



Meet Mia[®]:
Our breakthrough AI platform for
breast screening



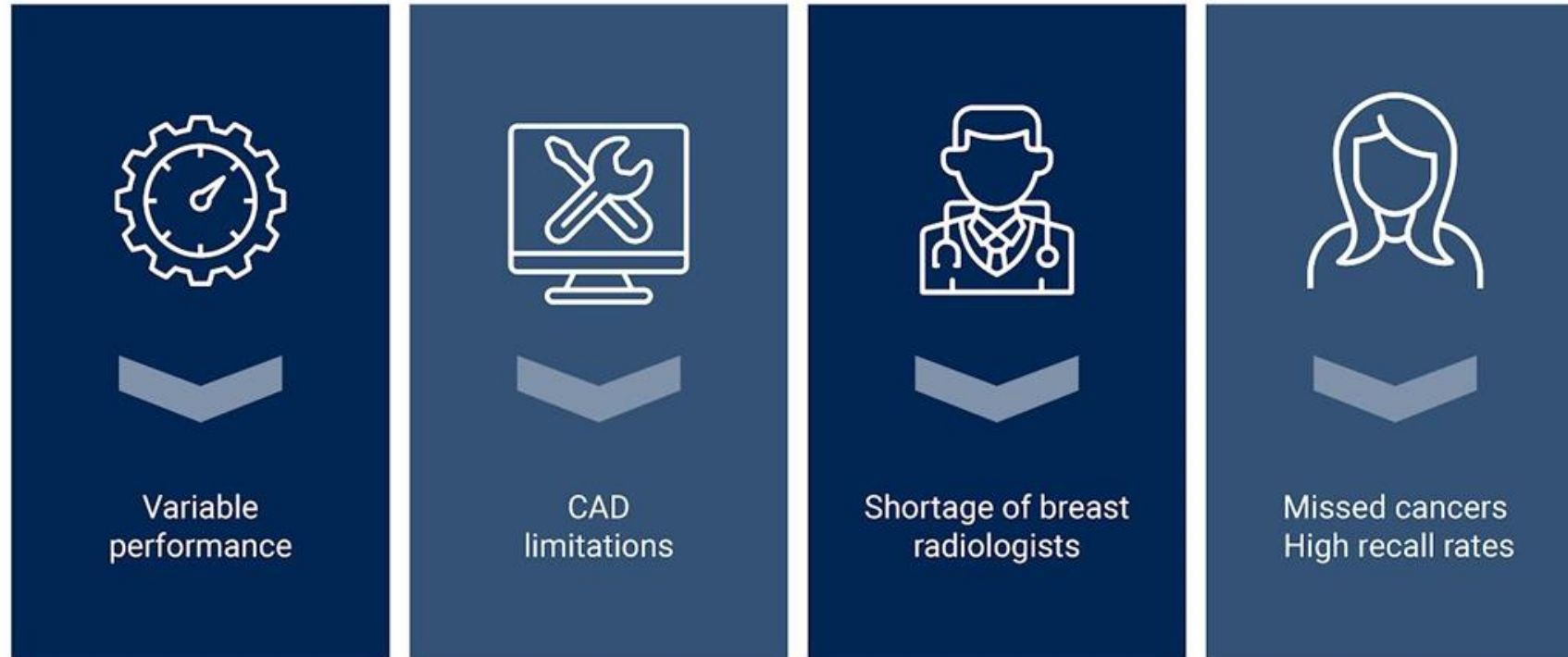
Giving **every** woman, **everywhere** a better fighting chance against breast cancer



Mia[®] is our breakthrough AI platform for breast screening.

A suite of solutions, Mia is designed to empower radiologists and screening services to deliver confident, accurate and timely results to every woman, everywhere.

