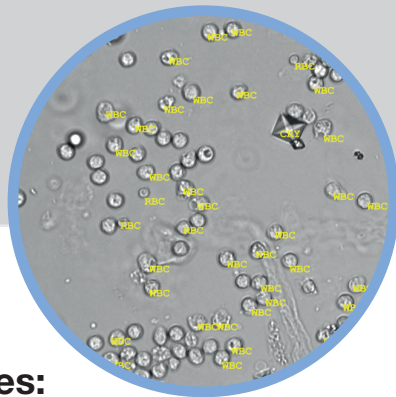


Complete urine sediment result in 1 minute

Automatic detected particles

- Red blood cells
- White blood cells
- White blood cell clumps
- Hyaline casts
- Pathological casts
- Squamous epithelial cells
- Non-squamous epithelial cells
- Bacteria
 - » Cocci
 - » Rods
- Crystals
 - » Calcium-oxalate monohydrate
 - » Calcium-oxalate dihydrate
 - » Triple phosphate
 - » Uric acid
- Yeast
- Mucus
- Spermatozoa



Advantages:

- High quality
- Using native urine
- Results in 1 minute
- Live view mode
- Multiple connectivity options
- Saving resources
- Made in Europe



Urinalysis in general

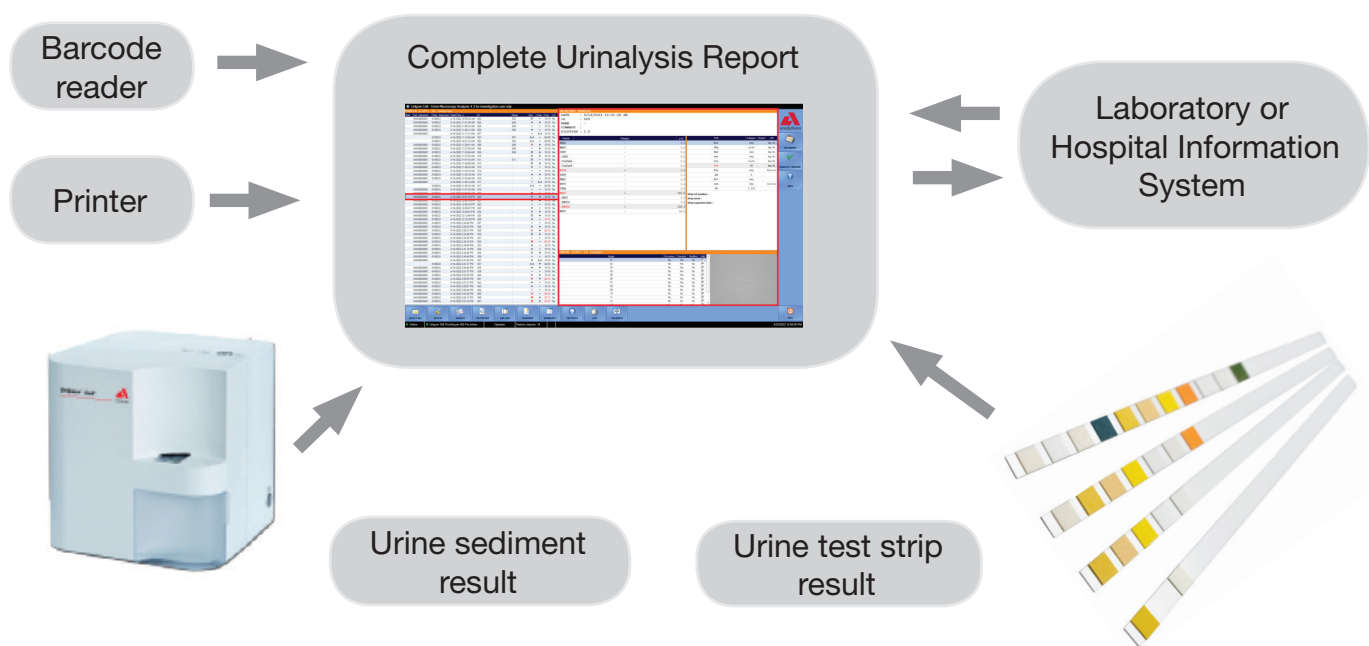
Urinalysis stands as one of the most prevalent and pivotal tests for the screening of urinary tract and kidney diseases. The determination of the presence or absence of urinary sediment particles plays a crucial role in diagnosing these conditions. However, the manual method considered the gold standard for urine sediment analysis, has the flaws of poor standardization, labour-intensive processes, time-consuming procedures and a heavy reliance on the operator's skills.

