

## Immuno-Oncology

Advancing Immunotherapies to Market



HistologiX offers **validated** and **optimised** IHC immuno-oncology biomarker assays with quantitative image analysis tools to deliver valuable immunological insight into tumour immune processes.

Our robust approach to the identification, quantification, localisation, and spatial relationships of immune biomarkers in tumour tissues supports clients in making informed decisions for advancing their immunotherapeutic strategy to market. HistologiX also has the ability to interpret data from these assays.

Our understanding of the complexity of the tumour immune microenvironment in tissues from preclinical mouse models through to patients on clinical trial provides valuable information for the drug discovery process.

## HALO<sup>™</sup> Image Analysis

Inflamed tumours comprising greater numbers of infiltrating lymphocytes have better prognosis. Using HALO™ Digital Image Analysis tools, HistologiX can reliably and reproducibly quantify immune cell densities across tissue cohorts. PD-L1 is normally expressed by immune cells and functions to regulate T cell activation. However, tumours may adopt PD-L1 expression resulting in direct suppression of anti-tumour cytolytic T cell activity. PD-L1 assessment is conducted routinely by a pathologist scoring percent positive tumour membrane at any intensity but can be quantified by digital image analysis.

PD-L1 Digital Image Analysis correlates with Pathologist Scoring



The Membrane algorithm output gives percentage of cells with membrane PD-L1 positivity.

Spatial analyses between cell types can provide insight for response, resistance and clinical outcome. We can quantify the complexity of tumour-immune cell interactions.

The interface between tumour and stroma is defined and immune subsets within distinct bands on either side of the invasive margin can be quantified.

Spatial relationships of CD8+ and Foxp3+ cells to PD-L1 derived from a proximity spatial plot





Profile the tumour immune microenvironment by IHC and quantitative image analysis tools for better patient selection strategies in immuno-oncology



CD8+ cytotoxic T cells have been analysed. The Immune Cell algorithm delivers the number of cells/mm<sup>2</sup> within the tumour microenvironment.

## Histology, IHC & Image Analysis

HistologiX, an independent GLP and GCP accredited company providing specialist immunohistochemistry services

## **Contact us for**

Immuno-oncology Consultation

Digital Pathology & Image Analysis

For more information, contact HistologiX at:

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