

## External Quality Assurance (EQA) of G6PD Quantitative Test

Survey No. : RH2013-09

Sample sent on : 2013/09/02

Reporting deadline : 2013/09/09

Sample sent : [15 set](#)

Results reported (%) : 15 (100%)

- |   |   |
|---|---|
| <p>1. <a href="#">Summary report on this EQA survey</a></p> <p>2. <a href="#">The distribution of G6PD reported in this survey</a></p> <p>3. <a href="#">The distribution of Hb reported in this survey</a></p> | <p>4. <a href="#">Long term observation of inter laboratory CV vs. surveys</a></p> <p>5. <a href="#">Long term observation of inter laboratory CV vs. G6PD activities</a></p> <p>6. <a href="#">Deviation graph for individual laboratory</a></p> |
|---|---|

### Referral Hosp. G6PD and Hemoglobin(Hb) Quantitative Test Results

Lab	Referral Hosp.	Receive (day)	Report (day)	S 1		S 2		S 3		Hb 1		Hb 2		Hb 3	
				(U/gHb)	SDI	(U/gHb)	SDI	(U/gHb)	SDI	(g/dL)	SDI	(g/dL)	SDI	(g/dL)	SDI
F01	F01	4	4	8.2	-0.4	10.9	-0.4	2.2	-0.2	2.2	0.5	2.2	0.0	1.9	0.0
F02	F02	1	1	9.5	1.0	12.9	1.2	2.2	-0.2	2.0	-0.5	2.1	-0.3	1.8	-0.5
F03	F03	1	6	8.6	0.0	11.1	-0.2	2.1	-0.5	2.1	0.0	2.1	-0.3	1.8	-0.5
F04	F04	1	4	8.2	-0.4	10.9	-0.4	2.1	-0.5	2.3	1.0	2.3	0.3	2.0	0.5
F05	F05	2	4	8.8	0.2	12.0	0.5	2.4	0.3	2.1	0.0	2.1	-0.3	1.9	0.0
F06	F06	2	4	8.6	0.0	11.9	0.4	2.0	-0.8	2.3	1.0	2.2	0.0	1.9	0.0
F07	F07	1	7	8.4	-0.2	10.3	-0.8	2.6	0.8	2.1	0.0	2.3	0.3	2.1	1.0
F08	F08	1	5	8.4	-0.2	10.7	-0.5	2.2	-0.2	2.0	-0.5	2.0	-0.7	2.0	0.5
F09	F09	1	5	9.6	1.1	12.5	0.8	2.9	1.5	1.7	-2.0	1.8	-1.3	1.4	-2.5
F10	F10	1	1	9.4	0.9	12.9	1.2	2.1	-0.5	2.2	0.5	2.1	-0.3	2.0	0.5
F11	F11	8	3	7.8	-0.9	10.0	-1.1	2.0	-0.8	2.2	0.5	2.2	0.0	1.9	0.0
F12	F12	1	7	10.0	1.6	13.8	1.8	2.5	0.5	1.6	-2.5	1.6	-2.0	1.5	-2.0
F13	F13	1	7	8.9	0.3	11.6	0.2	2.2	-0.2	2.3	1.0	2.3	0.3	2.1	1.0
F14	F14	1	7	6.4	-2.4	8.6	-2.2	1.8	-1.3	2.4	1.5	2.4	0.7	2.1	1.0
F15	F15	1	10	7.8	-0.9	10.3	-0.8	3.1	2.0	2.3	1.0	2.8	2.0	2.0	0.5

Total participating laboratories = 15

Median	-	1	5	8.6	11.1	2.2	2.2	2.2	1.9
Range	-	1-8	1-10	6.4-10.0	8.6-13.8	1.8-3.1	1.6-2.4	1.6-2.8	1.4-2.1
n for Mean	-	-	-	15	15	15	15	15	15
Mean	-	-	-	8.6	11.4	2.3	2.1	2.2	1.9
S.D.	-	-	-	0.9	1.3	0.4	0.2	0.3	0.2
C.V.	-	-	-	10.4%	11.9%	15.3%	10.6%	12.4%	10.8%
Reference	-	-	-	10.6	12.9	2.5	2.3	2.3	1.9

- Note:
- 1).            : Outlier (this result has been dropped and was not included in calculation of Mean, SD and CV).
  - 2). Standard Deviation Index (SDI) = (Individual Result - Mean) / SD
  - 3). The reference values were determined by using [Trinity Biotech 345-UV](#) reagent at the QC reference Lab.

[Ordered by Referral Hosp.](#)



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# Long Term Observation of G6PD QA Survey for Confirmatory Hosp.

