [2]Onkologie Friedrichshain, Berlin, Germany; [3]Onkologie-Praxis-Oldenburg, Oldenburg, Germany; [4]Oncokoeln, Köln, Germany; [5]HOPA, Hamburg, Germany*

Background: The aim is to develop a set of quality indicators for office based medical oncology practices. They will be used for an indicator-based quality measurement and peer to peer benchmarking by the WINHO department (collaboration of 210 medical oncology practices in Germany). The indicators should cover all areas of cancer care in office based oncology with a special emphasis is on breast and colorectal cancer. The Quality Oncology Practice Initiative and its indicators are a paradigm for this study.
Material and Methods: Relevant indicators were collected by internet and literature review. The indicator selection was done with a two-step expert rating procedure (modified RAND/UCLA). The indicators were rated concerning (1) importance/relevance, (2) benefit for patients, (3) whether they are within the responsibility of office based oncologists, (4) representation of high quality of care and (5) if the data is already present in patient records. All indicators were rated on five stepped categorial rating scales. Based upon the results of the 1st rating session, the indicators were modified before the 2nd rating. The expert panel consisted of 25 experts from oncology associations, members of the open quality management group of the WINHO department and participants from patient support groups.
Results: A preliminary set of 272 quality indicators was collected by literature review. Due to redundancy and/or low specification level the set was reduced to 67 indicators. In the first rating session, 37 indicators were homogeneously rated as relevant and meaningful for high quality of care in office based oncology. The result of the second session was a set of 46 (32 documentation & therapy, 5 colon, 9 mama) quality indicators. We are currently doing a feasibility test of all 46 indicators. First findings indicate that the data for the construction of 31 out of 46 indicators are already present in patient records.
Conclusions: QOPI indicators are to some extent adoptable for German practices as well. First results of the feasibility test indicate that it will take considerable effort from all involved parties to embed the data collection for a starter set of quality indicators into a daily practices routine. A pilot study about the implementation of the routinely data collection for the indicators has to be done.
This study was sponsored by the German Cancer Aid DKH.

3631 POSTER

Health Technology Assessment of High-intensity Focused Ultrasounds for Prostate Cancer

A. Migliore[1], M.R. Perrini[1], T. Jefferson[1], M. Cerbo[1]. *[1]Agenas Agenzia Nazionale per i Servizi Sanitari Regionali, Sez. Innovazione Sperimentazione e Sviluppo, Rome, Italy*

Background: HIFU ablation represents a new treatment for prostate cancer management. By an endorectal probe enclosing a piezoelectric or piezoceramic ultrasound transducer, energy is focused to the target tumour without damaging the surrounding tissue.
Objectives: Agenas (the Italian national agency for regional healthcare) carried out an heath technology assessment (HTA) to evaluate effectiveness and safety data from scientific literature on the HIFU treatment of localised prostate cancer compared to standard treatments; to describe the level of adoption and utilisation of the technology in Italy; to perform an economic analysis on the utilisation of the technology within the national health system (NHS).
Methods: We performed a systematic review of evidence. We were interested in studies reporting on effectiveness and safety of the HIFU treatment compared to alternatives in the target population, i.e. males with localised prostate cancer (T1-T2), with low or intermediate risk disease who are being treated with curative intent.
We considered primary as well as secondary literature documents published from 2002 in English or Italian. Primary studies were searched on the major databases (EMBASE, Cochrane Library and Medline). Secondary literature studies were searched on the Cochrane Database of Systematic Review and on the CRD database. A context analysis was carried out by a national survey to describe the level of use and dissemination of the HIFU technology in Italy.
Results: Our study allowed us: to produce a systematic review of evidence on the use of HIFU technology for the treatment of the target population; to produce a comprehensive overview of the distribution and use of the technology within the healthcare providers of the Italian NHS; to assess the costs associated to the HIFU treatment of prostate cancer as compared to standard treatments; to describe the economic and organizational impact of the technology.
As implications for practice and research, our HTA report could be a useful decisional tool at all the levels of the NHS, and highlight the evidence gaps that may be the main targets for the further clinical or economic studies.

3632 POSTER

Women Prefer Adjuvant Endocrine Therapy to Chemotherapy for Breast Cancer Treatment

N. Niikura[1], M. Kimura[2], T. Iwamoto[3], N. Hayashi[4], J. Shintoku[2], Y. Saito[1], Y. Suzuki[1], Y. Tokuda[1]. *[1]Tokai University School of Medicine, Breast and Endocrine Surgery, Kamagawa, Japan; [2]Ota General Hospital, Surgery, Gunma, Japan; [3]Okayama University, Gastroenterological Surgery and Surgical Oncology, Okayama, Japan; [4]St. Luke's International Hospital, Breast Surgical Oncology, Tokyo, Japan*

