

Discovering Circulating MicroRNA Biomarkers Using A Highly Controlled qPCR Workflow



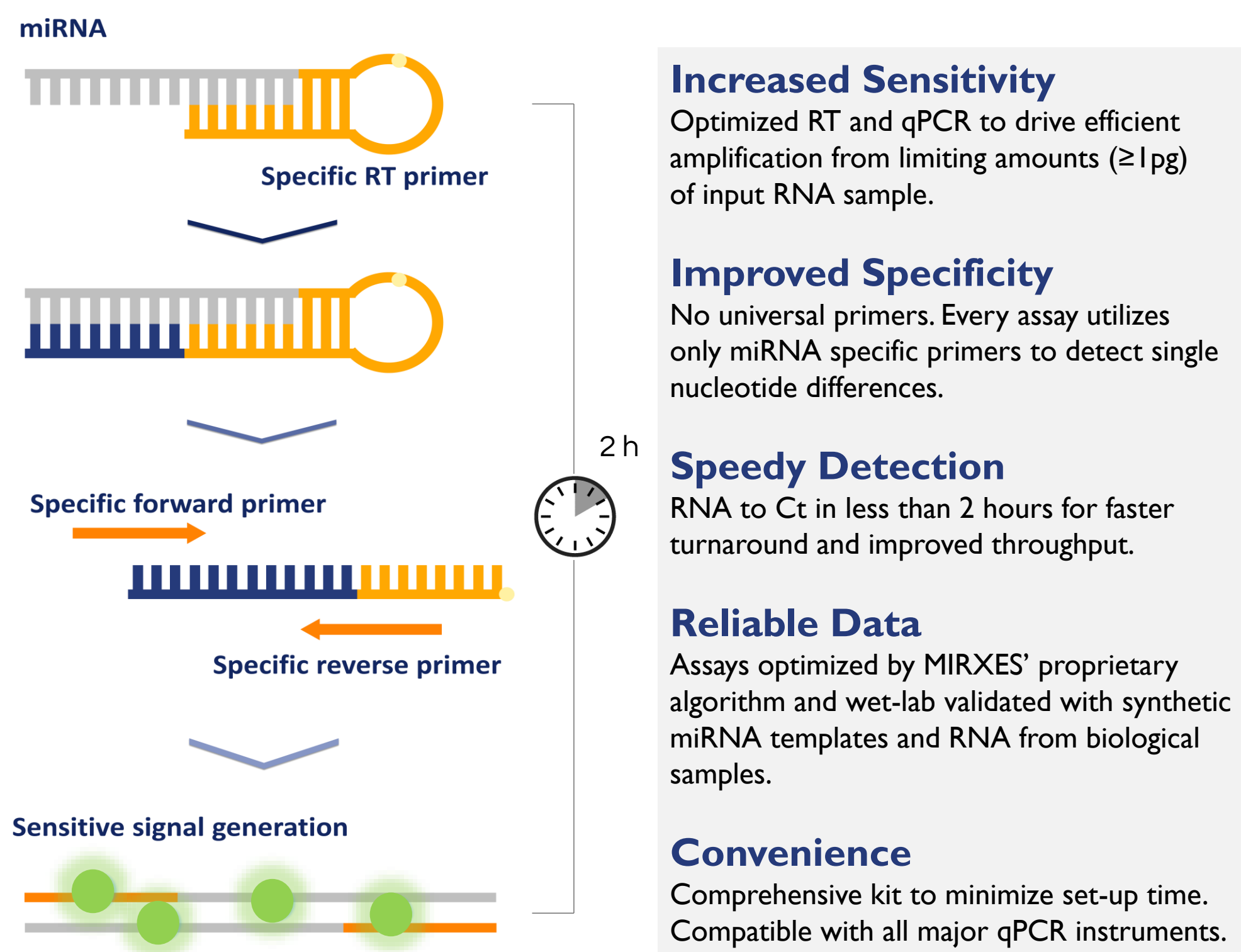
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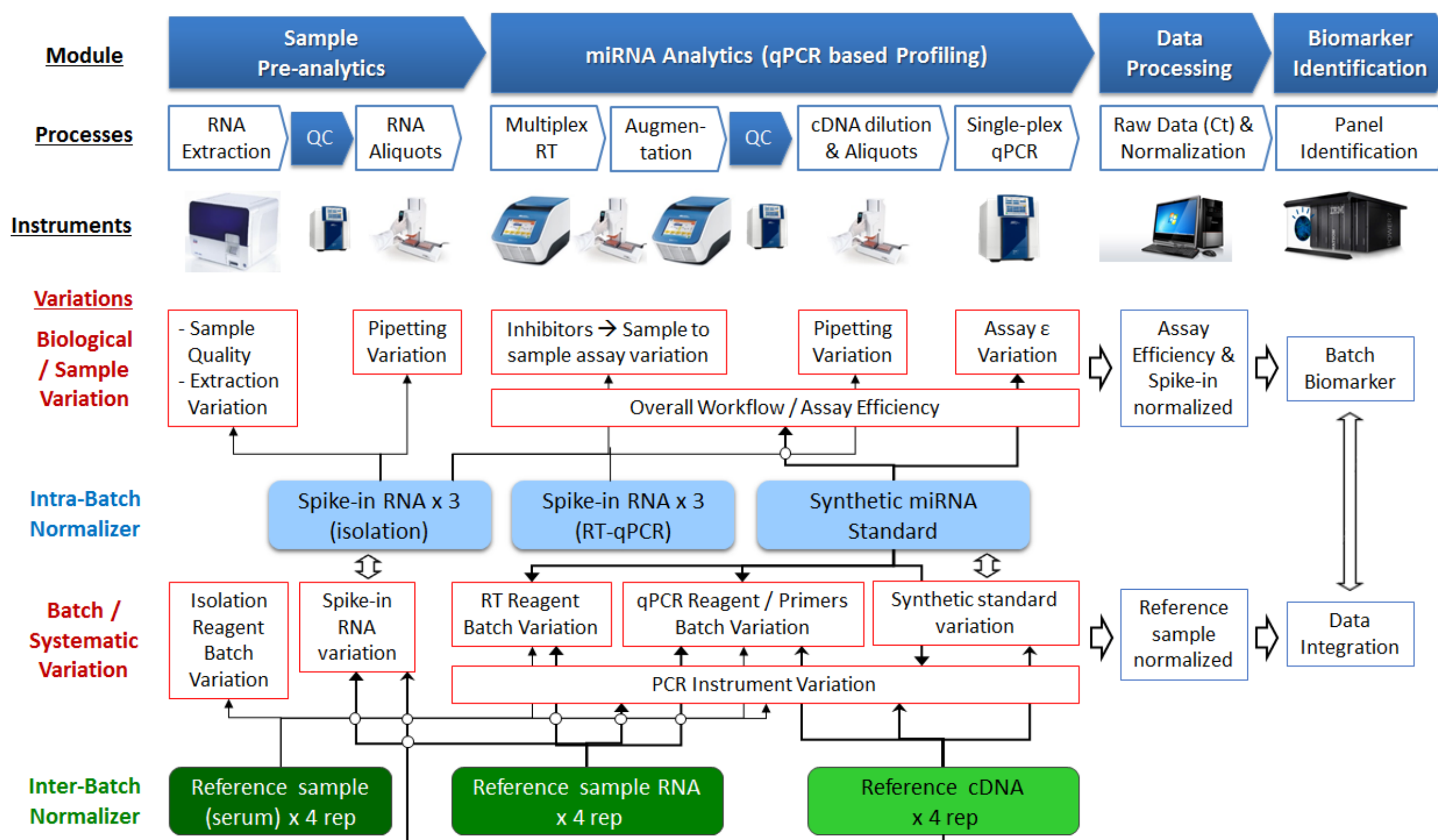
Novel MicroRNA qPCR Assay

