

# Hematology

## Digital Morphology of Blood cells

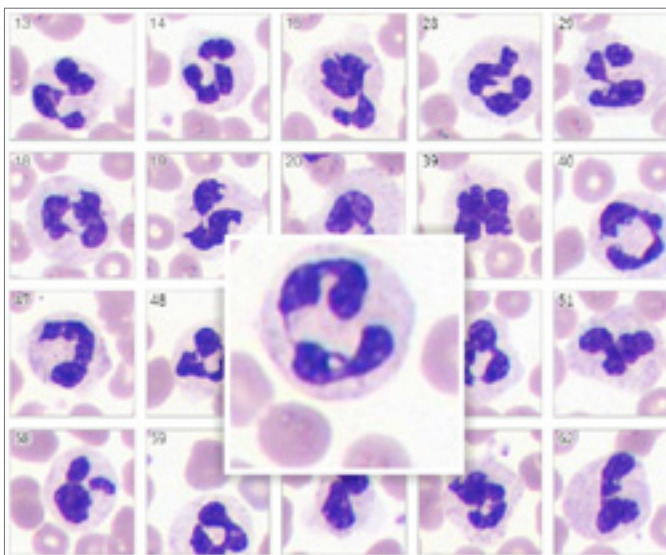


# Clinical Application Module

## Vision Hema

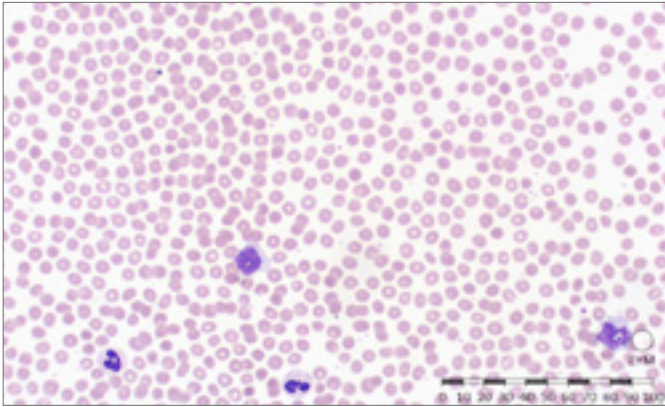
The screenshot displays the Vision Hema software interface. At the top, there are navigation icons for Folder, Patient, Sample, Scanner, Blood Analyzer, Report, Barcode, Panels, Samples Filter, Refresh, and Completed. Below this is a 'Main' window with a 'Samples' list on the left, a 'Results' table in the center, and a 'Cells' grid on the right. A large, detailed image of a segmented neutrophil is overlaid on the grid.

ID	Status	Sam	Last Change Di	Cell Type	Count	%
3052	Scanned	CBC	24.06.2019 16:48	Leukocytes	98	100
3051	Scanned	CBC	24.06.2019 16:47	Eosinophils	-	-
3050	Scanned	CBC	24.06.2019 16:47	Eosinophils	-	-
3058	Scanned	CBC	24.06.2019 16:43	Promyelocytes	-	-
3058	Scanned	CBC	24.06.2019 16:44	Myelocytes	-	-
3057	Scanned	CBC	24.06.2019 16:43	Metamyelocytes	-	-
3056	Scanned	CBC	24.06.2019 16:43	Band neutrophils	-	-
3055	Scanned	CBC	24.06.2019 16:44	Segmented neutrophils	83	84,7
3054	Scanned	CBC	24.06.2019 16:42	Lymphocytes	9	9,2
3053	Scanned	CBC	24.06.2019 16:41	Monocytes	6	6,1
3052	Scanned	CBC	24.06.2019 16:40	Plasma cells	-	-
3051	Scanned	CBC	24.06.2019 16:40	Reactive lymphocytes	-	-
3050	Scanned	CBC	24.06.2019 16:39	Large granular lymphocytes	-	-
3049	Scanned	CBC	24.06.2019 16:38	Prolymphocytes	-	-
3048	Scanned	CBC	24.06.2019 16:37	Atypical lymphocytes	-	-
3047	Scanned	CBC	24.06.2019 16:43	Blasts	-	-
3046	Scanned	CBC	24.06.2019 16:34	Secary cells	-	-
3045	Scanned	CBC	24.06.2019 16:35	Hairy cells	-	-
3044	Scanned	CBC	24.06.2019 16:34	Unknown	-	-
3043	Scanned	CBC	24.06.2019 16:34	Non-WBC	-	-
3042	Scanned	CBC	24.06.2019 16:35	Artifacts	3	3,1
3041	Scanned	CBC	24.06.2019 16:33	Smudge cells	4	4,1
3040	Scanned	CBC	24.06.2019 16:32	Erythroblasts (NRBC)	-	-
3039	Scanned	CBC	24.06.2019 16:31	Giant platelets	-	-
3038	Scanned	CBC	24.06.2019 16:32	Platelets aggregations	-	-
3037	Scanned	CBC	24.06.2019 16:30	Megakaryocytes	-	-
1036	Scanned	rbc	24.06.2019 16:34			
Total:				4074		



