

ICSH recommendation for standardization of reporting units used in the blood count, 2016

<i>Blood count parameter</i>	<i>Reporting Units currently used worldwide</i>	Recommended reporting unit	<i>Reason(s) for recommendation</i>
WBC and platelet counts	$\times 10^9/L$ Giga/L $\times 10^3/\mu L$ Number per μL Number per mm^3	$\times 10^9/L$	SI unit; previously recommended by ICSH; current majority use worldwide
WBC differential count	$\times 10^9/L$ Percentage (%) $\times 10^3/\mu L$ Number per μL Number per mm^3	$\times 10^9/L$ (rather than % where technology and/or IT capability allows)	SI unit; previously recommended by ICSH; more clinically meaningful than %
RBC count	$\times 10^{12}/L$ $\times 10^6/\mu L$ Tetra/L Number per mm^3	$\times 10^{12}/L$	SI unit; previously recommended by ICSH; current majority use worldwide
Haemoglobin	g/L g/dL mmol/L g/100 mL	g/L	True SI unit unlike g/dL or g/100 mL; ICSH previously did not recommend mmol/L (used in a minority of countries).
PCV/haematocrit	L/L Percentage (%)	L/L (% \div 100 = L/L)	SI unit; previously recommended by ICSH
MCV (mean cell volume)	fL μm^3	fL	SI unit; previously recommended by ICSH; current majority use worldwide
MCH (mean cell haemoglobin)	pg fmol	pg	SI unit; previously recommended by ICSH; current majority use worldwide
MCHC (mean cell haemoglobin concentration)	As per haemoglobin	As per haemoglobin (g/L)	As per haemoglobin
RDW (red Cell distribution width) PDW (platelet distribution width) and MPV (mean platelet volume)	% fL %CV	fL as a preference (where routinely reported)	SI unit; already reported as fL in many countries
Reticulocytes	$\times 10^9/L$ Percentage (%) Giga/L Number per mm^3 $\times 10^6/\mu L$	$\times 10^9/L$ (rather than % where technology and/or IT capability allows)	SI unit; previously recommended by ICSH; current majority use worldwide
Nucleated RBC count	$\times 10^9/L$ per 100 WBC $\times 10^3/\mu L$	$\times 10^9/L$ (rather than per 100 WBC where technology and/or IT capability allow)	SI unit; more clinically meaningful than per 100 WBC