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PCN207 Sustainable Measurement of Response Shift in Prostate Cancer Patients: Adjusting Health Related Quality of Life with the Then-Test

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1) estimate each patient's longitudinal HRQoL trajectory before the first SRE using repeated measures analysis; 2) calculate how SREs affect HRQoL changes. **RESULTS**: We found statistically significant declines in utility scores after all three types of SREs with an adjusted mean change of -0.06 (95% CI [-0.10, -0.02]) for "radiotherapy/surgery" (N=107), -0.20 (95% CI [-0.36, -0.04]) for "fractures" (N=31) and -0.24 (95% CI [-0.39, -0.08]) for "compression" (N=23). "Fractures" and "compression" affected a number of FACT-P domains and total score to a clinically meaningful and statistically significant extent. Compression had the broadest impact, affecting 7 out of 9 FACT-P domains and induced a mean decrease in the FACT-P total score of -16.96 (95% CI [-2.6.47, -7.44]). Radiotherapy/surgery was associated with a statistically significant decline in physical (-1.28, 95% CI [-2.06, -0.50]) and functional well being (-1.51, 95% CI [-2.37, -0.64]), and improvement in social well being (1.26, 95% CI [0.60, 1.91]). Full results will be presented. **CONCLUSIONS**: The presence of SREs was significantly associated with poorer HRQoL in this patient population. Any therapy reducing or delaying the occurrence of SREs may slow down the observed HRQoL decline in mCRPC patients.

#### PCN207

# SUSTAINABLE MEASUREMENT OF RESPONSE SHIFT IN PROSTATE CANCER PATIENTS: ADJUSTING HEALTH RELATED QUALITY OF LIFE WITH THE THEN.TEST

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OBJECTIVES: Patients diagnosed with prostate cancer (PCa) have similar survival rates across treatments, making treatments choices based on health related quality of life (HRQoL) more important. Objective was to increase HRQoL usage, sustainability and reliability measurement over time for use in cost-effectiveness analyses by investigating the occurrence of response shift (RS) in PCa patients. Never before has RS been measured over this long a time in PCa patients, not limited by few available treatment options. METHODS: A prospective cross sectional cohort study was started in January of 2012 with 1,720 CAPSURE patients using the SF-36 and UCLA-Prostate Cancer Index (PCI). In January of 2012 patient were asked to fill out questionnaires asking about their perceived HRQoL at time of diagnosis (then score) and current HRQoL (post-score). These scores were matched to previous collected scores at baseline (pre-score), ranging from 3 months to 20 years. RS (then-pre score), True Change (TC=post-then score) and Felt Change (FC=post-then) were calculated and compared with t-tests in different questionnaire domains. Linear regression was used to explore relations between scores and patient characteristics. RESULTS: RS and FC are found to be negative overall for SF-36 (RS:-3.6/-14.5 TC:-8.1/1.8 FC:-3.0/-22.7) and PCI (RS:-4.0/-30.2 TC:-20.2/0.07 FC:-3.6/-49.8), showing significant difference (P<0.05). Significant difference was also seen over the whole time range between post-scores and RS-adjusted-post-scores for SF-36 and PCI. A difference was found between recurrence and non-recurrence in both questionnaires (ranging 0/-4.0), although not significant. RS over time did not show change. CONCLUSIONS: Mean negative RS scores were found in this population using SF-36 and PCI, indicating over reporting in retrospective collected data. It is recommended physicians and researchers adjust found HRQoL scores with RS values found in this study, to increase usage, sustainability and reliability of retrospective collected HRQoLscores. Further research is needed to investigate RS dependency on other variables or characteristics.

#### PCN208

#### QUALITY OF LIFE IN PATIENTS WITH MULTIPLE MYELOMA IN SLOVAKIA

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OBJECTIVES: Multiple myeloma is common in older adults and its incidence increases after the age of 60 (under the age of 40, it occurs rarely, < 2%). In SK approx. 400 new cases have been diagnosed and in the treatment there is in average 1500 patients. Research aim was to find out the impact of the disease on particular items of Quality of patients' lives. METHODS: Sample: research consisted of pacienti diagnosed with the disease of multiple myeloma. We distributed 120 questionnaires and compiled 82 questionnaires (68,33%). There were 36 men (43,90%) and 46 women (56,10%). Their age was between 40 and more. We utilised standardised questionnaire of quality of life, Quality of Life-BREF (WHOQOL-BREF). Its first part included 24 items in four domains (physical health, psychological health, social relationships, and environment) and two items of overall evaluation. Numerical scales were signed in the answers in the following way: the least auspicious answer had the smallest value and the most auspicious answer had the biggest numerical value (range 1-5). The results of respondents were compared to population norms of the WHOQOL-BREF domains. RESULTS: In majority of items, the answers of the respondents do not differ very much in comparison with the average score of WHOQOL-BREF. Two items mostly differ from the average score most: domain of physical health - pain, where the average of 2.5 lowered in comparison to population norm of 4.03. The domain psychological health – negative emotions: where the average of 2.00 was lower in comparison to the population norm of 3.47. CONCLUSIONS: Prompt diagnostics of multiple myeloma significantly increases the possibility of the treatment to be successful. It also prolongs and improves quality of patient life. Research finding points out the reality that MM does not have the same impact on all domains of quality of life.

