

# Discovering Circulating MicroRNA Biomarkers Using A Highly Controlled qPCR Workflow



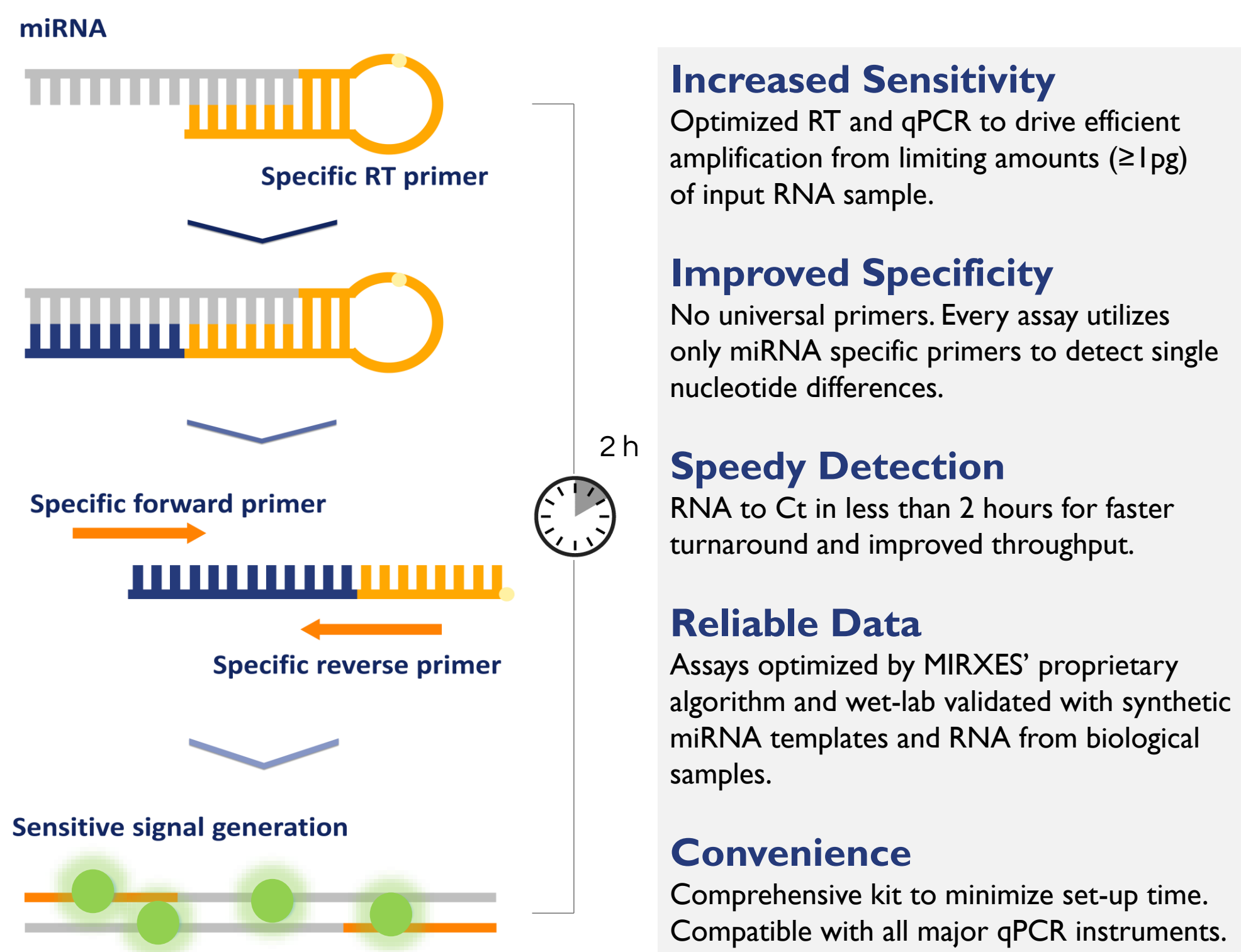
Lihan ZHOU<sup>1</sup>, Ruiyang ZOU<sup>1</sup>, Heng-Phon TOO<sup>1,2,3</sup>  
 Contact: +65 9796 8634 Email: lihan\_zhou@mirxes.com

1, MiRXES, 10 Biopolis Road, #03-01 Chromos, Singapore, 138670.  
 2, Bioprocessing technology Institute, A\*STAR, 20 Biopolis Way, #06-01, Singapore 138668.  
 3, National University of Singapore, 21 Lower Kent Ridge Rd, Singapore 119077