Breast screening programmes are facing huge challenges



Limitations of current approaches to breast screening

Gold-standard screening

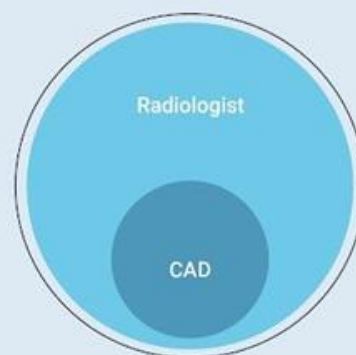
Double reader model



Similar visual perception:
added redundancy

The attempt to achieve gold-standard screening

Single reader + CAD model



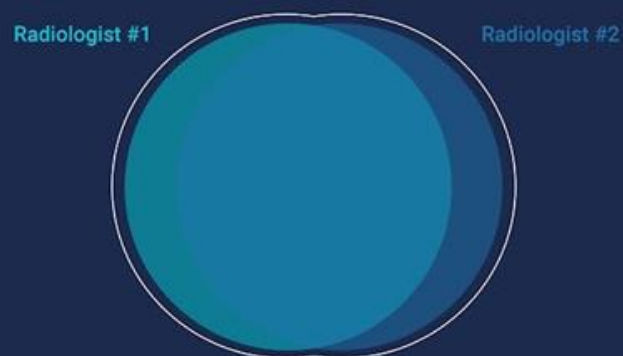
Isolated visual perception:
vulnerable to bias