Background: Previous studies reported that most women with early breast cancer judged a small likelihood of increased survival sufficient to elect adjuvant chemotherapy and endocrine therapy, despite its inconvenience and side effects. We attempted to determine the preferences of women regarding the benefits they considered necessary to make adjuvant therapy worthwhile, and to compare preferences for adjuvant endocrine therapy, chemotherapy, and trastuzumab therapy. We also investigated the effect of information about cost on women's treatment preferences.
Patients and Methods: Consecutive women who had a medical examination at the Breast Clinic, Ota General Hospital, were included in our study. We collected a questionnaire from a total of 365 women; 297 completed responses were included in the study. The survey was a 2-page questionnaire, including sections about a woman's background, treatment, what the woman had been told about options for treatment, and the advantages and disadvantages of adjuvant therapy. We asked the respondent to estimate her prognosis with and without adjuvant therapy, what degree of benefit she felt was acceptable to engage in adjuvant therapy, and what kinds of additional information she felt would be worthwhile to have. Fisher's exact test was used to determine the association of worthwhile and categorical clinical characteristics.
Results: Among 297 women, 105 had breast cancer that had been treated and 192 did not have breast cancer; 38% of women judged that a 5% or less gain in the probability of survival was sufficient to make endocrine therapy worthwhile; 28% participants judged that chemotherapy was worthwhile; and 24% participants judged that trastuzumab therapy was worthwhile. Women indicated that they were more likely to receive adjuvant endocrine therapy than chemotherapy or trastuzumab therapy, for the same gains in the probability of survival. Cost information about treatments

did not affect women's treatment preferences. Younger women tended to judge improvements in survival sufficient to make adjuvant endocrine and chemotherapy worthwhile, as compared to older women. The comparisons were statistically significant in the 10% and 20% categories for endocrine therapy and chemotherapy.
Conclusion: Women prefer endocrine therapy to chemotherapy or trastuzumab therapy, given the same projected treatment benefits. Younger women prefer both chemotherapy and endocrine therapy as compared with older woman.

3633 POSTER

European Cancer Guidelines: a Patient Perspective

C. Maddock[1], D. Schrijvers[2], M. Rosselli Del Turco[3], L. Marotti[3].
[1]Tenovus, Research, Cardiff, United Kingdom; [2]European CanCer Organisation, External Relations, Brussels, Belgium; [3]EUSOMA, Education, Firenze, Italy

Background: Patient and consumer involvement in Clinical Practice Guideline Development (CPGD) has been advocated from the early 1990s onwards. The aim of this research is to review their current extent of involvement in CPGD and also the general awareness of Clinical Practice Guidelines (CPG).
Material and Methods: A total of 24 people affected by cancer took part in focus groups or interviews (held Mar-Dec 2010). 2 participants had previously been involved in Guideline Development Groups (GDGs). The mechanism of recruitment involved convenience and purposive techniques. Thematic analysis of transcripts was carried out. Data from the European Cancer Guidelines survey study has also been included.
Results: In the survey of 30 European Oncology organisations [1], patients are often (38%) not involved in the development of guidelines.
Patient/representatives who had been involved in CPGD in our research felt that their input was valuable to themselves as individuals, to the GDG as a whole and also to the relevance of the resultant guideline for patients and carers.
Of the 24 focus group participants, only 12 had heard of CPGs. Knowledge of whom guidelines are intended for and what they contain is generally low. The consensus was that the general population's awareness of guidelines was low to non-existent. None of the participants had, during the course of their treatment communicated with health care practitioners about their treatment plan in relation to CPGs specific to their condition. Most participants thought that CPGs were a good idea, with certain provisos (Field and Lohr 1990 definition [2]).
Conclusions: In light of these results further research and activities are needed in relation to improving awareness, dissemination and implementation of guidelines and exploring how best to work with the patient and public (PP) stakeholders to improve the current mechanisms.
Certain countries have had extensive experience of PP involvement (UK, Netherlands) and we should look particularly to these for recommendations, guidance and resources.
This survey was performed as part of the Eurocancercoms project and supported by European Union funding.

References

[1] European Cancer Guidelines: a survey. Dirk Schrijvers, Marco Rosselli Del Turco; Carol Maddock; Lorenza Marotti
[2] Field, M.J. and K.N. Lohr (1990). Clinical Practice Guidelines: Directions for a New Program. 'Clinical practice guidelines (CPGs) are described as 'systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances'

3634 POSTER

European Priorities for Hepatocellular Carcinoma (HCC) Control: a Comparison of Current Needs in Five Countries

J. Bridges[1], G. Gallego[1], T.M. Pawlik[2], J.F. Geschwind[3]. *[1]Johns Hopkins Bloomberg School of Public Health, Health Policy and Management, Baltimore MD, USA; [2]The Johns Hopkins Hospital, Department of Surgery, Baltimore MD, USA; [3]Johns Hopkins University School of Medicine, Vascular and Interventional Radiology, Baltimore MD, USA*

