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Corrigendum: Vaccine safety surveillance using routinely collected healthcare data—An empirical evaluation of epidemiological designs

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A Corrigendum on

Vaccine safety surveillance using routinely collected healthcare data—An empirical evaluation of epidemiological designs

by Schuemie MJ, Arshad F, Pratt N, Nyberg F, Alshammari TM, Hripcsak G, Ryan P, Prieto-Alhambra D, Lai LYH, Li X, Fortin S, Minty E and Suchard MA (2022). Front. Pharmacol. 13: 893484. doi: 10.3389/fphar.2022.893484

In the published article, there was an error in Figure 4 and Figure 5 as published. After publication, the authors found that the positive control imputation multiplication was accidentally applied twice, meaning the intended multiplication of 1.25, 2, and 4 actually were $1.25^2 = 1.5625$, $2^2 = 4$, and $4^2 = 16$, respectively. This means the type 2 error in Figure 4 and the time to 50% sensitivity in Figure 5 were underestimated. The corrected Figure 4 and Figure 5 appear below.

In the published article the same error was present in the Supplementary Material. This means the type 2 error and the time to 50% sensitivity were underestimated. The correct Supplementary Data Sheet S1 can be found in the Supplementary Materials.
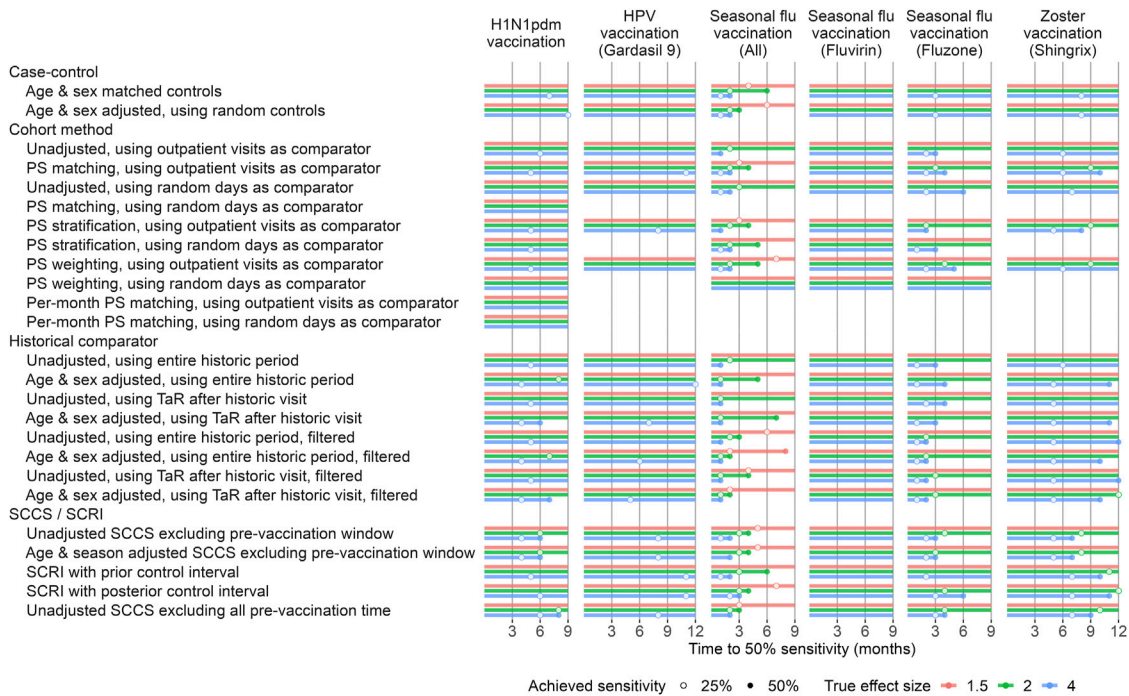
FIGURE 5
Time to 50% sensitivity after calibration. For each method variation and vaccine group, the number of months of data needed to achieve 50% sensitivity based on the calibrated MaxSPRT in the Optum EHR database are shown, stratified by true effect size of the positive controls. HPV = Human papillomavirus, PS = Propensity Score, SCCS = Self-Controlled Case Series, SCRI = Self-Controlled Risk Interval, TaR = Time-at-Risk.
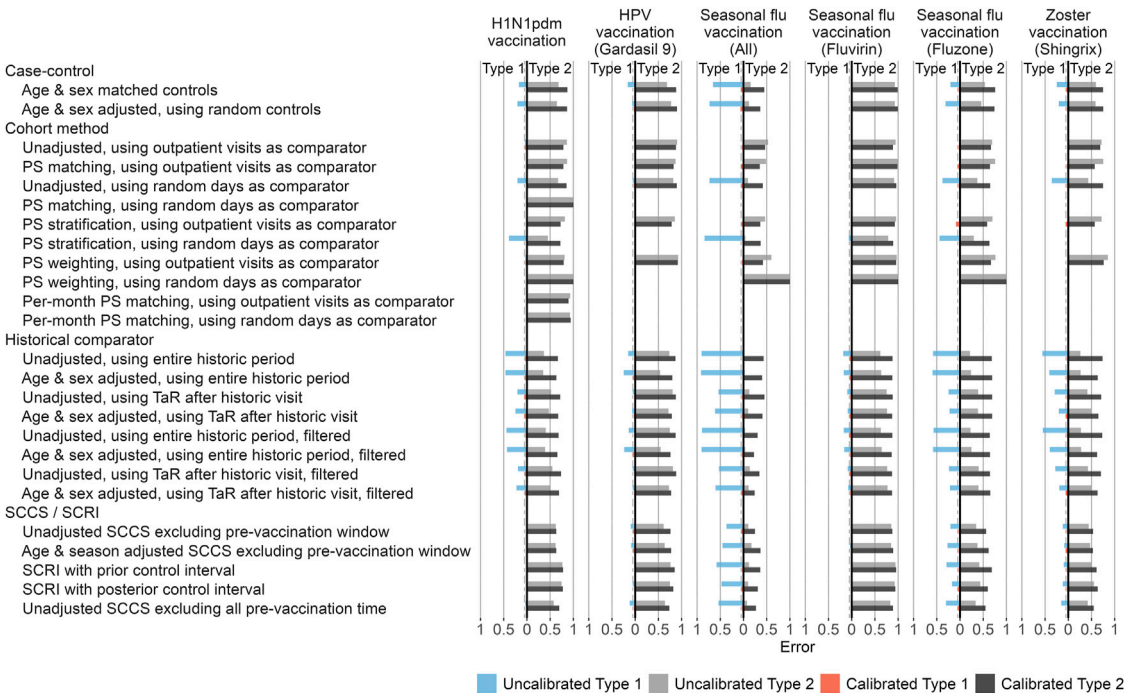

FIGURE 4
Type 1 and 2 error before and after empirical calibration. For each method variation and vaccine group, the type 1 and 2 error before and after empirical calibration in the Optum EHR database are shown. The x-axis indicates the type 1 error (higher values to the left) and type 2 error (higher values to the right), based on the (calibrated) one-sided p-value. The dashed line indicates nominal type 1 error of 5%. HPV = Human papillomavirus, PS = Propensity Score, SCCS = Self-Controlled Case Series, SCRI = Self-Controlled Risk Interval, TaR = Time-at-Risk.

The authors apologize for these errors and state that they does not change the scientific conclusions of the article in any way. The original article has been updated.

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Supplementary material

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fphar.2022.1088973/full#supplementary-material