Consequently, due to these inherent limitations, urine sediment analysis has been sparingly conducted over the past few decades. To address these challenges, the following patented special technology was meticulously developed to mitigate the deficiencies of manual microscopy through automation.

Time-saving standardized technology

The technology is the optimized automation of traditional manual microscopy using a special cuvette as the only consumable. The instruments based on this technology offer a reliable, standardized semiautomatic method for the identification of urine sediment particles even from low sample volumes of 175 μL .

Complete urinalysis in 3 minutes



Semi-automated urine microscopy analyzer

Technical specifications

| | |
|----------------------------|--|
| Detected particle classes: | Red blood cells (RBC), Leukocytes (WBC, WBCc), Hyaline casts (HYA), Pathological casts (PAT), Squamous epithelial cells (EPI), Non-squamous epithelial cells (NEC), Bacteria (BAC, BACr, BACc), Yeast (YEA), Crystals (CRY) [Calcium-oxalate monohydrate (CaOxm), Calcium-oxalate dihydrate (CaOxd), Uric acid (URI), Triple phosphate (TRI)], Mucus (MUC), Sperm (SPRM) Further classes for manual subclassification are available |
| Technology: | Cuvette-based automatic microscopy and image processing |
| Power: | 100-250V AC / 50-60 Hz / max. 100W |
| Database capacity: | Up to 10.000 results (including images) |
| Throughput: | Up to 60 tests/hour |
| Built-in microscope: | Yes |
| Images: | 15 standard HPF-like images |
| Min. sample volume: | ~ 175 µL |
| Display: | Monitor, external (included in scope of delivery) |
| Barcode reader: | Optional, external |
| Printer: | Optional, external |
| Interfaces: | USB, Ethernet, RS 232 |
| LIS connectivity: | LIS2-A2 or HL7 |
| Dimensions | 305 x 315 x 325 mm (WxDxH) |
| Weight: | ~ 15 kg |
| Consumable: | Urilyzer [®] Cell cuvettes |

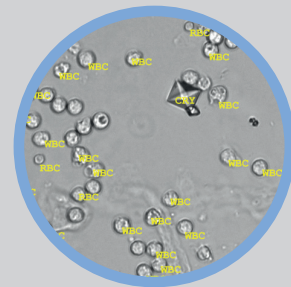
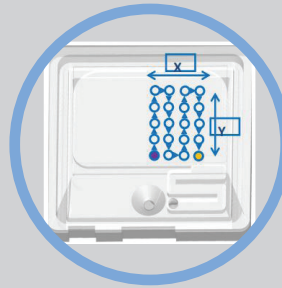


Automation of 'Manual Microscopy'

Manual

Automatic

- Sample preparation
- Request the cuvette
- Pipetting of 175µL
- Starting the measurement
- Centrifugation
- Recording 15 HPF-like images
- Particle recognition
- Evaluation



| Category | Count |
|----------|--------|
| ..C | 2,76 |
| ..C | 2,64 |
| ..CRY | 102,08 |
| ..CRY | 12,32 |
| ..CaOxam | 0,00 |
| ..CaOxrd | 89,76 |
| ..TRI | 0,00 |
| ..URE | 0,00 |
| ..HYA | 0,00 |
| ..PAT | 0,00 |
| ..NEC | 3,96 |
| ..EPI | 48,84 |
| ..YEA | 0,00 |
| ..BAC | 102,08 |
| ..CAC | 0,00 |
| .. | 17,60 |
| .. | 94 |

Video tutorials:

- (1) Correct pipetting
- (2) Daily maintenance
- (3) Result management and transfer options
- (4) Connection of the Urilyzer[®] 100 Pro



(1)



(2)



(3)



(4)

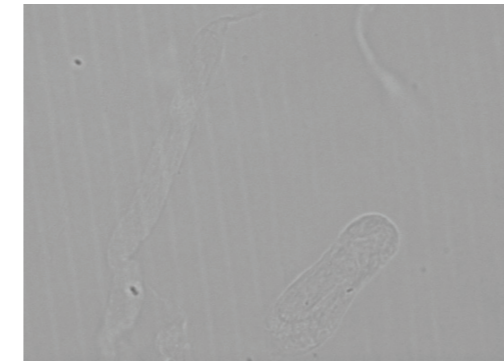
Find more information on our homepage.

