



# Tested. Proven. Acquired. DR Mammo Retrofit shows its value in live trial

Combining improved productivity and cost efficiency, a live trial of the DR Mammo Retrofit with MUSICA™ image processing convinced the Inmunomédica Medical Center in Concepción, Chile, to implement this new technology for high-quality mammography images.

**Case study: Inmunomédica Medical Center**  
Concepción, Chile

**AGFA** 

# Case Study

## INTERVIEW WITH:

**DR. CLAUDIA MERINO POHL,**

CHIEF RADIOLOGIST OF MAMMOGRAPHY

**SOLEDAD MARTINEZ,**

TECHNOLOGIST

Dr. Claudia Merino Pohl, chief radiologist of mammography at the Inmunomédica Medical Center in Concepción, has experienced firsthand the evolution of mammography in her 20+ years of medical imaging in the central Chilean city of Concepción. “When I arrived, breast imaging was being done by a couple of breast surgeons. I was one of the first radiologists who carried out mammographies in the city. But today, it’s a standard imaging exam, and nobody would consider not having a mammography system in a medical imaging center.”

The Inmunomédica Medical Center is a doctor-led initiative which was set up in 2000. It now offers a comprehensive health network of outpatient services throughout the country. “I was part of the group of doctors asked to create a diagnostic imaging service,” continues Dr. Merino Pohl. “We started with ultrasound and general radiography, but we quickly realized that we needed to offer mammography, because there was a real need amongst hospitals and GPs for this service in order to meet the requirements of the public health system.”





Dra. Claudia Merino P.

“We’ve worked with Agfa for over 15 years, we trust them, and they always work to find the right solution for our special requirements.”

Dr. Claudia Merino Pohl



## A PARTNERSHIP OF TRUST

After 10 years of using computed radiography (CR) for mammography, Dr. Merino Pohl was considering switching to direct radiography (DR). “I worked with DR mammography in another clinic, and wanted to implement the same level of image quality in the Concepción clinic.”

Dr. Merino Pohl turned to Agfa to find out about purchasing a dedicated DR mammography system. “We’ve worked with Agfa for over 15 years at this location, we trust them, and they always make the effort to find the right solution for our special requirements,” comments Dr. Merino Pohl “So we were ready to listen to them.”

“They told me about the DR Mammo Retrofit, and suggested I give it a trial at the clinic. I accepted the challenge, because of our long relationship. And indeed, the trial went very well right from the start. The DR benefits were very quickly realized: immediate access to images, high-quality image processing, excellent image contrast, and significantly lower radiation dose.”

The vendor-neutral DR Mammo Retrofit makes it easy and cost-effective for healthcare providers to upgrade their existing X-ray mammography modalities. The flat-panel digital X-ray detectors are specially designed for DR mammography and fit into standard buckys used for analog mammography. Only a modality alignment procedure is needed to switch to DR.

## FASTER EXAMS AND SMOOTHER WORKFLOW OFFER INCREASED PRODUCTIVITY

“The installation itself went very quickly, with the Agfa specialist setting all the image parameters,” explains Soledad Martinez. “We immediately saw the productivity improvements, thanks to the shorter exam time in particular.”

A mammography screening exam, for example, takes approximately 10 minutes, and requires the patient to be positioned four times, so speeding up the exam time enhances not only productivity, but also patient comfort.

The DR Mammo Retrofit significantly increases patient throughput: the cycle time of 30 seconds enables up to 120 images per hour, compared to 48 images per hour with CR. Furthermore, while CR offers an image preview within 1 minute, with the DR Mammo Retrofit, the preview is ready within 3 seconds, so any error can be corrected right away. “The technologist doesn’t need to leave the room to verify the image: we can do it right then and there, which makes the process smoother. MUSICA image processing ensures that almost no edits are needed in post-processing, speeding up the workflow even more. We save several steps, yet we get better image quality.”

Dr. Merino Pohl highlights that the technologists’ experience is key to improving productivity: “I was pleased with our previous CR system for mammography – certainly the image quality was very good. But operating it was more difficult and tiring, and with more manual interactions there was a higher risk of error. The DR Mammo Retrofit has eliminated those issues.”

The increased productivity not only enhances patient throughput, but also patient satisfaction, she continues: “A mammography exam is never ‘pleasant’ for the patient, but a faster exam means the experience itself is better, and the technologists have more time to focus on the patient, instead of the process. As a result, the patient leaves the center happier.”



