

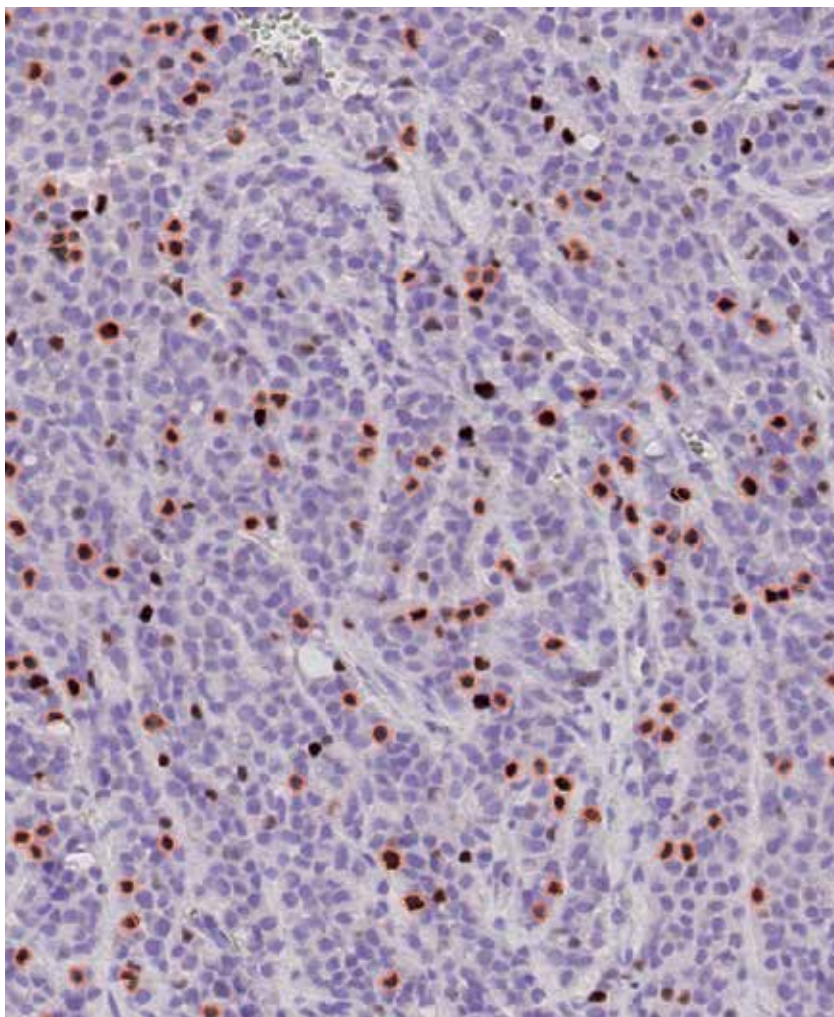
Leica

BIOSYSTEMS



Ariol™

Clinical IHC and FISH Breast Marker Analysis
Quality. Efficiency. Confidence.



Behind every breast slide in your laboratory is a woman waiting for life changing answers

With over 1.25 million women diagnosed with breast cancer each year*, accurate interpretation of tissue-based tests ensure that vital treatments can be started sooner. Ariol™ is a complete microscope-based, ePathology platform, bringing quality, efficiency and confidence to breast IHC and FISH analysis so that patients receive optimal care.

› QUALITY

Provide quantitative, objective analysis

› EFFICIENCY

Deliver accurate answers sooner

› CONFIDENCE

Proven clinically validated system

SCAN

Capture precise whole slide or region of interest scans of breast IHC and FISH samples with greater levels of specimen detail as the starting point for accurate analysis and patient diagnosis. Easily and consistently create crisp, high-resolution eSlides for analysis and archiving without fading or slide degradation.

MANAGE

Enhance your productivity and throughput with barcode driven sample identification and case-based workflows. Incorporate patient case information, slides and results in a central database for ease of access and review. Readily generate reports with case information, images and analysis data.

ANALYZE

Bring precision analysis of biomarkers into routine breast pathology assessment. Having quantitative IHC expression information and FISH counts available while interpreting slides is a valuable way to aid visual observations and help standardize results.

