PCN102

THE IMPACT OF MUSCLE WASTING OR WEAKNESS IN ADVANCED PANCREATIC CANCER PATIENTS: DEVELOPMENT OF A CONCEPTUAL MODEL

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OBJECTIVES: There is a paucity of published literature or patient-reported outcome instruments investigating the concept of muscle weakness/wasting and its impact on advanced pancreatic cancer patients' lives. The objective of this study was to explore locally advanced or metastatic pancreatic cancer patients' experience of muscle weakness/wasting and its impact on their lives and develop a conceptual model to illustrate the key concepts raised and their inter-relationships. **METHODS:** A cross-sectional qualitative study using non-probabilistic purposive sampling strategy recruited patients through 3 clinical sites in the United States. An interview discussion guide was developed using information obtained from a review of published literature. In-depth semi-structured interviews were conducted over the telephone. Data was analysed using a thematic analysis approach. A codebook developed during qualitative analysis was used as a basis for the development of the conceptual model. The conceptual model was reviewed by an expert clinician. **RESULTS:** Twenty-three advanced pancreatic cancer patients who experienced muscle weakness were interviewed. The sample included a wide age range (mean 63.3; range 38 - 87) and both male (78.3%) and female (21.7%) patients. Analysis of the qualitative data found that several areas of patient's lives were impacted by the muscle weakness/wasting they experienced. Patients identified a number of concepts which fell into the domains of physical activities of daily living, physical performance, social functioning, leisure activities, appearance, emotional impact and work. A conceptual model was developed to graphically illustrate the relationship between the concepts and their moderating factors. **CONCLUSIONS:** Muscle weakness and wasting have a noticeable and wide reaching negative impact on the lives of patients with advanced pancreatic cancer. This research identifies concepts of concern that could be explored as potential endpoints in future clinical trials.

PCN103

VARIATION IN HEALTH-RELATED QUALITY OF LIFE BY AGE AMONG PATIENTS WITH CHRONIC LYMPHOCYTIC LEUKEMIA

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OBJECTIVES: Among patients with chronic lymphocytic leukemia (CLL), advanced age is typically associated with limited functional status. We examined the relationship between age and health-related quality of life (HRQOL) for CLL patients treated in the United States (US). **METHODS:** Data were collected in Connect® CLL, a prospective US observational registry begun in 2010. Patient demographics and clinical characteristics were provided by clinicians. Patient HRQOL was self-reported in the clinic at enrollment. Patients completed the Functional Assessment of Cancer Therapy-Leukemia (FACT-Leu), EQ-5D, and Brief Fatigue Inventory (BFI). FACT-Leu, EQ-5D and BFI scores were analyzed by age group (<65, 65-74, >74). Statistical significance of differences was ascertained by ANOVA (SAS 9.1). **RESULTS:** Baseline HRQOL data were reported by 899 patients from 161 centers. Patients were predominantly male (63%) and white (90%) with mean age at 69 (standard deviation 11) years. FACT-Leu results suggest that overall HRQOL is better among the 65-74 cohort than either younger or older patients ($p=0.0421$), reflecting better physical ($p=0.0100$) and CLL-specific ($p=0.0083$) scores. FACT-G scores are similar among the two older groups and better than the younger patients ($p=0.0275$), reflecting better emotional well-being ($p=0.0127$). EQ-5D data indicate that mobility is most impaired in the oldest group compared to the younger groups ($p<0.0001$), and that usual activities ($p=0.0009$) and pain/discomfort ($p<0.0001$) are worse in both younger and older cohorts compared to those 65-74. No significant differences were observed in fatigue measured by the BFI, or in overall HRQOL measured by the EQ-5D Visual Analogue Scale. **CONCLUSIONS:** Connect® CLL registry results indicate that overall HRQOL is not worse with older age, as both younger and older age groups have worse HRQOL in certain domains. Future analyses should determine how HRQOL is affected over time with treatment and changes in disease. These results serve as a baseline reference.

