

## **Management of HER2-Positive Invasive Micropapillary Breast Cancer: Focus on Chemotherapy Toxicities and Surgical Implications of Typhlitis**

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### **Abstract**

*Background:* Breast cancer remains the most prevalent malignancy in women worldwide and a leading cause of cancer-related mortality. Invasive micropapillary carcinoma (IMPC), though relatively uncommon, exhibits aggressive biological behavior, characterized by lymphovascular invasion and a marked propensity for nodal metastasis. The HER2-positive subtype of IMPC poses particular therapeutic challenges, necessitating targeted biological therapy but also conferring an increased risk of treatment-related adverse events. *Objective:* This review aims to synthesize current evidence on the clinicopathological features and treatment of HER2-positive IMPC, with a special emphasis on the emerging complication of typhlitis in the context of taxane-based chemotherapy.

*Methods:* A narrative review of the literature was conducted to summarize data regarding pathogenic mechanisms, clinical presentation, diagnostic considerations, and management strategies related to HER2-positive IMPC and chemotherapy-associated typhlitis.

*Results:* Existing evidence highlights the aggressive course of IMPC, the therapeutic relevance of HER2-directed regimens, and the rare but potentially life-threatening occurrence of neutropenic enterocolitis in patients receiving taxanes. Although data remain limited, reported cases underscore the importance of early recognition and multidisciplinary management.

*Conclusions:* HER2-positive invasive micropapillary carcinoma is a rare but aggressive breast cancer subtype requiring multimodal therapy. While dual HER2 blockade with taxane-based chemotherapy improves survival, it also increases the risk of severe complications such as typhlitis. Early recognition and timely surgical intervention are essential to reduce morbidity and mortality. With appropriate therapeutic adjustments, systemic treatment can be safely continued, emphasizing the need for better risk stratification and preventive strategies.

**Keywords:** breast cancer, IMPC, HER2, taxane-based chemotherapy, pertuzumab, trastuzumab, typhlitis