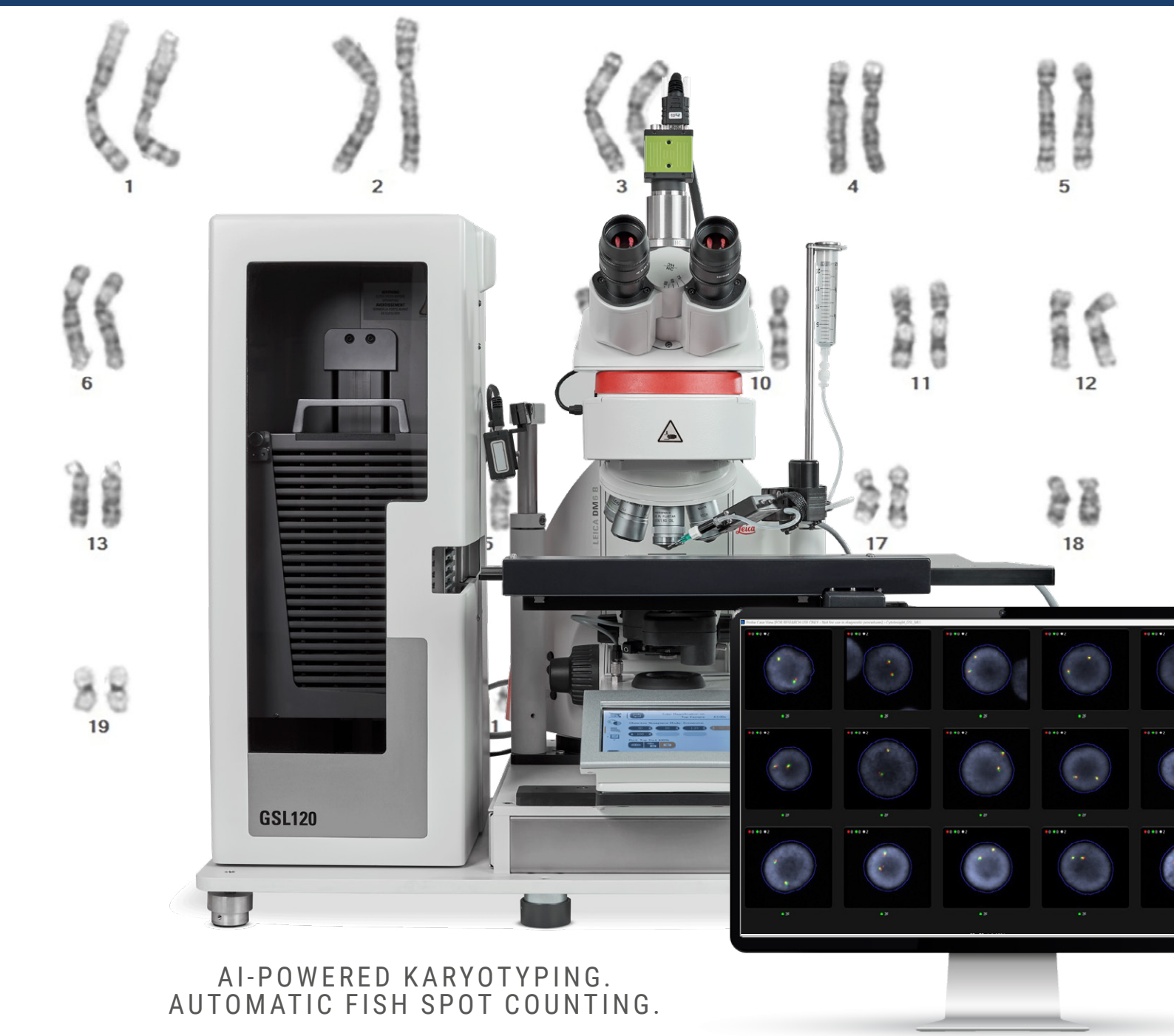
LEICA BIOSYSTEMS - CYTOGENETIC SOLUTIONS

CYTOINSIGHT GSL

FLEXIBLE BRIGHTFIELD AND FLUORESCENT CYTOGENTICS PLATFORM



AI-POWERED KARYOTYPING.
AUTOMATIC FISH SPOT COUNTING.

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Accelerate Your Journey
Imagine The Possibilities

Leica BIOSYSTEMS

CYTOINSIGHT GSL

COMPREHENSIVE CYTOGENETICS PLATFORM

Advance your cytogenetics workflow with CytoInsight GSL, an integrated capture, image analysis and case management platform engineered for high-quality data acquisition, analytical rigor, and operational efficiency.

