

A mammogram  
more likely to get it  
right the first time?\*

I'd call that **Genius.**

**#1**

breast tomosynthesis  
exam referred  
by OBGYNs<sup>1†</sup>

**DETECTS 41% MORE  
INVASIVE BREAST CANCERS<sup>2</sup>**

**DETECTS CANCER  
15 MONTHS EARLIER<sup>3</sup>**

**REDUCES FALSE-POSITIVE  
RECALLS BY UP TO 40%<sup>2,4</sup>**

**genius**<sup>™</sup>  
3D MAMMOGRAPHY

\*Compared to 2D mammography alone

†Based on a ProVoice survey conducted by AlphaImpactRx

# Why a Genius™ 3D MAMMOGRAPHY™ Exam Is a Smart Choice

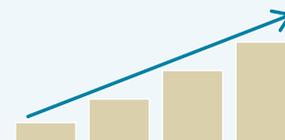
In 2016, an estimated **246,660 new cases** of invasive breast cancer are expected to be diagnosed in women in the US.<sup>5</sup> Clinically proven, innovative screening technology is critical for **better, earlier breast cancer detection**.\*



**1 in every 8 women** will develop breast cancer within her lifetime<sup>5</sup>



**8 out of 9 women** diagnosed with breast cancer have no family history<sup>5</sup>



Breast cancer risk **increases with age**—**2 out of 3** invasive breast cancers are found in **women over 55**<sup>6</sup>

Breast cancer screening is vital for all women, **especially those at higher risk** due to<sup>6</sup>:

- Age
- Genetics
- Personal history
- Chest radiation treatment
- Certain breast changes
- Race/ethnicity
- Body weight
- Reproductive history
- Hormone replacement therapy
- Breast density

## Early detection is key.

Due to the high incidence of breast cancer in the US and the potential to reduce deaths from it when caught early, the American Congress of Obstetricians and Gynecologists (ACOG) **recommends annual mammograms for women beginning at age 40**.<sup>7</sup>



If breast cancer is found early, the **5-year survival rate** is almost 100%<sup>8</sup>



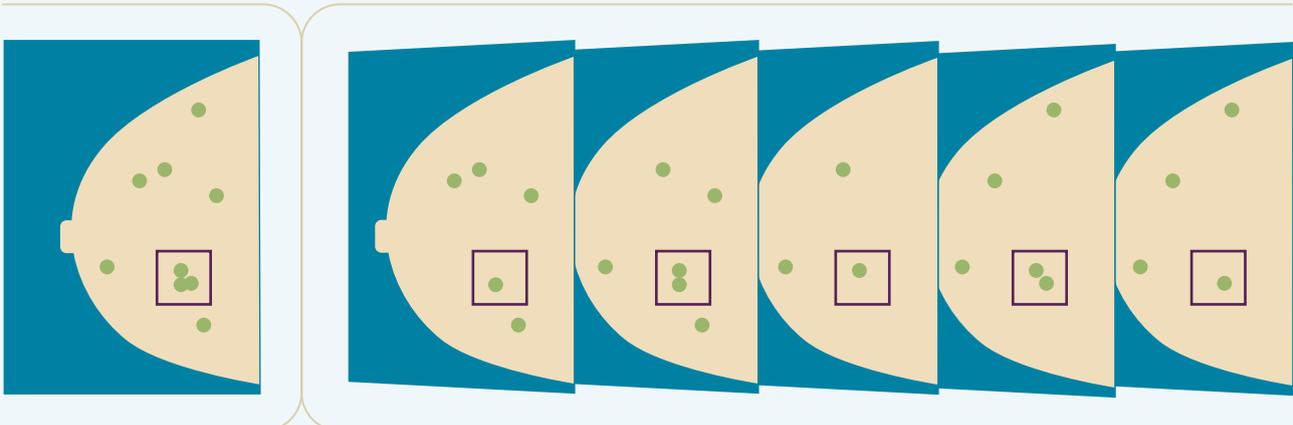
**4 out of 5 women agree** that access to a mammogram with clinically proven better detection and less chance of follow-up testing is important<sup>9</sup>

[More about Genius™ exams ▶](#)

