HR1/26: Hormonal Receptors

This EQA round was accomplished according to the document ***EQA Plan 2026***.
Typing conventions: *We are using comma as a decimal separator and dates in day.month.year format.*

Samples

The participants received 2 histological slides made of the TMAs (each TMA consists of 10 samples of the tissue), one to determine the estrogen receptor (ER) and one for progesterone receptor (PgR).
The samples were prepared by the subcontractor.

Supervisor's comment

There were 72 participants in this round (foreign participants: 1 from Hungary, 2 from Romania, 14 from Slovakia).
We asked the participants to report a qualitative result (negative / positive) for each sample and to supplement it with a quantitative estimate of the percentage of ER or PgR in the invasive carcinoma.
Each sample on each slide is processed as a separate test in the process of the EQA assessment.
In general, if a participant does not provide a result for the particular sample (e.g. sample lost during staining), then we do not process the relevant test (sample) at all for that participant - it is not counted in the evaluation and statistics. Therefore, for all tests in the statistics, the total number of results may not be equal to the number of participants - those who have not reported the result are missing.

Qualitative results

The assigned values are determined as the consensus of the participants. In the case of qualitative results, the consensus is reached if at least 80 % of the participants agree on the result.
The **ER** staining was without problems and consensus was reached in all tests. We observed excellent success rate for all positions (almost 100 %).
In the case of **PgR**, the consensus was reached for all tests except position 2, where 45 % of the participants reported negative and 55 % positive result. Success rates achieved in the rest of positions were excellent (almost 100 %).

Quantitative results

We do not determine assigned values for **quantitative** results in this EQA programme. As these are only estimates with a large uncertainty, consistent determination of the assigned values is not possible. Instead of assessment, the histograms are available to the participants where they can find the summary of quantitative results and the location of their result within the histogram.
The assessment of the test always depends on the qualitative results. Quantitative results do not affect the assessment of the test, but are an important guide to the staining sensitivity settings, and therefore histograms should be considered. If the individual positions deviate systematically from most participants, this indicates a problem. Unfortunately 4 participants did not provide quantitative results.

Long term success rate

You can find the overview of the total success of the participants of this round over last 2 years in the following table. Particular ranges of success are defined in the column headers (percentage of the tests on which the participant reported the correct result). Next 2 lines contain both absolute and relative number of participants who reached the success from the header**.**

	Success	***0 %***	***1 - 74 %***	***75 - 79 %***	***80 - 89 %***	***90 - 94 %***	***95 - 99 %***	***100 %***
Success in words		unsatisfactory		acceptable	good	very good	excellent	
Count	absolute	0	0	0	1	1	17	53
	relative	-	-	-	1,4 %	1,4 %	24 %	74 %
Note: You can find your individual success over last 2 years in your result sheet.								

Overall success of most participants of this round over the last 2 years is 95 % or higher.
Success rates below 95 % should be considered to be an impulse to improve.

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Supplements

As a supplement to this report individual participant who reported the results gain:

Name	***Description***
Confirmation of attendance Result sheet	The conditions for issuing the relevant document specified in the EQA Plan must be met.
Summary overviews of quantitative results	These documents include a graphical overview of the results in the form of the complex statistics (this includes for each test a histogram and summary statistics in graphical form).

The supplements are identified by their name, EQA round identification and participant code and are intended for the needs of the participant.

If you reported the results in this round, you can find your individual evaluation (reports) in the **Cibule** application (https://www.eqa.cz/cibule). After login, select ***EQA Results - View*** in the menu and then click the ***Reports*** button for the particular round.

Additional information

The final report, with the exception of the supplements, is public. Further information is freely available to the participants and other professionals at www.sekk.cz, in particular:

- The summary of the results of this round, including this final report.
- The document ***EQA Plan*** (contains information that applies both to this round and also the EQA in general).
- Explanation of the content of the particular supplements mentioned above.
- Contact to the EQA provider and the EQA coordinator and the list of all supervisors, including contacts.