Unique Design of 3 miRNA Specific Primers Enables Sensitivity and Specificity



Multi-layered Control Measures Ensure Reproducibility

Monitor and Normalize Technical and Biological Variations in Pre-analytical and Analytical Steps

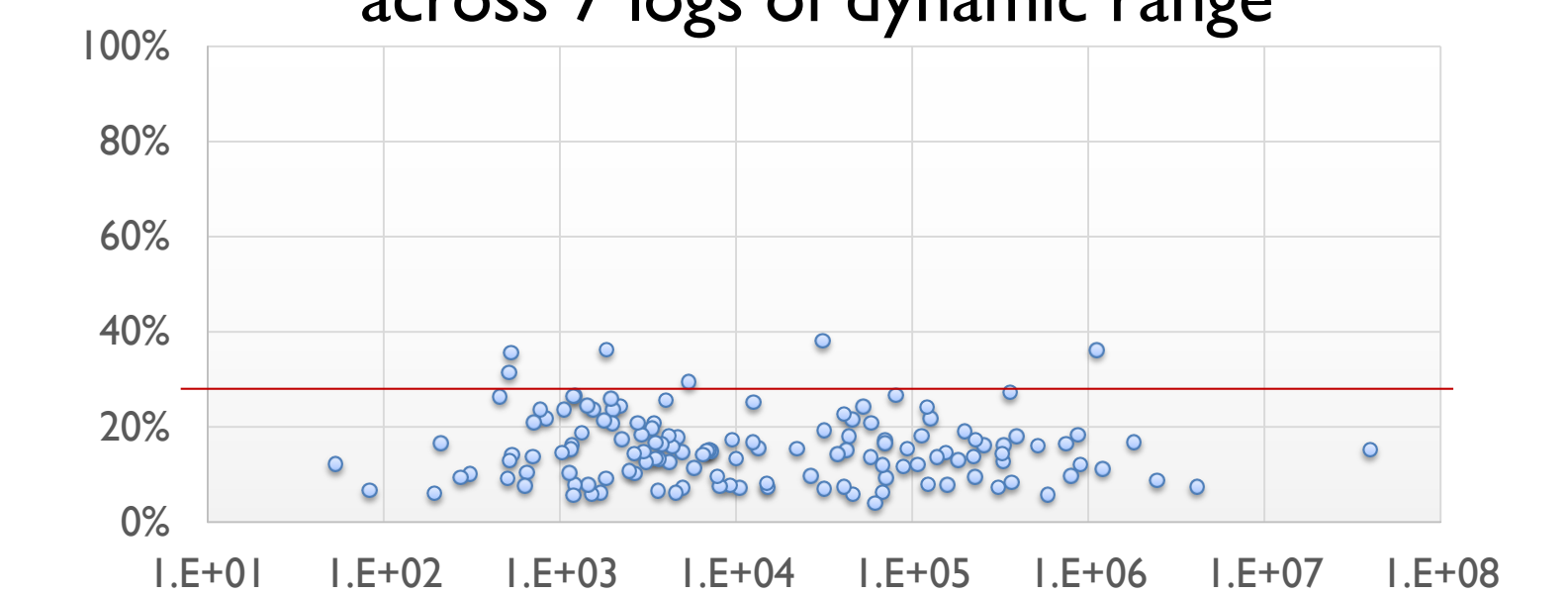


