Margin status (Core and Non-core)

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 and modification of the comprehensive margin analysis and reporting recommendations for wide local excision and other similar specimens are adopted for reporting of mastectomy specimens to include a statement of the distance to the closest margin(s) or site(s) of margin involvement.

Assessment of adequacy of excision requires close correlation between the surgical excision procedure and pathological examination. 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. Similarly it has been recognised that involvement of a margin, particularly the posterior margin in a mastectomy specimen, should also be described as this could result in a recommendation for further surgery or radiotherapy.

There remains some controversy regarding the minimum width of uninvolved tissue that defines 'complete' excision, although narrower margins are now more widely accepted as adequate than previously. For this reason, it is recommended that the pathologist reports the measurement to the inked margins of ductal carcinoma in situ (DCIS) and invasive carcinoma rather than quoting 'complete' excision or 'not at ink' in histology reports.

Some centres find it helpful to report the approximate extent of margin involvement. The following system is recommended - this is considered a non-core feature:

- Unifocal: one focal area of carcinoma at the margin, <5 mm
- Multifocal: two or more foci of carcinoma at the margin
- Extensive: carcinoma present at the margin over a broad front (≥5 mm).