Measurement of Uncertainty (MU) QC Calculator

Assay: ANY TEST
Method: ANY ANALYZER
Control: ANY CONTROL

		(A)	(B)	Uncertainty (SD)
SD (intra-assay)	N (intra-assay)	SEM (intra-assay)	SD (inter-assay)	u=Sqrt(A^2 + B^2)
2.5	**20**	**0.5590**	**2.9**	**2.9534**

Expanded Uncertainty (U) = 2 x u for 95% Confidence Level **Reset**

Confidence Level	Mean	Low	High
1 SD (68.26%)	**100**	**97.047**	**102.953**
2 SD (95.44%)	**100**	**94.093**	**105.907**
3 SD (99.74%)	**100**	**91.140**	**108.860**

1. Enter SD (intra-assay) and N of intra-assay to calculate Standard Error of the Mean (SEM) of the intra-assay precision (A) SEM = SD(intra-assay)/Sqrt(N)
2. Enter SD of the inter-assay precision (B) - for Uncertainty (SD) calculation
3. Enter the Mean of the Assay to calculate Confidence Limits
4. Round off the limits values to same decimal place as the Mean
   (note: some assays may require the provided 3 decimal places)

Reference:

'Using Sigma metrics and Measurement Uncertainty in QC'
by Edward Hill, BSc, Medical Laboratory Observer August 2017.vol 49.No. 8

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