Key Value Proposition

1. Unparalleled Sensitivity allows detection of low abundance miRNAs

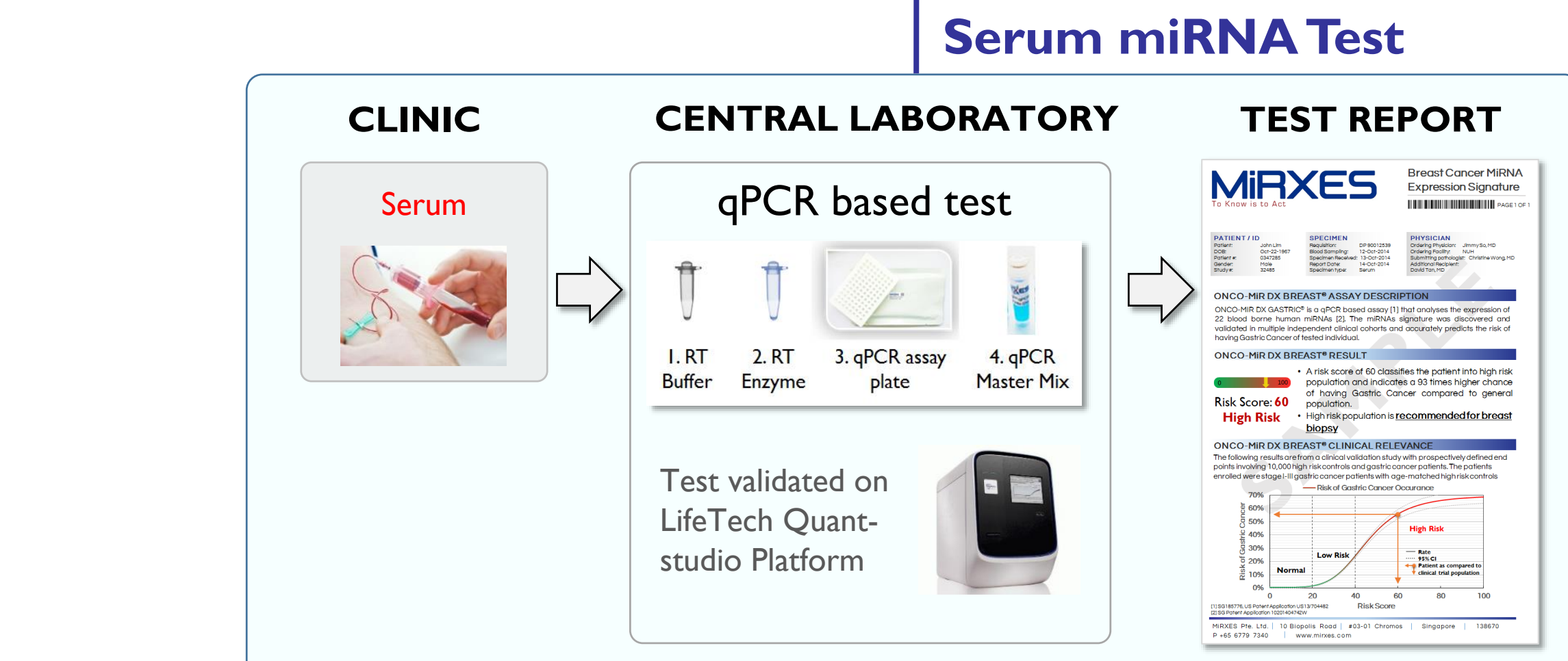
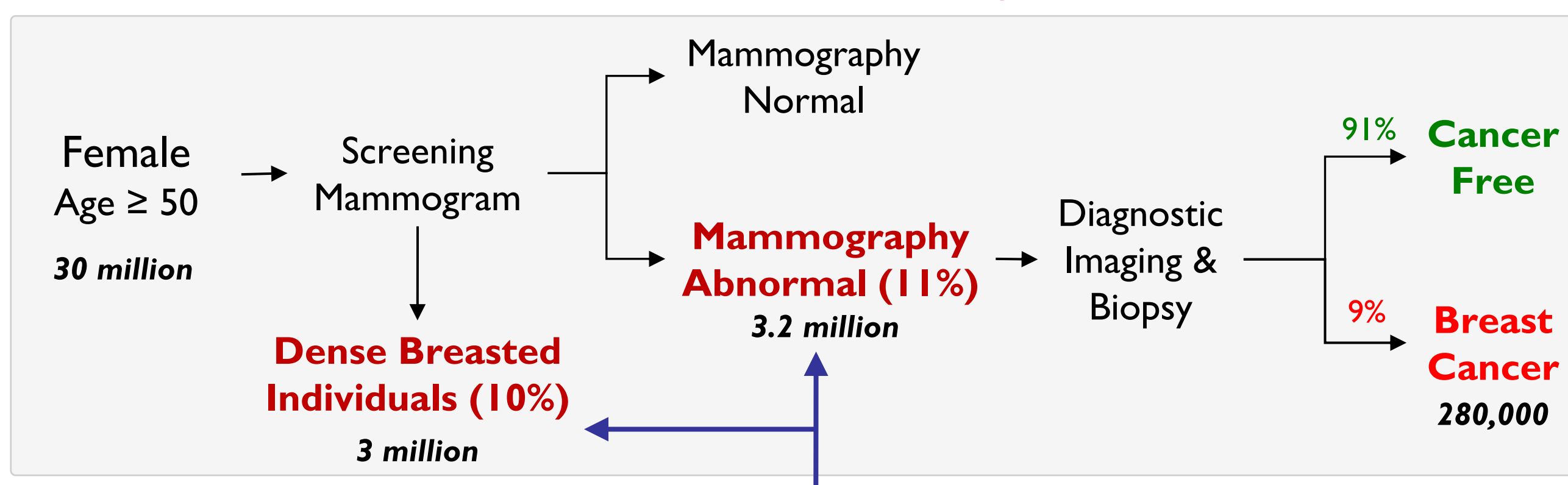
	MiRNAs detected from 200 μ l serum
MiRXES	> 400
qPCR Technology A	< 200
qPCR Technology B	< 150
qPCR Technology C	< 100

