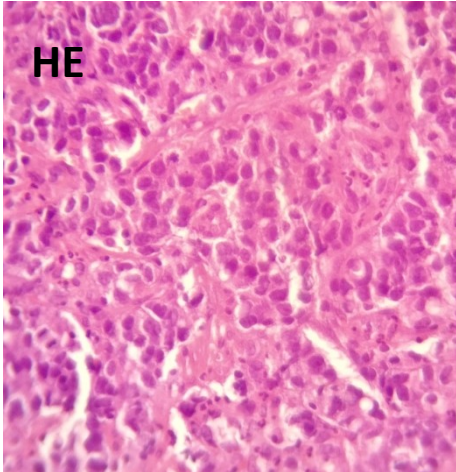## SURGICAL PATHOLOGY REPORT

Carcinoma Stomach

RESULTS

Programmed Death Ligand 1 (PD-L1)

Tumor Cells (TC) : Negative

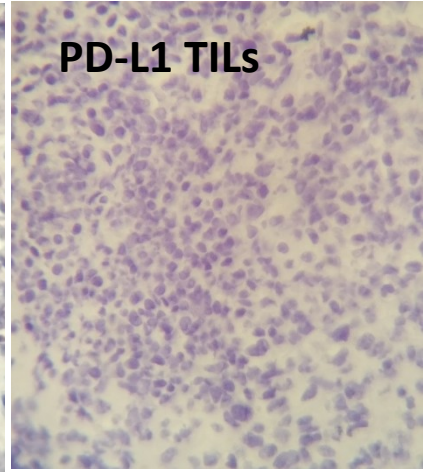**Tumor Infiltrating Lymphocytes (TILs)** : Negative

Fig. 1
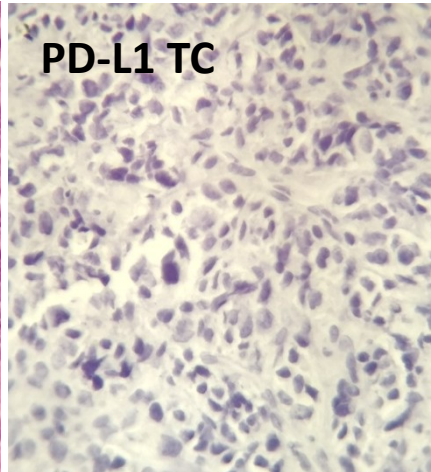
Fig. 2

Fig. 3

*TC- Tumor Cells, TILs- Tumor Infiltrating Lymphocytes

SPECIMEN

Carcinoma Stomach

Received one paraffin block labelled as S-7706/18 A.

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.

Microscopic Findings:

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

Membrane Staining
Cells immunoreactive – Score 0
Intensity- Score 0
Cytoplasm Staining
Cells immunoreactive – Score 0
Intensity- Score 0

Total Score: 00

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

Membrane Staining
Cells immunoreactive – 00%
Intensity- 0
Cytoplasm Staining
Cells immunoreactive – 00%
Intensity- 0

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.

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4.	Immunotherapy in Advanced Gastric Cancer: An Overview of the Emerging Strategies Helena Magalhães, Mário Fontes-Sousa , and Manuela Machado Canadian Journal of Gastroenterology and Hepatology 2018 8 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

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