MUCell_en_63_001_01.01_20250225

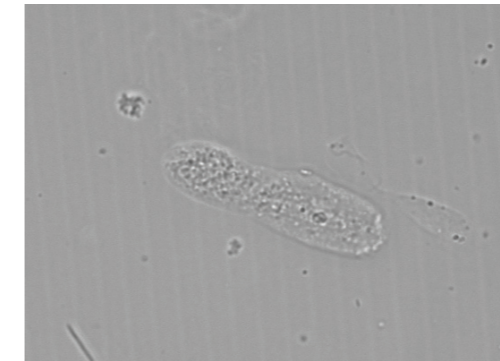
Whole viewfield image (HPF-like magnification)



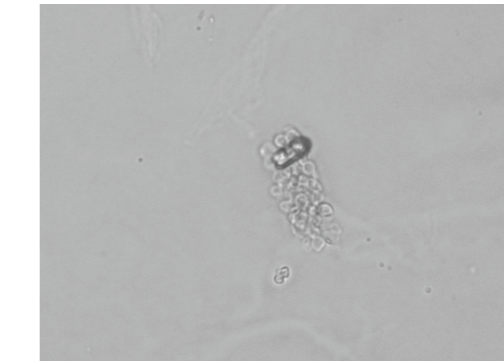
Casts



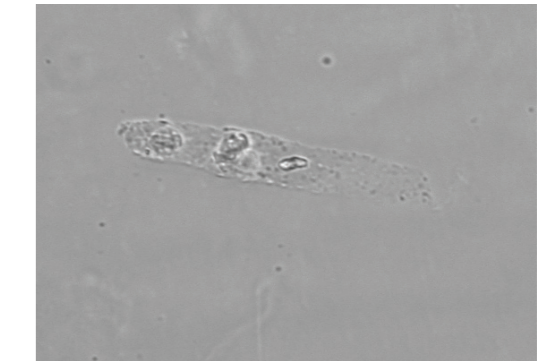
Hyaline casts (0,5 x zoom)



