

# How Does the Cytobank Workflow Fit Your Research?

Cytobank is the leading cloud-based platform for the advanced analysis of high dimensional life science data.

Empowering you to make new discoveries



# **Unbiased Discovery or Guided Analysis Using Prior Knowledge?**



- Identify all the possible populations present in your samples
- Discover significant biomarkers between groups of samples

**GOAL:** You don't want to miss the opportunity to identify any possible unknown population described by the markers included in your panel

# **Examples:**

- What types of cells are found in the tumor microenvironment?
- Which markers on PBMCs correlate with a response to immunization?



- High throughput analysis for large-scale/ longitudinal studies using templates
- Report defined population abundance/ marker intensity endpoints for clinical studies

**GOAL:** You have a specific population statistic that you need to report for a lot of different samples/timepoints

# **Examples:**

- How does the percentage of exhausted CD4+PD-1+ cells change following anti-PD-1 therapy in a clinical trial?
- How can I analyze hundreds of samples quickly?



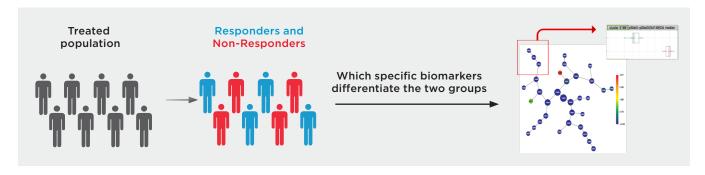


# Which Algorithm to Use For Each Research Question?

# **Discovery Setting**

#### CITRUS

Automatically identify predictive biomarkers from millions of datapoints. Cluster cells from multiple samples and perform group comparison in one run to quickly gain meaningful insights.



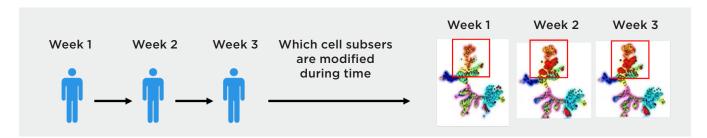
#### FlowSOM

Speed your time to analysis and quality of clustering with Self-Organizing Maps that can reveal how all markers are behaving on all cells, and detect subsets that might otherwise be missed.

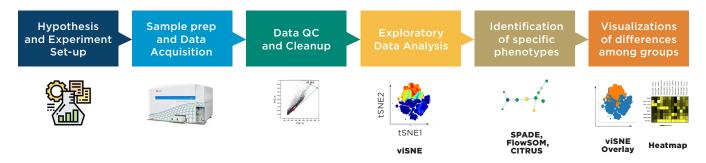
# **Guided Analysis**

#### FlowSOM

Use a Self Organizing Map (SOM) from a previous run to directly compare cell subsets from a new sample to previous analyses.



# Data Analysis Pipeline in The Cytobank Platform: How to Get The Most Out of Your Data



With the Cytobank platform you will be able to quickly summarize high parameter data in intelligible, comprehensive figures, enabling unparalleled communication between clinical researchers, scientists and other collaboration partners.