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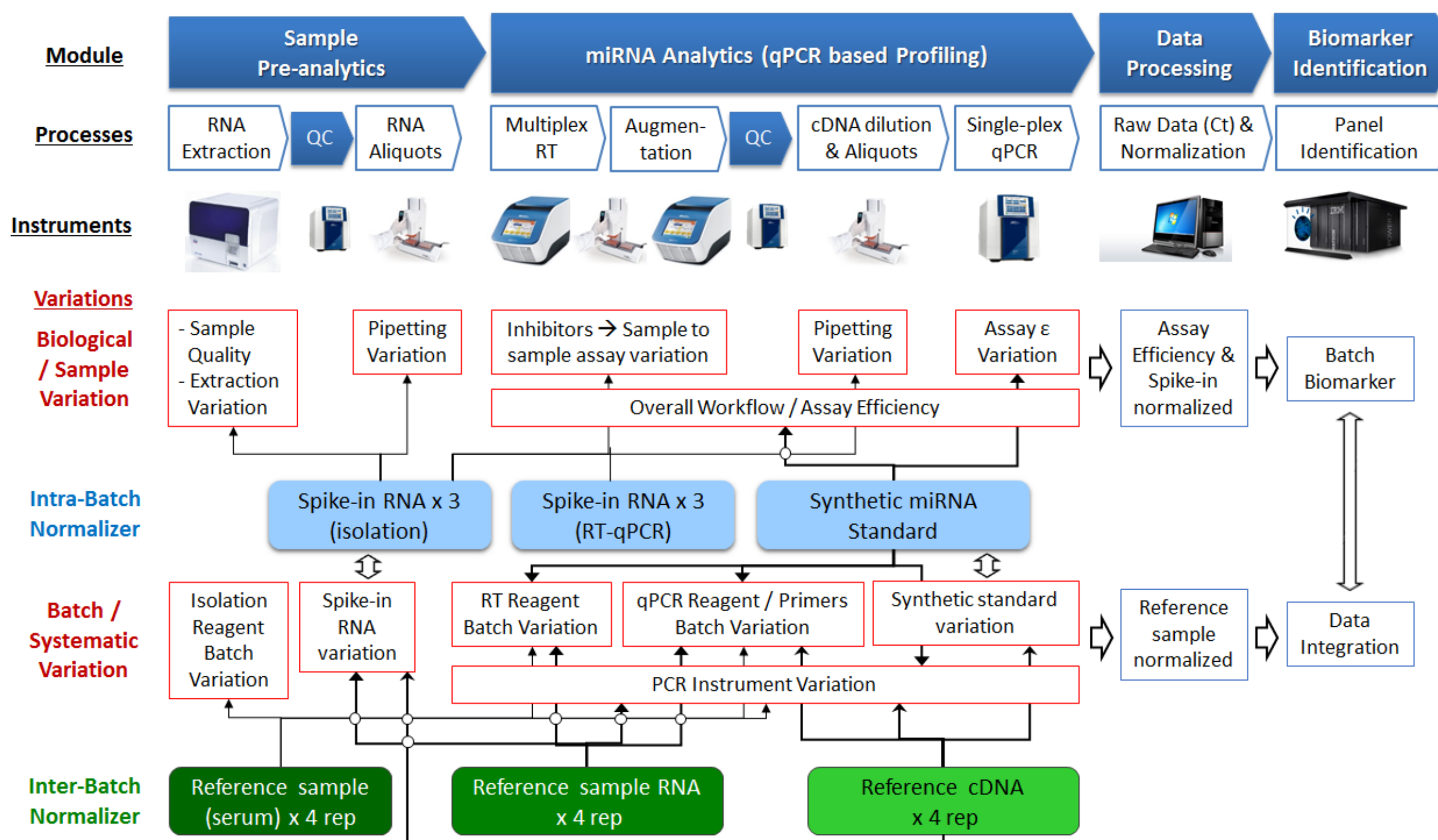
## Novel MicroRNA qPCR Assay

