Radiation Safety Guidelines for Radioimmunotherapy With Yttrium 90 Ibritumomab Tiuxetan

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Radioimmunotherapy is a new cancer therapy that combines the cytotoxicity of radiation with the tumor-specific targeting of monoclonal antibodies. Yttrium 90 (Y-90) ibritumomab tiuxetan (Zevalin®, IDEC Pharmaceuticals Corporation, San Diego, CA) is indicated for the treatment of patients with relapsed or refractory low-grade, follicular, or transformed B-cell non-Hodgkin’s lymphoma (NHL), including patients with rituximab-refractory follicular NHL. Y-90 ibritumomab tiuxetan requires only universal safety precautions and does not impose undue risks or radiation safety restrictions on patients or healthcare workers. The ibritumomab tiuxetan regimen can be administered safely in an outpatient setting. Nurses should become familiar with the necessary precautions in caring for patients treated with Y-90 ibritumomab tiuxetan, both to educate patients about safety issues and to minimize the risk of radiation exposure to staff and others.

Key Words: radioimmunotherapy, safety