The CytoInsight GSL system provides automated, walk-away brightfield and fluorescence scanning, advanced analytics, and robust system architecture to deliver the flexibility and throughput required in routine and complex cytogenetics studies.

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TIME FOR YOUR EXPERTISE

The CytoInsight GSL platform streamlines labor-intensive tasks by automatically locating, identifying, and capturing high-quality interphase and metaphase cells. AI-powered karyotyping accelerates time to results by up to 93.6%, while automated FISH spot counting reduce manual review freeing up technologist time to focus on tasks requiring their invaluable expertise.

WORKFLOWS THAT WORK FOR YOU

Backed by more than 30 years of proven performance, the CytoInsight GSL system delivers exceptional flexibility, automation, and image quality. Built by cytogeneticists for cytogeneticists, the platform was developed in collaboration with leading laboratories worldwide. Its intuitive, end-to-end workflows, user-focused design, and optimized imaging capabilities help to streamline your day and support consistent, high-quality results.

FLEXIBLE, SCALABLE, SECURE

Built to exceed the demands of modern cytogenomics, the CytoInsight GSL platform scales and adapts to support a broad range of applications, from FISH scanning and automated spot counting to karyotyping and M-FISH analysis. Integrated cybersecurity technology and Windows 11 compatibility protect sensitive data, while the intuitive interfaces and robust interoperability capabilities ensure seamless data flow.

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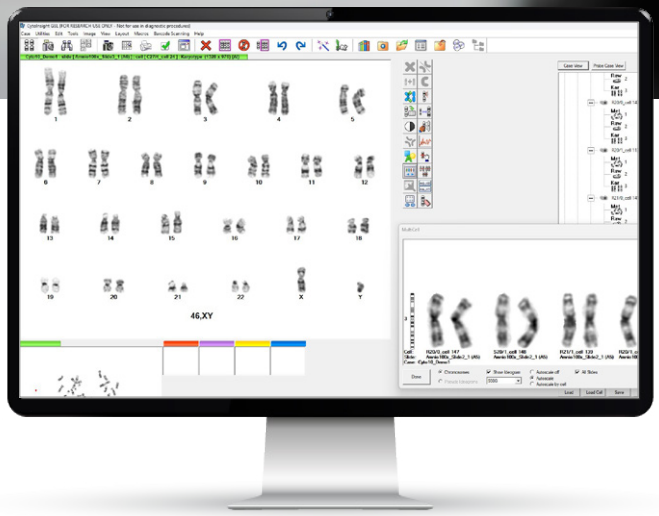
QUALITY YOU CAN SEE

Backed by more than 170 years of optical innovation, the Leica DM6 B microscope elevates your imaging capabilities with intelligent automation for both brightfield and fluorescence. The advanced 12 MP CMOS camera delivers crisp, high-resolution images with exceptional sensitivity and low noise, revealing chromosome banding and subtle structural details with optimal clarity. The result: a powerful imaging platform that helps your lab see more, work faster, and deliver confident cytogenetic insights.



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AI-POWERED KARYOTYPING

Reimagine what's possible in cytogenetics with AI-powered karyotyping that delivers speed, accuracy, and consistency at an entirely new level. By reducing hands-on time by up to 93.6%, the AI engine dramatically accelerates the path from metaphase capture to final report, empowering your lab to process samples faster than ever before. With >99% accuracy in chromosome segmentation and positioning, the system ensures consistent, reproducible results to empower confident decision-making.

93.6%
FASTER

99%
ACCURACY

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FULL AUTOMATION COMPLETE CONTROL

Take command of your FISH workflow with a system built to automate for efficiency, remove complexity, and minimize hands-on time, while keeping you firmly in control. With automatic oiling and unattended 63x or 100x capture, up to 7 fluorescent channels per assay, and customizable counting, CytoInsight GSL delivers streamlined automation for your cell and tissue FISH samples.