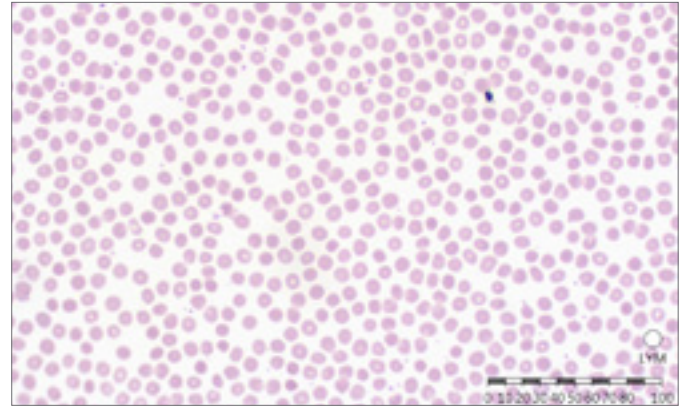
### Identification and pre-classification of leucocytes

- Basophils
- Eosinophils
- Promyelocytes
- Myelocytes
- Metamyelocytes
- Band neutrophils
- Segmented neutrophils
- Lymphocytes
- Monocytes
- Reactive lymphocytes
- Blasts
- Erythroblasts



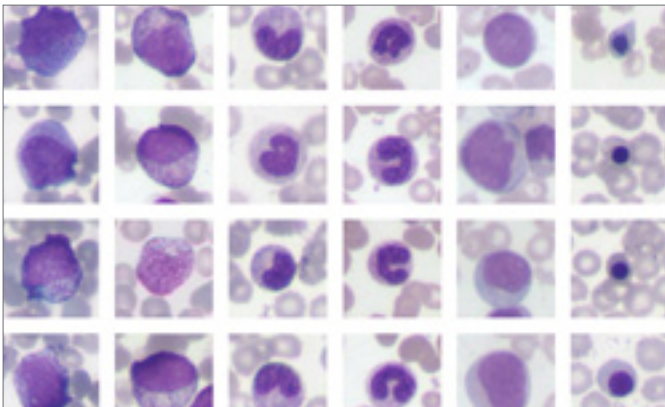
### Analysis of erythrocytes

- Size
- Color
- Shape
- Inclusions



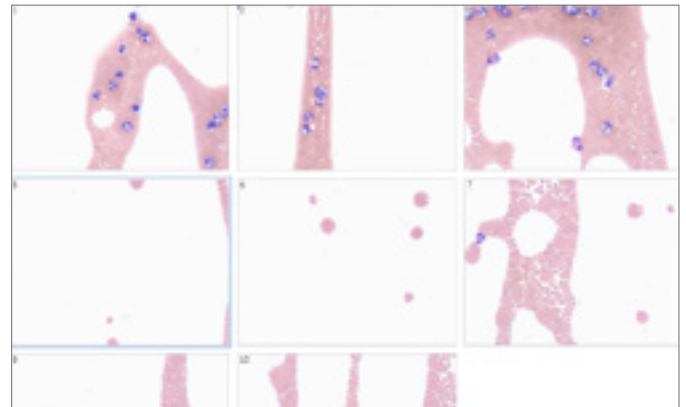
### Analysis of platelets

- Normal
- Micro
- Macro



### Analysis of pathological and complex cells

- Cells with degenerative changes
- Immature forms of neutrophils
- Atypical forms of lymphocytes
- Blasts
- Erythroblasts, smudge cells and other non-WBC cells

