

## Diagnostic classification (Core)

To ensure consensus and consistency of reporting, it is recommended to use the nomenclature and definitions for diagnosis and classification provided by the most recent edition of the World Health Organization (WHO) Classification of Breast Tumours, 5<sup>th</sup> edition, 2019.<sup>1</sup> The International Collaboration on Cancer Reporting (ICCR) dataset includes 5<sup>th</sup> edition Corrigenda, September 2020.<sup>2</sup>

Ductal carcinoma in situ (DCIS) varies in cell appearance, growth pattern and extent of disease and is now considered to represent a heterogeneous group of in situ neoplastic processes. When DCIS involves the epidermis of the nipple only, without underlying invasive carcinoma or DCIS, the classification is Paget disease of the nipple, the majority of which are high nuclear grade and strongly positive for HER2.

Pleomorphic lobular carcinoma in situ (LCIS) has overlapping features with DCIS and may be treated similarly, but at present there is insufficient evidence to establish definitive recommendations for treatment. The current understanding of the natural history of pleomorphic LCIS and florid LCIS is limited, and the optimal treatment is unknown with regard to pursuing negative margins and consideration of additional adjuvant therapies. Nevertheless, although pleomorphic and florid LCIS are not currently included in the American Joint Committee on Cancer (AJCC) pTis classification<sup>3</sup> they remain as a category in the Union for International Cancer Control (UICC) TNM 8<sup>th</sup> edition<sup>4</sup> and there is emerging evidence suggesting that these forms of LCIS might be better treated as DCIS,<sup>1,5</sup> in particular the practice of excision to negative margins.

## References

- 1 WHO Classification of Tumours Editorial Board (2019). *Breast Tumours. WHO Classification of Tumours, 5th Edition*. IARC Publications, Lyon.
- 2 WHO Classification of Tumours Editorial Board (2020). *Breast Tumours, WHO Classification of Tumours, 5th Edition, Volume 2 - Corrigenda September 2020*. Available from: <https://publications.iarc.fr/Book-And-Report-Series/Who-Classification-Of-Tumours/Breast-Tumours-2019> (Accessed 16th June 2021).
- 3 Amin MB, Edge S, Greene FL, Byrd DR, Brookland RK, Washington MK, Gershenwald JE, Compton CC, Hess KR, Sullivan DC, Jessup JM, Brierley JD, Gaspar LE, Schilsky RL, Balch CM, Winchester DP, Asare EA, Madera M, Gress DM and Meyer LR (eds) (2017). *AJCC Cancer Staging Manual. 8th ed*. Springer., New York.
- 4 Brierley JD, Gospodarowicz MK and Wittekind C (eds) (2016). *Union for International Cancer Control. TNM Classification of Malignant Tumours, 8th Edition*, Wiley, USA.
- 5 Foschini MP, Miglio R, Fiore R, Baldovini C, Castellano I, Callagy G, Bianchi S, Kaya H, Amendoeira I, Querzoli P, Poli F, Scatena C, Cordoba A, Pietribiasi F, Kovács A, Faistova H, Cserni G and Quinn C (2019). Pre-operative management of Pleomorphic and florid lobular carcinoma in situ of the breast: Report of a large multi-institutional series and review of the literature. *Eur J Surg Oncol* 45(12):2279-2286.