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## 552 - PROBABILITY OF LOCAL RECURRENCE ESTIMATED BY A MODIFIED MSKCC DCIS NOMOGRAM IN PATIENTS WITH DUCTAL CARCINOMA IN SITU TREATED WITH BREAST-CONSERVING SURGERY: A NOVEL TOOL FOR RADIOTHERAPY DECISION-MAKING

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**Introduction:** Radiation therapy (RT) plays an important role in the management of patients with ductal carcinoma in situ (DCIS) of the breast, treated by breast-conserving surgery (BCS). RT significantly reduces the risk of local recurrences (LRs) in unselected patients. Efforts are being made, currently, to de-escalate the RT in this scenario with individualized decision-making. Several biomarkers were developed to predict the probability of LR and aid a tailored clinical decision. **Objective:** The aim of this study was to assess the potential of a modified MSKCC DCIS nomogram to forecast LR after BCS for DCIS patients and assist physicians to recommend RT. **Methods:** Women with DCIS undergoing BCS, with clear surgical margins and external RT, were enrolled in the study. The MSKCC DCIS Nomogram was modified with the omission of the RT parameter. Patients were considered at high risk for LR when the 10-year probability of LR was >10%. Receiver operating characteristic curves were drawn and the areas under the curves (AUCs) of 10-year follow-up evaluation were calculated. **Results:** In all, 110 women were studied. Eight patients had LR (7.3%), five being invasives (62.5%) and three in situ (37.5%). LRs occurred in 6.2% and 12.7% of patients who were classified as high risk by the original and by the modified nomogram, respectively. The AUCs were compared. The modified MSKCC DCIS nomogram is warranted for the 10-year risk LR prediction, and it may reinforce RT indication. **Conclusion:** The modified MSKCC DCIS nomogram may identify patients with DCIS treated by BCS with a high probability of LR and, therefore, may individualize RT recommendation.