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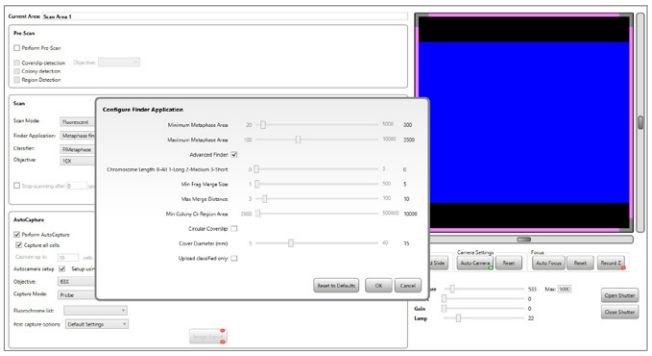
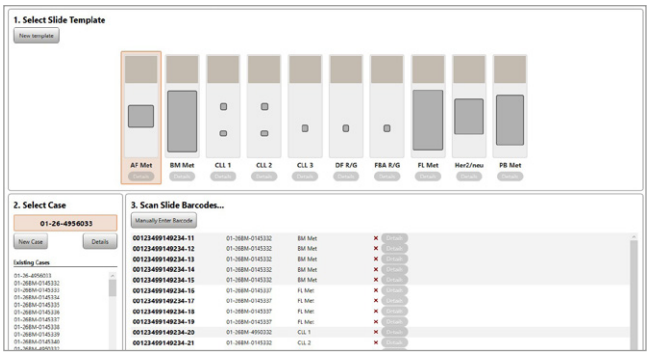
INTELLIGENT SCAN TEMPLATES



Build optimized workflows that adapt to both standard and complex FISH applications. With the intuitive interface, you can readily define target cell morphology and probe/filter combinations for your exact assay requirements – your CytoInsight GSL system does the rest.

BARCODE DRIVEN SCAN PARAMETERS



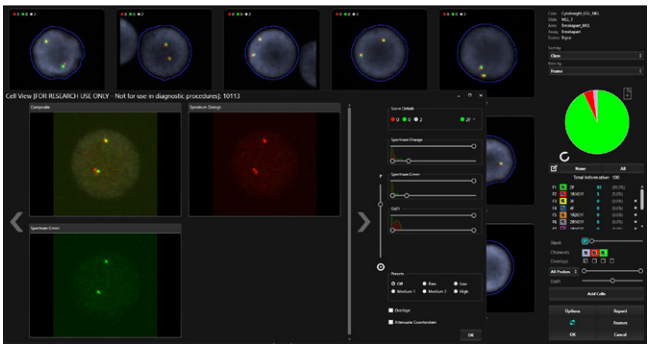
Remove guesswork and eliminate manual setup. Barcode recognition automatically assigns the correct scan template for both tissue-based and cellular FISH assays. Automated capture routines ensure uniformity across every slide, minimizing hands-on steps and maximizing reproducibility.

FLEXIBLE FISH, CONSISTENT COUNTING

With the CytoInsight GSL system, spot counting is fully automated, delivering rapid, reliable signal detection with precision-built consistency. The intelligent assay builder enables clear definition and classification criteria, ensuring every analysis follows standardized rules for accuracy across both tissue and cellular FISH.

COUNT AND CATEGORIZE

By combining automated counting with user-defined assay logic, the CytoInsight GSL platform produces fast, reproducible results. When reviewed with the virtual microscope tool—Cell View—these results ensure no detail is missed, strengthening confidence in every cell count.



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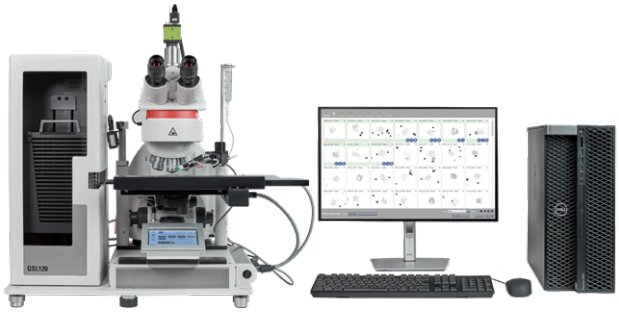
CYTOINSIGHT GSL PRODUCT CONFIGURATIONS

	Review Station	Capture Station without Microscope	Capture Station with Microscope	Scanning Station with GSL 10 Automated Slide Loader	Scanning Station with GSL 120 Automated Slide Loader
CytoInsight Software Application & Softare Protection Key	✓	✓	✓	✓	✓
Workstation - Computer with Windows OS and Display Monitor	✓	✓	✓	✓	✓
12 Megapixel CMOS Camera	✗	✓	✓	✓	✓
AI Karyotyping Software Module	Optional	Optional	Optional	Optional	Optional
Xylis LED Lamp for FISH Station	✗	Optional	✓	✓	✓
Leica DMS 8 Automated Microscope	✗	✗	✓	✓	✓
XY Stage	✗	✗	Mechanical	Motorized	Motorized
Automated Oiler	✗	✗	✗	✓	✓
Barcode Reader	✗	✗	✗	✓	✓
Automated Slide Loader	✗	✗	✗	10 Slides	120 Slides



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

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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.

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