9 August 2022

To: Recipients of EP14, 4th ed.

From: Jennifer K. Adams, MT(ASCP), MSHA
Vice President, Standards and Quality

Subject: Correction

This notice is intended to inform users of corrections made to CLSI document EP14, *Evaluation of Commutability of Processed Samples*, 4th ed. The corrections are described and shown below.

Appendix A. Description of Mathematical Model Used for Evaluating Commutability of Processed Samples Using Deming Regression

Equations (15b), (15c), and (16) are listed as:

$$\frac{\hat{\sigma}^2\left(\varepsilon_{\bar{X}}\right)+\hat{\sigma}^2\left(\varepsilon_{\bar{\bar{X}}}\right)=\hat{\sigma}^2\left(\varepsilon_{\bar{X}}\right)\left(1+1/n\right)=\hat{\sigma}^2\left(\varepsilon_X\right)\left(1+1/n\right)}{N_{Pc}} \quad (15b)$$

$$\frac{\hat{\sigma}^2\left(\varepsilon_{\bar{Y}}\right)+\hat{\sigma}^2\left(\varepsilon_{\bar{\bar{Y}}}\right)=\hat{\sigma}^2\left(\varepsilon_{\bar{Y}}\right)\left(1+1/n\right)=\hat{\sigma}^2\left(\varepsilon_Y\right)\left(1+1/n\right)}{N_{Pc}} \quad (15c)$$

$$\sigma(\bar{Y}_{\mathrm{Pc\_}pred})\approx\sqrt{\frac{\left(\bar{X}_{Pc}-\bar{\bar{X}}\right)^2\hat{\sigma}^2_{\beta H}+\left(\hat{\beta}^2_H\hat{\sigma}^2\left(\varepsilon_X\right)+\hat{\sigma}^2\left(\varepsilon_Y\right)\right)\left(1+1/n\right)}{N_{Pc}}} \quad (16)$$

The correct equations (15b), (15c), and (16) are:

$$\hat{\sigma}^2\left(\varepsilon_{\bar{X}}\right)+\hat{\sigma}^2\left(\varepsilon_{\bar{\bar{X}}}\right)=\hat{\sigma}^2\left(\varepsilon_{\bar{X}}\right)\left(1+1/n\right)=\frac{\hat{\sigma}^2\left(\varepsilon_X\right)\left(1+1/n\right)}{N_{Pc}} \quad (15b)$$

$$\hat{\sigma}^2\left(\varepsilon_{\bar{Y}}\right)+\hat{\sigma}^2\left(\varepsilon_{\bar{\bar{Y}}}\right)=\hat{\sigma}^2\left(\varepsilon_{\bar{Y}}\right)\left(1+1/n\right)=\frac{\hat{\sigma}^2\left(\varepsilon_Y\right)\left(1+1/n\right)}{N_{Pc}} \quad (15c)$$

$$\sigma(\bar{Y}_{\mathrm{Pc\_}pred})\approx\sqrt{\left(\bar{X}_{Pc}-\bar{\bar{X}}\right)^2\hat{\sigma}^2_{\beta H}+\frac{\left(\hat{\beta}^2_H\hat{\sigma}^2\left(\varepsilon_X\right)+\hat{\sigma}^2\left(\varepsilon_Y\right)\right)\left(1+1/n\right)}{N_{Pc}}} \quad (16)$$

Appendix C. Examples of Completed Analyses

On pages 38 and 47, equation (16) was corrected.

On page 39, equation (16) is listed as:

$$\sigma(\bar{Y}_{Pc\_pred}) \approx \sqrt{\frac{\left(\bar{X}_{Pc} - \bar{\bar{X}}\right)^2 \hat{\sigma}^2_{\beta H} + \left[\hat{\beta}^2_H \hat{\sigma}^2(\varepsilon_X) + \hat{\sigma}^2(\varepsilon_Y)\right]\left(1 + \frac{1}{n}\right)}{N_{Pc}}} = 3.82$$

The correct equation (16) is:

$$\sigma(\bar{Y}_{Pc\_pred}) \approx \sqrt{\left(\bar{X}_{Pc} - \bar{\bar{X}}\right)^2 \hat{\sigma}^2_{\beta H} + \frac{\left(\hat{\beta}^2_H \hat{\sigma}^2(\varepsilon_X) + \hat{\sigma}^2(\varepsilon_Y)\right)(1 + 1/n)}{N_{Pc}}} = 3.82$$

On page 48, equation (16) is listed as:

$$\sigma(\bar{Y}_{Pc\_pred}) \approx \sqrt{\frac{\left(\bar{X}_{Pc} - \bar{\bar{X}}\right)^2 \hat{\sigma}^2_{\beta H} + \left[\hat{\beta}^2_H \hat{\sigma}^2(\varepsilon_X) + \hat{\sigma}^2(\varepsilon_Y)\right]\left(1 + \frac{1}{n}\right)}{N_{Pc}}} = 0.0226$$

The correct equation (16) is:

$$\sigma(\bar{Y}_{Pc\_pred}) \approx \sqrt{\left(\bar{X}_{Pc} - \bar{\bar{X}}\right)^2 \hat{\sigma}^2_{\beta H} + \frac{\left(\hat{\beta}^2_H \hat{\sigma}^2(\varepsilon_X) + \hat{\sigma}^2(\varepsilon_Y)\right)(1 + 1/n)}{N_{Pc}}} = 0.0226$$

If you require any additional clarification regarding these corrections, please contact CLSI Customer Service (customerservice@clsi.org).

We appreciate your commitment to CLSI and regret any inconvenience.