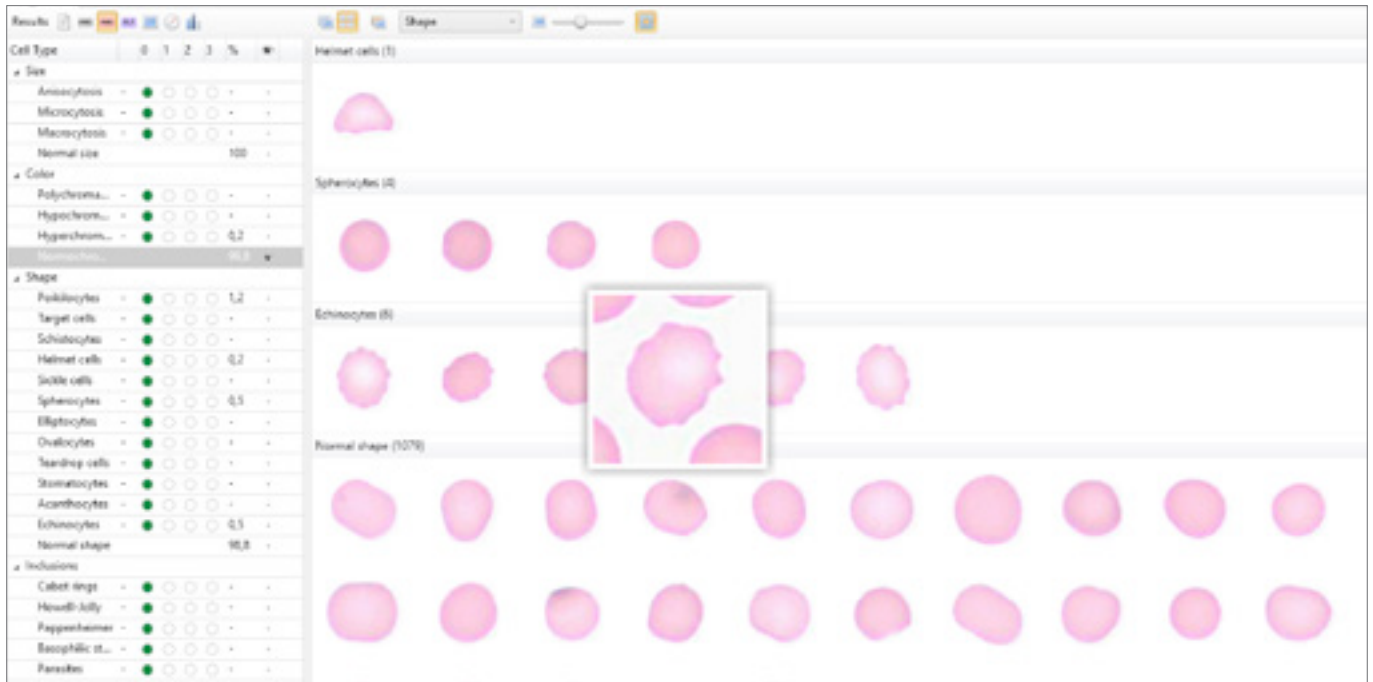


### Scanning of blood smear tail

- Additional assessment of atypical forms of leukocytes
- Assessment of platelet aggregations

