

**BEWARE! LIVE VIRUS IN ONCOLOGIC THERAPY:
TALIMOGENE LAHERPAREPVEC (TVEC) AND NURSING CONSIDERATIONS**

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Background Information: Melanoma is the most common form of skin cancer. According to the American Cancer Society (2016), melanoma accounts for 76,380 estimated diagnosed new cases and 10,130 deaths in the United States each year. With the increasing numbers of melanoma cases, a new oncolytic drug, Talimogene laherparepvec (TVEC), was recently approved by the Food and Drug Administration (FDA) for use in the local treatment of melanoma tumors, recurrent after initial surgery. TVEC contains an attenuated live herpes simplex 1 virus which is genetically modified to replicate inside tumors, causing rapid oncolysis. The knowledge and education of TVEC administration and proper handling is important to the nursing staff, patients, and caregivers.

Objectives of Project: The goal of this project was to improve nursing knowledge about administration and proper handling of the TVEC medication, characteristics and safety implications, and assess the level of knowledge among Post Anesthesia Care Unit (PACU) nurses in regards to TVEC therapy.

Process of Implementation: A pretest questionnaire was given to 128 PACU nurses to assess their knowledge level on TVEC, proper administration, safe handling, and patient education. Based on the responses, 25% of the nurses failed to recognize appropriate personal protective equipment (PPE), safe handling of the medication, and patient education. A PowerPoint presentation was developed using the teach-back methodology to address the nursing knowledge deficit.

Statement of Successful Practice: A posttest questionnaire was administered to the same 128 PACU nurses to assess their knowledge regarding TVEC. Overall, the nurses' knowledge increased from 75% to 99%, based on data collection. In addition, standard infection control, specific to patients who will receive TVEC treatment, was identified with the support of the institution's infection control and employee health teams.

Implications for Advancing the Practice of Perianesthesia Nursing: In a large oncology teaching institution, many patients receive medications and therapies that are not common in the clinical setting. The identification and knowledge about TVEC administration and safety is important to increase nursing knowledge and prevent accidental exposure or nosocomial infection acquired from a live herpes simplex 1 virus in oncologic therapy.