

Microbiology

Gram smears analysis automation



Clinical Application Module

Vision Gram



Automatic analysis of Gram smears

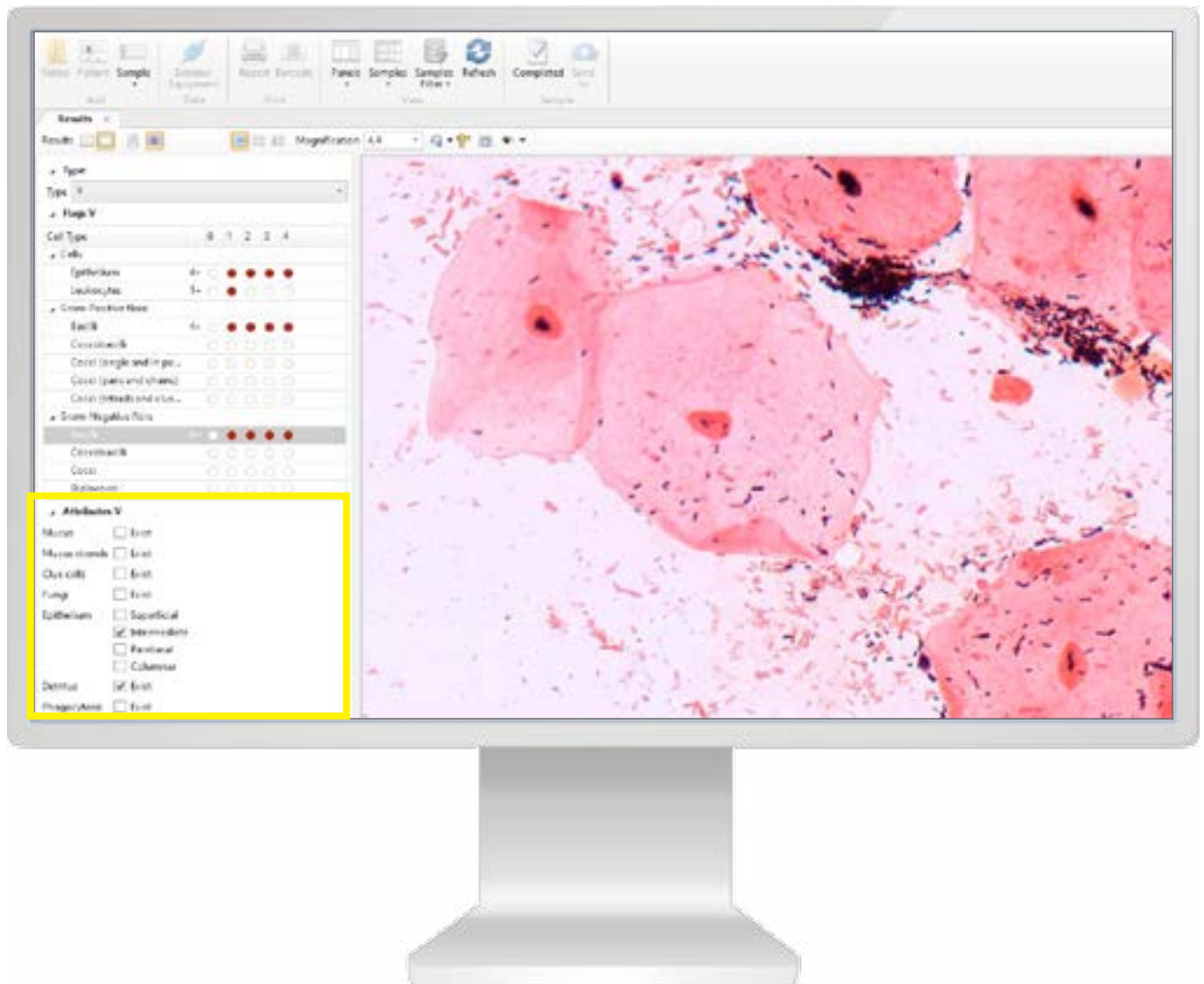
Automatic scanning and creation of digital slide

Automatic morphology assessment, count and pre-classification of gram-positive and gram-negative bacteria:

- Lactobacillus morphotypes
- Gram-negative and gram-positive rods
- Gram-negative and gram-positive cocci, located extra- and intracellularly, paired, chains, clusters
- Gardnerella morphotypes
- Anaerobic bacterial morphotypes, including: Peptostreptococcus, Bacteroides, Fusobacteriales, Prevotella, Mobiluncus spp.

