

How to read the data

# How to read the Statistical data-1.

## Statistics Calculation by Instrument

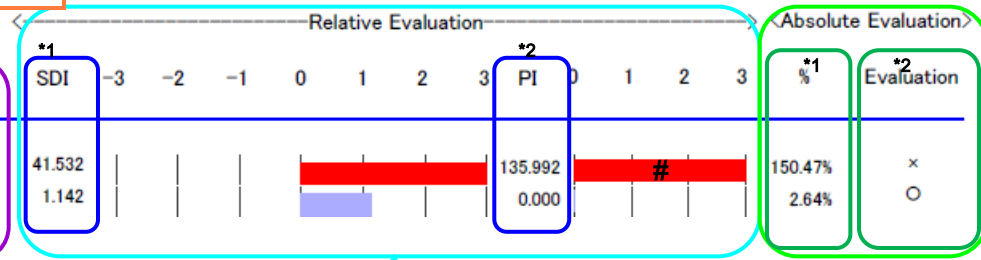
Method  
=  
Grouping

**C-0, ALL: Criteria Condition.**  
There is no classification in Hematology.  
It states C-1, ALL in all participants' report.

**A B C Hospital**

Instrument Code: 12345678

Item	C-1	Method	Lot#	Mean	SD	N	AllMean	Inter-SD	Intra-SD	LABS
WBC	ALL	SYSMEX(XEXT)								
			1THAI-1211 *	7.200	7.309	3	2.875	0.104	0.054	36
			2THAI-1212	16.090	0.000	1	15.677	0.362	0.154	35



### Your Lab Data

Mean : Average of three times measurement  
SD : Standard Deviation  
N : Measurement time

### Your Group Data

All Mean : Group Average  
Inter-SD : Standard Deviation of mean value between laboratories  
Intra-SD : Mean value of Standard Deviation within laboratories  
LABS : Number of Laboratories

### < Absolute Evaluation >

This evaluation method shows how far/close the Your Lab Data is to All Mean<sup>\*1</sup> and whether or not it is in the acceptable range<sup>\*2</sup>.

$$^*1 \quad \% = \frac{\text{Mean} - \text{All Mean}}{\text{All Mean}} \times 100$$

<sup>\*2</sup> See the next slide →

### < Relative Evaluation >

This evaluation method enable to see the variance of the Your Group and the relative positions of Your Lab, using "SDI (Standard Deviation Index)"<sup>\*1</sup> and "PI (Precision Index)"<sup>\*2</sup>.

<sup>\*1</sup> **SDI : Index for evaluation of accuracy of Your Laboratory**  
It shows how Mean is far from the All Mean

$$\text{SDI} = \frac{\text{Mean} - \text{All MEAN}}{\text{INTER-SD}}$$

※ In case SDI is more than +/- 3, the measurement value shows statistic deviation

<sup>\*2</sup> **PI : Index for evaluation of precision of Your Laboratory**  
It shows how many times the Your Lab SD is much bigger than the average of SD of Your Group

**PI = Your SD / INTRA-SD**

※ In case PI is 1, the Degree of Standard deviation shows the same as all country level.

### #Bar color information

In case SDI or/and PI is/are more than +/- 3, red bar(s) will appear instead of pale blue bar

## How to read the Statistical data-2.

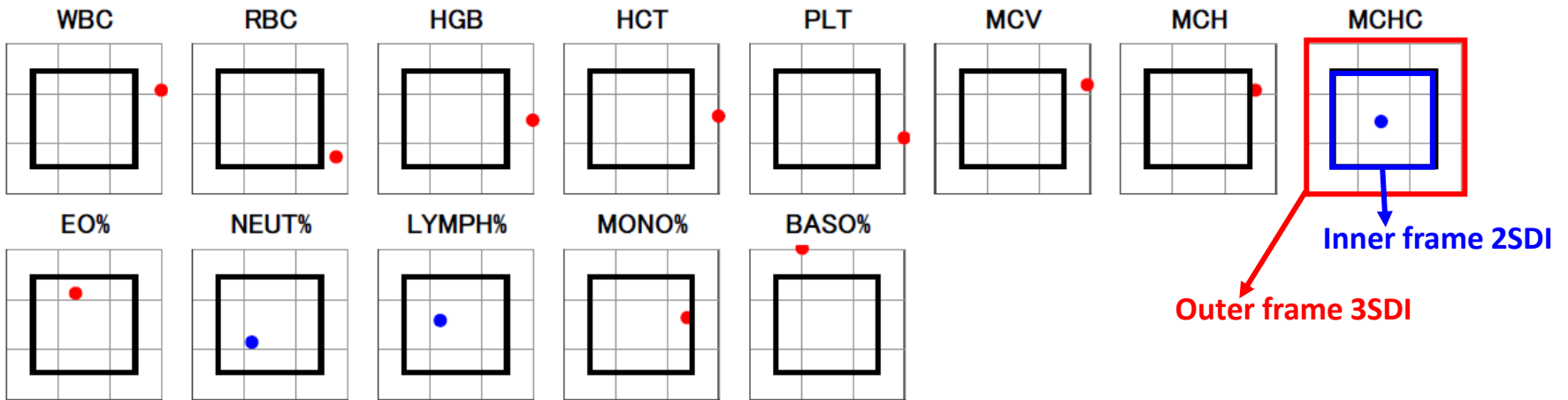
Item	○ (Good)	△ (Satisfactory)	× (Need Improvement)
HGB	$\leq \pm \text{Mean} * 5.0\%$	$> \pm \text{Mean} * 5.0\% \sim \leq \pm \text{Mean} * 10.0\%$	$> \pm \text{Mean} * 20.0\%$
NEUT%			
LYMPH%			
MONO%			
EO%			
BASO%			
RBC	$\leq \pm \text{Mean} * 7.0\%$	$> \pm \text{Mean} * 7.0\% \sim \leq \pm \text{Mean} * 14.0\%$	$> \pm \text{Mean} * 20.0\%$
WBC	$\leq \pm \text{Mean} * 10.0\%$	$> \pm \text{Mean} * 10.0\% \sim \leq \pm \text{Mean} * 20.0\%$	$> \pm \text{Mean} * 30.0\%$
HCT			
PLT	$\leq \pm \text{Mean} * 15.0\%$	$> \pm \text{Mean} * 15.0\% \sim \leq \pm \text{Mean} * 30.0\%$	$> \pm \text{Mean} * 40.0\%$

