

<b>Patient Name</b>	Mrs. Manju Jain	<b>Client Name</b>	HOPE Clinic	<b>Specimen Received</b>	23-Feb-2019
<b>Age/Sex</b>	59/F	<b>Client Code</b>		<b>Specimen Type</b>	Wax Block
<b>Patient ID</b>	011902230322	<b>Ref. Doctor</b>	Dr. Amish Vora	<b>Collection Date</b>	23-Feb-2019
<b>Specimen ID</b>	MOLQ/IHC-06022019			<b>Report Date</b>	12-March-2019

## SURGICAL PATHOLOGY REPORT

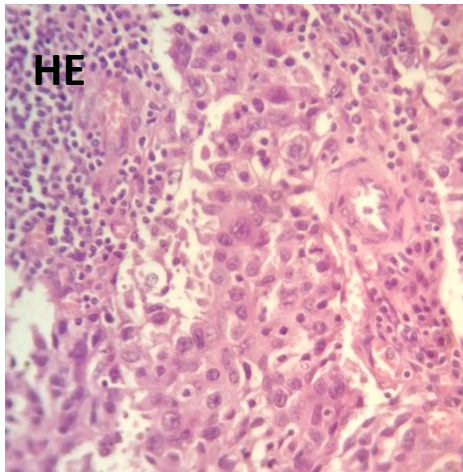
### Ovarian Cancer

#### RESULTS

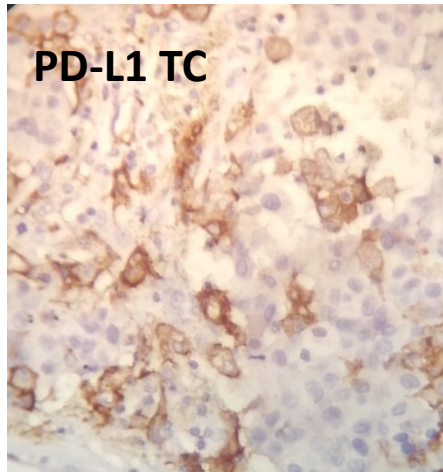
#### Programmed Death Ligand 1 (PD-L1)

**Tumor Cells (TC) :Positive (Total Score 03)**

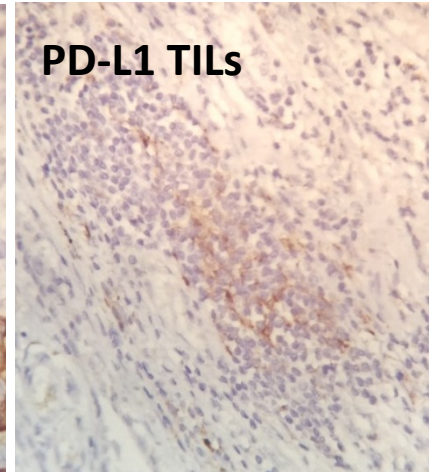
**Tumor Infiltrating Lymphocytes (TILs) :03% Positive Cells**



**Fig. 1**



**Fig. 2**



**Fig. 3**

\*TC- Tumor Cells, TILs- Tumor Infiltrating Lymphocytes

#### **SPECIMEN**

Ovarian Cancer

Received one paraffin block labelled as B-8641-17 C.

#### **Immunohistochemical Staining**

Immunostaining for PD-L1 protein was done using Ventana Rabbit Anti-Human PD-L1/CD274 Monoclonal Antibody (Clone SP-263) on Ventana Autostainer. Positive PD-L1 staining/expression is defined as complete and/or partial, circumferential or linear plasma membrane staining at any intensity that can be differentiated from background and diffuse cytoplasmic staining.

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### Microscopic Findings:

#### Programmed Death Ligand 1 (PD-L1) Immunostaining in Tumor Cells (TC) (Fig.2)

##### **Membrane Staining**

Cells immunoreactive – Score 1 (16%)

Intensity- Score 2

##### **Cytoplasm Staining**

Cells immunoreactive – Score 1 (04%)

Intensity- Score 2

**Total Score: 03**

#### Programmed Death Ligand 1 (PD-L1) Immunostaining in Tumor Infiltrating Lymphocytes (TILs) (Fig. 3)

##### **Membrane Staining**

Cells immunoreactive – 03%

Intensity- 1

##### **Cytoplasm Staining**

Cells immunoreactive – 00%

Intensity- 0



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Pathologist



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Consultant Pathologist

### Inference:

#### Immunoreactive Scoring System (IRS) Tumor Cells

##### A) Percentage of Stained Cells:

Score 0: <1% Positive Cells

Score 1: 1%-50% Positive Cells

Score 2: >50% Positive Cells

##### B) Staining Intensity:

Score 0: No immunostaining

Score 1: Weak staining

Score 2: Moderate staining

Score 3: Strong staining

**IRS=A+B**

**Range: 0-5**

##### Interpretation:

A total score of <2 – Negative

A total score of ≥2 – Positive

Programmed Cell Death Ligand 1 (PD-L1) is a protein encoded by the CD274 gene. It is crucial in maintaining immune homeostasis. PD-L1 works by attaching to the T-Cell receptors called PD1 and B7.1 (both inactive T cells). PD-L1 is an important prognostic and theranostic biomarker in the study of several neoplasma. PD-L1 overexpression may facilitate tumor growth and metastasis, and has been observed in carcinomas of Lungs, Thymus, Bladder, Colon, Pancreas, Ovary, Kidney, Breast, Melanoma and Glioblastoma.

##### Reference

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4. Checkpoint-inhibition in ovarian cancer: rising star or just a dream? Klaus Pietzner, Sara Nasser, Sara Alavi, Silvia Darb-Esfahani J Gynecol Oncol. 2018 Nov 29;6 11 Pages
5. Programmed death-1 and PD-1 ligand-1 expression in early onset gastric carcinoma and correlation with clinicopathological characteristics Ping Wei, Mulan Jin, Xiang Zhou, Xiumei Hu, Ying Wang Int J Clin Exp Pathol 2018;11:4 10 Pages