Survey No : RH2013-09 (in green ●)

- Total participants' CV result plotted against surveys

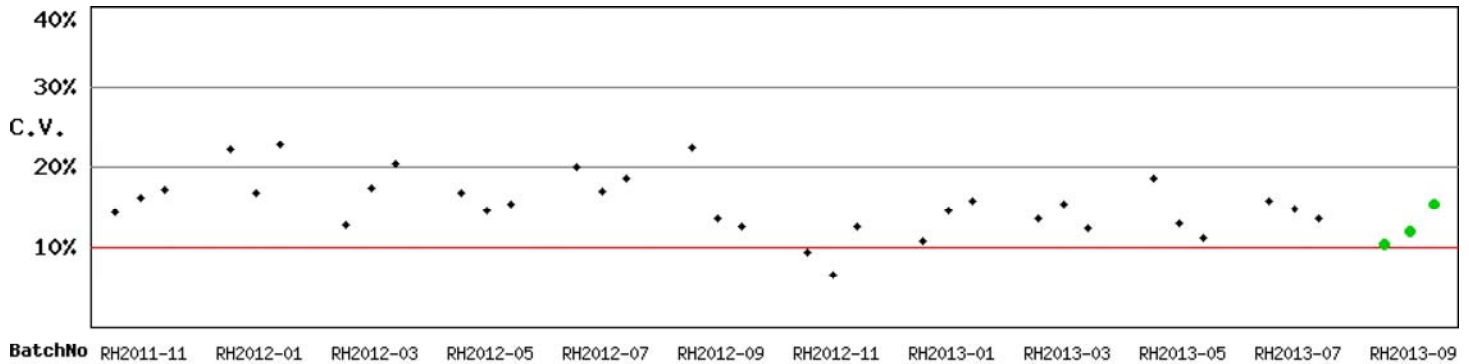


Fig RH-2.1

- Total participants' CV result plotted against G6PD activities

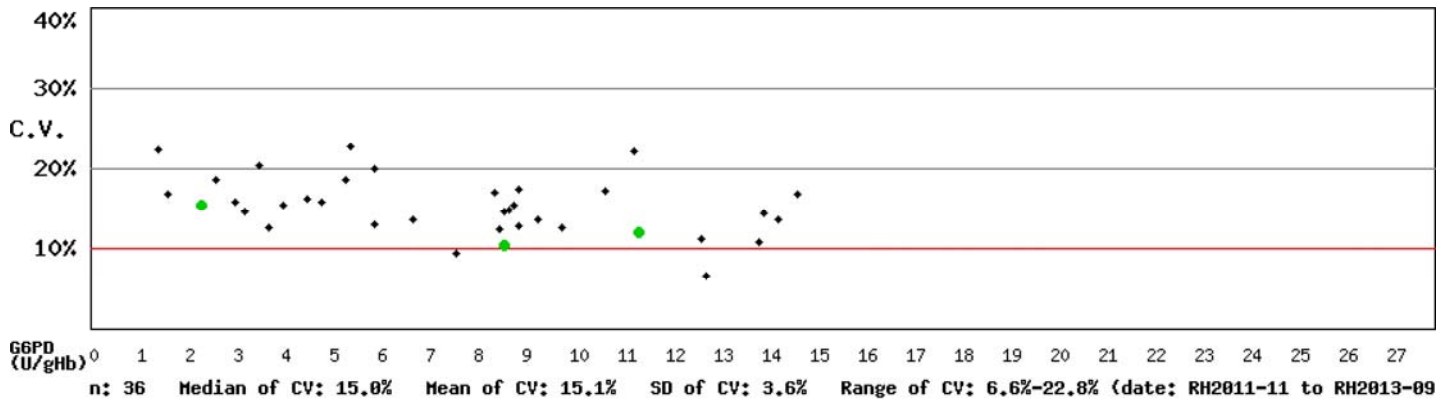


