

## PACT-CIMAC-CIDC Biomarker Assays

Category	Tier 1	Tiers 2-3	
Tissue Imaging	Multiplex immunohistochemistry and immunofluorescence (Multiplex IHC/IF)	Conventional immunohistochemistry	
		Multiplexed Ion-Beam Imaging (MIBI)	
Cell Profiling	Mass Cytometry (CyTOF)	High-dimensional flow cytometry	
		ELISpot	
Sequencing	Whole Exome Sequencing (WES)	Epigenomics (ATAC-seq)	
	RNA-Seq	Cell-free DNA (circulating tumor DNA)	
	Nanostring	CyTOF Proteomics	
			Single cell TCR sequencing
			TCRseq DNA Repertoire
			TCRseq Bulk RNA
			HLA-Seq; Epitope prediction
			ISH DNA/RNA
			Neoantigen Prediction
			HTG-EdgeSeq (gene expression)
			Microbiome (16S Deep Sequencing)
			Single-cell transcriptome
			Cytokines/Serum Analytes
Grand Serology ELISA			
MesoScale Discovery			

# CIMAC Assay Availability

Tier 1 Availability						
	CyTOF	Multiplex IHC/IF	WES	RNASeq	Nanostring	Olink
DFCI	✓	✓	✓	✓	✓	✗
MDACC	✓	✓	✓	✓	✓	✗
Mt Sinai	✓	✓	✗	✗	✗	✓
Stanford	✓	✗	✗	✗	✗	✗

Tier 2 Availability										
	ATACseq	ctDNA	CyTOF Proteomics	Grand Serology ELISA	MIBI	Microbiome (16s)	scTCRseq	Singleplex IHC	TCRseq DNA repertoire	TCRseq Bulk RNA
DFCI	✗	✓	✗	✗	✗	✗	✓	✓	✓	✓
MDACC	✗	✗	✗	✗	✗	✓	✗	✓	✓	✗
Mt Sinai	✗	✗	✗	✓	✗	✓	✗	✓	✓	✗
Stanford	✓	✗	✓	✗	✓	✗	✓	✗	✓	✗

Tier 3 Availability		
	CITEseq	scRNAseq
DFCI	✗	✗
MDACC	✗	✗
Mt Sinai	✓	✓
Stanford	✗	✗