

## CORRECTION

# Correction: Time to revisit the endpoint dilution assay and to replace the TCID<sub>50</sub> as a measure of a virus sample's infection concentration

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There is a semantic error in the description of the ratio of TCID<sub>50</sub> to expected infections or SIN in the text, where the ratio is described as being 1 over its correct value.

Throughout the article, the number of infections that 1 TCID<sub>50</sub> is expected to cause has been incorrectly reported as either being 1.44 infections in theory or 1.781 infections when estimated via Reed-Muench (RM) or Spearman-Kärber (SK) method. It should be the inverse of those quantities such that 1 TCID<sub>50</sub> is expected to cause 0.6931 infection in theory or 0.5615 infection when estimated via the RM or SK method.

All occurrences of the numbers  $-1/\ln(50\%) = 1.44$  and  $e^{\gamma} = 1.781$  in the text should be replaced by  $-\ln(50\%) = 0.6931$  and  $e^{-\gamma} = 0.5615$ , respectively. There is a single exception to this on page 6 where the re-computed ratios are correctly expressed as “(RM/1.781)/SIN” and “(SK/1.781)/SIN”.

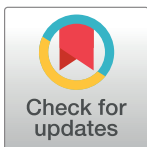
Additionally, in the Discussion, the statement:

“While, in theory, the intended MOI can be obtained by multiplying the TCID<sub>50</sub> by 0.7 (or rather  $\ln(2) = 0.693$ ), one should instead multiply by 0.561 to account for the overestimation of the TCID<sub>50</sub> by RM and SK.”

Should read:

“While, in theory, the intended MOI can be obtained by inoculating with 1.44 TCID<sub>50</sub> ( $-1/\ln(50\%)$ ) to infect one cell, in reality 1.781 TCID<sub>50</sub> estimated via the RM or SK method is required to infect one cell, to account for the method's overestimation of the TCID<sub>50</sub>.”

This semantic error was confined to the text of the article. None of the analysis, conclusions, publicly available code, or web calculator are affected.



## OPEN ACCESS

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## Reference

1. Cresta D, Warren DC, Quirouette C, Smith AP, Lane LC, Smith AM, et al. (2021) Time to revisit the endpoint dilution assay and to replace the TCID<sub>50</sub> as a measure of a virus sample's infection concentration. *PLoS Comput Biol* 17(10): e1009480. <https://doi.org/10.1371/journal.pcbi.1009480> PMID: 34662338