‘Ductal Carcinoma In Situ of the Breast’ – Is It Time to Replace This Term by ‘Ductal Intraepithelial Neoplasia of the Breast’?

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Dear Editor:
The term ‘Ductal Carcinoma in Situ’ is extensively used in international literature to describe an heterogeneous group of breast lesions. We would like to share with you and the readers of \textit{Onkologie} some concerns about the appropriateness of this terminology.

Conventional classification of intraductal proliferative lesions of the breast has subdivided this heterogeneous group of pathological entities into non-cancer (intraduct hyperplasia (IDH), and atypical intraduct hyperplasia (AIDH)), and cancer (‘DCIS’, grades 1, 2, and 3). This classification has proposed and implies a multistep model in breast carcinogenesis from normal to invasive carcinoma via IDH, AIDH, and grades 1–3 DCIS. Molecular alterations observed in grade 1 DCIS are significantly different from those observed in high-grade DCIS, however, suggesting independent and at least two and possibly more parallel pathways [1].

Unfortunately, the conventional classification system has a number of disadvantages. The first is interobserver variability and lack of reproducibility [2]. For example, the differentiation of AIDH from low-grade DCIS [3] is highly observer dependent resulting in significant differences in patient management. Basically ignored in the conventional classification is that the term ‘carcinoma’ (DCIS) has a tremendous psychological impact for women with the disease (and their relatives) who may feel anxiety, emotional stress, and depression associated with this diagnosis [4]. The third problem is that the diagnosis of ‘carcinoma’ may be associated with the risk of over-treatment, a possibility that persists, given the wide geographic variations in practice standards. This is especially true regarding the use of radiation therapy, in particular for patients with small, low-grade DCIS. The use of radiation therapy in these patients will interfere with any future uses of radiation therapy if and when they develop a true mammary carcinoma. On the other hand, if the designation of ‘carcinoma’ were continued for these lesions, even patients may feel guilty if they do not submit to radiation therapy and many physicians may fear the potential accusation of malpractice.

Despite its many shortcomings, the term DCIS is still widely used for breast lesions. This is in dramatic contrast to the adoption of the more logical destination of intraepithelial neoplasia in other organs, including the cervix, vagina, and vulva, where the terms mild, moderate, severe dysplasia and carcinoma in situ have been replaced by grades 1–3 cervical intraepithelial neoplasia (CIN), vaginal intraepithelial neoplasia, and vulvar intraepithelial neoplasia, respectively. Even in the prostate and pancreas, the terms prostatic intraepithelial neoplasia and pancreatic intraepithelial neoplasia, proposed recently, have gained wide acceptance. We believe that it is time to abandon the designation of carcinoma in situ and to unify the intraductal proliferations/alterations under the designation of intraepithelial neoplasia for mammary lesions that constitute risk factors (albeit of different magnitude) for subsequent development of invasive carcinoma. The term intraepithelial neoplasia has been accepted as an alternative to AIDH/DCIS for the intraductal proliferations and as the optimal designation for the spectrum of ALH/LCIS (WHO 2003) [5].

References