

# Oncology Nursing Society 31st Annual Congress

## Podium and Poster Abstracts

For your convenience, all Podium and Poster Abstracts have been indexed according to subject (page 486) and first author (page 491).

The abstracts appear exactly as they were submitted and have not undergone editing or the *Oncology Nursing Forum* Editorial Board's review process. We have made every effort to be accurate. If any errors or omissions have been made, please accept our apologies.

Abstracts that are not being presented do not appear.

**1**  
BUILDING A COLLABORATIVE NURSING PRACTICE TO PROMOTE PATIENT EDUCATION: AN INPATIENT AND OUTPATIENT PARTNERSHIP. Kristin Negley, MS, RN, AOCNS, Sheryl Ness, MA, RN, Janine Kokal, MS, RN, Kelli Fee-Schroeder, BSN, RN, Jeanne Voll, MS, RN, Chris Hunter, AD, RN, and Kristi Klein, BSN, RN, Mayo Clinic, Rochester, MN.

Oncology nursing staff, in a large Midwestern medical facility, identified that patient education for oncology patients can be incomplete or duplicative between the inpatient & outpatient practices. Although excellent patient education is provided in both settings, the messages taught are unknown between practice areas without extensive chart review. Developing a formal partnership that promotes communication and consistent information and education helps to assure standards of care are congruent between these two settings.

The purpose of this project was to build a collaborative nursing practice between inpatient and outpatient practice settings that promotes a seamless, integrated process of meeting the educational needs of oncology patients and families, along with providing a unique opportunity to enhance oncology nurse's professional development.

Two inpatient nurses, partnered with oncology nurse educators, worked one day every two weeks for three months in an outpatient Cancer Education Center interacting with cancer patients and families, teaching classes, and working on specific projects. In addition to promoting available educational materials, the nurse educators focused on professional development skills such as learning theories and education competencies, formal presentations, teaching strategies, and individual and group patient education interactions. The inpatient nurses provided the unique clinical knowledge and expertise of bedside nursing to the outpatient education practice.

An extensive evaluation, utilizing Kirkpatrick's four levels of evaluation, was conducted to assess collaborative practice, staff development, and nursing job satisfaction. Evaluation was completed by written assessment and oral interviews pre and post project with nurse participants, nurse educators, and nurse managers (post only). Participants were also asked to keep anecdotal comments of patient encounters.

The evaluation showed positive results with themes including: increased collaboration and communication between practices; increased awareness and application of educational materials; enhancement of professional development skills; and the provision of seamless, integrated care. This collaboration project has started a direct communication process between the Cancer Education Program and the inpatient oncology nurses with future projects in process. Collaboration between nurses is important but infrequently documented in literature. This project, though small scale, resulted in nursing collaboration with high impact outcomes of positively affecting nursing knowledge and patient care.

**2**  
THE DEVELOPMENT OF A PATIENT EDUCATION CAREPATH: A PILOT PROJECT. Marlana Mattson, RN, BSN, OCN®, University Hospitals of Cleveland Ireland Cancer Center, Cleveland, OH.

Background/Problem: Patient education regarding chemotherapy treatments, side effects and symptom management is a responsibility of

the oncology nurse. Oncology nurses consider patient education a high priority. This was described in the ONS Ambulatory Office Nurse Survey published in 2004. Oncology nurses are often faced with the challenge of integrating teaching into a busy schedule of patient care activities. Although oncology nurses consider patient education a high priority, chart reviews often reflect incomplete patient education or incomplete documentation. The lack of specific guidelines related to patient education has led to variable teaching practices among oncology nurses.

Purpose: The purpose of this project is to develop and implement an outcome oriented, multidisciplinary patient education carepath that ensures a consistent, high quality standard of patient education at an NCI-designated Comprehensive Cancer Center.

Intervention: A sub-group of the Ireland Cancer Center Patient Education Committee completed an assessment of the current patient education practices. Committee members outlined patient education topics relevant to general oncology treatments (i.e. nausea, infection, fatigue) and described the content necessary to provide comprehensive patient education. A carepath was designed with major treatment-related patient education topics organized in rows. Columns across the page represented periods of time. Individual blocks on the carepath list topics of patient education that should be discussed at a specific point in time. Each block includes bullet points of information to ensure consistent topic teaching among oncology RN staff. Group discussions, staff meetings, and poster presentations were used to introduce the patient education carepath project. The carepath was then introduced into three disease specific medical oncology practices for a six-week trial.

