

Margin status (Core and Non-core)

Assessment of the adequacy of excision requires close correlation between the surgical excision procedure and pathological examination and in some circumstances such as the presence of calcification, as well as radiological correlation. In particular it is essential that the pathologist is made aware of the depth of tissue excised and whether the surgeon has excised all the tissue from the subcutis to the pectoral fascia.

There remains some controversy regarding the minimum width of uninvolved tissue that defines 'complete' excision in breast conserving surgery, although narrower margins are now more widely accepted as adequate than previously. For this reason it is recommended that the pathologist reports the measurement of the distance between the inked margins and ductal carcinoma in situ (DCIS) (and invasive carcinoma).

Some centres find it helpful to report the approximate extent of margin involvement and the following system is recommended:

- Unifocal: one focus of carcinoma at the margin (single duct involvement)
- Multifocal: two or more foci of carcinoma at the margin
- Extensive: carcinoma present at the margin over a broad front (>5 mm).

If additional margins are taken, it is important to incorporate that into the margin measurements.

Note: There is an assumption that all breast tissue will be resected in patients undergoing a complete mastectomy and that pathological examination of margins is of limited value. However, there is evidence that margin involvement can increase the risk of local recurrence after mastectomy^{1,2} and a statement of the distance to the closest margin(s) and site(s) of margin (including nipple if nipple sparing mastectomy) for such mastectomy specimens should be included.

References

- 1 Fitzsullivan E, Lari SA, Smith B, Caudle AS, Krishnamurthy S, Lucci A, Mittendorf EA, Babiera GV, Black DM, Wagner JL, Bedrosian I, Woodward W, Gainer SM, Hwang R, Meric-Bernstam F, Hunt KK and Kuerer HM (2013). Incidence and consequence of close margins in patients with ductal carcinoma-in situ treated with mastectomy: is further therapy warranted? *Ann Surg Oncol* 20(13):4103-4112.
- 2 Glorioso JM, Gonzalez Juarrero AB, Rodysill BR, Harmsen WS, Habermann EB, Carter JM, Mutter RW, Degnim AC and Jakub JW (2017). Margin Proximity Correlates with Local Recurrence After Mastectomy for Patients Not Receiving Adjuvant Radiotherapy. *Ann Surg Oncol* 24(11):3148-3156.