

<b>Pt. Name:</b>	انيسة عبدالواحد سليمان عبدالرحمن		<b>Lab Number:</b>	0636-2026	
<b>Pt. Age:</b>	50 years.	<b>Gender:</b>	Female	<b>Received date:</b>	2026-01-29
<b>Referred By:</b>	...		<b>Reported date:</b>	2026-02-11	

## PATHOLOGY REPORT

<b>Clinical Information.</b>	Referred slides and blocks for immunostaining of bilateral ovarian masses.
<b>Nature of specimen.</b>	Referred slides and blocks.

### GROSS:

Seven referred paraffin blocks and seven H&E stained slides for immunostaining.

### MICROSCOPIC:

Review of the submitted histological sections reveals tissue fragments consistent with ovarian stroma extensively infiltrated by a malignant neoplasm. The tumor demonstrates a diffuse pattern of growth, characterized by non-cohesive individual cells, cords, and focal areas of glandular differentiation. The neoplastic cells exhibit marked cellular pleomorphism with hyperchromatic nuclei and increased mitosis. A significant proportion of the tumor cells display classic signet ring cell morphology, featuring abundant intracytoplasmic mucin vacuoles that displace the nucleus to the periphery. These neoplastic elements are embedded within a desmoplastic stroma. Separate section consistent with omental tissue are composed of mature adipose and fibroconnective tissue. These sections are free of tumor involvement.

Immunohistochemical staining was performed on the tumor cells with appropriate positive and negative controls. The neoplastic cells are positive for CK7, CK20, EMA, and CD15. The tumor cells are negative for PAX8, CD10, GATA3, Calretinin, SATB2, and CDX2. The Ki-67 proliferation index is approximately 30 % in tumor cells.

### DIAGNOSIS:

Referred slides and blocks of bilateral ovarian masses:

- **Metastatic Poorly Differentiated Adenocarcinoma with Signet Ring Cell (Krukenberg Tumor).**

### COMMENT

The combined expression of CK7 and CK20 is most frequently associated with upper gastrointestinal (gastric, pancreaticobiliary) or urothelial primaries. The absence of CDX2 and SATB2 expression makes a colorectal origin less likely, favoring a gastric or pancreaticobiliary primary site. The negative GATA3 help exclude metastatic breast carcinoma . Clinical correlation with gastric endoscopy and comprehensive imaging is strongly recommended to confirm the primary site of origin.

**Pathologist**

**Prof. Dr. Neveen Tahoun, MD, PhD**

**11-02-2026**

*Nerveen Tahoun*