

APERIO iQC SOFTWARE

AI-POWERED WHOLE SLIDE IMAGING QUALITY CONTROL



From Artifact to Accuracy:
Quality Control Where You Need It

For Research Use Only. Not For Use In Diagnostic Procedures.

Accelerate Your Journey
Imagine The Possibilities

Leica
BIO SYSTEMS

FROM ARTIFACT TO ACCURACY

Seamlessly integrated with the Aperio GT series of scanners, Aperio iQC software enables rapid detection of six common artifacts. It triggers alerts to the scanner console while slides are still on the scanner, ensuring that quality control is embedded directly into the scanning workflow. With intelligent automation, Aperio iQC ensures consistent artifact detection and categorization across tissue types and staining protocols.

The intuitive dashboard enables rapid artifact review, accelerating turnaround times and freeing up skilled personnel for higher-value tasks. Aperio iQC not only enhances operational efficiency but also builds confidence in slide quality — making it a vital tool for modern pathology labs committed to excellence at scale.



STILL INSPECTING SLIDES BY EYE? THERE'S A SMARTER WAY.

Traditional quality control (QC) in digital pathology is manual, subjective, and resource intensive. Histotechnicians must visually inspect every whole slide image (WSI) for artifacts like air bubbles, pen marks, and scanning errors—an approach that is time-consuming and prone to variability. These digital and histological artifacts disrupt workflows and compromise accuracy.



Average FTE hrs. per DAY spent QC WSI before sending to Pathologist

Time taken to QC each WSI
(70% reported this time frame)



QUALITY CONTROL WHERE YOU NEED IT

Aperio iQC Software automatically checks scanned H&E and IHC slides from connected Aperio GT scanners. Slides are processed within 31 seconds** after scanning, with detected artifacts sent to the Aperio iQC dashboard and scanner console, enabling Histotechnicians to assess the underlying issue before the slide is removed from the scanner. Users can approve or reject the whole slide images and leave comments in the Aperio iQC dashboard for each scan.

*Based on a survey of 75 digital pathology users, scanning on average of 1,000 - 1,500 slides per day

**31 second average for a 15mm X 15mm area

CONSISTENT AND STANDARDIZED WSI QUALITY CONTROL

Aperio iQC Software delivers measurable value by transforming quality control in digital pathology from a manual, subjective task into a streamlined, automated process.



Automatic detection of histological or digital artifacts



Artifacts identified as early in the workflow as possible



Reduce time and staff required for quality control



Centralized dashboard & visual indicators for rapid review



Provision of quality metrics for lab tissue/digital preparation

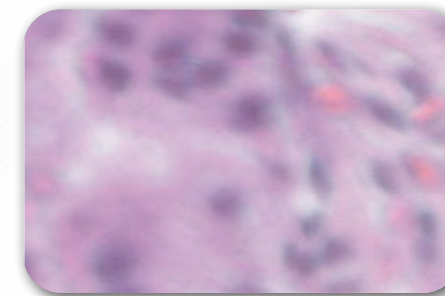
A centralized dashboard with intuitive visual indicators enables rapid quality assessment, helping technicians identify root causes of tissue and digital errors, empowering labs to implement effective countermeasures.

For Research Use Only. Not For Use In Diagnostic Procedures.

VISUAL INTELLIGENCE FOR SMARTER REVIEWS

The Aperio iQC software module, AI-powered quality control, is designed for the Aperio GT scanner series, and replaces manual QC with fast, automated artifact detection of six most frequent quality issues. By identifying issues early, labs can:

- Reduce WSI QC review time
- Reallocate skilled staff to higher-value tasks
- Improve overall lab efficiency