**We have developed
a new approach...**

A breakthrough solution developed by Kheiron

Gold-standard screening

Double reader model



Similar visual perception:
added redundancy

The attempt to achieve gold-standard screening

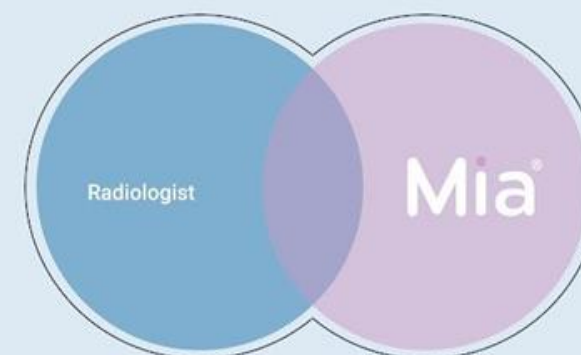
Single reader + CAD model



Isolated visual perception:
vulnerable to bias

Gold-standard double reading quality with a single human reader

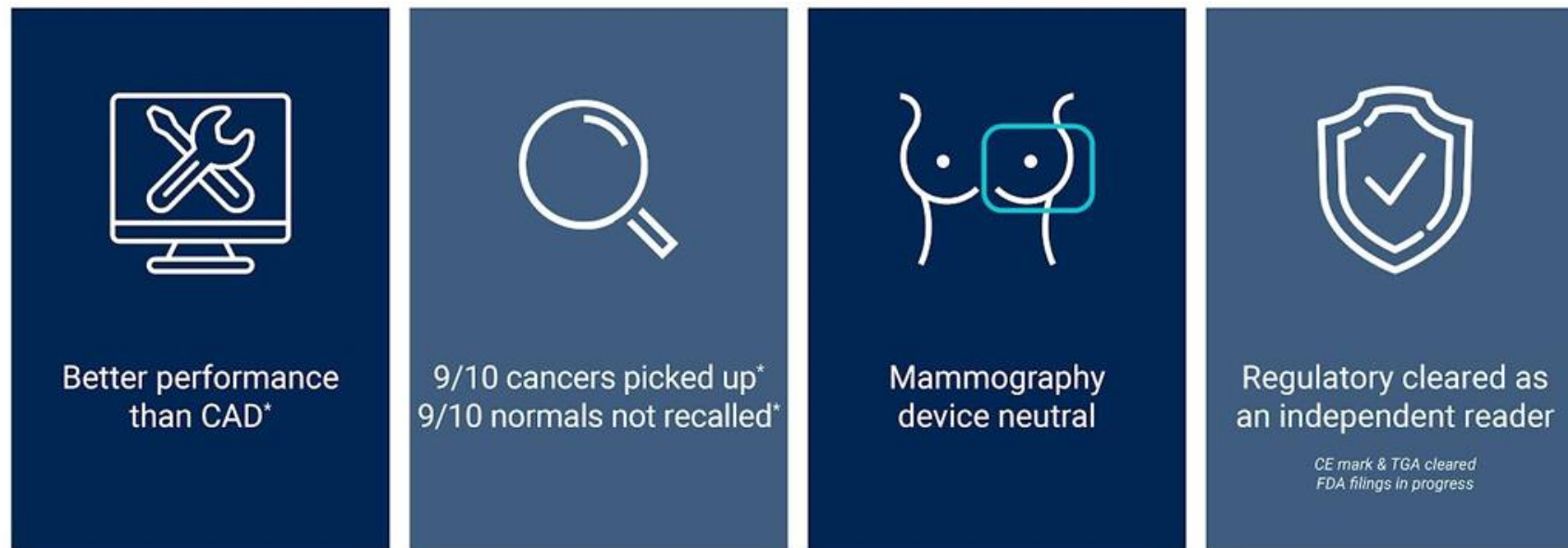
Single reader + Mia



Different visual perception:
improved detection

Meet Mia - our award-winning breast screening solution

Mia combines the latest deep learning technology with expert clinical insights



EuroMinnies
Best New Radiology
Software 2019



CogX Innovation Awards
Best AI Product in
Health 2019

Recall or no recall? Mia supports a critical decision



Case-wise recall suggestion

Mia suggests a decision for the entire case, just like asking a radiologist colleague for an opinion



Images indicated

Where malignancy suspected



Auxiliary ROIs*

Only relevant areas marked



Mia detects breast cancer that even experts miss



- ✘ Radiologist found the cancer on the right side but missed the cancer on the left side
- ✔ Mia found it



- ✘ Radiologist missed the cancer
- ✔ Mia found it

Developed in partnership with leading institutions around the world



2018 clinical study found 90% sensitivity, 89% specificity

4 SCREENING SITES



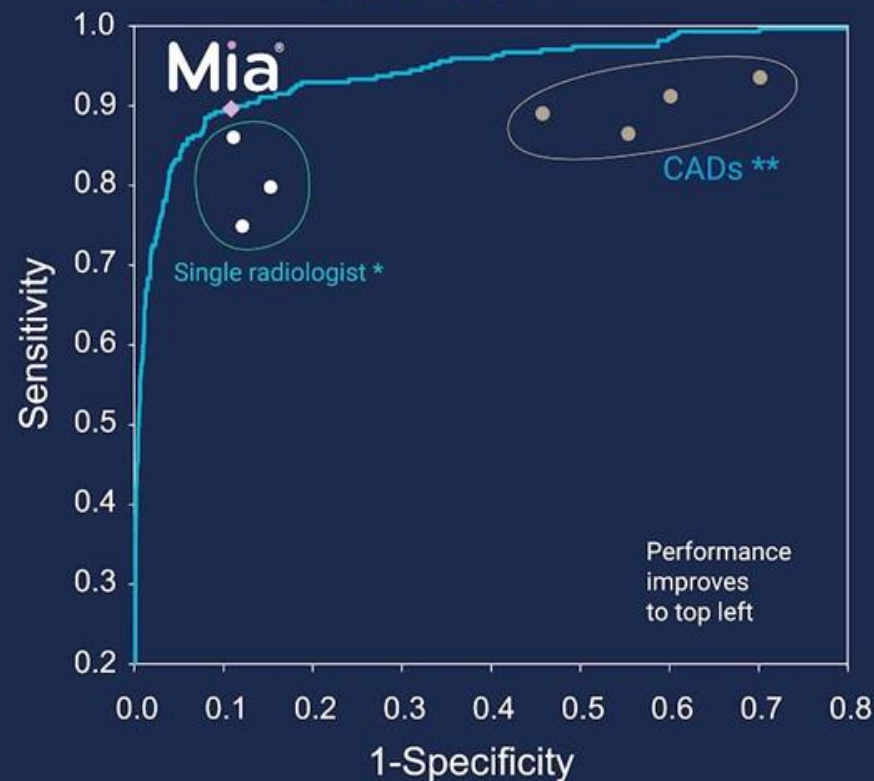
3,854 SCREENING CASES



6.9% PREVALENCE (Enriched Sample)