Additional Module

Vision Extended Gram



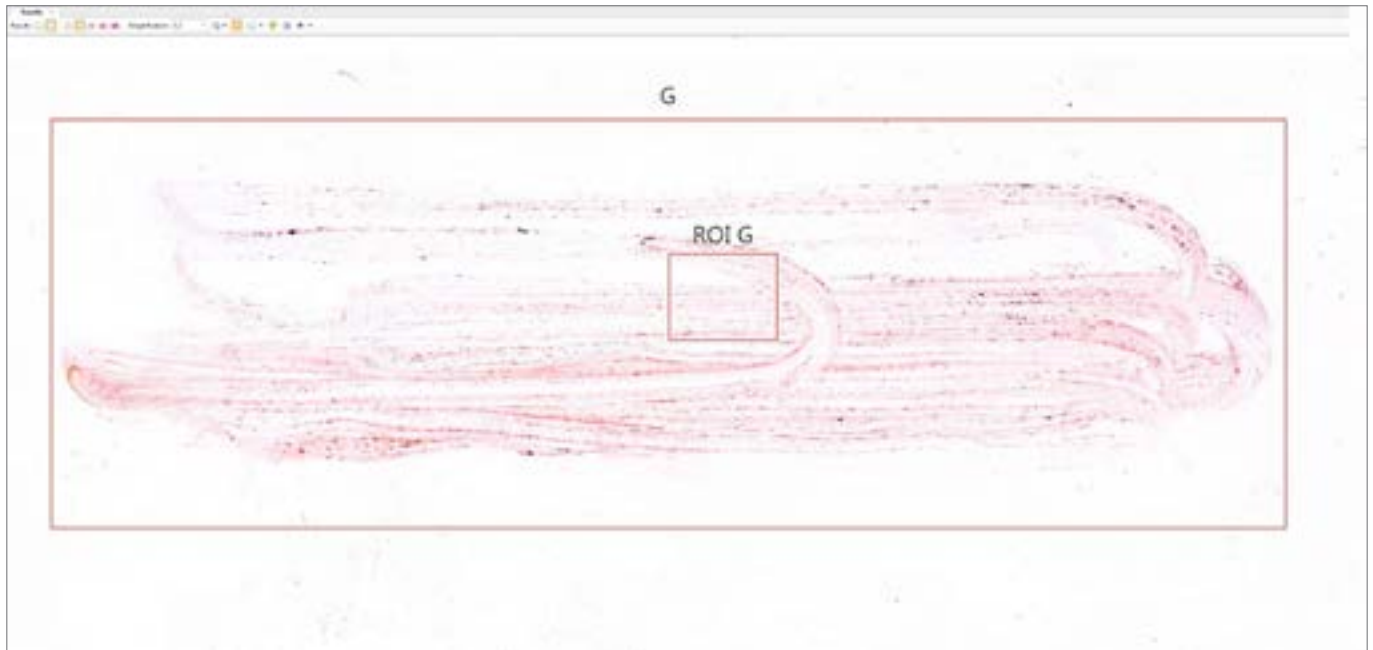
Automatic identification:

- Epithelial cells (superficial, intermediate, parabasal, cylindrical epithelial)
- Leukocytes
- Clue cells
- Mucus and cell debris
- Trichomonas vaginalis
- Fungi.

Scanning DS 2.5x, smear and location area detector

Working with one location area

Operation mode: Gram



Digital slide, Gram smear with 2.5x magnification.

