Risk Factors for Re-Excision Following Breast-Conserving Surgery

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Gwirtz and Skrine contributed to the conceptualization and design. Rodriguez and Skrine completed the data collection. Wilkins, Newcomb, and Skrine provided statistical support. Newcomb, Gwirtz, and Skrine provided the analysis. All of the authors contributed to the manuscript preparation.

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Breast-conserving surgeries (BCSs) are excisions of breast tissue that are not full mastectomies. Early-stage invasive breast cancer and ductal carcinoma in situ (DCIS) (i.e., cancer of the ductal elements of the breast that has not invaded beyond the ducts) (Dudley & Zucker-man, 2013) can be successfully treated with breast-conserving therapy and postoperative radiation (Hunt, Robb, Strom, & Ueno, 2008). However, some patients who undergo breast-conserving treatment may need to have a second excision or mastectomy to obtain clear margins or address complications. Clear margin refers to a margin of healthy cells surrounding the area of the tumor (Benedet & Roussaville, 2004).

Data from diverse studies across the globe indicate that 7%–30% of patients undergo re-excision, with an average of about 20%. The re-excision rate is even higher for DCIS cases, with rates closer to 30%–60% of patients (Devouge et al., 2013; Jeevan et al., 2012; McCahill et al., 2012; Meier-Meitinger et al., 2012;