

Hong Kong Institute of Medical Laboratory Sciences

Quality Assurance Programme Ltd.

And

The Hong Kong College of Pathologists

Interpretative Quality Assurance Programme in Haematology

February Survey (2026)

Dispatch date: 10 March 2026

Date of Return: on or before 24 March 2026

**HONG KONG INSTITUTE OF MEDICAL LABORATORY SCIENCES
QUALITY ASSURANCE PROGRAMME Ltd.
And
THE HONG KONG COLLEGE OF PATHOLOGISTS**

INTERPRETATIVE QUALITY ASSURANCE PROGRAMME in HAEMATOLOGY

INSTRUCTIONS

1. In the package there are two peripheral blood smears, one trephine biopsy and one haemoglobin pattern analysis.
2. Process and test survey samples as patient specimens using currently practised analytical procedures in your laboratory.
3. Survey results should be typed or printed legibly on the Return Form.
4. A fillable survey form for Interpretative Quality Assurance Programme in Haematology (HI) can be downloaded at HKIMLSQAP webpage (<http://www.hkimlsqap.org/index.aspx>).
5. Return your survey results to the HKIMLSQAP either by Facsimile to 2124 2798 or email to info@hkimlsqap.
6. Do not forward any particulars of your laboratory other than the assigned confidential Laboratory Code.
7. Return survey results to HKIMLSQAP on or before the due date specified on the Result Return Forms. Late or no return of survey data will be documented in your report.
8. For further enquiry, please contact HKIMLSQAP Ltd.
Phone: (852) 24990015 Fax: (852) 2124 2798 E-mail: info@hkimlsqap.org

CONFIDENTIALITY

HKIMLSQAP is committed to keep all details of participants confidential. Please refer to <http://www.hkimlsqap.org>

Lab. Code _____ Date of return on or before 24 March 2026

IQ 2611 (Peripheral Smear)

History: A 48-year-old man was admitted for workup of anaemia. A complete blood count showed WBC $26.0 \times 10^9/L$, Hb 11.2 g/dL and platelet $245 \times 10^9/L$.

1. Please describe your peripheral blood smear findings.

2. What is the diagnosis? (Please specify classification system used when appropriate).

3. What further investigations will you perform?

Answers provided by (please check one):

- | | |
|-------------------------------------------------------------|--------------------------|
| 1. Specialist Haematologist | <input type="checkbox"/> |
| 2. Trainee Haematologist | <input type="checkbox"/> |
| 3. Pathologist in another discipline other than haematology | <input type="checkbox"/> |
| 4. Medical Technologist | <input type="checkbox"/> |
| 5. Other medical personnel (please specify) _____ | <input type="checkbox"/> |

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IQ 2612 (Trephine Biopsy)

History: A 75-year-old man had bone marrow study for neutropenia workup. A complete blood count showed WBC $3.5 \times 10^9/L$, Hb 11.8 g/dL and platelet $166 \times 10^9/L$.

1. Please describe your peripheral blood smear findings.

2. What is the diagnosis? (Please specify classification system used when appropriate).

3. What further investigations will you perform?

Answers provided by (please check one):

1. Specialist Haematologist
2. Trainee Haematologist
3. Pathologist in another discipline other than haematology
4. Medical Technologist
5. Other medical personnel (please specify) _____

Lab. Code _____ Date of return on or before 24 March 2026

IQ 2613 (Peripheral Smear)

History: A 33-year-old woman attended AED for fever and jaundice. A complete blood count showed WBC $19.3 \times 10^9/L$, Hb 12.8 g/dL and platelet $178 \times 10^9/L$.

1. Please describe your peripheral smear findings.

2. What is the diagnosis?

3. What further investigations will you perform?

Answers provided by (please check one):

- | | |
|-------------------------------------------------------------|--------------------------|
| 1. Specialist Haematologist | <input type="checkbox"/> |
| 2. Trainee Haematologist | <input type="checkbox"/> |
| 3. Pathologist in another discipline other than haematology | <input type="checkbox"/> |
| 4. Medical Technologist | <input type="checkbox"/> |
| 5. Other medical personnel (please specify) _____ | <input type="checkbox"/> |

Lab. Code _____ Date of return on or before 24 March 2026

IQ 2614 (Haemoglobin Pattern Interpretation)

Hemoglobin pattern study was performed for a 33-year-old pregnant lady. The red cell indices were: Hb 11.8 g/dL, MCV 81.0 fL, MCH 28.7 pg and RDW 13.1. Peripheral blood film showed unremarkable red cells morphology. No HbH inclusions were seen by supravital stain. Please refer to Figures A to C for Hb pattern study.

Figure A. High Performance Liquid Chromatography (BIORAD Variant II)