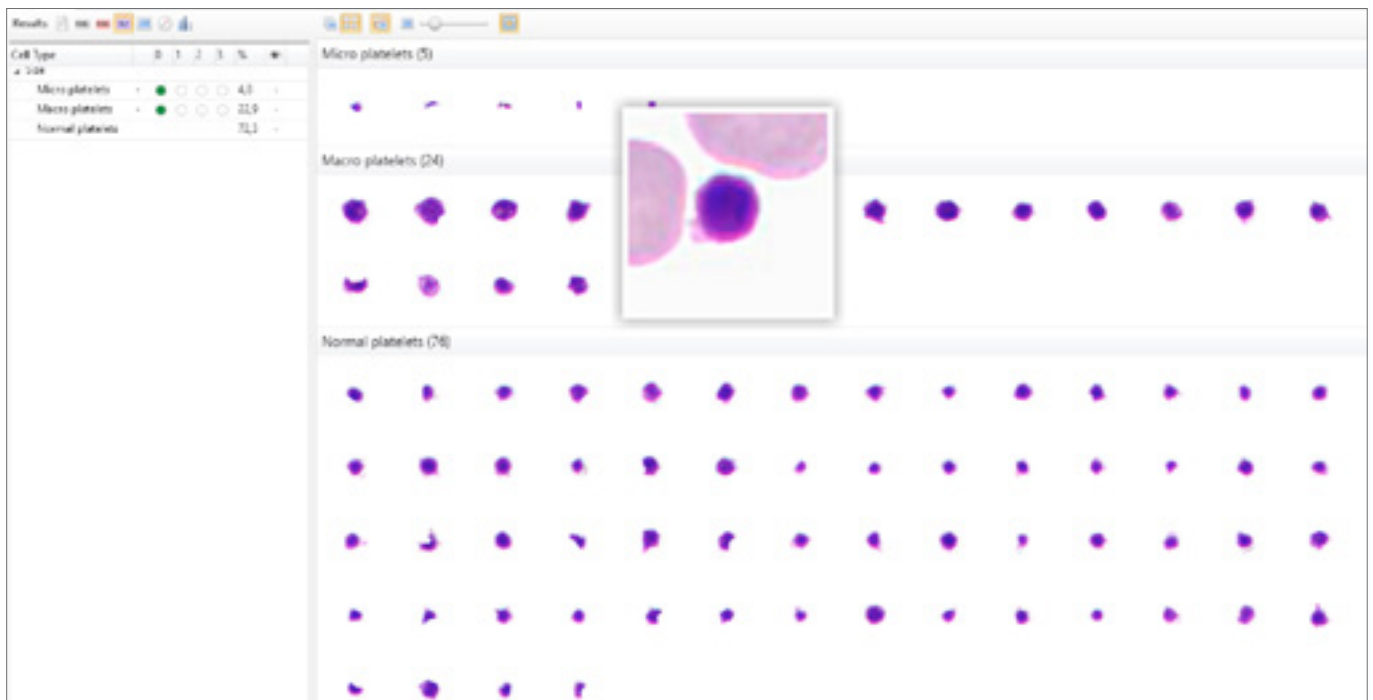


## Additional modules Vision Extended RBC



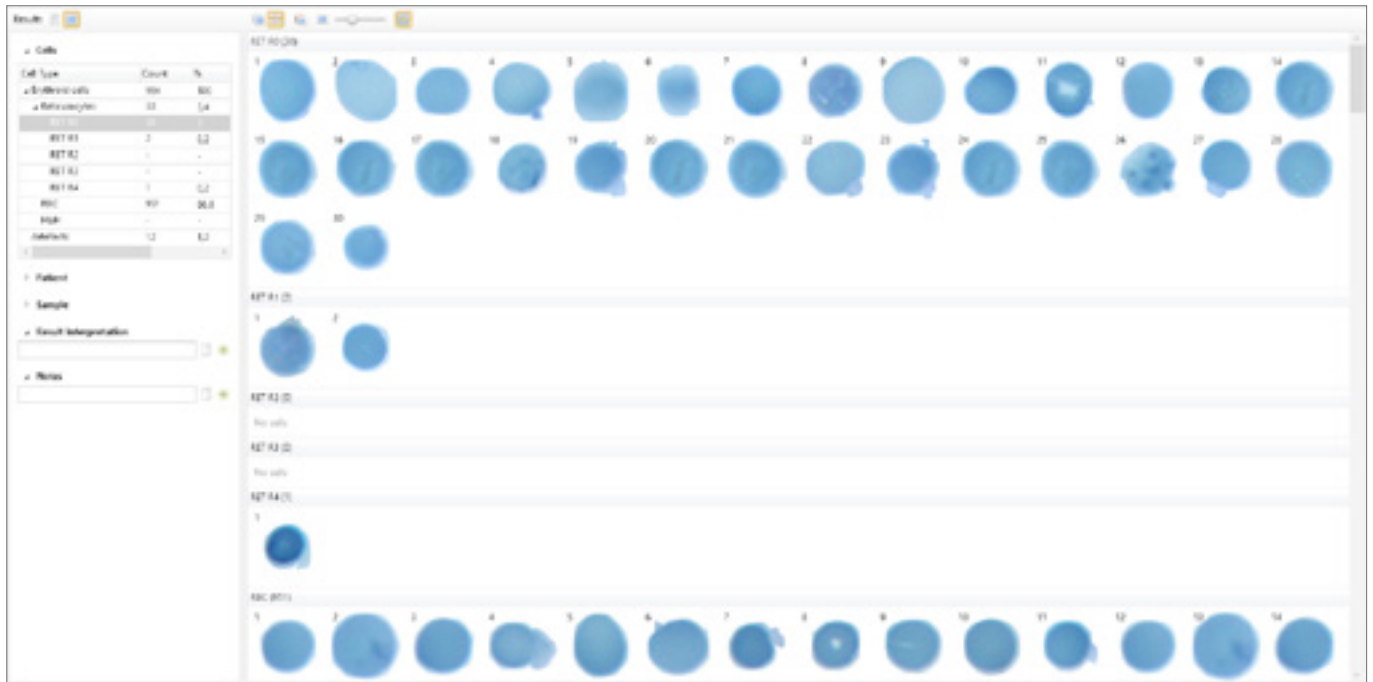
Automatic identification of erythrocytes by size, color, forms and inclusions. Pre-classification of erythrocytes by 21 