## DID YOU KNOW:

- The Inmunomédica Medical Center in Concepción was the first to test and purchase the Agfa DR Mammo Retrofit in the Latin American market.
- While there is no national screening program in Chile, women do undergo mammograms at 55 years and 60 years. The Concepción clinic not only handles individual patients who come to the clinic, but also works with tenders from hospitals, which include a full diagnostic mammography service.
- The imaging service at the Inmunomédica center in Concepción has two general radiography modalities, four ultrasounds covering all the specialties, one MRI, two CT systems and one mammography system. They carry out some 1500 ultrasounds, 100 X-rays and 15-25 mammography exams each month.

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Soledad Martinez





“Once we were certain that the test results were satisfactory, we could confirm that the DR Mammo Retrofit offered a cost-efficient alternative to purchasing a complete DR mammography system, while still providing us with the DR image quality and productivity benefits to support our care goals.”

Dr. Claudia Merino Pohl

## TESTING CONFIRMS HIGH IMAGE QUALITY

The clinic put the DR Mammo Retrofit through its paces before making the final decision. “In addition to the increased productivity, we had to be sure this new technology offered the image quality we need,” explains Dr. Merino Pohl. To fully test the system, the clinic carried out phantom tests, and compared DR Retrofit images with images from the previous system. “We assessed a large number of mammography images. As we have many patients who get annual checks, we could make comparisons. We also did tests with patients who presented microcalcifications, etc.,” explains Soledad Martinez.

“The tests with the phantoms and the mammography comparisons were key to assuring that everything we need to see is, in fact, visible,” agrees Dr. Merino Pohl. “Once we were certain that the results were satisfactory, we could confirm that the DR Mammo Retrofit offered a cost-efficient alternative to purchasing a complete DR mammography system, while still providing us with the DR image quality and productivity benefits to support our care goals.”



**Cycle time:  
30 seconds**



**Up to 120 images  
per hour**



**Preview image  
available in 3 seconds**

## AGFA'S CONTRIBUTION:

“When moving to DR, the supplier’s expertise is essential, and Agfa’s implementation process is one of the best. The Agfa application specialist customizes the system to a very high degree. The training was optimal: it really taught us how to use and take advantage of the product’s features. Compared to other suppliers, Agfa provides a truly excellent training service.

We also implemented an Agfa DR Retrofit for general radiography in another Inmunomédica center, and the experience there was also very positive.”

**Soledad Martinez**



## AN UPGRADE THAT SUPPORTS PATIENT CARE GOALS

“Working with Agfa has been very satisfying: they have supported us and addressed any concerns and questions we had,” Soledad Martinez continues.

“In the end, we decided to implement the DR Mammo Retrofit permanently, because it adds clear value,” concludes Dr. Merino Pohl. “Sometimes when clinics upgrade their technology, they have to raise prices for patients, but we want to continue offering a high-quality radiology service that is affordable for everyone. With the reliability and increased productivity offered by the DR Mammo Retrofit, we can provide the benefits of better technology, for the same price.”

## AGFA SOLUTION:

### DR Mammo Retrofit with 24M digital detector<sup>1</sup>

- An affordable upgrade to DR mammography, leveraging investments for the long term.
- Fast preview in only 3 seconds and a cycle time of 30 seconds that enables a maximum of 120 images per hour.
- MUSICA Nerve Center acquisition workstation and quality control tool, with an intuitive interface that offers complete ease of use at the point-of-care. A touch screen lets the technologist complete tasks quickly and effortlessly.
- MUSICA3 image processing software, specially adapted to DR mammography, offering the excellent contrast needed for mammography imaging and the potential to considerably reduce radiation dose<sup>2</sup>.
- 24M flat-panel digital X-ray detector specially designed for DR mammography, fitting into standard 24x30 buckys.
- Detector absorption that is compatible with the Automatic Exposure Control (AEC) of the mammography X-ray units, for seamless use with virtually all X-ray mammography systems.

<sup>1</sup> DR Mammo Retrofit with 24M digital detector is not available in the US and Canada

<sup>2</sup> Testing with board-certified radiologists has determined that Cesium Bromide (CR) and Cesium Iodide (DR) detectors, when used with MUSICA image processing, can provide dose reductions between 50 to 60%, compared to traditional Barium Fluoro Bromide CR systems. Contact Agfa for more details.





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