each class (class 1: 100%; class 2: 100%; class 3: 100%; class 4: 100%; class 5: 88%).
Conclusion: Understanding and identifying different types of information preference groups that exist, may help physicians to tailor information to CP and/or refer them to other health professionals in oncology who are responsible for social questions and/or health promotion. As a result, physicians may enhance CPs' psychosocial health outcomes.

1114 POSTER

Determinants and patient-reported long-term outcomes of physician empathy in oncology: A structural equation modelling approach

H. Pfaff[1], M. Wirtz[2], E. Bollschweiler[3], S.W. Mercer[4], M. Warm[5], J. Wolf[6], M. Neumann[7]. *[1]Center for Health Services Research Cologne (ZVFK) & Division of Medical Sociology of the Institute and Policlinic for Occupational and Social Medicine, Medical Department of the University of Cologne, Cologne, Germany; [2]Institute for Psychology, University of Education Freiburg, Freiburg, Germany; [3]Department of Visceral and Vascular Surgery, University Hospital Cologne, Cologne, Germany; [4]Section of General Practice and Primary Care & Division of Community-based Sciences, University of Glasgow, Glasgow, United Kingdom; [5]Department of Gynaecology and Obstetrics, University Hospital Cologne, Cologne, Germany; [6]First Department of Internal Medicine & Molecular Tumor Biology and Tumor Immunology & Center for Integrated Oncology (CIO), University Hospital Cologne, Cologne, Germany; [7]Center for Health Services Research Cologne (ZVFK), Medical Department of the University of Cologne, Cologne, Germany*

Background: Physician empathy (PE) is assumed to improve desirable outcomes e.g. compliance, reduction of distress and enablement. As there is currently limited empirical evidence about PE in cancer care, its effectiveness for cancer patients (CP) as well as determinants of PE, the purpose of this cross-sectional study was to explore the influence of PE on long-term outcomes in German CP and to analyze CP- and physician-specific determinants of PE.
Methods: A postal survey was administered to 710 CP, who had been inpatients at the University Hospital Cologne (response rate 49.5%). PE was measured with the German translation of the Consultation and Relational Empathy (CARE) measure, and patient-reported long-term outcomes were assessed using the STATE-Scale of the State-Trait-Anxiety-Inventory, the Major Depression Inventory (MDI) as well as the EORTC-Quality of Life (QoL) Questionnaire-QLQ-C30. Hypotheses were tested by structural equation modeling with "AMOS 4.0" software to analyze the relationships between variables.
Results: PE (a) had a moderate indirect effect on "depression" and a smaller indirect effect on "socio-emotional-cognitive QoL" by affecting "information from physician: findings and treatment options" and (b) had via "information about health promotion" a moderate indirect effect on "socio-emotional-cognitive QoL" and a smaller effect on "depression". The determinant with the greatest importance was "general busy-ness in hospital staff": it had a strong negative influence on PE, indirectly influencing "information from physician: findings and treatment options" and also patients' "depression".
Conclusion: PE seems to be an important pre-requisite for information giving by physicians and through this pathway having a preventive effect on depression and improving QoL. Conversely, physicians' stress negatively influences these relationships.
The research findings suggest that reducing physicians' stress at the organizational and individual may be required to enhance patient-physician communication and patient-reported outcomes. Therefore, future research should prospectively investigate physicians' working conditions from the perspective of CP **and** physicians to analyze the influence of physicians' working conditions on the patient-physician relationship (e.g. PE, information) as well as on patient-reported **and** physician-reported outcomes (e.g. stress, burn-out, job dissatisfaction) in an integrated and evidence-based study approach.

1115 POSTER

Epidermal Ggrowth Factor Receptor Inhibitor (EGFRI)-associated rash: a suggested novel management paradigm. A consensus position from the EGFRI Dermatologic Toxicity Forum

G. Giaccone[1], B. Melosky[2], M. Reck[3]. *[1]Medical Oncology Branch CCR, National Cancer Institute NIH, Bethesda MD, USA; [2]British Columbia Cancer Agency, British Columbia Cancer Agency, Vancouver BC, Canada; [3]Hospital Grosshansdorf, Hospital Grosshansdorf, Grosshansdorf, Germany*