parameters. Detailed information of every erythrocyte.

## Vision Extended PLT



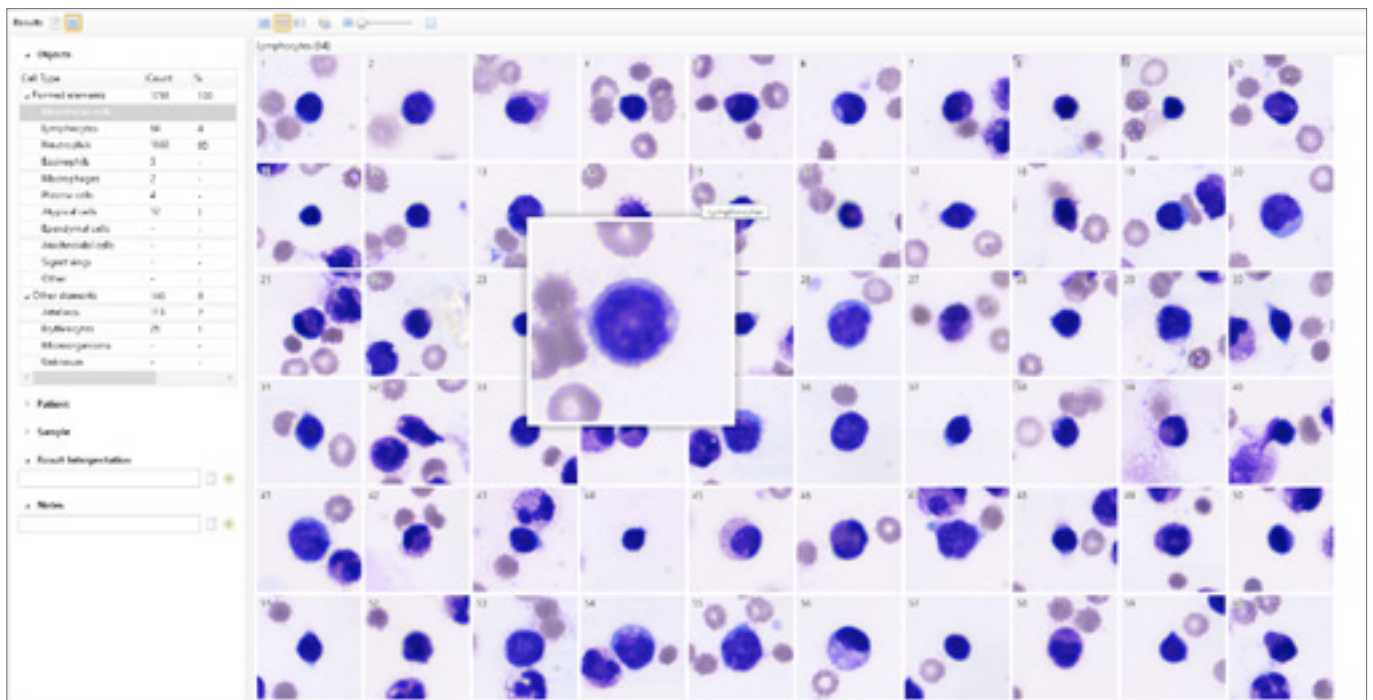
Automatic identification and pre-classification of platelets by 3 parameters: micro, macro, normal. Detailed information of every platelet.