Out-of-Focus Tissue

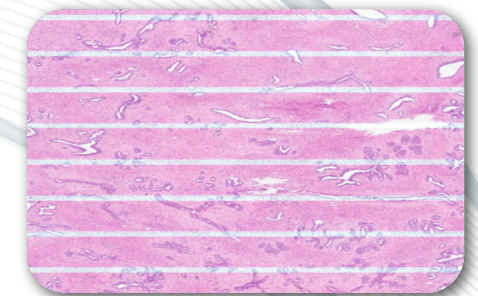
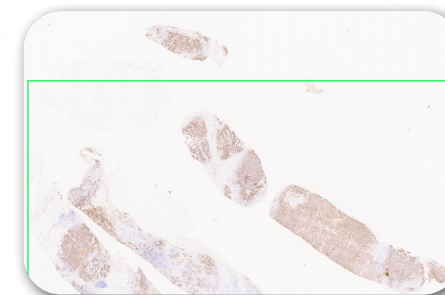
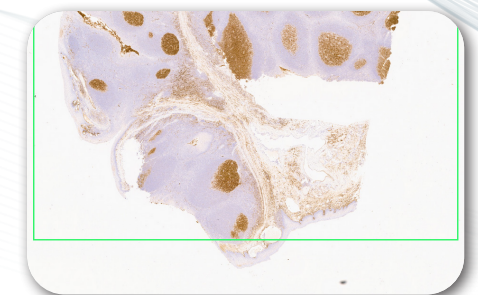


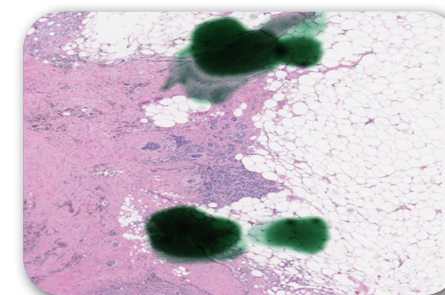
Image Striping



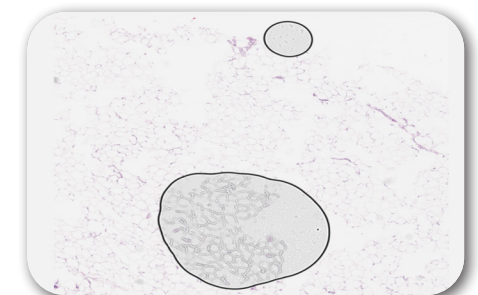
Missing Tissue



Clipped Tissue



Pen Marks



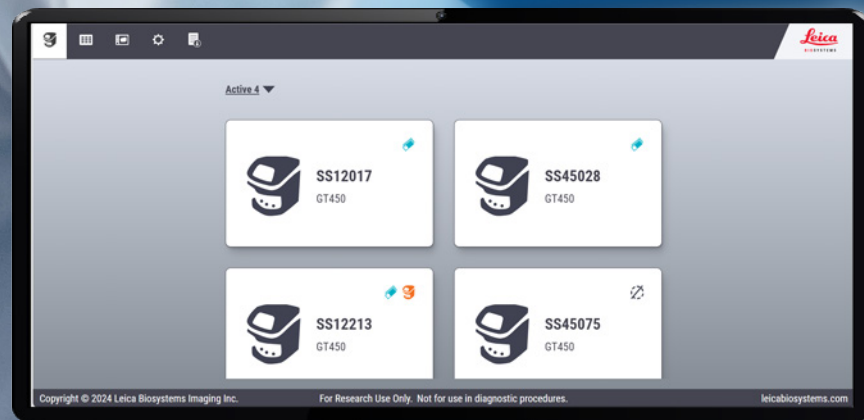
Air Bubbles

For Research Use Only. Not For Use In Diagnostic Procedures.