Evaluation: A retrospective chart audit to assess for documentation trends and completeness. All oncology RNs using the new patient education carepath will complete an evaluation tool to determine ease of use and the comprehensiveness of the carepath content.

Discussion: Implications for oncology nursing practice include consistent high quality patient education, as well as improved documentation. Integration of the patient education carepath into standard practice at the Ireland Cancer Center is the final project goal.

**3**  
A VIDEO IS WORTH A THOUSAND WORDS. Ellen Carroll, BSN, RN, and Bazetta Blacklock-Schuber, BS, BSN, RN, National Institutes of Health, Bethesda, MD.

Patient education is the cornerstone of oncology care. Consistent and accurate patient teaching impacts patient outcomes, especially for diverse populations. Increasingly, patients are asked to take on more self-care responsibilities, such as central line care. With a rise in both non-English speakers and self-care responsibilities, new approaches to patient education are required. Moreover, oncology nurses at this institution identified a variation in the care of central lines by patients/caregivers.

To address inconsistencies and improve effectiveness in teaching line care, this project involved developing a video to enhance and complement written materials and patient instruction for both English/Spanish speakers.

Patient, caregivers and staff were informally surveyed on existing teaching methods related to line care. Using responses and hospital protocols,

these study nurses through upfront education, effective assessment, and appropriate intervention.

Oncology nurses may encounter these toxicities in patients being treated with Gefitinib and Rapamycin. This information will assist nurses in developing treatment strategies to effectively manage these toxicities prior to the patients' initiating therapy.

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**SAFETY PERSPECTIVES ON THE ROLE OF AMG 706, AN INVESTIGATIONAL, ORAL, MULTIKINASE INHIBITOR (MKI), FOR SECOND-LINE TREATMENT OF GASTROINTESTINAL STROMAL TUMORS (GIST).** Marilyn Mulay, RN, MS, OCN®, Premiere Oncology, Santa Monica, CA.

Multikinase inhibitors (MKIs) are being examined for the treatment of gastrointestinal stromal tumors (GIST), a rare neoplasm characterized by well-defined mutations in growth factor receptors (incidence estimated at 5000 cases per year in the US). Patients with GIST frequently possess mutations in c-KIT, which encodes for a receptor tyrosine kinase involved in tumor cell proliferation. Imatinib, a small molecule cancer therapeutic, inhibits Kit and is currently approved for the treatment of GIST. Many imatinib-treated patients with GIST relapse due to additional mutations that confer imatinib resistance. Therefore, new therapeutics targeting mutant Kit and other oncogenic pathways are needed. Angiogenesis, the formation of blood vessels from the existing vasculature, is involved in the malignant potential of GIST. Inhibitors of angiogenesis are important therapeutic candidates for the treatment of imatinib-resistant GIST.

To provide a fundamental introduction to GIST and the side effects seen with AMG 706 treatment, along with methods for managing them.

AMG 706 is an oral MKI that inhibits vascular endothelial growth factor receptors (VEGFR), Kit, and platelet-derived growth factor receptors (PDGFR), resulting in potent inhibition in models of angiogenesis, tumor proliferation, and lymphangiogenesis. AMG 706 inhibits tumor growth directly and blocks its blood supply. AMG 706 is being examined in patients with imatinib-resistant GIST.

Side effects of AMG 706 most commonly include hypertension, diarrhea, fatigue, nausea, and headache. Hypertension has been observed with other antiangiogenic agents and is easily manageable with antihypertensive medication. Patients treated with AMG 706 should be frequently monitored for blood pressure changes. Antihypertensive drugs may be prescribed to bring blood pressure to acceptable levels. The short half-life of AMG 706 allows for rapid treatment interruption in the case of serious adverse effects.

AMG 706 is generally well tolerated, and its activity on multiple kinase targets, including VEGFR, PDGFR, and possibly mutant Kit, makes it an ideal candidate for imatinib-resistant GIST. The side effects of AMG 706 tend to be related to its antiangiogenic activity, and are easily monitored and managed.

## 46

**CLINICAL CHARACTERISTICS AND MANAGEMENT STRATEGY OF REV-LIMID INDUCED TUMOR FLARE REACTION IN PATIENTS WITH CLL.** Kena Miller, FNP, Laurie Musial, RN, and Dawn Depaolo, RN, Roswell Park Cancer Institute, Buffalo, NY; and Cynthia Crystal, RN, Celgene, New Jersey.