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

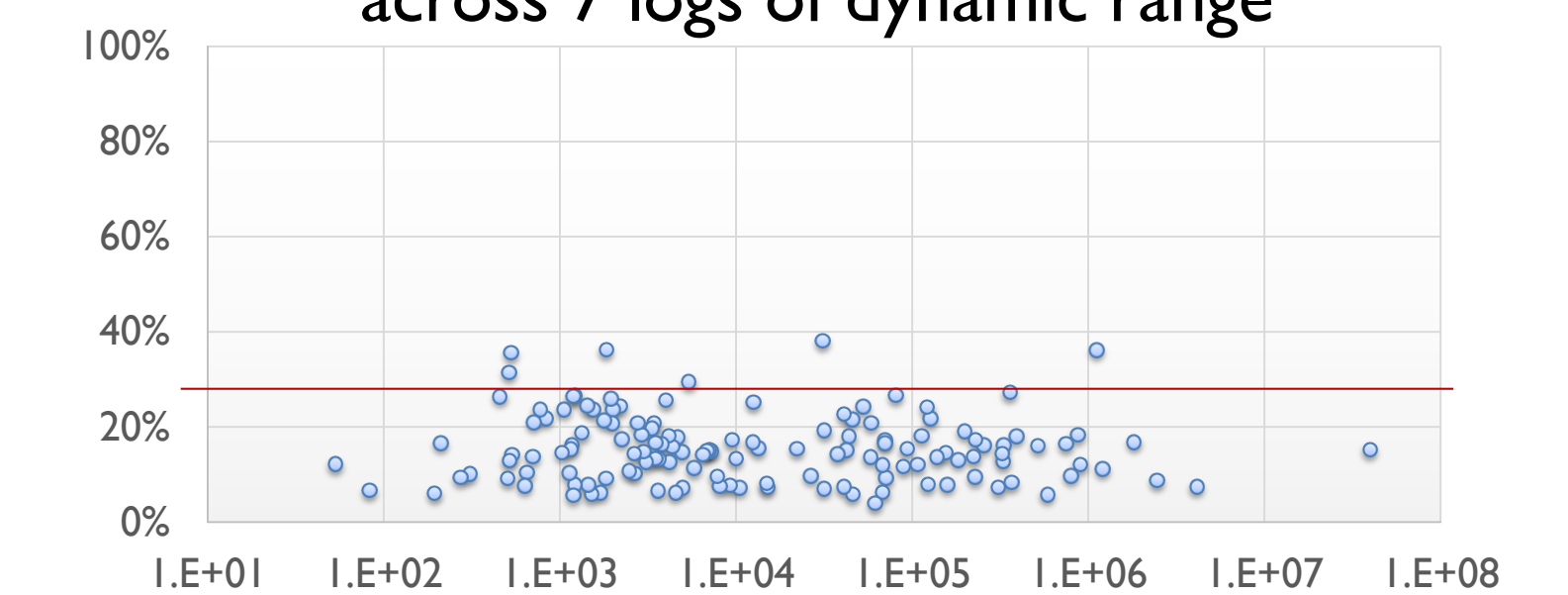


## Key Value Proposition

1. Unparalleled Sensitivity allows detection of low abundance miRNAs

