



## Pathology **Product Portfolio**

Labquality's external quality assessment service program includes more than 170 clinically relevant EQA schemes, covering the key specialities of laboratory medicine. Furthermore, the program includes a wide range of products intended for point-of-care test sites. Currently, more than 6,000 laboratories and POCT sites globally use Labquality's EQA schemes.

**External quality assessment (EQA) schemes for pathology:** Clinical cytology (including both gynaecological and non-gynaecological cytology), histopathology, immunohistochemistry and histological staining techniques. With changing topics for the rounds, both the routine and more advanced needs of pathology laboratories are covered. The challenges are realistic and include even the less commonly encountered clinically relevant cases.

### SALES AND CUSTOMER SERVICE

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Schemes 6700, 6701, 6702

# Clinical cytology

Virtual microscopy with gynaecology and non-gynaecology topics

VIRTUAL

## Topics in 2023 and 2024

- 6700: Gynaecological cytology (smear), virtual microscopy (March)
- 6701: Gynaecological cytology (liquid based), virtual microscopy (May)
- 6702: Non-gynaecological cytology, virtual microscopy (October)

## Specimens

Brief case histories are provided.

### Gynaecological cytology (6700, 6701)

Virtual images of 5–6 Papanicolaou stained slides of gynaecological specimen. The specimens are selected from routine cytological material. Diagnostics of cellular atypias in samples taken from gynaecological loci is assessed. Scheme 6700 includes the conventional pap smear samples. Scheme 6701 includes liquid based cytology (LBC) samples (ThinPrep).

### Non-gynaecological cytology (6702)

Virtual images of Papanicolaou stained slides of non-gynaecological cytosentrifuge or smear preparations or May-Grünwald-Giemsa stained smears. Images of 5–6 cases from representative loci.

## Examinations

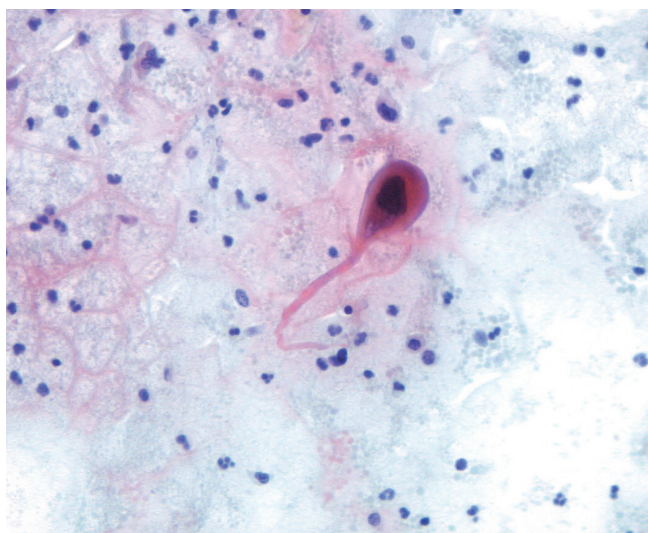
Observations and diagnoses

## Reports

- Expert report
- Distribution of diagnoses
- Diagnostic agreement
- Clinical follow-up data on the cases

## Notes

The virtual microscopy program doesn't work with Internet Explorer.



Scheme 6542

# Histopathology

Virtual microscopy with changing topics

VIRTUAL

## Topics in 2023

- March: Lymphohematopoietic pathology
- October: Prostate pathology, possibly also including AI reference values

## Topics in 2024

- March: Skin pathology
- October: Urothelial tumors

## Specimens

Virtual images of at least 5 slides of miscellaneous tissue. Brief case histories and instructions are provided.