Quality

A world leader in microscopy, histology and optimizing laboratory processes, Leica Biosystems provides the Ariol system as a complete, integrated ePathology solution for today's breast pathologist. With consistent and precise interpretation of breast proteins (ER, PR and HER2) and gene expression (HER2/neu), the Ariol system provides high-quality analysis to pathologists aiding diagnosis and helping patients receive the best possible treatment.

CONTROL AND OPTIMIZE

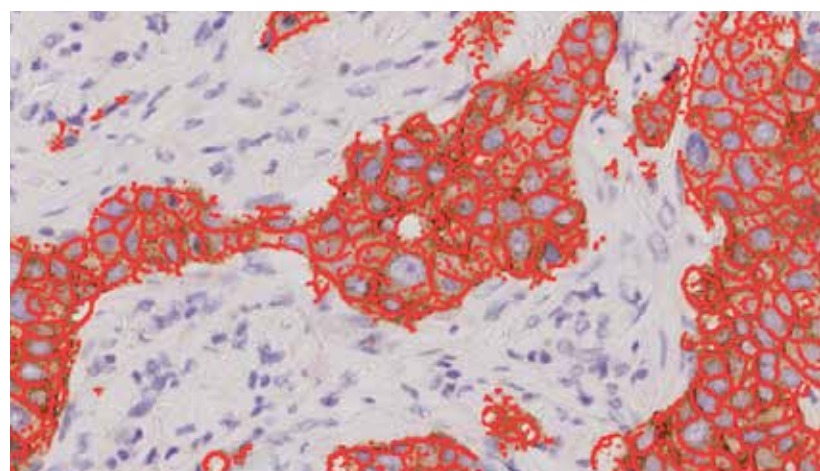
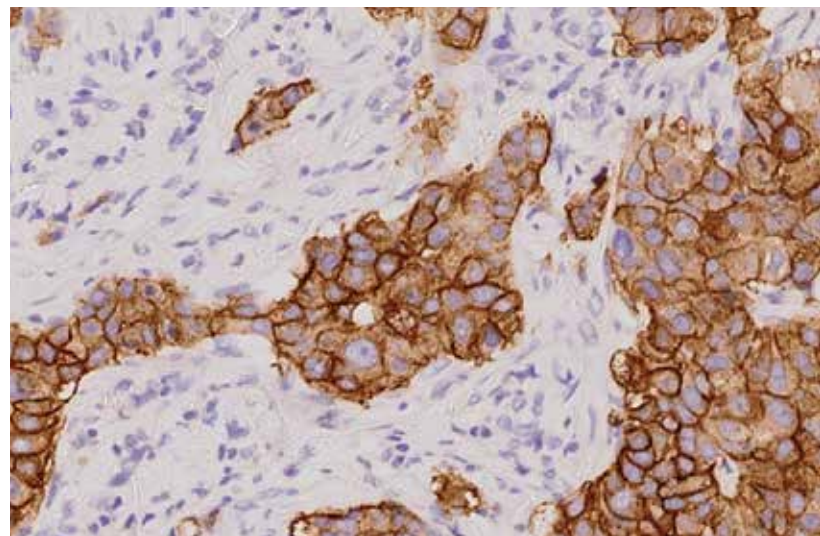
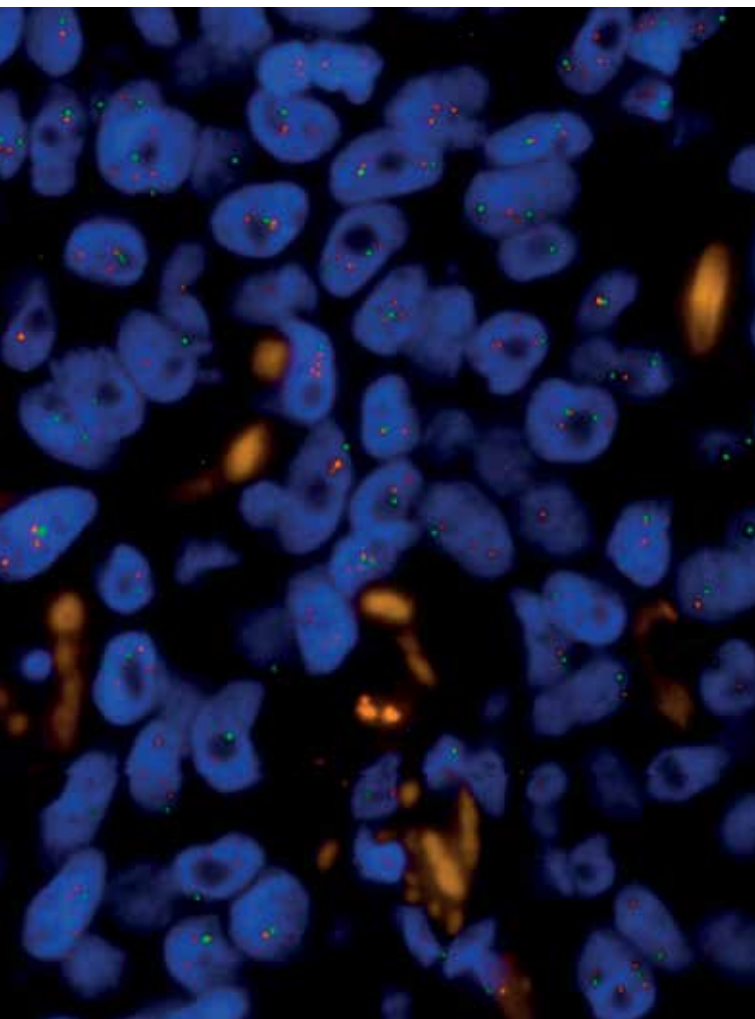
Flexible algorithm configuration for your laboratory. Ariol's trainable analytics can be optimized against control slides to accommodate for batch variation and different laboratories' tissue staining processes, ensuring accurate analysis results for your slides.