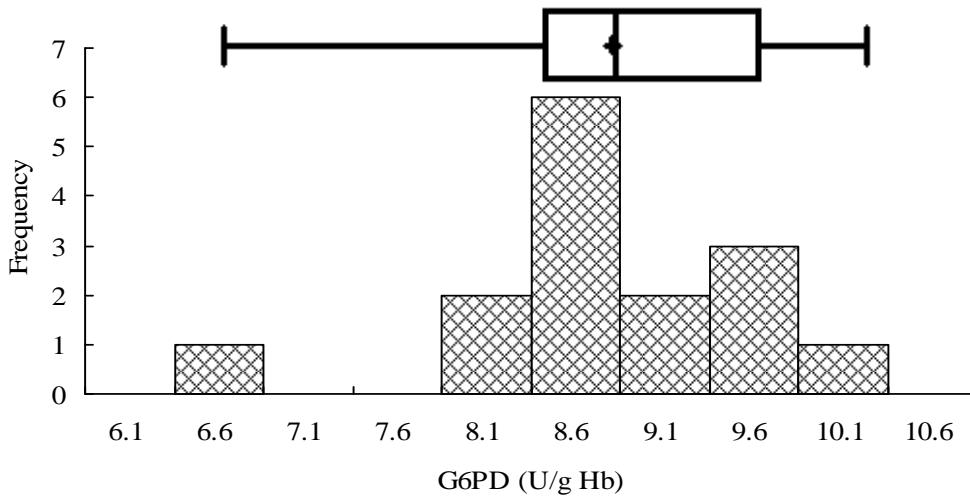
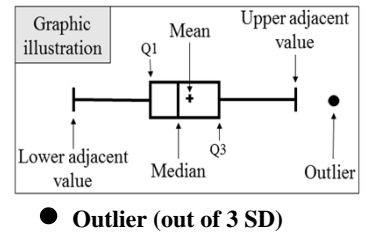
Fig RH-2.2

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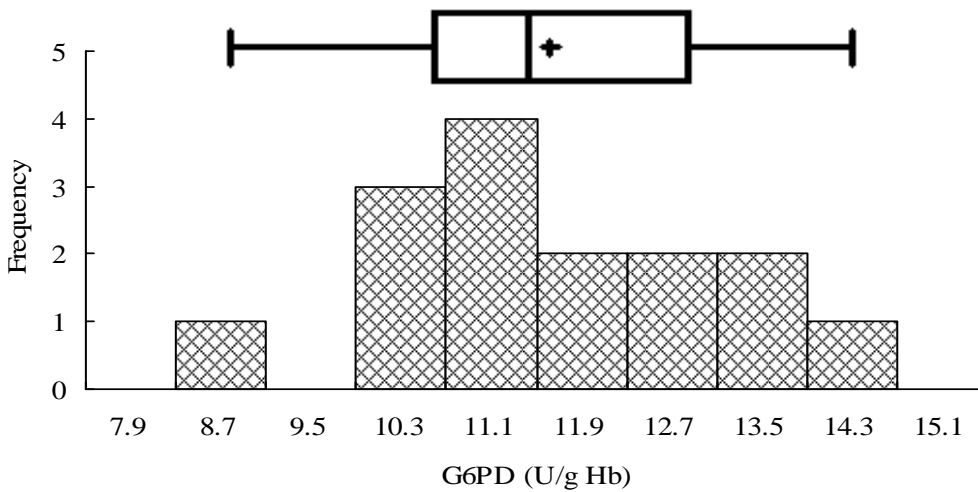
# External Quality Assurance -G6PD