# Genius™ 3D MAMMOGRAPHY™ Exam Point of View

## Why take a 2D image of the 3-dimensional breast?

Genius™ exams deliver a series of clear, digital, high-resolution images of the breast. This enables breast tissue to be evaluated layer by layer in more detail, helping to screen for cancer, determine if additional testing is necessary, or dismiss a false-positive with confidence.<sup>4</sup>

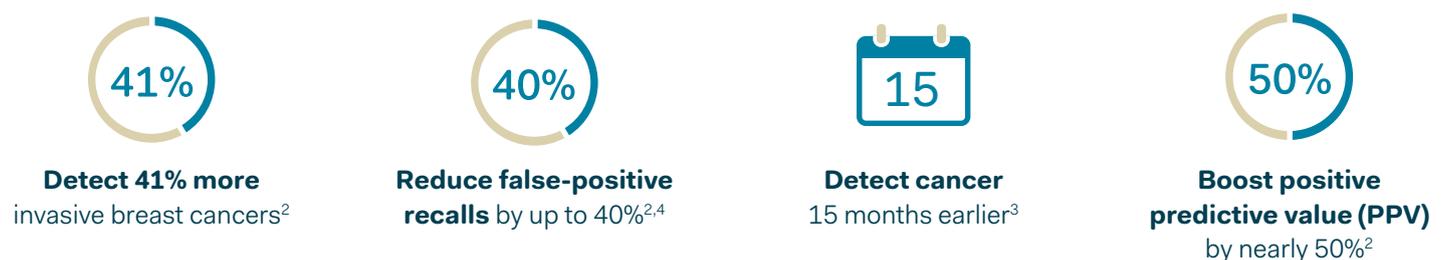


The diagram illustrates the difference between 2D and 3D mammography. On the left, labeled 'With 2D', a single 2D image of a breast is shown with a purple square highlighting a suspected lesion area. On the right, labeled 'With a Genius 3D MAMMOGRAPHY™ exam', five sequential 3D slices of the breast are shown, each with the same purple square highlighting the suspected lesion area. This allows for a layer-by-layer evaluation of the tissue.

Case of a suspected lesion area that, with conventional 2D mammography, likely would have resulted in a false-positive recall for additional imaging. The output of a Genius™ exam with multiple images allows the reader to clarify that the tissue is normal.

Genius 3D MAMMOGRAPHY™ exams are the first to be FDA approved and proven superior to 2D mammography.<sup>3,10</sup>

In fact, compared with conventional 2D mammography, they:



# Genius™ 3D MAMMOGRAPHY™ Exam Movement

Since 2011, over 10 million women in the US have been screened with a Genius 3D MAMMOGRAPHY™ exam.

Clinical studies have shown that all women, regardless of age or breast density, can benefit from a Genius™ exam.<sup>11,12</sup> Plus, it's covered and paid for by Medicare and a growing number of private insurers.

## What women can expect.

Any woman who is due to have a conventional 2D mammogram can elect to have a Genius™ exam. With its clinically proven accuracy and advanced software capabilities, the Genius™ exam offers:



**Comparable exam experience**



**Less than 4-second scan time\***



**Same positions and breast compression**

### Low-dose radiation well within FDA guidelines<sup>13</sup>

0 mSv<sup>†</sup>  
(Low<sup>14</sup>)

2D mammogram  
**Genius™ exam**

Natural radiation exposure per year

Average CT scan

8 mSv  
(High<sup>14</sup>)

\*Using Selenia® Dimensions® System with C-View™ Software

<sup>†</sup>MilliSievert (mSv) is a measure of the absorption of radiation by the human body

