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Lunit and Japan National Cancer Center Hospital East partner in AI pathology

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Collaborative research with Japan's largest oncology practice shows Lunit SCOPE's potential in predicting clinical outcomes for rectal cancer



South Korea-based startup Lunit, has announced collaboration with the National Cancer Center Hospital East (NCCHE) to evaluate and validate its artificial intelligence (AI) pathology solution for tissue data analysis.

This partnership aims to leverage the capabilities of Lunit SCOPE, an AI-biomarker platform, in analysing Immunohistochemistry and H&E tissue slide data from various clinical trials, including NCCHE's molecular profiling projects such as SCRUM-Japan MONSTAR-SCREEN. The primary objective is to assess AI's ability to accurately read known biomarkers such as HER2 and PD-L1, as well as to evaluate the performance of emerging biomarkers like immune phenotype, as read by Lunit SCOPE IO, in predicting clinical outcomes in multiple treatment settings.

This collaboration's first set of findings will be unveiled at the American Society of Clinical Oncology (ASCO) annual meeting. The finding includes the analysis of AI-assessed tumor-infiltrating lymphocyte (TIL) density in the tumor microenvironment of microsatellite stable (MSS) locally advanced rectal cancer (LARC) samples. The study shows a strong correlation between changes in TIL density during preoperative chemoradiotherapy (CRT) and pathologic complete response (pCR) rate of MSS LARC patients. This finding underscores the potential of tumor microenvironment (TME) analysis by Lunit SCOPE IO to predict favorable outcomes.