## Survey No :RH2013-09



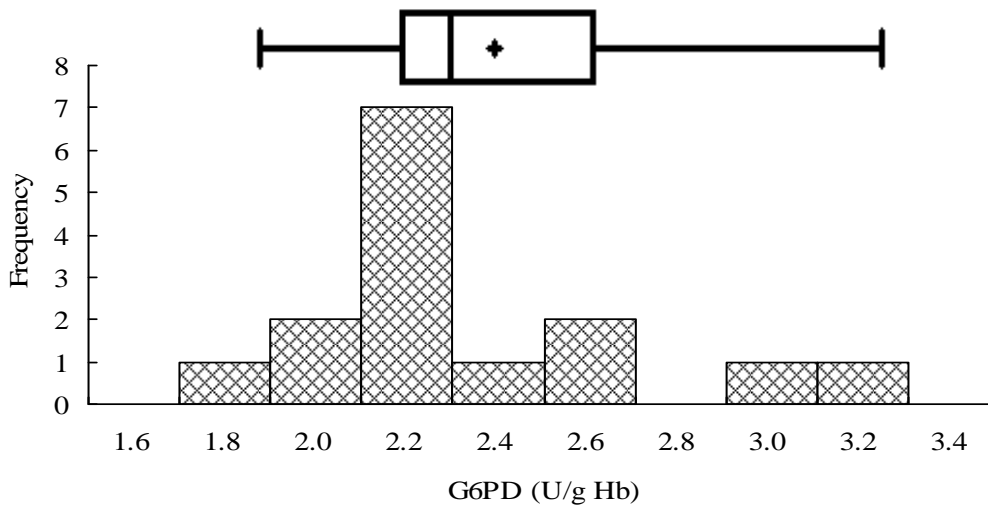
### Sample 1

**Median = 8.6 (n = 15)**  
**Mean = 8.6 (n = 15)**  
**S.D. = 0.9**  
**Ref. Value\* = 10.6**



### Sample 2

**Median = 11.1 (n = 15)**  
**Mean = 11.4 (n = 15)**  
**S.D. = 1.3**  
**Ref. Value\* = 12.9**



### Sample 3

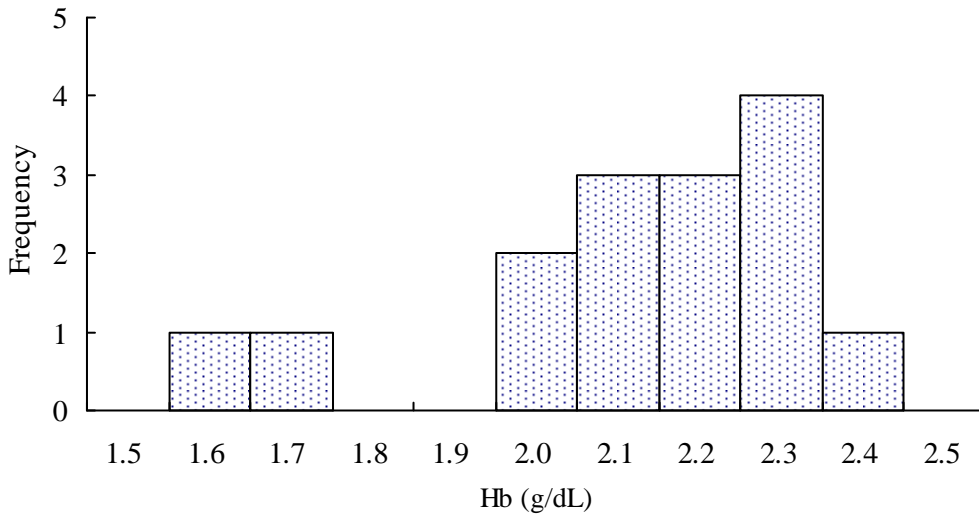
**Median = 2.2 (n = 15)**  
**Mean = 2.3 (n = 15)**  
**S.D. = 0.4**  
**Ref. Value\* = 2.5**

\* The reference values were determined by using Trinity Biotech 345-UV reagent at the QC reference Lab.

