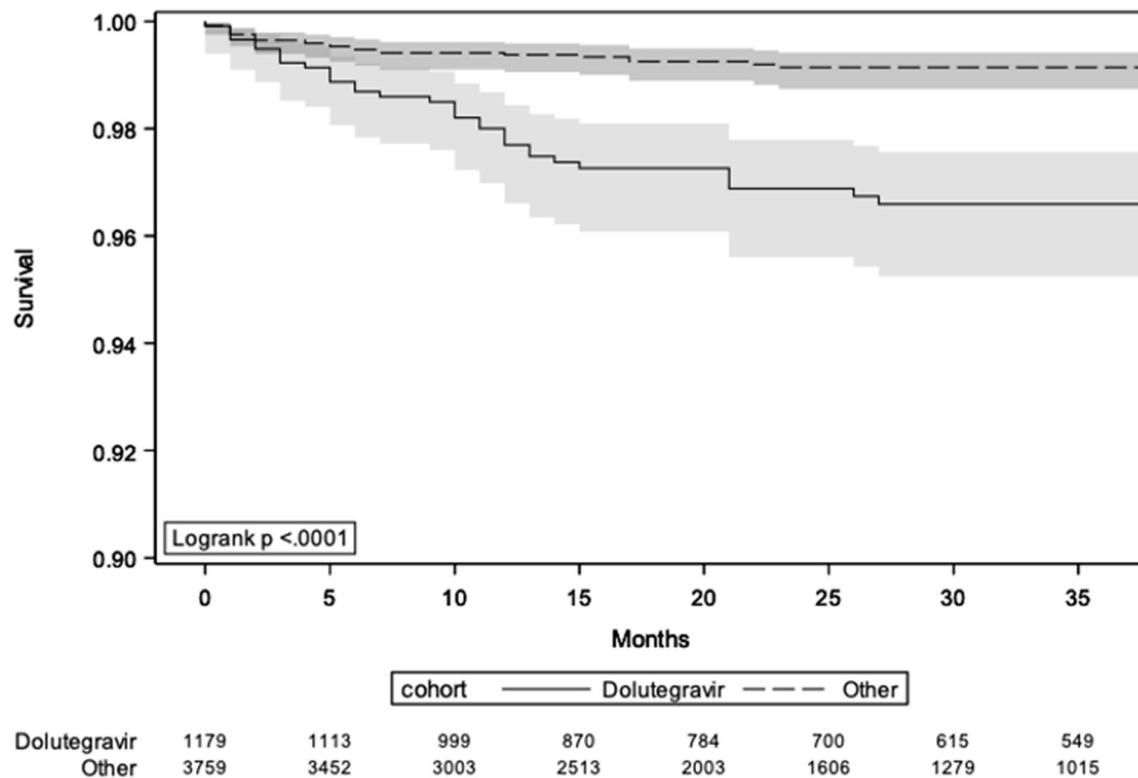


**Figure S1:** Survival analysis in strata of integrase inhibitors (INI) and non-INI-based regimens showed a significantly higher rate of discontinuations due to CNS-AE in INI (logrank  $p < 0.0001$ ).



**Table S1.** Crude and adjusted hazard ratio (HR) for discontinuation due to central nervous system events.

Variable	Crude HR	95% CI	P	Adjusted HR**	95% CI	P
Sex F (ref. M)	1.28	0.77-2.16	0.34			
Age (by 1 year)	1.02	1.00-1.04	0.10			
Age (ref. ≤50 years)	<b>1.97</b>	<b>1.21-3.21</b>	<b>0.006</b>	1.57	0.94-2.62	0.08
Weight (by 5 Kg)	0.99	0.91-1.08	0.89			
Ethnicity (ref. Caucasian)	1.23	0.53-2.85	0.62			
HCV-Ab+ (ref. HCV-Ab negative)	1.14	0.67-1.92	0.63			
Naïve (ref. experienced)	<b>2.06</b>	<b>1.21-3.51</b>	<b>0.008</b>	<b>2.44</b>	<b>1.39-4.28</b>	<b>0.002</b>
CDC stage (ref. A)						
B	0.88	0.50-1.56	0.66			
C	0.75	0.41-1.36	0.34			
CDC stage: chi-square for trend		0.92	0.34			
CD4 (ref. <250)						
250-499	1.32	0.65-2.69	0.44	1.28	0.64-2.61	0.47
500-749	1.30	0.59-2.84	0.51	1.11	0.49-2.51	0.80
≥750	<b>2.65</b>	<b>1.34-5.25</b>	<b>0.005</b>	<b>2.28</b>	<b>1.08-4.68</b>	<b>0.03</b>
CD4 class: chi-square for trend		7.02	0.008		3.66	0.055
Baseline psychiatric disorder (ref. no) *	<b>2.35</b>	<b>1.16-4.75</b>	<b>0.017</b>	<b>2.05</b>	<b>1.01-4.18</b>	<b>0.049</b>
Study cohort (ref. Dolutegravir)						
Lopinavir	<b>0.09</b>	<b>0.02-0.40</b>	<b>0.0009</b>	<b>0.12</b>	<b>0.03-0.52</b>	<b>0.005</b>
Atazanavir	<b>0.06</b>	<b>0.01-0.42</b>	<b>0.004</b>	<b>0.08</b>	<b>0.01-0.61</b>	<b>0.015</b>
Darunavir	<b>0.09</b>	<b>0.02-0.37</b>	<b>0.0008</b>	<b>0.11</b>	<b>0.03-0.44</b>	<b>0.002</b>
Rilpivirine	0.63	0.29-1.33	0.22	0.65	0.30-1.43	0.29
Raltegravir	<b>0.30</b>	<b>0.12-0.75</b>	<b>0.01</b>	<b>0.38</b>	<b>0.15-0.98</b>	<b>0.045</b>
Elvitegravir	<b>0.28</b>	<b>0.09-0.89</b>	<b>0.03</b>	<b>0.29</b>	<b>0.09-0.94</b>	<b>0.036</b>
Bictegravir	0.67	0.28-1.59	0.36	0.67	0.28-1.60	0.37