



**Hong Kong Institute of Medical Laboratory Sciences**  
**Quality Assurance Programme**

# Haematology & Serology

**May Survey (2025)**

**Dispatch date: 13 May 2025**

**Date of Return: on or before 27 May 2025**

# HONG KONG INSTITUTE OF MEDICAL LABORATORY SCIENCES QUALITY ASSURANCE PROGRAMME

## Haematology and Serology

### INSTRUCTIONS

1. In the package there are two samples for complete blood count (CBC), two lyophilized plasmas for coagulation study, two smears for blood cell morphology, and two red cell suspensions and plasma samples for blood group serology.
2. Upon receipt of the package, put blood and plasma samples immediately into a refrigerator at 2-8°C until analysis.
3. Consider the survey materials as potentially infectious and take standard biosafety measures when handling and disposing the materials.
4. Blood samples for CBC and blood group serology, when removed from the refrigerator, should be allowed to stand and equilibrate to 23±5°C for 15 minutes. Do not shake or mix cold blood samples on a mechanical mixer. Swirl tubes between hand palms to thoroughly re-suspend the blood samples and gently invert tubes 8 to 10 times immediately before analysis.
5. Lyophilized plasma samples should be reconstituted with 1 mL deionized / distilled water. Replace the stopper and swirl gently to make sure complete reconstitution of product. Keep the reconstituted samples at 23±5°C for 30 minutes. Invert to mix before analysis. Do not shake to avoid foam formation. The reconstituted product is stable for 24 hours when stored in its original vial at 2-8°C.
6. Process and test survey samples as patient specimens using currently practised analytical procedures in your laboratory.
7. Survey results should be submitted on line at <http://www.hkimlsqap.org/index.asp> using your login name and password.
8. Do not forward any particulars of your laboratory except the assigned confidential Laboratory Code.
9. Return survey results to HKIMLSQAP on or before the **due date 27 May 2025** Late or no return of survey data will be documented in your report.
10. For further enquiry, please contact HKIMLSQAP Ltd.  
Phone: (852) 2499 0015 Fax: (852) 2124 2798 E-mail: [info@hkimlsqap.org](mailto:info@hkimlsqap.org)

### CONFIDENTIALITY

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



**HONG KONG INSTITUTE OF MEDICAL LABORATORY SCIENCES**  
**QUALITY ASSURANCE PROGRAMME**

Fax: 21242798

**Haematology and Serology Return Form**

**Laboratory code:**

**Date of Return: on or before 27 May 2025**

**Complete Blood Count**

| Tests                       | HS2521   | HS2522   | Method Code |
|-----------------------------|--|--|-------------|
| WBC (x 10 <sup>9</sup> /L)  | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |             |
| RBC (x 10 <sup>12</sup> /L) | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |             |
| Hb (g/dL)                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |             |
| Hct (L/L)                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |             |
| MCV (fL)                    | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |             |
| Plt (x 10 <sup>9</sup> /L)  | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |             |

**Coagulation** (data in exact figures are mandatory)

| Tests                       | HS2523   | HS2524   | Method Code | Reagent Code |
|-----------------------------|--|--|-------------|--------------|
| APTT (sec.)                 | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |             |              |
| Clinical assessment (N/B/P) |  |  |             |              |
| Your Ref. range (sec.)      | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |             |              |
|                             | (low)  | (high)   |             |              |

| Tests | HS2523   | HS2524   | Method Code | Reagent Code |
|-------|--|--|-------------|--------------|
| INR   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |             |              |

**ABO and Rh(D) Grouping**

| Tests           | HS2527                | HS2528                | Method Code | Reagent Code |
|-----------------|-----------------------|-----------------------|-------------|--------------|
|                 | (Reaction Score 0-12) | (Reaction Score 0-12) | A,B,C,D     | E,F          |
| Anti - A        |                       |                       |             |              |
| Anti - A,B      |                       |                       |             |              |
| Anti - B        |                       |                       |             |              |
| Reagent A Cells |                       |                       |             |              |
| Reagent B Cells |                       |                       |             |              |
| Reagent O Cells |                       |                       |             |              |
| ABO Grouping    |                       |                       |             |              |

| Tests                  | HS2527                | HS2528                | Method Code | Reagent Code |
|------------------------|-----------------------|-----------------------|-------------|--------------|
|                        | (Reaction Score 0-12) | (Reaction Score 0-12) | A,B,C,D     | E,F          |
| Anti - D               |                       |                       |             |              |
| Rh/hr control          |                       |                       |             |              |
| IAT (where applicable) |                       |                       |             |              |
| Rh (D) Grouping        |                       |                       |             |              |

Remark (if any):

N.B.: N = Normal; B = Borderline prolonged; P = Prolonged.