Fig PHIQ-3

# External Quality Assurance-Hb

## Survey No : RH2013-09



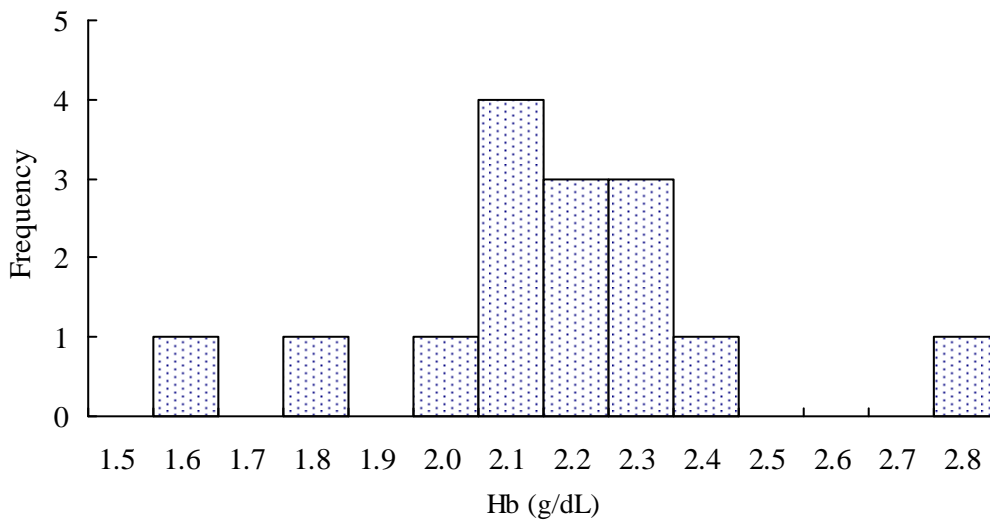
**Sample 1**

**Median = 2.2 (n = 15)**

**Mean = 2.1 (n = 15)**

**S.D. = 0.2**

**Ref. Value = 2.3**



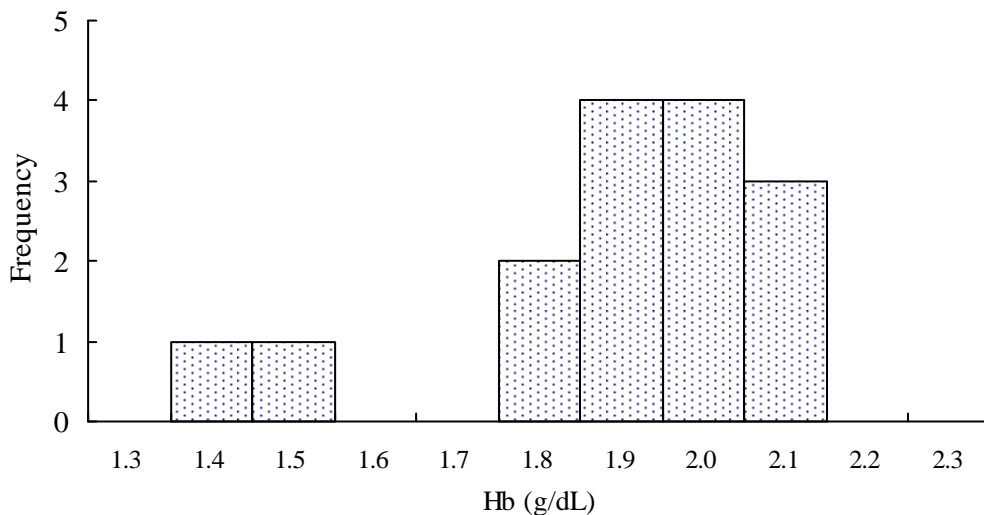
**Sample 2**

**Median = 2.2 (n = 15)**

**Mean = 2.2 (n = 15)**

**S.D. = 0.3**

**Ref. Value = 2.3**



**Sample 3**

**Median = 1.9 (n = 15)**

**Mean = 1.9 (n = 15)**

**S.D. = 0.2**

**Ref. Value = 1.9**

Fig PHIQ-4

# External Quality Assurance (EQA) Program

## for

### G6PD Quantitative Test in Philippines

Survey No. : RH2013-09      Sample sent on : 2013 / 09 / 02      Reporting deadline : 2013 / 09 / 09

This Survey [S2](#) has been used in 2010-2013 (n = 5 ; Survey / Sample No.) :  
[RH2010-07/S3](#) ; [RH2011-01/S1](#) ; [RH2011-09/S3](#) ; [RH2012-01/S1](#) ; [RH2013-09/S2](#) ;

#### Intermediate Measurement Precision of G6PD Quantitative Test

Lab	Survey : <a href="#">RH2013-09 / Sample 2</a>		Program period: <a href="#">2010 ~ 2013<sup>4</sup></a>			
	U/gHb	SDI <sup>2</sup>	Mean	n	SD	CV
F01	10.9	1.1	10.1	5	0.7	6.9%
F02	12.9	0.6	11.9	<a href="#">4<sup>5</sup></a>	1.8	15.1%
F03	11.1	-1.1	13.1	5	1.9	14.5%
F04	10.9	0.7	9.9	5	1.5	15.2%
F05	12.0	-1.2	13.3	5	1.1	8.3%
F06	11.9	-0.3	12.2	5	1.1	9.0%
F07	10.3	-0.9	12.2	<a href="#">5*</a>	2.1	17.2%
F08	10.7	-0.4	11.7	5	2.7	23.1%
F09	12.5	0.9	9.6	<a href="#">5**</a>	3.1	32.3%
F10	12.9	0.8	11.6	5	1.6	13.8%
F11	10.0	—	10.8	2	1.13	10.5%
F12	13.8	—	13.8	1	—	—
F13	11.6	—	11.6	1	—	—
F14	8.6	—	8.6	1	—	—
F15	10.3	—	10.3	1	—	—
Total participating laboratories = 15						
Median	11.1	0.1	11.6	—	1.6	14.5%
Range	8.6 ~ 13.8	-1.2 ~ 1.1	8.6 ~ 13.8	—	0.7 ~ 3.1	6.9% ~ 32.3%

- 1).            : Outlier (this result has been dropped and was not included in calculation of Mean, SD and CV).
  - 2). Standard Deviation Index (SDI) = (Individual Result - Individual Mean) / Individual SD
  - 3). The reference values were determined by reference method at the QC reference Lab.
  - 4). Survey / Sample No. : [RH2010-07/S3](#) ; [RH2011-01/S1](#) ; [RH2011-09/S3](#) ; [RH2012-01/S1](#) ; [RH2013-09/S2](#) ;
  - 5). Not participated in the [RH2012-01](#) survey.
- \*. An error result of [RH2011-01](#) was excluded.  
 \*\*. An error result of [RH2011-09](#) and [RH2012-01](#) were excluded.  
 \*\*\* Intermediate Measurement Precision ; ISO 3534-2:2006

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