**REFERENCES:** **1.** Data on file. Hologic 2015-2016. **2.** Friedewald SM, Rafferty EA, Rose SL, et al. Breast cancer screening using tomosynthesis in combination with digital mammography. *JAMA*. 2014;311(24):2499-2507. **3.** McDonald ES, Oustimov A, Weinstein SP, Synnestvedt MB, Schnall M, Conant EF. Effectiveness of digital breast tomosynthesis compared with digital mammography: outcomes analysis from 3 years of breast cancer screening. *JAMA Oncol*. 2016;E1-E7. <http://oncology.jamanetwork.com/article.aspx?articleid=2491465>. Accessed March 2, 2016. **4.** Rose SL, Tidwell AL, Bujnoch LJ, Kushwaha AC, Nordmann AS, Sexton R. Implementation of breast tomosynthesis in a routine screening practice: an observational study. *AJR Am J Roentgenol*. 2013;200(6):1401-1408. **5.** US breast cancer statistics. Breastcancer.org. [http://www.breastcancer.org/symptoms/understand\\_bc/statistics](http://www.breastcancer.org/symptoms/understand_bc/statistics). Accessed March 9, 2016. **6.** Breast cancer risk factors. Breastcancer.org. <http://www.breastcancer.org/risk/factors>. Accessed May 11, 2015. **7.** The American Congress of Obstetricians and Gynecologists (ACOG). Annual mammograms now recommended for women beginning at age 40. <http://www.acog.org/About-ACOG/News-Room/News-Releases/2011/Annual-Mammograms-Now-Recommended-for-Women-Beginning-at-Age-40>. Accessed May 11, 2015. **8.** Stages 0 & 1: what does it mean to have stage 1 breast cancer? National Breast Cancer Foundation, Inc. <http://www.nationalbreastcancer.org/breast-cancer-stage-0-and-stage-1>. Accessed March 31, 2015. **9.** Society for Women's Health Research. What women want: survey finds fact sheet. <http://swhr.org/wp-content/uploads/2014/05/SWHR-Survey-Fact-Sheet.pdf>. Accessed March 2016. **10.** Rafferty EA, Park JM, Philpotts LE, et al. Assessing radiologist performance using combined digital mammography and breast tomosynthesis compared with digital mammography alone: results of a multicenter, multireader trial. *Radiology*. 2013;266(1):104-113. **11.** Skaane P, Bandos AI, Gullien R, et al. Comparison of digital mammography alone and digital mammography plus tomosynthesis in a population-based screening program. *Radiology*. 2013;267(1):47-56. **12.** Rafferty E, Smith A, Niklason L. FFDM versus FFDM with tomosynthesis for women with radiologically dense breasts: an enriched retrospective reader study. Paper presented at: Annual Radiology Society of North America (RSNA) Meeting; November 2011; Chicago, IL. **13.** US Food and Drug Administration. Mammography Quality Standards Act of 1992. Pub L No. 102-539. As amended by the Mammography Quality Standards Reauthorization Act of 1998, pub. L. No. 105-248, title 42, Subchapter II, Part F, Subpart 3, 354 (42 USC 263b), certification of mammography facilities. 1998. [www.fda.gov/Radiation-EmittingProducts](http://www.fda.gov/Radiation-EmittingProducts). **14.** Daya Bay Contingency Plan. General knowledge of radiation. Radiation in daily life. <http://www.dbcp.gov.hk/eng/safety/knowledge.htm>. Accessed May 2015.

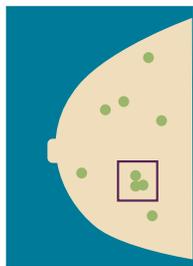
# Is a Genius™ 3D MAMMOGRAPHY™ exam right for me?

Genius 3D MAMMOGRAPHY™ exams are clinically proven to provide more accurate breast cancer screenings.<sup>1\*</sup>

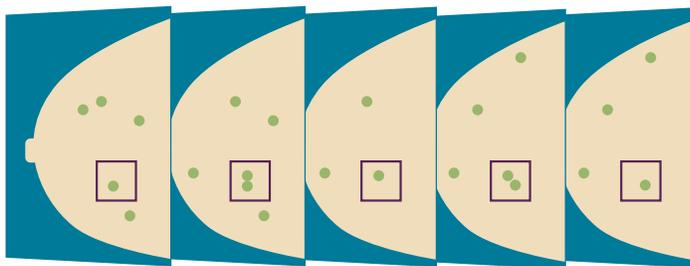
Conventional mammograms provide doctors with a two-dimensional image of the three-dimensional breast. Overlapping layers of tissue can sometimes create unclear results, false alarms, or worse—cancer being missed.

**A Genius™ exam provides your doctor with a series of detailed images of the breast.** This allows them to better evaluate your breast tissue layer by layer, making fine details more visible and no longer hidden by overlapping tissue.<sup>2</sup> Because of its clinically proven increase in accuracy, a Genius™ exam can help reduce false-positive recalls for additional imaging.<sup>1,2</sup>

## WITH 2D



## WITH A GENIUS 3D MAMMOGRAPHY™ EXAM



Case of a suspected lesion area that, with conventional 2D mammography, likely would have resulted in a false-positive recall for additional imaging. The output of a Genius™ exam with multiple images allows the reader to clarify that the tissue is normal.