Background and Aims: In 2007 the European Parliament designated viral hepatitis an urgent public health issue, calling for earlier diagnosis and wider access to treatment to prevent hepatocellular carcinoma (HCC). With a paucity of comparable data on HCC control, there has been little action on this declaration. We conducted a *needs assessment* for HCC control and tested the concordance of current performance across five countries.
Methods: Clinical experts in HCC were purposively sampled from France (FR), Germany (DE), Italy (IT), Spain (ES), and Turkey (TR). Needs assessment utilized the self-explicated method, a scientific stated-preference approach, to assess country performance on a 100 point scale. Experts valued ten dimensions of HCC control previously identified in the literature, including: clinical education; early risk assessment; HBV strategy; HCV strategy; life-style risk factors; national statistics; funding for detection; funding for treatment; political awareness; and public awareness. Results were analyzed using ANOVA, with concordance tested via the F-test.
Results: Twelve experts from each country completed the survey (response rate: 33%). Respondents included hepatologists (48%), oncologists (18%), radiologists (10%), and surgeons (17%); individuals self identified as having local/regional, national (30%) or international (35%) influence. Greatest need was assigned to political awareness (only 17.7 out of 100); public awareness (18.6), life-style risk factors (21.3), and national statistics (32.3). Cross-country valuations were relatively concordant ($p = 0.170$), but significant differences were found for funding for treatment ($p = 0.013$), funding for detection ($p = 0.015$), and HCV strategy ($p = 0.017$).
Conclusion: We herein report the first study to compare current needs for HCC control across Europe. Expert respondents identified greater public and political awareness as main priorities for HCC control, indicating a significant need for increased advocacy for liver disease in Europe. Any European effort on HCC control must also address discordances in funding for detection and treatment and priority given to HCV control across countries. Our data should help inform the discussion on HCC control and help identify benchmarks that will provide the basis for addressing this urgent European public health need.

Table 1. Needs assessment score

Variable	FR	DE	IT	ES	TR	P-value
Early risk assessment	40.3	34.5	35.5	50.0	30.7	0.187
	(22.7)	(18.6)	(14.9)	(24.1)	(20.3)	
Funding for detection	76.3	42.2	55.2	39.5	46.0	0.015
	(25.2)	(21.5)	(31.6)	(36.8)	(22.1)	
Political awareness	22.0	14.5	13.5	22.8	15.5	0.419
	(16.6)	(15.8)	(10.2)	(13.4)	(19.1)	
HCV strategy	58.8	52.0	40.3	55.2	31.0	0.017
	(9.0)	(26.2)	(20.9)	(23.5)	(25.7)	
Public awareness	14.3	21.3	11.0	22.0	24.5	0.264
	(10.5)	(26.7)	(6.9)	(16.2)	(17.6)	
Clinical education	24.7	25.3	23.8	27.8	39.5	0.195
	(14.8)	(18.8)	(16.0)	(17.3)	(21.7)	
Funding for treatment	75.3	59.8	68.7	45.0	34.7	0.013
	(28.4)	(34.4)	(29.6)	(35.7)	(26.0)	
Life style risk factors	20.8	25.7	18.7	23.7	17.7	0.639
	(13.7)	(13.2)	(13.9)	(20.5)	(9.3)	
HBV strategy	44.7	58.0	63.3	50.3	46.3	0.318
	(15.1)	(30.6)	(24.2)	(28.5)	(23.8)	
National statistics	12.3	14.0	32.0	32.5	20.8	0.050
	(10.6)	(15.2)	(28.9)	(24.2)	(20.4)	
All strategies	39.0	34.7	36.2	36.9	30.7	0.179
	(28.7)	(27.7)	(28.3)	(27.0)	(22.9)	
N	12	12	12	12	12	

Notes: Standard errors in parentheses. P-value test for concordance or valuation across countries.

3635 POSTER

Pharmacoeconomic Impact of Dose Rounding for Cancer Therapy

N. Ibrahim[1]. *[1]Military Hospital, Pharmacy Department, Riyadh, Saudi Arabia*

Background: The past ten years have seen a significant and progressive cost rising in medical oncology, largely due to the increase in cancer prevalence and the incorporation into clinical practice of novel, highly expensive drugs. Dose rounding is increasingly used in oncology departments to improve efficiency of outpatient clinics. The purpose of this project was to determine the theoretical cost saving related to a dose rounding process for adult biological and chemotherapy agents at Riyadh Military Hospital.
Material and Methods: Data was obtained prospectively during December 2010. All chemotherapy and targeted therapy orders prescribed in adult oncology out patient clinics as well as in-patient adult oncology wards have been collected. Prescriptions that include cancer therapy in doses that might be rounded according to study criteria were identified.
Results: Two hundred and thirty three orders of chemotherapy and targeted therapy were processed by Adult Oncology Satellite Pharmacy