Tumor Flare Reaction (TFR) is new side effect (SE) unique to chronic lymphocytic leukemia (CLL) patients treated with lenalidomide. This SE is not reported but pose major concern in patient management. Oncology nurses (ON) learn first hand about SE occurring with new therapies and must develop effective strategies to identify and manage these SE and to promote patient education.

Purpose: To bring forth the clinical characteristics of TFR and share our management experience. Lenalidomide, an immunomodulatory oral agent, FDA approved for 5q deletion MDS and currently investigated in multiple myeloma and CLL patients.

TFR is characterized by a sudden/tender increase in disease effected lymph nodes (LN)/spleen with rash and/or low-grade fever, occurring within 24-48hours of lenalidomide treatment. Usually during 1st cycle and lasting for 14 days. Some patients show an increase in WBC.

Twenty-nine patients with relapsed/refractory CLL enrolled on a phase II trial received lenalidomide 15- 25 mg/d for 21d of 28-day cycle. ON noted sudden tender increase in LN sizes. Progressive disease was a concern but a concurrent decrease in leukemia counts helped identify this an immune reactivation phenomenon, now referred as TFR. TRF

management strategy:

1. Ibuprofen(400-600mg) Q8-Hr x 10-14 days, at onset of pain/LN swelling.
2. Counseling
3. Oxycodone PRN for severe pain.
4. Benadryl PRN

These interventions through ON resulted in adequate management of TFR and improved compliance.

TRF is a new SE of lenalidomide with high incidence, peculiar to CLL. As this agent becomes commercially available, it is germane to the safety and welfare of patients that effective SE management strategies are utilized by ON and be shared with and clinical practitioners to improve patient outcomes. In our experience patient education, counseling and support by the ON played a critical role in early identification and management of this SE.

## 47

**PERFORMANCE IMPROVEMENT: FATIGUE INTERVENTION PROJECT.** Sandy Balentine, RN, OCN®, Mary Dinos, RN, OCN®, Maureen Flannery, LSW, and Fran Cartwright, RN, PhD, AOCN®, Valley Hospital, Paramus, NJ; Bette Williams, RN, Valley Hospital, Ridgewood, NJ; and Linda Ohnikian, RN, Valley Hospital, Paramus, NJ.

Fatigue remains a common and distressing symptom in individuals with cancer. ONS recommends that all patients with cancer should be assessed for fatigue and receive fatigue education and management.

The Performance Improvement Cancer Committee (PICC) identified the need to standardize the assessment and management of fatigue in inpatient oncology, radiation oncology and the ambulatory infusion center. A fatigue management packet was developed based on a literature review. The information packet is consistent with the interventions listed on the ONS "Evidence that nursing interventions influence fatigue".

The 0 to 10 fatigue scale was entered into the plan of care in inpatient oncology, radiation oncology and the ambulatory infusion center. Patients are assessed at the start of treatment, at defined intervals, and when patients complain of fatigue. All patients are given the fatigue management packet. Consistent with the NCCN guidelines (2005) and OCN® (2006 - 2009), patients who score 4 or greater on the 0 -10 scale (moderate to severe fatigue) are referred to a fatigue counselor for a more comprehensive assessment.

Data for the first month of the fatigue intervention project was reported at the PICC. Although it is a small sample, the data suggests that there are significant differences across diagnoses and treatment regimens. This will remain on the PICC agenda. Data will be examined to identify patients response to the intervention packet and counseling. Revisions to the project will be made. Topics for research will be explored based on this outcome data.

The oncology nurse is in a pivotal position to measure fatigue and to provide information about fatigue management that can influence severity of fatigue and/or the distress experienced form this troubling symptom.

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**VIRTUAL REALITY INTERVENTION FOR CHEMOTHERAPY SYMPTOMS.** Susan Schneider, RN, PhD, AOCN®, Duke University, Durham, NC.

Successful completion of chemotherapy offers a greater chance for tumor response and quality of life. Many patients have difficulty adhering to the regimen because of chemotherapy-related symptoms. Virtual reality (VR) provides a distracting, immersive environment, which blocks out competing stimuli, ameliorates symptoms, and helps patients tolerate treatments.

To determine the immediate and short-term effects of a VR intervention on symptom distress in adults with lung, colon or breast cancer who were receiving intravenous chemotherapy.

Lazarus and Folkman's Stress and Coping Model identify distraction as a coping strategy for managing stressful situations.

123 adults at Duke University participated in the study. The average participant was 54 years old, female and Caucasian. A crossover design was used to examine VR as a distraction intervention to relieve symptom distress in outpatients receiving chemotherapy and to determine the immediate and 48-hour post-treatment effect on symptom distress. Participants were