Although side effects associated with chemotherapy-based regimens have been well described, a substantial discordance exists between the incidence and severity of side effects noted by professional caregivers and those noted by patients. To better determine the true incidence of chemotherapy-related side effects, we evaluated patients being treated with standard regimens for breast, colon, ovarian, or non-small cell lung cancer (NSCLC), using a validated, patient-reported outcomes assessment instrument: Patient Care Monitor® (PCM®).

The study enrolled 384 patients. PCM was used to prospectively assess symptom distress of 6 targeted side effects—nausea/vomiting (NV), oral mucositis (OM), diarrhea, fatigue, peripheral neuropathy (PN), and cognitive dysfunction (CD)—for each chemotherapy cycle on a scale of 0 to 10 (severe distress=10). Patients were considered to have moderate-to-severe side effects if the maximum score was ≥4 during the first 3 cycles of chemotherapy. Patients received their planned chemotherapy and supportive care deemed appropriate by their physicians.

The frequency of patient-reported, moderate-to-severe side effects was substantial and varied by diagnosis and chemotherapy regimen. Among patients with breast cancer (n=187), fatigue (57%), chemotherapy-induced nausea and vomiting (CINV) (43%), and OM (31%) were most commonly reported, whereas fatigue (54%), CINV (36%), and PN (26%) were most often cited by patients with colon cancer (n=103). Patients with NSCLC (n=55) reported fatigue (63%), OM (38%), and PN (38%) most frequently. CINV was a consistent finding among all regimens, ranging in frequency from 30% among NSCLC patients to 43% in patients with breast cancer, despite the ubiquitous use of standard antiepileptic protocols.

The side-effect burden associated with chemotherapy remains, despite improvements in supportive care technology and therapeutics. Advances in chemotherapy-regimen-specific supportive care are needed to provide more tailored support care interventions in advance of treatment and, thus, a more optimized patient treatment plan.

• Despite improvements in supportive care technology and therapeutics, moderate-to-severe side effects remain a problem for patients, families, and clinicians because they interfere with patient function, and are costly and disruptive to practice efficacy.

• Patient-reported, second-generation 5-HT3 antagonists demonstrated significant improvement in CINV, especially chemotherapy-induced nausea.

• The effect of 5-HT3 antagonists on CINV was observed regardless of the chemotherapy regimen. Multivariate analysis demonstrated that only the chemotherapy regimen was associated with the occurrence and severity of nausea, vomiting, and diarrhea.

• The self-reported incidence of studied side effects generally exceeds the rates typically cited in the literature. This frequency ranged from 30% among NSCLC patients to 43% in patients with breast cancer, despite the ubiquitous use of standard antiemetic protocols.

• Of all the patients with reported moderate-to-severe CINV, 100% experienced diarrhea, 95% experienced fatigue, 75% experienced nausea, and 75% experienced vomiting.

• Of those receiving AC-based regimens, 91% received standard antiemetic supportive care with a Dexamethasone/NK1 antagonist, as well as standard provider and/or management of other side effects.

• There is a need for new tools to help predict individual risk for chemotherapy-induced side effects and allow for more tailored supportive care interventions in advance of treatment and, thus, a more optimized patient treatment plan.

• Total of 384 patients were enrolled over a 8-month period (9 excluded and 1 voluntarily withdrew from study).

• Use of a Validated Assessment Tool Demonstrates the Frequency of Patient-experienced, Regimen-related Side Effects Associated With the Treatment of Common Solid Tumors

• Conclusions

• The self-reported incidence of side effects remains high and may even be underestimated, given the reporting through only the first 3 cycles of chemotherapy, and demonstrates the need for continued monitoring and assessment of the consequences of chemotherapy-induced side effects for oncology nurses and other supportive care providers.

• More effective supportive care strategies along with new tools are needed to help predict individual risk for chemotherapy-induced side effects. This would allow for more tailored supportive care interventions in advance of treatment and, thus, a more optimized patient treatment plan.