## Vision RET



Automatic identification and pre-classification of reticulocytes by classes.

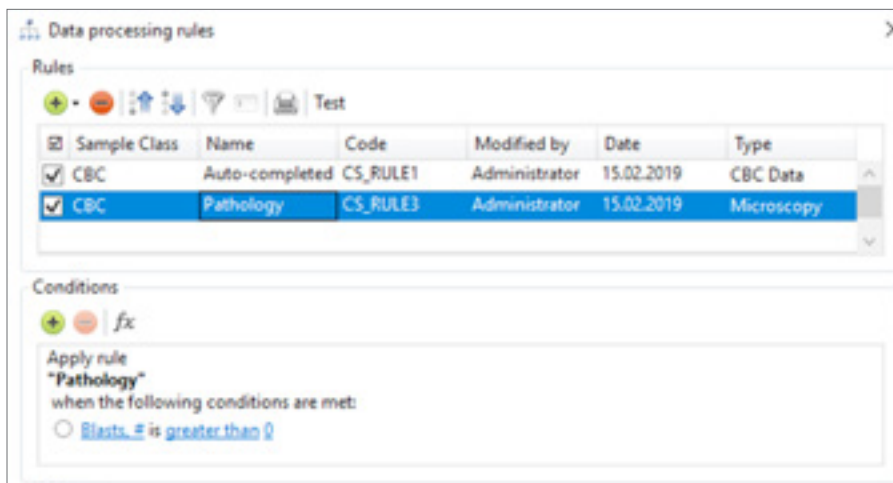
## Vision Body Fluids



Automatic identification and pre-classification of cells in human body fluids.

