# **FUJ**IFILM FUJIFILM **ASPIRE** Cristalle **Digital Breast Tomosynthesis**







## The fight against breast cancer is not one-dimensional.

At Fujifilm, we are committed to doing our part, at every opportunity, to deliver value through imaging innovation.

Screening is the best way to detect breast cancer earlier. Today, detection has significantly improved with the addition of tomosynthesis. But there are still limitations. The fear of discomfort and recalls can make women hesitant to schedule a screening. Radiologists demand the best image quality to simplify their diagnosis. The file size of 3D images can put a strain on IT infrastructure. There is a lot riding on the decision to upgrade to a more advanced mammography technology.

### It's time to get smarter about 3D mammography.

ASPIRE Cristalle with Digital Breast Tomosynthesis (DBT) is built with insight into image quality, operational excellence, and a better patient experience so it can deliver:

- Superior diagnostic accuracy for radiologists
- Simplified use and fast image acquisition for improved workflow and a better patient experience
- Noticeably less pain and anxiety for the patient, made possible by Fujifilm's patented Comfort Paddle
- IT solutions to optimize integration and image management

ASPIRE Cristalle with DBT

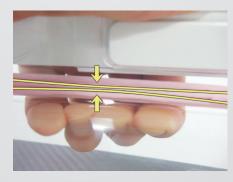
3D mammography that's built smarter.

A victory in the fight against breast cancer.









## **INSIGHT #1** Mammograms don't work if women won't get them.

#### **Built smarter for patient comfort**

Mammograms are paramount in the fight against breast cancer. But there are many reasons why women avoid them. The fear of the unknown. Dose concerns. Anxiety, because they've heard the exam can be painful.

And that is just for first-timers. Beyond that, recalls can be stressful, time-consuming, and often costly. It's no wonder that women with a false-positive result are 36% less likely to return for annual screening compared to women with a true negative result. ASPIRE Cristalle's advanced image quality reduces the number of recalls for non-cancer cases.

Many women also find mammograms uncomfortable and even painful—breasts weren't meant to be compressed flat. That is why we are proud to introduce an innovation that could be the deciding factor when women choose where to schedule their next exam—our patented Comfort Paddle.

## The Comfort Paddle is built smarter because it flexes to the contour of a woman's breast.

- Designed with a flexible, slotted 4-way tilting paddle
- Redistributes pressure normally concentrated on the thickest part of the breast
- Compresses evenly along the natural curve of the breast
- Allows for firmer, more tolerable compression for better visibility

The Comfort Paddle's unique design for more even compression, combined with the Intelligent Automatic Exposure Control (iAEC) image processing, make it possible to provide more optimized images at low dose for every breast type, and implants.

Every day, women turn to mammography centers to know for sure whether they are healthy, at risk, or in immediate danger. And every day, more radiologists turn to Fujifilm for innovative imaging and technology they can trust.

 Dabbous, et al. "Impact of a False-Positive Screening Mammogram on Subsequent Screening Behavior and Stage at Breast Cancer Diagnosis." Cancer Epidemiol Biomarkers DOI: 10.1158/1055-9965.EPI-16-0524 Published February 2017.

## **INSIGHT #2** Departments are only as efficient as the technology they use.



#### Built smarter for optimal departmental workflow

There are two sides to workflow—the human side and the technology side. Your radiology team works hard to be efficient while providing exceptional patient care.

ASPIRE Cristalle was built with insight into the time and effort needed to perform a mammography exam. Our advanced technology simplifies and speeds workflow so technologists can spend more time focused on patient interactions.

- Smart shortcuts and fewer clicks—set exposure and confirm acquired images on a single screen
- Simultaneously adjust density and contrast for both left and right views
- Minimize patient discomfort with automated compression and release
- Immediately output individual images to PACS, viewer, or printer during exam
- Improve system availability and extend system life with programmable automatic startup, sleep, and shutdown

**INSIGHT #3** You may be ready for tomosynthesis, but your IT infrastructure might not be.

### Built smarter for improved system integration and image management

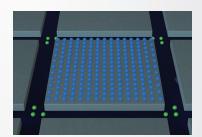
The attributes that make DBT so valuable to your clinical practice can make it tough on your IT.

The enormous datasets of DBT cause significant study management challenges. As you consider your strategy to bring the best mammography technology to your patient community, it is imperative that you consider your IT strategy in order to deliver optimal diagnostic outcomes.

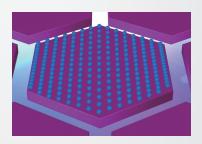
Our Synapse® Enterprise Imaging portfolio, including Synapse 5 PACS and Synapse VNA, enables secure, easy-to-manage storage and access to the complete patient imaging record throughout the healthcare enterprise, regardless of the technology-generating source, format type, or siloed storage system. Your care team can confidently collaborate and provide patient-focused care throughout the patient management continuum.

Additionally, our Synapse 5 PACS server-side rendering technology is ideally suited to handle the massive datasets generated by DBT exams—enabling unprecedented image-rendering speed, a reduced burden on IT infrastructure and increased speed to diagnosis.

## **INSIGHT #4** Hexagons are engineered to perform better than squares.



Conventional square pixel



ASPIRE Cristalle HCP pixel

#### **Built smarter for image quality**

The detector is the heart of any digital mammography system. Simply put, its job is to detect x-rays, convert them into electrons, and collect the resulting electrical charges. The more efficiently it collects the charges, the stronger the image signal, the less noisy the image, and the lower the dose needed.

In conventional detector design, the pixels that detect x-rays and convert them into electrical charges are square, with wide gaps between them resulting in lower electrical field intensity. Therefore, some of the converted x-ray information cannot be collected and is lost.

So we applied a smarter technology—Hexagonal Close Pattern (HCP) pixel design.

With Fujifilm's innovative application of this HCP architecture, hexagonal pixels are arranged with smaller gaps between pixels, resulting in less signal loss and stronger electrical fields. Collection efficiency is increased, resulting in higher sensitivity.

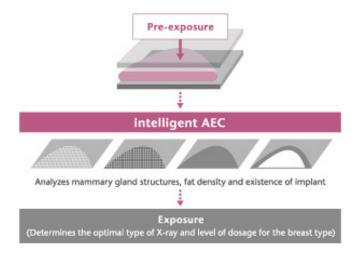
When compared to square pixels, HCP delivers:

- · 20% increase in detector sensitivity
- Improved information capture
- Lower patient dose

## **Optimized Dose for Maximum Image Quality** with Intelligent Automatic Exposure Control

The image quality of ASPIRE Cristalle is further improved with our Intelligent Automatic Exposure Control (iAEC).

iAEC intelligently analyzes breast composition and thickness and applies auto-recognition of implants to optimize dose and processing to







## In every woman's life, there are moments where imaging will make the difference.

Where wellness, peace of mind, and even life are on the line and the unique insights offered by radiology provide answers.

#### That's where you'll find Fujifilm.

With over 80 years of imaging breakthroughs, over 9,000 global ASPIRE digital mammography installations and an unrelenting drive to discover what's next, we continually deliver value from innovation. Our advanced technologies, such as **ASPIRE Cristalle 3D mammography**, enable and empower. Doctors can see more and make the most accurate diagnoses. Practices can run more efficiently. And patients can determine their best path forward.

We are proud to contribute to these victories against disease and doubt. Whether large or small, they can change a woman's life. And as needs evolve, we'll be here. Acting on insights, driving innovation, inspiring hope—and together with our customers, having a lasting and profound effect on women's health.

