

Advancing Cancer Diagnostics  
Improving Lives

**Leica**  
BIO SYSTEMS

Fast forward to next  
generation imaging

Introducing the  
**Aperio GT 450**

Scale up Digital Pathology  
operations by increasing throughput  
in high volume pathology labs.

For research use only. Not for use in diagnostic procedures.

\*International patent families including patent  
applications and granted patents.



More than 30  
Patents **SMARTER\***

Be on time  
Fast scans  
No shipping  
Continuous loading  
Be more productive  
Next generation imaging for **Technicians** Auto QC Fast-paced  
First-time scan success  
Cross-training Easy to use

Designed to deliver rapid results with confidence for histotechnicians.






Directly load racks from coverslipper to scanner.

"The Aperio GT 450 is very easy to use and a companion in the lab."

- Brittney Hosac - Lab Assistant, NeoGenomics

The products shown above, the HistoCore SPECTRA Workstation, in combination with the Aperio GT 450, are for Research Use Only (RUO).

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-  Assign priority cases.
-  Automated image quality check and slide calibration during each scan.
-  No-touch continuous rack loading during scanning.
-  450 slide capacity packed into small size.
-  Excellent image quality using Leica optics.



32 sec scan speed at 40x\*.



81 slides per hour at 40x\*.



Scan 120,000 slides per year operating the Aperio GT 450 for around 5 hours/day\*.

\* 15mm x 15mm scan area @ 40x; assumes 5 hr. scan time per day for 300 work days per year



Aperio GT 450 open face design allows you to continuously load rack while scanning is in progress to maximize productivity.



Assign priority cases for fast delivery of priority or routine cases directly to the Pathologist.



Featuring automatic image quality control, so you have image quality confidence before your scans reach the Pathologist.




Stats page allows you to view slides scanned/day/month/year, average scan area and average scan speed.

Login controls  
Easy setup  
Security  
Store and forward  
High speed data transfer  
DICOM or SVS compatible

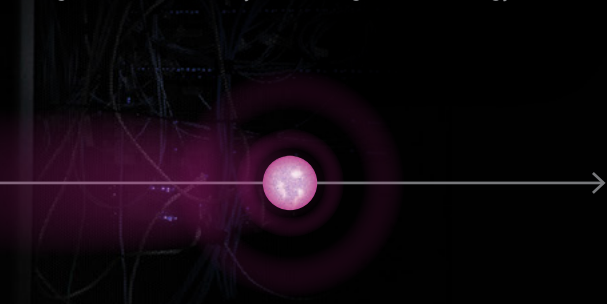
Next generation imaging for **IT Professionals** Flexibility  
Large storage Encryption

Designed to deliver  
fast, secure, and  
scalable IT architecture  
for IT Professionals.

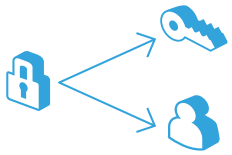


"The IT architecture for the Aperio GT 450, including the SAM central hub, is a gigantic leap forward to scale and support digital pathology IT operations."

– Chris Khacherian, UCLA Program Manager, Service Delivery, DGIT | Digital Technology



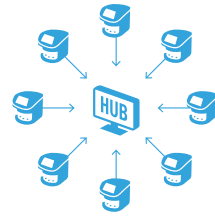
A secure, flexible and fast  
IT solution to scale up your  
Digital Pathology operations.



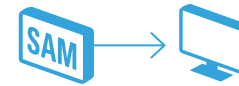
**Cyber security** including encryption and login controls.



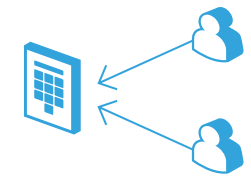
HL7 and PACS ready, for **integration** into LIS, LIMS or PACS.



Securely scan slides at a **spoke** location and store images at a **Hub** location for all sites to log in and view images.



**Store and forward:** store images temporarily then transfer during low IT traffic times.



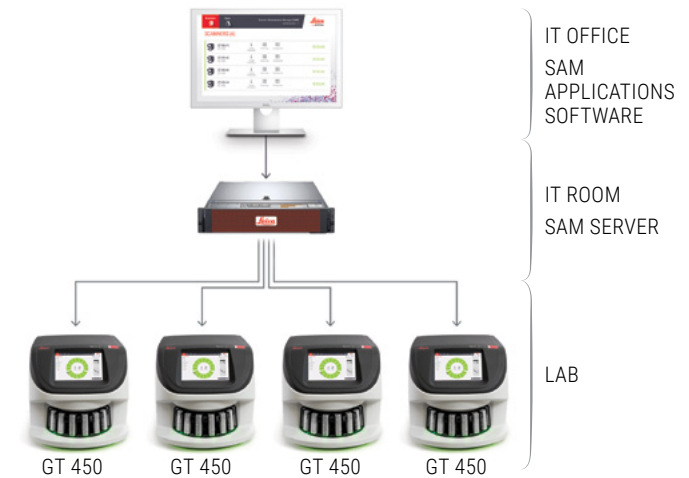
Set up user-specific **log in** for each Aperio GT 450.



