

ABOUT ESfEQA

ESfEQA is a German company based in Heidelberg and accredited according to DIN EN ISO/IEC 17043:2010 by the German Accreditation Body DAkkS. ESfEQA offers more than 70 External Quality Assessment programs in Biochemistry, Haematology, Immunology, Molecular Biology and Microbiology. Please visit our website for more information.

Reach out to your local distributor or to ESfEQA directly for information how to get enrolled in the ESfEQA External Quality Assessment Schemes.

ESfEQA GmbH
European Society for External
Quality Assessment
Siemensstr. 38
69123 Heidelberg
GERMANY
Phone +49(0)6221-894669-70
Fax +49(0)6221-894669-90
info@esfefa.eu
www.esfefa.eu



CLINICAL CASE STUDIES

EXTERNAL QUALITY
ASSESSMENT PROGRAM BY ESfEQA



EXTERNAL QUALITY ASSESSMENT PROGRAM

Clinical Case Studies

Concept of EQA Program

Numerous EQA programs are provided for the assessment of the analytical performance of medical laboratories in various disciplines of in-vitro diagnostics.

The new ESfEQA program 'Clinical Case Studies' focuses on the interpretation of the analytical data and intends to support and to strengthen the skills of the staff to draw the appropriate conclusions out of the analytical results.

Each survey of the 'Clinical Case Study' program will provide anonymized clinical data of an individual person. This may include age, sex, patient history and analytical data for Clinical Chemistry parameters, Hematology, Coagulation and related areas.

The participant of the survey will be asked to provide the suspected diagnosis, to recommend other parameters that will support or exclude the diagnosis and to suggest further investigations or therapeutic considerations.

Possible answers will be provided in drop-down lists. The participant is requested to select one or several answers that seem to be appropriate.

ESfEQA cooperates with scientific advisors, well-experienced in the field of laboratory medicine who will provide suitable case studies and comment on the participant results.

The ESfEQA Clinical Case Study program is offered on a monthly basis. Participants can start at any time of the year.

Example of Clinical Case Study Survey

Patient Report

Patient: 11-month-old girl

Clinical report upon admission:

Failure to thrive. A blood test 3 months ago was within normal limits.

Analytical Results (in brackets reference range)

PARAMETER	RESULT	UNIT	REFERENCE
Ca	2.25	mmol/L	2.10-2.55
PO ₄	1.50	mmol/L	1.15-2.15
Alkaline Phosphatase	3640	U/L	91-334
PTH	3.21	pmol/L	1.65-6.9
AST	40	U/L	< 71
ALT	35	U/L	< 31
γ-GT	18	U/L	< 21

Suspected Diagnosis

- Bile duct stenosis
- **Benign transient hyperphosphatasemia of infancy**
- Rachitis
- Viral hepatitis
- Hyperparathyroidism

These five options will be provided in a drop-down list to the participant. For this case, the answer 'Benign transient hyperphosphatasemia of infancy', would be the appropriate answer.

Which parameters support your suspected diagnosis?

- PTH
- **Alkaline Phosphatase**
- **Liver function test**
- **Lack of Symptoms**
- **Calcium**

What other tests are useful to confirm the diagnosis?

- Hepatitis serology
- **Total and direct bilirubin**
- **25-Hydroxycholecalciferol**
- 1,25-Dihydroxycholecalciferol
- Sonography of the parathyroid glands
- ALP isoenzyme electrophoresis

Therapy suggestions

- Vitamin D substitution
- **No therapy necessary**
- Parathyroidectomy
- Surgical treatment of biliary stenosis
- **Repeat blood testing in 3-4 month**

The expected answers are indicated above in bold letters.

How to get started

Please contact your local distributor or ESfEQA directly (info@esfqa.eu) for information on how to get enrolled in the ESfEQA External Quality Assessment Schemes.