Finely granular pathological cast

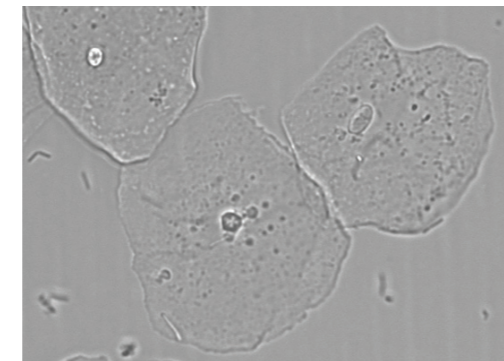


Erythrocytic cast

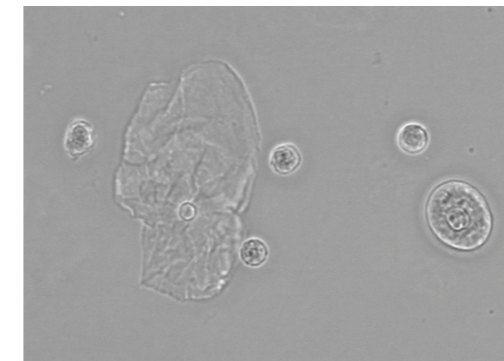


Leukocytic cast

Epithelial cells



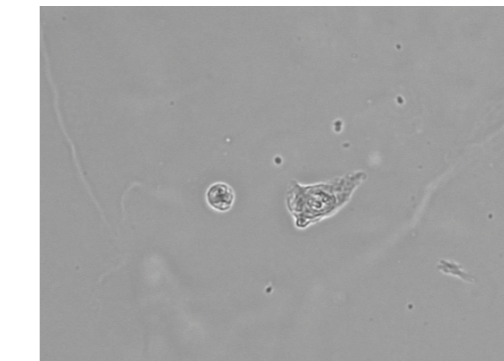
Squamous epithelial cells



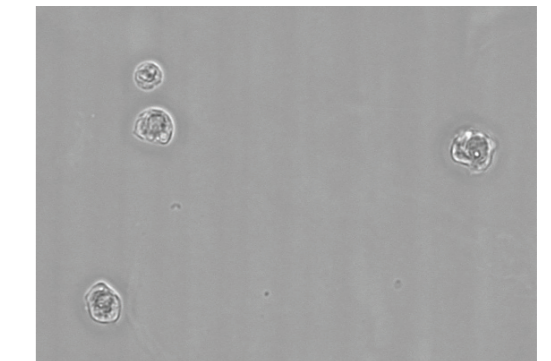
Squamous and non-squamous epithelial cells



Superficial transitional epithelial cells

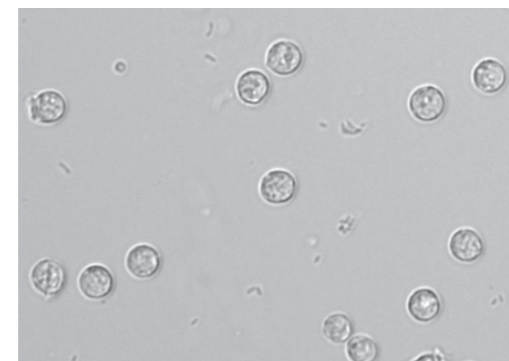


Deep transitional epithelial cell with a WBC

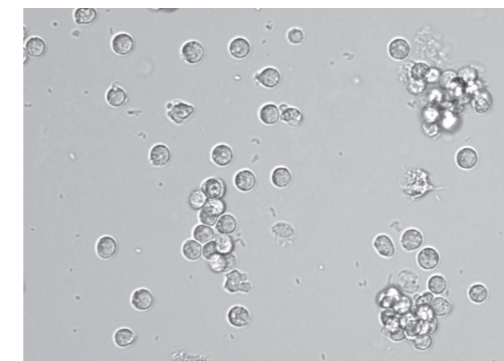


Renal tubular epithelial cells with a WBC

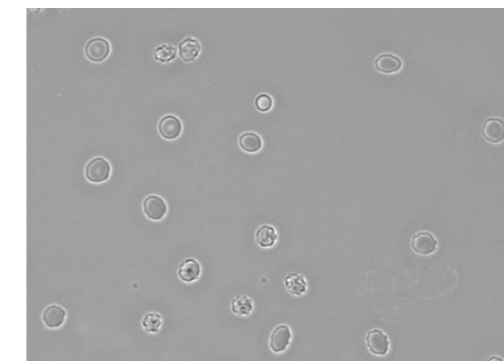
Blood cells



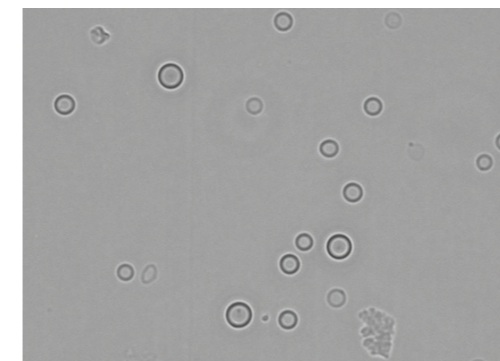
White blood cells



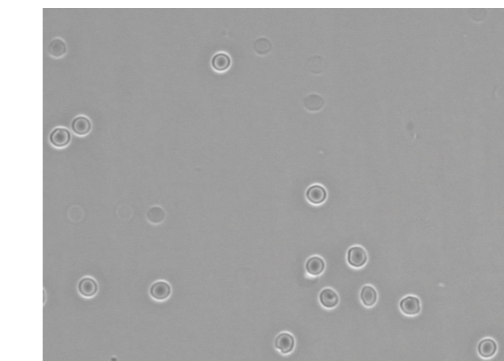
White blood cells and WBC clumps



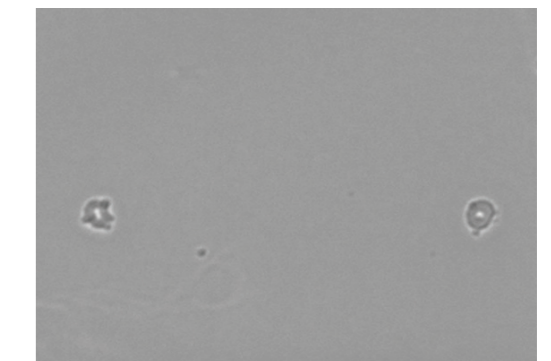
Red blood cells



Red blood cells



Red blood cells, some ghost cells



Acanthocytes (2x zoom)

