Pt. Name:	محمد احمد علي العيدروس			**Lab Number:**	3317-2026
Pt. Age:	60 years.	**Gender:**	Male	**Received date:**	2026-05-13
Referred By:	د/ عفيف النابهي			**Reported date:**	2026-05-19

PATHOLOGY REPORT

Clinical Information.	Referred paraffin block for immunostaining of gastric biopsy diagnosed as adenocarcinoma elsewhere.
Nature of specimen.	Immunohistochemistry

GROSS:

One referred paraffin block.

MICROSCOPIC:

Partially ulcerated gastric mucosal fragments infiltrated by an invasive moderately differentiated adenocarcinoma. The tumor is composed of crowded, irregular, and angulated and cribriform glands exhibiting fused and back-to-back architecture with minimal intervening stroma. These neoplastic structures are set within a desmoplastic background and are lined by atypical epithelial cells demonstrating nuclear enlargement, hyperchromasia, pleomorphism, loss of polarity, and prominent nucleoli. Foci of necrosis are noted.

Immunostaining was performed using appropriate positive and negative controls and revealed:

- **Her2/neu: negative score 0.**
- **PDL1:** Positive, with an estimated Combined Positive Score (CPS) \ge 5 based on linear membranous tumor cell and associated mononuclear immune cell staining.

Expression level meets the established CAP/FDA biomarker companion diagnostic threshold (CPS >= 1) for immune checkpoint inhibitor eligibility in gastric adenocarcinoma.

- **Mismatch Repair (MMR)** Immunohistochemistry: Intact nuclear expression of MLH1, PMS2, MSH2, and MSH6 within the neoplastic cells (internal non-neoplastic controls verified).

Mismatch Repair Proficient (pMMR), demonstrating a low probability of Microsatellite Instability-High (MSI-H) status per CAP guidelines.

DIAGNOSIS:

Stomach, Gastric Mucosal Biopsy & Immunostaining:

- **Adenocarcinoma, moderately differentiated.**
- **Ancillary biomarker testing by immunohistochemistry (IHC) was performed to guide systemic therapeutic strategies, demonstrating the following profile:**

(1) HER2/neu: Negative (Score 0), indicating the tumor is not a candidate for anti-HER2 targeted therapy.

(2) PD-L1 Expression: Positive, with an estimated Combined Positive Score (CPS) >= 5. This exceeds the established CAP/FDA biomarker companion diagnostic threshold (CPS >= 1) for immune checkpoint inhibitor eligibility in gastric adenocarcinoma.

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(3) Mismatch Repair (MMR) Status: Mismatch Repair Proficient (pMMR), as evidenced by intact nuclear expression of MLH1, PMS2, MSH2, and MSH6, indicating a low probability of Microsatellite Instability-High (MSI-H) status.

COMMENT:

These predictive biomarkers support clinical stratification for potential immunotherapy combinations.

Pathologist

Prof. Dr. Neveen Tahoun, MD, PhD
19-05-2026

Neveen Tahoun