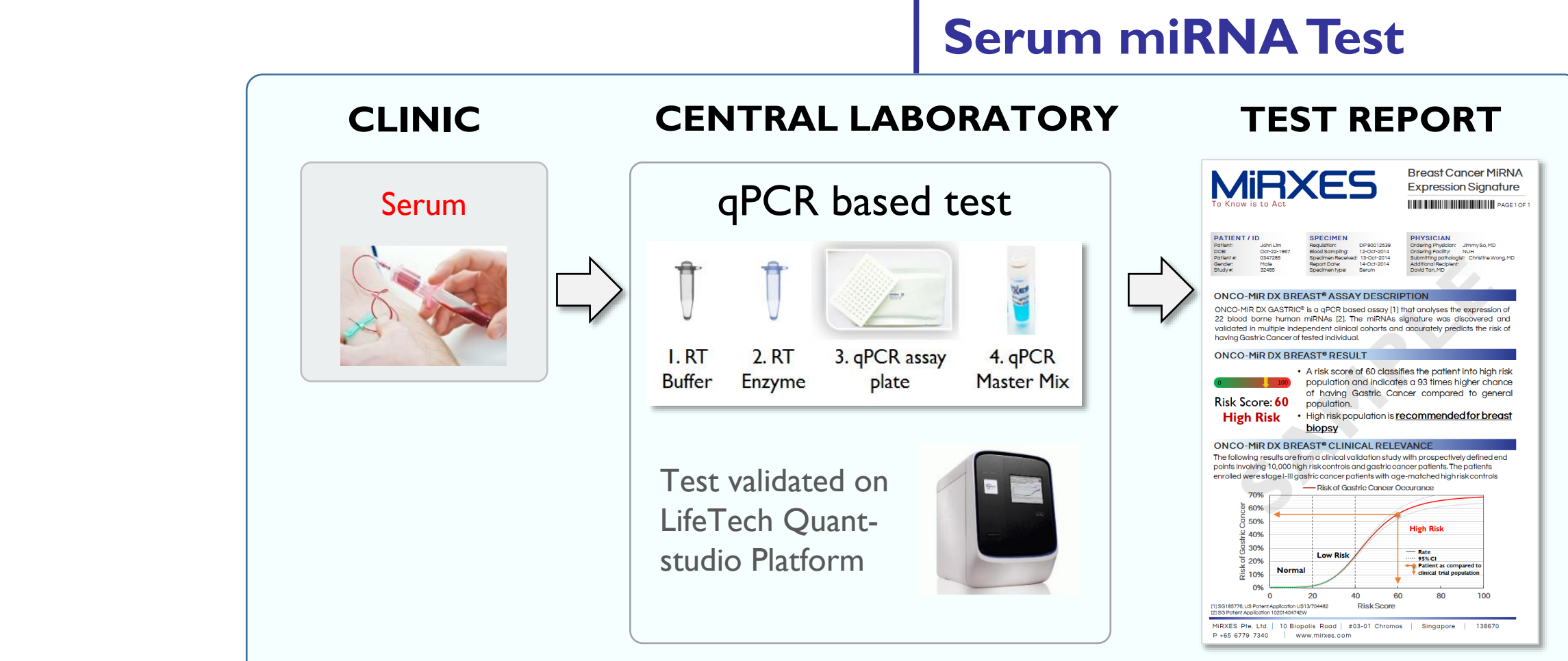
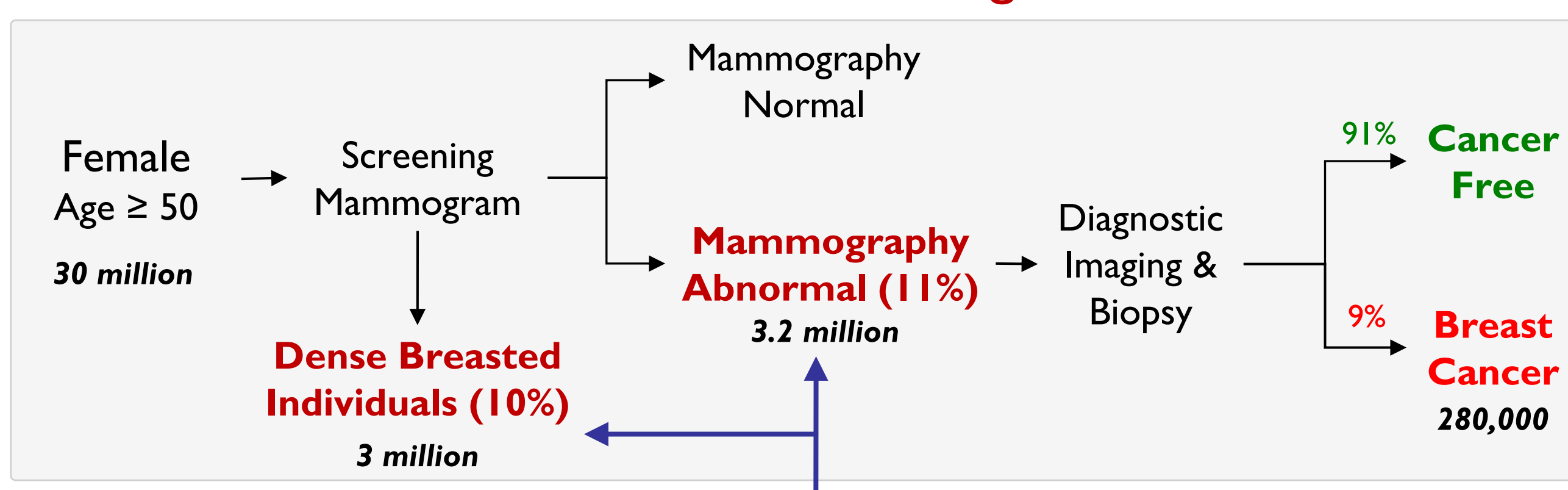
	MiRNAs detected from 200 $\mu$ l serum
<b>MiRXES</b>	> 400
qPCR Technology A	< 200
qPCR Technology B	< 150
qPCR Technology C	< 100