2. High accuracy and reproducibility
 Workflow CV < 30% for all miRNAs across 7 logs of dynamic range

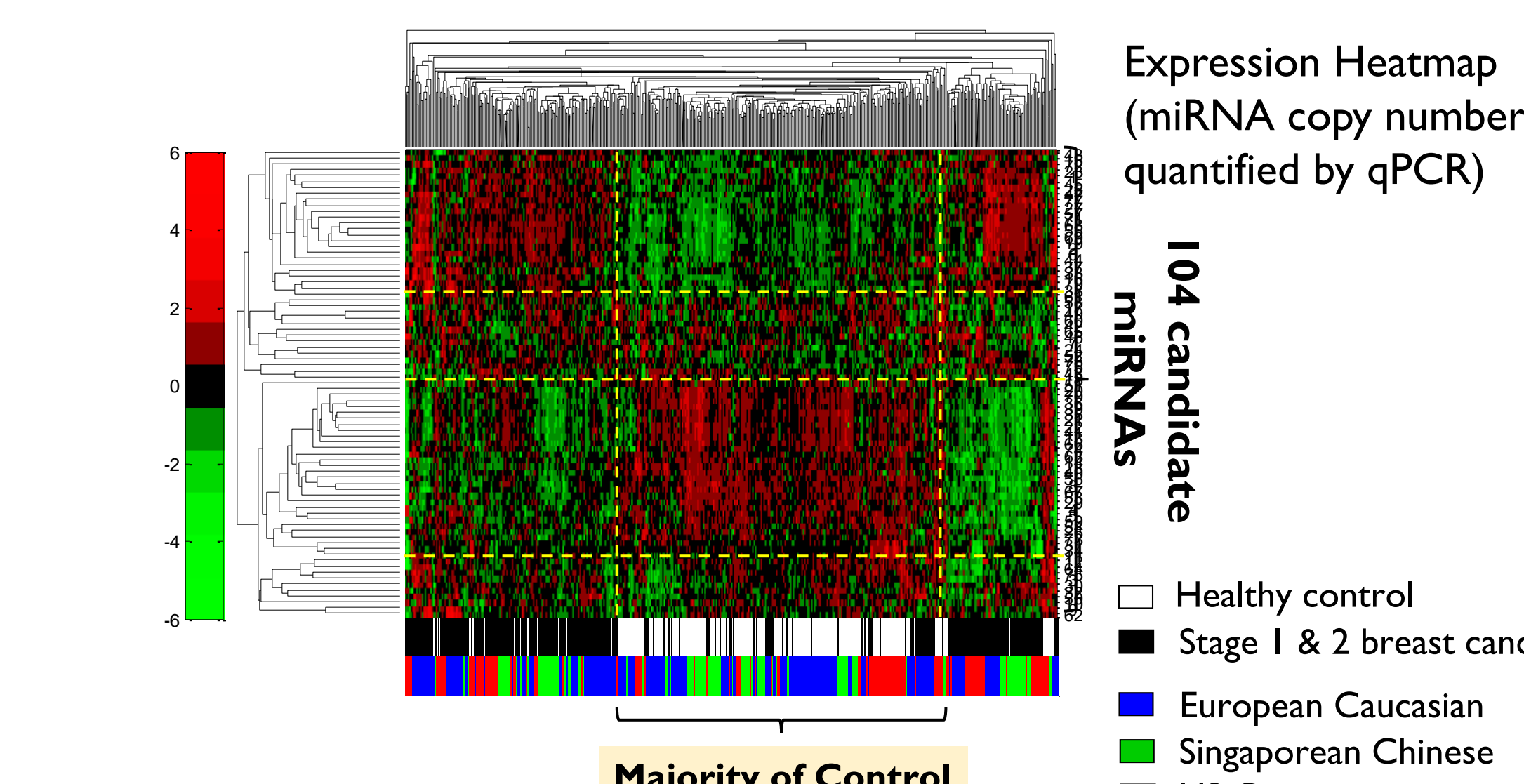
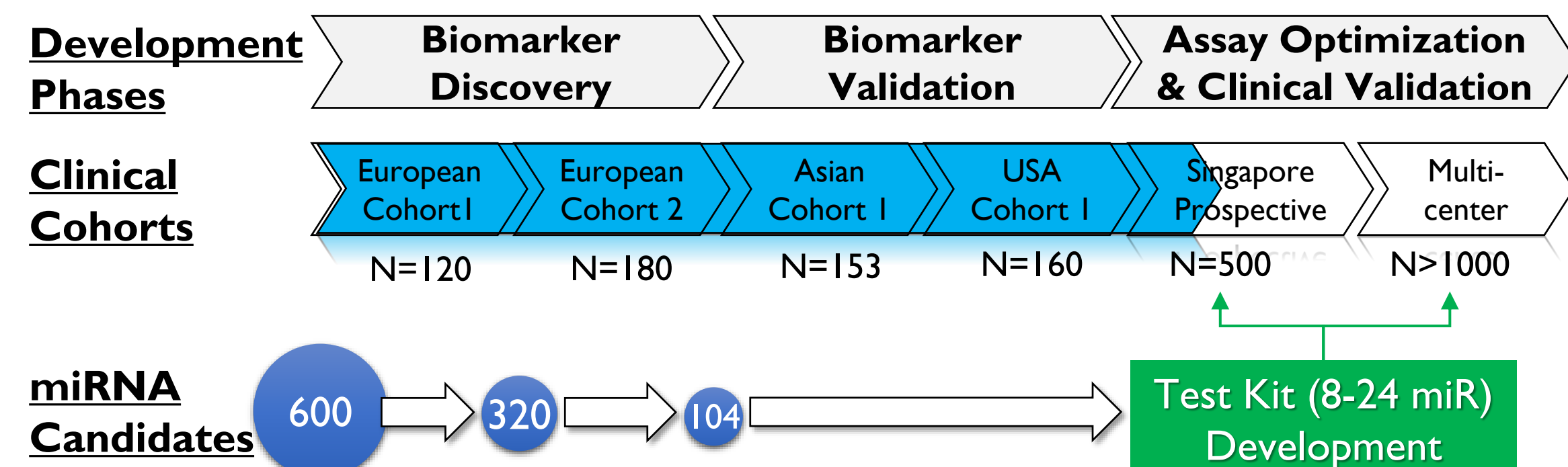