RBC
Red blood cells
WBC
White blood cells
WBCc
WBC clumps

HYA
Hyaline Casts

PAT
Pathological Casts

EPI
Squamous Epithelial Cells

NEC
Non-Squamous Epithelial Cells

BACc
Bacteria Cocci

BACr
Bacteria Rods

YEA
Yeast

MUC
Mucus

SPRM
Spermatozoa

CRY
Crystals

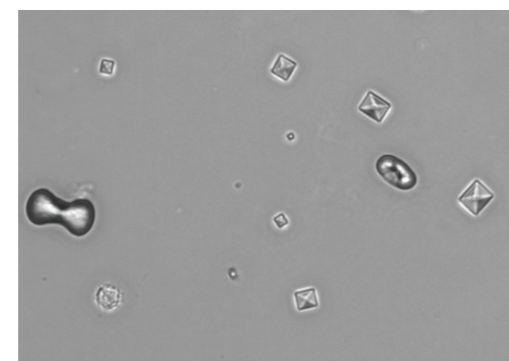
CaOxm
Calcium-oxalate monohydrate

CaOxd
Calcium-oxalate dihydrate

URI
Uric acid

TRI
Triple phosphate

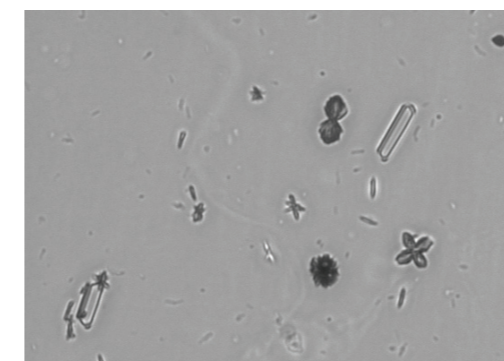
Crystals



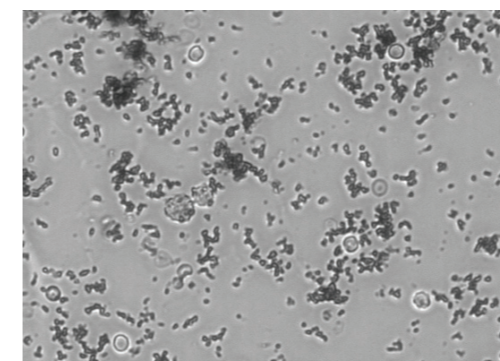
Calcium-oxalate-monohydrate and -dihydrate crystals



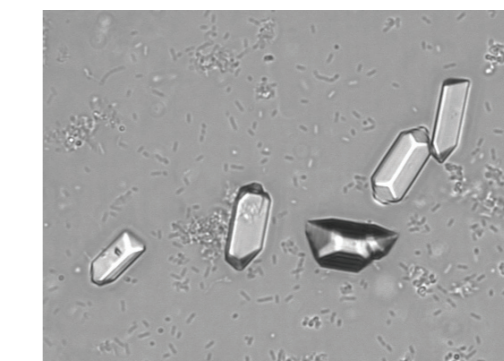
Uric acid crystals with WBCs and bacteria



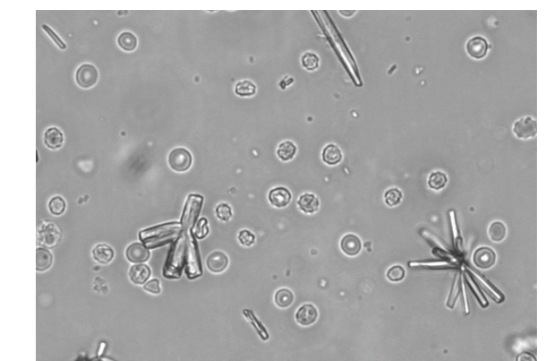
Calcium carbonate and triple phosphate crystals



