



mirxes

TO KNOW. TO ACT.

CADENCE USHERS CHANGE FOR CANCER DETECTION

MiRXES and partners are embarking on Project CADENCE (**C**Ancer **D**etected **E**arly **ca**n be **C**ur**E**d) to innovate a multi-cancer screening test (MCST) to detect tumors early and help save lives.

Lung
Breast
Colorectal
Liver
Stomach
Esophageal
Ovarian
Pancreatic
Prostate

Nine tumor
types account for

66%

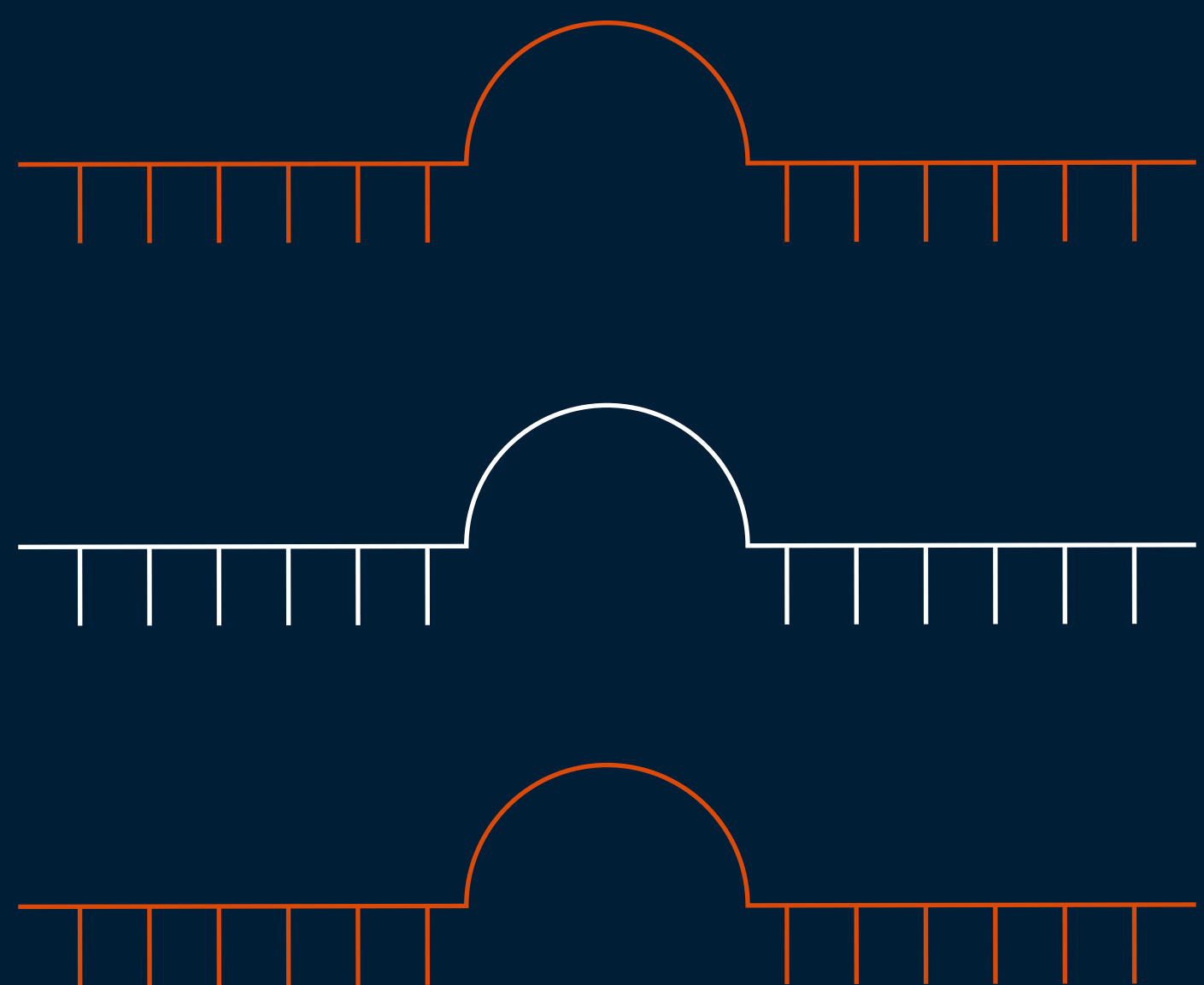
of all cancers in Singapore

Early detection, early intervention

Cancer cases have been rising steadily, with mortality especially high when diagnosis comes late. To enable early detection, MiRXES will develop a blood-based MCST for the top nine cancers in Singapore.

