

## **No Evidence of an Association Between Efavirenz Exposure and Suicidality Among HIV Patients Initiating Antiretroviral Therapy in a Real-World Data Analysis**

*Ella T. Nkhoma, PhD, MPH, John Coumbis, MD, MSPH, Amanda M. Farr, MPH, Stephen S. Johnston, MA, Bong Chul Chu, PhD, Lisa C. Rosenblatt, MD, MPH, Daniel Seekins, MD, and Angelina Villasis-Keever, MD, MSc*

### **Supplemental Digital Content**

**Supplemental Table 1.** Cohort Selection Attrition

	<b>Commercial Database, <i>n</i> (%)</b>	<b>Medicaid Database, <i>n</i> (%)</b>
Patients with $\geq 1$ prescription fill for an HIV-related ARV medication	90,086 (100.0)	26,981 (100.0)
Efavirenz	43,617	9766
Non-nucleoside reverse transcriptase inhibitors	9060	1983
Protease inhibitors (excluding ritonavir)	33,760	14,857
Integrase inhibitors	7764	1588
Fusion inhibitors	278	106
CC chemokine receptor type 5 antagonists	565	93
AND aged $\geq 12$ years at time of first ARV prescription fill	89,845 (99.7)	26,521 (98.3)
AND have continuous enrollment for 6 months prior to index date	34,004 (37.7)	11,431 (42.4)
AND do not have eligibility for Medicare	34,004 (37.7)	11,416 (42.3)
AND have no evidence of HIV-related ARV use prior to index date*	24,050 (26.7)	5763 (21.4)
AND have an HIV diagnosis prior to index date* or following index date	19,983 (22.2)	5154 (19.1)
Final study cohorts	19,983 (100.0)	5154 (100.0)
Initiated efavirenz-containing regimen	11,187 (56.0)	2224 (43.2)
Initiated efavirenz-free regimen	8796 (44.0)	2930 (56.9)

HIV = human immunodeficiency virus; ARV = antiretroviral.

\* Evaluated in available data starting January 1, 2004.

**Supplemental Table 2.** Additional Results for Propensity Score-Adjusted Models

	Commercial Database	Medicaid Database
<i>HRs of outcomes, treating efavirenz-free regimens as reference</i>		
PS-adjusted HR (95% CI) of suicidality		
≤180 days after initiation	0.980 (0.515–1.867)	0.782 (0.492–1.242)
181–365 days after initiation	0.789 (0.136–4.586)	0.451 (0.104–1.949)
>365 days after initiation	0.676 (0.033–13.990)	0.407 (0.035–4.763)
PS-adjusted HR (95% CI) of suicide attempt*	NA	NA
PS-adjusted HR (95% CI) of suicide attempt (expanded)		
≤180 days after initiation	0.856 (0.370–1.983)	0.419 (0.152–1.152)
181–365 days after initiation	1.999 (0.145–27.511)	0.552 (0.015–20.581)
>365 days after initiation	1.143 (0.014–95.889)	0.941 (0.005–166.912)
<i>IRRs and IRDs of outcomes, treating efavirenz-free regimens as reference</i>		
PS-adjusted IRR (95% CI) of suicidality	0.925 (0.559–1.548)	0.814 (0.546–1.202)
PS-adjusted IRD (95% CI) of suicidality	–20 (–250 to 180)	–520 (–2520 to 1180)
PS-adjusted IRR (95% CI) of suicide attempt	4.488 (0.566–204.425)	0.096 (0.002–0.661)
PS-adjusted IRD (95% CI) of suicide attempt*	—	—
PS-adjusted IRR (95% CI) of suicide attempt (expanded)	0.888 (0.436–1.89)	0.554 (0.241–1.198)
PS-adjusted IRD per 100,000 PYs (95% CI) of suicide attempt (expanded)	–20 (–200 to 130)	–540 (–1360 to 200)

HR = hazard ratio; PS = propensity score; CI = confidence interval; NA = not available; IRR = incidence rate ratio; IRD = incidence rate difference; PY = person-year.

\* Models did not converge given small number of events.