## YOUR GENIUS 3D MAMMOGRAPHY™ EXAM RECOMMENDATION

Name \_\_\_\_\_

### Procedure

- Genius™ exam—Screening
- Genius™ exam—Diagnostic

## SUPERIORITY OVER CONVENTIONAL 2D MAMMOGRAPHY



Detects 41% more invasive breast cancers<sup>1</sup>



Reduces false-positive recalls by up to 40%.<sup>1,2</sup>



Detects cancer 15 months earlier<sup>3</sup>

**genius**  
3D MAMMOGRAPHY

\*Compared to 2D mammography alone

# What to expect from a Genius™ 3D MAMMOGRAPHY™ exam.

If you've had a conventional 2D mammogram before, you'll find **the experience is comparable to a low-dose Genius™ exam.\*** The positioning and compressions are the same, but the result is multiple images in a less than 4-second scan time.†

## When breast cancer is found early, the 5-year survival rate is almost 100%.<sup>4</sup>

It's estimated that **1 in every 8 women** will develop breast cancer within her lifetime.<sup>4</sup> In 2016, approximately **246,660 new cases** of invasive breast cancer are expected to be diagnosed in women in the US.<sup>5</sup> That's why a clinically proven, innovative screening technology that allows for better, more accurate detection is critical.\*

**Any woman who is due to have a traditional mammogram can elect to have a Genius™ exam.** Clinical studies have shown that all women, regardless of age or breast density, can benefit from a Genius™ exam.<sup>6,7</sup> Plus, it's covered and paid for by Medicare, and a growing number of private insurers.



Since 2011, over **10 million women** in the US have been screened with a Genius™ exam



**Over 2,400 systems** that perform the Genius™ exam have been installed and are now available in all 50 states

Get the mammogram you deserve. Tell your friends to do the same.  
Visit [MyGenius3D.com/Info](http://MyGenius3D.com/Info) for more information.

\*Compared to 2D mammography alone

†Using Selenia® Dimensions® System with C-View™ Software

**REFERENCES:** **1.** Friedewald SM, Rafferty EA, Rose SL, et al. Breast cancer screening using tomosynthesis in combination with digital mammography. *JAMA*. 2014;311(24):2499-2507. **2.** Rose SL, Tidwell AL, Bujnoch LJ, Kushwaha AC, Nordmann AS, Sexton R. Implementation of breast tomosynthesis in a routine screening practice: an observational study. *AJR Am J Roentgenol*. 2013;200(6):1401-1408. **3.** McDonald ES, Oustimov A, Weinstein SP, Synnestvedt MB, Schnall M, Conant EF. Effectiveness of digital breast tomosynthesis compared with digital mammography: outcomes analysis from 3 years of breast cancer screening. *JAMA Oncol*. 2016;E1-E7. <http://oncology.jamanetwork.com/article.aspx?articleid=2491465>. Accessed March 2, 2016. **4.** Stages 0 & 1: what does it mean to have stage 1 breast cancer? National Breast Cancer Foundation, Inc. <http://www.nationalbreastcancer.org/breast-cancer-stage-0-and-stage-1>. Accessed March 31, 2015. **5.** US breast cancer statistics. Breastcancer.org. [http://www.breastcancer.org/symptoms/understand\\_bc/statistics](http://www.breastcancer.org/symptoms/understand_bc/statistics). Accessed March 9, 2016. **6.** Skaane P, Bandos AI, Gullien R, et al. Comparison of digital mammography alone and digital mammography plus tomosynthesis in a population-based screening program. *Radiology*. 2013;267(1):47-56. **7.** Rafferty EA, Niklason LT. FFDM vs FFDM with tomosynthesis for women with radiographically dense breasts: an enriched retrospective reader study. Paper presented at: Annual Radiological Society of North America (RSNA); November 2011; Chicago, IL.



Genius™ 3D MAMMOGRAPHY™ exams are only available on the Hologic Selenia® Dimensions® system. Please consult your physician for a complete list of benefits and risks associated with mammography.

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