MiRNA Biomarker for Breast Cancer Detection

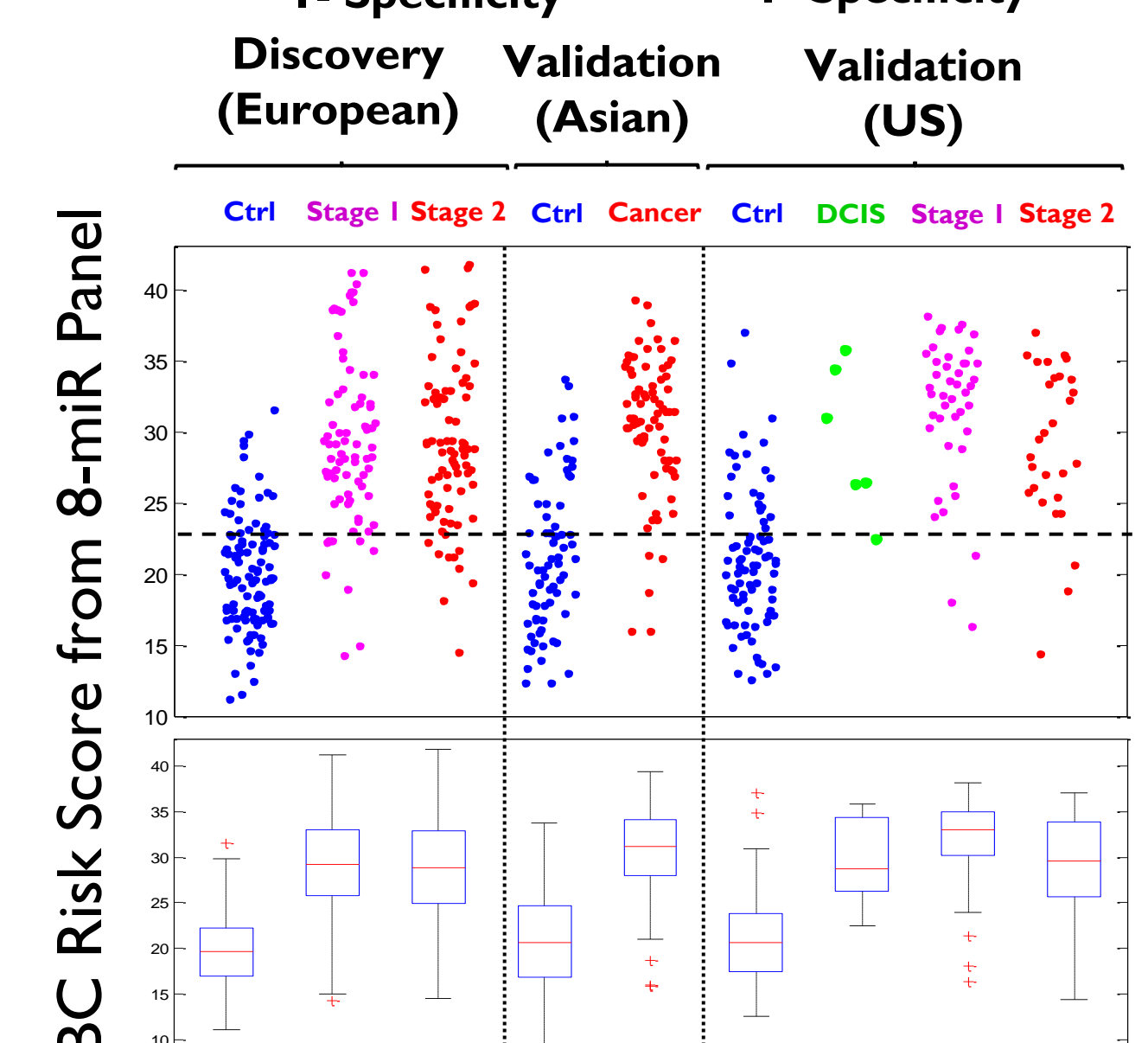
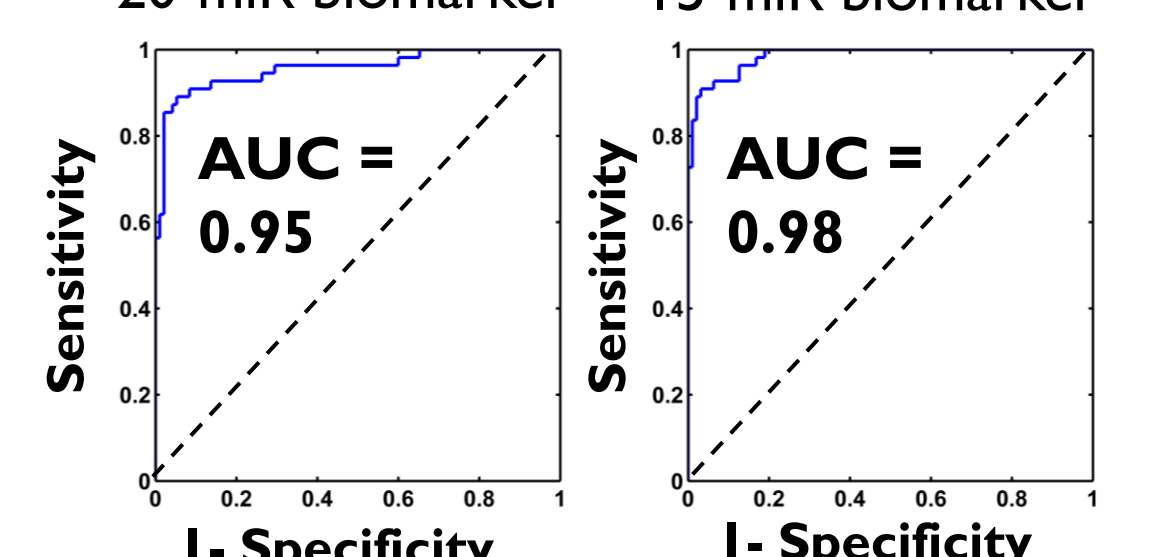
Unmet Needs in Breast Cancer Screening



