Romidepsin: A New Drug for the Treatment of Cutaneous T-Cell Lymphoma

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Patients with cutaneous T-cell lymphoma (CTCL) have a rare, disfiguring, and life-threatening subtype of non-Hodgkin lymphoma primarily localized to the skin. Their immune systems are altered and their skin is compromised. In addition, they are highly prone to infections—the most common cause of death in patients with this disease. Patients presenting with early-stage disease involvement typically are treated with topical therapies; patients with advanced-stage and recurrent disease require systemic treatment. Specialized knowledge is required by oncology healthcare providers to manage the wide array of symptoms experienced by these patients as a part of the natural course of this disease. A new drug, romidepsin, approved by the U.S. Food and Drug Administration, is indicated in the treatment of relapsed CTCL. The authors discuss use of romidepsin in the context of CTCL and the information needed to safely administer romidepsin and manage its side effects.

Cutaneous T-cell lymphoma (CTCL) is a heterogeneous category of non-Hodgkin lymphoma involving the skin as the primary site of malignant T-lymphocyte proliferation. The malignant skin-homing lymphocytes also invade and traffic between the lymph system, blood, and visceral organs, creating variable and complex clinical presentations. Appearance, degree of blood involvement, histology, immunophenotypic profile, and prognosis can vary widely among patients, making treatment and nursing care a challenge. Mycosis fungoides (MF) and its leukemic variant, Sézary syndrome (SS), are the most common types of CTCL. A review of the rare disease CTCL is presented, followed by a discussion of the clinical development for romidepsin, which was approved by the U.S. Food and Drug Administration (FDA) for treatment of CTCL. Finally, the article will summarize drug administration interventions and nursing considerations for this complicated patient population.

Because treatment of patients with CTCL often moves from topical in early stage to systemic therapies in more advanced-stage disease, both dermatology and oncology are involved in determining the course of treatment. The CTCL disease course can be indolent or it can demonstrate rapid progression. Of the systemic options available for CTCL, traditional therapy includes biologics and a wide array of chemotherapeutic agents, maintaining control with varying success. Strategies to improve outcomes are an important area of clinical research for this patient population.

The chronicle of a new drug starts as compounds are screened preclinically for potential therapeutic value. For every 5,000 compounds screened, about five agents reach clinical trials in human participants and one of those, on average, will eventually be...