



Supplementary Fig. 1. The graphical user interface of the UIMD PBIA. (A) Setting, (B) Analysis, (C) Database, (D) Classification, and (E) Report.

(Continued to the next page)

Classification List

No.	PB/BF	Tray slot	Barcode ID	Patient ID	Name	Analyzed date	Tact time(s)	Signed state	Edit
1	PB	1-08				2022-11-15 15:01:16	65.529	Ready	☑
2	PB	1-09				2022-11-15 14:59:44	126.460	Ready	☑
3	PB	1-08				2022-11-15 14:41:43	68.602	Ready	☑
4	PB	1-09				2022-11-15 14:40:08	110.151	Ready	☑
5	PB	1-08				2022-11-15 14:37:52	120.732	Ready	☑
6	PB	1-08				2022-11-15 11:17:49	117.324	Ready	☑
7	PB	1-09				2022-11-15 10:37:31	99.043	Ready	☑
8	PB	1-09				2022-11-14 16:01:06	87.863	Ready	☑
9	PB	1-08				2022-11-14 15:59:38	64.705	Ready	☑
10	PB	1-07				2022-11-14 15:58:33	108.082	Ready	☑
11	PB	1-06				2022-11-14 15:56:45	95.690	Ready	☑
12	PB	1-05				2022-11-14 15:55:09	78.143	Ready	☑
13	PB	1-04				2022-11-14 15:53:51	88.563	Ready	☑
14	PB	1-03				2022-11-14 15:52:23	27.904	Ready	☑
15	PB	1-02				2022-11-14 15:51:55	131.514	Ready	☑
16	PB	1-01				2022-11-14 15:49:43	83.404	Ready	☑
17	PB	1-09				2022-10-12 18:14:45	197.323	Ready	☑
18	PB	1-09				2022-09-13 17:04:30	102.060	Ready	☑
19	PB	1-09				2022-09-08 11:22:13	41.215	Ready	☑
20	PB	1-09				2022-09-08 11:16:18	108.369	Ready	☑
21	PB	1-09				2022-09-08 11:04:45	104.383	Ready	☑
22	PB	1-09				2022-09-08 10:18:42	94.436	Ready	☑

Information

Order information
 Order ID: 20221115145746_08_
 Ordered by: know
 Date: 2022-11-15 14:57:46
 LIS status: No data sent or received from LIS
 Type of order: WBC + RBC
 NS, NB integration: N

Result information
 Analyzed date: 2022-11-15 14:59:44
 Signed state: Ready
 Signed of date:
 Signed user ID:
 LY: 96 95%
 MO: 2 2%
 BA: 1 1%
 BL: 2 2%
 Total: 101 100.00%
 GP: 2
 AR: 17

WBC Classification

Class	Count	%
Neutrophil-Segmented	0	0
Neutrophil-Eband	0	0
Metamyelocyte	0	0
Myelocyte	0	0
Proerythrocyte	0	0
Lymphocyte	96	95
Reactive lymphocyte	0	0
Abnormal lymphocyte	0	0
Monocyte	2	2
Eosinophil	0	0
Basophil	1	1
Blact	2	2
Plasma cell	0	0
Total	101	100.00

Cell marking

NS NB ME MY PR LY LR LA MO EO BA BL PC NR GP PA MA AR

Lymphocyte (96)

Supplementary Fig. 1. Continued.

The screenshot displays the UIMD PB system interface. At the top, it shows 'Premium Smear' and '2022-11-15 14:59:44'. The main area is divided into several sections:

- RBC Classification:** A table with columns for Category, Class, and Degree (0+ to 3+).
- WBC Classification:** A table with columns for Class, Count, and %.
- non-WBC:** A table listing non-white blood cell counts.
- Analysis Report from UIMD PB system:** A detailed report for 'DM Serial Nbr: 20221115145746_00_'. It includes patient information (Patient ID, Name, Birth, Gender) and classification results for RBC and WBC.

The RBC Classification table shows the following data:

Category	Class	Degree
Size	Normal	0+ 1+ 2+ 3+
Size	Macrocyte	●●●●
Size	Microcyte	●●●●
Size	Anisocytosis	●●●●
Chromia	Normal	●
Chromia	Hyperchromic	●●●●
Chromia	Hypochromic	●●●●
Chromia	Polychromia	●●●●
Shape	Normal	●
Shape	Poikilocytosis	●●●●
Shape	Target Cell	●●●●
Shape	Burr Cell	●●●●
Shape	Acanthocyte	●●●●

The WBC Classification table shows the following data:

Class	Count	%
Neutrophil-Segmented	0	0
Neutrophil-Band	0	0
Metamyelocyte	0	0
Myelocyte	0	0
Promyelocyte	0	0
Lymphocyte	96	95
Reactive lymphocyte	0	0
Abnormal lymphocyte	0	0
Monocyte	2	2
Eosinophil	0	0
Basophil	1	1
Blast	2	2
Plasma cell	0	0
Total	101	100.00

The non-WBC table shows the following data:

Item	Count	Unit
nRBC	0	/ 100 WBC
Giant platelet	2	/ 100 WBC
Platelet aggregation	0	
Malaria	0	
Artifact(Smudge)	17	

The Analysis Report includes the following RBC classification results:

RBC classification result	Count	%
>Size Normal	1+	95 %
>Size Macrocyte	0+	2 %
>Size Microcyte	0+	1 %
>Size Anisocytosis	0+	2 %
>Chromia Normal	1+	100.00%
>Chromia Hyperchromic	0+	
>Chromia Hypochromic	0+	
>Chromia Polychromia	0+	
>Shape Normal	0+	
>Shape Poikilocytosis	3+	
>Shape Target Cell	1+	
>Shape Burr Cell	1+	
>Shape Acanthocyte	3+	
>Shape Ovalocyte	0+	
>Shape Schistocyte	0+	
>Shape Sickle Cell	0+	
>Shape Stomatocyte	0+	
>Shape TearDropCell	3+	
>Shape Spherocyte	0+	
>Inclusion Howell-Jolly Body	0+	

Supplementary Fig. 1. Continued.