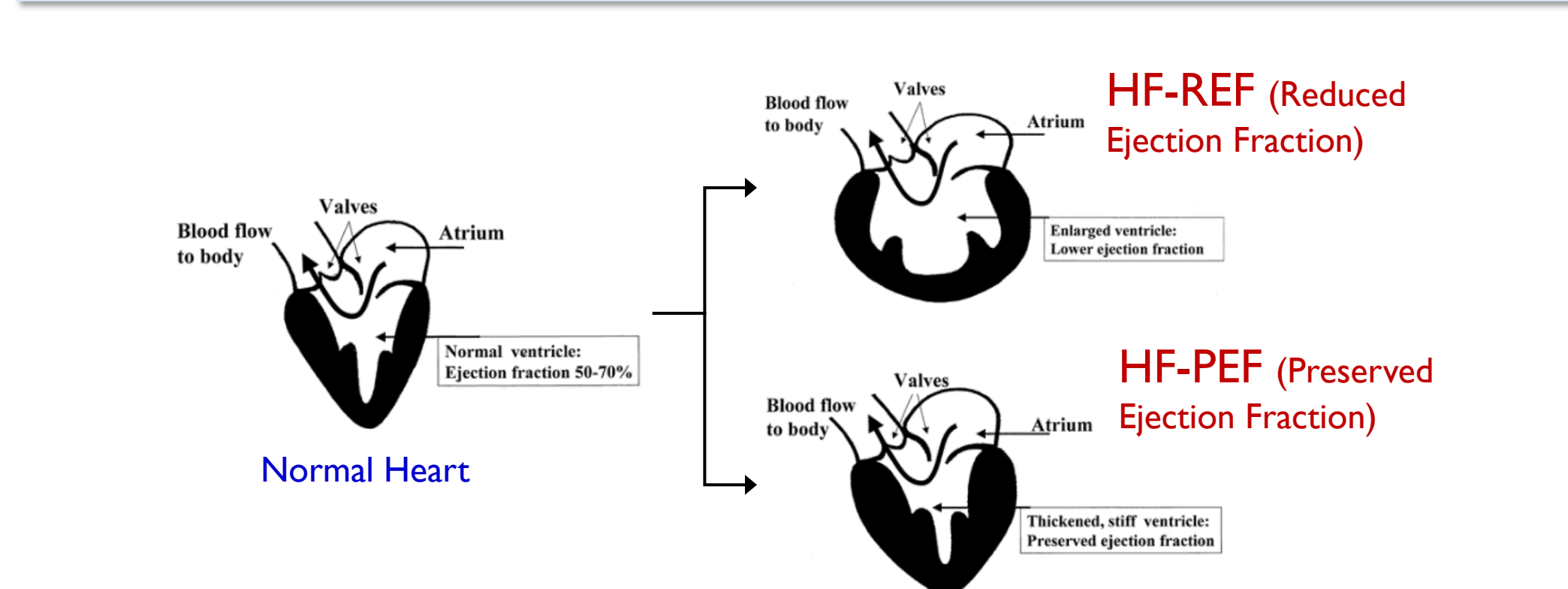
Study Design & miRNA Biomarker Performance



