HOLOGIC

Confidence in Radiology:
Your New AI Assistant is Here

Genius AI® Detection PRO Solution

More Than a
## Cancer Detection Solution

Designed to Drive
Accuracy and Efficiency[1]

With a shortage of radiologists and increasing patient backlogs, it's time for a smart solution that can support the radiologist like a true assistant and accelerate throughput.

As a leader in women's health, we are proud to introduce our new Genius AI® Detection PRO solution. This advanced technology utilizes the proven combination of 2D and DBT cancer detection AI and analyzes prior exams, improving the accuracy of breast screening results.[1] The all-in-one user interface features automated pre-reporting, breast density scoring, patient history and image quality checks, driving efficiency and giving radiologists confidence in their assessment. And that workforce shortage problem? Studies have shown up to 24% reduction[1] in reading times and perceived fatigue meaning you can do more with less.

With deep learning breast density scoring and one-click pre-reporting of lesion analytics, this cutting-edge AI assistant supports radiology teams through every step of the reading process, so there's less dictation and more detection.

Accurate. Efficient. Intelligent.
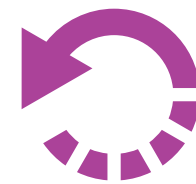
Using priors to reduce false positives.

The Genius AI® Detection PRO solution analyzes prior and current mammograms through its 2D and DBT deep learning algorithm for more accurate readings, ultimately reducing false recall rates.[2]
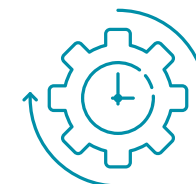
Faster workflow with automated pre-reporting.

A streamlined user interface lets you view all key patient and case information in one location. Pre-populate patient reports with one click, including lesion information, BI-RADS, and breast density results.

Up to 24% decrease[1] in reading time.

The Genius AI® Detection PRO solution utilizes a simplified 1-10 scoring scale with intuitive green-yellow-red color coding. Radiologists can accelerate their review and focus on the more complex yellow cases.

One Integrated User Interface
Key patient and case information in one location.

Genius AI® Detection PRO solution is your AI assistant, pulling patient information, flagging any image quality concerns, scoring breast density, providing lesion and case scores and pre-populating patient reports with the click of a button. Results are accessible through a seamless application available on any reading workstation, including PACS.

Lesion Markings
CC-MLO lesion correlation, 2D and DBT markings, standard and equivalent views.

