

# Multiplexed tissue imaging

A novel method for rapid staining and panel iteration for multiplexed tissue imaging.

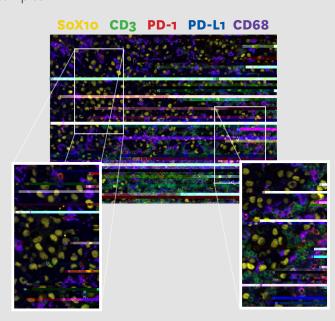
## **Background**

Recent advances in tissue scanning technology have enabled the creation of digital images containing vast amounts of data from entire sections of human tissue. The data from these images is quantified digitally to provide detailimaging system – the PhenoImager HT from Akoya

Biosciences – we have developed novel techniques for multiplexed immunohistochemistry (IHC).

Our techniques dramatically reduce the time taken for tissue staining and we can simultaneously detect at least seven markers across an entire tissue section.

We can generate new IHC panels for up to seven markers in a matter of days – this takes months with previous methods. Our techniques are suitable for both fresh frozen (FF) and formalin fixed para n embedded (FFPE) tissue samples.



### **Major advantages**

- Imaging of entire tissue sections in up to seven colours after staining for as little as one hour.
- Development of new / custom antibody panels within days.

# **Applications**

- Quantitative characterization and localisation of cell subsets within any tissue.
- Quantitative co-localisation of molecules to cell subsets within any tissue.
- Immune monitoring of responses in tissues to new therapies under clinical trial (e.g. immuno-oncology agents, anti-viral therapy, vaccines).
- Improved diagnostic pathology through simultaneous detection of multiple markers without the need for serial sections (e.g. co-localisation of multiple lymphoma markers).
- Improved quantification of companion diagnostic markers that determine therapy (e.g. quantification of PD-L1 expression by tumour cells and immune cells across entire tissue sections).
- Improved monitoring of patient responses to therapy (e.g. quantification of tumour-infiltrating T cell and myeloid cell subsets)

#### **UniServices**

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