Findings and Interpretation: We found 1229 articles with the above keywords. After abstracts exhaustive reading, independently by three authors, accordance with inclusion criteria, 6 of those articles were selected. After those publication analysis, two main themes were observed: biomarkers associated with quality of life in patients with cancer; evidence of association between polymorphisms and cytokines with CRF. Most of articles appointed the term “sickness behavior” to define the syndrome resulting from the release of pro-inflammatory cytokines as part of the immune response to cancer. With the exception of a clinical trial, all manuscripts pointed to genotypic differences related to different levels of fatigue.

Discussion and Implications: The findings indicated a lack of consensus among researchers about the exact set of cytokines and polymorphisms associated with CRF. It was emphasized the need for further investigations given the gaps that still existing on the matter. Once identified the actual pathophysiological pathways of CRF, the measurement of biological markers may be implemented on clinical practice as part of the individualized nursing assistance, and genomic based healthcare. The understanding of biological issues as determinants of subjective experiences such as FRC improve interventions to prevent and resolve this symptom.

C2-0158 OCCURRENCE OF COMMON SYMPTOMS CAN BE USED TO CATEGORIZE ONCOLOGY PATIENTS WITH DISTINCT SYMPTOM EXPERIENCES. Christine Miaskowski, RN, PhD, University of California, San Francisco, CA; Janine Cataldo, RN, PhD, University of California, San Francisco, CA; Bruce Cooper, PhD, University of California, San Francisco, CA; Steven Paul, PhD, University of California, San Francisco, CA; Claudia West, RN, MS, University of California, San Francisco, CA

Underwriting or Funding Source: National Cancer Institute
Poster Category: Research Study

Topic Significance and Study Purpose/Background/Rationale: The purpose of this study was to evaluate for differences in potassium channel gene polymorphisms in patients with and without severe persistent breast pain following breast cancer surgery.

Methods, Intervention and Analysis: At seven timepoints (i.e., just prior to and monthly for six months following surgery for breast cancer), 398 women completed self-report questionnaires about demographic and clinical characteristics, as well as pain in their affected breast. Growth mixture modelling was used to identify latent classes of patients with distinct pain trajectories. Chi-square tests were used to evaluate for differences in potassium channel gene polymorphisms between the latent classes. For this analysis, patients who reported no breast pain during the six months of the study were compared to patients who reported severe persistent pain (i.e., worst pain scores of ~8).

Findings and Interpretation: Patients in the severe persistent pain class were significantly younger, had a higher number of comorbidities, and a poorer functional status. Between group differences were found in polymorphisms for the following potassium channel genes: KCND2 (p=.013), KCNJ3 (p=.003), KCNJ6 (p=.002), and KCNK9 (0.041).

Discussion and Implications: This study provides preliminary evidence of distinct groups of breast cancer patients who differ in their experience with pain following breast cancer surgery. In addition, variations in potassium channel genes contribute to the development of severe persistent breast pain. These associations may help to identify high risk patients.

C2-0167 NAVIGATING THE SYSTEM OF CANCER GENETIC TESTING: CLINICAL GENETIC COUNSELORS’ PERSPECTIVES OF PATIENT ACCESS, RESOURCES, AND FOLLOW-UP CARE. Jean Boucher, PhD, RN, ANP, University of Massachusetts Worcester, Worcester, MA; Meghan Underhill, PhD, RN, Dana-Farber Cancer Institute, Boston, MA; Karleen Habin, BS, RN, Cancer Resource Foundation, Marlborough, MA; Debra Lundquist, MS, RN, Cancer Resource Foundation, Marlborough, MA; Marylou Woodford, RN, Cancer Resource Foundation, Marlborough, MA; Donna Guillaume, MS, RN, University of Massachusetts Worcester, Worcester, MA

Poster Category: Research Study

Topic Significance and Study Purpose/Background/Rationale: The prominence of cancer genetics testing is outpacing current