NA = Not Applicable. Please put down NA where the test is not performed. IC = Inconclusive





**HONG KONG INSTITUTE OF MEDICAL LABORATORY SCIENCES  
QUALITY ASSURANCE PROGRAMME**

Fax: 21242798

**Haematology and Serology Return Form**

**Laboratory code:**

**Date of Return: on or before 27 May 2025**

**Blood Film**

**Sample Code: HS2526**

HS2526 was prepared from an 86-year-old male admitted for blood transfusion with bradycardia. The automated blood counts were as follows:

WBC  $12.01 \times 10^9/L$ , RBC  $3.10 \times 10^{12}/L$ , Hb 7.8 g/dL, Hct 0.233L/L, MCV 75.2 fL, Plt  $55 \times 10^9/L$ .

The blood film was stained with May Grunwald-Giemsa method.

| Differential Count          | % |
|-----------------------------|---|
| Neutrophil Band             |   |
| Neutrophil Segmented        |   |
| Lymphocyte                  |   |
| Monocyte                    |   |
| Eosinophil                  |   |
| Basophil                    |   |
| Blast                       |   |
| Promyelocyte                |   |
| Myelocyte                   |   |
| Metamyelocyte               |   |
| Atypical lymphocyte         |   |
| Others: (specify in Remark) |   |

|                |  |
|----------------|--|
| NRBC / 100 WBC |  |
|----------------|--|

| RBC Morphology       |         |
|----------------------|---------|
| Normal (N)           |         |
| Abnormal             | 1/2/3 + |
| Hypochromasia        |         |
| Polychromasia        |         |
| Anisocytosis         |         |
| Microcytosis         |         |
| Macrocytosis         |         |
| Poikilocytosis       |         |
| Spherocytosis        |         |
| Elliptocytosis       |         |
| Target cell          |         |
| Schistocytosis       |         |
| Basophilic stippling |         |
| Rouleaux             |         |

| WBC Morphology            |  |
|---------------------------|--|
| Toxic granulation         |  |
| N = Not seen; P = Present |  |

| Platelet Morphology       |  |
|---------------------------|--|
| Giant form: easily found? |  |
| N = No; Y = Yes           |  |
| Clumping                  |  |
| N = Not seen; P = Present |  |

| Malarial Parasite              |  |
|--------------------------------|--|
| N = Not Found; S = P. species; |  |
| F = P. falciparum;             |  |
| M = P. malariae;               |  |
| O = P. ovale; V = P. vivax     |  |

Remark of HS2526 (if any):

N.B.: RBC Morphology - N= Normal; 1 = Mild or slight degree; 2 = Moderate degree; 3 = Severe or marked degree.

For problems related to the quality of the QAP Survey materials, please contact the HKIMLSQAP Chairman for replacement.



**HONG KONG INSTITUTE OF MEDICAL LABORATORY SCIENCES**  
**QUALITY ASSURANCE PROGRAMME**

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**Haematology and Serology Return Form**

Laboratory code:   2

Date of Return: on or before 27 May 2025

**Complete Blood Count**

| Tests |                         | HS2521 |  |  |   |  |  |  | HS2522 |  |  |   |  |  |  | Method Code |  |
|-------|-------------------------|--------|--|--|---|--|--|--|--------|--|--|---|--|--|--|-------------|--|
| WBC   | (x 10 <sup>9</sup> /L)  |        |  |  | • |  |  |  |        |  |  | • |  |  |  |             |  |
| RBC   | (x 10 <sup>12</sup> /L) |        |  |  | • |  |  |  |        |  |  | • |  |  |  |             |  |
| Hb    | (g/dL)                  |        |  |  | • |  |  |  |        |  |  | • |  |  |  |             |  |
| Hct   | (L/L)                   |        |  |  | • |  |  |  |        |  |  | • |  |  |  |             |  |
| MCV   | (fL)                    |        |  |  | • |  |  |  |        |  |  | • |  |  |  |             |  |
| Plt   | (x 10 <sup>9</sup> /L)  |        |  |  | • |  |  |  |        |  |  | • |  |  |  |             |  |

**Coagulation** (data in exact figures are mandatory)

| Tests                       | HS2523  | HS2524  | Method Code | Reagent Code |
|-----------------------------|---|---|-------------|--------------|
| APTT (sec.)                 | <div><div></div><div></div><div></div><div>●</div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div>●</div><div></div><div></div><div></div></div> |             |              |
| Clinical assessment (N/B/P) |   |   |             |              |
| Your Ref. range (sec.)      | <div><div></div><div></div><div></div><div>●</div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div>●</div><div></div><div></div><div></div></div> |             |              |
|                             | (low)   | (high)  |             |              |

| Tests | HS2523 |  |  |   |  |  |  | HS2524 |  |  |   |  |  |  | Method Code | Reagent Code |
|-------|--------|--|--|---|--|--|--|--------|--|--|---|--|--|--|-------------|--------------|
| INR   |        |  |  | • |  |  |  |        |  |  | • |  |  |  |             |              |

**FOR THE SECOND INSTRUMENT ONLY**

Remark (if any):

N.B.: N = Normal; B = Borderline prolonged; P = Prolonged.

NA = Not Applicable. Please put down NA where the test is not performed.