FISH WITHOUT FADE

Don't risk sample deterioration. HER2 FISH analysis is widely used in many regions and is often considered the gold standard for HER2 assessment. However, FISH signals fade over time and with multiple reviews. Capture a permanent record of the FISH image, including z-stack and analysis data.

CLINICALLY VALIDATED

Automated image analysis removes inter- and intra-reviewer variation, delivering standardization and consistency to clinical breast marker interpretation. For US-based laboratories, maximize return on investment with CPT reimbursement on breast IHC and FISH analysis.





Efficiency

Satisfy increasing laboratory demands by improving efficiency, increasing throughput and delivering high-quality analysis data sooner. Ariol enables streamlined, barcode-driven workflows eliminating bottlenecks and errors caused by duplicate data entry. The batch scanning and analysis capabilities mean the system can function 24/7.

CONTINUOUS PROCESSING

Keep your laboratory working even after your employees go home. A high throughput system, the Ariol with optional SL200 autoloader increases slide capacity, enabling unattended slide scanning and FISH probe counting. User-defined scanning and analysis protocols enable batch processing, reducing the need for manual intervention, increasing system efficiency.

MULTIFUNCTIONAL SOLUTION

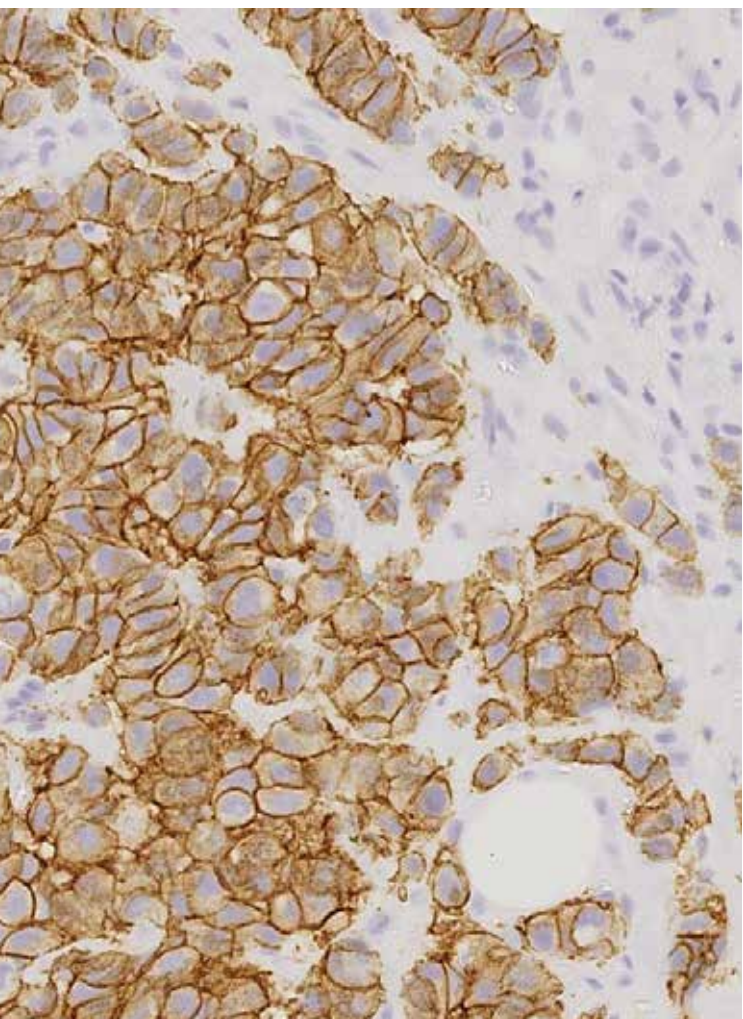
When laboratory space and funding are limited, Ariol combines brightfield IHC (ER/PR and HER2) and FISH (HER2/neu) on a single, compact and affordable system. Choose from brightfield, fluorescence or a combination of both to reflect the tests in your laboratory and maximize usage of your system.