MicroRNA (miRNA) matters

As regulators of gene function, miRNA levels can be early warning signs for cancer. MiRXES will leverage our expertise in miRNA, discovery platform and validation protocols to hunt for these disease markers.

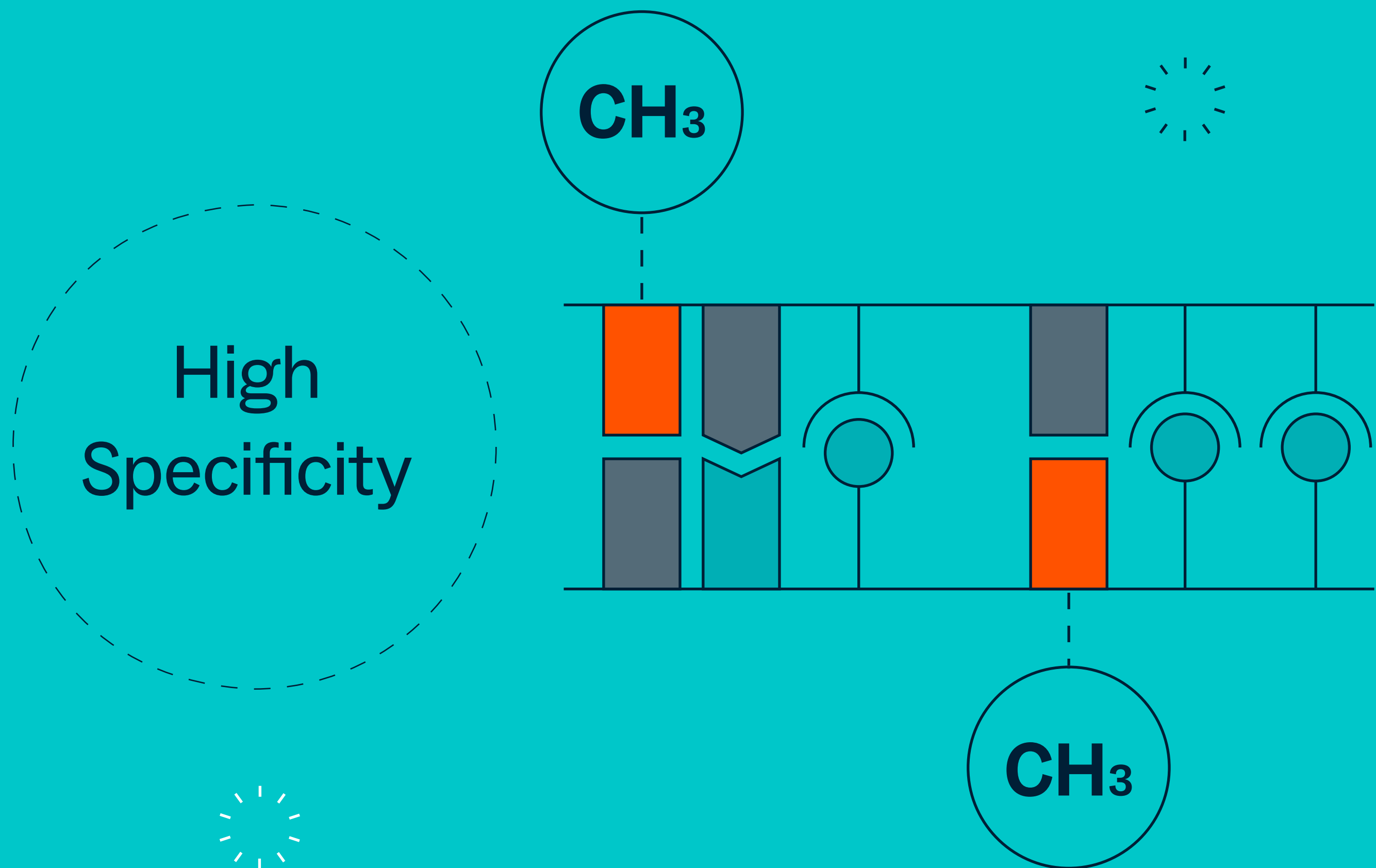


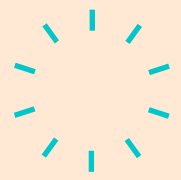
The diagram illustrates the interaction between a miRNA and an mRNA molecule. It consists of three horizontal lines representing the mRNA strand, each with a series of vertical tick marks representing nucleotides. A semi-circular arc, representing the miRNA, is positioned above the middle section of each mRNA strand. The top arc is orange, the middle arc is white, and the bottom arc is orange. To the right of this diagram is a large, dashed teal circle containing the text 'High Sensitivity'.

High
Sensitivity

A methylation addition

Another mechanism is DNA methylation, where methyl chemicals are attached to certain DNA segments and regulate their expression. Altered methylation patterns can be an indicator for tumor progression.



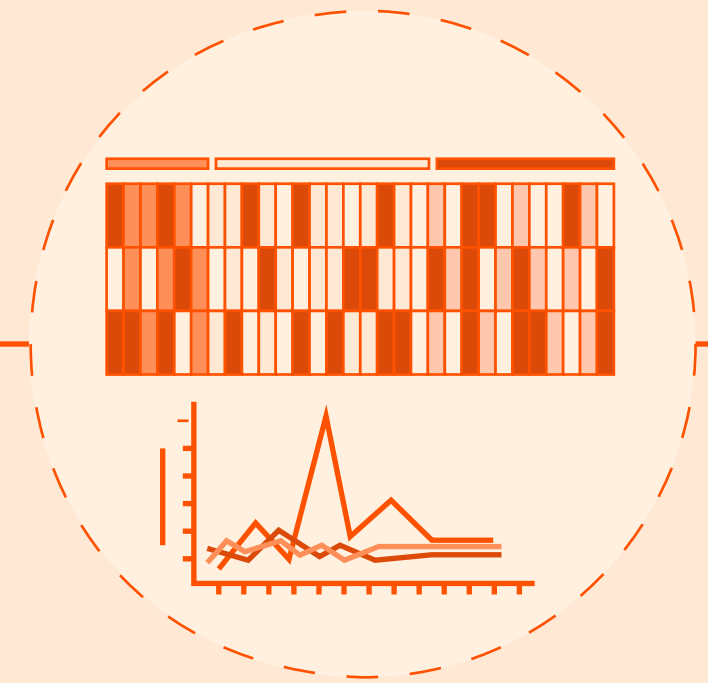


Discovery and Profiling

2022



Biomarker Selection and Verification



>10,000
total participants



