



ASO VISUAL ABSTRACT

ASO Visual Abstract: A New Method of Identifying Pathologic Complete Response Following Neoadjuvant Chemotherapy for Breast Cancer Patients Using a Population-Based Electronic Medical Record System

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We derived and validated a set of natural language processing (NLP)-based machine learning algorithms to accurately (sensitivity = 91%, positive predictive value = 86%, and F1 score = 84) capture pathologic

complete response from surgical pathology reports of breast cancer patients who underwent neoadjuvant chemotherapy (<https://doi.org/10.1245/s10434-022-12955-6>).

Machine Learning Algorithms to Identify Pathologic Complete Response Post Neoadjuvant Chemotherapy

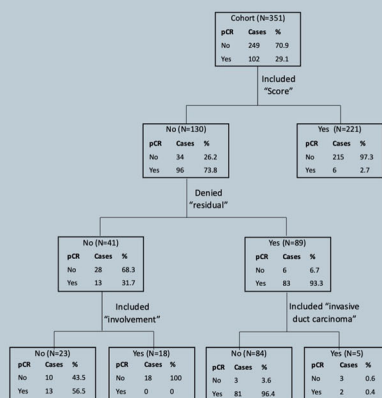


How to identify pCR from population-based electronic narrative data?



Three sets of ML algorithms with excellent performance (sensitivity 85.7%, PPV 81.8%, F1 core 83.7) were developed.

High F1 score Machine Learning Algorithm



Machine learning algorithms hold immense promise for accelerating research and clinical care of breast cancer patients treated with NAC regimens.

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