

November  
2023



# INSTAND

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Academy

Report on Online-Training  
Group 901  
Preanalytics

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**INSTAND e.V.**  
Society for Promoting  
Quality Assurance  
in Medical Laboratories e.V.

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**Expert**

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## Explanation for the evaluation

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In addition to the documents sent to you by mail, you can obtain further information on the training performed here.

## Certificate

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Each participant receives a certificate of participation and the evaluation. If you reach 60% of the points, you have passed the training and will receive a certificate.

## General overview

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Here we list the total number of participants, the total pass rate, and the average percentage points achieved.

## Summary table

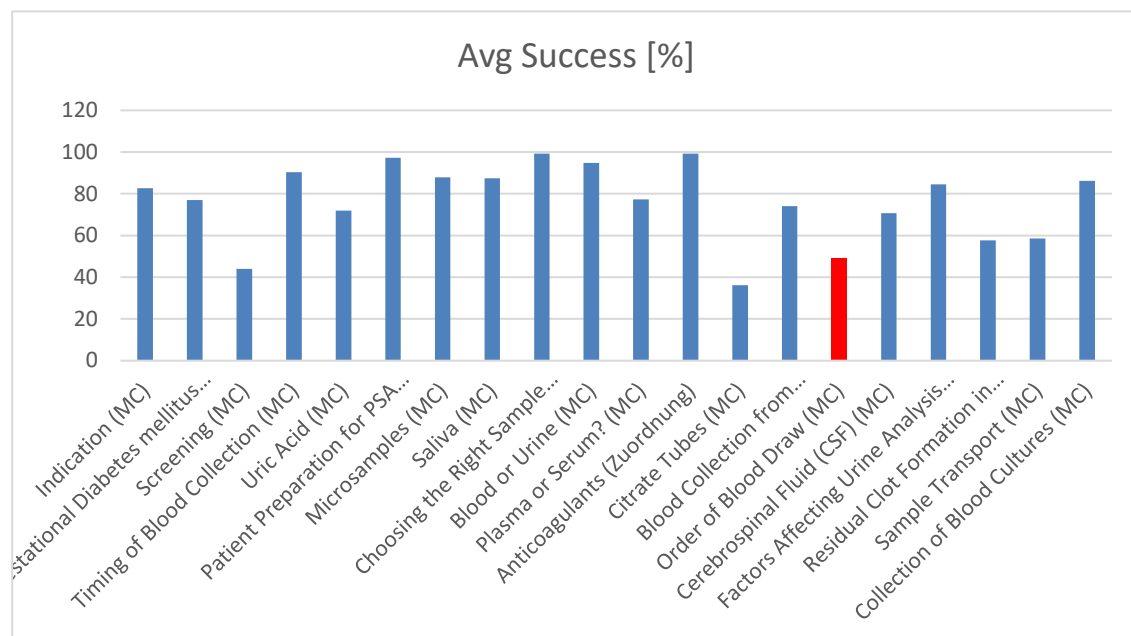
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### Preanalytics November 2023 overview

	result
Number of participants	60
Passed (>60 %)	50(83 %)
Not passed	10 (17 %)

### Statistics of the individual tasks

Card	Avg Success %
Indication (MC)	82,71
Gestational Diabetes mellitus (MC)	76,95
Screening (MC)	44,07
Timing of Blood Collection (MC)	90,4
Uric Acid (MC)	71,86
Patient Preparation for PSA (Prostate-Specific Antigen) Testing (MC)	97,18
Microsamples (MC)	87,93
Saliva (MC)	87,36
Choosing the Right Sample (Zuordnung)	99,31
Blood or Urine (MC)	94,83
Plasma or Serum? (MC)	77,24
Anticoagulants (Zuordnung)	99,31
Citrate Tubes (MC)	36,21
Blood Collection from Catheters (MC)	74,14
<b>Order of Blood Draw (MC)</b>	<b>49,31</b>
Cerebrospinal Fluid (CSF) (MC)	70,69
Factors Affecting Urine Analysis (MC)	84,48
Residual Clot Formation in Serum (MC)	57,59
Sample Transport (MC)	58,62
Collection of Blood Cultures (MC)	86,21



### Training materials

For this training, tasks were provided as an online questionnaire and as a PDF. The tasks were compiled with the collaboration of the above-mentioned expert and the solutions were released by him. Participants were

able to view the solutions immediately after completing each task and download the entire training with all tasks and solutions as a PDF after submitting the training.

