An Interdisciplinary Consensus on Managing Skin Reactions Associated With Human Epidermal Growth Factor Receptor Inhibitors

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The use of human epidermal growth factor receptor (HER1/EGFR) inhibitors, such as erlotinib, cetuximab, and panitumumab, often is accompanied by the development of a characteristic spectrum of skin toxicities. Although these toxicities rarely are life threatening, they can cause physical and emotional distress for patients and caregivers. As a result, practitioners often withdraw the drug, potentially depriving patients of a beneficial clinical outcome. These reactions do not necessarily require any alteration in HER1/EGFR-inhibitor treatment and often are best addressed through symptomatic treatment. Although the evidence for using such therapies is limited, an interdisciplinary HER1/EGFR-inhibitor dermatologic toxicity forum was held in October 2006 to discuss the underlying mechanisms of these toxicities and evaluate commonly used therapeutic interventions. The result was a proposal for a simple, three-tiered grading system for skin toxicities related to HER1/EGFR inhibitors to be used in therapeutic decision making and as a framework for building a stepwise approach to intervention.

The use of HER1/EGFR-targeted therapies, such as erlotinib (Tarceva®, OSI Pharmaceuticals, Inc.), cetuximab (Erbitux®, Bristol-Myers Squibb), and panitumumab (Vectibix™, Amgen Inc.), often is accompanied by the development of a characteristic spectrum of skin toxicities (Rhee, Oishi, Garey, & Kim, 2005). Although these events rarely are life threatening, they can cause physical and emotional distress for patients and caregivers. Often, the rash may be mistaken as an uncontrollable adverse effect rather than a treatable side effect. As a result, practitioners withdraw the drug, potentially depriving patients of a beneficial clinical outcome. Oncology nurses often are the first point of contact for patients who are receiving treatment; therefore, understanding the clinical basis for such skin reactions and offering effective and appropriate assessments and interventions are critical.

On October 29, 2006, an interdisciplinary forum was held in Chicago, IL, to discuss skin toxicities associated with HER1/EGFR-targeted therapies. Oncologists, dermatologists, pharmacists, and nurses shared their knowledge on the underlying mechanisms of these events and evaluated existing practices in the hope of reaching a consensus strategy on how best to manage them. This article provides an overview of their discussions.

Human Epidermal Growth Factor Receptor–Targeted Therapies

As a result of an increased understanding of the underlying molecular causes of cancer, biologic targeted agents have

At a Glance

- The use of human epidermal growth factor receptor (HER1/EGFR) inhibitors often is accompanied by the development of a characteristic class-specific spectrum of skin toxicities.
- Skin toxicities related to HER1/EGFR inhibitors do not necessarily require alteration in HER1/EGFR-inhibitor treatment and often are addressed best through symptomatic management.
- Evidence-based treatment recommendations for skin toxicities related to HER1/EGFR inhibitors are not available because no data from controlled clinical studies have been published.

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