Amorphous crystal with RBCs

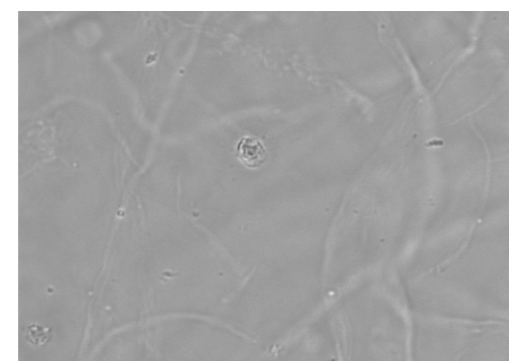


Triple phosphate crystals with bacteria

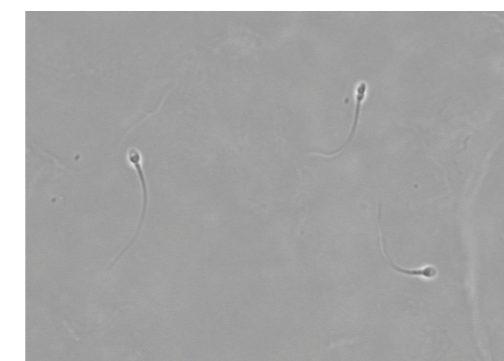


Calcium phosphate crystals with RBCs

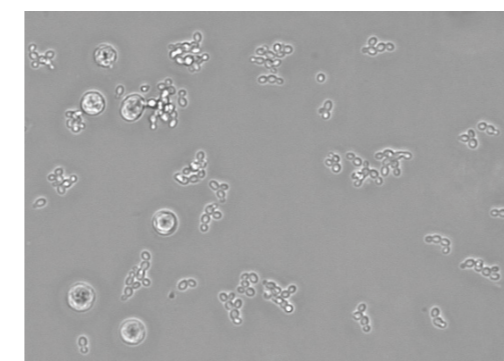
Others



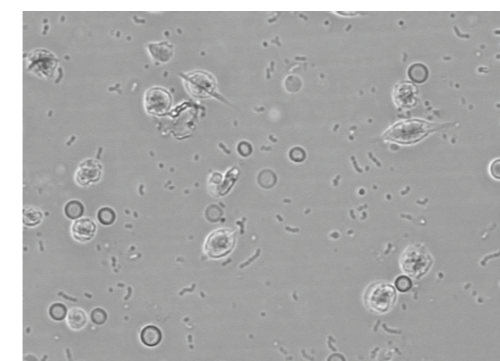
Mucus and WBCs



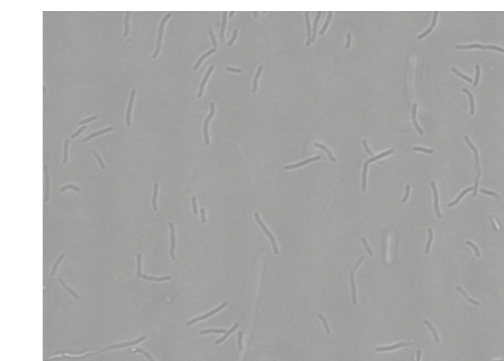
Spermatozoa



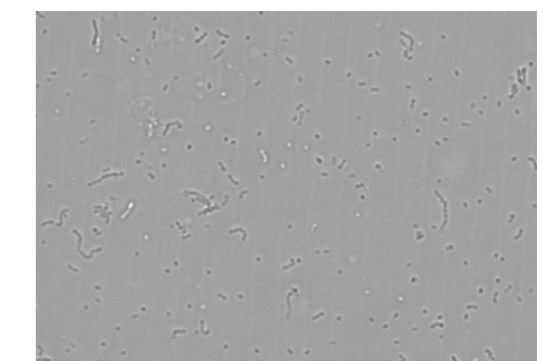
Budding yeast with white blood cells



Trichomonas vaginalis with blood cells and bacteria



Bacteria rods



Bacteria cocci, in single form and arranged in chains