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

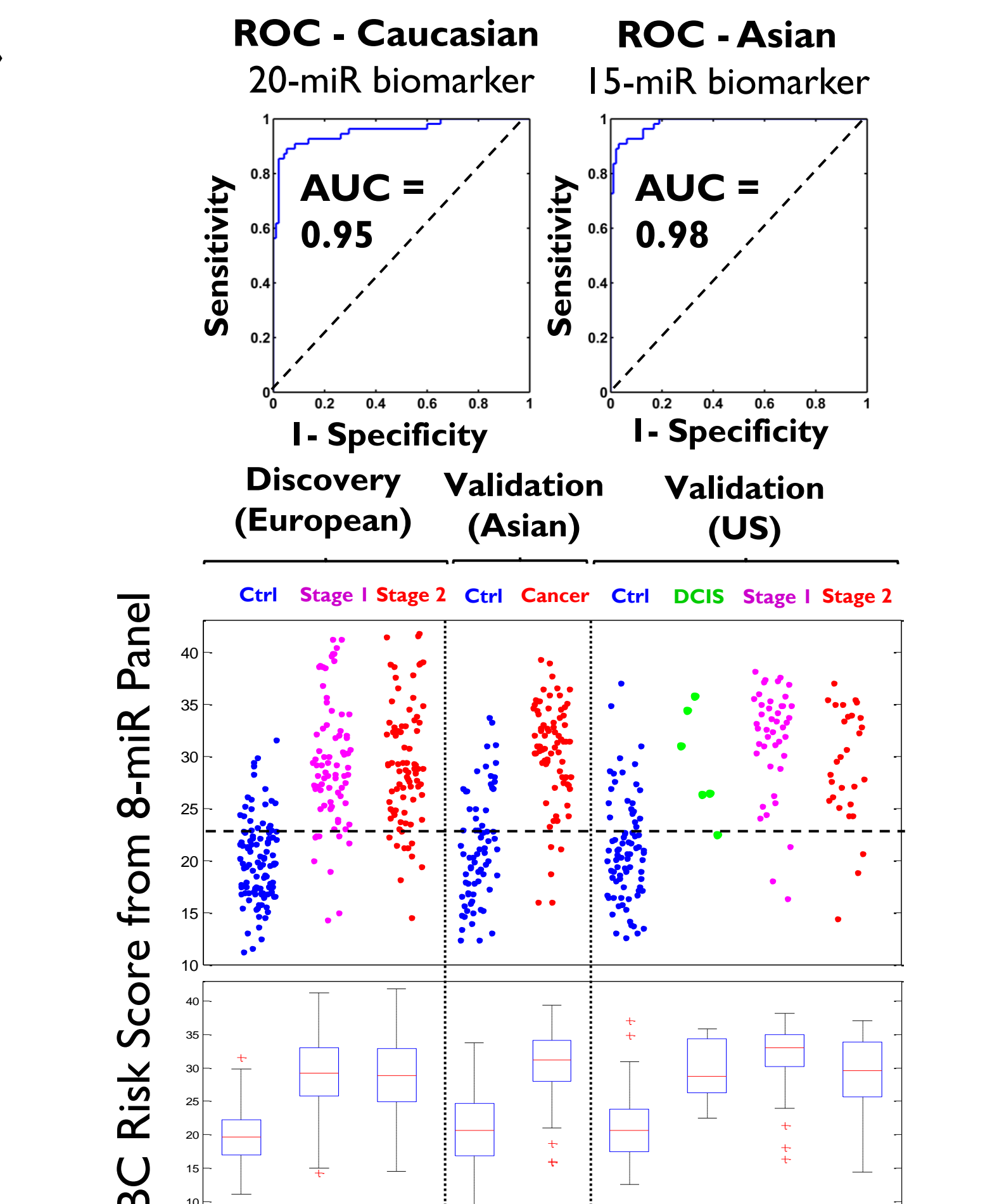