PCN104

PERFORMANCE STATUS OF PATIENTS WITH ADVANCED MELANOMA OVER TIME IN ROUTINE CLINICAL PRACTICE

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OBJECTIVES: Measurements of Eastern Cooperative Oncology Group Performance Status (ECOG-PS) are widely used to assess disease progression, determine appropriate treatment and prognosis; however, ECOG-PS over time in routine clinical practice is rarely published. This study examined ECOG-PS in patients with stage III/IV melanoma during 1-year from diagnosis in community oncology clinics. **METHODS:** Electronic medical records from 47 oncology clinics across the US were used for this analysis. Patients who had melanoma diagnosis, stage information, and ECOG-PS scores were included. Patient clinical, demographic, and treatment characteristics were described. ECOG-PS at diagnosis of stage III and IV melanoma and at every three months were analyzed. Mixed model analysis was undertaken to examine changes in ECOG-PS over time. **RESULTS:** A total of 266 patients (102 stage III and 164 stage IV) were included in this study. At baseline, stage IV patients had significantly worse mean ECOG-PS scores than stage III patients (0.79 vs. 0.35, $p=0.0001$). In patients with both baseline and at least one post-diagnosis assessment (84 and 110 patients with stage III and IV, respectively), mixed model estimated mean ECOG-PS scores changed from 0.69 at baseline to 1.14 at 1-year for stage IV patients and were relatively stable for stage III patients (0.47 (baseline) and 0.54 (1-year). There were 25 stage III and 43 stage IV patients who received drug treatments for melanoma. The majority of stage III patients (84%) received Interferon only; while 44.2% of stage IV patients received carboplatin+paclitaxel, 32.6% dacarbazine, and 11.6% cisplatin. Among drug treated patients with stage IV, worsening ECOG-PS over time (from 0.87 at baseline to 1.14 at one year) was observed. **CONCLUSIONS:** In patients with advanced melanoma treated in community oncology practices, worse ECOG-PS scores and faster deterioration were observed for patients diagnosed with stage IV compared to stage III. Even in patients treated with systemic therapies, worsening ECOG-PS was also observed over time.

PCN105

PATIENT-REPORTED OUTCOMES (PROS) AND TOLERABILITY OF THERAPEUTIC AGENTS IN PATIENTS WITH METASTATIC PROSTATE CANCER (MPC): A SYSTEMATIC LITERATURE REVIEW

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OBJECTIVES: Prolongation of survival or prevention of bone metastases are the main objectives of phase 3 studies in MPC patients refractory to hormone therapy or castration resistant (HRPC/CRPC). In addition to efficacy, PROs and tolerability should be assessed to define treatment benefit, as PROs (eg. quality of life [QOL] and pain response) measure the patient's subjective experience and can be correlated with hard outcomes (eg, pain intensity and survival). A systematic review evaluated the number of studies reporting PROs in HRPC/CRPC; tolerability was a secondary objective. **METHODS:** A predefined search strategy was used (2007-2011) in Medline, EMBASE, Cochrane Library, conference proceedings (ASCO/ESMO), AHRQ, NICE, and NHS HEED. Controlled clinical trials, retrospective cohort studies, and literature reviews were included. Studies in children, non-English language studies, case reports/series, and studies with preliminary/incomplete results were excluded. **RESULTS:** Of 79 studies identified, only 14 (18%) evaluated PROs and tolerability. The most common PRO was pain, measured using the Present Pain Intensity (PPI) instrument. Abiraterone showed statistically significant improvements in survival and pain response. Cabazitaxel did not show improvement in pain response, despite survival benefit. Bone-targeted agents (zoledronic acid/denosumab) prolonged the time to first on-study skeletal related event (SRE) but did not assess PROs. Radium-223, a new bone-targeted radiopharmaceutical agent emitting α-particles, included QOL as a secondary endpoint and showed survival benefit. Toxicities of the new therapies also require careful consideration. Fluid retention, hypertension, and hypokalemia are characteristic toxicities with abiraterone (predominately Grade 1/2). Cabazitaxel has a high incidence of Grade 3/4 neutropenia (82%), febrile neutropenia (8%), and diarrhea (6%). Radium-223 is well tolerated with a low incidence of Grade 3/4 neutropenia (2%). **CONCLUSIONS:** PROs are incorporated in studies of new therapies for MPC, although mainly as secondary endpoints with delayed reporting of results. Therefore, safety profiles play an important role in individualized treatment selections.

PCN106

DEVELOPMENT OF A GUIDANCE FOR INCLUDING PATIENT-REPORTED OUTCOMES (PROS) IN LATE-PHASE ADULT CLINICAL TRIALS OF ONCOLOGY DRUGS FOR COMPARATIVE EFFECTIVENESS RESEARCH (CER)

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OBJECTIVES: The FDA and EMA have published guidance documents to direct the development and inclusion of patient-reported outcomes (PROs) for drug approval and labeling. The Center for Medical Technology Policy's (CMTP) objective is to develop parallel guidance for post-regulatory decision makers for the appropriate inclusion of patient-reported outcome measures in the design and implementation of CER clinical trials. **METHODS:** A semi-structured questionnaire pertaining to the use of PROs in CER was developed based on a review of scientific literature and consultation with PRO study methodologists. In-depth interviews were conducted with 15 individuals from the clinical research, clinical practice, regulatory, payer, and patient communities. From these findings, an initial list of recommendations were developed, and the Center for Medical Technology Policy (CMTP) worked with a multidisciplinary technical working group of leading medical researchers, ePRO consultants, and patient advocates to establish a concrete set of recommendations. Fifteen recommendations were incorporated in the guidance document and posted on CMTP's website for a 2-month public comment period. Organizations were contacted to provide feedback through an online survey that elicited both Likert-scale questions and open comments. The guidance was then revised. **RESULTS:** A list of 12 "core" symptoms was identified as key items to measure in all late-phase studies for cancer trials: anorexia, anxiety, constipation, depression,