Pathology Decision Support System

Quantitative IHC* Analysis Software

Fully automatic, quantitative IHC analysis for efficient diagnosis and consistent measurement results

Software Features
NEC’s original image recognition technology selects the areas of suspected cancer for quantitative IHC analysis, and indicates the positive ratio in each area automatically. This software makes it possible to do quantitative analysis without human intervention.

Software Outline (Breast Specimens)
The target measuring area is selected automatically from an IHC pathology slide image, which has been digitized by a slide scanner. The positive ratio is calculated by evaluating the cells in the area, which is then outlined with a color corresponding to the result.

Area Selection Mode

1. Whole Slide Mode
All areas of suspected cancer are extracted automatically, and the positive ratio is indicated in each area.

2. Spot Mode
Spots are selected within each area of suspected cancer, and the positive ratio is indicated in each spot.

Fig.1 Analysis results of breast PgR

*Immuno-histo-chemistry
Features and Advantages of System Deployment

**Fully Automatic Analysis**
- Fully automatic processing from taking digital image to analysis and output of results
- Automatic extraction of target measuring area
- Two kinds of area selection (Whole, Spot)

**Integrated Data Management**
- Data management using client-server model
- Automatic analysis, database registration, and management for large quantity of slides
- Prevention of analysis result falsification
- Log record of analysis and access
- Data import of slide-related case information
- Multiple search functions (Analysis situation, Analysis result, Case)
- Deployment in accordance with user operation

**Highly Accurate Analysis**
- Highly accurate extraction of cell nuclei and cell membranes
- Automatic removal of stroma areas in target regions for measurement
- Counts positive, weakly positive, and negative cells

**Advantages of Deployment**
- Diagnoses specimens accurately
- Improves consistency of pathology tests through objective measurements
- Expedites operations through fully automatic measurements
- Archives slide images and analysis results
- Reduces operation cost

---

For more information, contact:

BioMedical Imaging and Informatics Group
Medical Solutions Division
NEC Corporation
E-mail : request@biomed.jp.nec.com

- e-Pathologist is a registered trademark or a trademark of NEC Corporation in Japan and other countries.
- The company and product names appearing in this document are trademarks or registered trademarks of their respective holders.
- The use of the software in clinical settings is subject to regulatory clearance.
- There is a possibility that the actual screen differs from the image on this leaflet, and the specification may be changed without notice.
- All rights reserved. Copyright 2013, NEC Corporation.