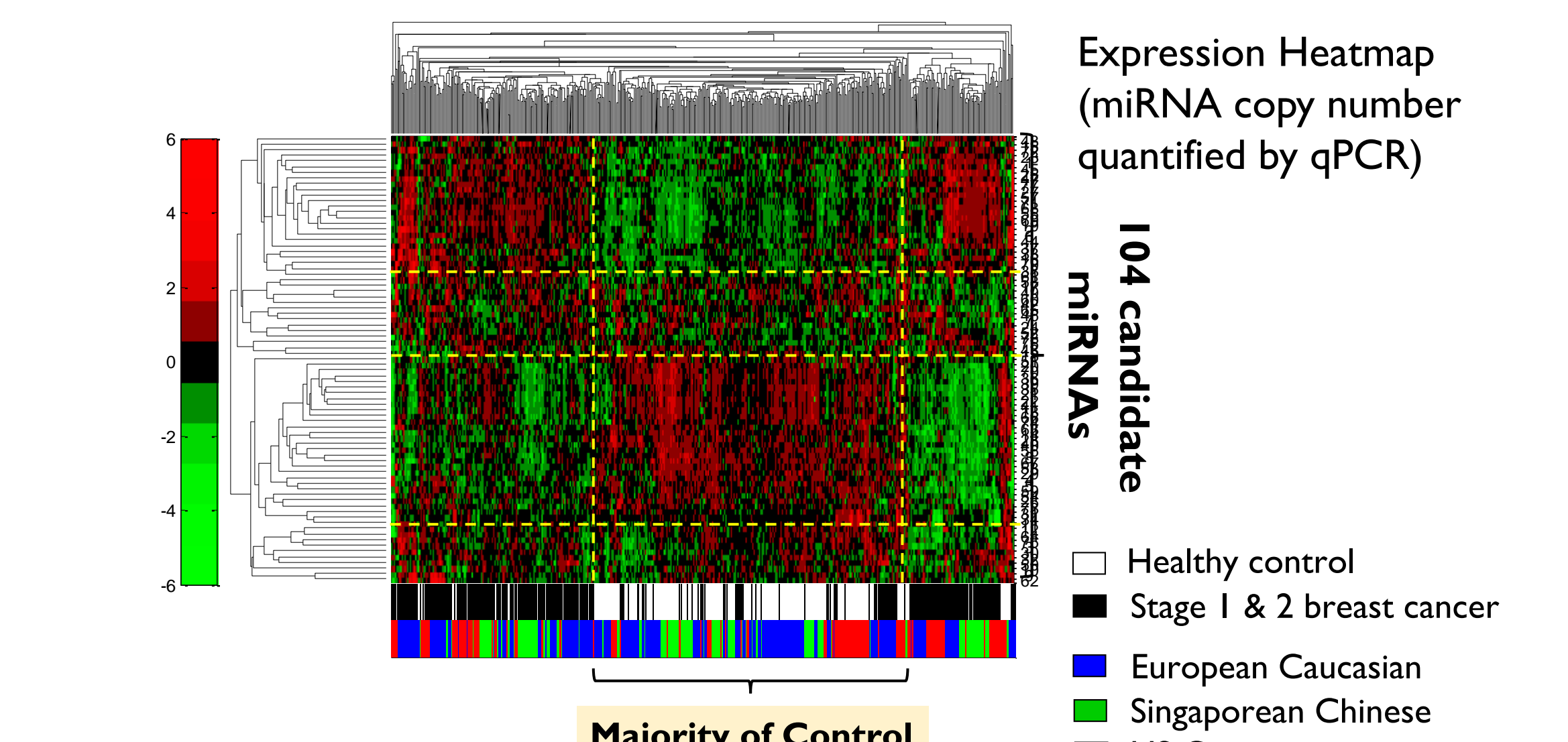
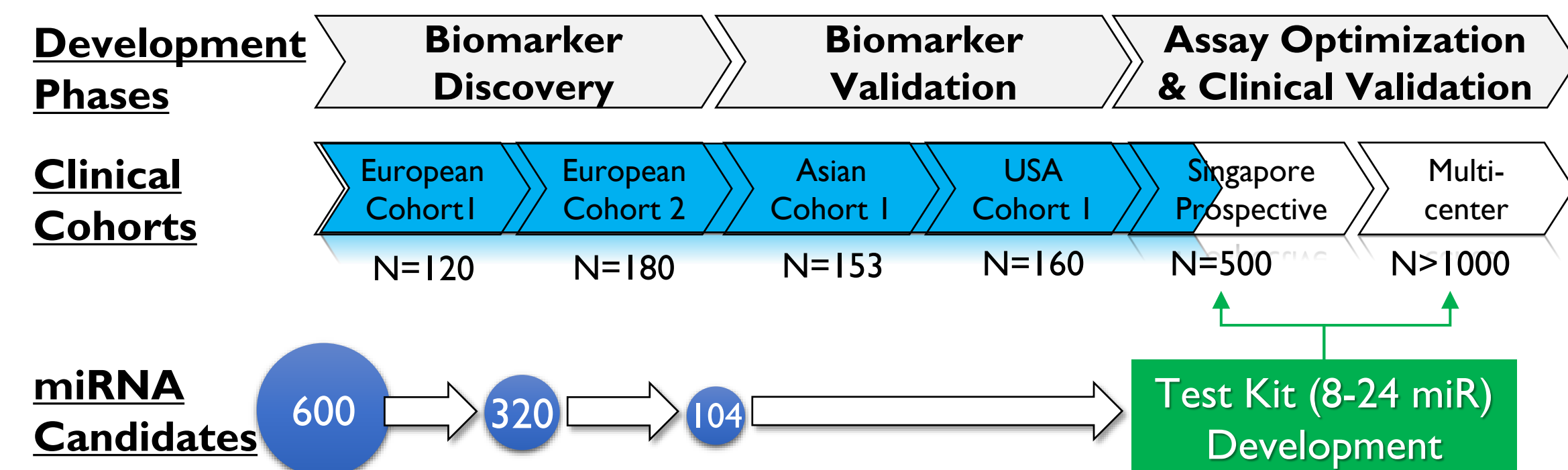


