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| xi  n  =  SD =  http://standard-deviation.appspot.com/images/standard-deviation-2.png  CV% = (SD / ) \* 100%  Mean – Target  SD  z-score  Bias = -True Value  Absolute Bias =| -True Value|  % bias = ( bias/target value) \* 100%  TE = | -True Value| + (z factor \* SD) = | bias| + (z factor\*SD)  | -True Value| + 2 SD ease for computation  | -True Value| + 1.96 SD 97.5% of the population of data points included in the estimation of total error  | -True Value| + 1.65 SD 95% of the population of data points included in the estimation of total error  % TE = % bias +( z factor \* CV%) ≅ (TE in units / Target Value in units) \* 100%  % bias + 2CV% ease for computation  % bias + 1.96 CV% 97.5% of the population of data points included in the estimation of total error  % bias + 1.65 CV% 95% of the population of data points included in the estimation of total error  TE < TEA  Sigma = [(TEa - |biasobs|)/SDobs]  ΔSEc = [(TEa - |biasobs|)/SDobs] - z factor = Sigma – z factor  Sigma – 1.65 = ΔSEc value used by Dr. Westgard where 5% of the population of data points exceed TEA limits  Sigma= ΔSEc + 1.65  SDI= (lab – group)/ SDgroup  CVI (CVR) = within lab CV/peer group CV |