

# Preanalytics

The preanalytical schemes provide laboratories and POCT sites with tools for extending quality assurance beyond the commonly assessed analytical phase. As a result of the improved analytical quality, most errors have been suggested to now occur in the preanalytical phase. Managing all phases of the total testing cycle is equally important to ensure patient safety.

<b>8817</b> HIL-index [DEKS]	1	2	3	4	5	6	7	8	9	10	11	12
	Three rounds per year											
<b>Specimens:</b> 2 samples, 1 mL each.	<b>Examinations:</b> Organised in co-operation with DEKS. Participation in all rounds is required. Register orders before the end of December.											

<b>7806</b> Preanalytics and process in anatomic pathology	1	2	3	4	5	6	7	8	9	10	11	12
					●							●
<b>Specimens:</b> 3-5 cases with preanalytical and process error(s). <b>Examinations:</b> Participants are asked to find preanalytical or laboratory process error(s) in the cases.	<b>Notes:</b> The scheme is intended for all laboratory staff of pathology laboratories. Scheme is carried out online.											

<b>7800</b> Preanalytics, clinical chemistry	1	2	3	4	5	6	7	8	9	10	11	12
		●										
<b>Specimens:</b> 3 cases with preanalytical error(s). <b>Examinations:</b> Participants are asked to find preanalytical error(s) in the cases.	<b>Notes:</b> The scheme is intended for personnel using POCT tests and devices. Scheme is carried out online.											

<b>7802</b> Preanalytics, microbiology	1	2	3	4	5	6	7	8	9	10	11	12
				●							●	
<b>Specimens:</b> 3 cases with preanalytical error(s). <b>Examinations:</b> Participants are asked to find preanalytical error(s) in the cases.	<b>Notes:</b> The scheme is intended for all laboratory staff of clinical microbiology laboratories. Scheme is carried out online.											

<b>7807</b> Preanalytics, Pneumatic Sample Transport	1	2	3	4	5	6	7	8	9	10	11	12
										●		
<b>Specimens:</b> Two surrogate blood vials (i.e. measurement devices for recording 3-axis acceleration during pneumatic tube system transport (PTS)). <b>Examinations:</b> Vials are sent through the PTS as regular blood samples, no laboratory analysis is performed. Rejection probability of LDH, ASAT and K will be calculated using the cumulative vibration level, laboratory defined analyte-specific hemolysis cutoffs, and a hemolysis model.	<b>Notes:</b> Vials are sent to the participating laboratories during September-October. Laboratories are asked to perform the recordings within one week upon receiving the vials and to return the vials using a courier (shipping costs not included). It is possible to measure 3 different lines from the same PTS manufacturer.											

<b>7804</b> Preanalytics, POCT in chemistry	1	2	3	4	5	6	7	8	9	10	11	12
											●	
<b>Specimens:</b> 3 cases with preanalytical error(s). <b>Examinations:</b> Participants are asked to find preanalytical error(s) in the cases.	<b>Notes:</b> The scheme is intended for personnel using POCT tests and devices. Scheme is carried out online.											

<b>7801</b> Preanalytics, urine and blood sample collection	1	2	3	4	5	6	7	8	9	10	11	12
			●									
<b>Specimens:</b> 3 cases with preanalytical error(s). <b>Examinations:</b> Participants are asked to find preanalytical error(s) in the cases.	<b>Notes:</b> The scheme is intended for personnel performing blood and urine sample collection. Scheme is carried out online.											

POCT

POCT

# External quality assessment for extra-analytical phases

PREANALYTICAL EQA | ANALYTICAL EQA | POSTANALYTICAL EQA

Labquality has two advanced external quality assessment programs for extra-analytical phases of clinical laboratory investigation process. Preanalytical EQA programs are independent schemes for the evaluation of preanalytical phase and Integrated EQA programs includes pre- and/or postanalytical evaluation together with traditional EQA samples.

## Pre- and postanalytical EQA programs

### Preanalytical EQA programs

8817	HIL-index [DEKS]	7807	Preanalytics, Pneumatic sample transport
7800	Preanalytics, clinical chemistry	7804	Preanalytics, POCT in chemistry
7802	Preanalytics, microbiology	7801	Preanalytics, urine and blood sample collection
7806	Preanalytics and process in anatomic pathology		

### Integrated EQA programs

#### Clinical chemistry

2570, 2580, 2590	Glucose meters	2240	Proteins, electrophoresis
2114	Haemoglobin, 1-level, POCT	2050	Serum B and C (2-level)
2300, 2300S	Hormones A: Basic analytes of hormone and immunochemistry	2480	Vitamin A, E and D metabolites
2301, 2301S	Hormones B: Steroid and peptide hormones		
2200	Lipids and lipoproteins		

#### Clinical physiology

7130	ECG, interpretation
------	---------------------

#### Haematology

4480	Column agglutination methods: grading of reactions and patient cases
------	--

#### Immunology

5935	ANCA and GbmAb	5251	Interferon Gamma Release Assay (IGRA) for <i>Mycobacterium tuberculosis</i> - whole blood sample
5900	Antinuclear antibodies	5920	Thyroid gland antibodies
5940	Coeliac disease, antibodies		
5250	Interferon Gamma Release Assay (IGRA) for <i>Mycobacterium tuberculosis</i>		

#### Microbiology

5950	<i>Bordetella pertussis</i> , antibodies	5668	Measles virus, antibodies
5960	<i>Borrelia burgdorferi</i> , antibodies, European origin	5669	Mumps virus, antibodies
5620	<i>Chlamydia pneumoniae</i> , antibodies	5980	<i>Mycoplasma pneumoniae</i> , antibodies
5650	Cytomegalovirus, antibodies	5660	Parvovirus B19, antibodies
5635	Dengue virus, antibodies and antigen detection	5560	Puumala virus, antibodies
5641	EBV mononucleosis, specific antibodies	5667	Rubella virus, antibodies
5080	General Bacteriology 1 (aerobes and anaerobes)	5880	Syphilis serology
5081	General Bacteriology 2 (aerobes)	5099	Tick-borne encephalitis virus, antibodies
5860	<i>Helicobacter pylori</i> , antibodies	5420	Toxoplasma, antibodies
5092	Hepatitis A, antibodies	5060	Urine culture, quantitative screening
5094–5096	Hepatitis B and C, serology	5065	Urine culture, quantitative screening, identification and susceptibility
5682	Hepatitis E, antibodies	5665	Varicella-zoster virus, antibodies
5091	HIV, antibodies and antigen detection	5636	Zika virus, antibodies