Background: Epidermal Growth Factor Receptor Inhibitors (EGFRIs) are associated with unique, class-specific skin, hair and nail reactions that have potential to disrupt optimal dosing. These are often best addressed by symptomatic treatment, but there is limited controlled, clinical evidence on which to base such treatments. In October 2006, at a US-based EGFRI dermatologic toxicity forum, therapeutic interventions were evaluated and a consensus treatment algorithm was developed. We present this approach within the context of the EU.
Method: 13 experts (oncologists, oncology nurses, pharmacists, dermatologists) attended the forum; all had extensive experience in the management of EGFRI-associated cutaneous toxicities.
Results: Moisturizing dry areas twice a day with thick alcohol-free emollient and limiting exposure to sunlight will likely decrease incidence of dermatologic toxicities. A physical sunscreen (zinc oxide or titanium dioxide) with an SPF $\geqslant$ 15 should be applied 1–2 hours prior to sun-exposure. Should dermatologic toxicity occur, an EGFRI-specific three-tiered grading system and step-wise treatment algorithm is proposed.
Mild toxicity–generally localized rash that is minimally symptomatic, with no sign of superinfection, and no impact on daily activities, may not require any form of intervention, but alternatively may be treated with low dose corticosteroid cream or antimicrobial gel/cream.
Moderate toxicity–generalized rash, accompanied by mild pruritus or tenderness, with minimal impact upon daily activities, and no signs of superinfection, should be treated with doxycycline or minocycline (100 mg PO BID) plus low dose corticosteroid cream, antimicrobial gel/cream, or a topical calcineurin inhibitor.
Severe toxicity–generalized rash, accompanied by severe pruritus or tenderness, that has significant impact upon daily activity, and has potential for superinfection should be treated as for moderate toxicity, plus a short term course of oral corticosteroid. EGFRI dose-reduction is also recommended for severe symptoms, in accordance with the product information. If dermatologic symptoms do not abate, despite treatment, then EGFRI interruption is recommended, but should be restarted once the cutaneous reactions have sufficiently diminished in severity.
Conclusions: EGFRI-associated dermatologic reactions are generally manageable, without dose reduction or interruption of EGFRI therapy. The practical application of this strategy is discussed.

1116 POSTER

Impact of pre-operative chemotherapy on the Quality of Life of patients with resectable non-small cell lung cancer using data from the MRC LU22/NVALT 2/EORTC 08012 multicentre randomised clinical trial

R. Stephens[1], P. Hopwood[2], D. Gilligan[3], M. Nicolson[4], C. Pugh[1], M. Nankivell[1]. *[1]MRC Clinical Trials Unit, Cancer Group, London, United Kingdom; [2]Christie Hospital, Psycho-Oncology Service, Manchester, United Kingdom; [3]Addenbrookes Hospital, Dept of Clinical Oncology, Cambridge, United Kingdom; [4]Aberdeen Royal Infirmary, Dept of Medical Oncology, Aberdeen, United Kingdom*

Backgound: There is a paucity of data relating to the longer-term Quality of Life (QL) of patients undergoing potentially curative treatment for non-small cell lung cancer (NSCLC). QL evaluation was therefore integrated into the LU22 trial to assess and compare the QL of patients receiving either surgery alone (S) or 3 cycles of platinum-based chemotherapy (CT-S) followed by surgery.
Methods: All patients were asked to complete SF-36 QL questionnaires prior to randomisation, at 6 and 12 months then annually to 5 years. SF-36 scores were combined into 8 domains and also summarised as a Physical Component Summary (PCS) and Mental Component Summary (MCS). Multivariable regression was used to identify baseline prognostic factors for the 6, 12 and 24 month PCS and MCS scores.
Results: There was no evidence of a survival difference between the 2 treatment groups (519 patients, 244 deaths, median S: 54 months, CT-S 49 months, HR 1.02, 95% CI 0.80, 1.31). Compliance in completion of the SF36 was 82% at baseline, 59%, 60% and 67% at 6, 12 and 24 months respectively. At 6 months, the S and CTS groups reported comparable functioning in 7 domains, but there was a significant difference in role physical in favour of the S group. No differences were observed between the treatment arms for any of the domains at 12 or 24 months. Regression analyses indicated that better physical health outcomes (PCS) were predicted at all follow-up points by baseline PCS and MCS (all $p < 0.05$), whereas longer time since surgery predicted better PCS at 6 months ($p < 0.05$), and younger age predicted better PCS at 24 months ($p = 0.07$). Better MCS was predicted at all time points by baseline MCS ($p < 0.05$). In addition, female gender and baseline PCS were predictors at 6 months ($p = 0.07$ and $p < 0.05$ respectively) whilst younger age predicted better MCS at 24 months ($p < 0.01$). 39% patients rated their health as excellent or very good at baseline, which reduced to 26% at 6 months, no further changes occurred at 1 or 2 years. More than 50% patients considered their health comparable to others, and over 45% were generally optimistic about their future health at 1 and 2 years.