

**Table S1. The list of haematological parameters adopted from laboratory procedure manual by the CDC.**

Cell	Parameter	Measured	Pulse Size	Reported Units
WBC	<b>White Blood Cell Count</b> This is the number of leukocytes measured directly, multiplied by the calibration constant, and expressed as $n \times 10^3$ cells/ $\mu$ L	WBC bath	$\geq 35$ fL	$n \times 10^3$ cells/ $\mu$ L
RBC	<b>Red Blood Cell Count</b> This is the number of erythrocytes measured directly, multiplied by the calibration constant, and expressed as $n \times 10^6$ cells/ $\mu$ L	RBC bath	36 to 360 fL	$n \times 10^6$ cells/ $\mu$ L
Hb	<b>Hemoglobin Concentration</b> Weight (mass) of hemoglobin determined from the degree of absorbance found through photocurrent transmittance is: $Hb \text{ (g/dL)} = \text{Constant} \times \log_{10}(\text{Reference \% T} / \text{Sample \% T})$	WBC bath	525 nm	g/dL
Hct	<b>Hematocrit</b> This is the relative volume of packed erythrocytes to whole blood, computed as: $Hct (\%) = RBC \times MCV/10$	Computed	$RBC \times MCV/10$	% Percent
MCV	<b>Mean Cell Volume</b> This is the average volume of individual erythrocytes derived from the RBC histogram.	Derived from RBC histogram	# x size of RBC / Total RBC	fL
MCH	<b>Mean Cell Hemoglobin</b> This is the weight of hemoglobin in the average erythrocyte count, computed as: $Hb / RBC \times 10$	Computed	$Hb/RBC \times 10$	pg
MCHC	<b>Mean Cell Hemoglobin Concentration</b> This is the average weight of hemoglobin in a measured dilution, computed as: $Hb / Hct \times 100$	Computed	$Hb/Hct \times 100$	g/dL
RDW	<b>Red Cell Distribution Width</b> RDW represents the size distribution spread of the erythrocyte population derived from the RBC histogram. It is the coefficient of variation (CV), expressed in percent, of the RBC size distribution.	Derived from RBC histogram	CV expressed in % of the RBC size distribution	% Percent
Plt	<b>Platelet Count</b> This is the number of thrombocytes derived from the Plt histogram and multiplied by a calibration constant. This number is expressed as: $n \times 10^3$ cells/ $\mu$ L	RBC bath	2 to 20 fL	$n \times 10^3$ cells/ $\mu$ L
MPV	<b>Mean Platelet Volume</b> MPV is the average volume of individual platelets derived from the Plt histogram. It represents the mean volume of the Plt population under the fitted Plt curve multiplied by a calibration constant, and expressed in femtoliters.	Derived from Plt histogram	Mean volume of Plt population under the fitted curve x constant	fL
NE%	<b>Neutrophil Percent</b> The percentages of leukocytes from each category are derived from the scatterplot.	Derived from scatterplot	# cells inside NE area / # cells inside total cell area x 100	% Percent
NE #	<b>Neutrophil Number</b> The absolute numbers of leukocytes in each category are computed from the WBC count and the differential percentage parameters.	Absolute number	$NE\%/100 \times WBC \text{ Count}$	$10^3$ cells/ $\mu$ L

LY%	<b>Lymphocyte Percent</b> The percentages of leukocytes from each category are derived from the scatterplot.	Derived from scatterplot	# cells inside LY area/# cells inside total cell area x 100	% Percent
LY#	<b>Lymphocyte Number</b> The absolute numbers of leukocytes in each category are computed from the WBC count and the differential percentage parameters.	Absolute number	Ly%/100 x WBC Count	10 <sup>3</sup> cells/μL
MO%	<b>Monocyte Percent</b> The percentages of leukocytes from each category are derived from the scatterplot.	Derived from scatterplot	# cells inside MO area/# cells inside total cell area x 100	% Percent
MO#	<b>Monocyte Number</b> The absolute numbers of leukocytes in each category are computed from the WBC count and the differential percentage parameters.	Absolute number	MO%/100 x WBC Count	10 <sup>3</sup> cells/μL

\*PDW - Platelet Distribution Width and Pct - Plateletcrit are NOT for diagnostic use and do not print. Coulter uses the value for PDW is an internal check on the reported platelet parameters. The table outlines the description of the parameters, abbreviation, mode of measurement, pulse size, and the units of reporting.