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Correction to "Enhanced Nicotine Metabolism in HIV-1-Positive Smokers Compared with HIV-Negative Smokers: Simultaneous Determination of Nicotine and its Four Metabolites in Their Plasma Using a Simple and Sensitive Electrospray Ionization Liquid Chromatography—Tandem Mass Spectrometry Technique"

For the above article [Earla R, Ande A, McArthur C, Kumar A, and Kumar S (2014) *Drug Metab Dispos* **42**:282–293, doi: 10.1124/dmd.113.055186], a corrigendum is presented for Table 4 on page 288 and Figs. 3 and 4 on pages 290 and 291, respectively. The corrigendum includes the removal of data from controversial subjects as determined by the University of Missouri-Kansas City Institutional Review Board (UMKC-IRB). Data were removed from HIV-negative smokers (patients 12–17) and HIV-1–positive smokers (patients 1 and 6) from Table 4, and data from the remaining subjects in Fig. 3 were then analyzed. Figure 4 contains a representation of the data (mean ± S.D.) from Table 4. In general, the data analysis upon the removal of these subjects showed an almost identical pattern to the original analysis. The differences between HIV-negative smokers and HIV-1–positive smokers with nicotine and its metabolites (cotinine, *trans*-3'-hydroxycotinine, nornicotine, and norcotinine) (Fig. 3) are similar to Fig. 3 of the original article. For example, there is a significant decrease in the levels of nicotine and a significant increase in the levels of nornicotine in HIV-1–positive smokers compared with HIV-negative smokers. However, there are no significant changes in the levels of other nicotine metabolites between these two groups. In conclusion, the results suggested that nicotine metabolism is increased in HIV-1–infected smokers compared with HIV-negative smokers, which is the same as the conclusion obtained in the original manuscript.

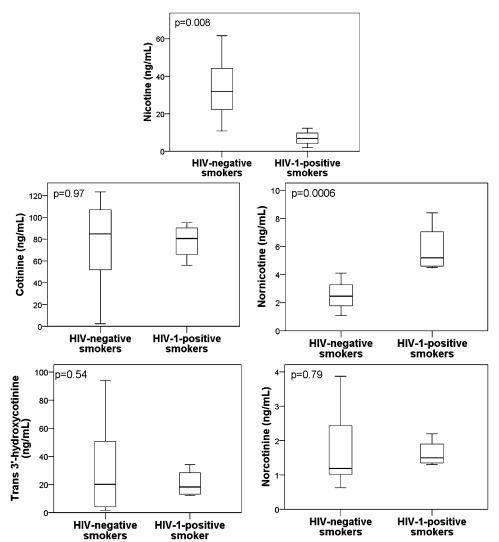


Fig. 3. The levels of nicotine, cotinine, *trans*-3'-hydroxycotinine, nornicotine, and norcotinine in the plasma of HIV-1-positive (n=4) and HIV-negative smokers (n=11) presented in an IBM SPSS boxplot. Boxplot shows distribution of all individuals, median, first quartile below the median, third quartiles above the median, and outliers in both HIV-1-positive smokers and HIV-negative smokers plasma.

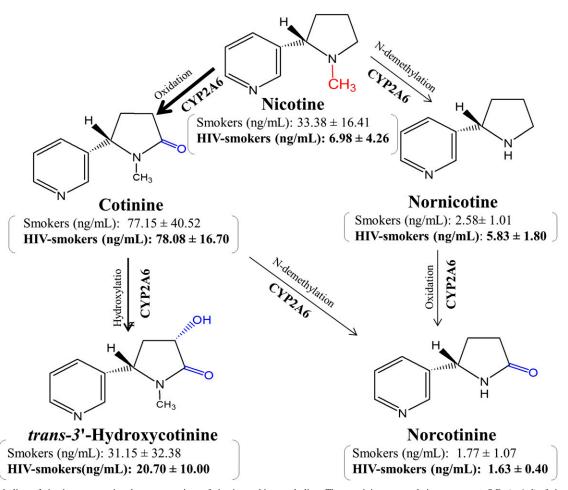


Fig. 4. The metabolism of nicotine representing the concentrations of nicotine and its metabolites. The remaining mean relative amounts  $\pm$  S.D. (ng/ml) of nicotine, cotinine, nornicotine, norcotinine, and *trans*-3'-hydroxycotinine found in the plasma of both HIV-1–positive smokers (n=4) and HIV-negative smokers (n=11) are shown in parenthesis. The intensity of arrows suggests relative contribution and amounts of CYP2A6-mediated pathways for nicotine metabolism. The nicotine is mainly metabolized to cotinine, followed by *trans*-3'-hydroxycotinine. In addition, nicotine is also metabolized by other pathways to nornicotine and norcotinine. These are standard chemicals and the structures were made using ChemDraw Ultra Version 6.0.1 (PerkinElmer, Waltham, MA).

TABLE 4

Determination of nicotine, nornicotine, cotinine, norcotinine, and *trans-3'*-hydroxycotinine in plasma from HIV-1–positive and HIV-negative smokers

Patient	CD4 Count	Nicotine	Cotinine	Trans-3'-Hydroxycotinine	Nornicotine	Norcotinine
		ng/ml				
HIV-negative smokers						
1	1416	10.87	2.33	2.28	4.10	0.88
2	938	33.07	115.55	68.19	3.97	2.45
3	1488	14.85	123.38	24.33	2.15	1.61
4	1289	27.49	84.93	4.86	1.65	1.19
5	742	28.96	79.51	94.19	3.61	3.28
6	936	53.06	65.49	3.43	2.91	0.63
7	1438	61.59	119.04	71.65	1.91	3.87
8	1039	51.45	98.37	33.28	1.64	2.42
9	500	17.10	23.59	1.50	2.46	0.87
10	700	31.86	38.45	18.86	2.94	1.17
11	921	36.91	98.02	20.12	1.09	1.15
Mean $\pm$ S.D.		$33.38 \pm 16.41$	$77.15 \pm 40.52$	$31.15 \pm 32.38$	$2.58 \pm 1.01$	$1.77 \pm 1.08$
HIV-1-positive smokers						
2	584	6.50	56.00	34.10	4.70	1.60
3	13	1.90	75.80	12.20	4.50	1.30
4	540	12.30	85.40	14.00	5.70	1.40
5	412	7.20	95.10	22.50	8.40	2.20
Mean $\pm$ S.D.		$6.98 \pm 4.26$	$78.08 \pm 16.70$	$20.70 \pm 10.00$	$5.83 \pm 1.80$	$1.63 \pm 0.40$