Case Score
Reflects the highest lesion score found.
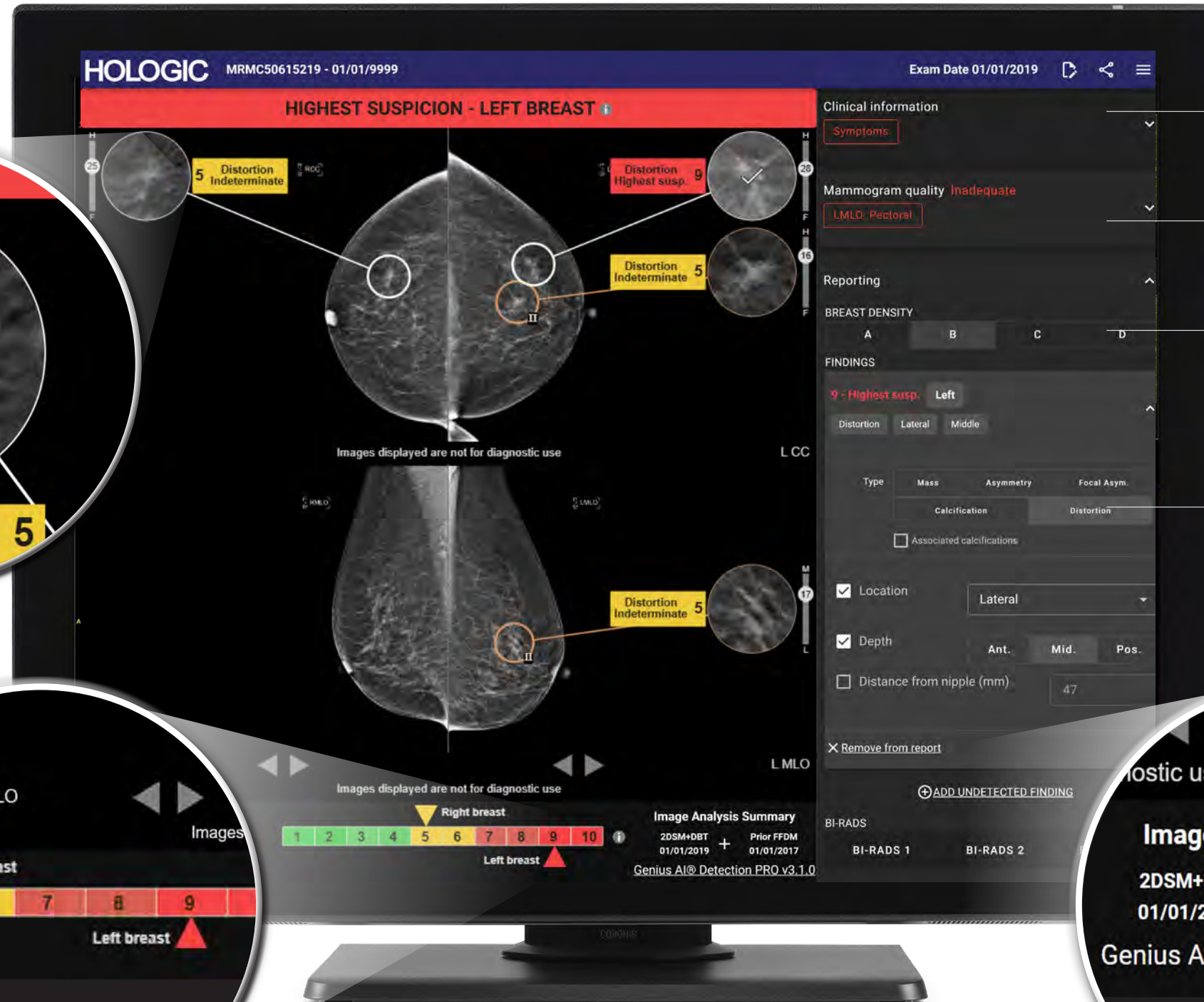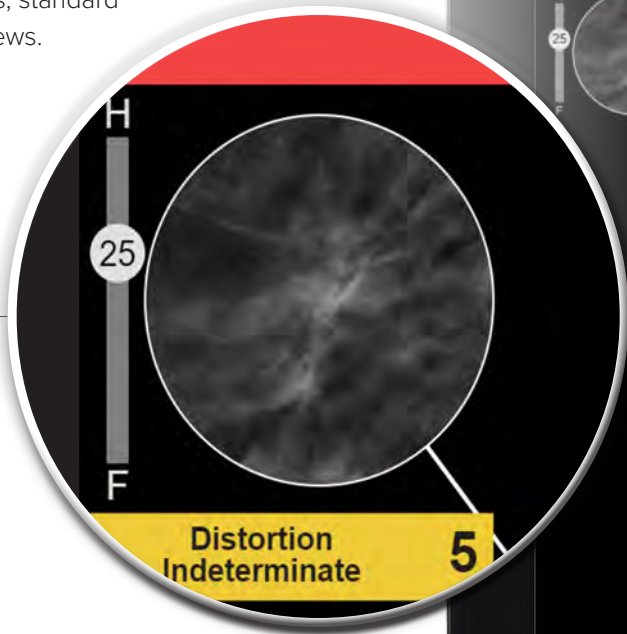
Clinical Information
Ability to pull pertinent clinical patient information from EMR or RIS/MIS.

Motion and Positioning Results
Deep learning AI analyzes positioning criteria, motion blur, and provides compression.
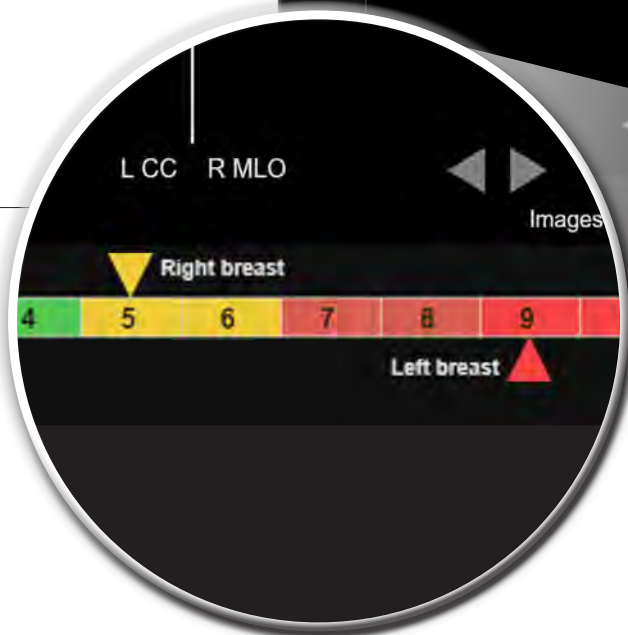
Automated Breast Density Score
BI-RADS density score powered by deep learning AI.

