

# PACT Biomarker Assays

**Tier 1 = broadly recommended for most trials**

Tier 2 = other assays, usage depends on trial

	<b>Tier 1</b>	<b>Tier 2</b>
<b>Tissue Imaging</b>	Multiplex immunohistochemistry and immunofluorescence	Conventional immunohistochemistry
		Multiplexed Ion-Beam Imaging (MIBI)

	<b>Tier 1</b>	<b>Tier 2</b>
<b>Cell Profiling</b>	Mass Cytometry (CyTOF)	High-dimensional flow cytometry
		ELISpot

	<b>Tier 1</b>	<b>Tier 2</b>
<b>Sequencing</b>	RNA-Seq	Nanostring
	Whole Exome Sequencing (WES)	TCR clonality
		Single cell TCR sequencing
		Epigenomics (ATAC-seq)
		HLA-Seq; Epitope prediction
		ISH DNA/RNA
		Neoantigen Prediction
		Cell-free DNA (circulating tumor DNA)
		HTG-EdgeSeq (gene expression)
		Microbiome (16S Deep Sequencing)
		Single-cell transcriptome

	<b>Tier 1</b>	<b>Tier 2</b>
<b>Cytokines/Serum Analytes</b>	O-Link serum cytokine analysis	Grand Serology
		Luminex
		MesoScale Discovery