FIND THE NEEDLES IN THE HAYSTACK – AUTOMATICALLY

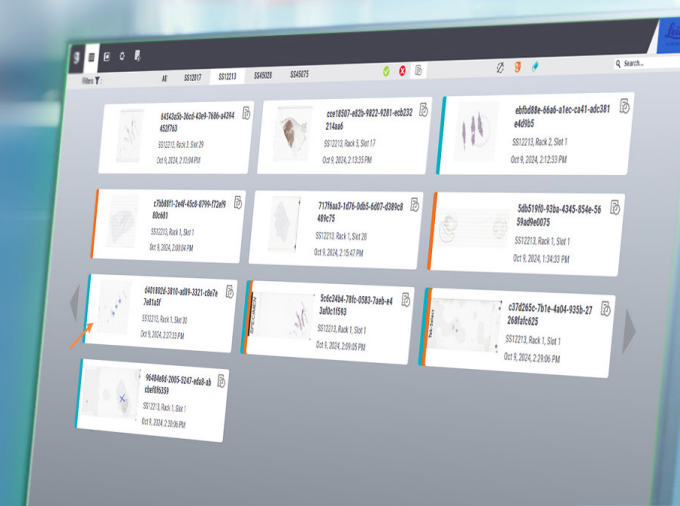
FOCUS YOUR EFFORTS WHERE IT MATTERS MOST

Only 5–8% of slides typically have quality issues, yet labs spend excessive time manually reviewing them. With Aperio iQC, you can stop wasting time reviewing artifact-free slides and start zeroing in on the ones that truly need attention.



For Research Use Only. Not For Use In Diagnostic Procedures.

TIME-SAVING WORKFLOW ENHANCEMENTS



- Designed to minimize the time histotechnicians spend reviewing WSIs, allowing faster turnaround and higher throughput
- Intuitive color coding to represent the artifacts type, histological or digital
- Up to four scanners per Aperio iQC software module

For Research Use Only. Not For Use In Diagnostic Procedures.

PATHOLOGY LAB

Aperio GT 180 Scanners



Aperio GT 450 Scanners

IT ROOM

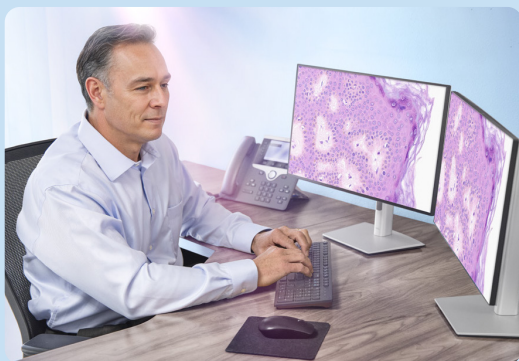


Aperio iQC processes slides in 31 seconds and detects artefacts. Copied images are automatically deleted after seven days.



SAM Server connected to multiple Aperio GT Scanners relays images to the file storage location and on to the IMS/PACS

RESEARCHER'S OFFICE



Slides are visible immediately after scanning in the IMS or PACS viewer.

QC STATION



Aperio iQC dashboard presents color-coded slides to quickly identify histological or scanning artefacts.

LEICA BIOSYSTEMS IS AN INTERNATIONAL COMPANY WITH A STRONG NETWORK OF WORLDWIDE CUSTOMER SERVICES
For detailed contact information on your nearest sales office or distributor please visit our website: LeicaBiosystems.com

For Research Use Only. Not For Use In Diagnostic Procedures.



Copyright © 2025 Leica Biosystems, a division of Leica Microsystems Inc. All Rights Reserved. LEICA and the Leica logo are registered trademarks of Leica Microsystems IR GmbH. Aperio is a registered trademark of Leica Biosystems Imaging, Inc. in the USA and optionally in other countries. GT, GT 450, GT 180 and iQC are trademarks of the Leica Biosystems group of companies in the USA and optionally in other countries. Other logos, product and/or company names might be trademarks of their respective owners. Danaher is a trademark of Danaher Corporation. All Rights Reserved.

Leica Biosystems is a global leader in workflow solutions and automation. As the only company to own the workflow from biopsy to diagnosis, we are uniquely positioned to break down the barriers between each of these steps. Our mission of "Advancing Cancer Diagnostics, Improving Lives" is at the heart of our corporate culture. Our easy-to-use and consistently reliable offerings help improve workflow efficiency and diagnostic confidence. The company is represented in over 100 countries. It has manufacturing facilities in 9 countries, sales and service organizations in 19 countries, and an international network of dealers. The company is headquartered in Nussloch, Germany. Visit LeicaBiosystems.com for more information.