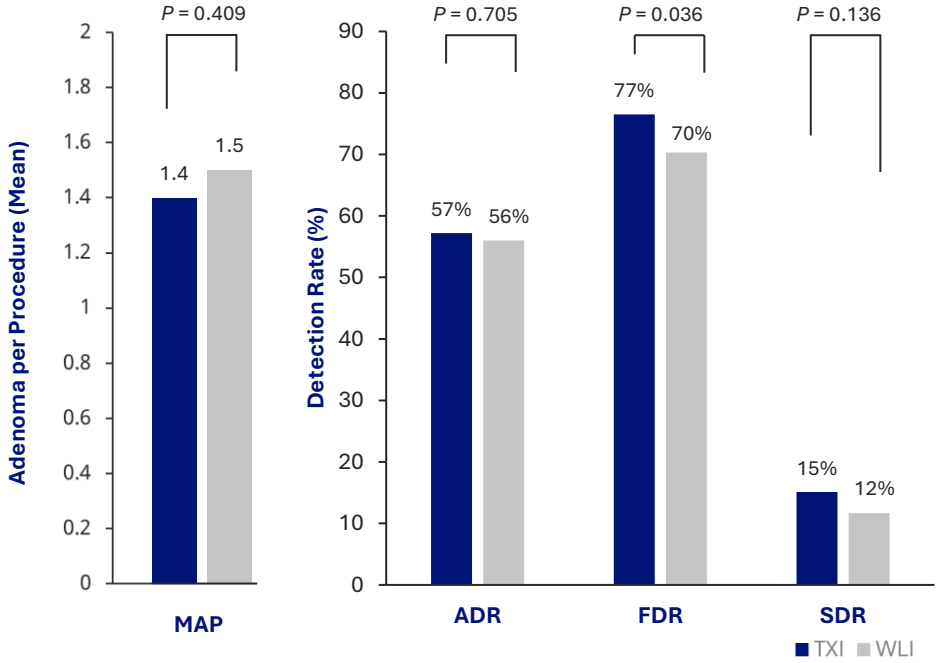
The Efficacy of Texture and Color Enhancement Imaging Observation in the Detection of Colorectal Lesions: A Multicenter, Randomized Controlled Trial (deTXIon Study)

Toyoshima N, Sakamoto T, Shinmura K et al. Gastroenterology. 2025;169(2):337-345.e2.

Main results: TXI™ technology did not result in a statistically significant improvement in MAP[1] (1.4, SD 2.2) comparing to WLI (1.5, SD 2.2) with a difference of -0.1 [95% CI -0.4 to 0.2], *P* = 0.409.



[1]Mean Adenoma per Procedure; [2]Adenoma Detection Rate; [3]Flat Lesion Detection rate; [4]Polyp Detection Rate; [5]Sessile Serrated Lesion Detection Rate.

Objective

To assess whether texture and color enhancement imaging (TXI™) technology improves detection of adenomatous lesions compared to conventional white light imaging (WLI) during colonoscopy.

Results

- A total of 896 patients in the per-protocol set were used for efficacy analysis, including 451 in the TXI technology arm and 445 in the WLI arm. The mean age was 64.4 years.
- ADR[2] was not significantly higher in the TXI technology group (57.2%) compared to the WLI group (56.0%), with a 95% confidence interval for the difference ranging from -5.32 to 7.80 (*P* = 0.705).
- FDR[3] and PDR[4] showed a significant improvement in the TXI technology group compared to the WLI group, with FDR at 76.5% vs. 70.3% (*P* = 0.036) and PDR at 82.5% vs. 74.4% (*P* = 0.003), respectively.
- SDR[5] was higher in the TXI technology group (15.1%) vs. WLI group (11.7%), but the difference did not reach statistical significance (*P* = 0.136).
- The adverse events occurred in 8 out of 951 patients (0.8%) in the safety analysis set, with no significant difference between TXI and WLI groups.

Conclusion

TXI technology was not proven to be superior to WLI in detecting neoplastic lesions. However, TXI may be **more efficient in detecting flat polyps.**

This study was conducted using the Olympus EVIS X1 Video System Center Olympus CV-1500 and Colonovideoscope Olympus CF-EZ1500DL/I.

Link to Publication

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TXI™ technology is not intended to replace histopathological sampling as a means of diagnosis

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