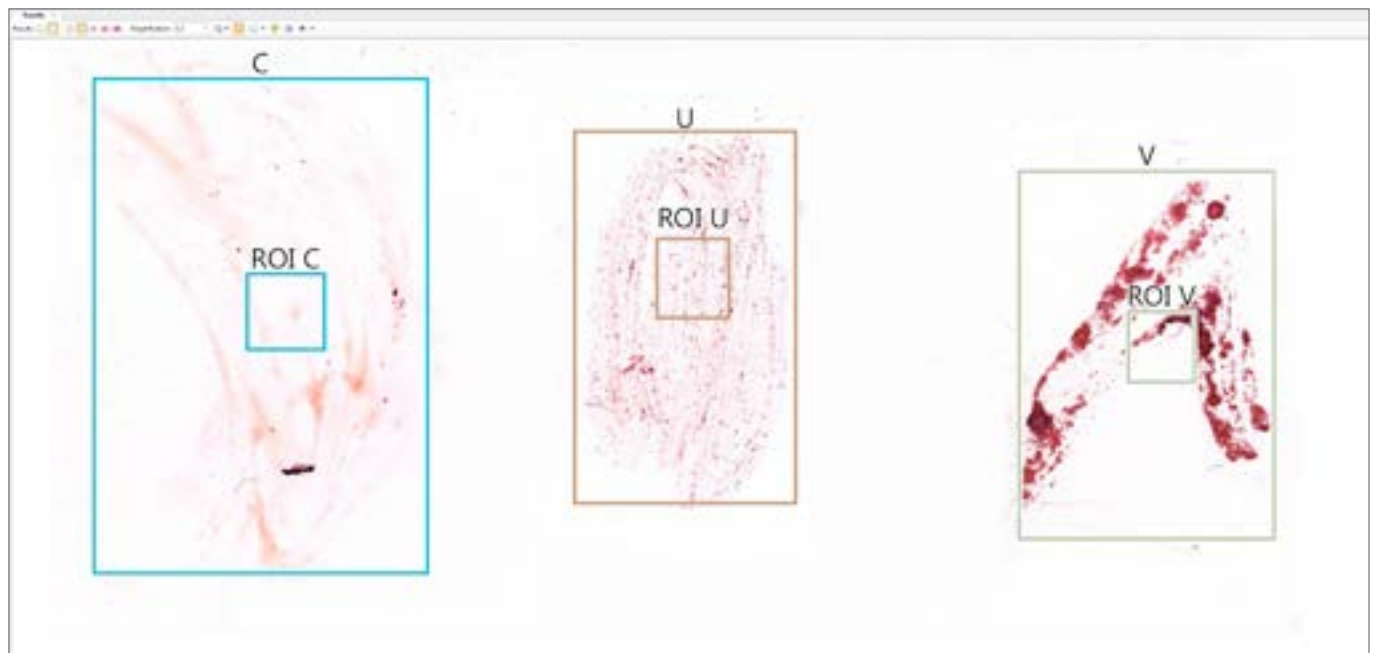
Automatic detection of Regions of Interest (ROI), Gram smear



Automatic scanning and analysis of Gram location

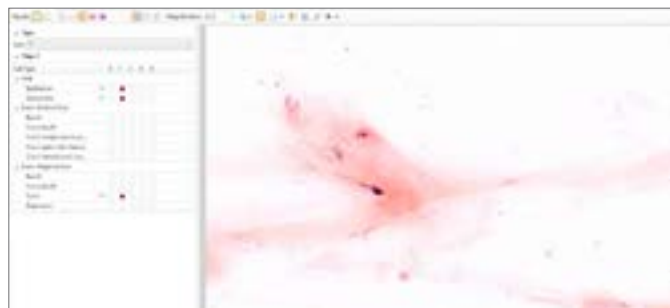
Automatic detection of three locations

Operation mode with three locations:
Cervical, Urethral, Vaginal

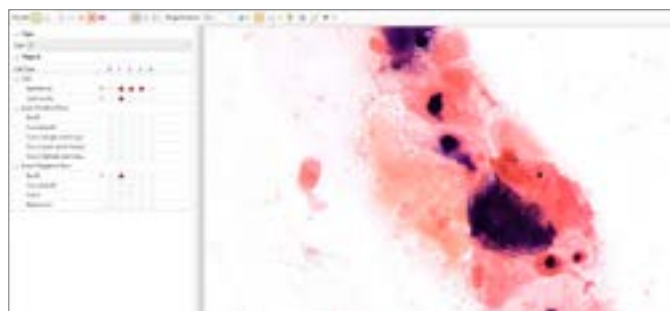


Digital slide, Gram smear with 2.5x magnification.