## MiRNA Biomarker for Breast Cancer Detection

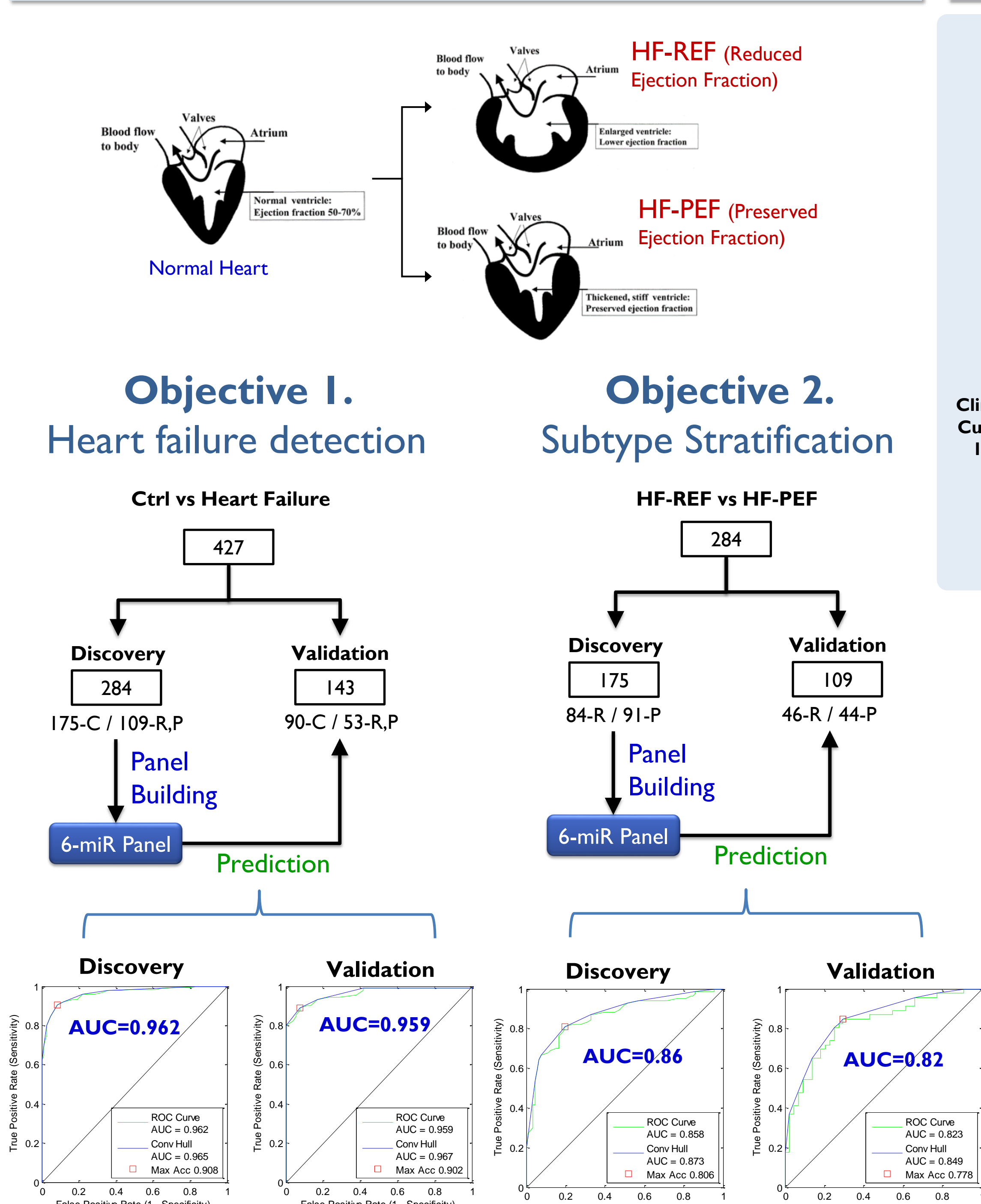
Unmet Needs in Breast Cancer Screening



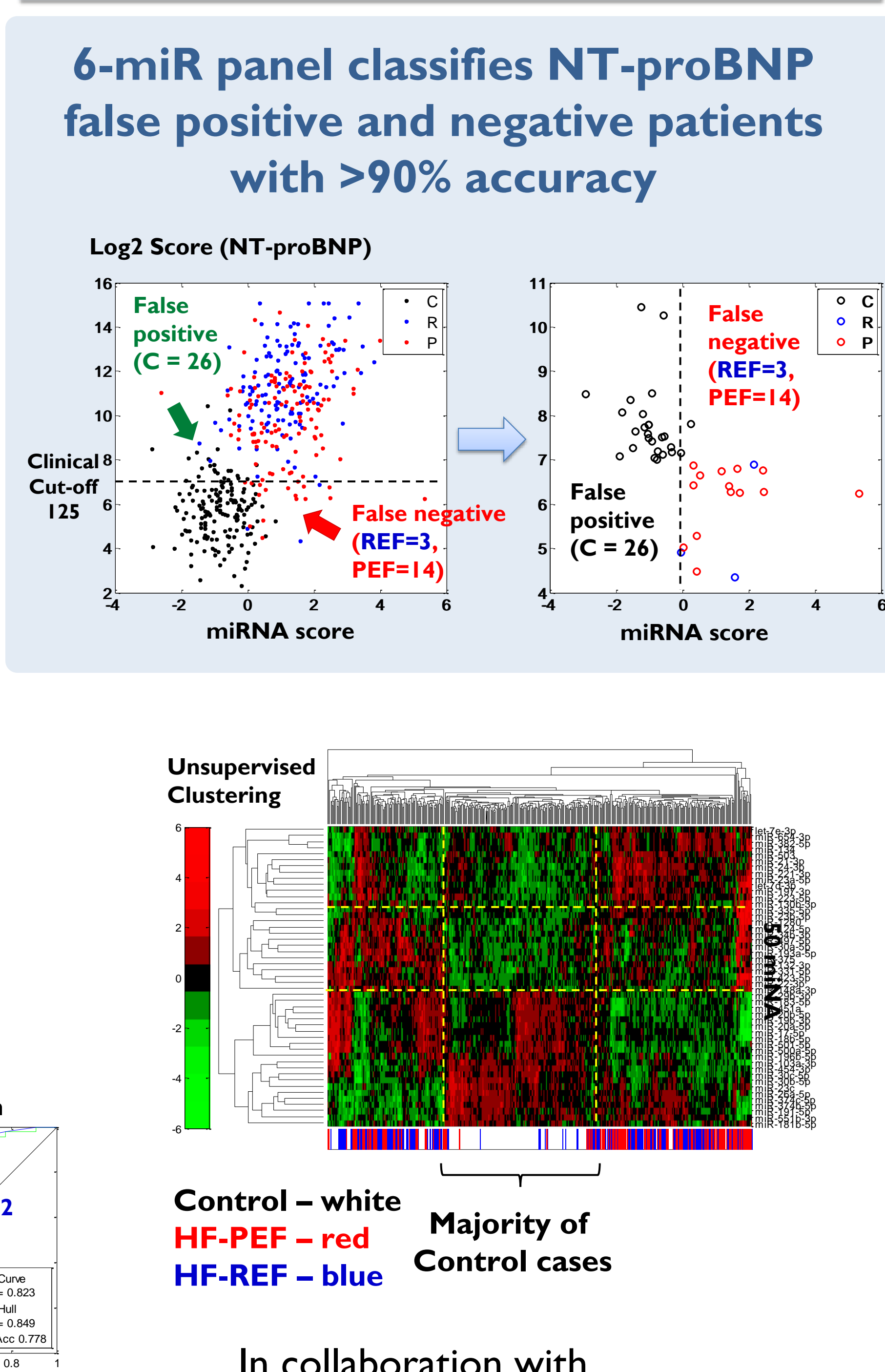
## Study Design & miRNA Biomarker Performance