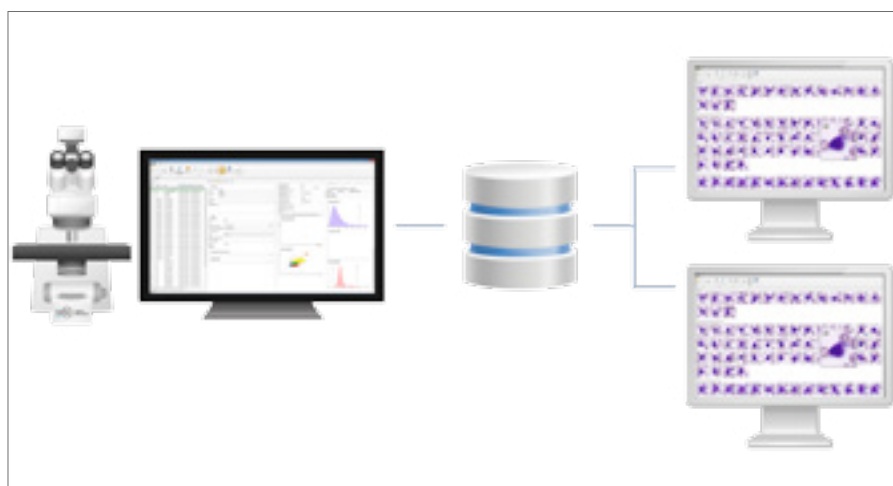
# Administrative Modules

## 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 Modules Vision Suite

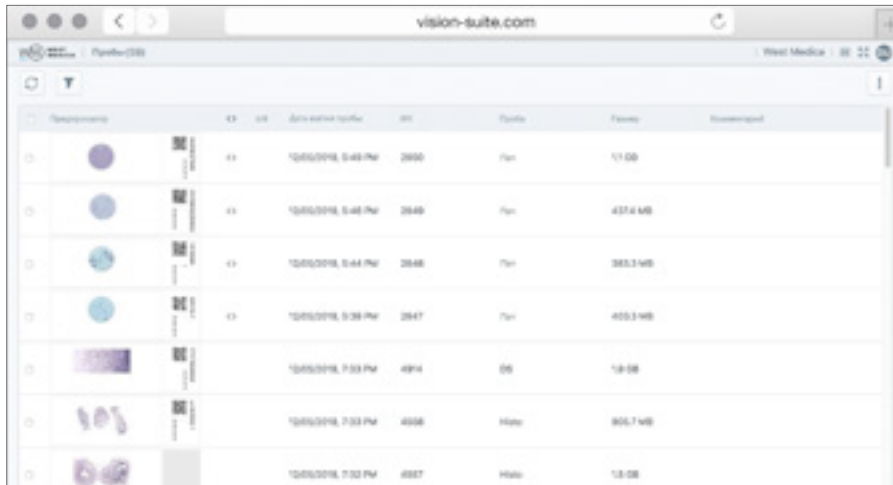


Image	ID	Date and time	Age	Gender	Result	Download
	21	12/01/2016, 5:48 PM	2650	Female	1/100	
	22	12/01/2016, 5:48 PM	2649	Female	437.4 MB	
	23	12/01/2016, 5:44 PM	2648	Female	383.3 MB	
	24	12/01/2016, 5:38 PM	2647	Female	455.3 MB	
	4914	12/01/2016, 7:53 PM	4914	06	1.8 MB	
	4928	12/01/2016, 7:53 PM	4928	Male	305.7 MB	
	4927	12/01/2016, 7:52 PM	4927	Male	1.8 MB	

Cloud/server for telemedicine and remote consultations with colleagues.

## Vision Expertise



Online testing and quality control.  
[www.vision-expertise.com](http://www.vision-expertise.com)

## 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: <b>Vision Hema</b>	Application module: <b>Vision Hema</b>	Application module: <b>Vision Hema</b>
Additional modules: <b>Vision Extended RBC</b> <b>Vision Extended PLT</b> <b>Vision RET</b> <b>Vision Body Fluids</b> <b>Vision Malaria</b>	Additional modules: <b>Vision Extended RBC</b> <b>Vision Extended PLT</b> <b>Vision RET</b> <b>Vision Body Fluids</b> <b>Vision Malaria</b>	Additional modules: <b>Vision Extended RBC</b> <b>Vision Extended PLT</b> <b>Vision RET</b> <b>Vision Body Fluids</b> <b>Vision Malaria</b>
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 1 or 4 slides	Automatic scanning 8 slides	Automatic scanning 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: 10x, 50x Oil, 100x 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.: 71150.01(1 slide) Art. N.: 71450.01 (4 slides)	Art. N.: 72852.01 (8 slides)	Art. N.: 73011.01 (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.



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