



Complete automation of IIFT using EUROPattern



Reagents



Incubation



Data processing



Image recording

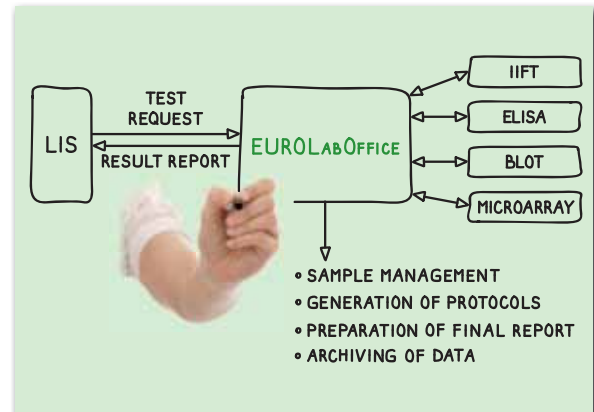


Pattern recognition



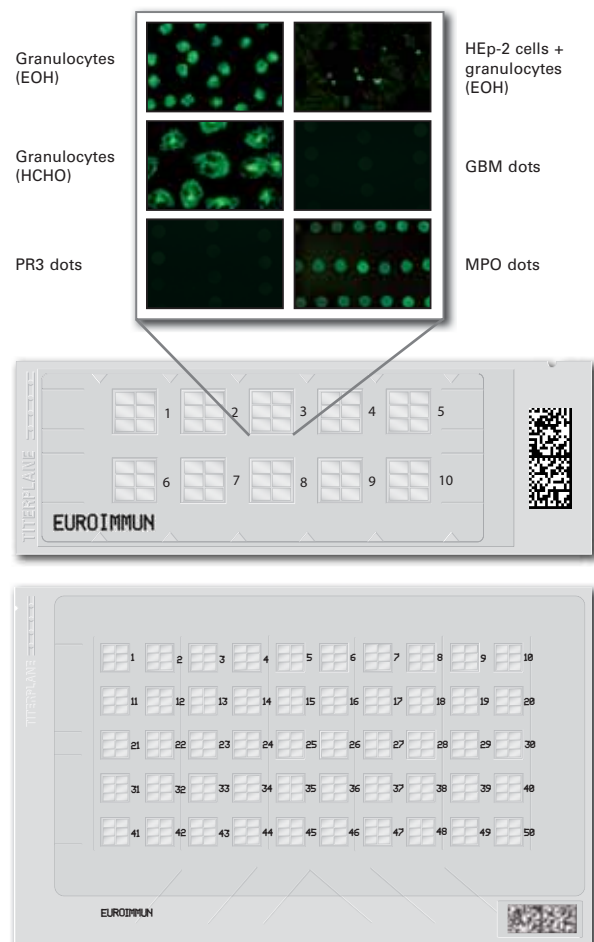
EUROLabOffice as control centre

- Integrity of data and results due to an entirely paper-less work process (quick, reliable, simple)
- Automated data processing and communication without transmission errors
- Automatic creation of electronic worklists
- Reporting support: day's results for a patient, patient history, search function, documentation and archiving
- Optimisation of existing laboratory processes, various expansion modules available
- Interface to LIS for two-way data exchange and optimal connection to EUROIMMUN devices



Quality meets functionality – EUROIMMUN reagents

- BIOCHIP technology allows:
 - multiparameter analysis: various substrates are combined on one test field as mosaics
 - high lot consistency for excellent reproducibility
- Slides are equipped with a matrix code for maximum reliability and traceability
- ANA diagnostics: HEp-20-10 cells show more than 150 mitoses per test field for optimal interpretability
- SLE diagnostics: two Crithidia IIFT (CLIFT) are available, either conventional or highly sensitive (now suitable for screening)
- ANCA diagnostics:
 - combination of ethanol- and formalin-fixed granulocytes for differentiation of vasculitides from chronic inflammatory bowel diseases
 - monospecific confirmation of results with PR3/MPO dots (EUROPLUS)
 - combination of HEp cells and granulocytes on one BIOCHIP allows differentiation between ANA and ANCA





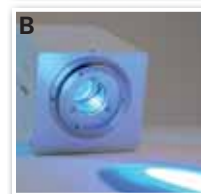
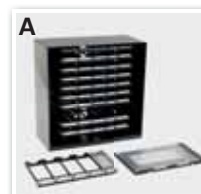
Highly flexible and efficient incubation solutions

- **Sprinter XL:** IIFT and ELISA processing on one system for medium to high throughput
 - up to 240 samples, 30 slides per run
 - sample identification via barcode
 - slide identification using the integrated matrix code reader
 - modern washing technology based on flooding for brilliant fluorescence signals
 - four washable needles
- **EUROLabLiquidHandler:** efficient IIFT processing for high-throughput laboratories
 - up to 500 samples per run
 - faster availability of results with comparable or even less hands-on time compared to conventional full automation
 - optional support of ELISA, immunoblot and liquid handling jobs
 - simple and reliable operation due to intuitive software and automatic identification of test components and labware used in the device
 - up to 10 washable needles



EUROPattern Microscope

- Magazine for 500 fields (**A**) with automatic supply of slides allows long walk-away periods
- Fastest system on the market: up to 200 test fields in one hour (18 seconds per test field)
- Matrix code reader: mix-up of slides can be excluded
- Controlled LED (**B**) for > 50,000 hrs of constant light intensity; documented quality control
- High-resolution cameras
- Various objectives with autofocus
- RealDrive hand control (**C**) for convenient handling such as with a normal microscope
- Eye-pieces available on request





On-screen diagnostics with EUROPattern

ANA

- Identification of seven patterns (homogeneous, granular, nuclear dots, centromeres, nucleolar, nuclear membrane and cytoplasmic) and any combination thereof
- Verification of all negative results with one mouse click
- Images of all substrates and dilutions are displayed together in one screen view and consolidated into one final report
- Preliminary findings for all results available (IIFT, immunoblot, ELISA)
- Representative mitoses in late metaphase are identified and labelled
- Pattern and titer suggestions with confidence values
- Direct request of follow-up analyses
- Feedback function for specialist support from EUROIMMUN AG
- FDA controlled and labelled titer estimations based on three dilutions. Optionally, the titer can be determined from one dilution only



Verification of positive sera (ANA)



Verification of negative sera

ANCA

- Identification of pANCA, cANCA and atypical patterns
- Consolidation of results for ethanol- and formalin-fixed granulocytes and monospecific tests (MPO, PR3, GBM EUROPLUS) into one final report
- Titer calculation based on ethanol-fixed granulocytes

Antibodies against dsDNA

- Crithidia evaluation via the specific kinetoplast fluorescence (not simply dark-bright classification)

Further applications

- Automatic image recording and on-screen diagnostics available for rat kidney (AMA + LKM), rat stomach (ASMA), rat liver (LKM + ANA), monkey liver (EmA + ANA), monkey oesophagus (EmA, desmosomes, epidermal basement membrane), transfected cells (neurology and nephrology) and infected cells (arbovirus)



Verification of positive sera (ANCA)



Verification of positive sera (anti-dsDNA)