Mapping multiple markers

CADENCE will profile thousands of patients, at-risk groups and healthy individuals to identify markers of each cancer type. Both miRNA and methylation will be combined to achieve optimal detection performance.



Detection Kit Development

2023



2024



Long-term testing
in population

SGD 50 million
in funding

Translating knowledge into action

With an arsenal of advanced genetic technologies and data analytics, the team will then build and validate a screening kit based on the best possible combination of markers for multiple cancers.

Shifting the stage to save lives

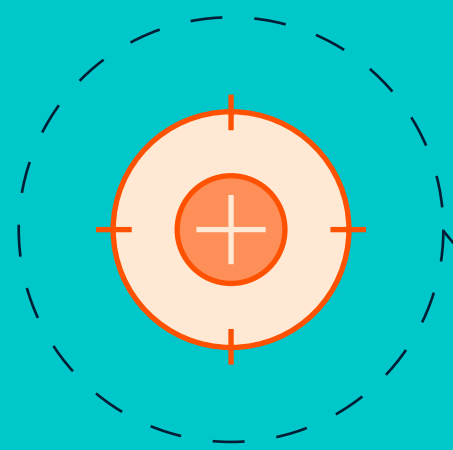
By screening for multiple cancers in a single blood test, CADENCE can fuel a molecular-powered and data-driven approach to cancer detection that is timely, accessible and more reliable than existing methods.



Diagnosis at earlier stages



Cost-effective and non-invasive



High performance



Collaborating for cancer healthcare

Having launched our research and clinical diagnostics labs, MiRXES is collaborating with academic and medical experts to support early disease interception, reduce cancer burden and usher in an era of preventive healthcare.