Automatic selection of locations and Regions of Interest (ROI) for locations: Cervical, Vaginal, Urethral



Automatic scanning and analysis
of Cervical Location



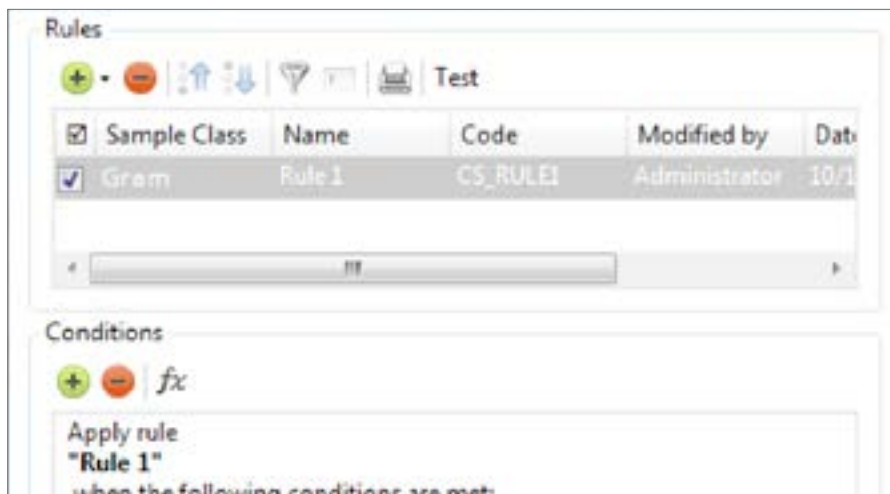
Automatic scanning and analysis
of Urethral Location



Automatic scanning and analysis
of Vaginal Location

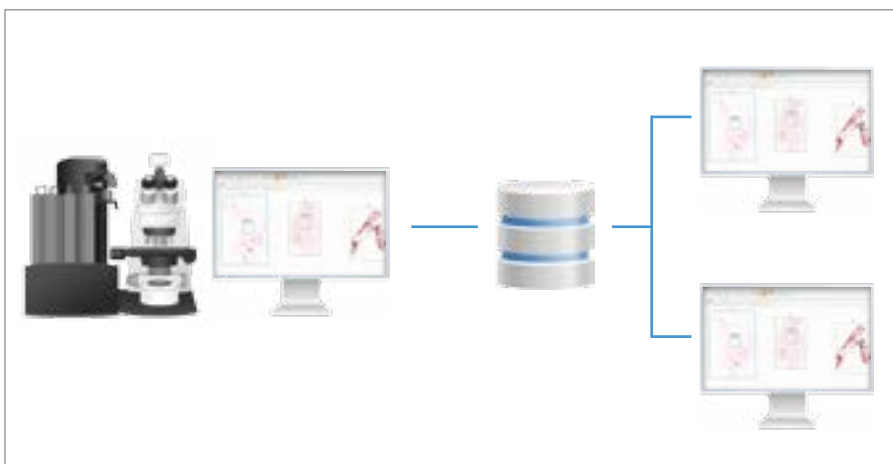
Administrative Module

Vision Manager



Analysis procedure automation, data processing rules created by the specialist.

Vision Remote



Remote workstation.

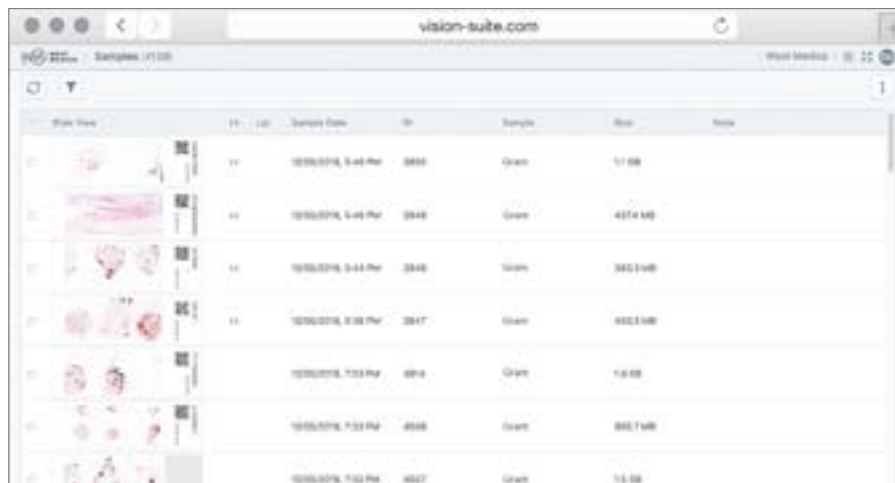
Artificial intelligence



Artificial intelligence (AI) cumulates algorithms and technologies that allow computers to learn and solve intellectual tasks provided by humans.