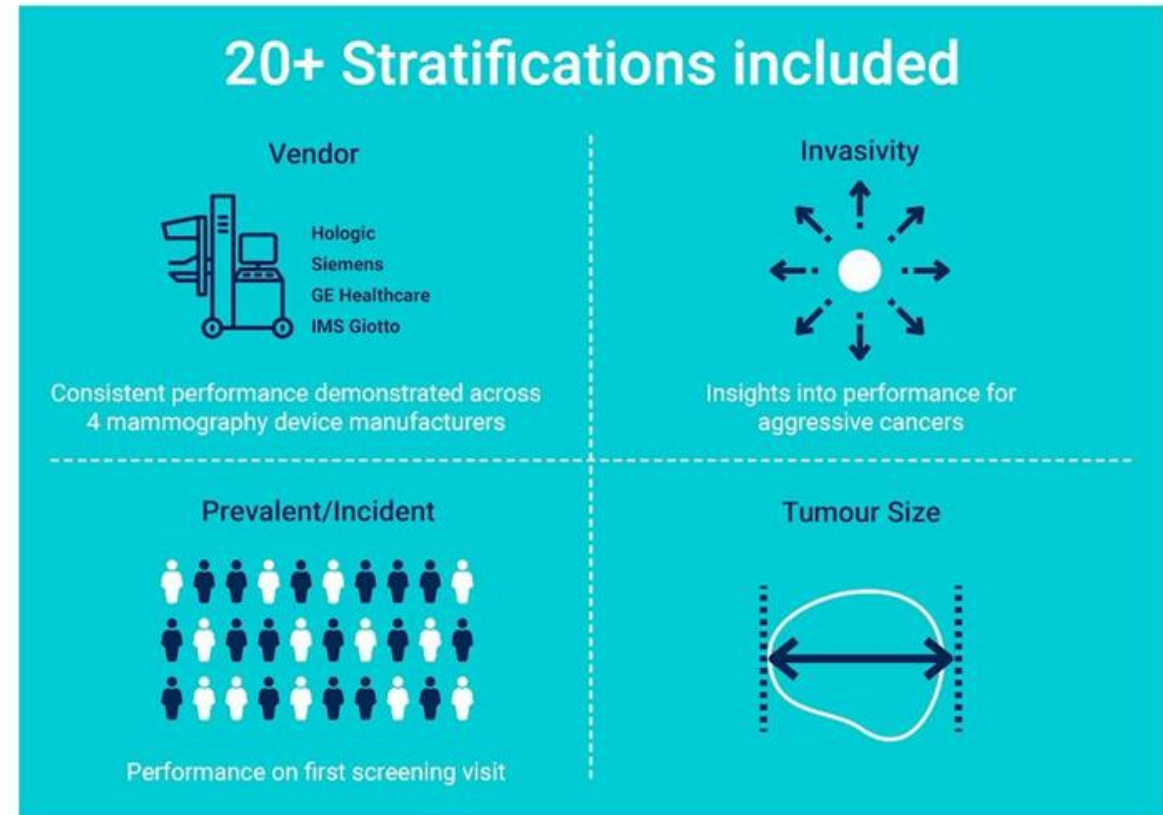
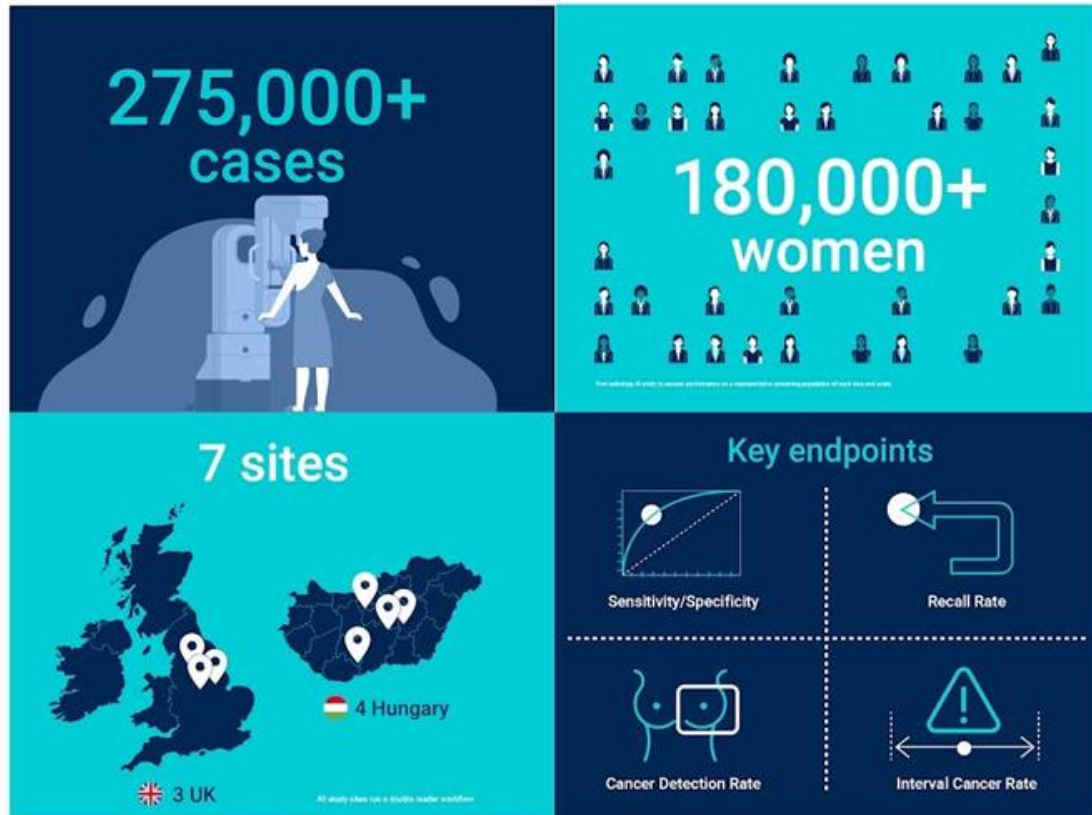
ROC Curve