IMPROVED WORKFLOW

Working in a dark room for FISH counting can be tiring and unpleasant work. Bring FISH into the light, improve employee working conditions and count more cells faster, with the Ariol scanning and analysis system. Easily compare serial sections of IHC and FISH staining side-by-side on one screen for improved insight into expression location.

24/7

ANALYZE MORE SLIDES IN LESS TIME



Confidence

Ensure that the right patient gets the right diagnosis. With reports suggesting that up to 20% of HER2 testing may be inaccurate*, many patients may not receive the correct treatment. Ariol provides quantitative, objective analysis of HER2, ER and PR IHC staining, as well as HER2/neu FISH, aiding in the diagnostic decision process so that the patients' correct treatment can start sooner.

REPRODUCIBLE

Increase confidence in your analysis. For pathologists routinely assessing common breast cancer markers, there is a constant drive towards standardization and reproducibility. Analysis with Ariol gives the confidence of objective analysis and reproducible results in breast pathology.

ACCURATE

Accurate interpretation of breast protein and gene expression is essential for correct patient diagnosis. With the Ariol system, extract quantitative data from slides and for ease of use, express in leading scoring protocols such as HER20, 1+, 2+, 3+ or FISH probe ratios.

SECURE

Ensure only the correct people have access to patient sensitive information. Administrator-defined user accounts control system access and processes, so that only approved personnel can view data, giving peace of mind to you and security to your system.

*American Society of Clinical Oncology/College of American Pathologists Guideline Recommendations for Human Epidermal Growth Factor Receptor 2 Testing in Breast Cancer. VOLUME 25, NUMBER 1, JANUARY 1 2007. JOURNAL OF CLINICAL ONCOLOGY, ASCO SPECIAL ARTICLE.

System Advantages



QUALITY

Precise Control

Carefully optimised calibration routines ensure robust, repeatable performance every day.

Leica Optical Engineering

Ensure the best image quality by utilizing Leica's unrivalled DM6000 B microscope with advanced automation and superb clarity of capture.

CONFIDENCE

Complete System

One world leading manufacturer for the DM6000 and Ariol software means reliability and total control.

Proven Analysis

Behind every Ariol system is a decade of development and learning in breast pathology analytics.

EFFICIENCY

High throughput

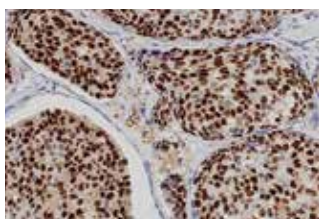
The optional SL200 gives a continuous workflow to allow streamlining of slide capture and analysis.

One System, Two Applications

With a small footprint and versatile application suite Ariol can seamlessly cope with Fluorescent and Brightfield slides maximizing lab space and minimizing budget.

