

Pt. Name:	محمد احمد سعد منصر		Lab Number:	2376-2026	
Pt. Age:	58	Gender:	Male	Received date:	2026-04-15
Referred By:	د/ علي الاشول		Reported date:	2026-04-17	

PATHOLOGY REPORT

Clinical Information.	Referred block of sigmoid mass biopsy for immunistaining. The biopsy was previously diagnosed outside our lab as well to moderately differentiated adenocarcinoma on 3 April 2026, pathology number 171-26.
Nature of specimen.	Immunohistochemistry.

GROSS:

One referred paraffin block.

MICROSCOPIC:

Colonic mucosal fragments, the majority of which consist of unremarkable colonic mucosa and significant necrotic debris. Only two fragments show focal involvement by adenocarcinoma, characterized by infiltrating malignant glands with architectural distortion and cytological atypia. Surrounding stroma shows moderate desmoplastic reaction.

Immunistaining done with appropriate positive and negative controls and revealed:

MLH1: Intact, nuclear expression in >90% of tumor cells.

PMS2: Intact, nuclear expression in >90% of tumor cells.

MSH2: Intact, nuclear expression in >90% of tumor cells.

MSH6: Intact, nuclear expression in >90% of tumor cells.

DIAGNOSIS:

Referred paraffin block of sigmoid mass, endoscopic biopsy:

- Adenocarcinoma, grade 2.
- Mismatch Repair (MMR) Status: Proficient (pMMR). See Comment.

Comment:

The identification of invasive adenocarcinoma in a pMMR (mismatch repair proficient) context suggests a tumor that likely developed through the traditional chromosomal instability pathway rather than the microsatellite instability (MSI) pathway. For the patient, this translates to a significantly lower likelihood of an underlying hereditary condition like Lynch syndrome, although a review of family history remains a standard clinical precaution.

From a treatment perspective, pMMR status is a key biomarker; it indicates that the tumor is likely to follow standard chemotherapy protocols, as these "stable" tumors typically do not derive the same high level of benefit from immunotherapy as their dMMR counterparts. Because the malignancy was only captured in two fragments amidst significant necrosis, these results must be correlated with endoscopic findings (the gross appearance of the mass) and radiological staging (such as CT or MRI). This ensures the biopsy is representative of the entire lesion's grade and behavior before finalizing a surgical or oncological management plan.

Pathologist

Prof. Dr. Neveen Tahoun, MD, PhD
17-04-2026

Nerveen Tahoun