



**Graier T, Weger W, Sator P-G, et al. Effectiveness and clinical predictors of drug survival in psoriasis patients receiving apremilast: A registry analysis. *JAAD Int.* 2021;2:62-75.**

On behalf of our coauthors, we write to report errors that occurred in the original article “Effectiveness and clinical predictors of drug survival in psoriasis patients receiving apremilast: A registry analysis.” The errors were elucidated when one author manually extracted data for a new independent analysis from the Psoriasis Registry Austria and tried to merge it with automatically extracted data from the electronic data files of the registry. We discovered an inconsistency regarding biologic naïve and biologic non-naïve patients, due to two coding errors. One error caused previous treatment with some non-biologics to be considered as a biologic treatment. The second error caused that some treatments with biologics or non-biologic treatments were not or not correctly identified. Together these errors caused a total of 48 of 367 patients to be wrongly considered as biologic non-naïve. In fact, only 78 (21.3%) of patients had received previous biologic treatment, instead of 126 (34.3%) as depicted in Fig 4E.

The errors also caused wrong patient numbers in Table IX: 17 (16.5%) of 103 patients under 40 years of age were biologic non-naïve instead of 34 (33.0%) patients. For patients  $\geq 40$  years of age at treatment start 61 (23.1%) patients were biologic non-naïve instead of 92 (34.8%) patients. Furthermore, this led to an underestimation of patients that had received previous treatments and the total number of previous treatments as depicted in Table IV. In fact, 308 (83.9%) patients instead of 305 (83.1%) patients had received previous treatments. The total number of previous treatments was 622, instead of 428.

Our study had revealed that drug survival of apremilast decreased significantly in patients younger than 40 years (relative hazard ratio [confidence interval, CI], 1.493 [1.111-2.007],  $P = .008$ ). Based on the corrected data we now identified previous biologic treatment as an additional factor significantly decreasing drug survival of apremilast treatment with a relative hazard ratio of 1.662 (CI, 1.198-2.305,  $P = .002$ ) instead of 1.269 (CI, 0.949-1.696,  $P = .108$ ) as depicted in Table VIII. This also led to slightly different drug survival rates (CI) for biologic naïve and non-naïve patients in Table VII: naïve 89.2% (85.0-92.4) instead of 91.4% (86.9-94.3), 77.9% (72.4-82.4) instead of 78.6% (72.5-83.5) and 60.2% (53.6-66.1) instead of 59.6% (52.3-66.2), at 3, 6 and 12 months respectively; non-naïve 74.6% (63.1-83.0) instead of 76.2% (67.6-82.8), 60.0% (47.7-70.3) instead of 65.5 (56.2-73.3), 46.2% (33.7-57.7) instead of 52.5% (42.8-61.4), at 3, 6 and 12 months respectively. The median drug survival (CI) in months for biologic naïve patients changed from 17.4 (12.9-25.2) to 18.2 (13.11-25.2), and for biologic non-naïve patients from 13.1 (7.3-16.8) to 11.8 (5.1-15.1). These findings are consistent with results from a recently published study, reporting an increased risk for drug discontinuation in biologic non-naïve patients receiving apremilast (hazard ratio of 3.86).<sup>1</sup> Furthermore, we noticed that the impact of arthritis on drug survival in the Kaplan-Meier plot of Fig 4B did not match with the relative hazard ratio in Table VIII. This was caused by the interchange of numerator and denominator in the study’s programming code compared to the code of the database, leading to the output of the reciprocal value. However, this error remains without statistical significance. By cross checking the rest of the manuscript, we noticed a few additional minor rounding errors in Tables X, XI, and XII, and a duplicate labeling in Fig 5 (the labeling of Fig 5B should read inverse involvement).

Besides all other major conclusions of the study remain unchanged and valid. This includes psoriasis area and severity index response rates, reasons for treatment discontinuation and side effects as well as post apremilast treatments. Furthermore the relative hazard ratios for gender, obesity or nail, palmoplantar, scalp and intertriginous involvement remain also unchanged as reported in the paper.

We sincerely apologize for the errors we made, and the inconvenience this caused *JAAD International* and its readership.

#### REFERENCE

1. Kapniri E, Dalamaga M, Papadavid E. Comorbidities burden and previous exposure to biological agents may predict drug survival of apremilast for psoriasis in a real-world setting. *Dermatol Ther.* 2020;33(6):e14168.