AI speeds up processing and interpretation of data, and allows to efficiently perform the most comprehensive tasks, including medical image analysis.

Consulting and Education Module Vision Suite



The screenshot shows a web browser window with the address bar displaying 'vision-suite.com'. The page title is 'Samples (17/05)'. Below the title bar, there is a search icon and a dropdown menu. The main content area displays a table with columns: 'Image View', 'ID', 'Sample Name', 'ID', 'Sample', 'Size', and 'Note'. The table contains several rows of data, each with a thumbnail image, an ID, a sample name, another ID, the sample name, its size, and a note. The sample names are 'Gran', 'Gran', 'Gran', 'Gran', 'Gran', 'Gran', and 'Gran'. The sizes are '1.1 MB', '437.4 MB', '345.3 MB', '432.1 MB', '1.3 MB', '345.7 MB', and '1.3 MB'. The notes are empty.

Image View	ID	Sample Name	ID	Sample	Size	Note
	11	10000016, 5:44 PM	3845	Gran	1.1 MB	
	12	10000016, 5:44 PM	3846	Gran	437.4 MB	
	13	10000016, 5:44 PM	3846	Gran	345.3 MB	
	14	10000016, 5:44 PM	3847	Gran	432.1 MB	
	15	10000016, 7:03 PM	3848	Gran	1.3 MB	
	16	10000016, 7:03 PM	4046	Gran	345.7 MB	
	17	10000016, 7:03 PM	4047	Gran	1.3 MB	

Cloud/server for telemedicine and remote consultations with colleagues.

Clinical applications



The latest developments of artificial intelligence provide a solution for the tasks connected with automation in digital microscopy.

Our technologies speed up the diagnostic process, reduce analysis time and lower subjectivity of the results received.

They improve the efficiency of laboratory routine operation, bringing microscopy analyses in line with state-of-the-art standards.

Specifications



Vision Assist
Cell Imaging Analyzer



Vision Pro
Cell Imaging Analyzer



Vision Ultimate
Cell Imaging Analyzer

Application module: Vision Gram	Application module: Vision Gram	Application module: Vision Gram
Additional module: Vision Extended Gram	Additional module: Vision Extended Gram	Additional module: Vision Extended Gram
Digital slide 100x	Digital slide 60x/100x	Digital slide 63x
Operation mode: Gram (1 location)	Operation mode: Gram (1 location)	Operation mode: Gram (1 location)
—	—	Operation mode CUV (3 locations)
—	—	DS 2,5x, smear detector
Working modes: queue (only 4 slides version)	Working modes: queue, random access	Working modes: queue, continuous and random access, STAT testing, 24/7
Automatic scanning	Automatic scanning	Automatic scanning
1 or 4 slides	8 slides	Up to 200 slides
Manual slide handling	2 cassettes with slides	Automatic slide handling
Microscope for scanning	Microscope for scanning	Microscope for scanning
Personal computer	Personal computer	Personal computer
Monitor	Monitor	Monitor
—	—	Touch-screen monitor for control
—	Built-in barcode reader (optional)	Built-in barcode reader
—	Automatic oil dispenser (optional)	Automatic oil dispenser
Optical system: 10x, 50x Oil, 100x Oil	Optical system: 10x, 60x Oil, 100x Oil	Optical system: 2.5x, 10x, 63x Oil
Bright field	Bright field	Bright field
Köhler illumination, LED	Köhler illumination, LED	Köhler illumination, LED
Bidirectional LIS, LIS2-A2 (ASTM), HL7, Ethernet	Bidirectional LIS, LIS2-A2 (ASTM), HL7, Ethernet	Bidirectional LIS, LIS2-A2 (ASTM), HL7, Ethernet
Art. N.: 71150.05 (1 slide) Art. N.: 71450.05 (4 slides)	Art. N.: 72852.05 (8 slides)	Art. N.: 73031.05 (200 slides)

Please check the intended use and the registration in your local regulation. Depending on the regulations of the respective region, some products may be used for research purpose only.

Pre-classification has to be validated by the specialist reviewing the galleries of cells. We reserve the right to change specification without notice.