## Examinations

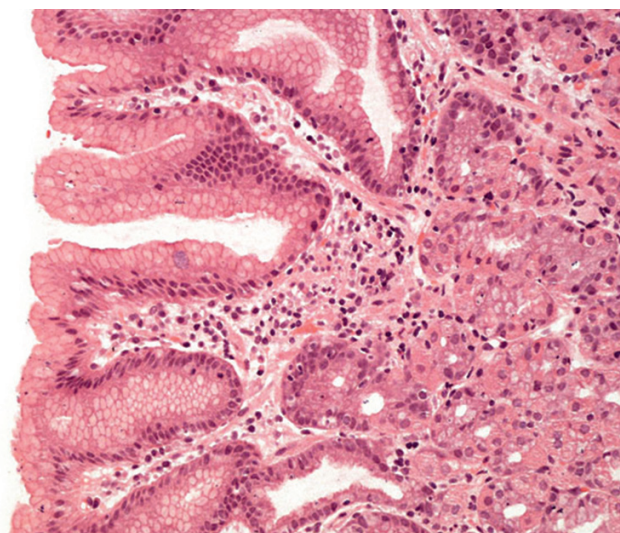
Observations and diagnoses

## Reports

- Expert report
- Distribution of diagnoses
- Diagnostic agreement
- Clinical follow-up data on the cases

## Notes

Topics may vary annually.



Scheme 6543

# Histological staining techniques

Varying stains

## Topics in 2023

- April: HE, FE
- October: PAS, D-PAS, LEDER

## Topics in 2024

- April: Masson Trichrome, Reticulin
- October: Helico-GIEMSA, AB-PAS

## Specimens

Unstained paraffin sections or smears on slides

## Examinations

Staining of the slides. A set of stained slides is returned to Labquality for evaluation by an expert board.

## Reports

- Expert report
- Laboratory specific scores and comments on quality of the staining
- Cumulative history of laboratory specific scores
- Mean scores

## Notes

Stains vary annually.

Schemes 6600, 6600S

# Immunohisto-chemistry

Comprehensive selection of antibodies

## Topics in 2023

- March: SOX10, Prame, Melan A/Mart-1, CK20, CK7
- September: PR, HER2, ER, Ki-67 ja HER2 -ISH\* \*) also double stain accepted, but no FISH (breast cancer)
- November: CD23, bcl2, bcl6, CD35, CD138 (lymphoma)

## Topics in 2024

- March: CD34, alfa-SMA, S-100, CD117, CYT5/6
- September: PR, HER2, ER, Ki-67 ja HER2 -ISH\* \*) also double stain accepted, but no FISH (breast cancer)
- November: CD3, CD5, CD43, CD45, Pax5 (lymphoma)

## Specimens

Unstained paraffin embedded tissue from different tissue blocks or from one multiblock.

## Examinations

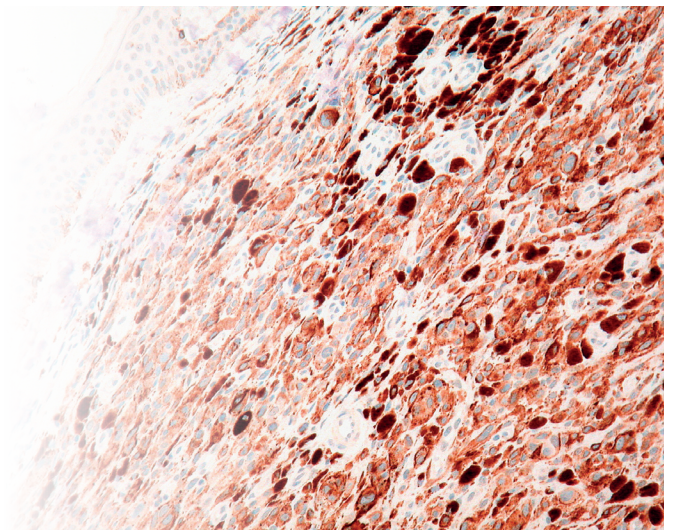
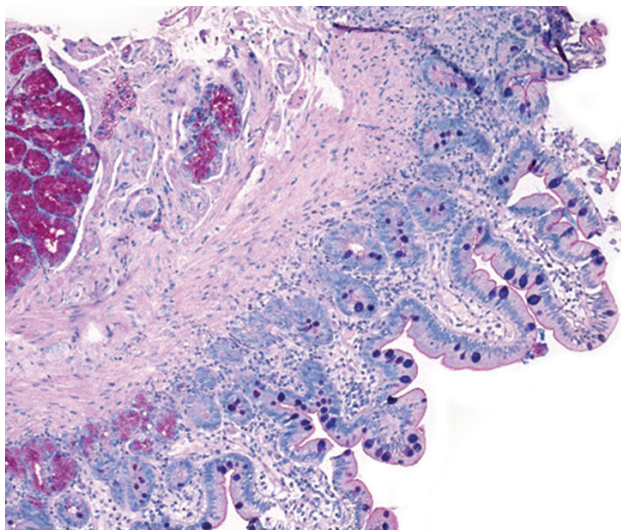
Staining of the slides. A set of stained slides is returned to Labquality for evaluation by an expert board.

