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Paper Title:	Grading Invasive Ductal Carcinoma from Whole-Slide Histological Images Using Deep Learning-Based Feature Encoding Techniques
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Abstract

Invasive ductal carcinoma (IDC) grading is essential for determining treatment and prognosis, yet manual grading of whole-slide histological images (WSI) is human-intensive and subject to variability. In this study, we present a deep learning-based approach to automate the grading of breast cancer from WSIs. Given the large size of WSIs, the proposed method extracts descriptive features through a deep neural network-based technique, before classification model is constructed and performed to assign one of three grades. The proposed model efficiently handles the high-resolution nature of the slides. We evaluate the technique on a dataset of breast cancer histological images. The results demonstrate that our deep learning-based technique achieves competitive performance, offering a robust solution for the automatic grading of IDC, reducing the burden on pathologists and enhancing consistency in diagnosis.