## Solutions and assessment scheme

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The questions are multiple- and single-choice types as well as mapping tasks. For multiple-choice and mapping tasks, the participant receives 1 point if all correct answers are selected. If not all answers were answered correctly, the points are calculated by dividing the difference between the number of correct and the number of incorrect answers by the number of possible answers. In single-choice tasks, either 1 or 0 points can be achieved.

At least 60 % (11,4) of the maximum possible points (19) had to be achieved in order to receive a certificate of successful participation.

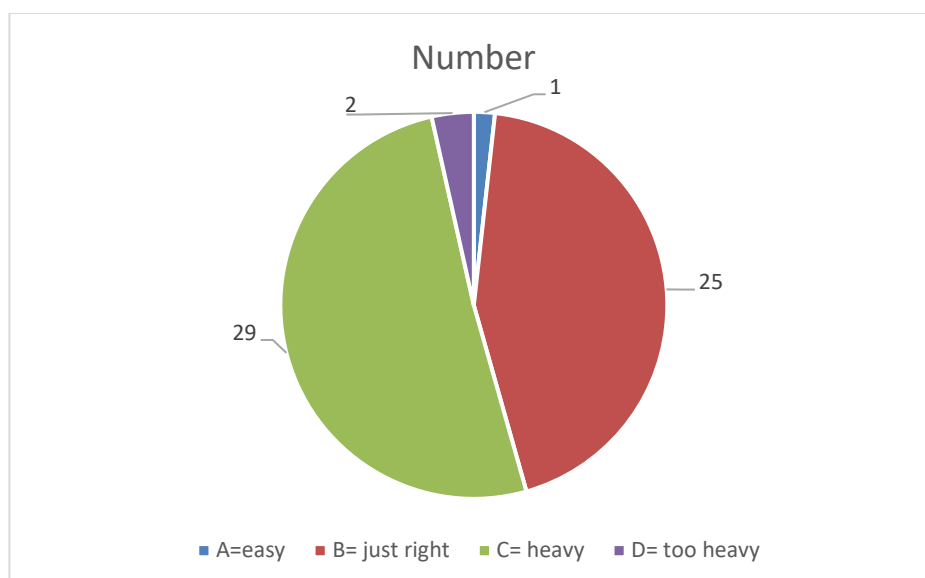
## Comment

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Dear participants,  
the current online training course "Preanalytics" is aimed at MTL and laboratory managers. 60 participants took part in this training. We would like to thank all participants for their commitment.

With a pass rate of 83 %, this training shows a lower pass rate than the training in April 2023 (78 %). The mean total score achieved by participants decrease from 15,7 out of 20 points (78,5 % of total points) to 14,6 out of 19 points (76,8 % of total points) compared to the April training.

**Rating of the questions preanalytics November (901) by the participants**



In this training, some partially modified questions were used that had been asked before and caused great difficulties for the participants. In this way, on the one hand, it would be possible to estimate the learning effect, and on the other hand, it would also be possible to refer to more current literature. Please refer to the solutions of the individual questions. This format is primarily for continuing education, so participants who did not achieve 60 % this time should not be discouraged at all!

The following questions caused particular problems:

Question 7 "Screening", 44% pass rate

The examination of urine with test strips is still recommended, for example, for the diagnosis of inflammation of the urinary tract. The determination of creatinine clearance is not useful for the diagnosis of kidney disease, as normal creatinine clearance does not rule out kidney disease.

Question 17 "Citrate tubes", 36% pass rate

The ratio 1:10 describes the ratio of the citrate solution to the blood sample, not that of the blood. For the blood, the ratio in the sample is 9:10, which must be taken into account when counting cells in the citrate blood, for example.

Due to an editorial error by the expert, question 19 "Sequence of blood collection" was removed from the assessment; the correct answers were of course A, B and E. We apologise for any confusion this may have caused.

We thank all participants for their comments, they are very important feedback for us.

Dr rer. nat. Manfred Falck  
Düsseldorf / 28.11.2023