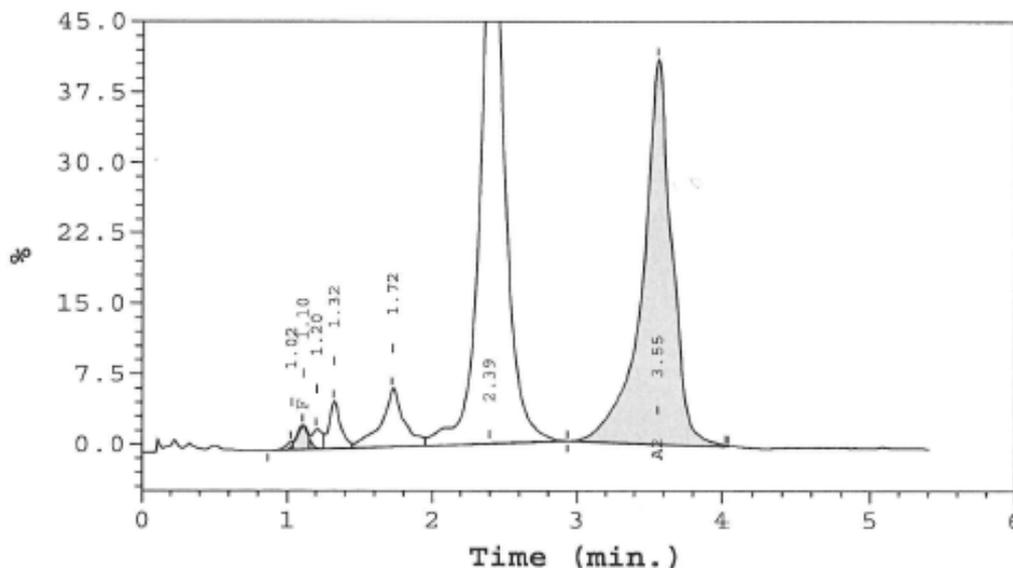
Peak Name	Calibrated Area %	Area %	Retention Time (min)	Peak Area
Unknown	---	0.2	1.02	4216
F	1.1	---	1.10	19022
Unknown	---	0.8	1.20	13769
P2	---	2.0	1.32	36312
P3	---	4.8	1.72	88450
A0	---	49.6	2.39	908956
A2	41.1*	---	3.55	762729

Total Area: 1,833,454

F Concentration = 1.1 %
A2 Concentration = 41.1* %

*Values outside of expected ranges

Analysis comments:



Lab. Code _____ Date of return on or before 24 March 2026

IQ 2614 (Haemoglobin Pattern Interpretation)

A. Interpretation of **High Performance Liquid Chromatography**

A1. **HbA** present / absent* (circle *the correct answer)

A2. **HbA₂** _____ % of total Hb
normal / depressed / elevated / undetermined*

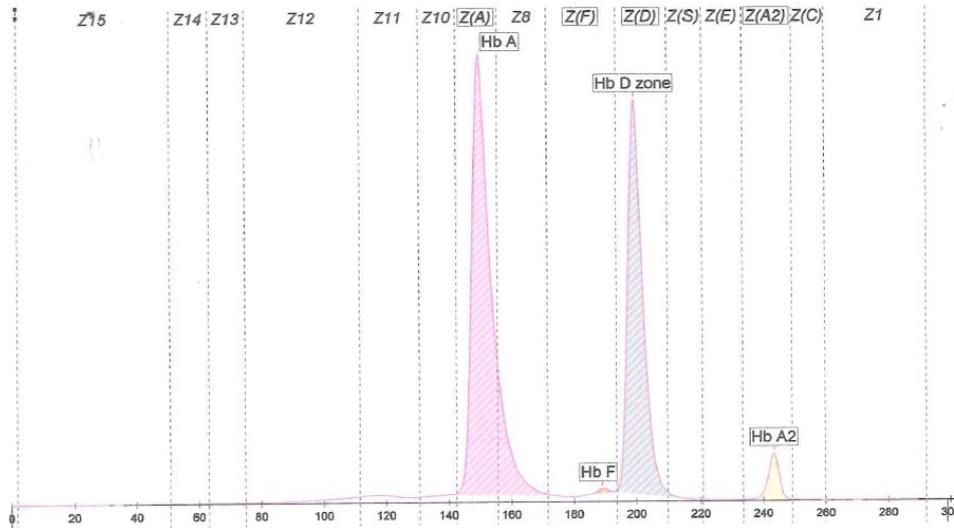
A3. **HbF** _____ % of total Hb
normal / depressed / elevated / undetermined*

A4. **Hb variant(s)**
1. _____ % of total Hb
2. _____ % of total Hb

Lab. Code

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Figure B. Capillary Electrophoresis



Haemoglobin Electrophoresis

Name	%	Normal Values %
Hb A	57.5	
Hb F	0.3	
Hb D zone	38.8	
Hb A2	3.4	

B. Interpretation of Capillary Electrophoresis

B1. HbA present / absent* (circle *the correct answer)

B2. HbA₂ _____ % of total Hb
normal / depressed / elevated / undetermined*

B3. HbF _____ % of total Hb
normal / depressed / elevated / undetermined*

B4. Hb variant(s)
1. _____ % of total Hb
2. _____ % of total Hb

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IQ 2614 (Haemoglobin Pattern Interpretation)

D. Diagnostic evaluation of patient (circle more than one if appropriate)

Thalassaemia (pure quantitative defect)

absent / present*

alpha / beta / gamma / delta chain*

heterozygous / homozygous / compound heterozygous / double heterozygous*

Variant (structural defect, excluding Hb Barts, HbH)

absent / present*

alpha / beta / gamma / delta chain*

heterozygous / homozygous / compound heterozygous / double heterozygous*

identity: _____

What are the possibilities?

What further test(s) would you suggest?

Answers provided by (please check one):

- | | |
|-------------------------------------------------------------|--------------------------|
| 1. Specialist Haematologist | <input type="checkbox"/> |
| 2. Trainee Haematologist | <input type="checkbox"/> |
| 3. Pathologist in another discipline other than haematology | <input type="checkbox"/> |
| 4. Medical Technologist | <input type="checkbox"/> |
| 5. Other medical personnel (please specify) _____ | <input type="checkbox"/> |

(End of question)