2018 study proved that Mia performs at the level of expert radiologists

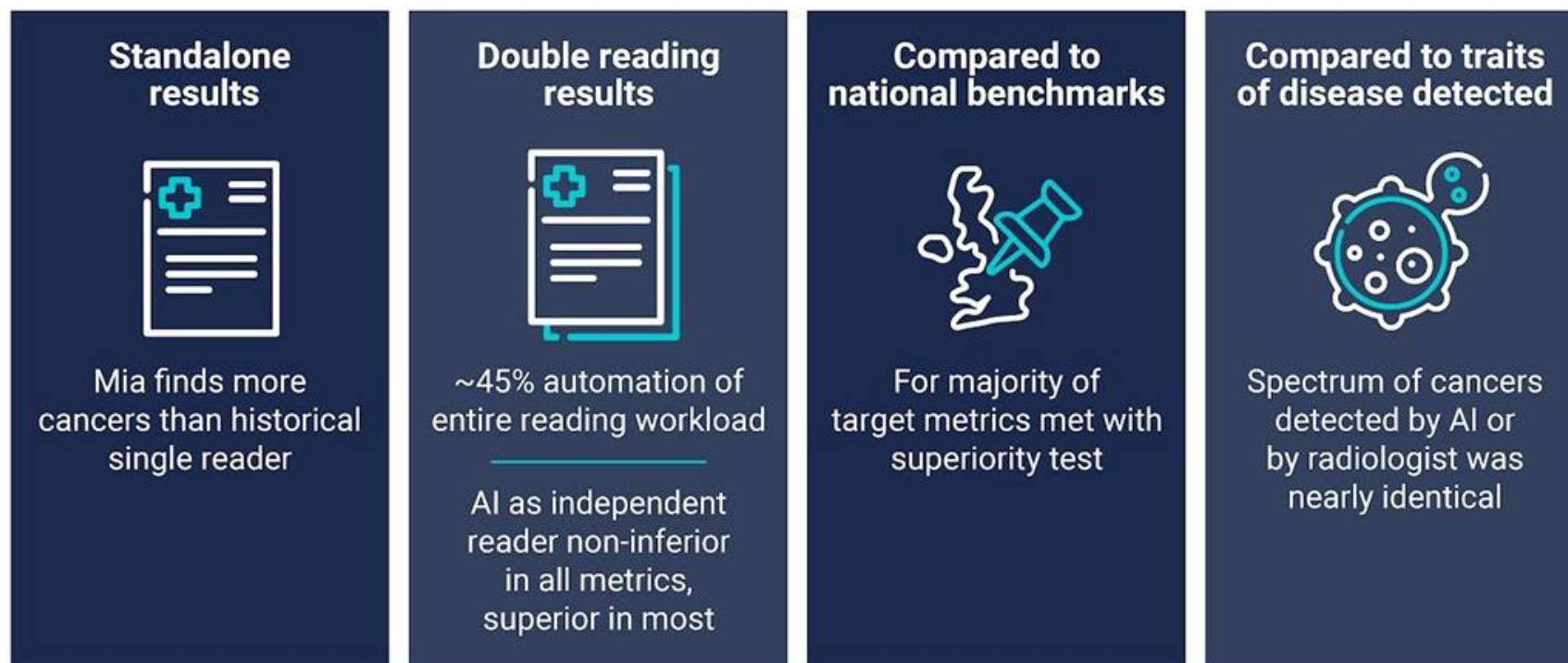
Acceptable Human Performance	Sensitivity	Specificity
Mia by Kheiron Medical	90%	89%
US national performance benchmarks for modern screening digital mammography ¹	87%	89%
Criteria for identifying radiologists with acceptable screening mammography interpretive performance ²	≥ 80%	≥ 85%
Minimally acceptable interpretive performance criteria for screening mammography ³	75%	88%