Pre-Populate Patient Reports
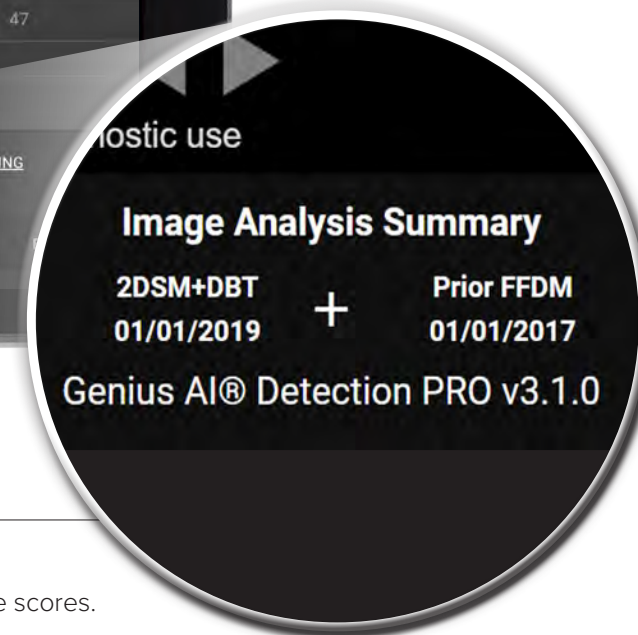Pre-populate report with lesion findings with one click.

Confirmation of Prior Analysis
Increases confidence in case scores.

More Features. **More Information.**

The Genius AI® Detection PRO solution incorporates the intelligence of deep learning AI for cancer detection and density assessment, patient and image quality check, and a pre-reporting tool, into one powerful product. With a single view consolidating all the functionalities needed for breast screening to achieve precision, our technology empowers you to diagnose with certainty.[1]

Genius PRO is more than a cancer detection but **a true AI assistant.**

Features	Genius AI® Detection PRO Solution
2D AI Cancer Detection	✓
3D AI Cancer Detection	✓
AI Uses Prior Exams	✓
AI Breast Density Scoring	✓
Motion & Positioning Scoring	✓
Pre-Populate Reports	✓
Read Time Analytics	✓

More Confidence Than Ever Before

Better decisions through comprehensive image analysis.

Utilizes a powerful combination of 2D and DBT deep learning AI to better analyze lesion markings on individual cases[3]. Ability to read priors to increase specificity and drive additional reduction in false positive recalls.[2]

