Increased understanding of the molecular composition of breast cancer tumors has led to the development of targeted anticancer agents. Novel therapies directed against human epidermal growth factor receptor 2 (HER2) in breast cancer have been developed. One such agent, trastuzumab emtansine (T-DM1), is an antibody drug conjugate that has been shown to be effective in the treatment of women with HER2-positive breast cancer. Phase I and II studies have determined a maximum tolerated dose, and several phase Ib/II, II, and III studies have shown improved tolerability and efficacy compared with the combination of trastuzumab and chemotherapy. The most concerning grade 3 or higher adverse events associated with T-DM1 include thrombocytopenia and transaminitis. To ensure that these adverse events do not delay or interrupt treatment, oncology nurses need to familiarize themselves with these risks and their management. This article reviews the clinical development of T-DM1 and its usage, with a focus on the nurse’s role in preventing and managing adverse events associated with T-DM1 therapy.