

# Customized measurements of the RNA and DNA biomarkers in your liquid biopsies



## applications of plasma biomarkers

- diagnosis
- prognosis
- prediction
- therapy response monitoring
- drug safety
- patient stratification

## advantages of liquid biopsies

- serial sampling
- minimally invasive
- reduced risk
- easy
- patient comfort
- faster sampling

## candidate nucleic acid biomarkers in plasma

- messenger RNA
- micro-RNA
- long non-coding RNA
- DNA

extracellular cell-free circulating } nucleic acid

## measuring nucleic acid biomarkers in plasma



to discover **new** biomarkers with RNA sequencing \*



to test **known** biomarkers with quantitative or digital PCR \*\*

> 500 miRNAs	5000-10,000 mRNAs	types of measurement	1-100 miRNAs	1-100 mRNAs & lncRNAs	1-10 DNA variants
✓	✓	expression level 	✓	✓	
	✓	sequence variants (e.g. mutations and fusion genes) A A T C G A A T T C G A		✓	✓
		copy number variants 			✓

\* reported numbers are the number of miRNAs and mRNAs typically detected in plasma

\*\* reported numbers are the number of features typically measured in a test