## Reports

- Expert report
- Laboratory specific scores and comments on quality of the staining
- Cumulative history of laboratory specific scores
- Mean scores

## Notes

Changes in frequency, antibodies and sample type. Three rounds with distinct topics available annually. Multiblock samples are now included. Participants can select 3 or 5 antibodies of their choice in each round (6600S for 3 antibodies, 6600 for 5).



# Preanalytics and process in anatomic pathology

## Type

This preanalytical external quality assessment scheme provide a unique means to assess a larger part of the total pathology laboratory process. Real life scenarios are used as case studies in this scheme. In every case the participants are asked to define the action they would do if they encountered a similar case in their daily work and also to identify possible preanalytical error(s) and error(s) in pathology process including dissection, tissue processing, embedding, cutting and staining.

## Specimen

- Two rounds in a year.
- 3-5 cases with preanalytical and process error(s) in every round.

## Examinations

Participants are asked to find preanalytical and analytical error(s) in the cases. Main question: Would you accept this sample?

## Reports

- Expert report
- The approach of this scheme is educational
- The results are not scored

## Additional information

The scheme is intended for all laboratory staff of pathology laboratories.

## Notes

The scheme is carried out online with no specimen delivery.

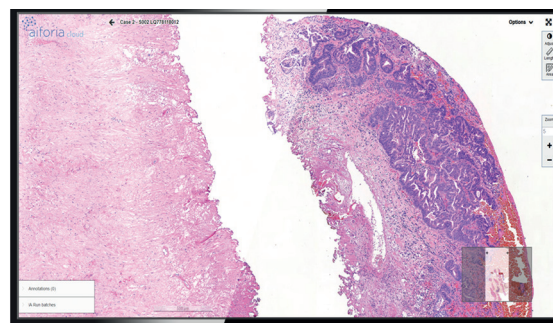
# Virtual microscopy

Available globally | No shipping costs

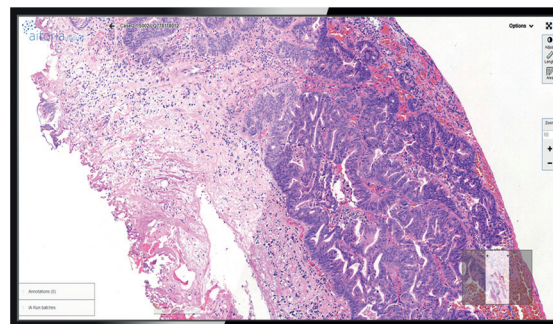
No stability or homogeneity issues

Virtual microscopy involves scanned high-resolution images of representative microscope specimens. The participants can view the virtual slides on their own computer screens. Viewing of several fields of vision and levels of focus with various magnifications are enabled to simulate analysis with an optical microscope. The navigation is easy and virtual slides can be viewed even with a cellular phone. Virtual microscopy allows independent viewing of images simultaneously in different locations.

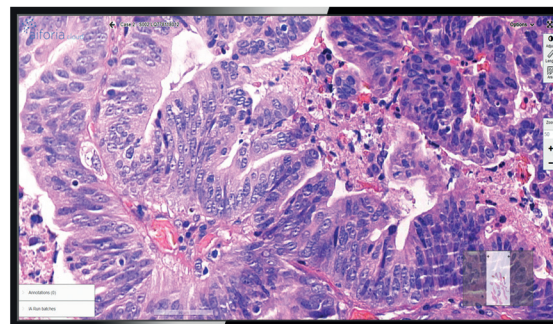
Virtual microscopy provides a powerful tool for disciplines traditionally limited by the homogeneity and size of the specimen. At present, Labquality offers eight virtual microscopy based EQA schemes including those for clinical cytology and histopathology. In pathology schemes the whole specimen slide has been scanned.



5 x magnification



10 x magnification



50 x magnification

Examples of three different magnifications of one specimen slide in Labquality's histopathology round in 2018.