# How to read the QAP Matrix

## QAP Matrix

### A B C Hospital

Instrument Code: 1234567891



Blue-colored plot	Within $\pm 1SDI$ for both levels
Red-colored plot	Out of $\pm 1SD$ for one level or both levels

# How to read the SDI/PI Twin Plot

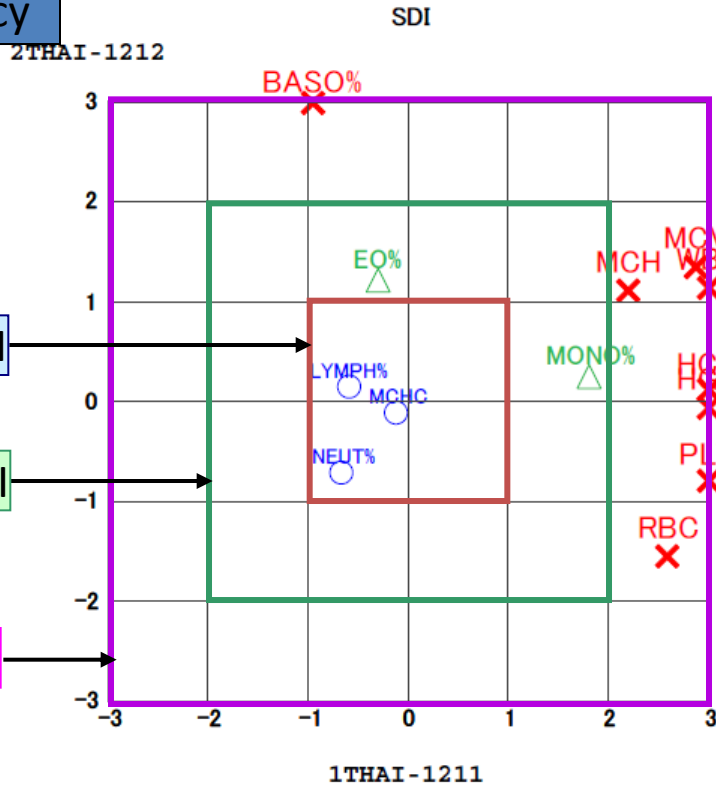
## SDI/PI Twin Plot

**A B C Hospital**

Instrument Code: 1234567891

**Accuracy**

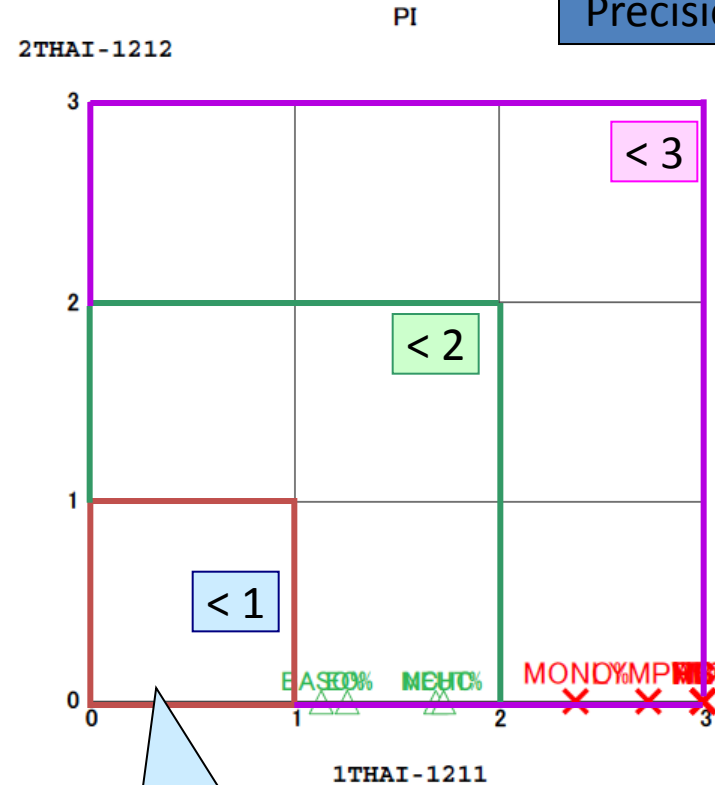
**Precision**



**+/- 1SDI**

**+/- 2SDI**

**+/- 3SDI**



Average variation of the selected peer group