A centralized Scanner Admin Manager (SAM) will allow IT professionals to scale up Digital Pathology operations securely and efficiently.




No more workstations needed. SAM server and software allow IT managers to set up and monitor GT 450 scanners via the network, including dashboard status views, PIN controls and log out times.



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Fast viewing speeds  
Faster turnaround time  
High resolution  
Limited rescans  
Image quality  
Integrated work-flow  
Craftsmanship State-of-the-art  
Next generation imaging for Pathologists  
Peace of mind  
Resolution Precision Ease of use DICOM  
Contrast

Designed to rapidly deliver images with excellent image quality for Pathologists.



"I am really impressed with the sharpness and contrast of the images. It is definitely next-generation image quality."

– W. Dean Wallace M.D., Professor, Pathology and Laboratory Medicine, David Geffen School of Medicine at UCLA

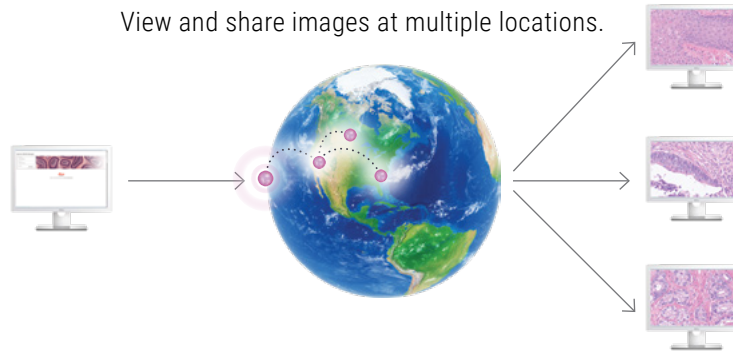
Aperio GT 450 utilizes a high performance 40x objective manufactured by Leica, the company that has engineered world class optics since 1841.



Aperio GT 450 illuminates tissue from both sides of the slide resulting in a 99.5% accurate tissue finder that recognizes faintly-stained tissue while excluding:

- > Pen marks
- > Stain residue
- > Scratches
- > Dust

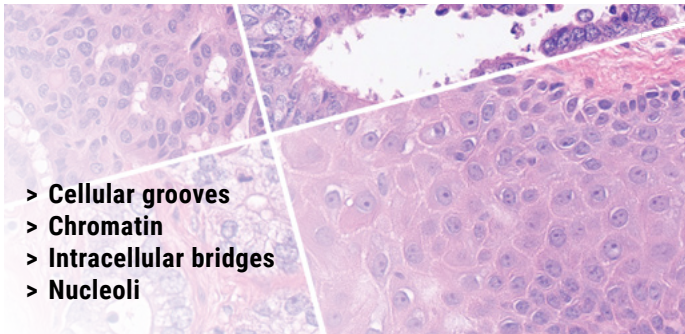
View and share images at multiple locations.



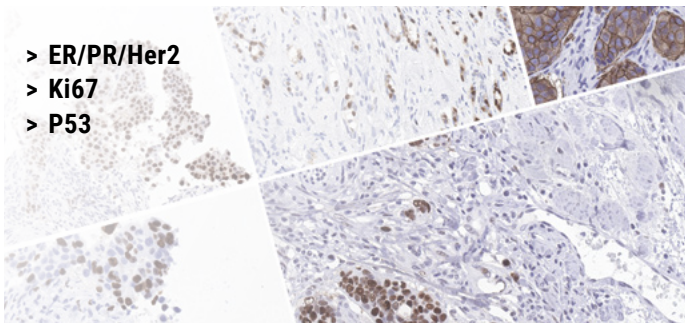
Aperio GT 450 applications:

- > Digital archiving
- > Drug development studies
- > Cancer research
- > Toxicology research
- > Basic cell biology research
- > Immunology research

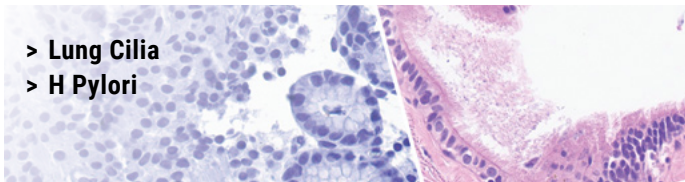
“Good cellular details at high power and good focus throughout the tissue.” – Sally Agersborg, MD, PhD, Medical Director, NeoGenomics Laboratories, Inc.