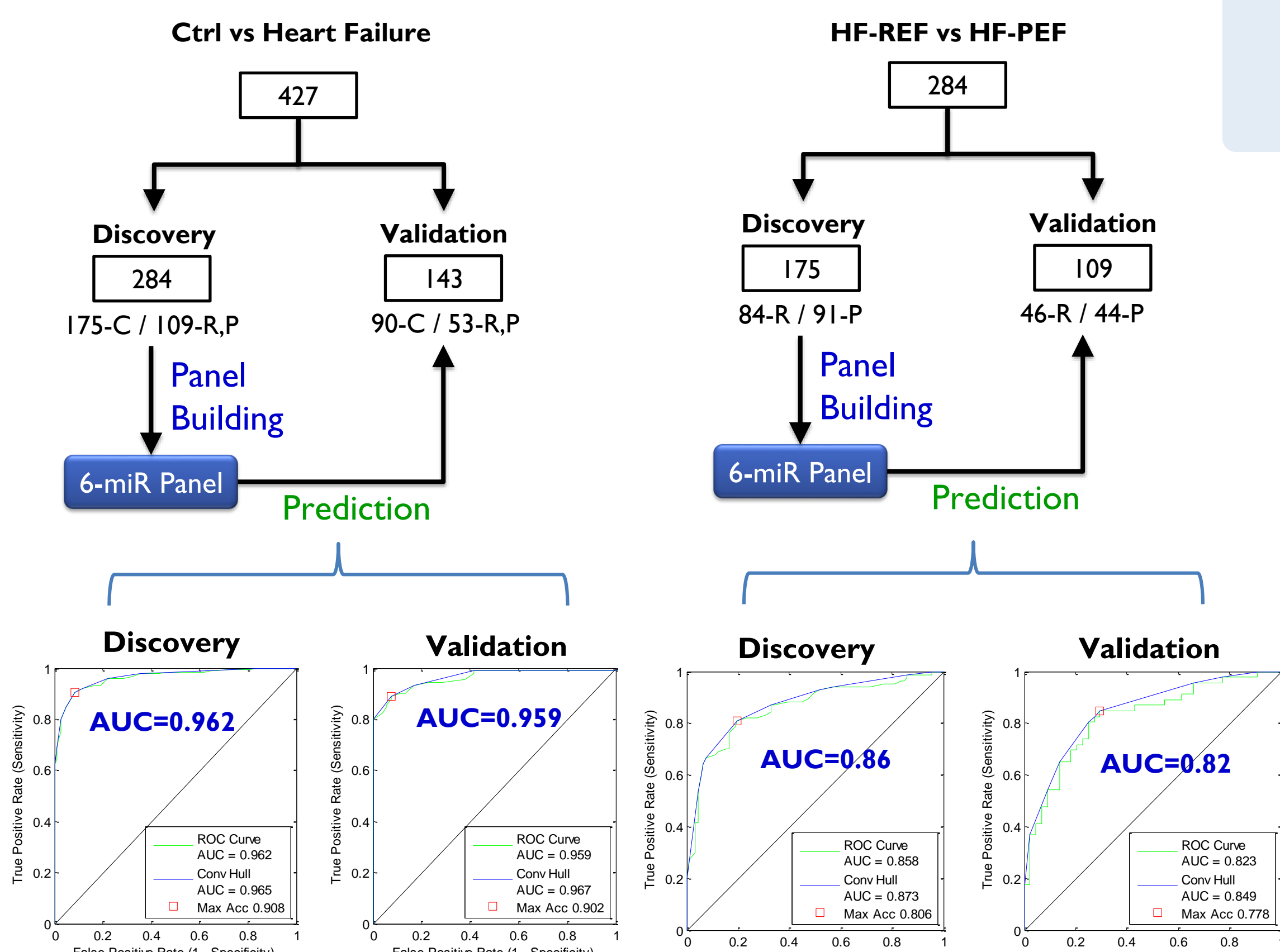
ROC - Caucasian 20-miR biomarker
 ROC - Asian 15-miR biomarker



