

The Study Bulletin serves to clarify which units are to be recorded for laboratory data , as well as how to accurately convert results reported in units different than those required for the study.

If you have any questions please do not hesitate to contact Janet Overvelde, Project Leader.

Units Used to Record Laboratory Data

The following list outlines the units to be used to score APACHE II and to enter Daily Data into the EDC System.

<u>Variable</u>	<u>Units</u>
Temperature	Degrees Celsius (°C)
White Blood Count (WBC)	$\times 10^9/L$
Platelets	$\times 10^9/L$
Blood Sugar	mmol/L
Creatinine	$\mu\text{mol}/L$
*Urea	mmol/L
Bilirubin	$\mu\text{mol}/L$
Albumin	g/L

*For US sites, BUN should be converted to urea.

To assist sites whose institution uses units other than those outlined above, we have created a Unit Conversion Calculator. This calculator is available in two places: (1) on the web: www.criticalcarenutrition.com > REDOXSC[©] Study > Resources > Study Procedures Manual; and (2) as a help file link on the Daily Data form of the EDC System. The calculator provides conversions between Conventional and SI units.

To use the calculator, simply enter the result as reported by your institution into the blue column of the calculator, the converted result will appear in the yellow column.

Convert from Conventional units to SI units			
	Enter value		SI value
White blood cell count		$\times 10^3/\mu\text{L}$	$\times 10^9/L$
White blood cell count		$\times 10^3/\text{mm}^3$	$\times 10^9/L$
Platelets (thrombocytes)		$\times 10^3/\mu\text{L}$	$\times 10^9/L$
Platelets (thrombocytes)		$\times 10^3/\text{mm}^3$	$\times 10^9/L$
Creatinine	5.3 mg/dl		469 $\mu\text{mol}/L$
Creatinine	mg/L		$\mu\text{mol}/L$
Albumin	g/dl		g/L
Glucose	mg/dl		mmol/L
Glucose	g/L		mmol/L
Total Bilirubin	mg/dl		$\mu\text{mol}/L$
Total Bilirubin	mg/L		$\mu\text{mol}/L$
Urea	mg/L		mmol/L
Urea	g/L		mmol/L
BUN → Urea	mg/dl		mmol/L
BUN → Urea	g/L		mmol/L

For example, to convert creatinine reported by the lab as 5.3 mg/dL:

1. Enter '5.3' in the appropriate blue column;
2. The converted value '469 $\mu\text{mol}/L$ ' appears in the yellow column;
3. Enter the newly converted value in the yellow column into the EDC System.

If you require a conversion that is not found in the Conversion Calculator, please contact the Project Leader.