- > Cellular grooves
- > Chromatin
- > Intracellular bridges
- > Nucleoli



- > ER/PR/Her2
- > Ki67
- > P53



- > Lung Cilia
- > H Pylori

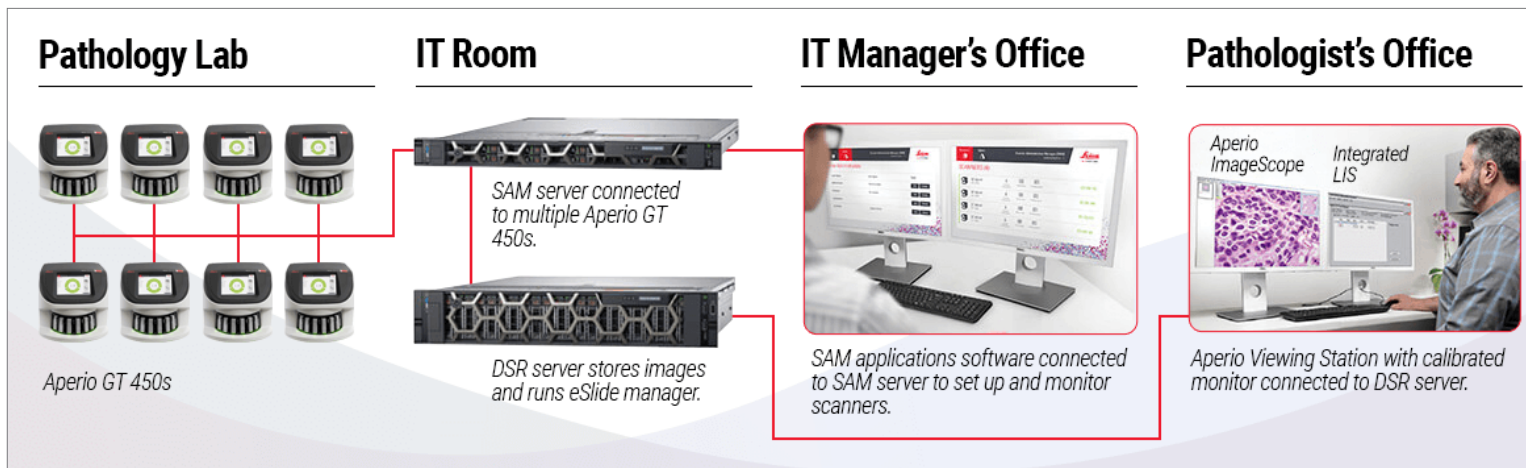
Access and organize your cases with Aperio eSlide Manager integrated into an LIS. View your case images with Aperio Viewer.

Aperio Viewer

Integrated LIS



From the lab to the IT room the Aperio GT 450 was designed to scale up digital pathology operations for **Histotechnicians**, **IT Professionals** and **Pathologists**



"The Aperio GT 450 has demonstrated in a workflow study at our laboratories substantial increases in case throughput while dramatically reducing hands on time for our technicians, which frees up additional FTE capacity that we can operationally utilize to respond to increasing annual slide volumes."

– Julie Broccardo, Director of Anatomic Pathology Operations, NeoGenomics Laboratories, Inc.

#### Aperio GT 450 Summary of Specifications

Maximum Slide Capacity	450
Rack capacity	15 racks of 30 slides, 15 racks of 20 slides
Racks compatible with Leica HistoCore SPECTRA Workstation	Yes
Continuous rack loading while scanning	Yes
Priority rack scanning	Yes
Magnification	40x
Resolution	0.26 µm/pixel at 40x
Scan speed (15mm x 15mm area at 40x)	32 sec
Sustained throughput (15mm x 15mm area at 40x)	81 slides/hr
Automated Image Quality Check	Yes
Slide sizes accepted	1x3
Field of View (FOV)	1mm
Bar code engines	1D and 2D symbology
Dimension	20.8" (52.83 cm) W x 23" (58.43 cm) L x 19.5" (49.53 cm) H
Weight	140 lbs (63.5 kg)

\*Parts shown are each sold separately.

Part Number	Description
23GT450	Aperio GT 450 Scanner
23GT450SAM	Aperio GT450 Scanner Admin Manager (SAM) Server
23GT450SAMSW	Aperio GT450 Scanner Admin Manager (SAM) Applications Software
23Dell740XD21TB	Dell 740 XD image storage DSR 21 Terabytes
23Dell740XD42TB	Dell 740 XD image storage DSR 42 Terabytes
23Dell740XD85TB	Dell 740 XD image storage DSR 85 Terabytes
23Dell740XD138TB	Dell 740 XD image storage DSR 138 Terabytes
23VS100	Aperio viewing station (includes calibrated monitor, workstation, Aperio ImageScope viewer and optimized ICC file)

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Learn more at: [LeicaBiosystems.com/AperioGT450](https://www.LeicaBiosystems.com/AperioGT450)