

In the pathology section

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Determining tissue mismatch repair (MMR) status has become a cornerstone of diagnostic and molecular pathology. Beyond informing mutational burden and potential response to immune checkpoint inhibitors, MMR testing can uncover germline defects critical for identifying patients and families at risk for cancer, particularly in gynecological and gastrointestinal malignancies.

Detecting MMR protein expression via straightforward immunohistochemical assays often serves as the gateway to deeper genetic insights. A finding of deficient MMR (dMMR) triggers reflex testing, including *BRAF* mutation analysis, *MLH1* promoter methylation assessment, and, when needed, microsatellite instability (MSI) testing to confirm either microsatellite stability or MSI-high status — the latter strongly associated with dMMR.

In this section, Schaeffer and colleagues deliver a comprehensive and practical review of MMR testing, seamlessly bridging technical details with clinical implications. Their article offers a uniquely Canadian perspective on integrating MMR diagnostics into pathology workflows and patient care. It is a timely, essential resource for practicing pathologists and trainees navigating the increasingly complex landscape of molecular diagnostics.

We welcome your submissions to our pathology section of this journal. If you have any manuscript topics you wish to discuss, please do not hesitate to contact me.

Stephen Yip MD, PhD, FRCPC

Associate Editor, Pathology Section
AE.Pathology@CanJMedSpec.com