#### PCN209

## QUALITY OF LIFE IN PATIENTS WITH LUNG CANCER IN THE SLOVAK REPUBLIC Bielik J<sup>1</sup>, Matisakova I<sup>2</sup>, Kucerkova P<sup>2</sup>, Mastiliakova D<sup>1</sup>, Melus V<sup>2</sup>

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**OBJECTIVES:** The current incidence and mortality of lung cancer (LC) in adult patients in Slovakia ranges from about 57.3 resp. 50.3 in men and 10.6 resp. 7.6 in women per 100000 inhabitants. The lung cancer has a great impact on quality

of life (QoL) and the ability to work (WA) too. Till now in the Slovak Republic there was not realised the study oriented on the both mentioned categories. METHODS: 102 patients with LC were studied. The average of age was 50.3 y., weight – 78.3 kg, height – 175.1, duration of illness – 2.4 y., symptoms of illness before diagnosis – 1.2 y. Metastases were present in 72 patients. 4 patients were mentioned as strong pessimists, 10 predominant pessimists, 9 neither pessimists nor optimists, 61 predominant optimists, and 18 strong optimists. QoL and the ability to work was evaluated by means of the numeric scale from 0 to 10 (0-the worst, 10- the best) by patients themselves. RESULTS: The QoL was evaluated in these domains: in the time of good health – 8-21, in the time of diagnosis – 2.82, in the current time – 3.71. The WA had these results: in time of good health - 8.89, in the time of diagnosis - 5.08, and in the current time - 2.17. The impact of treatment on the QoL was 2.49 and on the patients families QoL it was 2.75. The willingness to pay for perfect cure was 92.35 € per month (the average salary in Slovakia in 2013 was 824 €). **CONCLUSIONS:** LC has a great impact on QoL and on the WA too. There was a strong correlation between QoL and WA, although the WA has the later onset as QoL. Our research confirmed the importance of early diagnosis and high effective treatment of this disease.

#### PCN210

## VALIDATION OF THE PROPOSED REDUCED QUALITY OF LIFE QUESTIONNAIRE TO THE EORTC QLQ-C30 IN CUBANS PATIENTS WITH CANCER

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OBJECTIVES: To validate the short version of the QLQ-C30 obtained for patients with non-small-cell lung cancer in patients with head and neck, prostate, breast or cervix cancer. METHODS: We analysed data of 636 patients distributed: 237 diagnosed with head and neck cancer, 146 diagnosed with breast cancer, 140 diagnosed with cervix cancer and 113 diagnosed with prostate cancer. The analysis followed a 4-step approach. First, we conducted a Mokken nonparametric item response analysis to ascertain the QLQ-C30 dimensionality and separate several scale if appropriate. Second, we conducted a parametric Samejima's graded response model (GRM) to assess the item characteristics and information for each scale. Third, we did a confirmatory factor analysis (CFA) to test the scales unidimensionality and to obtain standardised factor loadings to suggest a reduced version of the QLQ. Finally, we assessed the discriminative validity of the reduced version by using receiveroperator curve (ROC) analysis. RESULTS: Mokken analysis of the QLQ-C30 resulted in a unidimensional scale, with an overall scalability defined a medium scale. The unconstrained GRM showed that most items presented appropriate difficulty and discrimination parameters. The CFA supported an underlying unidimensional latent structure for the whole QLQ-C30 (CFI = 0.98; RMSEA = 0.05) with modification indexes pointing to important redundancy of information. The selection of items with standardized factor loadings > 0.70 lead to a 6-item QLQ that showed good discriminative validity against independent criteria of quality of life (ROC area = 0.76; 95% CI = 0.72 to 0.80) as compared with the values for the whole scale (ROC area = 0.70; 95% CI = 0.66 to 0.74). **CONCLUSIONS:** The EORTC reduced scale was validated in this study; it presents good psychometric properties and includes a unidimensional structure of patient-perceived quality of life.

#### PCN21

## SHARED DECISION-MAKING IN WOMEN WITH EARLY STAGE BREAST CANCER AND IMPLICATIONS FOR LONG-TERM HEALTH-RELATED QUALITY OF LIFE

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OBJECTIVES: Surgery for breast cancer has a substantial impact on a woman's health-related quality of life (HR-QOL). The NIH and EORTC advocate treatment with breast conserving therapy (BCT) for women with early stage breast cancer. The aim of this study was to understand the shared surgical decision-making process from the patients' perspective by implementing qualitative methods. **METHODS:** All participants were recruited and consented from a single center. Inclusion criteria included women who selected BCT over mastectomy. Utilizing an interview guide, women were asked to share their experience with all aspects of decision-making related to breast cancer treatment. Interviews were audio-taped, transcribed, and coded with NVIVO8. Qualitative data were further analyzed to identify factors influencing decision-making regarding BCT. A comparative matrix analysis was conducted to further evaluate women's appraisal of their surgical decision-making process and how this impacted their long-term HR-QOL. RESULTS: Nineteen patients were included in the analysis. The mean age was 58.3 (+ 12.2) years, 52.9% were married, 84.2% were Caucasian, 68.4% were currently employed and 31.6% had a family history of breast cancer, 10.4% diagnosed with Stage 0, 52.6% stage I and 36.8% stage II breast cancer. Factors contributing to decision-making were dichotomized into satisfied (n=11) or dissatisfied (n=8). Satisfied patients were further categorized as either (i) positive outlook n= 2; (ii) acceptance of choice n= 9; Dissatisfied patients were further categorized as (i) experiencing regret n=4; (ii) fear of recurrence n=4. **CONCLUSIONS:** As decision-making needs vary by individual women, a personalized decision-making approach is an essential factor to improve HR-QOL among women with early stage breast cancer. Additional prospective quantitative studies of the preoperative decision-making and post-operative HR-QOL are necessary, as these findings may compliment existing outcomes research

#### CANCER - Health Care Use & Policy Studies

### PCN212

## EVIDENCE-BASED MEDICINE AS A DRIVER OF IMPROVING COLORECTAL CANCER SCREENING IN UKRAINE

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