MiRNA Biomarker in Heart Failure

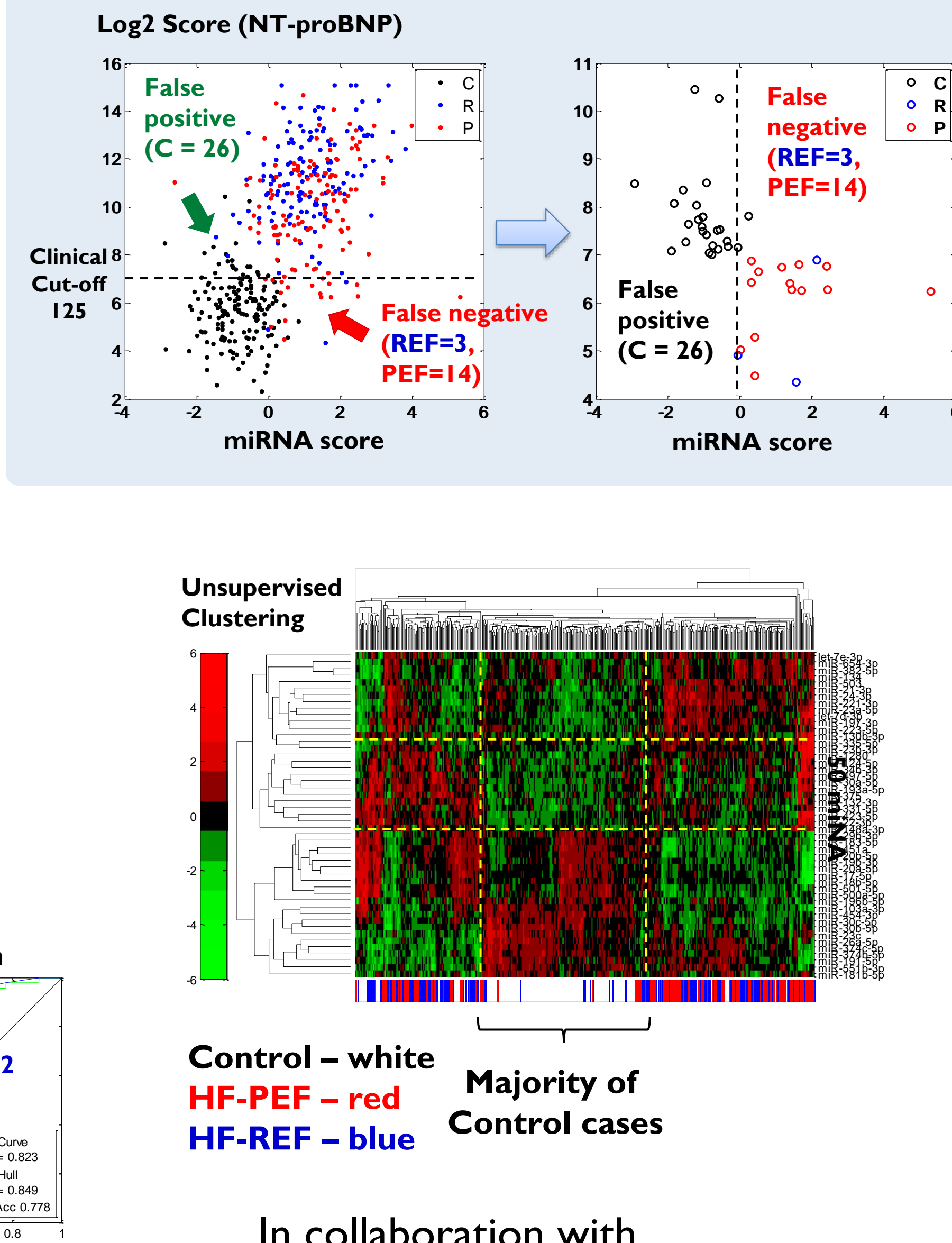


Objective 1. Heart failure detection
 Objective 2. Subtype Stratification



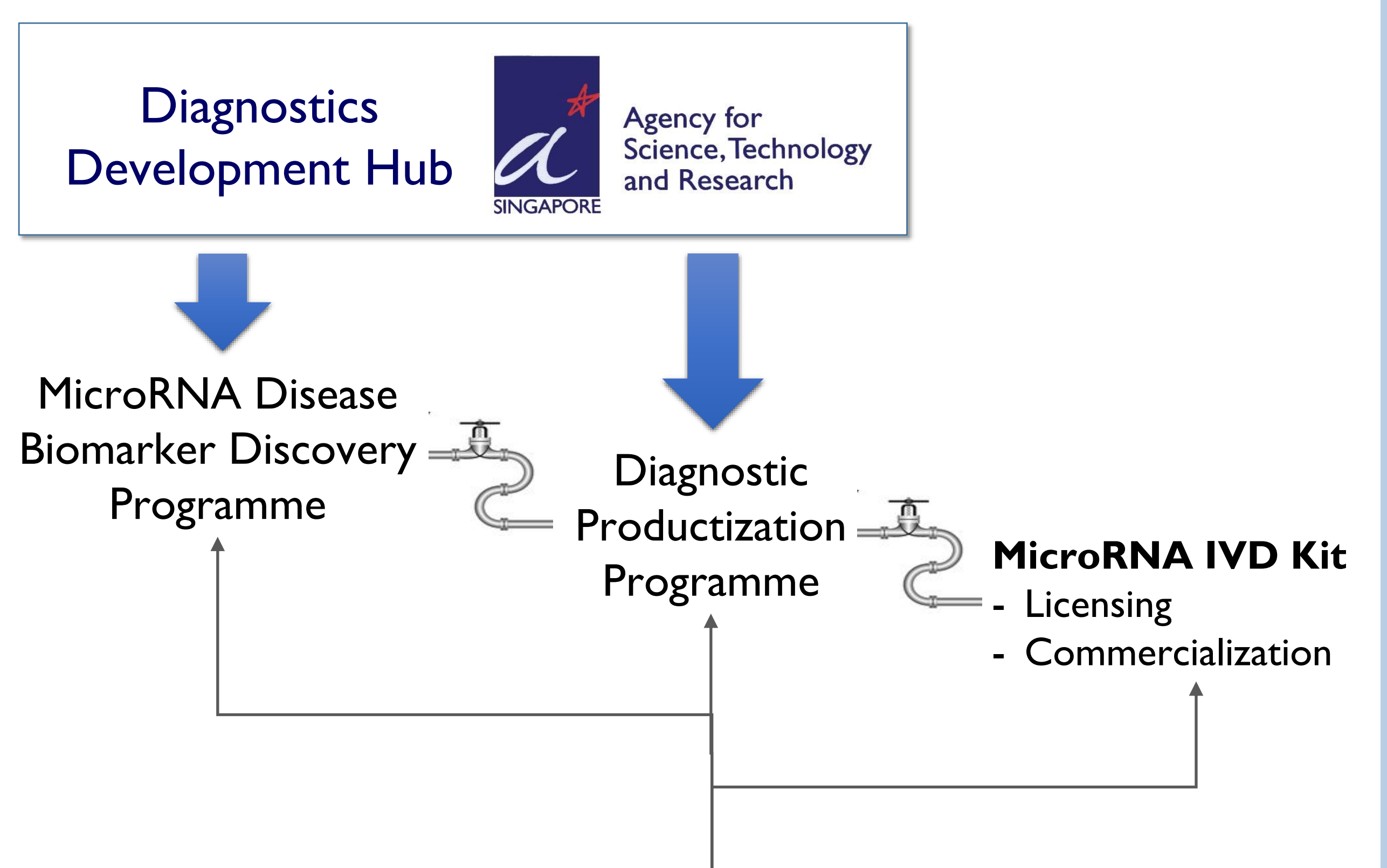
MiRNA Compliments NT-proBNP

6-miR panel classifies NT-proBNP false positive and negative patients with >90% accuracy



A Singapore miRNA Biomarker Development Partnership (Flexible Collaboration Models)

Singapore's National Diagnostics Initiative



MiRNA Technology & Development Partner

6-miR biomarker panels are capable to detect and stratify heart failure patients

In collaboration with Professor A Mark Richards
 NUHS National University Health System
 CVRI Where every beat counts