Certainty in recalls.
Simplified case scoring from 1-10 reflects the highest lesion score found and helps you move quickly over the green and red cases to focus on the more indeterminate cases.[2]
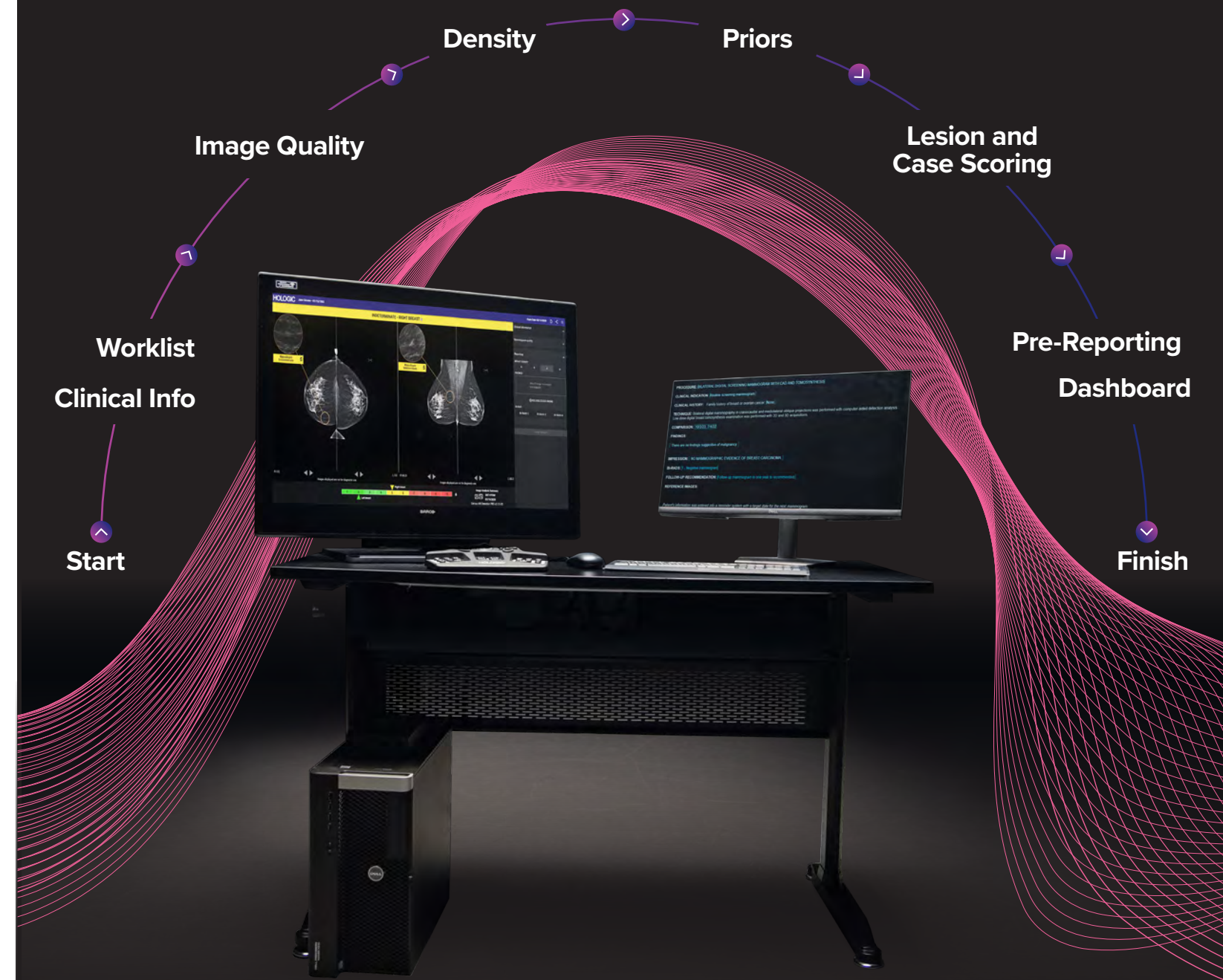
Improvements tracking on the dashboard.
A data-analytics interface allows users to see decreases in reading times reduced and case score distribution for your clinical setting.[1]

Patient information and image quality alerts.
Key patient information indicates whether the patient is symptomatic and/or has a high lifetime risk score. The image quality module will check whether if the mammogram was adequately acquired.

Designed to simplify the entire reading workflow.

Density
Priors
Image Quality
Lesion and Case Scoring
Worklist
Clinical Info
Pre-Reporting
Dashboard
Start
Finish

Greater Accuracy and Efficiency

with Your New AI Assistant[1]

Reduce false positives drives better performance.[2]

What if one technology could summarize everything you need to know about a patient case? Genius AI® Detection PRO solution does just that. It's your AI assistant that works to optimize and accelerate the entire reading process.[1]

Genius AI® Detection PRO solution is a powerful, software that utilizes the latest advances in AI enable you to make better and faster decisions.[1] From image quality checks to automated lesion correlation, deep learning breast density scoring to one click pre-reporting for less dictation, this is the assistant To enhance the operations of your radiology department.

To learn more about how Genius AI® Detection PRO solution can support your radiology department, connect with a Hologic representative today.

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REFERENCES:
1. Compared to not using Genius AI Detection PRO. S. Pacilè, et al. (2024). Evaluation of a multi-instant multi-modal AI system supporting interpretive and noninterpretive functions. Accepted for publication in the Journal of Breast Imaging, https://doi.org/10.1093/jbi/wbae062. 2. K240301 510(k) Summary. Distributed by Hologic. 3. S.Pacilè, et al., (2023, May). Application of artificial intelligence to mammography-tomosynthesis combined images for breast cancer screening. [conference presentation]. SBI 2023