Technical Specifications

	BRIGHTFIELD	FLUORESCENCE	BRIGHTFIELD AND FLUORESCENCE
Clinical image analysis (USA and Europe)	– HER2 IHC – ER IHC – PR IHC	HER2 FISH	– HER2 IHC – ER IHC – PR IHC – HER2 FISH
Objective lens	– Leica HCX PL PL 1,25x/0.04 – Leica HCX PL FL 5x/0.15 – Leica HCX PL PL 10x/0.30 – Leica HC PLAN APO 20x/0.70 – Leica HCX PL APO 40x/0.85 CORR – Leica HCX PL APO 63x/1.40-0.60 (optional)		
Slide capacity	– 4 or 8 with stage – 200 with SL200		
Light source	Halogen Lamp 12V 100w	X-Cite 120 PC including light guide	– Halogen Lamp 12V 100w (brightfield) – X-Cite 120 PC including light guide (fluorescence)
Camera	– Jai CVM 2 (1600 x 1200) – Jai CVM 4 (1380x1030)		
Resolution	– 20x = 0.368 um/pix – 40x = 0.184 um/pix		
Slide Processing Speed (scanning plus analysis*)	20x magnification, 15x15 = 10min	40x magnification, 3x ROI = 15min (approximate for 3 channel FISH slide)	
Glass slide dimensions	26 x 76 mm (thickness 0.9 to 1.2 mm including coverglass)		
Z-stacking	– user selectable number of layers – user selectable layer thickness – 1 to 30 layers		
Barcode reader	Barcode Scanner, LS2208 1D, supports most 1D Industry standards e.g. Code 128, Interleaved 2 of 5 & Code		
Storage	– 2TB RAID 5 array – External user-provided network storage		
Image formats	– Ariol – SCN – TIFF – JPEG – JPEG2000 – BMP	– Multi-channel Ariol – Multi-channel SCN – TIFF – JPEG – JPEG2000 – BMP	– Ariol & Multi-channel Ariol – SCN & Multi-channel SCN – TIFF – JPEG – JPEG2000 – BMP
Operating Voltage	110 to 220 V (UPS included as standard)		
Mains frequency	50-60 Hz		
	4 OR 8 SLIDE CAPACITY	WITH SL200	
Dimensions	L34 x D59x H68 cm	L68 x D59x H68 cm	
Weight	26.2 KG	57.5 KG	
Optional Research Software Modules	– Rare Event Analysis (CTC, Cytospins, Lymph node analysis) – Tissue Microarray Analysis – Angiogenesis / Microvessel detection		



APERIO ePATHOLOGY SOLUTIONS

Leica Biosystems provides excellence in tissue preparation and staining through to ePathology and analysis, all of which is backed by unrivalled service, support and expertise.

- Tissue preparation instruments and consumables Microtomes, blades and slides
- Leica SCN400 F combined Brightfield and Fluorescence whole slide scanning
- Aperio ePathology management with eSlide Manager™
- Secure **NETWORK** for real-time eSlide viewing and collaboration, globally
- Precision Image Analysis for whole-slide automated research
- Tissue Microarray workflows through OpTMA
- SlidePath Gateway and ePathViewer™ for iPad/iPhone and Client
- Expert Service and Support

LEICA BIOSYSTEMS

Leica Biosystems is a global leader in laboratory workflow solutions for anatomic pathology, striving to advance cancer diagnostics to improve patients' lives. Recognizing there is a shortage of pathology expertise worldwide, as well as increasing subspecialization, Leica Biosystems expanded its capability in pathology imaging with Aperio ePathology Solutions enabling greater access for pathologists through market leading whole slide scanners, Network solutions that enables remote, real-time viewing and easy distribution of images for collaboration and Precision solutions that provide pathologists with easy-to-use quantitative image analysis to improve clinical and research productivity, reproducibility and consistency.

Leica Biosystems – an international company with a strong network of worldwide customer services.

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Europe Sales and Customer Support

For detailed contact information about European sales offices or distributors please visit our website: www.LeicaBiosystems.com

Leica Biosystems brings together products, quality and support. Offering a complete solution that helps you advance workflows, enhance diagnostic clarity and deliver what really matters – better patient care.

The Ariol® Microsight, Hersight, ERsight, PRsight and PathVysion® digital scoring applications are for in vitro diagnostic use, all diagnostic decisions are made by the qualified clinician. All other assays are for research only, not for use in diagnostic procedures.

*Reg. US Pat & TM Off and in other jurisdictions throughout the world

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