Unprecedented scale & rigour of our 2020 study



Results summary of our 2020 clinical study

In the largest radiology AI clinical study to date, we demonstrated differentiated performance **AND** a novel AI + radiologist workflow

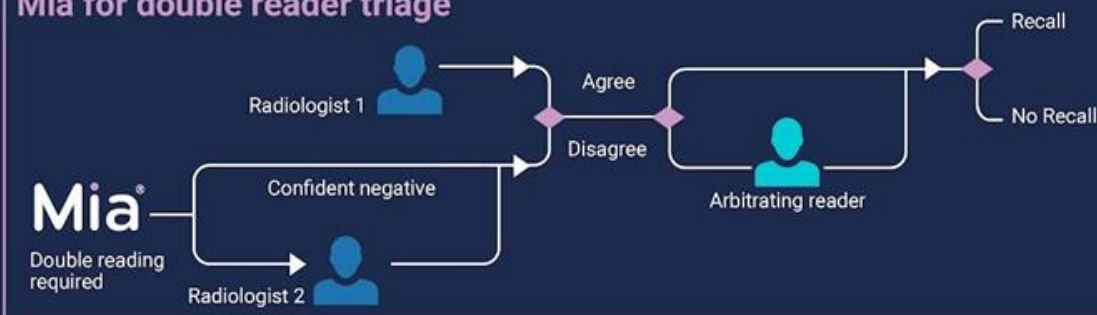


Mia can increase productivity of various workflows

Double reader workflow



Mia for double reader triage



Mia for double reader triage increases efficiency by automating up to 25% of the reading workflow

Mia as an independent reader



Mia as an independent reader increases efficiency by automating up to 45% of the reading workflow

“The study found that using Mia as an independent reader maintains the standard of care of double reading, detects cancers missed by human readers, while automating a substantial part of the workflow, and could therefore bring significant clinical and operational benefits.”

Dr Nisha Sharma

Consultant Breast Radiologist and Director and Clinical Lead
for Breast Imaging at Leeds Teaching Hospitals NHS

First winner of UK Government's AI in Health and Care Award 2020

In the UK and beyond, this award will allow us to:



Accelerate the deployment and adoption of AI



Replicate and accelerate our rigorous approach to clinical validation



Generate evidence (clinical and health-economic) for an improved standard of care



The combination of AI + humans will produce better outcomes for all

Radiologists



Reduce missed cancers

Lower false positives

Increase productivity

Providers



Immediate cost savings

Increase standardisation

Mitigate radiologist shortages

Women



Reliable cancer detection

Reduce recalls and anxiety

Avoid unnecessary biopsies



Thank you

For more information, please visit our website

www.kheironmed.com

To request a demo of Mia, contact

info@kheironmed.com

Educational use only.
Not intended for supply.