## MiRNA Biomarker in Heart Failure

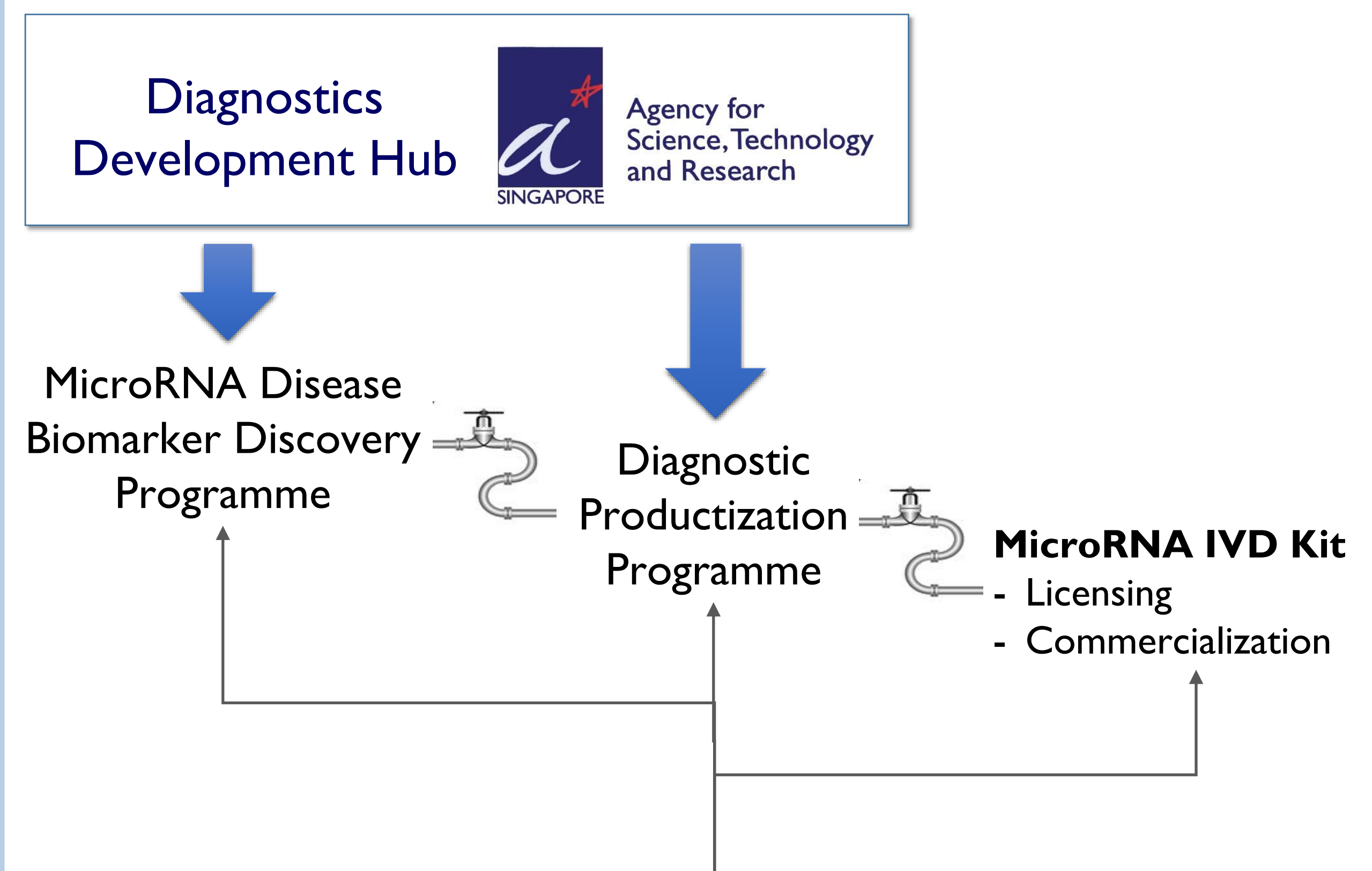


## MiRNA Compliments NT-proBNP



## 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

